Ocean Risk and Resilience Action Alliance

FULL BUSINESS CASE (FBC) – HIGH VALUE (OVER £2 MILLION VALUE OF PROCUREMENT)

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Cover Sheet

PROGRAMME SUMMARY	*A direct grant award to the Ocean Risk and Resilience Action Alliance. The grant will support a number of projects, selected in collaboration with the ORRAA Secretariat. The grant will support ORRAA's aims to mobilising $500m USD in finance for programmes and innovative finance products by 2030, that incentivise private and blended finance into coastal natural capital and coastal resilience.*
COUNTRY / REGION	*International – ODA eligible countries*
PROGRAMME VALUE	
START DATE	*November 2022*
END DATE	*31st March 2026*

This Business Case was completed in November 2022 and reflects the delivery priorities and required compliance standards at the time. At the time of publication (September 2025) some of these priorities and standards have changed. The Business Case has been published in the form it was approved at the time and should be considered in that context.

ACRONYMS

BAF	Blue Action Fund	KPI	Key Performance Indicator
BAU	Business as Usual	LDCs	Least Developed Countries
BCR	Benefit Cost Ratio	MEL	Monitoring, Evaluation and Learning
BPF	Blue Planet Fund	MDB	Multilateral Development Bank
BBNJ	Biodiversity Beyond National Jurisdiction	MIS	Management Information System
CAD	Canadian Dollars	MPA	Marine Protected Area
CBD	Convention on Biological Diversity	NbS	Nature-based Solutions
CBD COP 15	15th meeting of the Conference of the Parties to the Convention on Biological Diversity	NGO	Non-Governmental Organisation
		ODA	Official Development Assistance
CO2	Carbon Dioxide	ORRAA	Ocean Risk and Resilience Action Alliance
COP26	26th UN Climate Change Conference of the Parties	PNG	Papua New Guinea
CPIC	Coalition for Private Investment in Conservation	PSEAH	Prevent sexual exploitation, abuse and harassment
Defra	Department for Environment, Food and Rural Affairs	RDEL	Resource Departmental Expenditure Limit
EDI	Equality, Diversity and Inclusion	SDG	Sustainable Development Goal
FCDO	Foreign and Commonwealth Development Office	SIDS	Small Island Developing States
FLD	Front Line Delivery	SR	Spending Review
FRA	Fraud Risk Assessment	SRC	Stockholm Resilience Centre
FTE	Full Time Equivalent	SRO	Senior Responsible Officer
G7	Group of Seven (intergovernmental organisation)	SU	Stockholm University
GEF	Global Environment Facility	ToC	Theory of Change
GFCR	Global Fund for Coral Reefs	UK	United Kingdom
ORRAA	Global Ocean Accounts Partnership	UN	United Nations
GRP	Global Resilience Partnership	UNEP	United Nations Environment Programme
HMG	Her Majesty's Government	UNFCCC	United Nations Framework Convention on Climate Change
HMT	Her Majesty's Treasury	USD	United States dollars
ICF	International Climate Finance	VfM	Value for Money
ICPP	Inter-Governmental Panel of Climate Change	WTO	World Trade Organisation
IUCN	International Union for Conservation of Nature	WWF	World Wide Fund for Nature
		LDCs	Least Developed Countries

Contents

Intervention Summary

Summary of programme objectives

Defra is seeking approval to continue to provide investment from Defra's Blue Planet Fund to the Ocean Risk and Resilience Action Alliance (ORRAA). ORRAA is a multi-sector alliance focused on ocean finance, bringing together private sector (e.g. Deutsche Bank, AXA insurance), governments (Palau, Fiji, Canada, UK and the United States), multilateral development banks (e.g. Asian Development Bank and Inter-American Development Bank) and civil society (e.g. Conservation International, WWF), to pilot and scale up innovative financial solutions to provide resilience to climate vulnerable coastal communities. ORRAA's overarching goals are to drive at least $500 million of investment into coastal and ocean natural capital and surface at least 50 novel finance products by 2030.

The preferred option for investment is over 4 years, in addition to the already provided in 2021/22, which takes the whole life value of the grant to over 5 years. Through grant financing, this investment will provide technical assistance to improve the enabling environment to attract and crowd in other sources of private, philanthropic and public ocean financing. The UK will benefit from working closely with other donors on the development of the ORRAA pipeline and crowding in funding through our seat on the Funding Advisory Board and in collaboration with the ORRAA Leadership team.

In addition, we will continue to influence strategic direction of the alliance through our position on the Steering Council. Projects are selected through discussion with the ORRAA Leadership and Secretariat Teams, taking on steer from the Funding Advisory Board and evaluating potential investments using established BPF criteria. Cross-HMG expertise is brought into the selection process where needed, particularly from FCDO where we have begun to design a framework for a technical steering group on blue finance mobilisation, that would more closely involve them in the selection. Within projects, the funds will be spent on areas such as training, community engagement and outreach, modelling studies and research and core secretariat costs. The private sector and insurance partners will take on the liability and risk for the innovative financial products, e.g. parametric insurance, impact funds, and UK funds will not be channelled into these financial instruments, nor be used as a first-loss guarantee mechanism.

ORRAA is now in year 2 of operation and though maturing as an Alliance they are still relatively new. To ensure we can provide funds up front to small front-line delivery partners, as well as that ORRAA has the right specialisms and expertise within their own operations and can effectively scale up promising investments and continue to grow, we recommend the first year of this grant funding is provided in 2 instalments and not tied to milestones. Whilst there are some risks to this approach, ORRAA's performance to date and Annual Review results has provided us with the confidence that this approach is good value for money and will enable us to provide consistency in deliverables required to support scaling up of selected projects in year 2-4. The governance frameworks in place with ORRAA will provide means to ensure delivery stays on track and incentivise performance. For years 2-4, performance related milestones for future payments will be introduced.

What are the main programme ***activities?***

As well as funding secretariat costs (co-funded with the Canadian government, more detail in Section 4.1), the main programme activities are to provide technical assistance. To date, the

UK has funded 9 projects (full list in Table 4, Section 3.2) and using these as indicative of the programme activities going forward, we provide an overview below:

- Developing impactful communication materials and guidelines on insurance payouts to increase uptake of insurance products and safety net options provided through innovative community savings projects in Philippines and Indonesia
- Technical assistance in the form of GIS habitat analysis and in-country engagement, to identify sites suitable for implementing sustainable aquaculture techniques and mangrove restoration in shrimp ponds in the Philippines.
- Delivery of a unique meta-analysis of all ocean risk and vulnerability assessment tools that exist to date, to support delivery of more robust risk and vulnerability assessments that underpin decision making and local scale policy in SIDS and LDCs.
- Training on the use of a rapid assessment tool in Kiribati and Sri Lanka to assess risk from ocean and climate change to coastal cities. The outcomes of the assessments will inform decisions regarding investments to improve the safety and resilience of coastal communities.
- Developing effective and inclusive engagement and training programmes for coastal residents, local government and NGOs to support timely, post-hurricane reef recovery activities in the Greater Caribbean area.

What are the expected results?

Investing into ORRAA will help create the enabling environment necessary to overcome critical barriers to investing in ocean finance and in turn encourage increased investment into the ocean. Greater investment in coastal natural capital and innovative finance products to reduce ocean risk will mean vulnerable coastal communities in ODA-eligible countries are more resilient to climate and economic shocks and sustainable management of coastal habitats and resources is incentivised. Specific results attributable to the UK will depend on the projects we choose in collaboration with the ORRAA Secretariat, in years 1-4 of this grant. Through the preferred option of over 4 years, we expect the following, noting there is some overlap between the shorter and longer term:

Shorter term outcomes (2022-2024)

- Undertake research and develop strategies to better understand, analyse, predict, model and manage ocean risk
- Deliver an increased pipeline of pilot projects for innovative finance products that increase coastal resilience in climate vulnerable communities in order that decisions can be taken on which of these to scale up
- Grow the effectiveness of ORRAA to influence greater investments in coastal natural capital through participation in key events and discussions to promote the Alliance's work, projects and fundraising goals
- Improve the design/implementation of gender-sensitive ocean resilience pilot projects in key vulnerable regions
- Advance global narrative on ocean risk and coastal resilience with policymakers, finance leaders and investors
- Act as a connector and catalyst for bringing together private sector commitments and expertise to support government and not-for-profit action
- Act as a connector and catalyst for cross-sector collaboration across the Global North and South on ocean risk/ finance

Longer term (2023-2026)

- Surface, incubate and scale 50 finance and insurance solutions that build resilience by investing in nature by 2030
- Leverage public & private investments in coastal natural capital that deliver a return on investment

1. Strategic Case

Two major global challenges, **anthropogenic climate change** and **biodiversity loss, have** led to increased **ocean risk.** The ocean is experiencing increased sea levels, acidification, deoxygenation, marine heatwaves and increasing frequency and severity of extreme weather events. Marine ecosystems have already been severely degraded; it has been estimated that human activity has severely altered 66% of the marine environment[1]. The Dasgupta review states that to reverse these trends, **we must act now, and immediate action will significantly reduce the costs of restoring nature**[2], as well as helping to achieve wider societal goals, such as addressing climate change and alleviating poverty.

1.1.1. Anthropogenic climate change, biodiversity loss and ocean risk

The ocean is altering dramatically, and these changes are affecting the ocean's health and ability to regulate our climate. As the integrity and health of the ocean is eroded through these changes, resilience and adaptative capacity of its ecosystems will decline, subsequently increasing vulnerability to further climate change and an increase in '**ocean risks**' particularly for coastal communities who rely directly on marine resources for their livelihoods.

Women and girls are also disproportionately vulnerable to these risks, particularly in the fisheries sector where **47% of the total fisheries workforce is women**[3] but their role is often overlooked and goes unrecognised and unsupported. It has been found that if projects or policies are implemented without women's meaningful participation it can decrease effectiveness and increase existing inequalities[4].

To quantify the impact of ocean risk to economies, nature and people, ocean risk will worsen considerably if global temperatures exceed 1.5°C above pre-industrial levels. Loss of fishery productivity at low latitudes, acidification, dead zones and other dangerous conditions will be more pronounced. This will affect the livelihoods of 10-12% of the world's population depending on fisheries and aquaculture[5] and over **3 billion people worldwide relying on food from the ocean** as a significant source of animal protein[6].

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[1] Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, 2019, Summary for Policymakers of the global assessment report on biodiversity and ecosystem services, IPBES. https://www.ipbes.net/sites/default files/downloads/spm_unedited_advance_for_posting_htn.pdf

[2] The Economics of Biodiversity: The Dasgupta Review Headline Messages. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957629/Dasgupta_Review_-_Headline_Messages.pdf

[3] The World Bank (2012), *The Global Contribution of Capture Fisheries,* https://openknowledge.worldbank.org/bitstream/handle/10986/11873/664690ESW0P1210120HiddenHarvest0web.pdf?sequence=1

[4] UNFCCC. Introduction to Gender and Climate Change https://unfccc.int/gender

[5] Food and Agriculture Organization of the United Nations (FAO). The State of World Fisheries and Aquaculture 2014.

[6] Potts, J., Wilkings, A., Lynch, M., & McFatridge, S. State of Sustainability Initiatives. Standards and the Blue Economy.

To address ocean risk, we first **need to better understand and mitigate ocean-derived risks**. This needs to be followed by scaling up both the flow of investment into **Nature-based Solutions** (NbS) that increase the resilience of coastal natural capital and vulnerable communities, as well **nature-positive financial frameworks** that can attract and de-risk investment into marine natural capital and coastal resilience measures. Investing in NbS is a key part of protecting the most vulnerable communities and regenerating biodiversity, specifically through **valuing and protecting coastal ecosystems which are critical natural assets for reducing ocean risk**.

1.1.2. Barriers to mobilising blue finance

There are barriers to both mobilising the quantum of finance needed to bridge this finance gap to deliver effective and well-managed NbS[7]; and to transition to sustainable, nature-positive investment models required to deliver benefits for people, climate and the ocean.
Current barriers to mobilising public and private investment in natural capital include:

- **Ocean literacy**: The High-Level Panel's 2020 report on Financing[8] states that there is a lack of familiarity with ocean-based project development and financing by both the business and finance sectors.

- **Risk adjusted financial return**: In general, for those seeking financial returns, there is an inherent challenge with many investments in natural assets[9], which, by their nature, address public or common goods and positive externalities where there is no market.

- There are also likely to be greater **risks and uncertainties with pilot project success**. Some projects inherently carry a degree of risk in achieving desired outcomes due to being piloted for the first time.

- Blue carbon habitats require a long lead time to reach full sequestration potential.[10] This means that blue carbon investments based on restoring or enhancing habitats are particularly sensitive to **regulatory and policy uncertainty**. **Undefined property rights,** overlapping responsibilities from different government agencies and a lack of marine plans present additional challenges.

- **Lower confidence and higher risk-adjusted returns** is also due to insufficient data and modelling capabilities for investors to quantify ocean-derived risk. There are also inadequate enabling policies to shift investment away from unsustainable infrastructure. For investments in the marine environment, there are inherent uncertainties in yield and return on investment.

