

**Scottish Forum on Marine Natural Capital – Meeting minutes**  
**Wednesday 15<sup>th</sup> March 2022, 10:00 – 12:30**

	Item	Lead	Time
1.	Introductions	All	10:00-10:10
2.	Business in the Blue Economy 2023 workshop de-brief	Julia Clough	10:10-10:25
3.	Presentation – Sea the Value (+ questions)	Tavis Potts	10:25-11:00
4.	Updates from Forum members	All	11:00 -11:45
	<b>Break</b>		11:45-11:55
5.	MNCFS name and logo	Jessica Jones	11:55-12:05
6.	New members	Jessica Jones	12:05-12:15
7.	AOB	Jessica Jones	12:15-12:25
8.	Date of next meeting	Jessica Jones	12:25-12:30

**Attendees:**

Chris Leakey (CL, NatureScot), Lucian Fernandez Slade (LFS, NatureScot), Cathy Tilbrook (CT, NatureScot), Amy McQueen (Chair – AM Marine Scotland), Sally Rouse (SR, Marine Scotland, Nicola Melville (NM, SEPA), Marion Harrald (MH, SEPA), Janet Khan (JK, SEPA), Tavis Potts (TP, University of Aberdeen), Hannah Rudman (HR, SRUC), Adele Shaw (AS, CES), Jessica Jones (JJ, SWT), Julia Clough (JC, SWT), Sam Collin (SC, HMC), Ness Smith (NS, HMC)

**Apologies:** Sinead Sheridan, Philip Boulcott, Vicky Morgan, Calum Duncan, Jennifer McNulty

**Summary of actions from the meeting:**

Action	Lead
Email to confirm membership of Howell Marine Consulting.	JJ
Open invitation to present at quarterly meetings on Basecamp.	JJ
Reach out to Marine Nature Enhancement Team at MS for a presentation.	CT
Design logo templates for members to vote on.	JJ/LFS
Send poll for next meeting date.	LFS

**2. Business in the Blue Economy 2023 workshop de-brief**

**Consideration for future events** – Nearly too many speakers, perhaps should leave more time for panel discussion.

**Interest from Finance earth to do another conference** - particular focus on saltmarsh code (Hannah Rudman (SRUC) interested in giving a webinar on the code also). Other forums potentially already focusing on this – we **must be cautious to not repeat what blue carbon networks are already doing**.

One of the tasks for the forum to work on was a natural capital protocol, some of the **talks already showed examples of how this protocol was being used**. No need to trial the protocol, but can **focus on** how we can work with businesses already **taking this approach to make it more mainstream**.

- **Examples:**
- Glenmorangie, using oyster restoration to help mitigate the remaining impacts they have on the surrounding marine environment (after reducing impact by 95% by investing in an anaerobic digestion plant). Identified impacts on natural capital and seeks to mitigate these implementing nature-based solutions.
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- Orsted, looking at improving their understanding of the impacts their activities have, and are searching for opportunities where they can restore and create habitat by improving the design of underwater structures.
- **Key observation:** Regulation can be the initial driver for delivering a natural capital approach. Positive to see that some companies are going beyond initial expectations.

#### **CT on FIRNS bid:**

Naturescot bid for FIRNS in order to look at what framework mechanisms might need to be put in place in Scotland to allow for investment in nature. Primarily focused on saltmarsh code, as there is interest from investors, such as Orsted, but they don't necessarily want to do all the groundwork. A structure for investment is needed to facilitate these transactions.

#### **SR on meeting at World Ocean Summit:**

Various sessions on blue finance – increasing interest from financial sector. Large presence of venture capitalists and other financial corporations. Example of financial corporations identifying the need to adapt: Deutsche Bank stating that a fundamental finance system change needed. Blue economy sustainable finance principles widely adopted by major banks.

#### **NS on Finance Earth:**

Finance Earth 3 year sustainable finance programme for blue-belt. Looking into 3 main strands:

- Drawing down on existing funding available to channel investment in small blue economy programmes within OT's.
- Scoping project to identify areas which are available for investment.
- Money to invest is available but there is a lack of suitable projects and necessary governance structures.
- **Key question:** What role should government play within this rapidly moving blue finance sector? Where can we have the best impact?
- **Key areas to focus:** guidance and opportunity mapping to ensure that investment is being channelled into the most beneficial projects. MS nature enhancement will be leading on the work for opportunity mapping – need of input from other organisations to move fast and ensure we aren't reactive to new ideas and are prepared to strategically steer them.

## CL:

Source to sea project with SEPA. Aimed at exploring source to sea synergies and efficiencies and breaking through siloes of land, freshwater and marine management. Includes workshops aimed at opening dialogue between academia, public and private sectors.

Other related source to sea work (2012): 'Linking coasts and catchments'. Interesting to see how the same issues are still problematic many years later. High level strategies are in place but not being implemented on the ground.

