

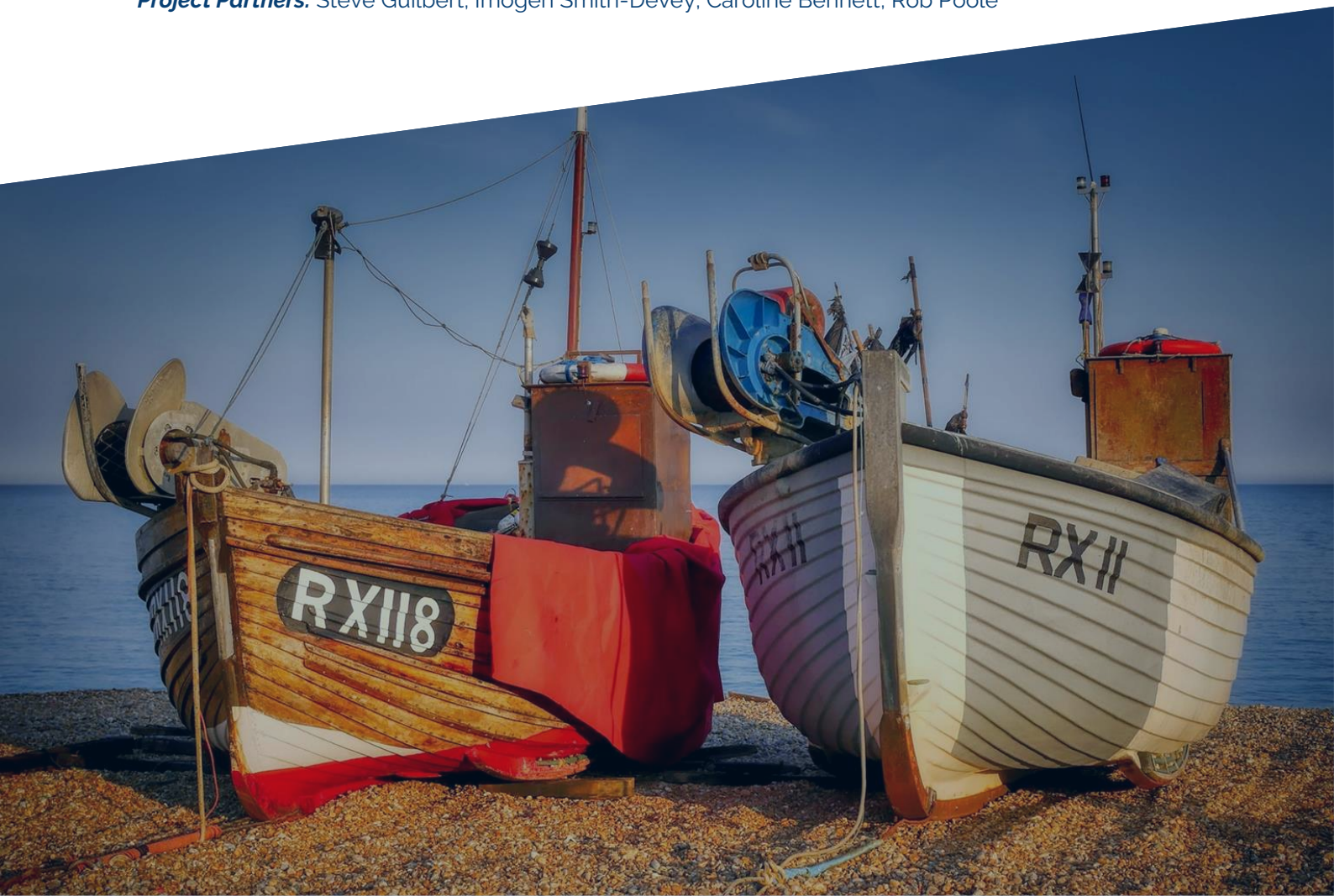
Resilience of Coastal Communities (ROCC)

Stakeholder Workshop Summary

In person workshop, Plymouth - 7th June 2022 / online workshop – 9th August 2022
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Workshop aims and headline findings

The workshops brought together practitioners involved in delivering interventions that aim to increase resilience (**R**), wellbeing (**WB**) and/or environmental sustainability (**ES**) in coastal communities and marine ecosystems in the Southwest region of the UK. The aims were to:

1. Understand what past/current interventions are trying to achieve: how do people and nature positively benefit? What were the intended and unintended outcomes?
2. Understand what crises, events or societal changes have impacted the delivery of interventions: were impacts positive or negative? What strategies were used to cope or adapt?
3. Provide an opportunity for participants to consider the interactions and co-development of objectives in current and future interventions, learn from each other, and build networks.