- Insurance, loans, income protection and savings schemes that would build resilience to the short-term and long-term shocks caused by climate-related impacts, are not readily available in the most vulnerable areas. In many cases, this is due to **the gaps in risk modelling** which are required for the development of insurance products. In addition,

[7] Eric Usher, head of the United Nations Environment Programme Finance Initiative (UNEP FI),
[8] High Level Panel (2020) Ocean Finance: Financing the Transition to a Sustainable Ocean Economy
[9] Such as conservation projects or those investing e.g. in natural defences that enhance coastal protection and biodiversity
[10] 20-25 years for mangroves, 50 years for seagrass restoration and up to 100 years for saltmarsh restoration (Bell-James, 2016)

empirical evidence shows low uptake due to financial barriers, behavioural barriers (personal perceived risk; low trust in providers), and technical barriers (basis risk)[11].

- A **lack of supply**, or the lack of a pipeline of products – i.e., there are impact investors willing to invest in the sustainable ocean, but insufficient large-scale options for them to do so. This lack of supply in turn reflects the challenges cited above: projects lack the appropriate deal size and risk-return ratios to match capital, making scaling and replication more complex than in familiar terrestrial sectors. [12]

1.2 Strategic alignment of ORRAA with UK priorities

The UKHMG's **Green Finance Strategy** details the steps the UK will take to support the alignment of the global financial system with a net zero, climate resilient and nature positive global economy. Working with and through ORRAA will increase UK opportunities to substantially influence the private sector towards this goal, as they focus on informing and accelerating private sector commitments that value nature and reduce ocean risk.

Using the momentum and focus from COP26, the UK is calling for a systematic shift in the way governments and markets value nature, by ensuring that all private finance flows towards the emerging nature positive goals of the new **CBD Global Biodiversity Framework (GBF)**. To achieve ambitious GBF targets, additional nature finance needs to be mobilised from all sources – public, private and philanthropic - as well as a commitment to integrate climate and biodiversity goals within the global financial and international aid systems. The investment opportunities that ORRAA offer, will allow the UK to demonstrate leadership in this space and contribute directly to the efforts needed to create transformation in nature positive investment.

The **UK's International Development Strategy** sets out the UK's vision to take forward our work on climate change, nature and global health, focusing on providing women and girls with the freedom they need to succeed in the context of a strong emphasis on climate, nature, biodiversity and sustainability[13]. The objectives and delivery pathways are in step HMG International Nature Strategy (and the joint Defra-BEIS-FCDO 2030 Strategic Framework for International Climate and Nature Action which will supersede the INS when published), which outlines how we must champion ambitious global, integrated approach to halt biodiversity loss by 2030.

UK intervention through funding and leadership in finance for NbS, through the investment in ORRAA will leverage greater interest and investment from the public and private sectors. It will create opportunities for the UK to directly tackle the barriers to mobilising finance, described above; and through our engagement with the alliance and their members, provide a range of non-monetised benefits that will allow us to create greater impact for the investment.

1.3 Programme Overview

Defra are proposing to invest over four years, 2022/23-2025/26 into the Ocean Risk and Resilience Action Alliance (ORRAA) as a direct grant award. This investment scales up a direct grant to ORRAA of made in 2021/22 bringing the total grant value to.

[11] Clarke, D. (2016). A Theory of Rational Demand for Index Insurance. *American Economic Journal: Microeconomics, 8*(1), 283-306.
[12] High Level Panel (2020) Ocean Finance: Financing the Transition to a Sustainable Ocean Economy
[13] UK government's strategy for international development - GOV.UK (www.gov.uk)

Ocean Risk and Resilience Action Alliance

ORRAA is an association of organisations from the finance industry, NGOs and public sector, with the aim of improving coastal resilience for vulnerable populations, particularly women and girls in SIDS and coastal developing countries. Members and Delivery Partners include: AXA, the Global Resilience Partnership, the Canadian and UK and Palau Governments, The Nature Conservancy, Willis Towers Watson, Rare, WWF and Deutsche Bank, Swiss Re, InterAmerican Development Bank, Asian Development Bank, the Insurance Development Forum and Greensquare ventures.

An investment into ORRAA provides the UK with the opportunity to deliver BPF outcomes, primarily mobilising finance for nature, driving community resilience and tackling poverty and incentivising investment for NbS and protection of critical marine habitats. ORRAA is also uniquely placed to deliver on a critical pathway in the Blue Planet Fund Theory of Change: '**investing in finance-based climate resilience and risk reduction**'.

ORRAA's strategy is that each project invested into should bring public, private and philanthropic sectors together to collaborate, generate knowledge, derive investable products. This is delivered through three impact pathways:

- Financial Innovation: Pioneering innovative and scalable finance and insurance products to protect and regenerate valuable coastal and marine natural assets while delivering a return on investment.
- Science and Research: Accelerating research on ocean risk and resilience and improving modelling that informs financial innovation and policy action to reduce the impacts of climate and ocean change by implementing gender-sensitive ocean resilience projects in key vulnerable region
- Policy & Governance: Informing, advancing and driving public and private policy commitments and action that value nature, build coastal resilience, reduce ocean risk and accelerate the delivery of the SDGs.

ORRAA has three phases of development to scale ambition to reach their target of leveraging $500 million USD of investment into tackling ocean risk by 2030. Phase 1 ends this year, with Phase 2 commencing in 2023 (see figure 1 below for more details on ORRAA's phasing). ORRAA's theory of change is also attached in Annex K.

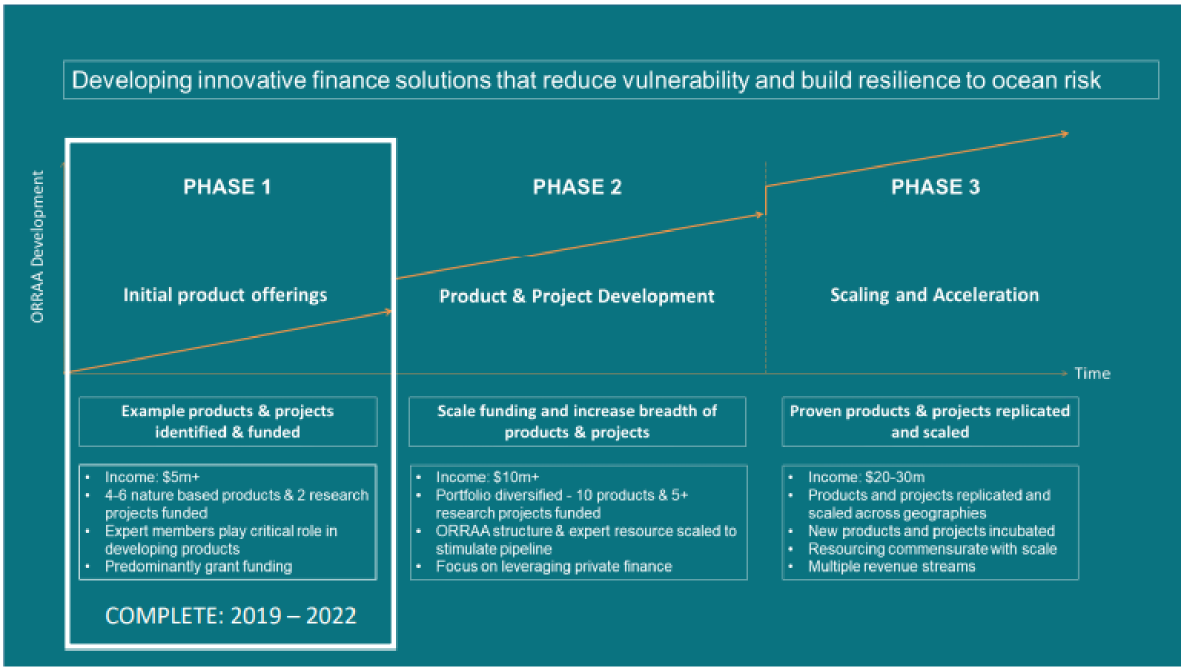

Figure 1:ORRAA's three phase approach. Phase 1 has been achieved and the Alliance have moved into Phase 2

1.3.1. What are the main project activities and expected results of further UK investment?

Defra’s grant will provide funding for technical assistance to strengthen the enabling environment across a portfolio of projects. Our funding will be alongside other donors and private sector partners, leading to piloting of innovative approaches to addressing ocean risk. The project will be selected in collaboration with the ORRAA Secretariat. **Defra will also have the option to run a call for proposals for new projects**.

Using anticipated leverage ratios from similar ICF projects, in addition to information on private funding already leveraged by UK financial support to ORRAA, very indicative estimates are that investment from the **UK could lead to mobilised private finance of**. In the shorter term (next 5 years), the UK investment is more likely to achieve mobilised private investment **equal to or slightly more than the investment put in, with the added benefit of de-risking investment in marine natural capital in the longer term.**

Defra’s investment will:

- contribute to ORRAA’s aims to leverage $500 million USD of investment into coastal and ocean natural capital;
- contribute to the **creation of at least 15 new and innovative finance products by 2025** incentivising private and blended finance into coastal natural capital and **improve resilience of 250 million climate vulnerable people by 2030**.

Specific results attributable to the UK for the project will depend on the projects we choose in collaboration with the ORRAA Secretariat. The UK will also have the opportunity to work with other donors, via the ORRAA Funder Advisory Board (which we established as part of our year 1 investment), to align funding and programming.

The **Intermediate Outcomes** identified in ORRAA's logic model (Annex K) are designed to build on Phase 1 outcomes[14], which the UK has supported, and realise the objectives of Phase II (2022-2025) and Phase III (2025-2030) of the Alliance's work. The UK's scaled up investment in ORRAA will support Phase II and Phase III outcomes (Figure 1), supporting the target investment of $10million in Phase II and contributing to ORRAA's viability in the longer term.

Below is a short summary of the kind of projects the **UK could support through ORRAA.** Examples include those the UK funded this year (see Annex A for more detail):

Weather Index-Based Parametric Insurance for Small-Scale Fishers
It has been estimated that an extreme weather event insurance product for fisheries in the Caribbean could provide up to of benefit for every of spend. This project enabled:

- Insurance payments to small-scale fishers from missed fishing days (50,000 fishers now have access to the insurance).
- Increased registration of small-scale fishers (due to insurance incentive).

Financing the Mesoamerican Reef's Resilience to Extreme Climate Events
This project has leveraged an insurance product worth in 2021/22. Technical assistance has enabled:

- 22 first responders trained to clean and repair reef damage
- Improved reef health and increased income for community members and fishers
- Nearly 2 million people could see their exposure to ocean risk reduced by the scheme (through increased coastal protection, faster recovery of environmental services provided by reefs and temporary livelihood opportunities.

Blue Carbon Resilience Credits, Papua New Guinea
It has been assumed that improved carbon markets within in Papua New Guinea could reduce mangrove deforestation by 11.5km^2. A project funded this year expected to contribute to 0.5% of this reduced deforestation as well as revenue from carbon credits and increased societal resilience to ocean risk.

The project is anticipated to be reporting against the BPF Knowledge Performance Indicators (KPIs) and relevant ICF indicators (see management case for more details).As part of the grant agreement for the new funding, a comprehensive logframe will be developed within the next 6 months which will establish clear, SMART outputs and outcomes, integrating learning from the single year funding, the BPF KPIs and ORRAA's ToC; as well identifying the benefits that we can expect to see from continued funding to ORRAA. Alongside the indicators used in the Phase 1 VfM appraisal, ORRAA's ToC and current logframe (Annex K) provide an example of the metrics we would consider using to assess impact and effectiveness of spend in Phase 2.

The experience of working with ORRAA in year 1 of the BPF has been factored into the recommendations in the Appraisal Case. The impact of the UK's investment into ORRAA is summarised below. Lessons learnt and recommendations from the Annual Review of the single year grant in 2021/22 have also been factored into ways of working and governance of

[14] Short term outcomes agreed between Defra and ORRAA for Phase 1 funding: 1. Deliver an increased pipeline of pilot projects for innovative finance products; 2. Grow the effectiveness of the Alliance to influence greater investments in coastal natural capital; 3. Improve the design and implementation of gender-sensitive ocean resilience polit projects in key vulnerable regions.

the grant to minimise risks and maximise outcomes of a multi-year uplift in funding to the Alliance.

1.3.2 Impact of ORRAA and UK investment to date

ORRAA have **successfully met the milestones agreed between ORRAA and Defra** for Year 1 projects and outcomes have been shared. A full list of projects currently supported by the UK are listed in **Annex A.**

- Defra's assessment **is that we have a high level of confidence in ORRAA delivering value for money and the remaining milestones for this financial year. There is no evidence to suggest an unsatisfactory Annual Review or indication that our investment into ORRAA shouldn't be scaled.**

Delays to reporting have stemmed from late delivery of the grant for the current investment and ORRAA have worked successfully with the downstream delivery partners to mitigate these. There is no reported underspend as of 20th October 2022. At the time of writing, a full Annual Review is pending, however, initial results provided from ORRAA have been used to evaluate VfM. The outcomes give additional confidence in continued funding and in ORRAA's ability to successfully deliver on agreed outcomes (see Appraisal Case, sections 2.2 and 2.3 for more details).

