Learning from the SeaGIS projects

Sustainable development of the marine environment

Johnny Berglund, Project manager, County Administrative Board of Västerbotten

Pan Baltic Scope / FIAXSE Cross border meeting in 26.03.19 in Umeå

SeaGIS 1 + 2.0 - Support for ecosystem based planning of the marine environment using GIS

Cooperation between Swedish and Finish authorities in the Northern Quark area

2011-2014

2015-2018

Länsstyrelsen Västerbotten

Länsstyrelsen Västernorrland

Österbottens förbund
Pohjanmaan liitto

KESKI-POHJANMAAN LIITTO
MELLERSTA ÖSTERBOTTENS FÖRBUND

Närings-, trafik- och miljöcentralen

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UMEÅ UNIVERSITET

IGIS
INNOVATIVA GEOGRAFISKA INFORMATIONSSYSTEM

Åbo Akademi

VASA UNIVERSITET

SeaGIS 2.0

Interreg
Botnia-Atlantica
Europeiska regionala utvecklingsfonden

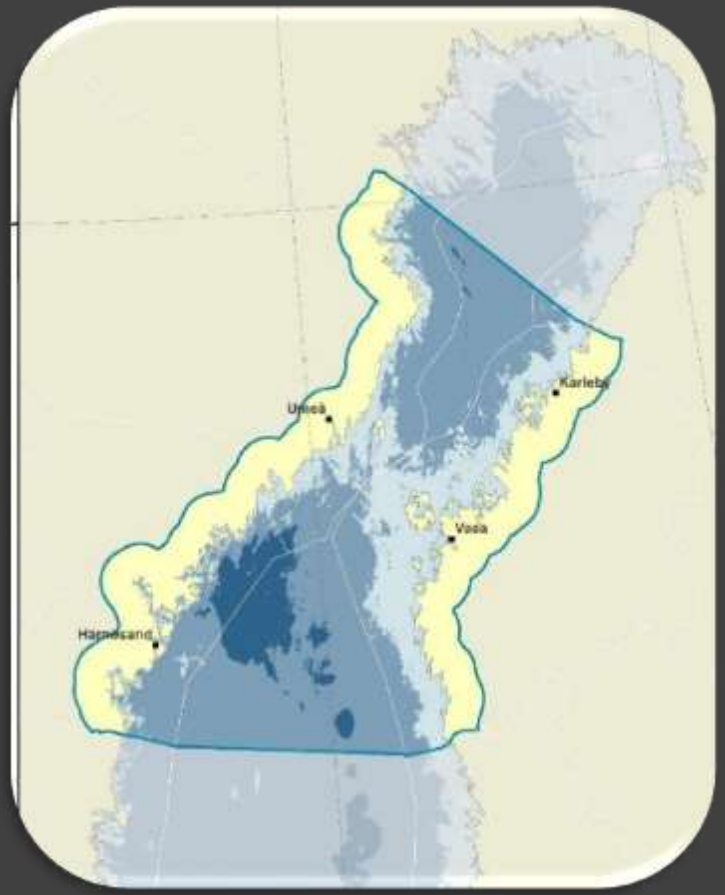
Timetable

DafneCholet

Cross-border solutions for integrated maritime governance

Activities in SeaGIS 2.0

1. MSP data and participation
2. Regional goals for Blue Growth
3. State of the environment – Nature conservation
4. Ecosystem services
5. Cooperation - Oil spill protection
6. Establishment of the map service



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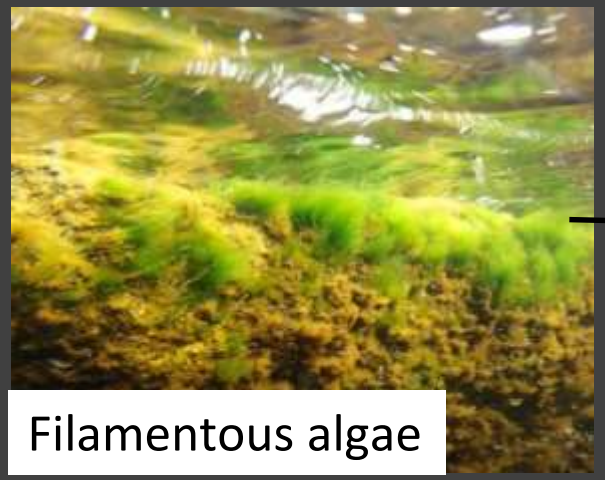
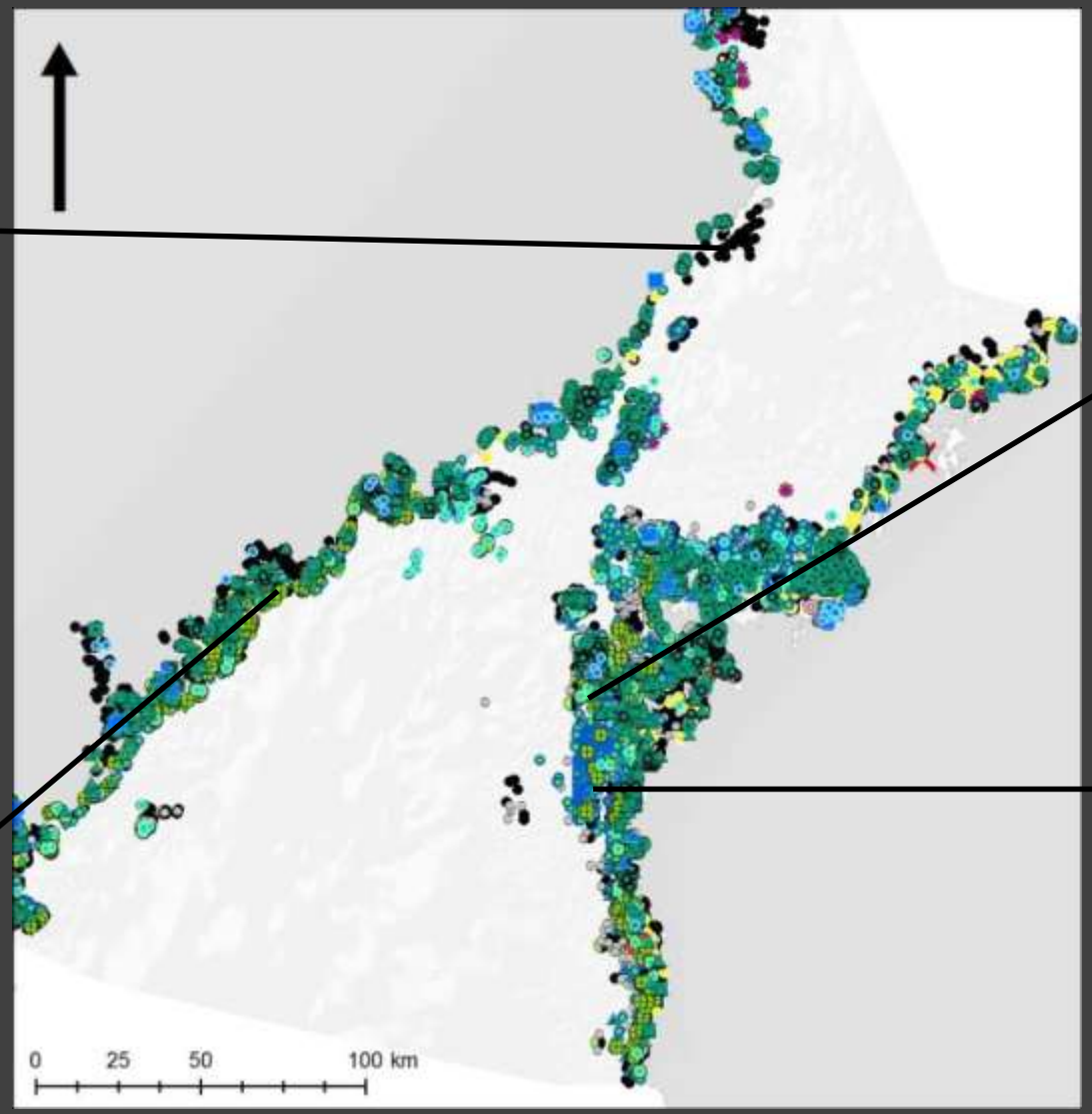
HELCOM Underwater Biotop modelling

