**Clarification Questions and Answers**

**Reference: C21-0482-1598**

**Title:The role and value of natural capital in mitigating impacts of natural hazards in the Turks and Caicos Islands.**

Q. There is one part of the bid on page 6 that states:

B. Undertake an economic assessment of the functional role and value of the natural environment across the Turks and Caicos Islands in mitigating terrestrial and coastal hazards (e.g. those associated with disaster resilience and protection) and map these values

1. Using a framework undertake a total economic valuation for the coral reef systems, highlighting data gaps and recommendations;

With a footnote from that section that states:

There is a parallel contract out for tender which is developing a framework to capture the total economic value of coral reefs. Additional data will be provided to support the TEV upon request.

What is stated under point ‘ii’ seems to be a much more detailed requirement that that which is required under heading statement ‘B’. Part B asks for the economic assessment of the natural environment (one part of which is coral reef) in mitigating coastal hazards. However part ‘ii’ seems to require a total economic value, which would require calculation of the value for disaster resilience as well as all other values associated with the coral reef, such as value from tourism, fish nursery etc.

Please can you confirm if this is a correct interpretation?

Also, the parallel contract that is out for tender (ii) which is developing a framework to capture the total economic value of coral reefs, we have tried to search for this contract to find out what else it requires, to ensure our bid is in-line with the other contract, however we are unable to find this contract, or any note of it. Please can you provide more details or signpost where this contract is shown (ie contract finder).

Q. Yes - your interpretation is correct. As part of the contract, we would require an economic valuation of the natural environment in its role protecting the coastline and mitigating terrestrial and coastal hazards. This would be part of B i). In addition to this, the valuation calculation in B i) should be fed into the parallel framework created for coral reef systems to help determine the total economic value of these coral reefs. This is to the extent that the data is available to value the other benefits and service which coral reef systems in the Turks and Caicos Islands provides.

Please see the Annex A for the aforementioned contract, which is attached below. We are currently in the process of awarding this contract, hence it not being available on contract finder. There is now a successful contractor however, and as part of the contract for which you are bidding we would expect you to work within this framework as mentioned above.

**Annex A**

|  |  |
| --- | --- |
| Title of Project | ***Developing Disaster Resilience Turks and Caicos Islands: Coastal and inland flood risk modelling, opportunity mapping and indicators*** |
| Date and Time for Return of Bids | **Tuesday 26 October 2021 @16:00 hours \*\*Extended to Monday 1 November @ 16:00 hours \*\*** |
| Contract Reference Number | **C21-0482-1598**  |
| Address for Bid Submission | 1 electronic copy to be sent to TenderResponse@jncc.gov.uk PLEASE DO NOT SEND BIDS DIRECTLY TO AMANDA GREGORY, MARK COLLAR, OR DORA IANTOSCA VIA THEIR WORK EMAIL ADDRESSES AS THIS WILL INVALIDATE YOUR BID.Bids must be less than 10 MB in size.On receipt of your bid, you will receive an automated e-mail to confirm receipt by the JNCC Support Co. If you do not receive this automated email, please contact the individuals below, in the following order:Sue Wenlock (00 44 1733 866880)Chris Downes (00 44 1733 866877) |
| Contacts for **Technical Information** relating to this Project Specification | Mark CollarJoint Nature Conservation CommitteeEmail: Mark.Collar@JNCC.gov.ukTel: 01733 866811ORAmanda GregoryJoint Nature Conservation CommitteeEmail: Amanda.Gregory@JNCC.gov.ukTel: 01733 866864 |
| Contact for Queries Regarding the **Procurement** **Procedure** | Dora IantoscaFinance TeamJoint Nature Conservation CommitteeEmail: Dora.Iantosca@jncc.gov.uk or contractqueries@jncc.gov.ukTelephone: 01733 866894  |
| Proposed Start Date | w/c 1 November 2021 |
| Proposed End Date | 28 March 2022 |

**Title of Project**

**Contents**

[1. Joint Nature Conservation Committee 3](#_Toc82007129)

[2. Project Aims 3](#_Toc82007130)

[3. Project Background 4](#_Toc82007131)

[4. Project Objectives 5](#_Toc82007132)

[5. Project Objectives: Detailed Tasks 5](#_Toc82007133)

[6. Potential Follow-On Work *(delete if non-applicable)* 7](#_Toc82007134)

