

Assessing ecologically and biologically significant areas at different spatial scales: What type of decision-making is supported? (EBSA-EMMA-PEMMA)

Lauri Kuismanen, Finnish Environment Institute (Syke)

Lasse Kurvinen, Metsähallitus Parks & Wildlife Finland

Markku Viitasalo, Finnish Environment Institute (Syke)

et al.



Suomen ympäristökeskus
Finlands miljöcentral
Finnish Environment Institute

So, the 30-by-30 target

Protected area objectives on different spatial scales:

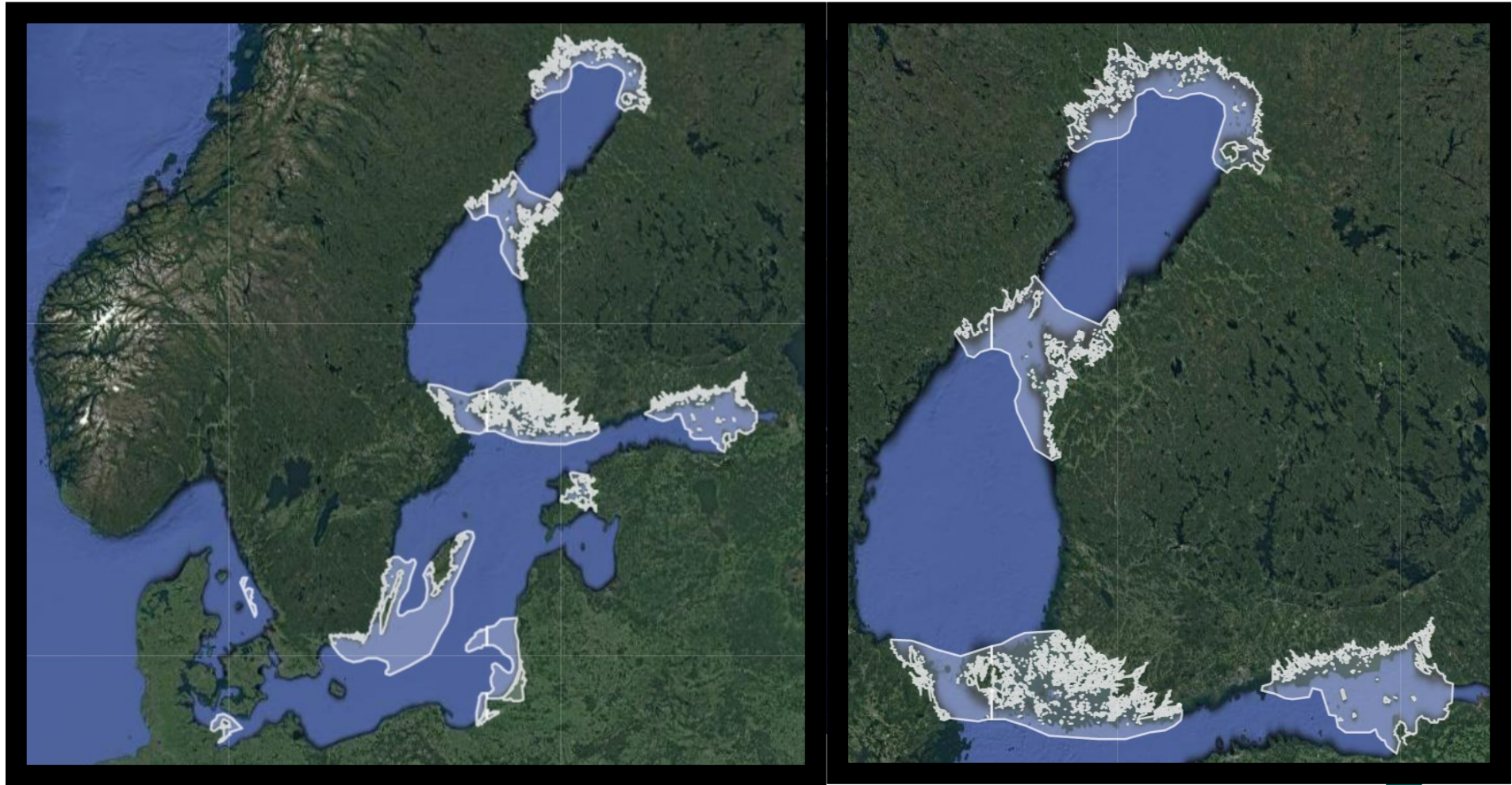
- Global (GBF)
- Regional (EUBDS and HELCOM BSAP)

Where do we designate the new areas?

- Carbon-rich ecosystems (e.g. seagrass meadows)
- Biodiversity-rich natural areas, high biodiversity value or potential
- Important ecosystem service providers
- Etc.



