



**Marine Ecosystems
Research Programme**

Cultural values of marine ecosystem services

Gill Ainsworth, Centre for Ecology & Hydrology

Francis Daunt, Juliette Young (CEH), Jasper Kenter, Andy Crabb (SAMS)

Seb O'Connor (Edinburgh Uni)

Marine Ecosystems Research Programme

www.marine-ecosystems.org.uk | marine.ecosystems@pml.ac.uk | [@merp_updates](https://twitter.com/merp_updates)

Project and Knowledge Exchange Office hosted by Plymouth Marine Laboratory

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Cultural Ecosystem Services (CES): spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences

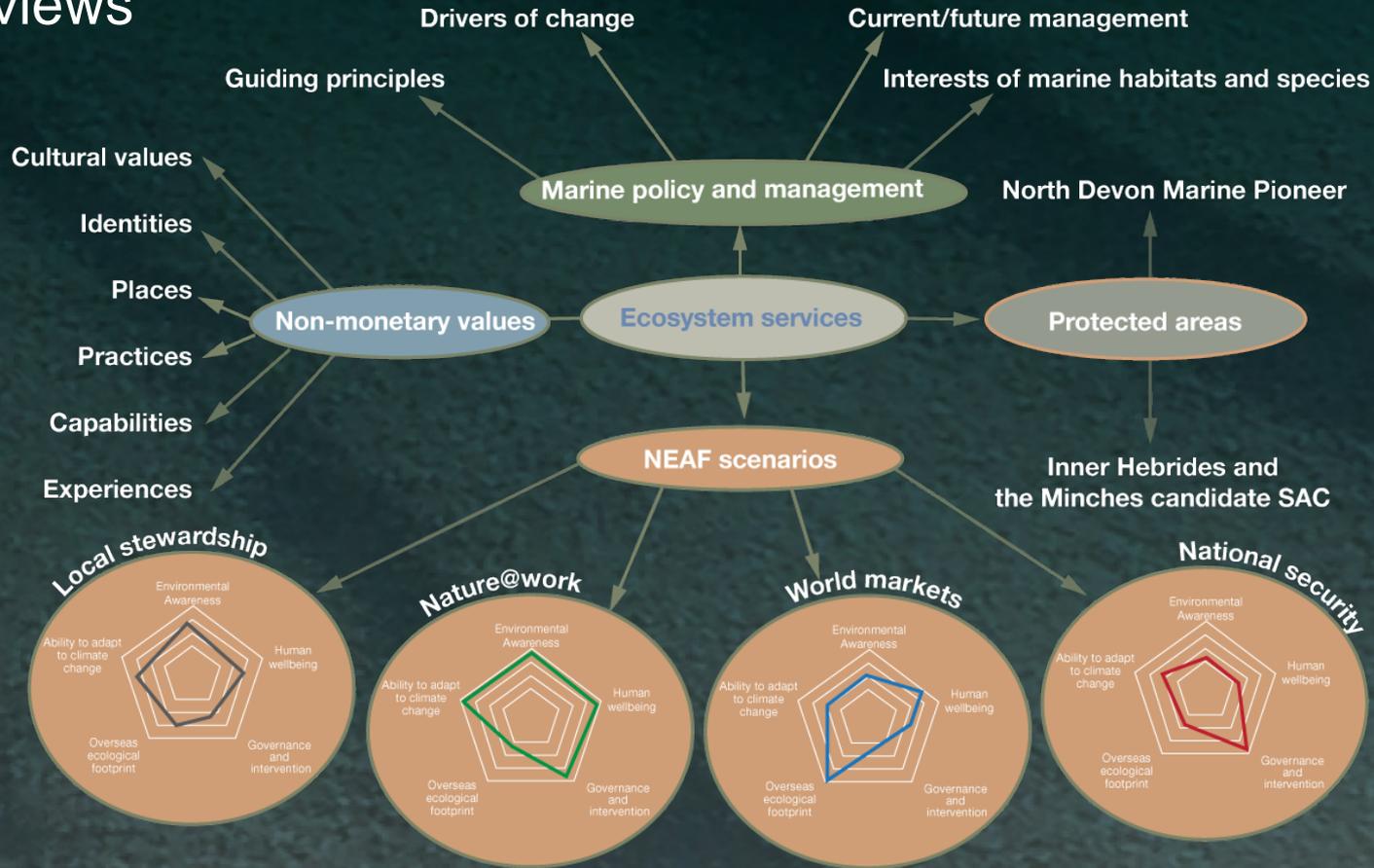
AIM: Advance understanding of marine ecosystem values in response to management interventions