## TP:

Resilient UK coastal communities and seas £11m funding announcement: aimed at transdisciplinary research projects which apply a place-based approach to transform our understanding of UK coastal communities and seas.

### 3. Presentation from Tavis (Sea the Value):

**Key research questions:** What benefits does biodiversity provide? Who benefits from marine ecosystems? Which values underpin these benefits?

#### Objectives:

- Quantify interlinkages between marine biodiversity, natural capital and ES.
- Looking at values: economic, social, cultural mainly focussed on 2 ES: carbon sequestration and bioremediation of waste.
- Connect the ecological, economic, and social values of biodiversity to decision-making: key focus on co-design with stakeholders to develop frameworks for green finance.

#### Interdisciplinary team:

- Research orgs: PML, UoPortsmouth, UoAberdeen,
- Consultancies: eftec, Daryl Burdon Ltd
- NGO's: Solent Forum, Moray Firth Coastal Partnership, Coastal Partnership Network.

**Moray Firth case study (Cromarty Firth)** - Chosen particularly because of interesting set of issues surrounding the new green free port, interesting mix of communities, its importance to the energy sector and because of its substantial natural capital (saltmarsh, seagrass, shellfish beds). Second case study is in the Solent (England).

**Stakeholder methodology will be incorporated** into both case studies - participatory mapping developed in the North Devon pioneer work, Deben estuary was first test of this 10-step methodology.

Key aspect of participatory mapping is looking at how and who benefits from natural capital. These methods enable the identification of how a variety of social and economic factors may affect individual's access to natural capital.

- **Workshop 1:** identification and mapping of features and benefits. The output of this workshop is a digitised map of the natural capital in the area and what benefits are linked to each asset.

- **Workshop 2:** Trade-off assessment. Looks into how natural capital and benefits are changing. In this stage scenarios are developed (co-designed), in the Deben Estuary sea level rise was used as a scenario to see how ecosystems would shift from saltmarsh to mudflats. These can then show how these ecosystem changes can affect the provision of ES and related benefits.
- **Workshop 3:** Logic chain development. Showing links between natural capital – benefits – beneficiaries. ES aren't passive, they affect people in different ways. Conversely, (Beneficiaries) can then look at how reliant a certain stakeholder group is on NC. E.g. boatyards - concerned with aesthetic values.
- **Lessons learned from Deben Estuary study:**
  - Place based approaches needed for improving understanding and enhancing natural capital.
  - Common language for natural capital developed throughout the process.
  - Provides data, including digitised visual products at localised scales that help understanding existing trade-offs between different management scenarios.
  - Supports learning and research about the connections between nature and well-being.
  - Helps identify which beneficiaries may be impacted under different policies – leading to better decision-making.

## Q&A

- **Will the digitised maps be published? Could they be included on the NMPi?**  
Yes, once they are produced. All data will be free and given to communities and uploaded to NMPi and other UKRI data bases.
  - Important to be sensitive to stakeholder engagement processes, important to understand community sentiment. Possible issues related to stakeholder fatigue. Important to identify fractures between communities.
- **Given the importance of bottlenose dolphins in the Moray Firth, will ES provided by mobile species be included?**
  - Going to have to look at a natural capital assessment of mobile species, because of the importance of dolphins and other marine in the Moray Firth. Many businesses are shaped around the presence of these animals and there is also a strong community sentiment around them.
- **How do we define the bounds of communities? How does this feed into values (trade-offs between different communities or members within the same community)? How can this be integrated on a national scale?**
  - The ambition is to map every meter of the coast with a stakeholder mapping approach. A big enabler for these methods to be widely introduced will be the training packages currently being developed, which will allow communities to go through the participatory mapping process independently. The key is to 'train the trainer'.

- Tension between national and local. Often frustration that national scale data isn't accurate. Community-led approach is more granular, allows identification of important marine activities accurately.
- Difficulty in identifying a representative sample of coastal communities to include in the workshop. Important to consider communities of interest and communities of place.
- **Five capitals approach to marine planning – How can social values be captured on a national/regional scale? Is it possible?**
- Social values/capital are embedded at the scale where social networks occur. Some national/regional values can be captured, but how these translate into local/community values is challenging. Overall scepticism around the ability to scale up social values – working with communities must be the first step.

## 4. Updates from Forum members

### Update on FIRNS:

Open for expressions of interest. Currently recruiting to expand capacity to run the programme. Keen on seeing some marine/coastal proposals. More detailed update in the next MNCFS meeting.

### CT update:

Early discussion about the potential to set up a catchment-type enhancement fund, led by fisheries management Scotland. FIRNS funding could scope how to link SMEEF and new catchment fund, potentially could operate under a shared governance structure to improve efficiency.

### SC Howell Marine Consulting update

Working on how to incorporate marine natural capital into blue economy. Bridging gap between research and policy development (blue economy development).