On the global scale - EBSAs



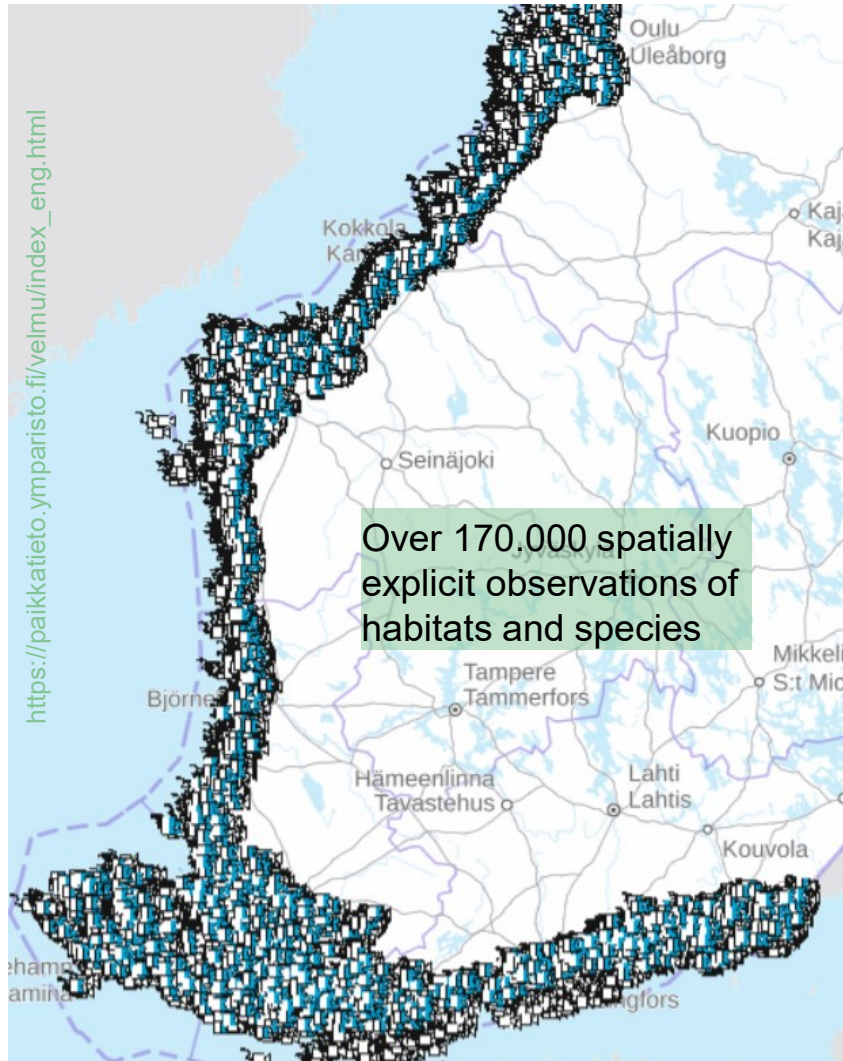
"The EBSAs are special areas in the ocean that serve important purposes, in one way or another, to support the healthy functioning of oceans and the many services that it provides."

CBD EBSA criteria

Criteria

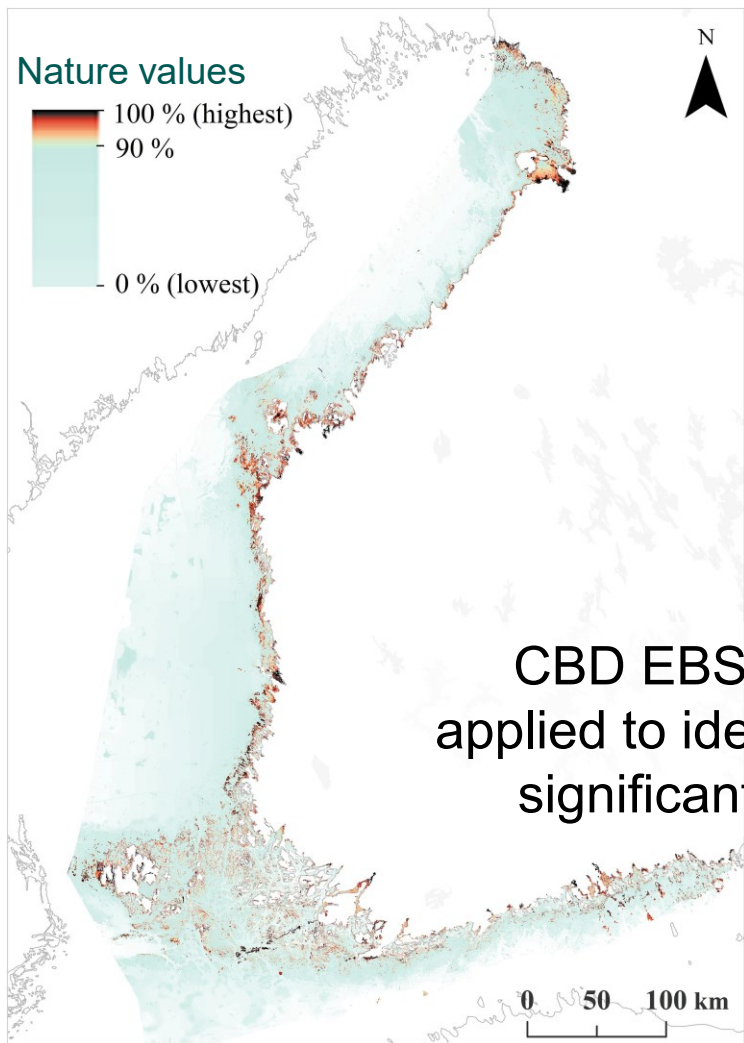
1. Uniqueness or Rarity
2. Special importance for life history stages of species
 - A framework to methodologically describe significant areas
3. Importance for threatened, endangered or declining species and/or habitats
4. Vulnerability, Fragility, Sensitivity, or Slow recovery
 - E.g. important habitats, unique features...
5. Biological Productivity
6. Biological Diversity
7. Naturalness

National level work?



