

Embedding large scale freshwater Nature-based Solutions (NbS) into economic sectors

Time	Content	Lead
12.30 (CET)	Welcome and Introductions	Gilles DOIGNON (DG RTD biodiversity team leader)
		Kirsty Blackstock – James Hutton Institute
12: 45	Overview of MERLIN & Embedding large scale freshwater Nature-based Solutions (NbS) into economic sectors	Kirsty Blackstock – James Hutton Institute
		Anna Bérczi-Siket- WWF
13.10	Q&A about the MERLIN project	All participants
13:20	Moderated discussion in break out rooms themes	Kirsty Blackstock
	•Cooperation opportunities	Anna Bérczi-Siket (Water supply sectoral lead)
	•Cross sectoral issues	Eva Hernandez (WWF) /Agriculture sectoral lead
	•Comments on DRAFT sectoral briefings	Esther Carmen (JHI), Fanni Nyírő (WWF) – Hydropower sectoral leads
		Tamás Gruber (WWF) – Navigation sectoral lead
		Alhassan Ibrahim (JHI) – Peat sectoral lead
		Audrey Vion Loisel (ICA) - Insurance sectoral lead Mia Ebeltoft (WWF) - Insurance sectoral lead
13.50	Wrap Up and Next Steps	Kirsty Blackstock
14:00	Meeting closes	

Purpose of Meeting

- → Introduce Project
- → Build our Community of Practice
- → Share ideas whilst at early stage
- → Benefit from your expertise
- → Begin our journey together



- → Participants please introduce yourselves in the chat
- → Mr. Gilles Doignon will open the meeting...

Introductions



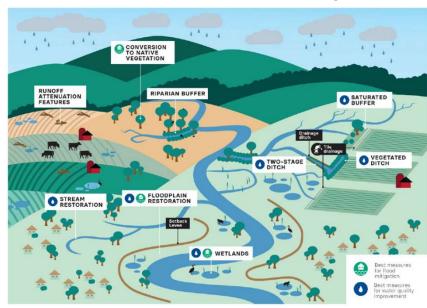
The MERLIN project

- → H2020 "Green Deal" call
- → 45 partners from academia, NGOs, water agencies, municipalities and practitioners
- → 21 mio Euro (50% into restoration projects)
- → Duration: **2021-2025**
- → Ambition: Contributing to societal transformation



MERLIN – sowing seeds of change

- Need to protect & restore in more places, faster
- Solutions that last beyond traditional restoration to NbS



