

Data needs to support Maritime Spatial Planning at sea-basin scale

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Data needs

- Depth
- Geology
- Currents
- (Exposure)



important for models


HUB classification

Hierarcical classification with 6 -levels:

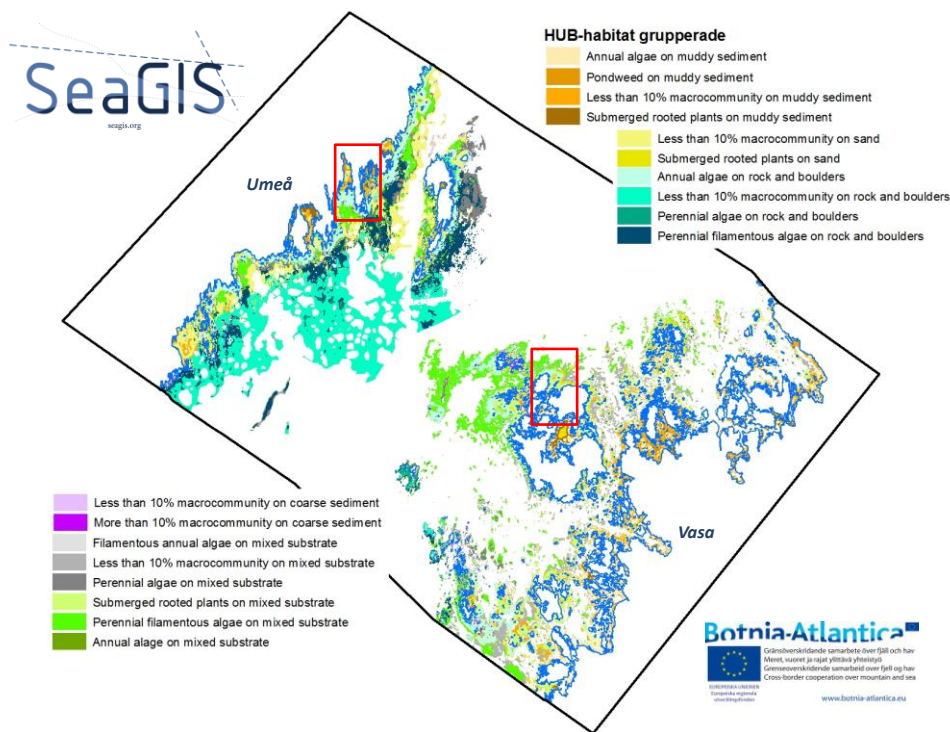
- 1) Region (Baltic)
- 2) Vertical zones (photic/aphotic)
- 3) Substrate (rock/sand/mud...etc.)
- 4) Community structure (epibenthic/infaunal)
- 5) Characteristic community (sp. group)
- 6) Dominating taxa (species)

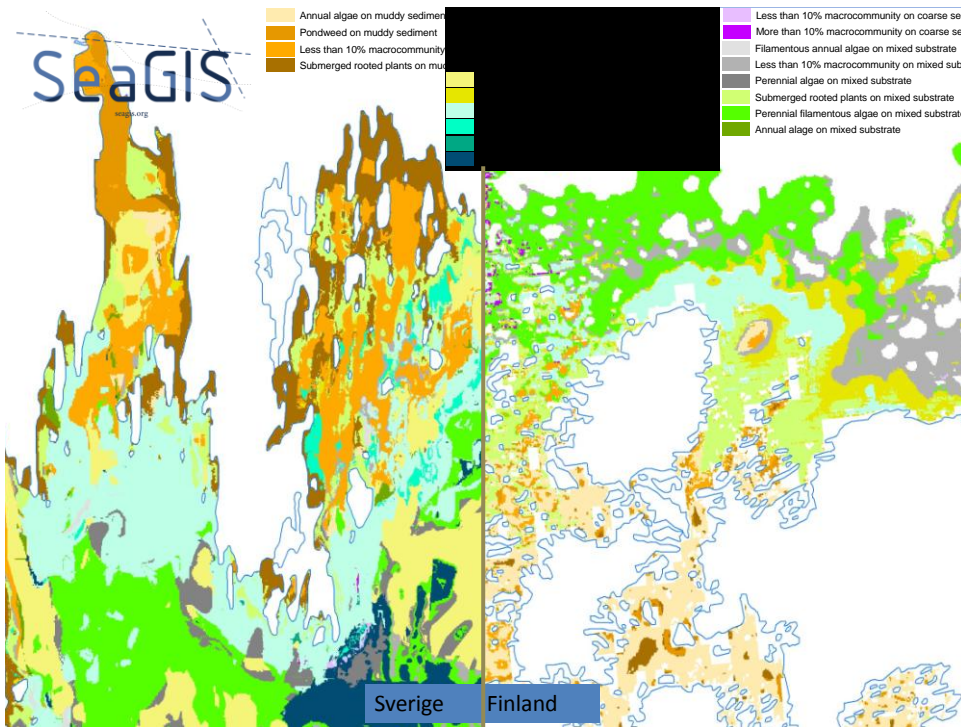
Baltic Sea Environment Proceedings No. 139