The terms of the new grant agreement will reflect this, and we recommend steps to safeguard future spend, pending deliverables, as outlined in the Commercial Case, Table 5. These actions are recommended to mitigate any residual risk that is inherent in funding pilot projects and bringing them to scale.

1.4 Gender equality and inclusion

The BPF is committed to considering and incorporating the role, equality and inclusion of gender throughout our programming and decision making. All programmes funded through the BPF will be required to deliver in line with relevant UK legislation, such as the UK International Development (Gender Equality) Act 2014. Gender has been integrated into the design of the Blue Planet Fund through investment criteria and Monitoring Evaluation and Learning. ORRAA's overall goal is to improve the state of coastal resilience for vulnerable populations, **particularly women and girls using gender-sensitive approaches**, in SIDS and coastal developing countries. Through the ORRAA Governance ToR ORRAA commits to ensuring their programme of work is underpinned by gender, equity and human rights considerations. All projects submitted to ORRAA are required to demonstrate how gender and equity will be addressed, and these dimensions are also included in reporting.

2. Appraisal Case

The Appraisal Case considers options to meet the goals set out in the strategic case, considering a long list of potential delivery organisations (including ORRAA) and assessing them against the strategic objectives and BPF investment criteria, before assessing a short list of options, together with assesses the progress ORRAA has made in its first year of delivery.

The appraisal case finds that ORRAA has delivered value for money to date for the invested in Year 1 (FY21/22) and remains the preferred delivery partner. The preferred option is to invest a further over the next four years (22/23 – 25/26). This is a continuation, development, and expansion of the Year 1 programme. This option provides the best fit with the Blue Planet Fund (BPF) investment criteria and the strategic case for intervention. A light touch cost-benefit analysis is derived based on an illustrative portfolio of ORRAA projects to test value for money.

2.1 Rationale for intervention

Building on the strategic case - public investments in the marine environment and economy still fall well below what is required to support the transition to a sustainable blue economy. Available evidence indicates that current financial flows are insufficient to meet the costs of the impacts of climate change in coastal regions and the marine environment.[15] [16] In the last 10 years, less than 1% (US $13 billion) of the total value of the ocean has been invested in sustainable projects through philanthropy and official development assistance (ODA) and only 2% of total MDB spend is focused on the sustainable ocean economy.[17] By investing through MDBs we can combine our efforts along with other donors. Through economies of scale, we can create the much-needed impact towards a sustainable ocean economy.

Coastal communities, especially in LEDCs and SIDS, rely on the ocean for their livelihoods, nutrition, economic growth, and climate resilience. The ocean's vital services are increasingly under pressure due to over-extraction, habitat destruction, biodiversity loss, pollution and climate change. Coastal communities in LEDCs and SIDS have limited access to the services that can help build a sustainable ocean economy (specifically access to knowledge and advice that can support the development of sustainable marine-related economic activity); have less resilience (such as access to effective insurance or opportunities for savings); and fewer financial resources to make the investments needed. The public and private investments into projects that de-risk and improve resilience to restore and protect the marine environment and support sustainable ocean economic activities are limited given the numerous market barriers.

- The ocean is a public good, for those seeking financial returns there is an inherent challenge as the positive externalities associated with investing in the Ocean are not represented within market values. This means the conditions are challenging to achieve private, financial, returns from these projects and thus they lack private sector interest. Public investment is therefore needed to support and encourage private financing but given the lack of local expertise and domestically available funding in LEDCs and SIDs they are unable to provide this public good.

- There is imperfect information for investments in the marine environment, and this creates inherent uncertainties in yield and return. Imperfect information, and returns, discourages investment and this translates into a lower number of successful case studies/investment examples in the marine space to support the case for private investment and allow investors to understand the risk profile. Further, there is significant uncertainty in baseline environmental conditions and future impacts which compounds the risk to private investors.

The lack of ability of private investors to fully understand their risk profile and internalise the returns from their investment work against incentivising investment. Using public money to

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[15] *Catalysing Ocean Finance,* Global Environment Facility (2012)
[16] *Financing Nature: Closing the Global Biodiversity Financing Gap*, Paulson Institute
[17] OECD creditor reporting systems: https://stats.oecd.org/Index.aspx?DataSetCode=crs1# and OECD Data Platform on Ocean Finance (shinyapps.io)

alter this risk/return profile and address the asymmetries in information should encourage private investment over time.

2.2 Longlist of options

The longlist of options include:

Option 0 – 'Do nothing'

Option 1 – **Bilateral support to research organisations:** This option would provide support to research effective ways of modelling risk in marine investments and develop solutions.

Option 2 – Bilateral support to conservation organisations working in-country, directly on projects: This option would provide support on conservation and restoration of marine NbS in priority countries.

Option 3 – Multilateral support to a multi-stakeholder platform: This option would support a multi-stakeholder platform galvanising action on sustainable blue finance – for example, the Blue Natural Capital Finance Facility or the Blue Action Fund (BAF).

Option 4 – Support to the Coalition for Private Investment in Conservation: The CPIC is a group of leading civil society organizations, private and public sector financial institutions and academia working to deliver a material increase in private, return-seeking investment in conservation.

Option 5 – Support through a multilateral development bank: This option would involve support to financing NbS and innovative financial products.

Option 6 – Support to ORRAA: Investing in ORRAA will support targeted action to mobilise public and private finance for marine NbS and coastal resilience.

The above longlist of potential delivery partners has been considered against the critical success factors of:

- **Ability to mobilise finance**
- **Ability to strengthen investment in marine nature-based solutions**
- **Ability to spend effectively and quickly**

Based on a strategic gap assessment of the BPF portfolio – which identifies a critical under-representation in the BPF portfolio on interventions that target the mobilisation of private finance - we place more weight on the criteria to mobilise finance. The ability to spend quickly and effectively has been considered as delivery partners will be able to mobilise and deliver in this FY (2022-23).

The strategic gap analysis of the BFP portfolio and a full description of the linkages between ORRAA and other BPF portfolio programmes can be found in Annex C. A more detailed description and assessment of the longlisted options (including how the longlisted options scored against the BPF investment criteria)[18] is included in Annex D. A summary of the

[18] Poverty reduction potential; Environmental benefit potential; Do no harm; UK Government priorities; Country alignment; Financial soundness; Delivery and implementation potential; Additionality; Mobilising potential – finance; Mobilising potential – stakeholder action.

longlisted options and assessment of their suitability in meeting the critical success factors is described in Annex Q

Based on the assessment of the options against critical success factors, the BPF investment criteria and ORRAA performance to date, ORRAA was identified as the preferred option. In particular:

- ORRAA has a proven track record of **mobilising finance,** and their track record of effective and timely delivery gives us confidence that they will be able to expand their activities to leverage further finance and align this with nature positive investments, further supporting Defra's Finance for Nature goals.
- ORRAA projects that could be funded by the UK investment (see Annex M) strongly align with the programme objective of strengthening investment in marine NbS.
- ORRAA have indicated that they would be able to spend the of year 1 funding before the 1st April **providing delays to receiving the finance are not incurred**.

Working directly with ORRAA also provides the benefit of access to expertise of downstream delivery partners from all the sectors considered in options 1, 2, 5 plus private sector partners; thereby expanding our pool of DP's and range of deliverables more than by working bilaterally with another organisation. In addition, the investments made by the Canadian and US governments signal that these countries also have confidence in ORRAA as an organisation to invest in.

2. 3 Assessment of one-year grant (2021/22)

2.3.1 Leveraging finance

At the time of writing the year 1 business case, ORRAA had set out its ambition to leverage an additional $500m USD of private finance for investment in marine and coastal NbS by 2030. This aim has been superseded following the development under ORRAA of The Sea Change Impact Finance Facility (SCIFF[19]). The SCIFF, alongside ORRAA's wider programming has a more ambitious target of driving at least $1 billion USD of private investment into coastal and ocean ecosystems by 2030. This target is driven by a needs-based evidence assessment for driving ocean resilience, conducted by ORRAA and contracting partners, Palladium[20].

Since donor investments were made, ORRAA has mobilised a total of in private sector (including philanthropic) finance (Table 1). We have made two methodological assumptions when calculating the mobilised finance attributed to the BPF investment (to date):

- As ORRAA is an innovative platform bringing together public and private stakeholders, full additionality is assumed in mobilised private finance into ORRAA, e.g., there is assumed to be no innovative ocean finance in the baseline
- As the UK has been a global leader, alongside Canada, to support ORRAA through both G7 and COP26 Presidency platforms and the initial funding of the ORRAA secretariat, we assume equal attribution per dollar of public to mobilised private finance to date, e.g., a pro rata approach of attribution weighted by $ donor contribution.

The total initial public sector ORRAA investment came from the BPF (£1,900,000m), the Canadian government (£7m), and the US government (£0.8m), totalling £9.7m. As 20.6% of the initial investment can be attributed to the BPF, we have assumed that 20.6% of mobilised private finance can be attributed to the BPF, which stands at £1.2m (20.6% * £6.05m). This

Table 1:ORRAA's contributions (public sector) and mobilised finance (philanthropies/private sector) from 20/21

results in a leverage ratio of 0.6 for the BPF investment to date – and represents only current finance already mobilised, rather than a full future forecast. This approach has been reviewed and confirmed by ORRAA.

2.4 Wider Year 1 results and outputs against Year 1 indicators:

Of the 14 indicators used to evaluate the outcomes and outputs of phase 1 programme with ORRAA, we have assessed that 9 have been met and that the three short term outcomes have been achieved. The early results of the programme suggest that several BPF KPIS have been met- in particular KPIs 1[21], 2.1[22], 2.3[23] and 4[24] and that with further funding, these and additional KPIs will be met more effectively, including KPIs 3[25], 6[26], 7[27], 8[28] and 9[29]. There is limited evidence to support assessment of indicators related to long term environmental outcomes - reflective of the early stages of this programme.

Results from the Phase 1 VfM appraisal at the programme level can be found in Annex O.

Using this assessment, we believe that ORRAA are on track to support BPF high level outcome of 'investing in finance-based climate resilience and risk reduction in order to achieve thematic and underpinning outcomes'. Furthermore, that early results of the programme suggest that several BPF KPIS have been met- in particular KPIs 1, 2.1, 2.3 and 4 and that with further funding, these and additional KPIs will be met more effectively, including KPIs 3, 6, 7, 8 and 9. Results from the Phase 1 VfM appraisal at the programme level can be found in Annex O.

2.5 Assessment of shortlisted options

Taking forward ORRAA as the preferred delivery partner, a number of sub-options have been considered with ORRAA exploring the level of investment – set out in Annex S. The preferred proposed investment amount was determined by taking a demand-led approach – specifically, ORRAA considered the appetite from projects for further funding and the ability of ORRAA to support and distribute the investment. was also felt to be in step with the current largest public donor to ORRAA (Canada) who are investing over 3 years.

<u>Option description – further investment of £13,398,600 in ORRAA (preferred option)</u>

The continued investment in ORRAA aims to further develop conditions to enable private resilience finance for vulnerable coastal communities and ecosystems: delivering innovative

[21] Volume of finance mobilised for purposes which match BPF objectives
[22] Number of people, as a result of BPF finance, with improved income outcomes.
[23] Number of people, as a result of BPF finance, with improved climate resilience outcomes.
[24] Number of marine-related evidence, knowledge dissemination and education activities or products developed as a result of BPF finance.
[25] Number of projects or planning and/or governance processes with increased inclusion of local people and knowledge in decision making to improve the marine environment.
[26] Degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for marine users.
[27] net change in greenhouse gas emissions– tonnes of GHG emissions reduced or avoided as a result of BPF finance.
[28] Area of marine ecosystems protected, enhanced or under sustainable management practices as a result of BPF projects.
[29] Changes in marine natural capital asset extent and condition as a result of BPF funding.

solutions and pilots (which utilise the insurance industry, wider finance players, science and governance).

With this investment, the UK will benefit from continued direct contact with diverse delivery partners and donors, to support a joined-up approach in enabling finance for NbS and cross-sector and cross-country learning. With longer-term investment, the UK will inform and influence the longer-term direction and investments of the Alliance.

ORRAA envisage coalescing the current pipeline of projects into the Sea Change Impact Finance Facility (SCIFF) pipeline[30] within the next three years. The SCIFF specifically would address the need for a new open architecture for ocean investment at scale through a new, commercially-managed framework in three interlinked areas:

1. A Blue Resilience Clearing House to act as a marketplace to match potential investments with projects and to build investment into innovative products in blue carbon as well as resilience bonds, debt-for-nature swaps and other finance mechanisms.

2. An Umbrella ("octopus") Facility to further support existing impact funds in this space, provide a technical assistance facility to invest in projects in development, and provide catalytic and equity finance to drive investment into what are currently viewed as higher risk areas in the ocean and coastal space, such as offshore renewables or green shipping.