40 filmed stakeholder interviews, June 2017

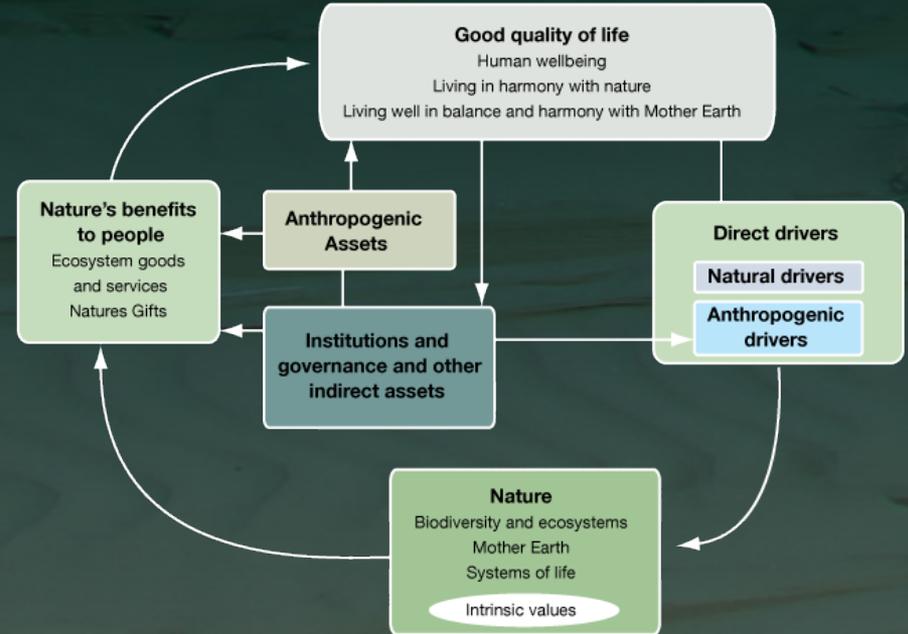
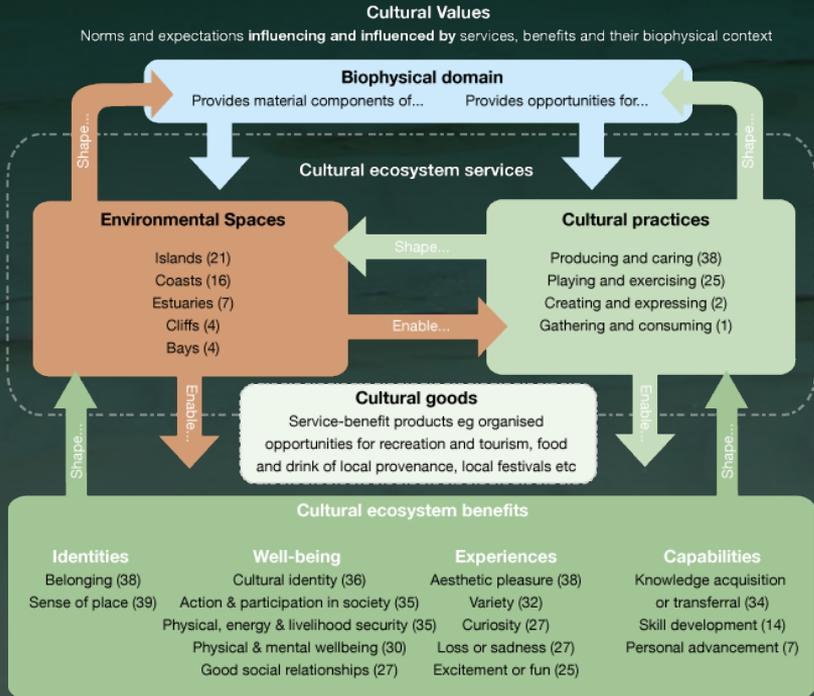
Celtic Seas: West Coast of Scotland, Southwest England

Interviews



NEAF scenarios tested in WP3 T1 stakeholder workshops

Integrated valuation approaches: shared values



NEAFO: Church et al. (2014), Fish et al. (2016)
Ecosystems as objects of cultural concern