[7. Outputs 8](#_Toc82007135)

[8. Product Specification 9](#_Toc82007136)

[9. Dissemination 9](#_Toc82007137)

[10. Timescale 10](#_Toc82007138)

[11. Health and Safety 10](#_Toc82007139)

[12. Project Management 10](#_Toc82007140)

[13. Instructions for Bid Submission 11](#_Toc82007141)

[14. Evaluation Criteria 12](#_Toc82007142)

[15. Payment 13](#_Toc82007143)

[16. Additional Requirements 13](#_Toc82007144)

**Joint Nature Conservation Committee**

The Joint Nature Conservation Committee (JNCC) is the statutory adviser to the UK Government and devolved administrations on UK and international nature conservation

Our role is to provide scientific evidence, information, and advice to inform decisions to protect the natural environment. Our specific role is to work on nature conservation issues that affect the UK as a whole and internationally, by:

advising Government on the development and implementation of policies for, or affecting, nature conservation in the UK and internationally;

providing advice and disseminating knowledge on nature conservation issues affecting the UK and internationally;

establishing common standards throughout the UK for nature conservation, including monitoring, research, and the analysis of results; and

commissioning or supporting research which it deems relevant to these functions.

Background to JNCC can be found on JNCC’s website at: <https://jncc.gov.uk/about-jncc/>

 **Project Aims**

The UK’s Overseas Territories are highly dependent on the natural environment for their economic and social wellbeing. They are also reliant on limited built infrastructure. In the Caribbean in particular, this infrastructure, and human life, are vulnerable to both natural and anthropogenic hazards. The natural environment is itself susceptible to damage from human activities – resulting in loss of value to the economy and reducing its ability to protect economic assets and human well-being.

JNCC is supporting the Government of Turks and Caicos Islands (TCI) by monitoring environmental change in the context of the role of natural capital in mitigating the impact of natural disasters, with the emphasis on supporting economic reconstruction, preparations for, and recovery from natural disasters.

Building upon work to date, carried out under JNCC’s [Natural Capital in the Overseas Territories programme](https://jncc.gov.uk/our-work/natural-capital-in-the-overseas-territories/), this Conflict, Stability & Security Fund (CSSF) **project will** support TCI to **understand and value the natural environment in providing coastal and inland flood protection, train Government Officials to enable them to undertake future assessments** and **support how this knowledge can be incorporated into plans, policies, and procedures** by enhancing their ability to prepare for, and recover from, these hazards.

The work will contribute to;

* the UK Government’s hurricane preparedness plans for the British Overseas Territories in the Caribbean[[1]](#footnote-1).
* The preparation of TCI’s national ecosystem service accounts.
* The project does not intend to cover the wide variety of TCI’s ecosystems and their associated services, but focus on those associated with enhancing disaster resilience against storm surge and inland flooding.

**Please note:** This project will support and is **expected to collaborate and work in conjunction with**, a second project running in parallel. The second project will develop model(s) to:

* assess the functional role of the Turks and Caicos Islands’ natural capital in protection of infrastructure from natural hazards such as storm surge and inland flooding,
* create indicators to monitor environmental change in the context of disaster resilience and
* identify opportunities for nature-based solutions to mitigate the impacts and enhance environmental resilience.

**Project Background**

The Turks and Caicos Islands (TCI) is a UK Overseas Territory located in the tropical Atlantic Ocean around 900 km southeast of Florida. The archipelago of over 40 low-lying, limestone islands covers 950 km2 and supports numerous endangered, endemic, or range-restricted species and rare habitats.

Population concentration in coastal areas and the location of the Turks and Caicos Islands in the Atlantic hurricane belt makes storm surge a significant hazard (Bray et al. 2019). Hurricane Irma for example led to peak surge of over 6 m (University of the West Indies 2017; Williams et al. 2018), damaging built infrastructure and natural capital assets (Government of the Virgin Islands 2017). It is therefore important to understand how nature-based solutions may attenuate storm surge and improve resilience in TCI.

The 2016 Conflict, Stability & Security Fund (CSSF) funded programme of work, ‘*Enhancing economic security through environmental resilience*’ in the UK Overseas Territories (OTs) aimed to improve long-term economic planning to support growth and development. Embedding the role of the natural environment in economic and spatial planning through existing or new policies or legislation was one element, with the objective to protect and enhance the value of the OTs vital natural environment.