3. A Risk Reduction Mechanism to develop and deploy insurance products and guarantees as the 'risk wrappers,' which are critical to hedging against risk as the marketplace evolves.

This option would involve investing into multiple projects in ORRAA's pipeline. This would likely include phase 2 support to projects that currently receive BPF, support for new projects currently in ORRAA's pipeline and/or Defra could select projects following a call for proposals (the Canadian government have recently taken this approach). This enables Defra to choose whether they want to scale-up existing projects or invest in new projects.

The more that ORRAA can front-load their operations, the easier it will be to crowd in ODA resources. A larger investment will show the private sector that there is public sector engagement and blended investment opportunities, which will engage the global marketplace for investment into blue resilience products and projects.

The UK's investment would also facilitate a database to be created of potentially investable projects for other funders.

A smaller budget option was discussed but it was decided that the returns would be smaller and given that ORRAA have successfully built a pipeline of investable projects, according to the Phase 1 appraisal, a higher value investment would allow Defra to support a more comprehensive and complementary portfolio of projects from year 2 onwards. Approximately per year would support the Secretariat with expansion in the Global South, maintain a necessary R&D budget and still allow adequate funding to bring 2-3 strong projects to scale and support their sustainable delivery. In addition, investing a smaller amount and working with ORRAA to leverage further finance would likely lead to delays in investment reaching projects (which could detrimentally impact the environment) and would also mean that the UK have less autonomy on how the investment will be spent.

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[30] 220620-SCIFF-FINAL.pdf (oceanriskalliance.org) The SCIFF is a foundational structure for the global ocean finance space, aiming to drive at least $1billion into coastal and ocean ecosystems by 2030.

Separately, ORRAA have explained that the investment would create the opportunity to bring projects from inception to bankability as well as to scale up projects of interest and replicate them in new geographies, without compromising on ability to support smaller pilot projects and react to new opportunities. According to ORRAA's Theory of Change, the supply of bankable projects is often a critical constraint to achieving greater investment from the private sector. Investing less than per year in years 2 and 3 in ORRAA's work will likely compromise the Alliance's ability to achieve impactful environmental and social outcomes.

Given the current climate and biodiversity emergencies, this "front loading" investment is key to restoring and building the resilience of coastal ecosystems and the communities dependent on them – the ultimate outcome of ORRAA's Theory of Change. The longer we take to move from pilot investments to scale, the harder and more costly it will become, risk exposure to hazards will grow and the private sector may become less likely to engage.

Option 'Do Nothing' - Baseline

This option would see the BPF withdraw support for an important area within the sustainable marine economy and climate change space, and as a result would present a significant reputational risk to the UK government, as well as to the BPF and its wider work.

The work of ORRAA would continue, however at a much lower scale and impact, given that the UK has the potential to be one of the largest donors and additional leveraging of funds would be lost. Withdrawing UK support from ORRAA would reduce the potential of ORRAA in its aim to leverage $1bn USD in finance for Nature-based Solutions and coastal resilience by 2030. Without further investment through the BPF, ORRAA will be reliant on either securing a long-term funding stream with interest, or reliant on the good-will of partners, countries, or multilateral organisations such as the World Bank, UNSD and UNESCAP; in-kind contributions; and some small financing from other sources. Regardless of where funding might be secured from, there would be a considerable and indefinite gap in delivery of projects without BPF investment.

This option would present missed opportunities to build upon the work started by ORRAA to increase ocean resilience through mobilising finance; and to meet the objectives agreed under the UK-led G7 Nature Compact, to increase finance and d**rive the protection, conservation and restoration of ecosystems**.

If the UK government did not invest further in ORRAA, then the UK would still invest in a number of BPF funded projects which also have mobilising finance as one of their programme objectives, such as COAST and Fiji Blue Bond. *See Annex C for detail on how ORRAA explicitly differs from other projects that have similar objectives.*

2.6 Appraisal of shortlisted options

For the purposes of this business case, we have tested value for money, through indicative cost benefit analysis.

The methodological approach is based on developing an Illustrative portfolio of projects which could reflect the impact of the BPFs investment. Th evidence base draws on estimates for projects funded by ORRAA that we deem to represent the types of projects that the UK funding would support and for which we have we derived partial Benefit to Cost Ratio (BCR). This approach delivers a part-quantitative, part-qualitative indicative value for money assessment – as such we consider it a test for VfM – where evidence base limitations prevent a full CBA and the ability to compare options with confidence (see uncertainty section set out below). Further details can also be found in Annex A.

2.6.1 Summary of Costs and Benefits (preferred option) – attributed to UK investment

Table 2: Benefits, cost, risks and conclusions of the proposed investment from Defra's BPF to ORRAA

Partial BCR (low / medium / high) - This is a proxy BCR based on a partial analysis of ORRAA supported projects – see Annex A for details. This BCR should be viewed as indicative only.	
Partial NPV (low / medium / high) – The NPVs are indicative of potential scale only as they are based on the estimated partial impact of selected ORRAA supported projects (see annex A for details).	
Monetised costs – Proposed UK investment (present value, PVC)	
Partial Monetised benefits (low / medium / high) – The monetised benefits are indicative of scale only. The non-monetised benefits section below includes a list of the types of benefits we expect to occur from further investment in ORRAA. (present values, PVB)	
Non-monetised costs	All costs have been monetised based on the UKs investment (these cover costs to fund the secretariat, overheads and finance that will be spent directly on project delivery).
Non-monetised benefits	• The projects funded by the BPF investment (and the finance leveraged following the BPF investment) will result in increased protection of ecosystems through NbS, specifically these projects could result in: ○ Improvements in community level resilience to flooding and climate shocks. ○ Improved livelihoods (in part through more stable income). ○ Increased carbon storage. ○ Increased education and training. ○ Better access to clean water. ○ Improved waste management (increased health outcomes and material revenue and reduced waste disamenity).

	○ More sustainable fisheries. ○ Improved biodiversity. ○ Increased tourism. • UK leadership and global reputation. • Improvement in the underlying evidence base to enable investments (through effective monitoring and evaluation of ORRAA supported projects). *(The exact benefits and scale will depend on the specific projects invested in).*
Additional Finance mobilised[31] – assuming that finance is leveraged at a ratio of 3-5 x the amount investment (note these figures illustrate a wider benefit, not captured in the CBA/BCR[32])	
Risks	Using proxy case studies and partial BCRs from these case studies is risky as it is uncertain whether the UK investment will deliver similar types of impacts (with similar magnitudes). Some projects funded by ORRAA will have reasonably high levels of risk and may not all lead to significant benefits. For example, some individual projects are innovative, with the aim of improving knowledge, but the extent to which research findings will be relevant and useful will vary. Similarly, there is a risk that the UK investment may not be able to leverage the projected level of finance if investors choose to invest elsewhere. There is a risk of inflation devaluing the investment if the currency in which the investment is held experiences high levels of inflation. There is also a risk of unfavourable shifts in exchange rates which could reduce the impact of the investment. Separately there's a risk of underspend which would reduce the BCR and NPV. See annex A for details on the possible impact of this. The benefits have been reduced to account for the risks of unfavourable exchange rate shifts and optimism bias associated with projects delivering less than projected impacts (see below).
Key assumptions in appraisal	• Additional finance mobilised will be leveraged at a rate of 3 to 5 x the amount invested. This is based on projections provided by ORRAA. We have sense-checked these to ensure coherence with the ICF KPI methodology.

[31] This is in addition to the expected monetised benefits.
[32] Mobilised finance is not included in CBA nor BCR estimates, in line with the BPF appraisal methodology.

	• Appraisal period for NPV calculation: 30-years • Discount rate: 1 • Benefits begin to be realised in year 5 • A reduction of 1has been applied to the benefits to account for unfavourable exchange rate shifts and inflationary pressure devaluing the investment[33]. • A reduction of has been applied to the benefits to account for additionality (i.e., whether the projects would have been funded in the absence of the UK investment). • An Optimism Bias of has been applied to the benefits to account for failing to deliver desired impacts.

[33] We have chosen to reduce benefits for exchange rate shifts for this programme specifically because at a minimum, the investment will be made in GBP, it will then be held in Swedish Krona before being transferred to USD.

The innovative nature of ORRAA means that there are inherent challenges and uncertainties in the exact quantification of its benefits. However, as described above, we present partial analysis for current ORRAA projects to conservatively estimate the potential scale of benefits associated with further investment – to test VfM.

Annex A provides further details on the evidence base - specifically the projects used to derive an average BCR (as referred to in Table 2). There are illustrative of future investments, since ORRAA will invest over its lifetime in a range of enabling projects in a range of locations. These examples do not offer comprehensive quantification of expected benefits associated with the projects – instead they focus on monetising a specific set of benefits. Therefore, they should be considered as partial only and in reality, the BCR of such projects could be higher. These examples have been used to demonstrate that further investment in ORRAA is expected to deliver a positive return on investment, even when only looking at a narrow range of benefits.

In some cases, final value for money may be lower, especially where there are greater risks, uncertainties and barriers. However, such projects may be exactly the type of projects which result in a 'step-change' in enabling marine NbS to attract funding from public and private sources. In addition, the *potential* lower BCR in the intermediate term (due to the innovative nature of investments) could contribute to achieving value for money in the long-term – as a result of critical learning and enabling private finance.

The expected impacts of the investment will be reviewed following the completion of each annual review to ensure that ORRAA remains the preferred organisation to invest this funding in.

2.7 Uncertainties

There are many uncertainties in the appraisal. These include:

- There are evidence gaps in the 'Business As Usual' situation, including climate risks and action of others.
- Uncertainties in the potential effectiveness of ORRAA's work. Evidence gaps in the specific benefits of projects, including effectiveness of interventions in specific locations.
- The exact projects the UK investment will be spent on will be confirmed via the Grant Agreement under advisement of the ORRAA Secretariat.
- Fluctuations in exchange rates could impact the value of the UK investment in other countries
- Uncertainty remains over whether ORRAA will be able to leverage the same amount of finance (and more) in the future.

There is a risk that the appraisal below does not accurately reflect the actual impact of the UK investment. As a result, we have applied a optimism bias to the projected (partial) benefits calculated. See Annex R for a full explanation of all uncertainty and mitigating actions taken.

This means it is not possible to appraise and fully quantify with certainty the options with a whole-programme Cost-Benefit Analysis. **Finance will only be released on the basis that this review provides us with confidence that ORRAA are delivering as expected and are well placed to continue and expand on their activities with further UK funding.**

Review of Appraisal following ORRAA year 1 evidence

Following the initial results of the first-year investment, we have strong confidence in the prior VfM appraisal presented in this business case – both that the illustrative portfolio provides an accurate representation of the impact of the investment, and that these outcomes and performance are in line with the indicative range of estimates. The new evidence provided by ORRAA validates the assumptions made in the ex-ante appraisal to the extent possible with year 1 outputs and provides greater confidence in these assumptions. However – reflecting we have only year 1 results, we judge that it is too early and would be premature to refine the analysis further at this stage, nor that there is expected to a change the fundamental results of the original cost benefit analysis.

Examples of initial results from the first-year investment from three ORRAA projects are below:

- For weather based parametric insurance for small scale fishers, the proxy case study estimated a partial BCR of This was based on an assumption of 50,000 fishers having access to insurance. Following the completion of the feasibility study, the intent is to pilot the product across several coastal municipalities as a proof of concept. Thus, data on the actual number of people supported is still not yet available. The proxy study estimated that an extreme weather event insurance product for fisheries in the Caribbean could provide up to of benefit for every £1 of spend. The project report states the estimated cost per fisher of this coverage will be between and per year, with this providing coverage of per year. This is therefore consistent with the assumptions of the proxy case study.
- The only benefit quantified for the proxy study for 'Financing the Mesoamerican Reef's Resilience to Extreme Climate events' was increase in value of the programme. Following the results of the first-year investment, this value has not changed. However, 87 people have received direct training now in reef response and reef resilience, significantly more than 22 people recorded at the time of the initial review.
- For the Ocean Risk Innovation Challenge (ORIC) 2.0, reporting of results will not be available in full until 2023. No assumptions used for the proxy analysis have changed.

For the ex-ante appraisal, an optimism bias of was applied to benefits to account for projects failing to deliver desired impacts. Although the ORRAA year 1 results to date give us greater confidence the projects will continue to deliver, we have kept the optimism bias applied as uncertainty remains, and we do not yet consider there is sufficient new evidence to revise the underlying assumptions of this appraisal.

2.8 Ensuring value for money (VfM)

Further investment in ORRAA has been assessed against the 'four Es' of ODA value for money. Using the outcomes from Phase 1 to inform a VfM appraisal, it is assessed that ORRAA has the right procedures, plans and approaches in place to ensure Economy, Efficiency, Effectiveness and Equity; as well ability to deliver against intended outcomes.

The 'four E's' of ODA Value for Money

Economy (are we buying at the right price?)