Modified from Suttles et al. 2021. Water, 13, 3579



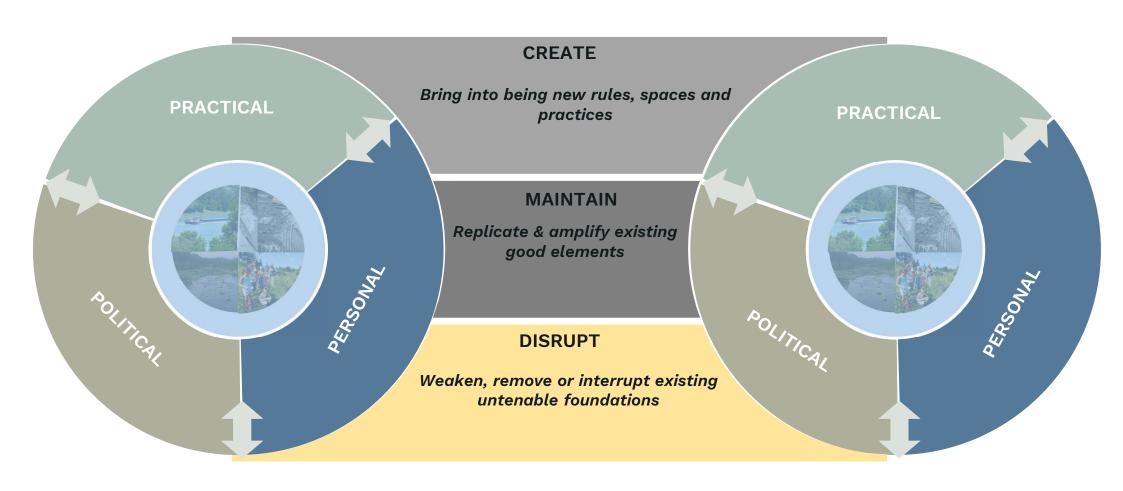


Innovation, upscaling & transformation



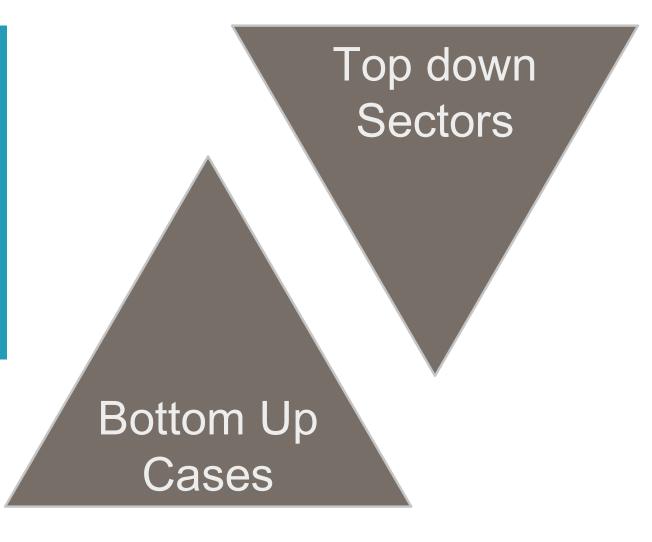


How can we support transformation?





The MERLIN project





Sharing & shaping good practice in places

17 restoration case-studies



PEATLANDS
AND WETLANDS



SMALL STREAMS
AND BASINS



LARGE TRANS-BOUNDARY RIVERS



Sharing & shaping good-practice in business

6 Economic Sectors







Water Supply



Inland Navigation



Insurance





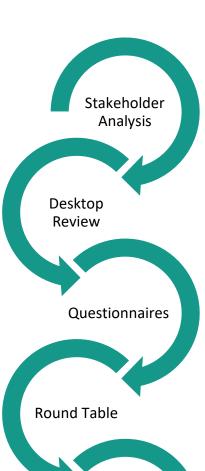




Economic sectors

Role in landscape-scale approach





Briefings

Main EU sector actors identified

Review official documents, scientific publications

Views of experts across the EU

Online meetings in Spring 2022

Sectoral & Cross-Sectoral briefings — Nov 2022



Routemaps for Transformation

Strategy = between objectives & plans





Starting point & destination – mainstreamed freshwater NbS by 2030 (and 2050)?





Routemap = recognition of multiple modes of transport







Sectoral briefings -cooperation slides

Agriculture - producing food

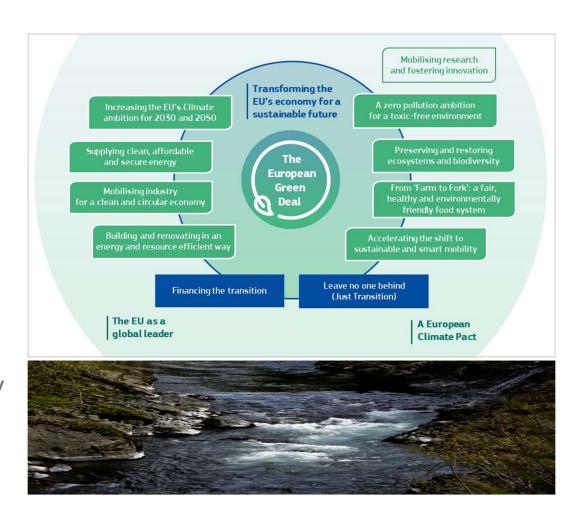
Hydropower - producing low carbon energy

Insurance - protecting people and property

Navigation - moving goods and people

Peat extraction - producing growing media and fuel

Water Supply - clean secure water for people and industry



Cooperation with Sectors

- Starting point: Relationship with NbS/restoration
- · Destination: The main cooperation points
- Cross-sectoral relationships

Cooperation with Agriculture

- Resistance towards large scale NbS something for nature but not solving farmers' problems.
- Focus on the enabling environment that can support coordinated or collective action across farms and help farmers benefit from adopting NbS
 - Illustrate the benefits of NbS (valuation of ecosystem services)
 - Build capacity and knowledge sharing opportunities (MERLIN case studies)
 - Adapt or create policies and products (NbS is well integrated into the CAP; NbS certification)

Cooperation with the Hydropower sector

- →NbS is not a widely understood concept within the sector
 - → Ecosystem restoration through dam removal is seen as a **threat** to meeting **climate mitigation** objectives

→ **Negative ecological consequences** of hydropower need to be reduced or mitigated (fish migration, sediments and nutrients flow)

- → Make a positive contribution to biodiversity and ecosystem services.
- →Dam removal within a wider catchment scale.
 - →Draw on **existing examples** of dam removal
 - → Develop an understanding of how to assess 'obsolete'
 - →Focus on strategic action at the **catchment scale**
 - →Work to support the development of cross sector partnerships involving hydropower organisations
 - → Develop an understanding about key entry points into **decision making processes** about future economic viability of dams to ensure consideration of NbS as an option.
 - →Develop understanding and awareness of different finance mechanisms for supporting dam removal and NbS as a financially feasible path for the sector