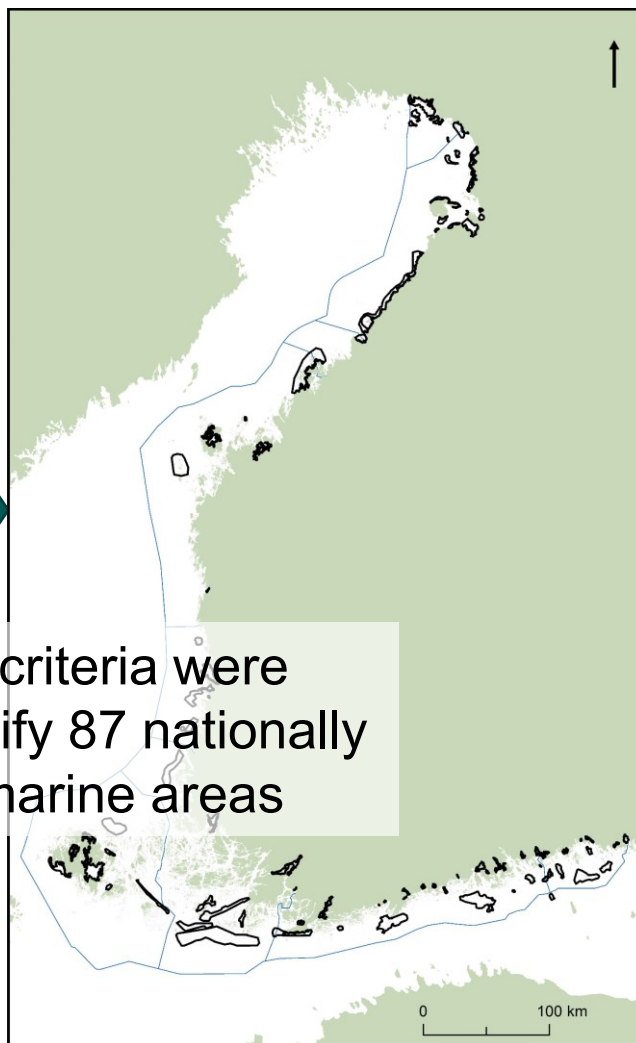
- How to utilise it?

The first ecological value map of the Finnish marine environment



Virtanen et al. 2018

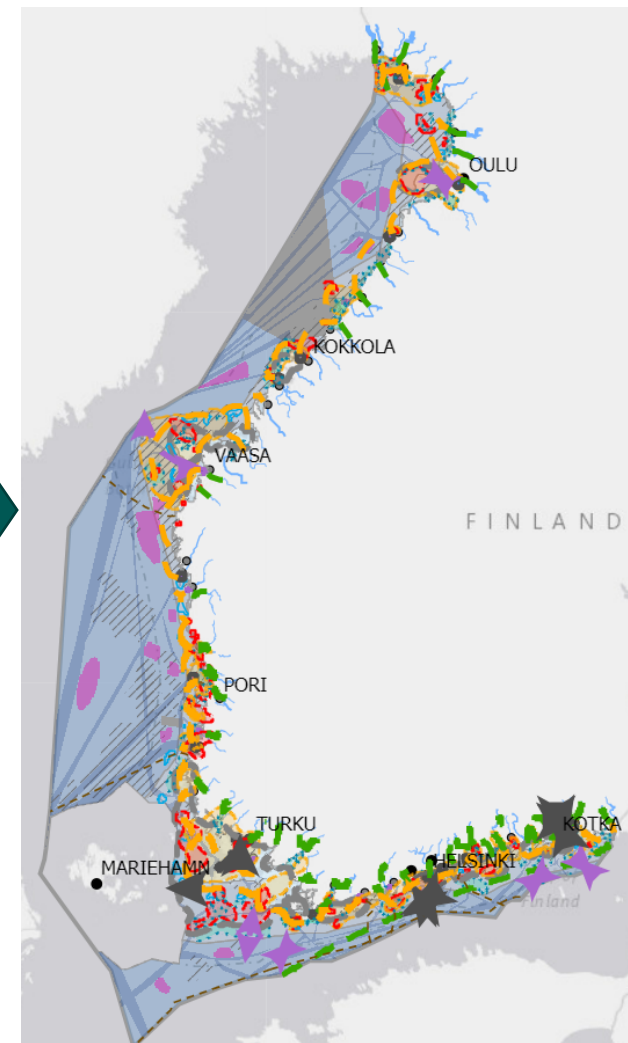
"EMMA's" – 87 ecologically significant underwater marine areas



Lappalainen et al. 2020

CBD EBSA criteria were applied to identify 87 nationally significant marine areas

