

**6th ESP Europe
Conference
2026**

Knowledge & NbS – priorities for strengthening NbS practice

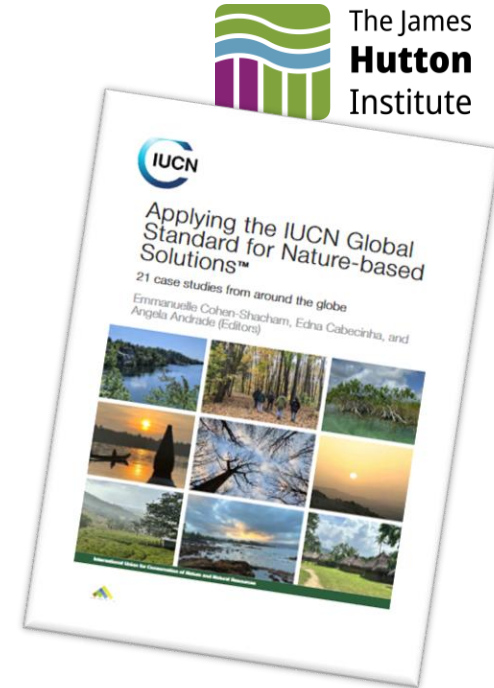
Kerry Waylen
James Hutton Institute
Scotland



The James
Hutton
Institute

Basis of this talk

- Insights from 13 of 21 case studies in Applying Global Standard report
 - Online survey, miro board, workshops
- Also
 - Engagement with NbS Global Standard
 - Other work on enabling catchment NbS in Scotland, and holistic nature management



NbS Global Standard

“actions to protect, sustainably manage and restore natural and modified ecosystems in ways that address societal challenges effectively and adaptively, to provide both human well-being and biodiversity benefits”

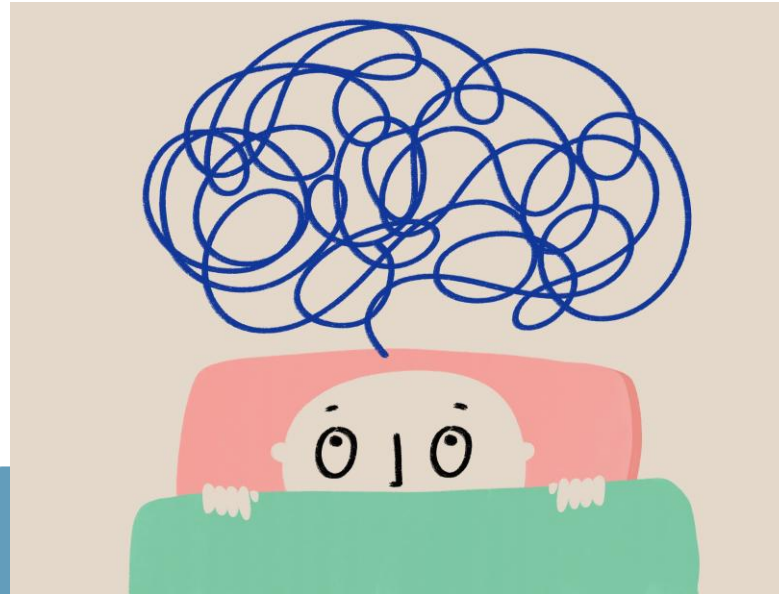


Knowledges for NbS

- Working systemically for **multiple issues**: so, need insights on many topics¹
- Working **with and for society**²: so, need to value views & expertise of many groups
- Knowledges will be articulated, represented and **combined** in many ways: so, need to expect and support co-production³

So...

- Need to know everything, from & with everyone, all the time?



What do the 13 cases tell us?

What do cases tell us?

Topics

- Natural processes & local needs & economics
- Relationship with 8 Criteria implementation
- Also, 'know how' to make ideas real

"A problematic knowledge-sharing experience I had emerged when discussing assessment criteria such as long-term impacts, trade-offs and economic feasibility ... While ecological and governance aspects were generally well understood, these topics were more difficult to address ... there was limited information available on some dimensions, particularly trade-offs and economic aspects"

What do cases tell us?

Formats

- Scientific studies and case studies
- Agency reports, maps, historical documents
- Models
- Local narratives, stories

“It was fantastic spending time in country, cooking, eating and connecting with country and traditional stories and knowledge alongside systematic surveys “

What do cases tell us?

Whose knowledges

- Local residents and communities
- Contractors, engineers
- Scientists and academics



What do cases tell us?