The suite of projects undertaken mapped and valued the natural assets by integrating satellite data, Geographical Information Systems (GIS) and economic assessments of the priority environmental goods and services (derived from natural capital). Relevant to this contract is a GIS-based model that was developed to assess vulnerability to storm surge and flooding events and their impacts on infrastructure and human life in the British Virgin Islands. For more information see: <https://jncc.gov.uk/our-work/natural-capital-in-the-caribbean-uk-overseas-territories/>.

This suite of **JNCC** [**CSSF-funded projects**](https://jncc.gov.uk/our-work/natural-capital-in-the-overseas-territories/#outputs-caribbean-supplementary-reports) had the following objectives:

* establish the Total Economic Value (TEV) of the terrestrial and marine natural environment to each participating Territory;
* identify the priority natural capital assets and measurable attributes (Natural Capital Metrics) to monitor changes in value through time;
* integrate natural capital valuations into national mapping (GIS) to define the spatial distribution of these natural assets (Value Mapping) and to promote the integration of such valuations into planning and policy making to improve long-term economic growth.

This current phase (2021/22) of CSSF project work builds on this earlier work, which is now being applied in additional, disaster-vulnerable, OTs in the Caribbean.

**Project Objectives**

The contractor will be expected to collaborate with the Government of Turks and Caicos Islands (TCIG) and contractors of the parallel TCI project to ensure that model(s) and tool(s) can incorporate outputs and findings as necessary and can be supported by TCIG technical infrastructure with the aim to be run and maintained by Government Officials.

There are a number of related Darwin Plus projects that the contractor would be expected to make themselves familiar with and liaise with project leads as appropriate, to avoid duplication of effort and maximise value for money and best use of all outputs for the Government of Turks and Caicos Islands and HMG.

The objectives of the work to be done under this contract are to build upon the previous and ongoing natural capital work in TCI to:

1. Identify, assess, and map the value of priority habitats and the natural environment in mitigating terrestrial and coastal hazards (e.g., those associated with disaster resilience and protection services) in the TCI;
2. Refine existing models to incorporate the condition of habitats into scenarios analysis which will assess how degraded or improved condition of priority habitats impacts the economy and disaster resilience, e.g. impact of disease and bleaching of coral reefs, or conversely, their restoration
3. Demonstrate the economic value of the natural environment in mitigating flood risk and its contribution to total economic value;
4. Support the integration of the economic assessments into TCI Government decision-making;
5. Provide training to TCI Government officers in the use and application of economic valuation techniques, to undertake future assessments, and how these assessments can support decision making.
6. Develop communications products for stakeholder engagement.

The work will be conducted in collaboration with the TCI Government and the JNCC, reporting to a TCI based Project Steering Group, as well as the contractor team developing the *Disaster resilience in TCI: coastal and inland flood risk modelling opportunity mapping and indicators* parallel project. The contractor should be prepared to travel to the TCI as necessary, should travel restrictions be lifted, to review and collaborate with TCI officials and deliver training.

**Project Objectives: Detailed Tasks**

1. Set up a Project Steering Group (PSG) comprising, key personnel from TCI Government (e.g., Department of Environment, Department of Disaster Management and Emergencies), JNCC, parallel project teams and contractor.
	1. First PSG meeting to be held within week of contract confirmation.
	2. Meetings to be held (via remote systems) as agreed by the PSG.
2. Undertake an economic assessment of the functional role and value of the natural environment across the Turks and Caicos Islands in mitigating terrestrial and coastal hazards (e.g. those associated with disaster resilience and protection) and map these values.
	1. Use natural capital indicators, to be provided, to assess the economic value of those natural assets that deliver protection services[[2]](#footnote-2) (and assumptions driving these values;
	2. Using a framework[[3]](#footnote-3), undertake a total economic valuation for the coral reef systems, highlighting data gaps and recommendations;
	3. Produce maps which describe the spatial distribution of the economic value of the natural environment for the TCI island system;
	4. Develop an environmental economic indicator, or metric, to support TCI reporting; and
	5. Identify datasets available for monitoring frequency and gaps for use in valuation assessments (existing, unpublished, asset registers and ecosystem accounts will be made available to the contractor);
3. Use scenarios developed under the parallel project to model storm surge and inland flooding and assess potential ‘costs’ arising under each scenario and the benefits provided by priority habitats such as coral reefs, mangroves, salt ponds and seagrass beds in terms of realised ‘values’;
4. Integrate natural capital valuations into existing national mapping (GIS) capabilities to spatially define the benefits provided by natural assets (Value Mapping) and support the integration of such valuations into TCI planning and policy making.
5. Build capacity in TCI:
	1. In the use of the valuation tools to:
		1. undertake future analysis as new data sets and knowledge become available.
		2. raise queries, and question the data to support decision making (for example, in planning nature conservation and disaster resilience)
	2. Deliver technical training (remote or in person) in the development and use of the economic assessments,
	3. Deliver high-level training in the interpretation of the outputs and results and recognising limitations to use.
	4. Support the integration of the valuation tools into TCI Government decision-making,
	5. Provide at least 5 days technical support to TCI government, post project, for technical troubleshooting and query raising.
6. Work with JNCC, and TCIG, to prepare stakeholder engagement materials for use with different audiences;
	1. High-level Government (TCIG and HMG);
	2. Technical Officers; and
	3. Local Communities and schools