Finnish maritime spatial plans

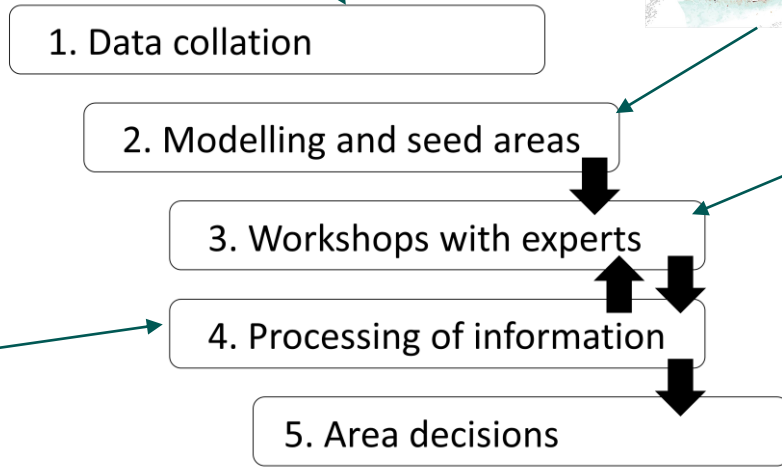
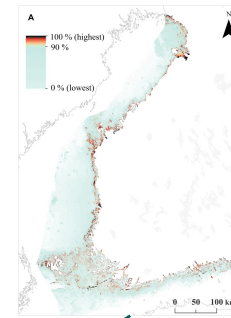
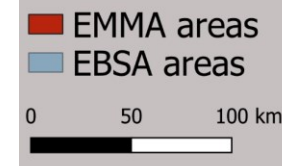