26 participants attended the in-person and online workshops, representing 21 organisations operating in the Southwest, covering the sectors of tourism, fisheries, conservation, heritage, marine business, NGOs, Government.

Types of intervention

A diverse range of interventions were discussed that differed in their **primary objectives**, for example:

Health (*n=2*)

- Bring accessible physical and mental health services to the active fishing community (**WB/R**)

Conservation (*n=4*)

- Create communities of beach cleaners (**ES/WB**)
- Improving quality of nature connectedness in coastal communities (**ES/WB**)

Marine Governance (*n=3*)

- Embed marine citizenship & ocean recovery in local government policy (**ES/R**)

Tourism/Business (*n=4*)

- Encourage sustainable behaviours by tourists (**ES**)
- Broaden local business opportunities beyond tourism (**R**)

Fisheries development/support (*n=7*)

- Increase demand for under-utilised species (**ES**)
- Management for a non-quota species (**ES**)

Socio-ecological (*n=2*)

- Identify nature-based solutions to climate change (**ES**)
- Enhance marine natural capital while supporting the economy & society (**ES/WB**)

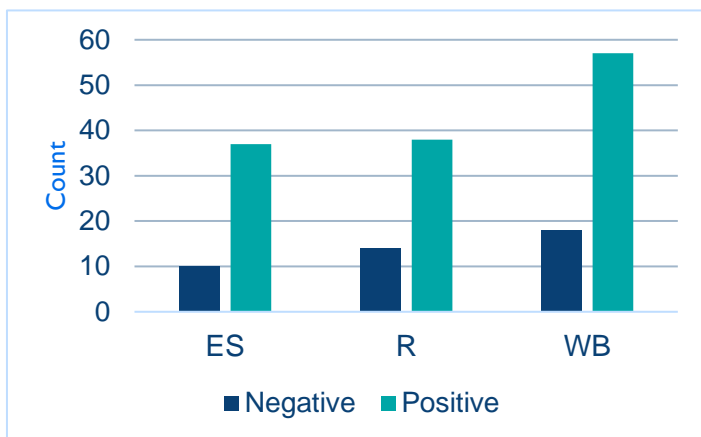


Fig 1: Total number of impacts of interventions on wellbeing (WB), resilience (R) or environmental sustainability (ES) cited during the workshops, split by positive and negative impacts.

Overall, *wellbeing* was the most frequently cited outcome, with interventions having both positive and negative impacts on wellbeing. Interventions also had both positive and negative impacts on *resilience* and the marine *environment* (Fig 1 and Table 1).

Interactions between *resilience* and *wellbeing* were identified, often related to **positive synergies**. Interactions also involved **negative outcomes** that could reflect unintended negative impacts on both *resilience* and *wellbeing* or trade-offs, where one improves to the detriment of the other.

Interactions between *environmental sustainability* and either *wellbeing* or *resilience* were less frequent and there was only a single instance when **synergies** between all three objectives was reported for an intervention.

In conservation and heritage interventions there is a growing appreciation of *wellbeing* and, to a lesser extent, *resilience* benefits, but these are not yet deeply embedded or evidenced. Interventions tend to focus on the ecological or heritage assets themselves.

In ROCC, we aim to increase understanding of the synergies and trade-offs that occur among resilience, wellbeing and environmental sustainability in practice so that future interventions can deliver benefits for coastal communities and marine ecosystems, including through times of adversity and change.

Workshop aim 1: Intended and unintended impacts of interventions

In breakout groups, participants discussed an intervention they deliver, in terms of the impacts on the marine environment, people's wellbeing and/or their resilience and if the impacts were: a) positive or negative; and b) intended or unexpected. The groups also considered knock-on effects and short vs. long-term impacts.