ORRAA have Assessment Criteria for project proposals which provide benchmark parameters on the assessment of projects potentially eligible for financial support from the Alliance. Specifically, ORRAA projects undergo a project approval and delivery process which is described below:

This process enables ORRAA to draw on their institutional expertise and critically assess proposals to ensure that they offer good value-for money, provide monitoring, learning and evaluation to track contribution of the projects to ORRAA and donor objectives.

To date, ORRAA has welcomed a range of new delivery organisations through the competitive innovation fund. The competitive element of ORRAA helps to ensure that investments are made at the right price. In addition, because of the wide range of delivery partners and Alliance members that ORRAA work with, ORRAA and its donors have an opportunity to choose the best organisations for each project – critically assessing each against their investment criteria.

Efficiency (are we spending well?)

Efficiency means turning inputs into the desired outputs – in this case, the intermediate outputs of pilots and results of R&D projects are producing relevant data and modelling, identifying and delivering projects which can be scaled up, as well as leveraging funding from partners and stakeholders. ORRAA is aiming to leverage at least $1bn USD of investment coastal and marine natural capital through the development and deployment of financial products that build the resilience of 250 million climate vulnerable coastal people, by 2030. The programme level VfM appraisal in Annex O demonstrates the quantum of finance ORRAA are successfully leveraging from existing funding.

The impacts of Defra's investment are protected or restored marine and coastal habitats, which have the potential to support ecosystems and livelihoods, reduce vulnerability and increase resilience[34] in the most exposed and vulnerable regions. To spend well, ORRAA bases decisions on the best available evidence of restoration and conservation, choosing interventions with the greatest potential, as well as seeking innovative solutions.

Effectiveness (are we spending wisely?)

Effectiveness means focusing on the 'right' investments in order to lead to a reduction in poverty, improvements in resilience and improvement in the marine environment. ORRAA addresses a clear gap: enabling finance into marine NbS.

ORRAA is co-hosted by the Global Resilience Partnership (GRP). Over the past 5 years, the GRP has funded over of investments in resilience that have benefited over 7 million people. ORRAA also applies the appropriate type of financing for the country, partner or issue in question: seeking co-funding where relevant and direct grants to local organisations where appropriate.

Since Defra made the initial investment, a new Financial Advisory Body (The FAB) has been implemented. This body will support ORRAA in monitoring potential funding conflicts of interest, overlap with other existing donor investments, and help prevent "double dipping" by

[34] The Alliance defines resilience as the capacity to deal with change and continue to develop, and is elaborated by the IPCC as "capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation.

projects, thereby reducing duplicative work and ensuring funding and any opportunities for co-funding are aligned. It will also ensure that funding for new projects is maximized while providing space to leverage additional funding streams to support the scaling of current ORRAA projects. Further detail on the governance for this group and Defra's role are described in the Management Case.

In addition, ORRAA use project eligibility and assessment criteria to provide benchmark parameters for the ORRAA Secretariat on the assessment of projects potentially eligible for financial support from the Alliance[35] (see above). The criteria are used to ensure that investments are nature-positive, equitable, sustainable and ultimately offer positive VfM. In summary, eligible projects:

- should either promote the development of ocean and coastal Nature-based Solutions (NbS) or mitigate risk multipliers like overfishing and pollution, delivering enhanced economic, social and cultural resilience for climate vulnerable coastal communities.
- should be biodiversity positive, lead to either net zero or climate positive outcomes, and "do no harm" - i.e.: not result in negative impacts on communities or the ecosystems they are designed to build resilience in.
- are required to include local partners from the Global South.

There will be provisions in place to suspend/terminate funding in the event of ORRAA not delivering as expected. More detail on this can be found in section 3.4 and 4.9.

Equity (are we spending fairly)

ORRAA seek to focus on the most vulnerable populations. Project partners are required to specifically explain how their project has been designed and will be delivered in such a way to take into consideration gender and equity and outline how women, children and other vulnerable groups will benefit from the project.

In addition, ORRAA engages with a wide range of delivery partners and Alliance members that means diverse stakeholders are involved, beyond what might be perceived to be 'tried and tested' partners. This enables diverse perspectives to be heard and considered, which increases the equitable approach. Defra are able to directly support further diversification and representation on ORRAA's Boards through their membership and ways of working with the Alliance.

2.9 Conclusion of economic appraisal

Based on this assessment, investment in is the preferred option and is assessed to represent value for money based on the available evidence. ORRAA are the only organisation delivering the necessary holistic, multi-sector approach with particular influence with private sector investors - a sector that is very much underleveraged for ocean finance. The UK can directly benefit from working with ORRAA due to their role in bringing together these sectors, including insurers, bankers, governments from developing and developed states, multi-lateral entities, academics and civil society; to work effectively across geographies on financial and insurance tools to build coastal resilience, and accelerate global transition towards nature positive investments.

Whilst similar initiatives exist (and are emerging) in this field, such as Fiji Blue Bonds and COAST (see Annex C) and there is opportunity for complementarity, ORRAA is sufficiently

[35] These criteria were based in part on frameworks developed for Canada and UK grant work. These criteria are now being incorporated into the design of the SCIFF.

different to warrant separate investment, and is well connected with other, similar initiatives to proactively avoid duplication of effort.

ORRAA have access to a variety of delivery partners, as well as an established working relationship with larger, less agile organisations. Defra can benefit from this in terms of access to a wider pool of project partners and expertise without compromising on the advantages of being able to interact directly with funding recipients or steer the programme of projects through the UK’s position on the ORRAA Steering Council and the Funders Advisory Board.

Following detailed cost benefit analysis, through developing an illustrative portfolio, the preferred option of investing a further over the next four years (22/23 – 25/26) is expected to deliver a BCR of (central estimate), resulting in benefits of (PVB, central estimate).

Our assessment of Phase 1 projects gives us confidence that VfM has been achieved with the single year spend, and relevant, useful conclusions drawn on how to better appraise VfM and longer-term impacts have been identified. Given the early stage of the Programme and the work of the Alliance, the current trajectory against the short-term outcomes is very positive and for some outcomes (such as number of investable projects identified), has been exceeded.

In addition, further investment through the BPF is necessary to ensure that ORRAA’s progress via the one-year grant (2021/22) is embedded to **create a long-term impact** and support durability of the alliance. Without extending the work of ORRAA, the gains made via the one-year grant would not be built upon and as a result, long-term benefits would be less likely to be delivered. We are confident that with additional funding bolstering their operations, ORRAA will be able to expand their network of experts and further their work in ocean finance.

Our preferred funding option is for a investment, funding a range of priority delivery and research projects alongside funding the cross-cutting work of the secretariat, to enable the full potential of ORRAA to be realised – and the ‘step change’ in nature-positive finance for marine and coastal NbS and community resilience.

3. Commercial Case

3.1 Competency of the delivery organisation

ORRAA is led by a leadership team, including an Executive Director, and is supported by a secretariat combining the expertise of AXA XL, the Global Resilience Partnership (GRP) and (previous to 2022) what was Ocean Unite. ORRAA's membership (see Annex G for roles and responsibilities) draws on expertise from leading institutions in the insurance and banking sectors who have strong delivery track records, as well as global influence and credibility. The Strategic Case outlines how ORRAA has successfully moved into Phase II of its Business Plan, having secured funding and membership to support this move.

Since the launch of ORRAA in 2018, the alliance has received in direct and in-kind contributions from private and public sector. This has leveraged an additional in the same time frame (see Table 1 in section 2.1). Donors include the US, Canada, the Gordon and Betty Moore Foundation, AXA, The Builder's Initiative and Willis Towers Watson. Table 3 illustrates the Alliance's growth.

Table 3: Growth in number of ORRAA's projects, value of projects, and membership over 2020-2023. (Information correct of July 2022)

Year (UK fiscal year)	Number of projects supported		Membership (new members signed by category and total)
2020/ 2021	Via Monetary support: 10 Via in-kind support: 11		16 new members (35 total) *7 full members* *8 project delivery partners* *1 observer*
2021/ 2022	Via Monetary support: 14 Via in-kind support: 11		14 new members (49 total) *7 full members* *5 institutional partners* *2 observers*
2022/ 2023	Via Monetary support: 10-12 Via in-kind support: 20		7 new members (56 total) *7 full members*

3.2 Due diligence

The Project Manager has undertaken due diligence checks (including safeguarding) against the delivery partner, this includes the Defra Group Commercial due diligence checklist which found no issues and a scored a green recommendation meaning very limited risks.

ORRAA completes due diligence on all its project partners, a process undertaken by the Secretariat in accordance with GRP processes that are governed by Stockholm University. Any partners that are provided funding must agree to complete an organisational self-assessment, a risk register that is regularly updated, annual audits, financial reports, narrative reports and evaluations as well as site visits where appropriate.

Please refer to **Section 4.8** for further information on **ORRAA's financial fraud and risk assessment**. For **management and governance arrangements**, please refer to **Sections 5.1.2, 5.1.3 and 5.2.**

Market Analysis

As communicated to Defra via agreed, formal quarterly meetings and the project report summaries delivered in September, projects receiving UK funding have been completed on time and via the initial VfM assessment, have met their deliverables to a satisfactory level. A breakdown of projects and budgets for the single year grant in 2021/22 are shown in Table 4. These evaluations will be used to agree which projects will be selected for continued support or scaling up.

Final financial reporting was delivered in September 2022 at a programme and project level. The reporting shows an underspend created by lower travel costs than budgeted at the project level and currency gains.

Table 4: BPF funded ORRAA projects 2021/22 and indicative project costs

3.3 Why is the proposed funding arrangement the right one for this intervention, with this delivery partner?

Having considered the alternative options to deliver the desired outcomes of this business case, such as competing this opportunity, the conclusion was that a direct award to ORRAA is the most optimal route to market due to their specialised offering in the innovative finance space; as well the expertise they bring together through their membership. They have demonstrated via the year 1 grant and initial project outcomes reported in the Strategic and Economic Cases (sections 1.3, 2.2, 2.4 and Annex A) that this arrangement is effective and that ORRAA have the right governance in place to comply with ODA funding and reporting requirements.

As outlined in the Strategic Case, Section 1.3, there are additional benefits to Defra's BPF programming from working with such a cross cutting, agile alliance.

3.4 Management and governance

3.4.1 ORRAA Governance arrangements

ORRAA has transitioned from an alliance hosted by Ocean Unite and GRP to a separate legal entity and a USA registered non-profit organisation, in accordance with their organisational development model, which Defra were sighted on prior to awarding the first grant.

The Leadership team for ORRAA represents ORRAA (Executive Director and co-chair), GRP and AXA XL (Co-chair).

The Secretariat is co-hosted by the Global Resilience Partnership (GRP) and ORRAA Inc. ORRAA Secretariat staff and consultants are hired and managed by ORRAA Inc., which also coordinates all communications, outreach, ORRAA's work programme, member and policy engagement, and the management of philanthropic or other grants.

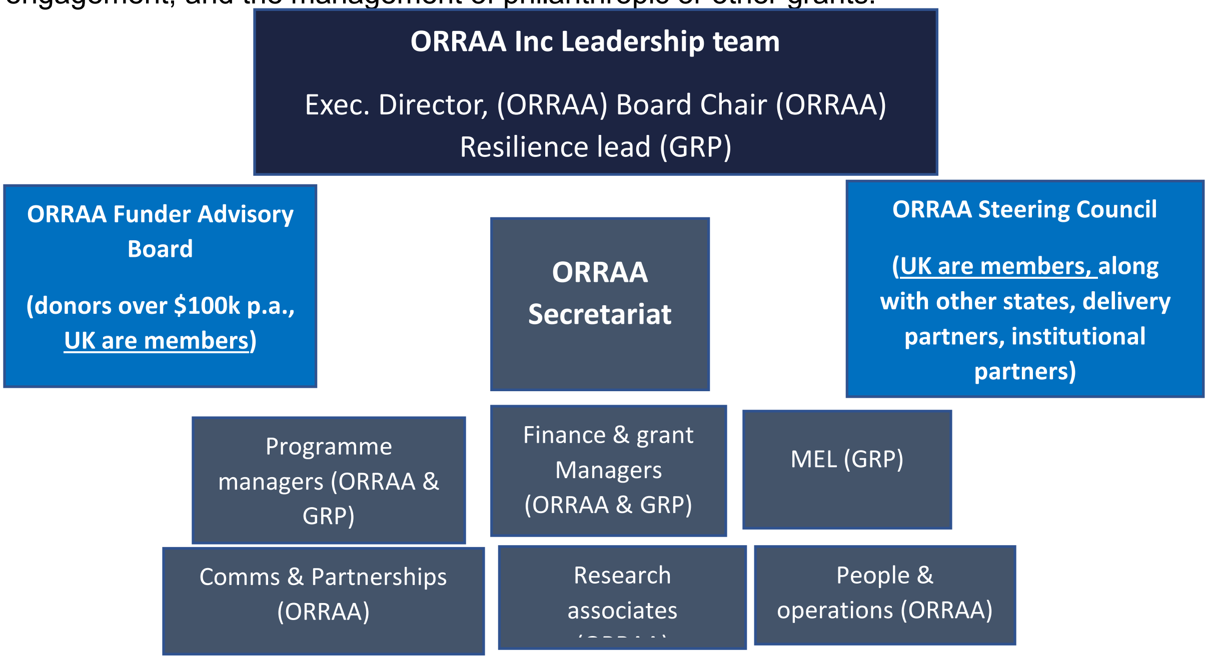

Figure 2: Overview of ORRAA governance, roles and organisational hosts for the work areas

The Secretariat is guided by a Steering Council of 10-15 representative members to ensure that it is accountable to ORRAA's members. The Steering Council sets the overall strategic direction for the ORRAA Secretariat, including guidance on strategy, objectives, plans, and programmes in accordance with the agreed ORRAA Governance Terms of Reference. It also coordinates with like-minded entities to ensure complementarity of efforts. It ensures transparency, accountability and that the mission of the Alliance is delivered. The Steering Council meets twice a year. Steering Council members **do not select projects for funding** to avoid potential conflicts of interest, as many Steering Council members are also potential/past project delivery partners.