30 000 observations classified into HUB



Filamentous algae

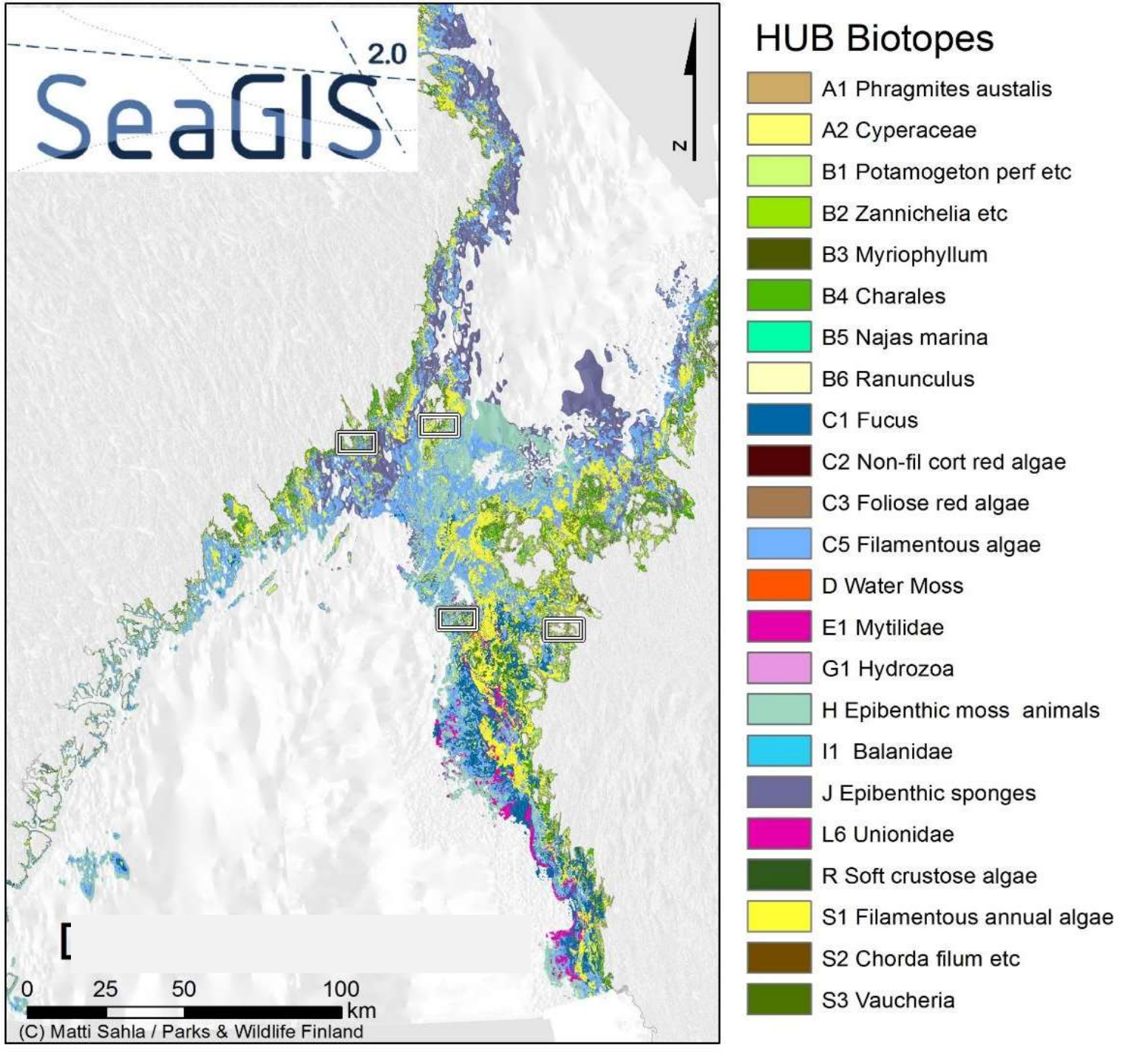


Bladderwrack beds

Reeds

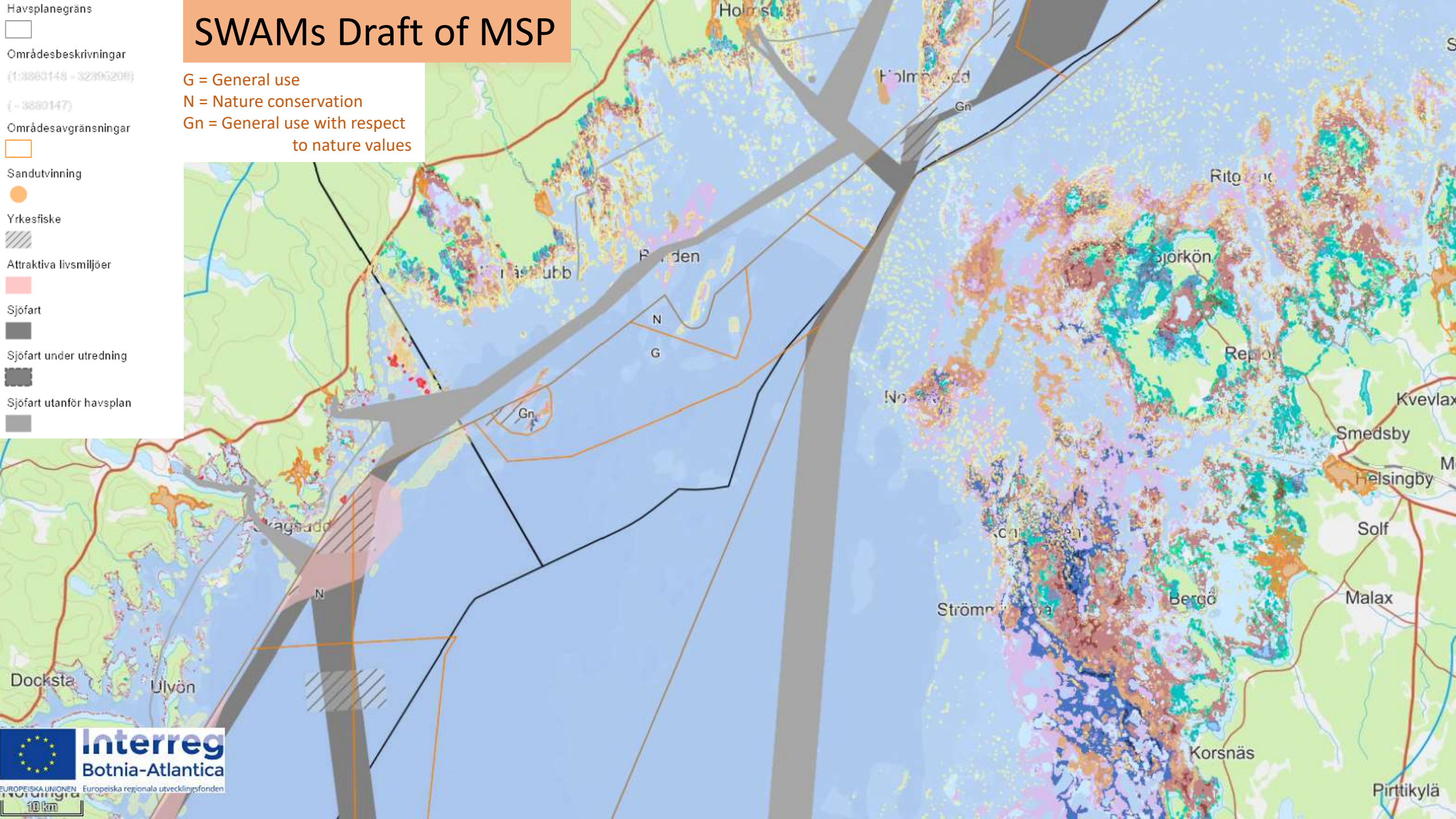
Bluemussel beds