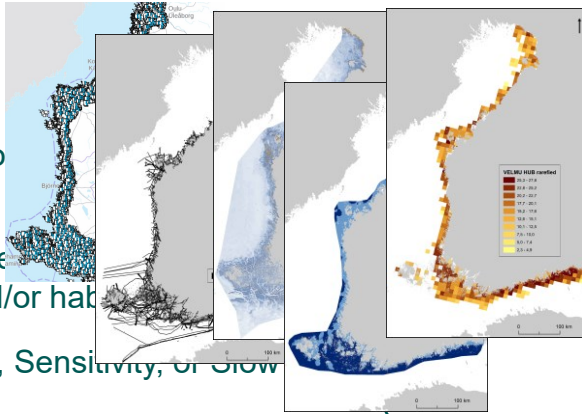


Merialuesuunnitelma.fi

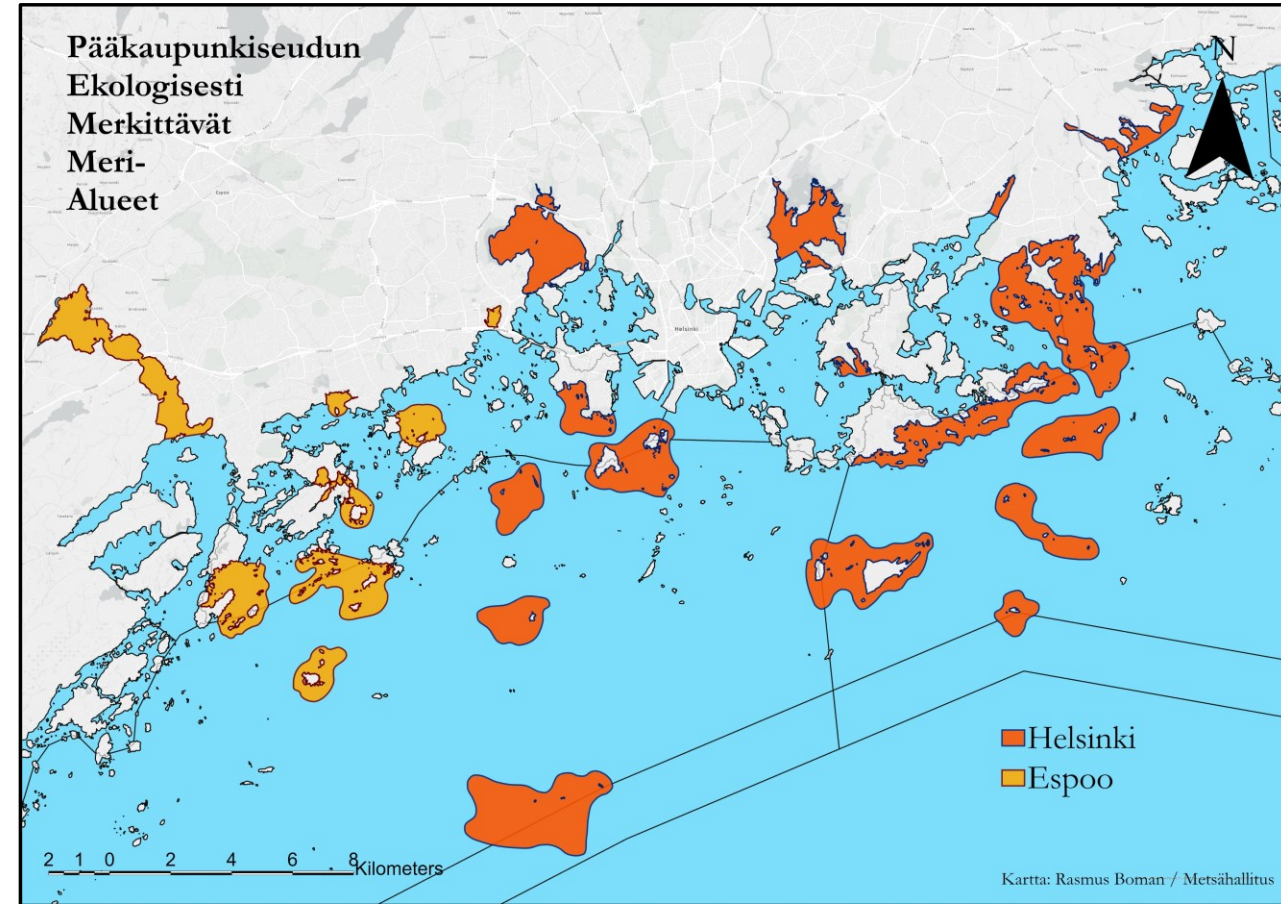
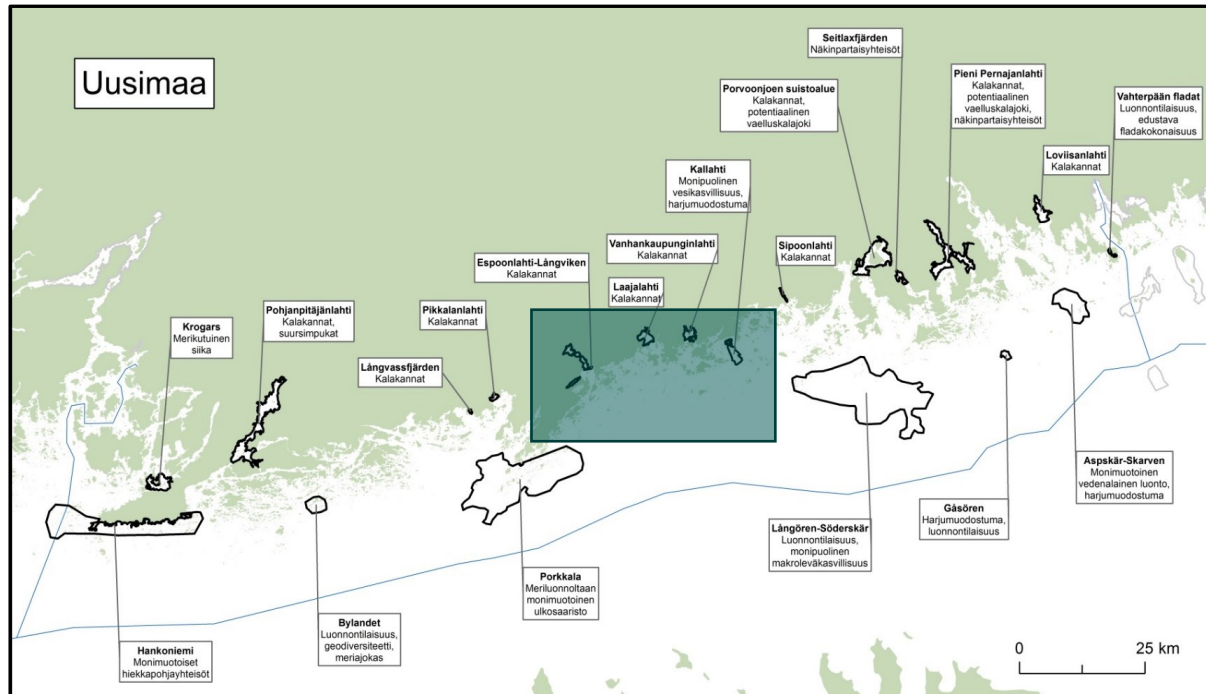
National scale: EMMA