The Funder Advisory Board (FAB) was created by the ORRAA Secretariat in response to UKHMG's need to have oversight of and steer spend of BPF funding, as well as the growth in the number of ORRAA funders and size of its funding base. The Board works in close collaboration with the Secretariat and Steering Council to coordinate and leverage opportunities amongst donors. The FAB is comprised of funders to ORRAA that contribute at least annually in support of ORRAA's core functions. This currently includes the Governments of the UK and Canada, the Gordon and Betty Moore Foundation, the Builders Initiative, and Deutsche Bank, with the United States membership soon to be finalised.

3.4.2 UK and ORRAA Governance arrangements

Defra, as holders of the UK membership and current BPF programme leads with ORRAA, sit on the Steering Council and Funder Advisory Board. These groups both meet twice a year and Terms of Reference are included in **Annex J.** Defra also work directly with the ORRAA leadership team and Secretariat on programme governance, grant management, annual reviews and via more informal calls for progress updates twice a month.

Proposed role of these groups and formalised engagement with ORRAA for grant management and annual reviews over years 1 and 2-4 is proposed below in Table 5, including how these reviews will be used to release subsequent funding against payment milestones agreed in the grant contract. It is recommended that following agreement of a joint Delivery Plan between Defra and FCDO, that relevant programme leads from FCDO are integrated to the formal review points and project selection discussion, to ensure complementarity across BPF programmes.

Table 5: Indicative monitoring and reporting process to be established between ORRAA and Defra, and with input from FCDO, to provide assurances prior to payment milestones and ensure grant agreements and reporting remain relevant throughout the life time of the multi-year grant.

Grant Year	Review point	Purpose	Reporting due	Payment/approval milestones, according to objectives met	Leads/SRO
1	October 2022	Annual review of single year grant.	Full financial and project reporting for single year projects (2021/22), measured against BPF ToC, critical success factors and grant agreement. Using agreed reporting templates, written and presented project summaries and formal MEL process (as show in Management Case).	Clearance on the grant agreement for new multiyear investment. Payment of two thirds of year 1 funding. Fraud Risk Assessment & Risk Register reviewed	Defra Programme Managers & MEL leads; Commercial Grants team ORRAA, Leadership Team Secretariat- Programme Mangers, Finance & grant managers & MEL leads
1	January 2023	Mid-point review	Project updates, measured against agreed spend and year 1, q4 project milestones	Payment of balance of year 1 funding. Agree spend profile and allocation for year 2	Defra Programme Managers ORRAA, Leadership Team Secretariat- Programme Mangers
2	April 2023	Annual reporting for year 1	Full financial and project reporting for year 1, measured against agreed benefits, impacts, outcomes and spend. Formal reporting templates and full MEL process completed- grant agreement and payment milestones adjusted as needed. Reporting shared with FAB for lessons learnt and discussions on co-investment	Payment of 50% of year 2 funding. Confirm spend profile and allocation. Clearance for disbursement of project funds for year 2 delivery. Confirm risk assessments and grant agreement for year 2 activities	Defra Programme Managers & MEL leads; Commercial Grants team ORRAA, Leadership Team Secretariat- Programme Mangers, Finance & grant managers & MEL leads. Commercial MEL supplier FCDO BPF leads

2	Sept 2023	Quarterly point review	Project updates, measured against agreed spend and project milestones for year 2, q1.	Payment of 25% of year 2 funding.	Defra Programme Managers ORRAA, Leadership Team Secretariat- Programme Mangers
2	January 2024	Quarterly point review	Project updates, measured against agreed spend and project milestones for year 2, q2.	Payment of 25% of year 2 funding. Agree spend profile and allocation for year 3 Review grant agreement, FRA and Risk Register for updates for year 3	Defra Programme Managers ORRAA, Leadership Team Secretariat- Programme Mangers
3	April 2024	Annual review	Full financial and project reporting for year 1, measured against agreed benefits, impacts, outcomes and spend. Formal reporting templates and full MEL process completed- grant agreement and payment milestones adjusted as needed. Reporting shared with FAB for lessons learnt and discussions on co-investment	Payment of 50% of year 3 funding. Confirm spend profile and allocation for year 3. Clearance for disbursement of project funds for year 3 delivery. Confirm grant agreement and risk assessments for year 3 activities	Defra Programme Managers & MEL leads; Commercial Grants team. ORRAA, Leadership Team Secretariat- Programme Mangers, Finance & grant managers & MEL leads Commercial MEL supplier
[year 2-3 milestones and reporting repeated for year 3 and 4]					
4	April 2026	Close out review	Full financial and project reporting for year 4 and lifetime of the grant, measures against agreed impacts and outcomes and ODA close down reporting requirements. Full extended MEL process conducted.		Defra Programme Managers & MEL leads; Commercial Grants team; ODA Board ORRAA, Leadership Team Secretariat- Programme Mangers, Finance & grant managers & MEL leads FCDO formally consulted Commercial MEL supplier

3.5 Budget and payment mechanism

The budget for this investment is, over the period of FY2022/23- FY25/26. The payment mechanism would be through a direct grant award to ORRAA, governed by a Grant Agreement. This would be based on the original agreement with ORRAA, taking on board lessons learnt and ensuring that claw back mechanisms are included in the event of non-delivery of agreed objectives and to mitigate other risks identified in the Fraud Risk Assessment and any Commercial Risks, as identified and mitigated for in the Risk Register, shown in **Table 10, Section 5.5** of the Management Case below.

Budget per year, overheads and spend profile are described in **Section 4.2 of the Financial Case.**

3.6 Transparency and risk management within ORRAA

Where there are any potential conflicts of interest regarding ORRAA, Steering Council Members will be expected to declare these. When necessary, members will recuse themselves from any discussions where these conflicts could arise.

The Funder Advisory Board (FAB) which meets twice a year has a clear mandate to mitigate and manage risk related to duplication of funding streams and to ensure transparency and complementarity.

Defra management and governance arrangements are set out in Section 5.1.2.

3.7 Safeguarding

ORRAA follows the safeguarding policies of Stockholm University and the Global Resilience Partnership. GRP has a specific whistle blower policy and as part of due diligence and ongoing monitoring, all organisations that are receiving ORRAA funds will need to complete and regularly update a risk register and review policies that include a focus on anti-corruption and safeguarding. Further details on safeguarding are described in the Management Case, section 5.7.

3.8 UK domestic subsidy

Having consulted with relevant WTO and UK subsidy colleagues this grant funding is compliant with the following:

1. World Trade Organisation (Agreement on Agriculture)
2. New subsidy controls under the EU-UK Trade and Cooperation Agreement (Chapter 3)
3. Northern Ireland Protocol Art 10

The project does not provide support to agricultural producers or processors, so it is outside the scope of the WTO Agreement on Agriculture. However, we may need to notify under the terms of the WTO Agreement on Subsidies and Countervailing Measures, the next WTO notification round is in 2023 and we will work with the WTO team to ensure compliance.

Additionally, subsidy colleagues have confirmed that they do not consider this funding to constitute a subsidy and thus not be in scope of the Trade and Cooperation Agreement or the Northern Ireland Protocol Art 10.

3.9 Commercial risks

The key commercial risks in this investment include:

- Fund Diversion, including fraud, corruption, bribery, theft, terrorist financing, money laundering and other misuse of funds that prevents funds being directed to the correct purpose
- Fluctuations in exchange rates could cause a reduced sum of money. In the event of adverse currency movement, there will be reduced potential for project delivery
- Difficulty in attributing every £ to specific activities and outcomes

Those mentioned above are discussed further within the management case risk register (**Section 5, Risks 7,8 and 10**) as well as the mitigating actions.

Mitigating actions related to fraud, corruption and other misuse of funds are also outlined in the Fraud Risk Assessment. Responsibility for the actions will lie with the Defra Programme Manager and the ORRAA MEL and Programme Mangers within the Secretariat (see Figure 2). Our confidence in ORRAA's assurance and financial management processes are described further in the Accounting Officer tests below.

4. Financial Case

4.1 Nature and value of the expected costs

The total funding for the programme under this FBC is as a four-year direct grant from Defra (2022-26). This is in addition to already awarded via a single-year grant in 2021/22, taking whole life costs of the programme to This funding will come from Defra's ODA budget and the first three years of the investment (2022-2025) is affordable according to the 2021 3-year Spending Review.

The costs of this project are RDEL and CDEL. In an average year, that will support R&D products and tackle specific barriers to increasing ocean literacy in the private sector. For year one of this multi-year grant, an estimated would be allocated for CDEL, covering R&D, policy papers and supporting forums for knowledge sharing. This proportion would be reduced to approximately for years two and three of the grant when the focus of programme will shift towards implementation, using R&D products. Consolidated Budget Guidance (CBG) states capital spend is unrequited transfer payments which the recipient must use to buy capital assets; buy stocks or repay debt.

The ratio of spending for the grant will be approximately on the portfolio of financial innovation and research and development projects. A further (approximately) would be invested into the ORRAA Secretariat – the policy, communications, outreach and engagement hub of the Alliance, and approximately on overhead costs. See section 4.1.2 below for rationale on funding the ORRAA secretariat.

The overhead costs of for Stockholm University (SU) is the contribution that SU charge for management, legal, administrative costs and some financial costs associated with grant management. The costs are separate from the Secretariat who lead on programme management, research and member engagement. This contribution will remain whilst ORRAA's administration is partly housed by the Stockholm Resilience Centre. As ORRAA has moved to become a legal entity, these costs have been reduced down to from in the first year of funding and will be further reduced down to by year 2 of Phase 2 funding, as ORRAA Inc. takes on the financial and grant management.

4.1.2 Rationale for spend profile over four years

As funding in year one is due to delivered late in the FY 2021/22, we recommend a bell curved shape spend path, with reduced funding in year one to allow continued support for the best performing projects from the single year grant. This would follow with the majority of larger and scaled up projects funded as early as possible in year's two and three to enable them to have the best possible runway for development and implementation. These could then be leveraged in year four with a focus on further implementation as well as identifying opportunities for private or multi-lateral sector investment into growing them further; coupled with an exit-strategy and project close-out review. We are confident that ORRAA will be able to continue operating beyond March 2026 (if the UK decides not to further invest in ORRAA beyond March 2026).

The recommended high-level budget profile is outlined in Table 6. but **will be governed by the grant agreement and delivered on a results-based case.** The annual splits (as well as the total value of the investment) are steered by consideration of the following

- Costs are front-loaded in the early years of a start-up to allow for the right levels of expertise, as well as on the ground delivery and ability to scale. ORRAA is in its second year of delivery.
- With the main costs for an innovative tool or project being on the front end, once it has been designed, those costs do not need to be replicated for each subsequent project. The tools become more cost effective over time, reducing the upfront capital expenditure needed.
- When the insurance sector is involved in de risking, that then begins to crowd in other private finance that is less risk-averse, so the more quickly we can move (as a global community) to drive the development of the insurance tools for coastal nature-based solutions; the faster we should see additional investment.

Given what science is demonstrating in terms of the rate of change and the need to intervene quickly and at scale, the longer we wait the harder and costlier it will become.

Table 6: Proposed spend profile by work area for the four-year grant to ORRAA.

The **mechanisms for reviewing milestones and deliverables** are outlined in the Commercial Case above and described in the Management Case below. The outcomes of the reporting described between ORRAA and Defra would be used to make the case during the next Spending Review for the fourth, final year of investment to ORRAA (2025-2026).

A four-year spend is recommended rather than a three year spend due to. In line with advice from the ODA's Red Team reviews, SRO approval was granted to extend the profile of the spend to mitigate risks identified in the Strategic Case (Section 1.2) and the Appraisal Case (Section 2.2) regarding risks of a reduced window to deliver funding this FY (2022-23). These risks included jeopardy to existing projects due a potential break in funding if Defra were to pause investment this year, only to restart next year for a further three years. An uplift to the spend will also address risk to loss of capital to ORRAA from costs of transaction fees, conversion rates between UK, SRC and delivery partners (usually in USD) and potential decline in the value of UK Sterling. From an environmental impact perspective, a four-year programme always greater opportunity to leverage and attract additional funding into nature positive investments and allows the UK to support sustainability of the Alliance and the projects it delivers.