HELCOM HUB
 Technical Report on the HELCOM Underwater
 Biotope and habitat classification



Helsinki Commission
 Baltic Marine Environment Protection Commission





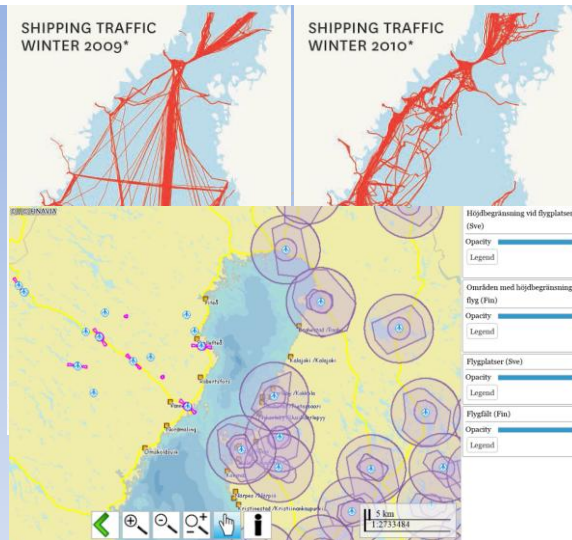
SeaGIS

Botnia-Atlantica

Use of Hub-maps

HUB-habitats can be used to illustrate a regions characteristics, but can (should?) also be used to support MSP decisionmaking when faced with different uses e.g. bridges, windparks, cables/pipelines etc.

- Depth
- Geology
- Currents
- (Exposure)
- Ice charts
- Military/Radar
- Ammunition
- Energy areas
- Risk areas
- SAR and oil combating units (areas for sinking vessels)



Sectorial

- Need to get current situation data as well as future trends (decades). Planning is looking ahead and preparing, not repairing!

DIRECTIVE 2014/89/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 23 July 2014 - establishing a framework for maritime spatial planning.

Art. 8.2

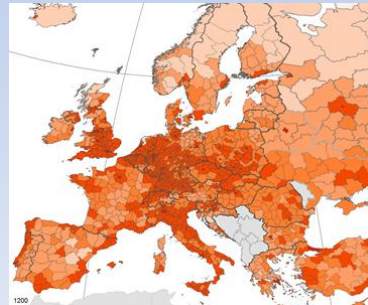
- — aquaculture areas,
- — fishing areas,
- — installations and infrastructures for the exploration, exploitation and extraction of oil, of gas and other energy resources, of minerals and aggregates, and for the production of energy from renewable sources,
- — maritime transport routes and traffic flows,
- — military training areas,
- — nature and species conservation sites and protected areas
- — raw material extraction areas,
- — scientific research,
- — submarine cable and pipeline routes,
- — tourism,
- — underwater cultural heritage.



Fishing intensity (subsurface) for OT, TBB, and DRB gears - ICES

~50% of the worlds population live within 100 km from the coast!

- Socio-economic data is needed in different formats to evaluate current situation and developing needs
 - Where are the foreseen hotspots regarding e.g.
 - Coastal infrastructure
 - Population
 - Economy
 - Pollution
 - Loss of habitats/resources



Population density 2012. www.nordregio.se

The 'difficult' ones

- Ecosystem health
- Cumulative effects
- Climate change
- Setting numbers on or defining 'sustainable growth', 'ecosystem services' and 'ecosystembased management'
- Temporal uses / 3D

- Resolution
 - 500x500m grids are perhaps good 'basin' data but is of little use for regional planners in coastal or archipelagic areas.
- Standardisation & Harmonisation
- Access / Transparency

And always challenge yourself by asking, is the data's methodology correct, up to date, spatially correct (extent and location), complete and quality assured

How do we solve this?

"If you want to go fast, go alone. If you want to go far, go together." (African proverb)

Thank you for listening!