Helcom Underwater Biotopes



SWAMs Draft of MSP

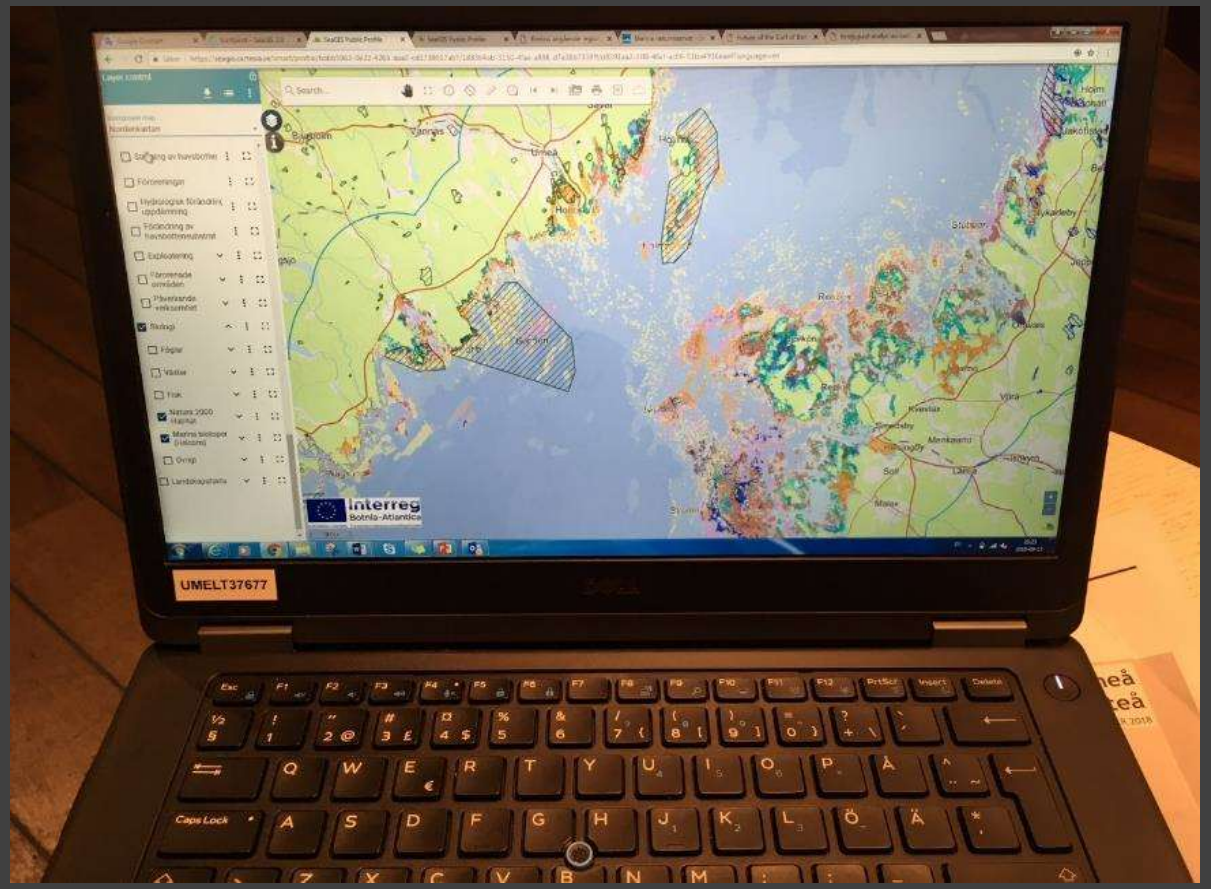
G = General use
N = Nature conservation
Gn = General use with respect to nature values



