Hydromorphology & HMWBs

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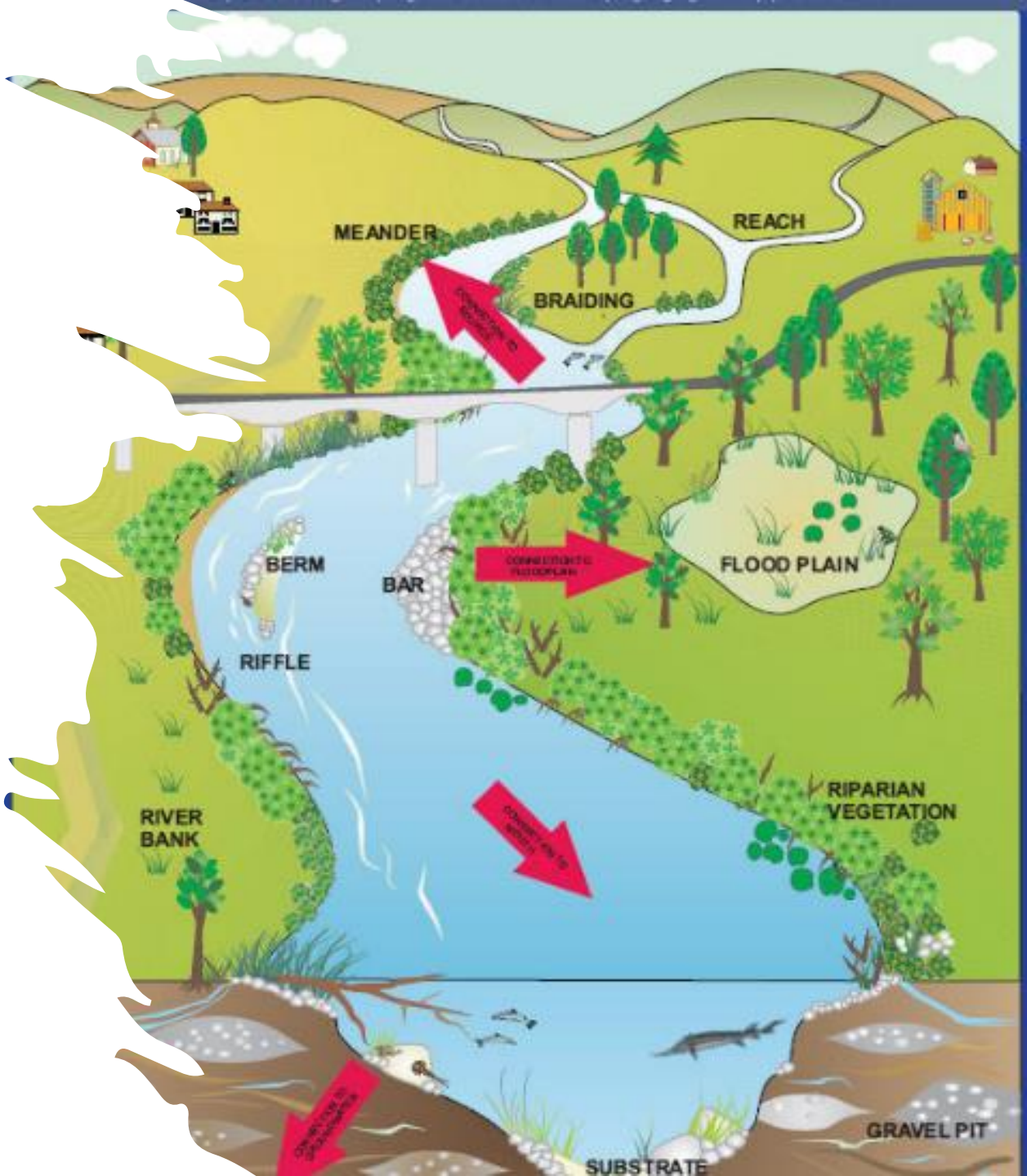
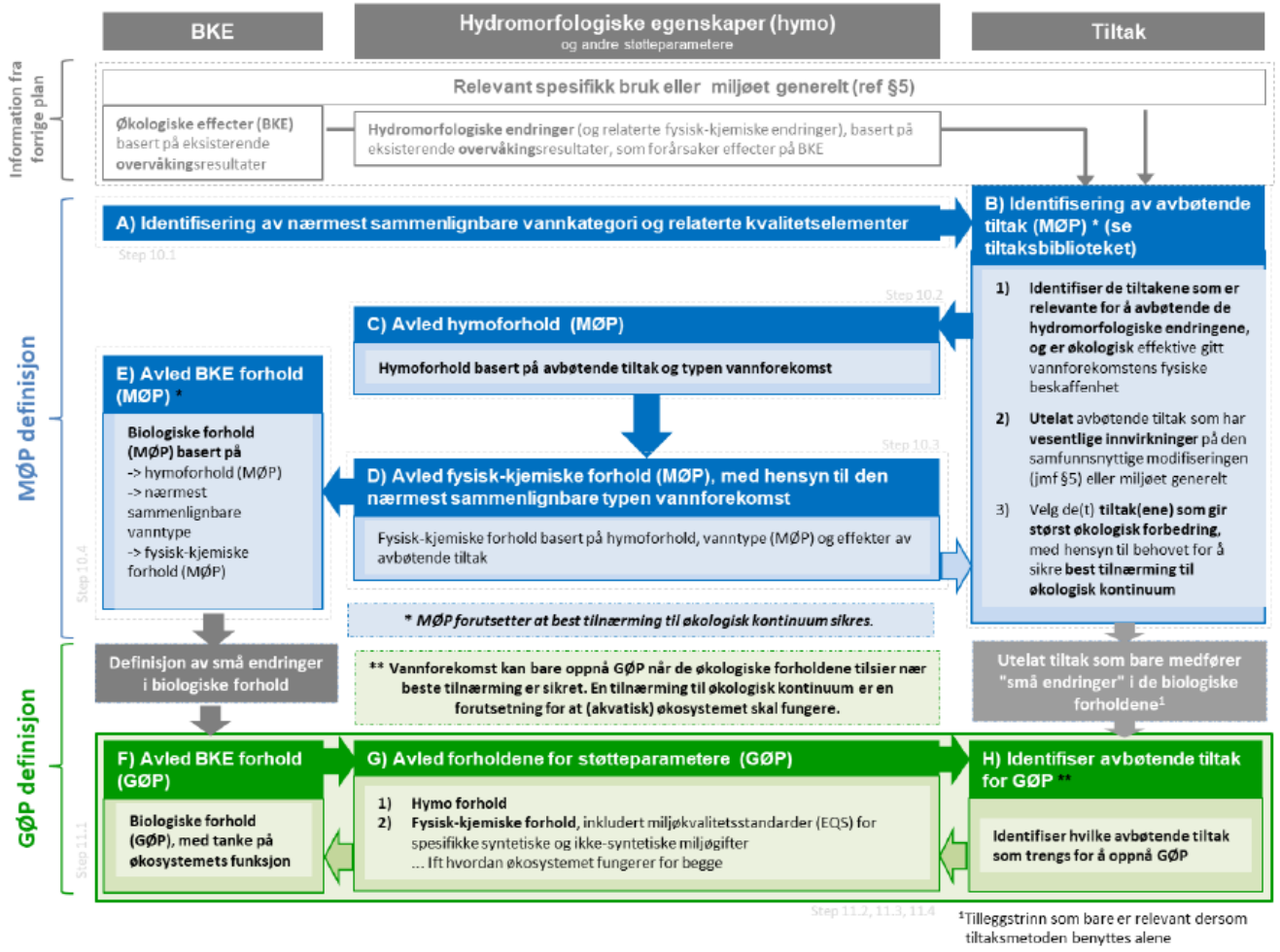