All interim and final reports, maps and other outputs are to be shared with the TCI Government in a timely manner.

**Potential Follow-On Work**

Tenderers should be aware that there is the potential for the successful contractor to be requested by JNCC to undertake additional work on this contract into the financial year(s) 2021/22 and 2022/23.

Please note however that the potential for additional work to be undertaken is subject to a continuing need, availability of funds, and satisfactory contractor performance. For the avoidance of doubt, no guarantee can be given, that you will be asked to undertake the potential additional work outlined within this Annex A document. Tenderers are not asked to provide detailed project plans for these follow-on aspects at this stage.

**Outputs**

1. Maps which display the distribution of the economic value of coastal protection and inland flood services in TCI.
2. An assessment of the total economic value of coral reefs in TCI.
3. An updated natural resource inventory which identifies data sets, highlights gaps and recommendations for use.
4. Framework method for post-hazard economic assessment of environmental, financial, and economic losses and avoided costs.
5. A detailed technical report providing:
	1. **A non-technical summary** of the economic assessment model and its application;
	2. An assessment of the economic values assigned to the role priority habitats play in mitigating the impacts of storm surge and inland flooding, (e.g. coral reefs, seagrass beds and mangroves);
	3. Scenarios assessment with appropriate visualisations (maps, etc);
	4. Assessment of the uncertainty, supported by examples if appropriate;
6. Training and capacity-development for relevant users, with guidance documents, in use of the tools and derived outputs delivered by the project, together with scenarios developed in the parallel project, to be delivered to:
	1. High level (Senior TCI Government Officials) training in the interpretation of results and limitation; and
	2. Technical training in the development and use of the economic assessments.
7. Work with JNCC, and TCIG, to prepare stakeholder engagement materials[[4]](#footnote-4) e.g., infographics, videos, poster/leaflets, short PowerPoint presentation (using JNCC template), highlighting aims, key messages, results, uncertainties, potential next steps;
8. A separate, short recommendations report to JNCC highlighting data gaps, challenges, barriers, and potential next steps.

**Product Specification**

JNCC is committed to making its publicly available resources and documents accessible, in accordance with the Public Sector Bodies (Websites and Mobile Applications) (No. 2) Accessibility Regulations 2018.

Making material accessible means making sure it can be used by as many people as possible.  This includes those with:

* impaired vision
* motor difficulties
* cognitive impairments or learning disabilities
* deafness or impaired hearing

The outputs and material that JNCC publishes should be compliant with the [Web Content Accessibility Guidelines version 2.1](https://www.w3.org/TR/WCAG21/) AA standard.

To meet this standard, all reports and other documentation which are to be made publicly available must adhere to JNCC’s house-style and be produced using a **JNCC CSSF template** **that will be provided** at the project initiation meeting, unless otherwise stated. All reports (draft and final) should be provided electronically via email **both** as a Microsoft Word document and an Adobe PDF.

Copies of documentation associated with case studies should be provided in electronic format with an associated reference catalogue.

For any other outputs or products which are to be made publicly available through JNCC, evidence regarding how the accessibility standard will be reached should be included.

The successful contractor must ensure this project is in compliance with the JNCC Evidence Quality Assurance Policy. Tenderers are asked to note the Evidence Quality Assurance Policy document and Guidance Notes that accompany the Invitation to Tender. *See* <https://jncc.gov.uk/about-jncc/corporate-information/evidence-quality-assurance/>

Copies of documentation associated with the case studies should be provided in electronic format, with an associated reference catalogue.