How knowledges are shared

- Local surveys; also listening
- Searching for information
- Events, workshops

Balancing formal and informal

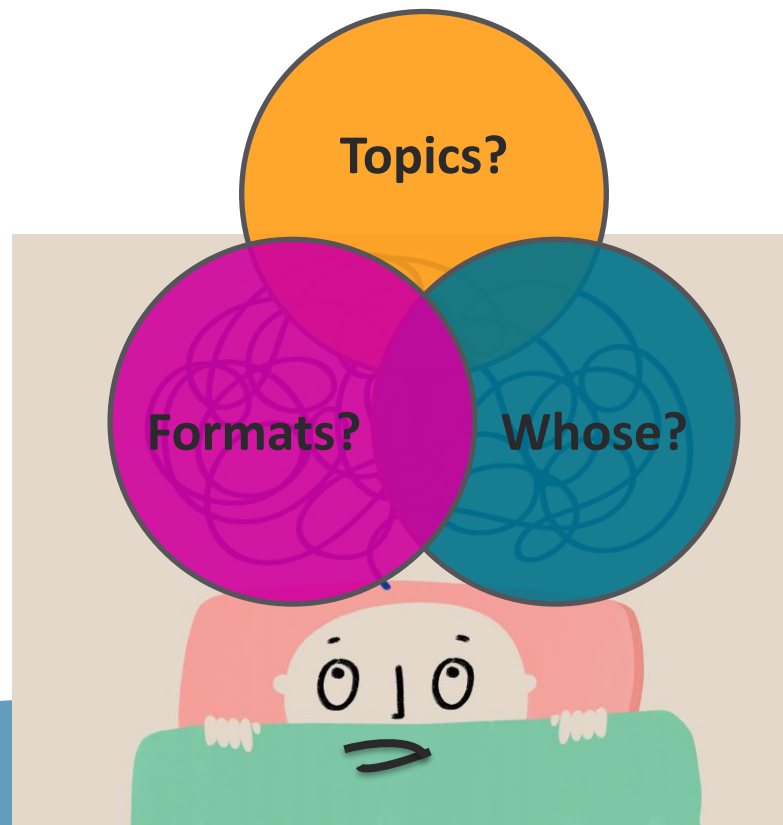


What do cases tell us?

Knowledge needs vary as projects unfurl

"allow more flexibility, reflection and explanation that recognise different project phases and knowledge maturity"

Priorities



Priorities



Plan to revisit
over time

! Not just natural processes...
attention to gaps – economics?
Local history?

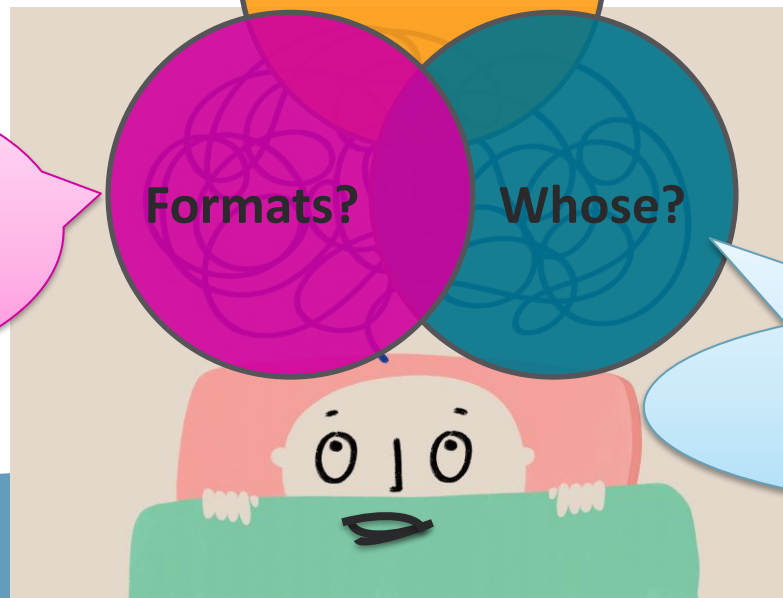
Topics?

Formats?

Whose?

! Look beyond
scientific papers and
professional reports –
some expertise never
written down

! Listen to local communities
and residents – also agencies,
contractors, new partners



Priorities for supporting NbS

Anything new?

- Confirms need to seek & share many knowledges
 - Obviously every case is different
but some knowledge types do tend to need special attention
- Confirms that knowledge-sharing is valued but challenging
 - Advice and tools are available¹

Conclusions

■ Looking forward

- Frame as an iterative process¹
 - Reflect on legacy of prior work of team & at site
 - Expect unfolding needs & knowledges²
- Focus on expertise rather than evidence³?
 - Review in terms of legacy, present & future needs



1. Collier et al, 2023. An integrated process for planning, delivery, and stewardship of urban nature-based solutions: The Connecting Nature Framework <https://doi.org/10.1016/j.nbsj.2023.100060>

2. Räsänen et al, 2024. Bridging the knowledge-action gap: A framework for co-producing actionable knowledge. <https://doi.org/10.1016/j.envsci.2024.103929>

3. Turnhout et al (2019) Environmental Expertise. Connecting Science, Policy and Society <https://doi.org/10.1017/9781316162514>

Conclusions

Attention to knowledges is important but challenging

- Projects are often short-term¹ – limited time to learn, plan, reflect.
- Monitoring typically under-resourced²

Knowledges in and for NbS needs attention by funders and partners, not just project managers

1. Lehmann et al, 2025. Time in and for nature-based solutions. No quick fix solutions for complex ecological and social processes <https://doi.org/10.1016/j.nbsj.2025.100219> 2. Biber, 2011. The problem of environmental monitoring https://lawreview.colorado.edu/wp-content/uploads/2013/11/8.-Biber-FINAL_s.pdf

Thank you



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<https://www.hutton.ac.uk/project/achieving-multi-purpose-nature-based-solutions/>