IPBES Conceptual Framework (Diaz et al 2015)
Complex relationship between nature and human society

Documentary: multi criteria analysis workshop

Places:

“We make our living from the sea so it’s important to us that the environment’s looked after”
Provisioning SW

Interests of marine species/habitats:

“...asking the right questions. And finding answers in a scientific manner, with evidence to support it, and then informing management is probably the part that needs most attention.”
Tourism/Leisure/Recreation WCoS

Experiences:

“...I was looking out the window, thinking: ‘Wow! Look at that surf - the colour and the shape, and the roar of the wind’... I can’t imagine living away from the sea”
Local resident SW

Managing protected areas:

“...lots of people are dependent...on the marine environment, and if we can draw those constituencies in... that might be an opportunity to think about different ways of funding the management, the protection, of these resources.”
Regulatory SW

Values for managing the marine environment

Openness to change:

A varied life, filled with challenge, novelty and change

An exciting life, stimulating experiences

Curious, interested in everything, exploring

Biospheric:

Protecting the environment, preserving nature

Unity with nature, fitting into nature

Respecting the earth, harmony with other species

Altruistic:

A world at peace, free of war and conflict

Social justice, correcting injustice, care for the weak

Equality, equal opportunity for all

Conservation:

Honouring parents and elders, showing respect

Family security, safety for loved ones

Self-discipline, self-restraint, resistance to temptation

Self-enhancement:

Authority, the right to lead or command

Influential, having an impact on people and events

Wealth, material possessions, money

Based on Schwartz 1992, 1994

Values for managing the marine environment

Biospheric values:

Protecting the marine environment, preserving nature 24

Respecting the earth, harmony with other species 22

Unity with nature, fitting into nature 18

“Well, obviously, protecting the environment in a balanced sort of way which lets communities still work and use it, and make a livelihood from it, but also preserves what's there... to maintain the diversity of this area.”

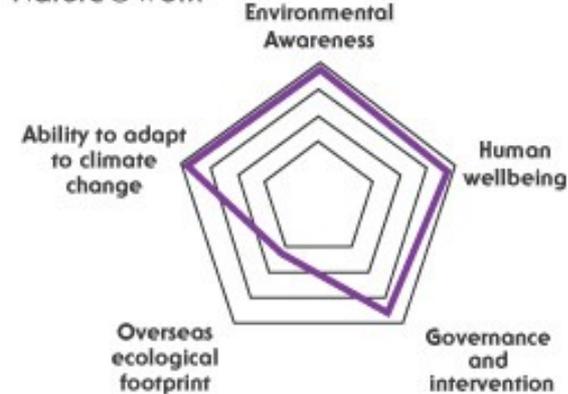
Provisioning WCoS

NEAF scenarios – management worldviews

Local Stewardship



Nature@Work



World Markets



National Security



- leisure and tourism
- landscapes
- capture fisheries
- aquaculture
- marine energy
- other maritime industries
- species diversity/protection
- water quality

NEAF scenarios – management worldviews

Local Stewardship



“We're going in the right direction... through both legislation and through collaboration... also to do with the population feeling that they're involved, that it's not just top down management from government.” Regulatory SW

Scale of operation

Legitimacy and voice

Systems of property and access rights

Rules, norms, legislation, treaties

Nature@Work



“...there is a higher value placed on environmental awareness, sustainability and there are...more areas that are protected and industries managed in a stronger way. So, I think that strategy fits closest to my vision for what I would like to see.” Regulatory WCoS

Summary of work

7 minute intro film: public outreach

~40 minute documentary to guide marine management in the Celtic Seas

Data linked to WP3: EwE and StrathE2E ecological modelling

Ainsworth GB, Kenter JO, O'Connor S, Daunt FJ, Young JC (In prep). *Cultural ecosystem services in the Celtic Seas*, Special Issue on Multiple values for the management and sustainable use of coastal and marine ecosystem services, Ecosystem Services.

O'Connor S, Kenter JO (In prep). *Making intrinsic values work; a communicative approach to integrating intrinsic values of non-human nature with ecosystem services*. Special Issue on Theoretical Traditions in Social Values for Sustainability, Sustainability Science.



Future impact and policy relevance

Spatial planning

MPAs: North Devon Marine Pioneer; Inner Hebrides & Minches candidate SAC

- shared values
- competing interests
- potential trade-offs regarding marine ecosystem services and their activities