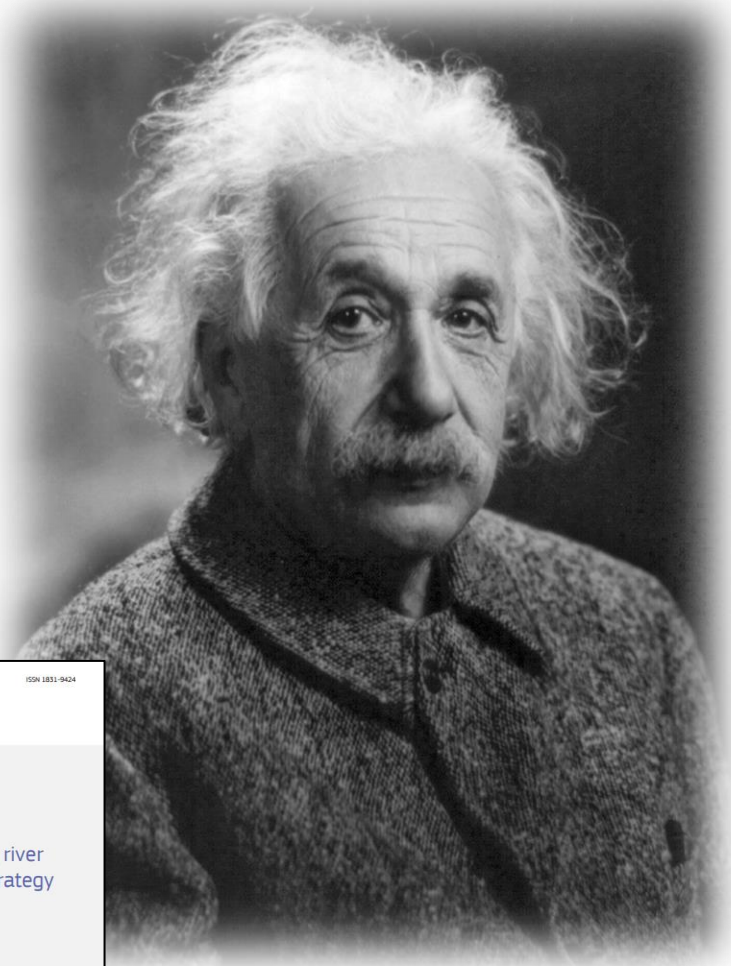
Nordic WFD Worskshop on Hymo
Gøteborg, 26 Sept 2024