Data management (access, transfer, storage, processing, and retention) will be subject to a separate Data Sharing Agreement.

**Dissemination**

The products/outputs produced under this contract will be a JNCC product and shall not be published or disseminated without the written permission of JNCC or TCI Government. Outputs may at some point be published on the JNCC website and all material supplied as part of this contract shall remain copyright of JNCC and TCI Government. The findings from this contract will also be made available to staff within JNCC, the UK country nature conservation bodies, Defra, FCDO, and the UK Overseas Territories.

All documentation delivered by JNCC to the contractor regarding specification for the new system should be treated as commercial-in-confidence, the contractor should seek JNCC permission before distributing the documentation to any third parties.

Any information delivered to the contractor should not be used for any purposes outside the scope of this contract and should be destroyed on completion of the contract.

**Timescale**

Provisional dates for delivery of the contact outputs are set out below. Exact dates are to be agreed at the start-up meeting based on Contractor and JNCC staff availability.

|  |  |
| --- | --- |
| **Milestones** | **Provisional dates** |
| Start-up meeting (UK) | w/c 1 November 2021 |
| Attendance at steering group meeting (TCI) | w/c 1 November 2021 |
| Draft economic assessment report and training materials | 7 February 2022 |
| Training and materials delivered | 11 March 2022 |
| All outputs completed and data returned to TCIG | 25 March 2022 |
| Project Sign OffIncluding all data and tools delivered to TCI and JNCC | 28 March 2022 |

In agreeing exact dates, please note that the potential for work under this contract to be funded into 2022/23 is subject to availability of funds.

**Health and Safety**

The successful bidder is expected to follow appropriate Health & Safety procedures including adhering to JNCC’s policy on safeguarding. For further information <https://jncc.gov.uk/about-jncc/corporate-information/safeguarding/> and to be able to undertake appropriate risk assessments, evidence of which should be supplied to JNCC. (NB under no circumstances should any work or service commence prior to the receipt of written approval of the risk assessment by the JNCC H&S Advisor).

Any incidents occurring within the contract period should be immediately reported to JNCC.

**Project Management**

The successful Contractor shall nominate a project manager who shall be responsible for ensuring the project is completed satisfactorily and who shall be the main contact point for JNCC.

JNCC’s main contact points will be:

Mark Collar

Email: Mark.Collar@jncc.gov.uk

Tel: +44 (0)1733 866921

and

Amanda Gregory

Email: Amanda.gregory@JNCC.gov.uk

Tel: +44 (0)1733 866811

**Instructions for Bid Submission**

The bid submission should include the following:

A brief summary of the bidder’s experience in relation to the requirements of this contract;

A proposed approach for achieving the objectives of the contract and delivering the detailed tasks identified within each objective. This should be sufficiently detailed to allow assessment against the evaluation criteria (Section 14);

A detailed project plan (including Gantt chart) with proposed work programme and an estimate of time required to achieve each objective;

A draft Table of Contents for the final report;

Details of Quality Control procedures to be followed (**note for author if research project/contract:** *see EQA Policy Appendix 1 (Bias, Conflicting Evidence and Uncertainty) and EQU Policy Appendix 3 (Quality Assurance of Expert Knowledge and Opinion):*

Details of the bidder’s own internal Quality Management System;

Details of the Project Team including their roles and experience, an estimate of their time input into each task and CVs of all personnel who will be involved in the contract/project;

Availability of the Project Team for a virtual start-up meeting during the week commencing 1 November 2021.

Overall quote for the contract to include:

* + Day rates for all members of the Project Team;
	+ Rates for attending start-up, interim and final meetings in Peterborough or Aberdeen (costs for travel and accommodation are attached and should be used. These rates are analogous to the civil service rates).
	+ Costs and time allocation should be clearly allocated to specific tasks within this contract/project; and
	+ **VAT if applicable.** **The contractor is to specify whether VAT at the prevailing rate would be applicable to this project and if so, provide their VAT registration number.**

The following documentation:

* + Copies of health and safety policy statements where available or a note regarding such items as lone working, emergency procedures and accident reporting;
	+ Copies of current public and employer liability insurance certificates;
	+ Copies of any appropriate risk assessments; and
	+ Copies of any environmental policies should you have them.