SeaGIS map service

- Library of maps for the sea and coastal zone, more than 500 layers
- Regional data
- Harmonized symbology, FIN-SWE data
- Open and accessible, even in mobile devices

Please use the Chrome web reader



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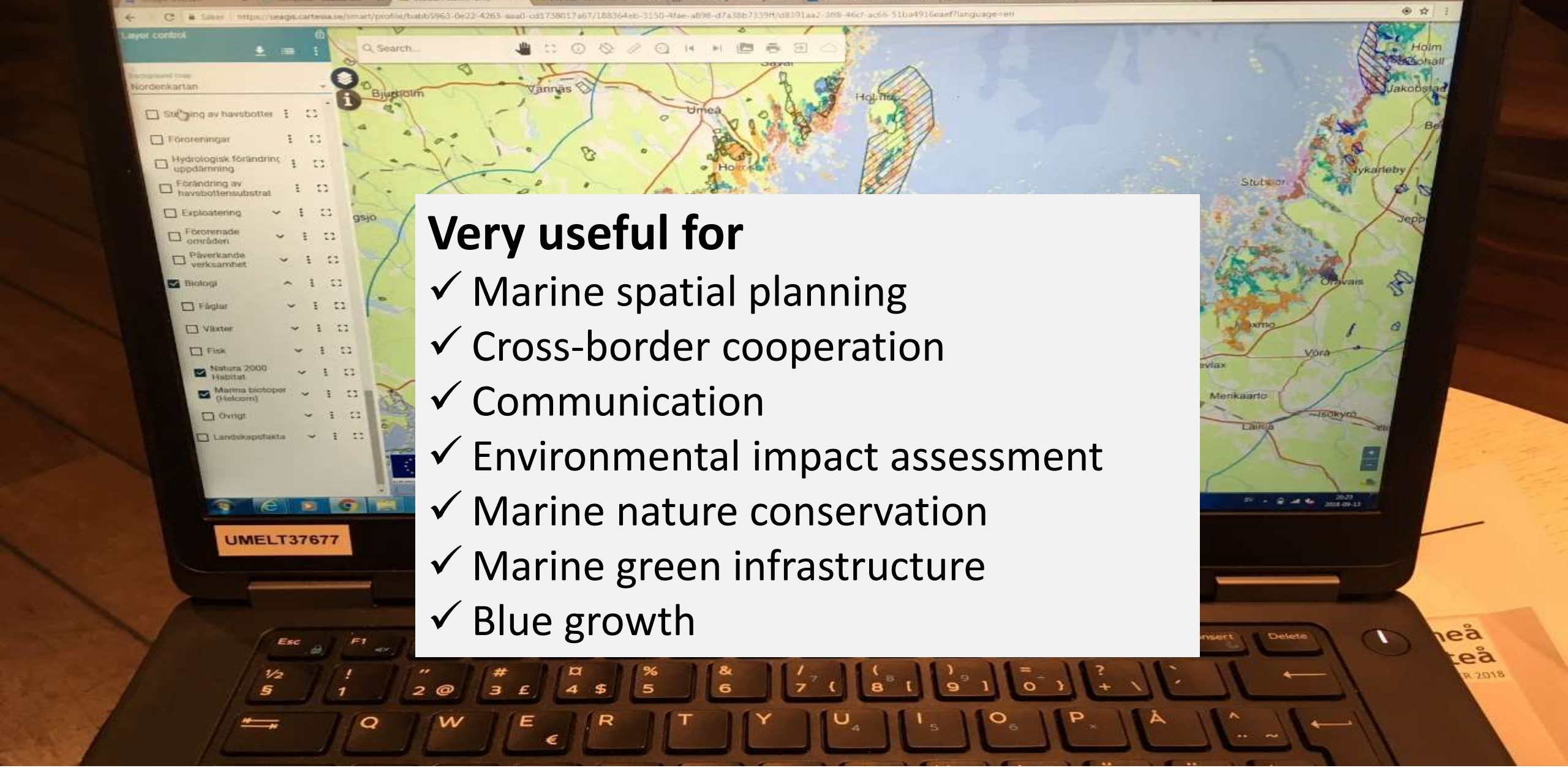

Very useful for

- ✓ Marine spatial planning
- ✓ Cross-border cooperation
- ✓ Communication
- ✓ Environmental impact assessment
- ✓ Marine nature conservation
- ✓ Marine green infrastructure
- ✓ Blue growth

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What about blue growth?