4.1.3 Rationale for funding of the ORRAA Secretariat

Between 2021/22 and 2024/25, the UK and Canadian governments will fund the secretariat costs in their entirety – this will be reviewed once this 4-year period is up. As a result of this arrangement, all finance leveraged from other public and private organisations will be spent on projects, innovation and R&D. This is an effective way of enticing investors who are attracted to the prospect of their investment being fully spent on project delivery.

ORRAA Secretariat costs are in line with similar spend for other BPF programmes, including Global Plastics Partnership (GPAP). The GPAP costs for the Secretariat plus overheads was but with comms and strategic support added in; the proportion allocated for the same activities that will be undertaken by the ORRAA Secretariat in full by 2023 was

Support for the ORRAA secretariat achieves ORRAA outputs and outcomes itself. Lessons learnt across projects/ sectors (including what has not worked), and how investment into coastal resilience and NbS can be scaled have to be effectively communicated in order to encourage sustainable ocean finance and systemic changes in global financial systems. It is the secretariat's role to disseminate this information and aggregate findings through high profile events, strong interpersonal skills/ relationships and clear and consistent messaging. Funding the secretariat to allow them to fulfil these roles is therefore crucial.

4.2 How will funds be paid out?

This project will be entirely financed through a direct grant, the agreement for which will be based on the terms approved by Commercial in 2021/22.

Payments will operate on a basis of three annual payments made in the first, third and fourth quarters, subject to final project selection and cash flow requirements for start-up versus project maintenance. Reducing the milestones payment to three instead of quarterly payments (with the exception of year 1 where we recommend two payment milestones), will reduce administration and financial costs of transferring funds (see Table 7). Further information on the MEL used to steer the grant agreement and payment schedules can be seen in Section 5.3 of the Management Case.

Table 7: Payment schedule for years 1-4 of the new 4-year grant (2022-2026)

Grant year	Milestone	Expected date of invoice	
1	1st quarter	*(grant not in place)*	
	2nd quarter	November 2022	
	3rd quarter	January 2023	
2	1st quarter	October 2023	
	3rd quarter	January 2024	
	4th quarter	March 2024	
3	1st quarter	October 2024	
	3rd quarter	January 2025	
	4th quarter	March 2025	
4	1st quarter	October 2025	
	3rd quarter	January 2026	

	4th quarter	March 2026	

Financial safeguards
Given the innovative nature of some of the projects the UK might invest it, and ORRAA still being a relatively new alliance, ORRAA, we recommend that the preferred option for funding is approved on the basis that the grant agreement will only be approved and funding delivered in Q3 of this FY, following sign off on the annual review in October. This process will allow Defra and ORRAA to continue to prepare for projects in 2022-23 and following the annual review, move to delivery immediately without further clearances required from the ODA teams.

Defra will publish the programme's business case, logframe and Annual Reviews on DevTracker in line with ODA programme requirements.

4.3 Accounting Officer Tests

The accounting officer tests have been met. Please refer to Annex H for further details.

Affordability (and financial sustainability): the first year of this investment has an allocated budget from financial year 2022/23 of, subsequent investments of will be similarly delivered, in line with the new grant agreement and on receipt of satisfactory project reporting for previous year and confirmation of project selection each year.

Regularity: the project will be managed in accordance with HMT's Managing Public Money guidance and in line with the Defra ODA guidance. Legal powers are in place through the International Development (Official Development Assistance Target) Act (2015). This project meets the ODA requirement that the activity must promote the economic development and welfare of developing countries as its main objective.

Propriety: ODA funding will be allocated under Section 1 of the International Development Act (2002) and expenditure will be in accordance with this legislation and all ODA requirements. The project will not breach any parliamentary control procedures or expectations, Defra Board governance structures will be followed which are guided by the Corporate Governance Code. Additionally, payment in advance has been approved by the Financial Governance team.

Value for money: the recommended option for funding has been appraised carefully against alternatives, including a do-nothing option as well as alternative funding mechanisms and delivery approaches. VfM for Phase 1 funding has also been assessed to have been met (see Section 2.8 in the Appraisal case)

Feasibility: the need for investment has been outlined in the strategic case, the investment can realistically be implemented accurately, sustainably and to the intended timescale.

4.4 Front Line Delivery Costs

Managing the UK's funding contribution requires four FTE's which is laid out in Table 8. Front Line Delivery (FLD) will be funded separately outside of the project budget, the Defra International Sustainable Blue Finance team has sufficient budget under the current SR to fund staffing costs.. The staff set out in the table are the core team working on ORRAA to ensure delivery of HMG objectives. Project staff also draw on broader policy expertise in Defra and across HMG on marine and fisheries policy and private finance as required.

Table 8: Front Line Delivery breakdown

4.5 International Climate Finance

The UK is committed to spending £11.6 billion over the next 5 years (2021-2026) on ICF. With climate being a strategic cross cutting theme of the BPF a proportion of the programming will be considered as ICF.

Using robust methods based on globally accepted standards, Rio markers,[36] it has been estimated that of the funding given to ORRAA will classified as ICF. This figure will be reassessed throughout the lifetime of the project. As part of the UK's ICF commitment, the project will follow ICF regulations and reporting, which are already embedded into the BPF Monitoring, Evaluation and Learning (MEL) framework which in turn have guided ORRAA's MEL criteria.

4.6 Financial management: monitoring, reporting, accounting

4.6.1 Defra financial management requirements

We require annual audited and quarterly unaudited financial reports from the Delivery partner. Table 9 sets out the cycle of these reports in Year 1. This takes into account the grant being awarded late in the FY so whilst the requirements will be replicated for years 2-4, timing will be adjusted as needed. The Defra team are confident in the competency of the organisation to deliver these, using the reporting from the year 1 single-year grant and the reporting provided to other donors to the Alliance. These can be provided.

Table 9: Financial requirements, indicative and assuming grant awarded in October 2022

Document	Lead	Description	Cycle	Estimated Deadline
Financial report	ORRAA	Quarterly report on spend	FY22/23	31st January 2023 31st March 2023
External financial audit	ORRAA	Final financial report	FY22/23	30th June 2023

4.6.2 ORRAA financial management requirements

Whilst ORRAA has become an independent, US registered not-for-profit, it is still co-hosted by the Global Resilience Partnership at the Stockholm Resilience Centre (SRC), who oversee the financial monitoring of funds which are managed through the overall Stockholm University (SU) financial system.

The overall turnover of the Stockholm University is around and it has a well-developed financial management system. As a governmental entity, Stockholm University is governed according to Swedish laws and regulations pertaining to all public entities, through this Stockholm University are required to develop an annual financial report for external and public review.

Stockholm University is subject to an annual audit process and individual departments, or centres are subject to random internal audits at least once every 5 years. Procurement is

[36] The Rio Markers have been developed to track ODA flows towards the Rio Conventions, including the United Nations Framework Convention on Climate Change. The Rio Markers are used to mark ODA projects as targeting climate change mitigation and/or adaptation as a principal or significant objective or as not targeting climate change. The Rio Markers offer examples of climate change mitigation or adaptation activities across sectors.

guided by the Stockholm University procurement policy, subject to Swedish public procurement law, which is built on the principles of fair competition, cost effectiveness and minimising social and environmental impacts.

4.7 Financial management

There is no expected accrued costs, leftover funds or interest as a result of this investment. The investment will be paid out in pounds sterling and transferred into Swedish kroner in year 1, whilst funds are still managed by SU. ORRAA Inc. receive funds in US dollars for dispersal to downstream delivery partners. Therefore, there is no financial risk due to fluctuating exchange rates on our side but under the advice of the ODA Red Team, an uplift in funding to ORRAA has been recommended to allow the ORRAA to receive greater actual capital for investing in project delivery.

4.8 Financial fraud and risk assessment

In line with ODA guidance, Defra expects all organisations to have a zero-tolerance approach to fraud and corruption; acting immediately if it is found, working with authorities to bring perpetrators to account and pursuing aggressive loss recovery approaches.

A full Fraud Risk Assessment (FRA) has been completed and approval pending agreement of the investment amount and spend profile. A risk register will be kept live and updated throughout the lifetime of the agreement. There are mitigations and procedures in place to combat residual risk. We are satisfied from the FRA and the due diligence checklist (referred in section 3.2) that ORRAA have adequate systems in place to detect and combat fraud by applying the rules and regulations of its co-hosts and financial managers (GRP) to mitigate fraud and risk.

The grant agreement will stipulate under what conditions funding may be withdrawn or withheld pending performance and financial reporting.

4.9 Provision for Defra to Withdraw Funding

The scenarios of potential suspension of funding, termination and returns to Defra and how they might be triggered, including by the monitoring and reporting cycle, are as follows:

Table 10: Scenario timing and reporting trigger

Scenario	Timing and reporting trigger (if relevant)
Occurrence of any illegal or corrupt practice	Annual Reviews (by Defra), monthly updates (from the delivery partner to ORRAA, relayed to Defra)
"Extraordinary circumstances that seriously jeopardise the implementation, operation or purpose of the programme" This is primarily designed to cover instances of force majeure. We assess this may also provide some cover in extreme cases of under-delivery.	Annual Reviews (by Defra), monthly updates (from the delivery partner to ORRAA, relayed to Defra)
"If ORRAA does not fulfill its commitments according to the cooperation contract"	At the time if/when this happens or if identified as part of Annual and monthly reporting, Annual Reviews, independent evaluations at mid-term points

5. Management Case

5.1 What are the management and governance arrangements for implementing the intervention?

5.1.1. Governance structure

Two main pillars of formal governance support this project.

1. Defra's strategic input to the **ORRAA Steering Council** via its full membership to the Alliance, which focuses on policy steer in support of aligning climate and biodiversity goals between UKHMG and ORRAA. The UK has one seat on the Council, but Defra has agreed with ORRAA that up to UK two reps can attend the meetings.
2. The **Funders Advisory Board (FAB)**, which focuses on the bilateral funding arrangement between ORRAA and Defra. The UK has one formal seat, held by Defra and with informal agreement that one to two Defra representatives can attend according to the Board's agenda.

Informal governance between ORRAA and Defra is also in place currently and will continue for the remainder of the grant. Arrangements are described below.

5.1.2 Defra management and governance arrangements

Using the agreement established for the single-year grant, an amended multi-year grant agreement will be set out between the UK and ORRAA, re-confirming the management roles and responsibilities of both parties. It will incorporate the new role of the FAB and describe how ORRAA's updated project selection criteria and KPIs (which are aligned with BPF KPIs) will be used to assess delivery and report on VfM.

The day-to-day management of the projects that the UK funds will be undertaken by ORRAA and selected downstream delivery partners, with Defra taking an overarching and decision-making role and reflecting policy priorities from across HMG in their input to ORRAA via the Steering Council and the FAB, as noted above in Section 5.1.1. Progress will be monitored via meetings between ORRAA and the Defra project manager every 2- 3 weeks, drawing in specialist leads from the ORRAA Secretariat as needed.

The Defra project manager will report to the policy lead and the internal Defra monthly Portfolio Programme Meetings and quarterly Defra BPF Programme Boards, which oversees all BPF investments, their timelines and the potential risks. There will be onward reporting to the BPF Joint Management Board, a joint FCDO-Defra board which retains strategic oversight of the whole Blue Planet Fund. To ensure coordinated delivery at a more granular level between Defra and FCDO on cross-cutting BPF outcomes on mobilising finance and valuing nature, additional governance is being considered. A working group covering finance for nature, mobilising finance and blue carbon NbS would facilitate coordination between this programme and COAST, maximising opportunities for alignment and reducing risk of duplication of effort within common areas of interest.

5.1.3 ORRAA management and governance arrangements

See section 3.4.1 in the Commercial case for an overview of ORRAA's management and governance arrangements.

5.2 HM Government staffing – Resource Requirements

The project will require moderate Defra resource (see Section 4.4 for FLD costs), with input focused on monitoring progress, project selection, overseeing governance arrangements and taking part in ORRAA Steering Council meetings and the FAB. A combination of will be required cover these responsibilities. Please see the FLD requirements in Table 8 of the financial case for cost details, these resources are already in place or due to be filled through completed recruitment campaign (as of September 2022).

Expertise to support execution of these roles may be sourced from within the UK ALBs, UKHMG and directly within the Marine Division, on areas such as marine ecosystems and conservation, finance for nature, climate, ocean science and marine natural capital.

5.3 How will progress and results be monitored, measured and evaluated?

5.3.1 BPF MEL framework

As a BPF investment, the project is required to follow the BPF Monitoring, Evaluation and Learning (MEL) framework. This sets out how MEL activities will support the BPF to identify what impact it is achieving, which activities and approaches are working or not, help to assess the programme's value for money (VfM) performance, and contribute to the global evidence base for intervention areas.