In addition, note that the bid submission should provide sufficient information to allow assessment against the evaluation criteria outlined in Section 14.

**Evaluation Criteria**

JNCC is not bound to accept the lowest priced or any bid. Having the technical expertise and experience to complete the work to a high standard and being able to complete it within the timescale are of the essence for this contract.

The bid evaluation may be undertaken by a panel consisting of JNCC staff and staff members from the Government of Turks and Caicos Islands.  Unless otherwise stated in your bid submission, bids will be forwarded to them for evaluation purposes only.

For information on how we handle personal data please see our Privacy Notice at <https://jncc.gov.uk/about-jncc/corporate-information/privacy-statement/>

Bids will be evaluated using the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
|  | EVALUATION CRITERIA | Maximum Score | Score |
| **1. Quality of Bid (50% of the total for the three assessment categories)** |
|   | *Clarity of proposal particularly work programme and deliverables* | *10* |   |
|   | *Understanding of, and relevance to, the requirements (in particular, the adequacy of the details of the proposed process for achieving the required outputs; clarity of the proposal in respect of mechanisms to access or acquire the necessary data to undertake the work; the adequacy of the proposed consultation process with the Turks and Caicos Islands Government.* | *10* |   |
|   | *Soundness and logicality of methods* | *5* |   |
|   | *Realism and measurability of outputs* | *5* |   |
|  | *Evidence provided of how accessibility standards will be met*  | *5* |  |
|   | *Identification and proposed solutions to potential risks/issues*  | *5* |   |
|   | *Serious weaknesses which threaten success* | *5* |   |
|   | *Probability of success* | *5* |   |
|   | Sub Total | *50* |   |
| **2. Details of Contractor (20% of the total for the three assessment categories)** |
|   | *Expertise, experience, and balance of team* | *9* |   |
|   | *Risks if important team members drop out* | *5* |   |
|   | *Adequacy of subcontractors if any*  | *6* |   |
|   | *Sub Total* | *20* |   |
| **3. Cost (30% of the total for the three assessment categories)** |
|   | *Transparency and correctness of presentation what does presentation mean here in relation to cost?* | *10* |   |
|   | *Fairness/reasonableness for the level of work and expertise required* | *6* |   |
|   | *Appropriateness of ratio of senior to junior staff time* | *6* |   |
|   | *Clarity of each team member’s contribution and value added* | *8* |   |
|   | *Sub Total* | *30* |   |
| *Total Score* | *100* |  |

**Payment**

Payment will be made in two equal instalments on the basis of the following schedule:

1. Submission of the draft economic assessment report and training materials expected to be developed in January 2022 and delivered in February 2022; and
2. Submission of the Final Report, outputs, and data to JNCC and TCI Government on 28 March 2022.

Payment will be made on completion of the objectives, following the submission of an invoice(s); and based on satisfactory undertaking of the contractual elements to the agreed standard of the JNCC Project Officer.

**Additional Requirements**

All bidders are requested to carefully read the Terms and Conditions applying to this contract. Payment will only be made upon delivery of key outputs.

It is assumed that all costs associated with the production of figures, reproduction of photographs and the final report are accounted for within the rates/fees given.

The bidder is expected to supply all necessary equipment, software, licences, etc. to carry out the obligations required under the contract.

1. [Hurricane preparedness plans for the British Overseas Territories in the Caribbean](https://www.gov.uk/government/news/new-hurricane-preparedness-plans-for-british-overseas-territories-in-caribbean), July 2019 [↑](#footnote-ref-1)
2. These will be based on ecosystem service and opportunity maps created from other ongoing projects and in agreement with TCIG. Available from JNCC and upon request to other project leads [↑](#footnote-ref-2)
3. There is a parallel contract out for tender which is developing a framework to capture the total economic value of coral reefs. Additional data will be provided to support the TEV upon request [↑](#footnote-ref-3)
4. For example: Ospar website (<https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/key-messages-and-highlights/>), IFRECOR (<https://www.dropbox.com/s/cfp43o80lb8gog1/ETAT-DES-RECIFS-2020-resume-pour-decideurs-web.pdf?dl=0> - summary in French, <https://ifrecor.fr/2021/06/08/2020-letat-de-sante-des-recifs-coralliens-herbiers-marins-et-mangroves-des-outre-mer-francais-un-bilan-mitige/> ) [↑](#footnote-ref-4)