Common themes

Table 1 gives examples of intervention impacts on either people or the environment that are **positive** or **negative**. Participants frequently expressed that the health of people and the health of the environment are closely linked, as people who spend more time in nature are more likely to be healthier and have increased environmental stewardship. Forward planning was deemed vital for success: Investment to support businesses can provide benefits across all themes of WB, R and ES if all are considered in planning; and incorporating climate change scenarios into marine planning can benefit both the environment and socio-economic resilience (R/ES). Fisheries interventions had



more negative impacts than other types of intervention, suggesting trade-offs among R, WB and ES may be more prevalent in this sector.

Unexpected or unintended impacts

Unexpected impacts are those caused by the intervention, that were not originally intended or identified. They can be either positive or negative.

Workshop discussions highlighted how spiritual and mental health benefits arose from interventions with the primary objective of targeting physical health issues or conservation. Schemes that created groups or networks often took on wider roles of advocacy or environmental projects in the community.

Negative unexpected impacts included tensions (-WB) between those not involved in an intervention and those who are; a struggle to maintain funding for on-going interventions (-R); developed dependencies for services provided through schemes, that should otherwise be provided by statutory services (-R) or unintended environmental consequences (-ES) for schemes that inadvertently increase fishing capacity.

National policy can also have unintended consequences at local scales, such as in fisheries where the small and large-scale fleets have divergent needs and priorities. This can lead to a lack of trust and engagement with groups that feel marginalised.

CASE STUDY:

Sole of Discretion

Below is an example case study targeted at small-scale fishers in Devon.

Name: Sole of Discretion

Primary Aim: To educate consumers on the origin of the seafood they purchase and assure a fair and profitable price for local small-scale fishers. Also, to increase sales and popularity of under-utilised/bycatch species.





Positive impacts: Consumer can trace fish back to boat and catch method (+WB), support low-impact under 10m/12m skipper-owned vessels (+WB/R/ES).

Negative Impacts: Better price achieved only for under-utilised species, therefore not fully achieving the objectives of the scheme (-R), market penetration of under-utilised species is minimal, therefore will not support growth of sector (-R).

Unexpected Impacts: Stable employment of processing sector achieved, but only on the back of imported species (+WB/-R); potential environmental impacts if bycatch species become targeted species (-ES).



Table 1: Examples of impacts of interventions, both positive and negative, on people (wellbeing/resilience) and the environment, cited at the workshops.

| Positive | | +WB | +R | +ES |
|--|--|-----|----|-----|
| Impacts on people  | Conflict resolution between fishers | • | | |
| | Volunteering opportunities | • | | |
| | Improved mental/physical health | • | • | |
| | Formation of community groups | • | • | |
| | Cross-party consensus on ocean-based action | | • | • |
| | Supporting employment & local investment | • | • | |
| | New sources of data | | • | |
| | Increased willingness to seek help & support | • | • | |
| | Increased ability to diversify/adapt | • | • | |
| Impacts on the environment  | Educating fishers on stock management | | • | • |
| | Ecological benefits of increasing vital habitats | | | • |
| | Increased carbon sequestration | | | • |
| | Encouraging pro-environmental behaviours | • | | • |
| | Supporting low impact fisheries | • | • | • |
| | Increased public awareness of environmental issues | | | • |
| Negative | | -WB | -R | -ES |
| Impacts on people  | Restriction of a fishery | • | • | |
| | Additional paperwork | • | | |
| | Increase in eco-anxiety | • | | |
| | Animosity between social groups | • | | |
| | Exclusion of certain groups from benefits | • | • | |
| | Feelings of disenfranchisement | • | | |
| | Struggle to maintain funding | | • | |
| | Dependencies on organisations/services/support | | • | |
| | Lack of resources to implement plans | | • | |
| Impacts on the environment  | Highlighted issues with fish stock assessment | | | • |
| | Increased demand on certain fish species | | | • |
| | Conflict b/t envir. and socio-economic interests | • | | • |
| | Increase in fishing effort | | | • |



Initial evidence of synergies and trade-offs among outcomes

WB/ES: Synergies between ES and WB were seen, for example through positive effects of interventions on people (well-being, mental health, connectedness to nature) that encouraged people to spend more time in nature or become engaged in conservation efforts.

WB/R: Interventions that aimed to support coastal businesses and resource users found **positive impacts** on WB and R (through diversification of activities, providing finance or infrastructure support) but also **trade-offs**. For example, offshore wind projects can decrease WB for some communities while reducing reliance on fossil fuels thereby improving R.