Criteria

1. Uniqueness or Rarity
2. Special importance for species
3. Importance for threatened declining species and/or habitats
4. Vulnerability, Fragility, Sensitivity, or Slow recovery
5. ~~Biological Productivity~~
6. Biological Diversity
7. Naturalness



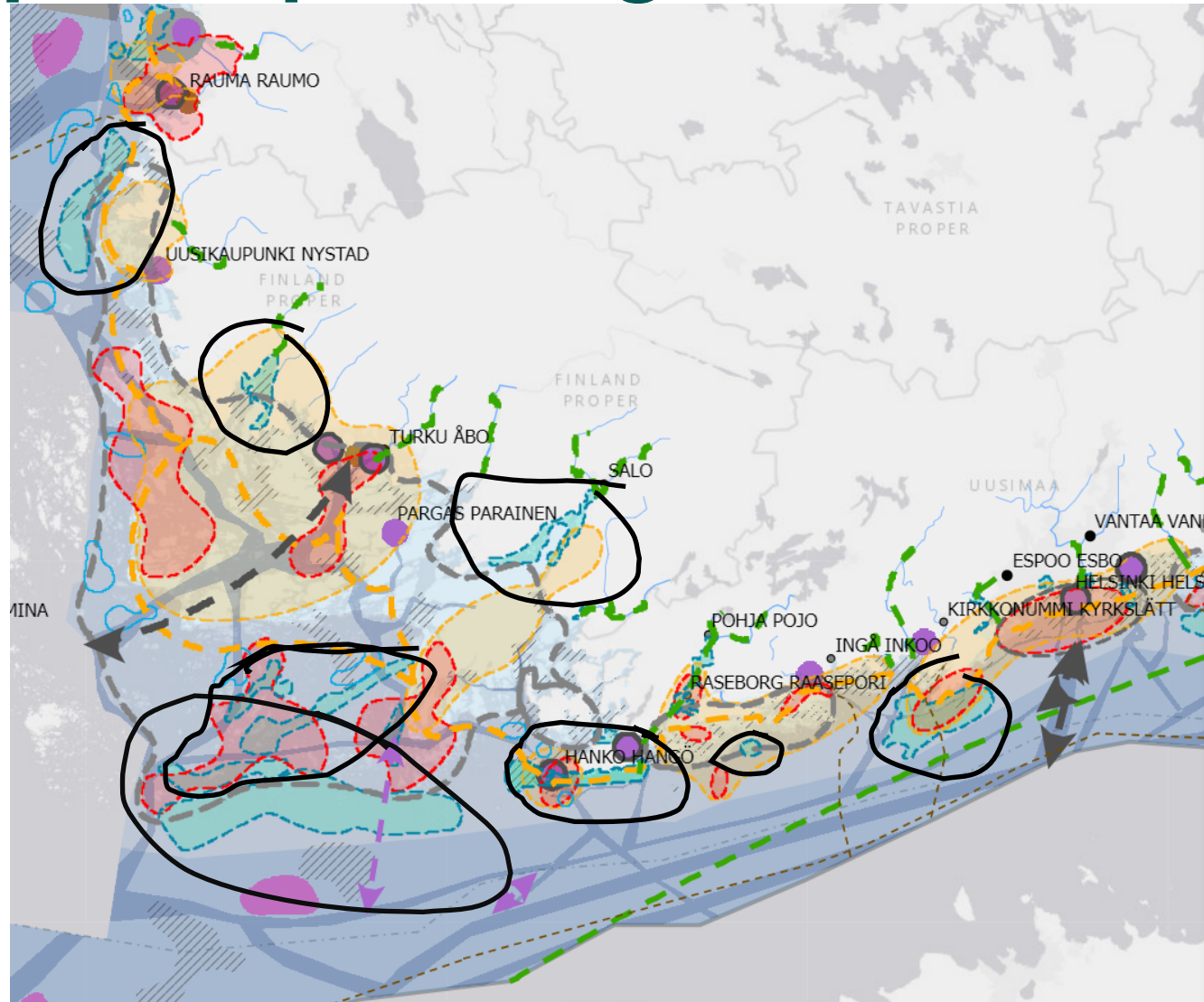
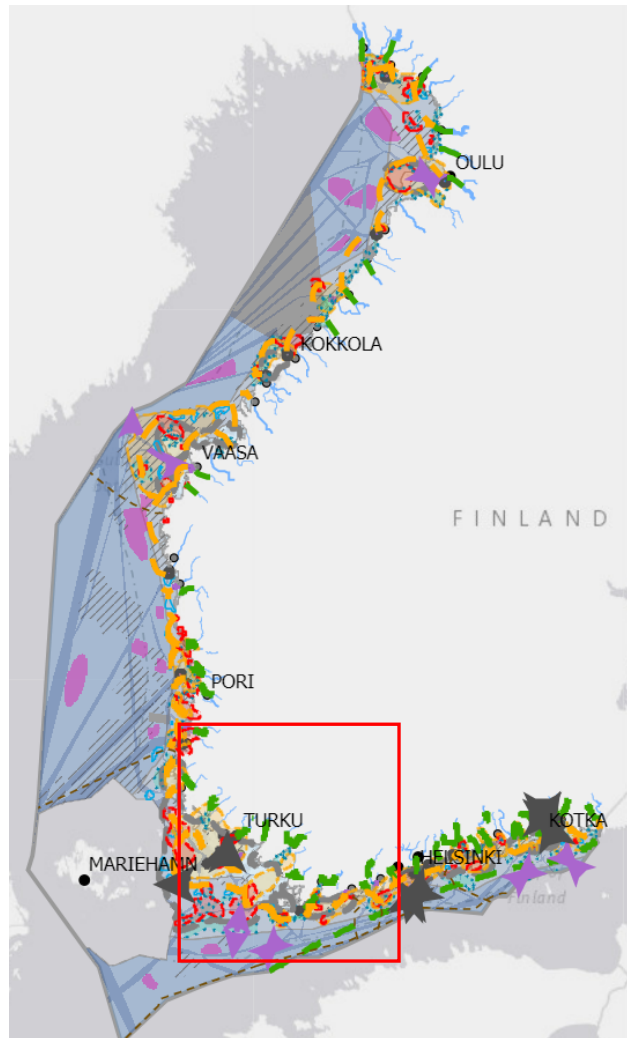
Local scale: from EMMA to PEMMA



Results already in use in conservation planning

Uses of the national and local EBSAs

Maritime spatial planning



Legend

Connections and connection needs identified in the Maritime Spatial Planning Process

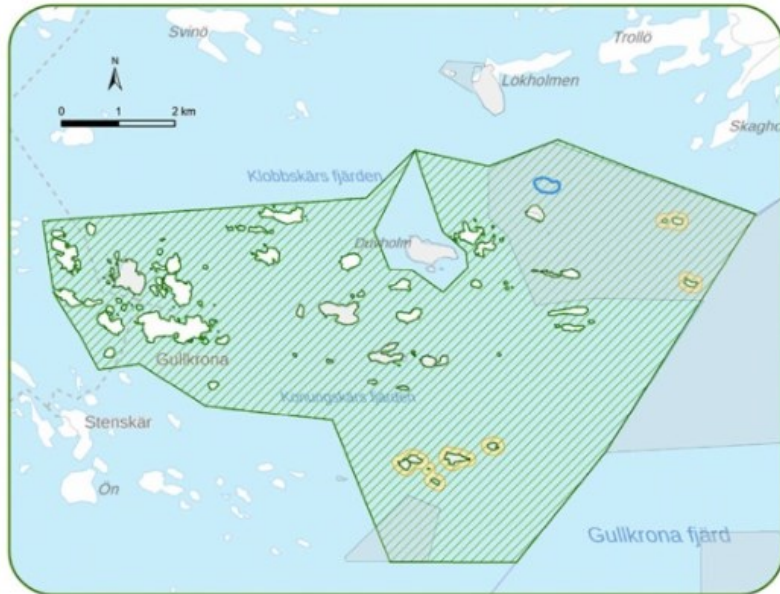
- Ecological connection
- Tourism and recreational connection
- Pipelines cables and pipes
- TEN-T- functional connection
- Functional connection

Significant and potential areas identified in the Maritime Spatial Planning Process

- Aquaculture
- Fishing
- Cultural values
- Significant underwater natural values
- Tourism and recreation
- Archipelago
- Specific coordination area
- TEN-T-port
- Port
- Special area
- Seafaring areas
- Energy production
- Maritime industry