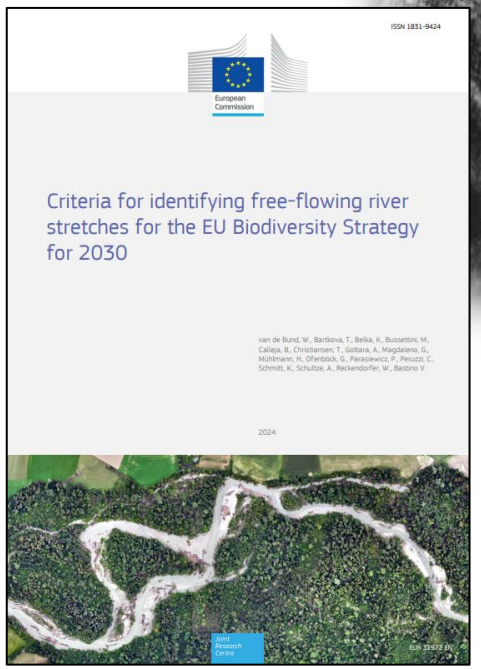


GEP or not and HYMO

- *«Not understandable for normal people»*
- A never ending story (at Nordic WS?)

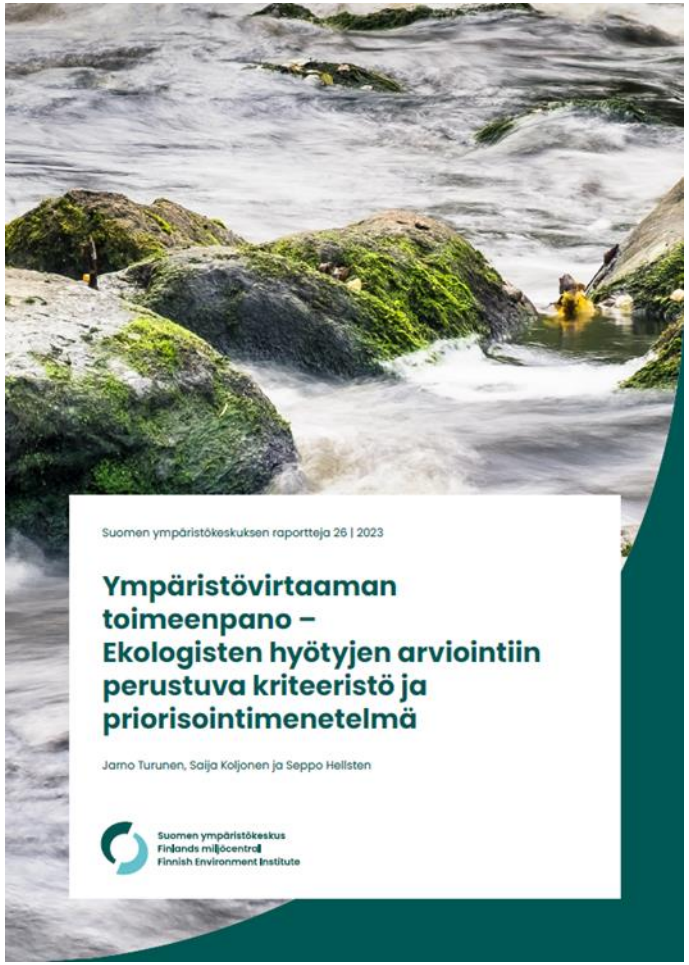






eFlow prioritization in FINLAND (Jarno – SYKE)

- As a member state feedback from the second river basin management planning, European Commission has urged Finland to define and implement ecological and environmental flows in river basin districts
- However, there was no systematic assessment where environmental flow could yield the largest ecological benefits and where further work on the implementation should be conducted
- Environmental criteria and a prioritization method was developed as a guidance
- Prioritization was done for 219 hydroelectric powerplants in Finland (> 0.1 MW)
- Emphasis on benefits to migratory fish stocks/salmonids



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PUBLIC PARTICIPATION IS IMPORTANT
CASE - HIMLEÅN (SWEDEN)

Alla berörda

Nuläge, gemensam problemförståelse

Åtgärdslista

Genomförbara åtgärder med motivering

Myndigheter

Preliminär identifiering av KMV

Samverka preliminär identifiering av KMV

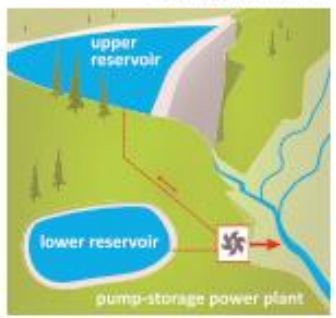
Bedömningar inför förklarande av KMV

Förslag på reviderad målbild och ev. förslag till ny normsättning

Diversion power plant

River power station

Storage power plant



Pump-storage power plant

Implementing measures

- follow-up
  - County Governor and Environmental Agency
- detailed plan
- supervision
- documentation

Revision

New terms

Implementation

3. Updates on new methodologies/national guidance

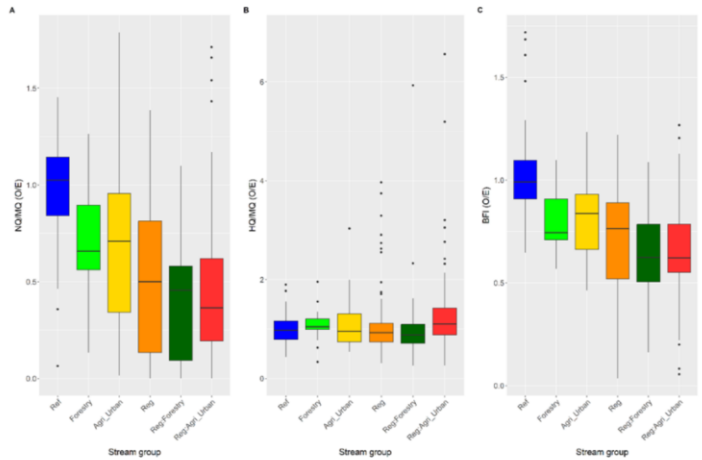
Classification of hydromorphological alteration