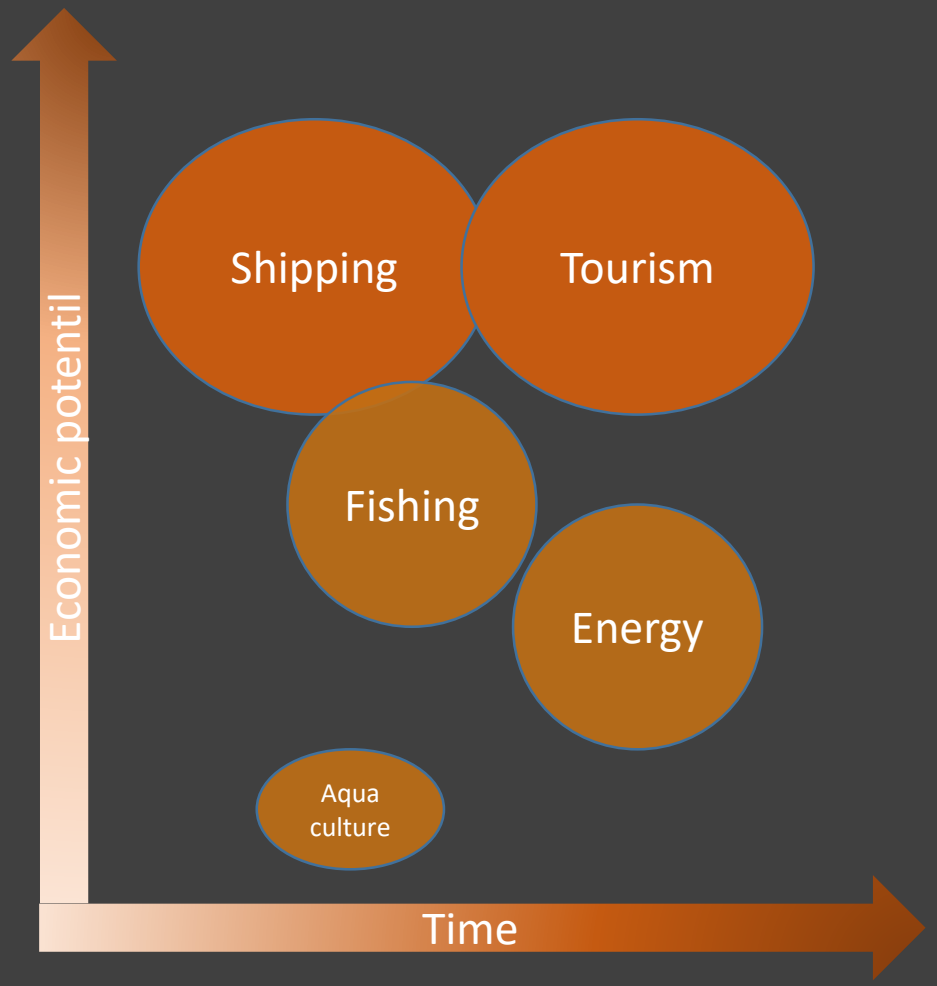
- SeaGIS 1 + 2.0 have examined existing national and regional plans and strategies
- SeaGIS 2.0 conducted a series of recurring workshops and interviews




Themes:

1. Fishing and aquaculture
2. Shipping and infrastructure
3. Energy (mainly wind power)
4. Coastal tourism
5. Recreation and nature conservation

(6. Island communities)



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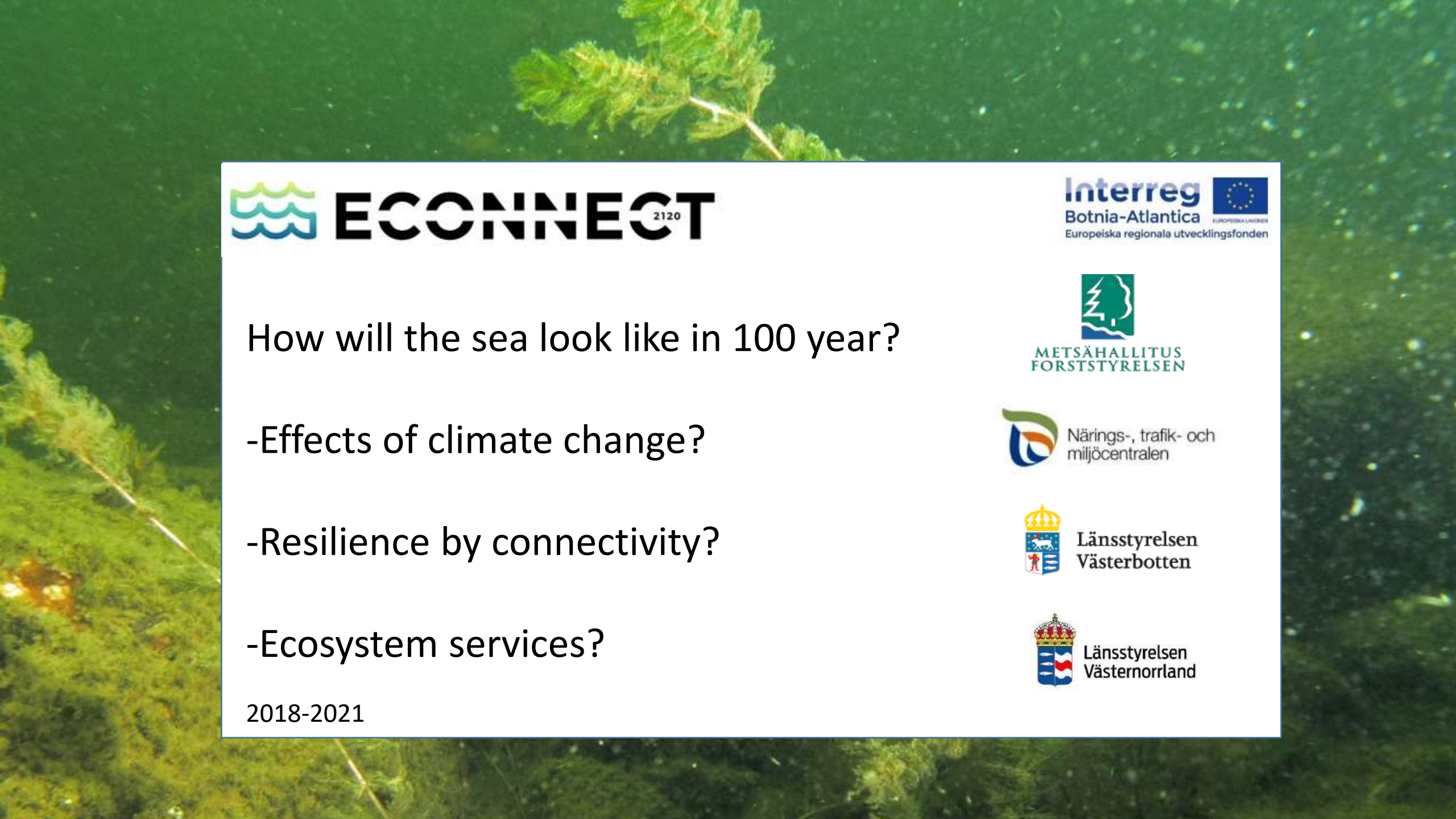
Outcome of the interviews with municipalities