MPA planning

Gullkrona marine protected area



BSAG



-  Movement restriction
-  Prohibition of anchoring
-  Protected area
-  Natura area

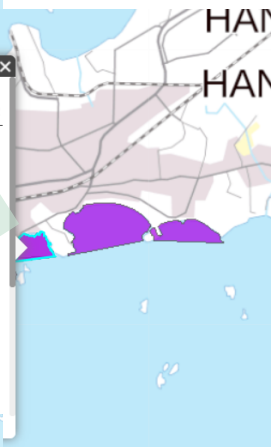
- Example of the largest voluntary private-owned MPA in the Archipelago sea (sw Finland)
 - Local engagement utilising national efforts
- Could be used for finer-scaled MPA management planning
 - Recall the objectives of the 30-by-30 objectives)

Supporting the national OEEM process



Rajoitukset
 Ingarskilajoen edustan isoryskiello
JS
 Ingarskilajoen edustan troolauk- ja nuottuskielto
JS
 Keskitä kartalla
Voimassa tänään 1.1 - 31.12
 Jokisuukalastuksen kiello (meri)
Lisätiedot: Vaelluskalastusalueen kuuluvassa joessa sekä meressä viittä kilometriä lähempänä tällaisen joen suuta on kalastuskalasteilla ja nuotalla kielletty. (kalastuskalasteilla) Kalastuskieltoalue ei perustu kalastusmuutosten perusteella määritettyyn jokisuualueen rajoitukseen vaan kalatalousviranomaisen näkemyskseen

Fishing restrictions

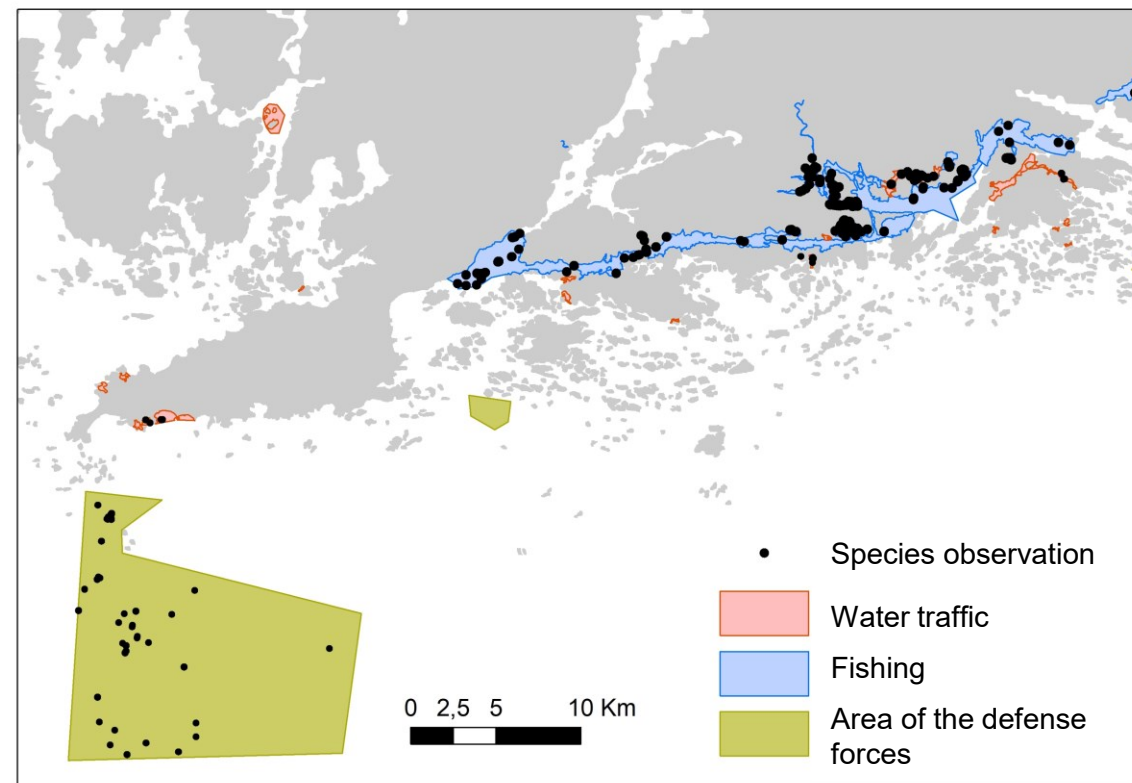


(3/3)
 Rajoituksia moottoroiduilla vesikulkuneuvoilla liikkumiseen: VL0100222
 Rajoitustunnus VL0100222
 Nimi Östervik
 Nopeusrajoitus km/h
 Nopeusrajoitus solmu
 Tekijä
 Toteutus
 Syy
 Muuta
 Rajoitusten tarkoituksena on vähentää moottoroiduilla vesikulkuneuvoilla ajoa alueilla ja muilla vesialueilla, joissa on kalastuskalasteilla ja nuotalla kielletty kalastus. Kielto ja rajoitus ei koske virka, sairaankuljetus- ja pelastustehtävissä tai muussa vastaavassa toiminnassa olevia aluksia.