ES/R: In fisheries interventions, provision of funding for fishing gear or increasing the market for a bycatch species (+WB/R) could put **undue pressure** on stocks (-ES). Schemes that support forward planning (+R) can **improve** ES through opportunities for better management (e.g. fish stocks, windfarms, nature-based adaptation etc). Conversely, schemes that aim to increase resilience to coastal flooding (+R) can have knock-on impacts to wildlife (-ES) and people (-WB) by enforced relocation or re-directing urban development from high-risk areas.



Workshop aim 2: Crisis and change events, and their impacts on interventions

In breakout groups, participants identified key change events that have impacted the delivery of their interventions (positive or negative), as well as the strategies used to respond to opportunities and adversities presented by these events:

Covid-19

Brexit

Energy crisis

Climate change

Change in governance structures

Fuel crisis (sudden rise in costs)

Introduction of MPAs

Access to funding

'Blue Planet' effect

Political/cultural change

Changing demographics



Impacts of changes on interventions

Impacts following changes or crises events were wide-ranging depending on the disturbance.

The Covid-19 pandemic was found to **positively** increase people's connectedness with nature although **knock-on effects** cited were a change in focus of conservation volunteer groups, and a lack of understanding of the impacts of the increased use of the marine environment by the public. Although the halt of face-to-face contact during Covid was **negative** in many interventions, increased use of digital technologies has been **positive** for some groups (reaching wider, new audiences) but negative for others (those with limited digital access).

Brexit caused substantial issues for fishers and market chain actors in relation to issues with exports. Changes in funding caused issues for many interventions, such as drawing focus away from core activities to maintain viability.

Response strategies

The requirement and ability to change, adapt or grow in response to events was highlighted by the range of **response strategies** described, as outlined above. They include strategies to mitigate funding threats such as communicating more widely to attract new funding sources, innovating with new investment and engagement strategies, and engaging communities in developing future plans.

To respond effectively, participants stressed the need to consider future environmental changes, such as climate change and sea level rise that will have impacts over short and long-term time scales. Improved planning, building networks and adapting funding models were also key to the capacity of interventions to respond positively in times of change and turbulence. Monetising the cost of failing to act can also provide political traction.





Summary

The outputs from the workshops demonstrate there are already a wide array of synergies between R, WB and ES objectives in current interventions, as well as numerous unexpected positive impacts. However, deeper discussion also revealed some, often unintended, negative outcomes and the potential for trade-off interactions between objectives where one outcome improved but others were adversely impacted, at least for some groups or places. Unexpected outcomes were both positive and negative for both people and the environment, depending on the type of intervention.

Importantly, many interventions **continued to deliver positive outcomes** to people and marine environments through significant periods of turbulence, which required considerable innovation by practitioners. There were many examples of unexpected positives in times of crisis. Yet, response strategies were not always able to fully overcome the challenges of multiple and unprecedented change events.

It was encouraging to note shared experiences across a range of different interventions, as well as opportunities to learn from each other and the diversity of expertise in the workshops and in the Southwest.

Next, ROCC is interested in investigating the positive and negative, intended and unintended outcomes of interventions from the perspective of the beneficiaries and, in particular, how they experience **synergies** and **trade-offs** among resilience, wellbeing and marine environmental sustainability.

Future directions

We are committed to pursuing opportunities for both further research and practical impact on this topic and look forward to collaborating with you in the future. Please do contact us if you would like to discuss our plans or have ideas for potential case studies.

Background to our research

Resilience of Coastal Communities (ROCC) is a research project, funded by the Sustainable Management of Marine Resources (SMMR) programme, which seeks to explore the interplay between resilience, wellbeing, and environmental sustainability in UK coastal communities.

Launched in 2021 and running until 2024, ROCC will apply a 'nexus approach' that explores the synergies and trade-offs between these three objectives. The premise of ROCC is that when designing solutions targeted towards enhancing either resilience, wellbeing or sustainability, decision-makers must also consider the potential impacts on the other two objectives.

As several practitioners working in the Southwest UK were unable to attend the in-person workshop in Plymouth on 7th July 2022, we held an additional online workshop in August and have combined the data from both workshops in this report.

Our heartfelt thanks for your time at the both the in-person and online workshops.



Contact:

If you have any further comments or would like to be kept updated about the project, please contact Claire Szostek: c.l.szostek@exeter.ac.uk

For project information and updates visit:
smmr.org.uk/funded-projects/resilience-of-coastal-communities

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