- Very low planning capacity in smaller municipalities

- Rather little interest in the sea
- Lack of knowledge about possibilities

- Concerns for more restrictions and "government control“
- Want to utilize resources to develop the municipality;
  - residential / vacation homes,
  - recreation and tourism
  - ports and industries, etc.

www.seagis.org



ECONNECT 2120

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How will the sea look like in 100 year?

-Effects of climate change?

-Resilience by connectivity?

-Ecosystem services?

2018-2021

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Analysis of connectivity

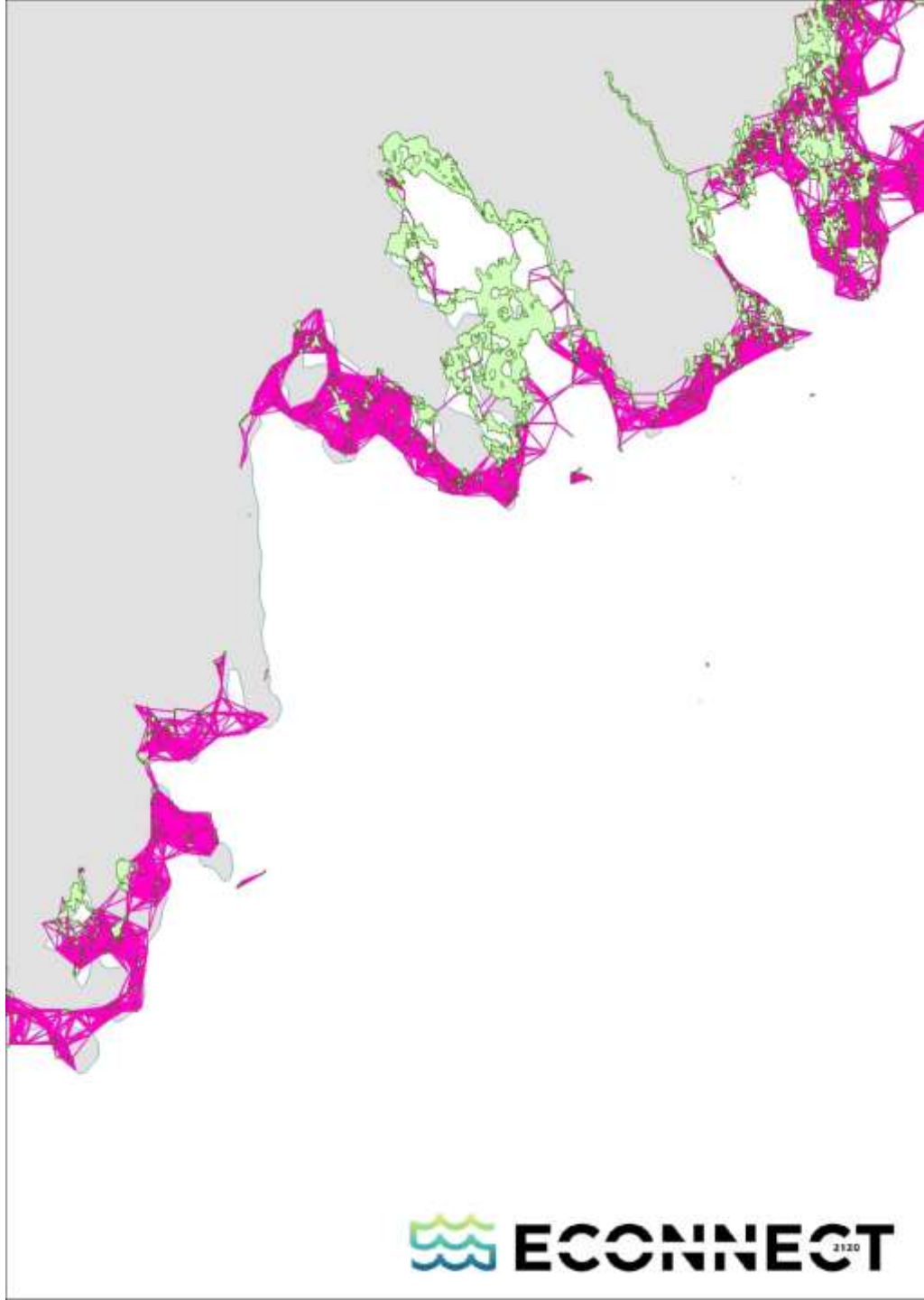
Example charophytes at high resolution

Chara meadows

Analysis of connectivity

Example charophytes at high resolution

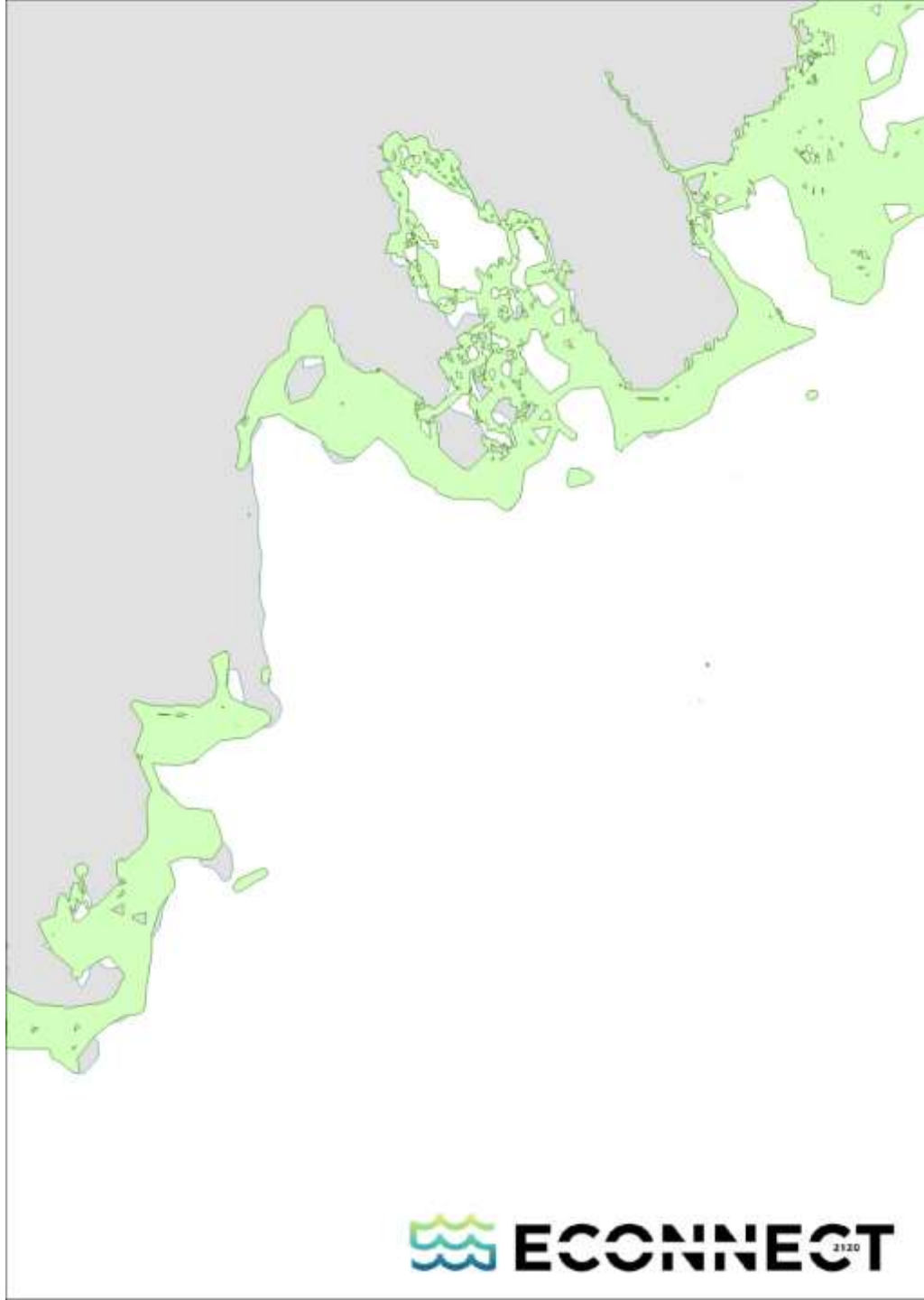
Chara meadows + Links (1 km)



Analysis of connectivity

Example charophytes at high resolution

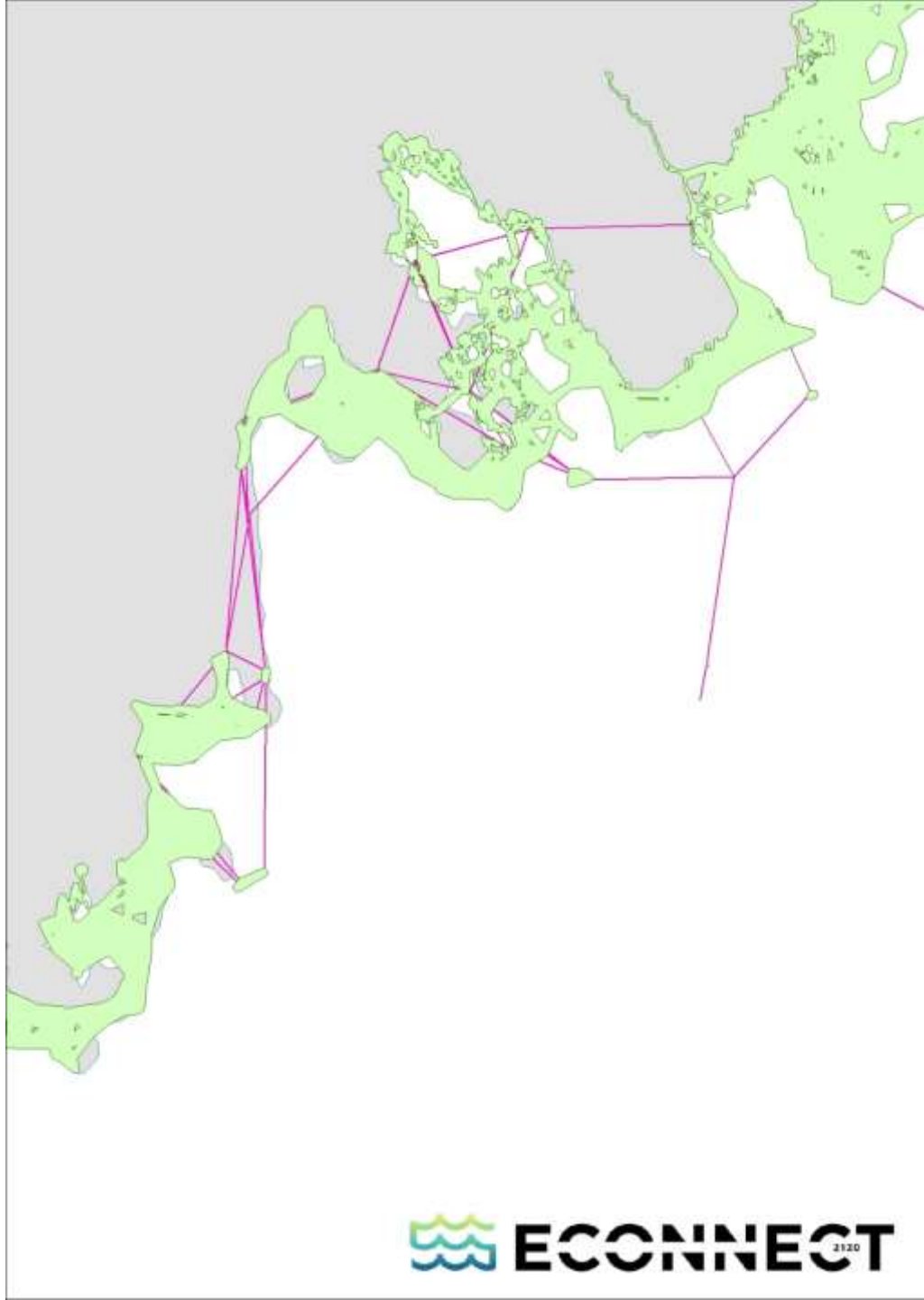
Chara meadows + Links (1 km)
= good connected components