Water traffic restriction



Military restrictons



Tytti Turcia / Metsähallitus

Management supporting the conservation of ecosystems

- Identifying restoration targets
 - Target 2 of the GBF requires restoration of 30 % of degraded areas by 2030
- Identifying data gaps

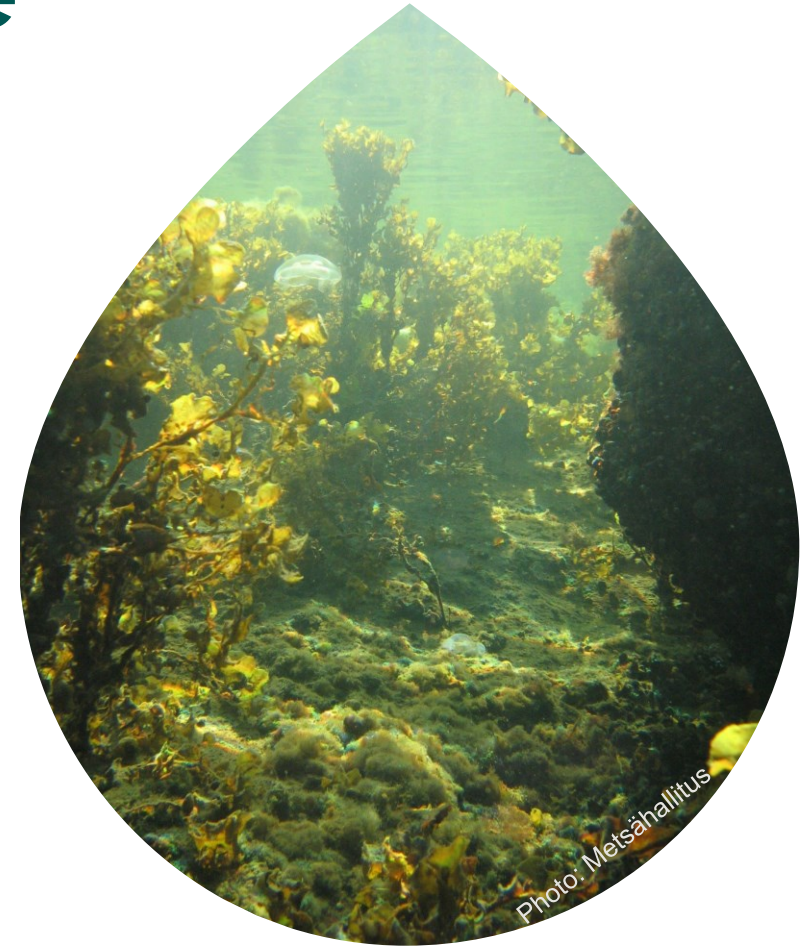


Photo: Metsähallitus

Permitting processes



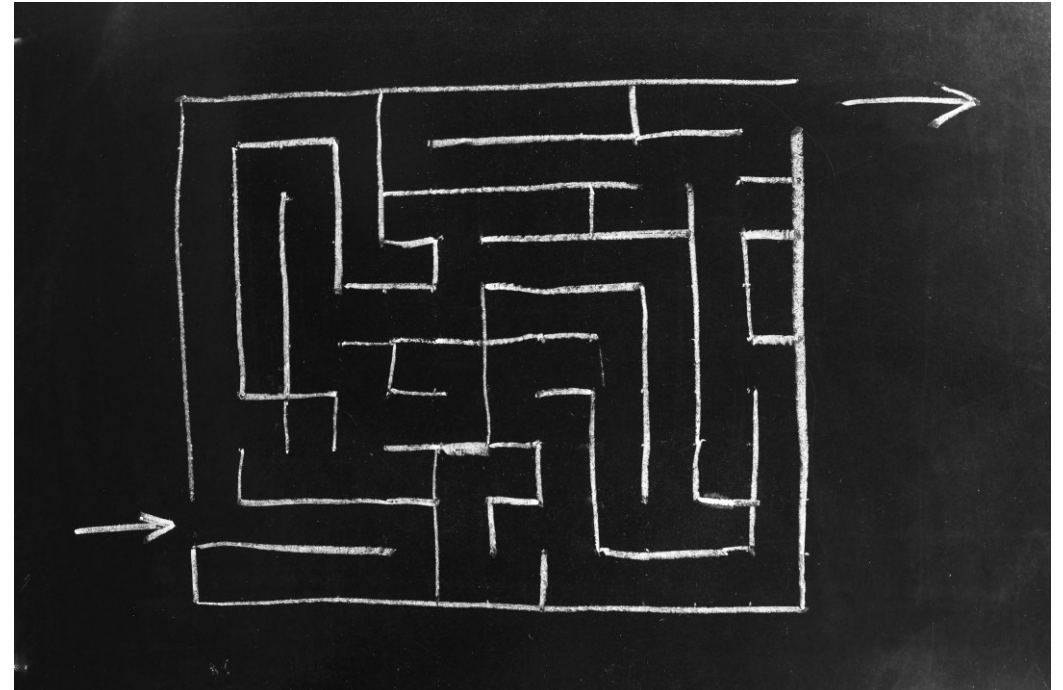
- Inform the applier of the permit / consultant during the planning of the activity
 - Depends on the spatial scale
- National and local EBSAs (EMMA, PEMMA) are administratively non-binding, though



Conclusions

The national and local scale applications of the EBSA process support objectives of different scales:

- Global and regional commitments, e.g., conservation and restoration
- National coordinated efforts for mapping, maritime spatial planning
- Regional implementation of MPA designation and management, restoration measures



Thank you for your attention! Questions?

You can also reach me here: lauri.kuismanen@syke.fi



Suomen ympäristökeskus
Finlands miljöcentral
Finnish Environment Institute