One mid-term review is proposed during the programme period, with the aim to assess progress against agreed, measurable objectives and to identify issues, lessons learned and recommend changes/ The mid-term review findings may lead to revisions to implementation arrangements, ToC and results frameworks, partnerships, etc. Key areas to be covered in the mid-term review are:

- continued relevance of the projects being funded
- effectiveness and achievement of outcomes
- efficiency and Value for Money
- network/linkages of stakeholders and beneficiaries
- lessons learnt and needed revisions to the projects

Additional MEL activities will include the below, and will be updated as the process develops:

- **Routine monitoring** of activities to track their impact, results and progress, to be conducted primarily through regular meetings between the Defra Programme Manager and the ORRAA Secretariat (including their programme manager and finance officer).
- **End-term evaluation** of projects and programmes to assess their contributions and identify if they are meeting or met milestones and expectations for performance and delivery
  - These meetings are conducted with the ORRAA Secretariat and leadership team.
- **Continuous learning** and building the evidence base where this is weak to inform future programming and adaptive management of projects.
  - ORRAA have already established a series of 'Solution Labs' and close out calls with project managers to support learning and sharing of outcomes across the relevant communities of practice. Defra support these and will look to spotlight specific outcomes or delivery processes for sharing within the Defra group via webinars and teach ins.
  - ORRAA share annual project reports with all members.

- With the lower spend profile for this FY (2022-23), Defra and ORRAA have an opportunity to do a deeper dive on project outcomes across their whole portfolio and take learning to other interested donors. With a longer lead in and more thorough market engagement with other investors, the UK and ORRAA have a greater opportunity to apply learning and develop considered project delivery plans for larger scale investments planned for years 2-4 of the multi-year grant.

Building on the logic model used to appraise VfM in the first year of investment, a full **logframe** will be developed specifically for projects funded by the UK within the next 6 months) in collaboration with ORRAA, detailing a defined set of outputs for the investment with specific indicators, which will allow progress to be monitored.

5.3.2 ORRAA MEL framework

ORRAA itself is monitored and evaluated against a Performance Measurement Framework, designed and managed by GRP leads within the Secretariat (see Figure 2, Section 3.4.1). Through building and sharing evidence and learning, staff, partners and clients, ORRAA's MEL activities aim to understand if and how ORRAA has had a transformational and sustainable impact and ways in which that understanding can further improve resilience outcomes more widely.

ORRAA's implementing partners follow the established GRP MEL process, which requires partners to provide a MEL plan as part of their proposal, report progress and learning semi-annually/quarterly and produce a final narrative report. Th:

5.4 KPIs

5.4.1 BPF KPI requirements

All BPF projects and programmes will be required to report against at least one BPF KPI, but ideally all relevant BPF KPIs. The KPIs are designed to reflect the BPF theory of change and the key poverty reduction and environmental aims of the Fund. BPF KPIs remain under development and methods will be produced to enable projects to report on a greater number of BPF KPIs as the BPF progresses. BPF KPIs mirroring ICF KPIs have agreed and published methods and will be reported on initially.

It is likely that this project will be monitored against the following BPF KPIs, in addition to all relevant ICF KPIs:

- **KPI 1 (ICF KPI 11 & 12):** Volume of finance mobilised for purposes which match BPF objectives.
- **KPI 2 (ICF KPI 1, 2 & 4):** Development Outcome: Number of people, as a result of BPF finance, with improved outcomes: i) income**;** ii) ability to cope with the effects of climate change; iii) climate resilience
- **KPI 3** Number of projects or planning and/or governance processes with increased inclusion of local people **and knowledge in decision making to improve the marine environment**
- **KPI 4** Number of marine-related evidence, knowledge dissemination and education activities or products developed as a result of BPF finance**.**
- **KPI 6** Degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for marine users.
- **KPI 7 (ICF KPI 6):** Net change in greenhouse gas emissions– tonnes of GHG emissions reduced or avoided as a result of BPF finance.
- **KPI 8** Area of marine ecosystems protected, enhanced or under sustainable management practices as a result of BPF projects.

- **KPI 9** Changes in marine natural capital asset extent and condition as a result of BPF funding.

The outcomes of the Phase 1 Annual review and the VfM assessment that is detailed in Section 2.3, will be used to develop indicators at a project level that will in turn inform the fund level BPF and ICF KPIs. These indicators will be used for future appraisals of VfM and will link the ORRAA's ToC against agreed short and long-term outcomes for ORRAA BPF programme and will be captured in the Phase 2 logframe.

5.4.2 ORRAA KPI requirements

ORRAA uses GRP's Management Information System (MIS) to collate, store, and manage indicator reporting data. The MIS is designed in a modular way that allows for additional modules or functionalities. In addition, the MIS system is based on open-source technology and can be adapted by non-experts, e.g., to accommodate indicators or reporting requirements. The indicator guidance to implementing partners sets out the definitions and guidance for all required indicators (see GRP indicator guidance), **all GRP indicators are listed in Annex I.**

5.5 What are the risks and how will they be managed?

There are 10 key identified risks, detailed in Table 10. In line with organisational risk management the categories considered include external context, delivery, safeguards, operational, fiduciary and reputational. Of these risks numbers 2, 3 and 5 are considered the biggest risks, RAG rated red or Amber with 'High' severity if not mitigated. To reduce the likelihood and severity of these risk these priority risks we will work with ORRAA to establish the mitigating actions outlined in Table 10, making sure in response to no.2 that COVID-19 planning is embedded into every project. The mitigation of no.3 is already in progress with conversations between other donors and ORRAA underway through the governance arrangements described in Section 5.1. Regarding Safeguarding, ORRAA, Defra and GRP have strong policies in place to ensure wellbeing, but these are only as strong as their implementation. ORRAA and Defra will need to work closely with downstream Delivery Partners to ensure this, making multiple options for reporting and whistleblowing available to all stakeholders in the supply chain. More details are described in Section 5.7 below.

In addition to the above a full risk register will manage project management risks in accordance with HMG guidance and reported to the BPF Programme Board. When appropriate, risks will also be escalated to the BPF Joint Management Board (Defra-FCDO), the Marine and Fisheries Programme Board, as well as the ODA Board.

Table 11: Project risks and mitigation measures

No.	Risk type	Risk description	Likelihood	Severity	RAG	Mitigation measure
1	External context	Political instability of countries where ORRAA activities are taking place, which results in projects not going forward or lack of political buy-in.	Medium	Medium	Amber	We will work closely with ORRAA to align country focus. We will work closely with the FCDO across the BPF, ensuring regular updates are made and advice is taken on board.
2	Delivery	COVID-19 impacts delivery of activities due to travel restrictions, as well as reducing the capacity of on the ground delivery partners.	Medium	High	Red	The ORRAA Secretariat and partners are well adapted to working virtually. Prior to the pandemic, the ORRAA Secretariat was already carrying out much of its work remotely through regular video conferences with the Secretariat, ORRAA members, and project partners. Going forward the systemic nature of such shocks and stresses will be incorporated into ORRAA's understanding of risk and resilience, particularly how the pandemic will impact economic resilience and exacerbate the impact of ocean risk and climate change on the economies of LDCs and SIDS and the impacts on women and girls. Due to ongoing impacts of Covid and uncertainties of new strains, risk is remaining as red with the view that this may decrease to Amber over the lifetime of the funding. Risks will be reviewed and updated via the project risk register.
3	Delivery	The wider governance arrangements fail to be established or fall short of what Defra considers to be acceptable, resulting in delays to project delivery and a lack of accountability and transparency	Low	High	Amber	Governance issues present at the start of the one-year grant have been resolved through the formation of the Funders Advisory Board and amendments to the UK membership requirements. This has removed potential for conflicts of interest and streamlined UKHMG engagement with the ORRAA Steering Council and leadership team. This RAG status should be kept under review according to any future changes or agreements to UK's membership requirements to the Alliance.

4	Delivery	Projects selected overlap and create a duplication of effort, or conflict of interest with similar programmes, particularly those looking to mobilise finance for marine NbS or support protection/restoration of blue carbon ecosystems to support blue carbon markets.	High	Medium	Amber	Governance frameworks are in place to compare and contrast project pipelines between FCDO and Defra, allowing COAST and ORRAA project managers to look for complementarity and additionality and avoid duplication. Care will be taken in particular to avoid conflicts created through funding of private and public sector projects, utilising the BPF JMB and Programme Board, and establishing more granular coordination as required.
5	Safeguards	Investment in projects have unintended social or environmental impacts, including Sexual Exploitation, Abuse and Harassment (SEAH)	Low	High	Amber	ORRAA are subject to the polices of the Stockholm Resilience Centre and GRP, which has strict policies in place and training and support to prevent sexual exploitation, abuse and harassment (PSEAH). They also use social and environmental analysis tools as part of programme design. All organisations that are receiving ORRAA funds will need to complete and regularly update a risk register and review policies that include a focus on anti-corruption and safeguarding, including PSEAH. Proposed that all stakeholders on UK funded projects have more than one mechanism available for whistleblowing, i.e. via DP's, ORRAA and Defra.
6	Operational	Limited control over where and how our funds are spent.	Low	Low	Green	We will work in collaboration with ORRAA to direct where UK funds are spent through the Funders Advisory Board. We also have influence over the direction of policy and programming through our membership of the ORRAA Steering Council.
7	Fiduciary	Fluctuations in exchange rates could cause a reduced sum of money. In the event of adverse currency movement, there will be reduced potential for project delivery	Low	Low	Green	Exchange rates will be monitored, and concerns will be raised if there is potential for a large loss of funds. There is possibility to adjust the timing of payments to avoid liquidity risk if necessary, however it should be noted that perfect matching may not be possible. ORRAA will need to be able to absorb some currency fluctuations and accept that the total amount received may slightly differ.

8	Fiduciary	Fund Diversion, including fraud, corruption, bribery, theft, terrorist financing, money laundering and other misuse of funds that prevents funds being directed to the correct purpose	Low	Medium	Green	A zero tolerance to fraud will be taken. A full Fraud Risk Assessment has been completed for this investment, a risk register will be kept and monitored throughout the lifetime of the agreement. ORRAA will follow the rules and procedures of its well-established co-hosts GRP who has various routines and procedures in place.
9	Reputational	Lack of consideration of social and cultural impacts from coastal and ocean development	Low	Low	Green	ORRAA use a multi-sector approach which minimises the likelihood. They work with local delivery partners such as RARE, who contextualise interventions for local contexts and work alongside local delivery partners.
10	Commercial	The UK are not the only donor and BPF funding may be aligned with funding from others; making it harder to isolate the precise impact of each pound sterling	Low	Medium	Green	Using agreed project reporting and financial audits provided by GRP, along with collaboration co-donors, we can assess impacts of UK funding more precisely and note caveats where precise outcomes are not possible. We will also be able to report on non-monetary benefits to ORRAA and project partners, through collaboration with other donors using the framework of the FAB.
11	External context	The ability for the UK investment to leverage finance will depend to some extent on the macroeconomic climate. In the event of economic downturns it may be more challenging to attract public and private sector investments.	Low	High	Amber	ORRAA are expected to report on leveraged finance amounts which will enable Defra to consider whether further intervention (increased engagement with potential investors or a shift in the types of projects that are invested in) is needed. Leveraged finance is expected to be a KPI for the UK investment.

5.6 Due Diligence and Safeguarding

Once a project has been assessed as eligible by ORRAA and the FAB, partners are required to meet and adhere to ORRAA's due diligence and safeguarding standards. These policies align with those that have been adopted by ORRAA's co-host, the Global Resilience Partnership and Stockholm University[37].

Due Diligence: Any partners that are provided funding, must agree to complete an organisational self-assessment, a risk register that is regularly updated, annual audits, financial reports, and narrative reports and evaluations.

Safeguarding: Safeguarding in its broad sense means protecting people and the environment from unintended harm. The main focus is on preventing and responding to harm caused by sexual exploitation, abuse, harassment, or bullying. Funded delivery partners must:

- Maintain a safeguarding policy which includes a statement of commitment to safeguarding, clear procedures to address allegations and complaints, and a zero-tolerance statement on bullying, harassment and sexual exploitation and abuse;
- Maintain a confidential detailed register of safeguarding issues raised and how they were dealt with;
- Share its safeguarding policy with representatives or third parties involved in the project;
- Maintain a whistle-blowing policy which protects whistle blowers from reprisals and includes clear processes for dealing with concerns raised;
- Maintain and communicate a code of conduct for staff, including any volunteers and consultants, that sets out clear expectations of behaviours -inside and outside the workplace -and make clear what will happen in the event of non-compliance or breach of these standards; and
- Meet or be working towards the minimum standards for Sexual Exploitation, Abuse and Harassment safeguarding: the Inter-Agency Standing Committee Minimum Operating Standards on Protection from Sexual Exploitation and Abuse ("PSEA") and/or the PSEA elements of The Core Humanitarian Standard on Quality and Accountability.

[37] These policies can be found here:
Rules and regulations: https://www.su.se/staff/organisation-governance/governing-documents-rules-and-regulations
Fraud and corruption: https://www.su.se/staff/organisation-governance/governing-documents-rules-and-regulations/safety-security-and-irregularities/rules-and-procedure-for-handling-suspected-irregularities-and-crime-1.495264