Analysis of connectivity

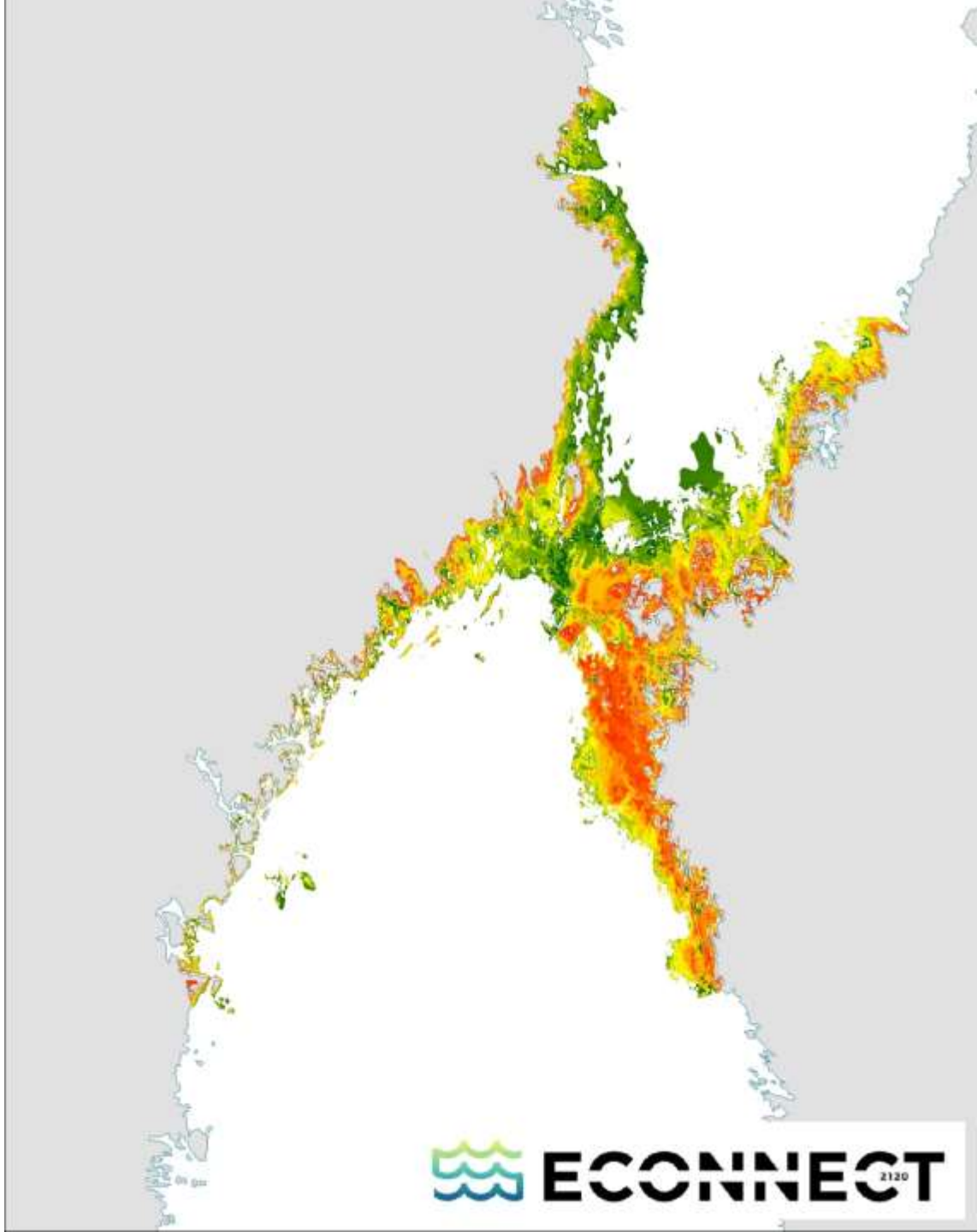
Example charophytes at high resolution

Chara meadows + Links (1 km)
= good connected components
+ longdistance links



High biological diversity

Analysed with Zonation
including 23 HUB biotop maps



Lessons learned

- Sharing data makes you strong
- For regional questions (regional planning) you need regional data, *check SeaGIS map services*
- Low interest from municipalities in MSP
- We have to prepare for climate change

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Thank you for listening!

Johnny Berglund

Project manager SeaGIS 2.0, coordinator ECONNECT

County Administrative Board of Västerbotten

SeaGIS 2.0 and ECONNECT 2120

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