Cooperation with the Insurance sector

- → More aware of the term NbS than just 2-3 years ago, needs a widely accepted framework to describe and quantify the risk reduction efficiency of nature-based solutions.
- → Data modelling: Connect risk models from insurance sector with data modelling done in Merlin
 - To understand the effects of NbS and include these (for example large scale floodplain restoration) in insurance NatCat models
 - → Innovation in Insurance products and services:
 - Create an increased understanding of how NbS can 'fit' in the insurance products
 - → Potential for **public-private investment**
 - → **Joint advocacy** meeting/workshops with the sector
 - → Collaboration to revise regulatory framework if required to facilitate action

Cooperation with Navigation

- Synergies between the sector and restoration/NbS are most likely infrastructure developments involving restoration measures, targeting physical river structures (e.g. riverbed, banks, etc.).
- Integrated river development (instead of planning) principles to be approved and applied – (cross sectoral)
 - To have a common agreement and understanding on minimum fairway conditions (international agreements and national legislation); where intervention is necessary, to provide navigation conditions with NbS;
 - to show and justify of benefits of NbS for the navigation and nature conservation sectors, but also to other sectors and stakeholders; (cross sectoral)
 - CBA on proposed measures small and large scale (project and program level) (cross sectoral)

Cooperation with the Peat Extraction sector

- →Peatlands have a strong natural potential to save carbon and play an important role in nature-based solutions for climate change
- →Large-scale restoration beyond sites of peat extraction (revegetation after use)
 - → **Enhanced cooperation** between peat extraction industry and other stakeholders including public agencies and other private organizations
 - →Innovative funding mechanisms and business approach to mainstreaming NbS
 - → **Research** on the area of peat from which peat is extracted, GHG emissions from extracted peatlands in relation to other drained peatlands; and achieving net zero emission in the sector
 - → Overcoming bureaucracies where MERLIN could serve as an intermediary between the peat extraction companies and various states to facilitate the process

Cooperation with Water Supply & Sanititation sector

- NbS "green" solutions, technologies to handle water overflows during intense rainfall events or use them instead of grey technologies
- Raising awareness of the importance of working upstream and on restoration;
 - Sanitation NbS solutions are based on mitigation measures to treatment of wastewater
 - NbS upstream to protect resources
 - often large-scale ecosystem intervention difficult for water operators to deliver on their own
 - Instead, working in partnership with other stakeholders
 - This approach can increase the governance challenges
 - Need for renewed sector policies Good examples GEMAPI" law in France

Mainstreaming & Transformation

.... working at catchment scale with all relevant sectors



- many sectors share the same reliance on water resources



- some directly involved in MERLIN NbS measures







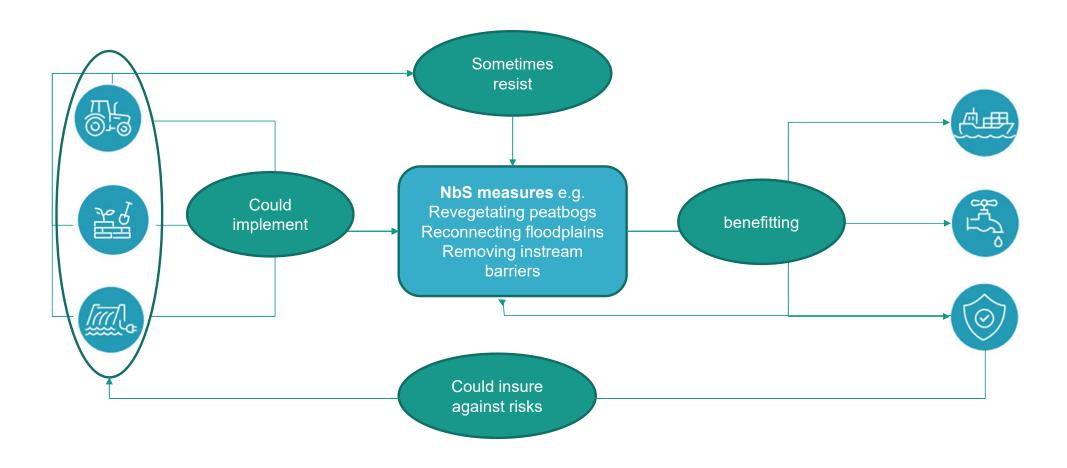








Cross Sectoral Interactions



Next Steps

- Will make slides available on our webpage:
 - https://www.hutton.ac.uk/research/projects/merlin-mainstreaming-ecological-restoration-freshwater-related-ecosystems
- Short summary report emailed to those registered end of Oct 22
- Final briefings will be online from December 2022
- May follow up regarding policy analyses
- Next Roundtables in Spring 2023
- Share draft sectoral policy analyses in Summer 2023
- Climate & regional policy workshop in autumn/winter 2023

Thank you!

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