Hydrological status assessment of Finnish Rivers
Jarno Turunen, Finnish Environment Institute

Experiences with the proposed NO hymo classification system for rivers and lakes in Iceland
Svava Björk Þorláksdóttir, Icelandic Meteorological Office

Response to pressures (observed to expected ratio)

- NQ/MQ ratio and base flow index (BFI) were the most sensitive metrics to human pressures
- The +400 sites were classified based on metric deviation from expected values (O/E-ratio) to above good status (O/E >= 0.6) or bad-moderate status (O/E < 0.6)



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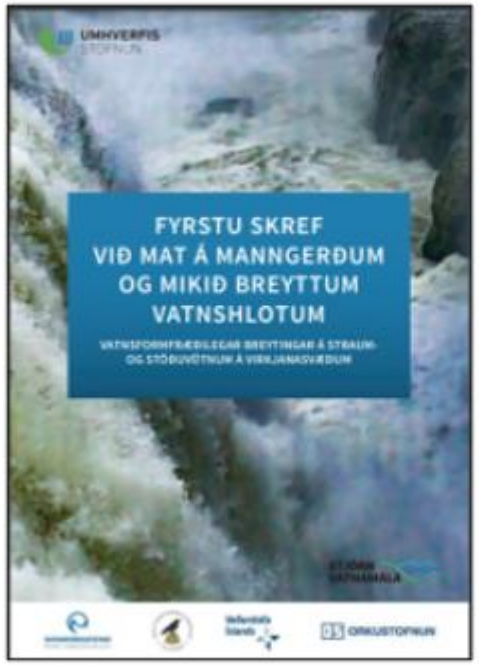
HYMO in Iceland

What has been done already?

- **Norwegian methodology is the basis for the Icelandic method for analyzing HYMO in rivers and lakes.**
- **Published reports related to HYMO**
  - **First steps in the assessment of artificial- and HMWB – HYMO changes (2020).**
  - **HYMO quality elements in rivers and lakes (2021).**
  - **Methods for assessing high HYMO status in rivers and lakes (2023).**
  - **Guidance on determining the ecological potential of HMWB (2024).**
  - **...and more reports and statements have been made on related topics**



Potential next steps for Nordic hymo-collaboration?

- Need for widen the HYMO scope
  - Not ONLY Hydropower
  - Hymo in agricultural and/or urban areas
  - Exchange on **«no detoriation»** principles in Art 4.7.
  - Coastal hymo?

- Ongoing work on harmonising the NO-SE **river (hymo) typology**
  - More countries welcome to join
  - GEP probably differ between these
  - Define monitoring standards for GEP

- Useful to share «best practises» and knowledge exchange is useful
  - Nordic conditions is «special»
  - FFR-methodology in Nordic RBs
  - Webinars on good mitigation measures?
  - HydroCen – “Forsker on demand”

- «Every-body» feel they are «too alone» about implementation…would be useful to exchange more regular
  - At least online and minimum once pr year

Some «take home messages» on hymo

- Very useful the ppt on hydro-classification (FIN)
- Eflows – Env Flows – GEP-flow (as little without LSO)
- Some countries (e.g. Sweden) have finalised several national additional guidelines (after CIS Guidance no 37) other not…
- Importance of engaging people (Public participation)
- Really liked the dam-removal «success-story»
- Still need to discuss in depth «tricky» hydropower issues
- Site dependent impacts and mitigation needs