Can we apply 5 capitals approach to marine planning? Is it possible? Main project is being developed with MMO around the East Marine plan area. Focus is on fishing, offshore renewables and aggregates.

First steps is to define what the 5 capitals approach is and look at previous examples of where it has been adopted. First stage of the project seeks to develop asset registers for each of the five capitals for each of the main sectors (Mentioned above). Registers will then be used to identify interactions between capitals and sectors – ultimate goal is to develop a tool for improving decision making. Some key questions: How to scale up, can we link various marine plans? Where does each capital most appropriately apply within decision-making? So far it is a thought piece but aims to develop discussions around these key questions.

- **Concerns that five capitals approach takes us back to taking all capitals into consideration with an equal importance. Does it take away from progress made in the BEV or strategy for economic transformation which are built on the idea that nature underpins all other benefits (economic, social)**

- Five capitals approach also identifies that nature underpins the remaining capitals. Natural capital is placed at the base and forms foundations for other capitals. Above natural capital is human capital then social capital, followed by manufactured and lastly financial capital (mostly a product of other capitals rather than physical capital in itself).
- **Do you have to consider all capitals? How flexible is the approach?**
- Each situation is different. Within the approach, often not all capitals may have to be considered. The idea is more about a way of framing interactions between capitals for decision making. The 5 capitals approach provides a structured approach to showing how different capitals interact. Ideology comes from: Forum for the future (5 capitals approach).

### **AS update**

At the end of last year CES commissioned a report on their role in marine restoration/enhancement projects, and how best can support communities and the issues that they face. Report in its final stage and will be shared with the group when published.

### **SR update**

- Blue economy natcap MS - Priority is to develop a set of guidelines to integrate a blue economy approach within various policies. Includes how to incorporate natural capital thinking/approaches for policy development.
- **Civtech challenge:** aims to increase opportunities for investment in marine nature restoration/enhancement projects.
- Aecom: Mainly focused on the investment and return of restoration/enhancement projects. They will be doing a user research programme to establish what potential investors in marine nature need from a platform (operational and capital costs, best locations, possible returns). Hoping for minimum of 2 viable products, demo day and webinar from both companies in June.
- Tritonia: Tech company that specialise in underwater imagery – new technology for semi-autonomous image collection of the seabed and automatic id, which would allow for very efficient monitoring of changes in habitat extent of restoration programmes.

### **JK update**

Scottish environment business awards have been launched - reminder that there are business that have gone beyond compliance and regulatory requirements.

### **JJ update:**

Orkney Oceans of Value: Plans to digitise maps with outputs from the project. Further workshops planned where the CVM video will be screened to incentivise conversations about how communities value their marine and coastal environment. The intention is to also digitise outputs from these workshops in the form of maps that show locations of natural capital assets and highlight where communities would like to prioritise certain marine activities.

Workshops targeted at various locations around Scotland to see if other communities agree with values identified in Orkney through the CVM.

- Two at Orkney nature festival.
- Sea Scotland conference (tickets now available)
- Marine festival in Berwick.
- Looking at coastal partnerships/ local SWT groups

UK blue carbon project ongoing with WWF and RSPB – should start doing the Scottish area in June/July.

Progressing lessons learned from land report done by Arup – Successes and challenges of terrestrial natural capital approaches and identifying which ones could be applied to the marine environment.

**AM update** - Choice experiment value of marine environment on recreational users - full survey now live. Ambitions to wrap up project by this month - hoping to publish before the summer.

Defra carried out an Ocean literacy survey – has now been published.

## 5. MNCFS name/logo

A couple of logo templates will be created for the next meeting. Once ideas have been identified, possible designers could be contacted to develop the final logo.

Website is still in the process of being developed.

## 6. New members

Membership of Howell Marine Consulting and possibly Arup will be decided via email.

## 7. AOB

Nothing raised

## 8. Date of next meeting

A poll will be circulated to confirm a date for the next meeting in June.

## Links and resources shared during the meeting:

[FIRNS - The Facility for Investment ready Nature in Scotland | NatureScot](#)

**New framework for reporting on impacts on biodiversity** (200 pilot projects currently testing the framework) [TNFD – Taskforce on Nature-related Financial Disclosures](#)

[Home | VIBES | Scottish Environment Business Awards](#)

**Relevant source-to-sea research related to plastic pollution:** [Marine plastic pollution: research - gov.scot \(www.gov.scot\)](#)

**Report which identifies stopping land based pollution as one of five actions needed for ocean health.** Peter Haugen who is a contributing author is now part of the First Minister Enviro Council [full-report-ocean-solutions-eng.pdf \(oceanpanel.org\)](#)

**Sustainable Finance Roundtable Report for Blue Belt**  
[Blue Belt Programme Sustainable Finance Roundtable v0.6.pdf \(publishing.service.gov.uk\)](#)

**Scottish government's wellbeing economy is set in four capitals rather than five** [total-contribution-report-2017.pdf \(thecrownestate.co.uk\)](#)