



Interreg
Nord
European Regional Development Fund



Seamless Mapping and Management of the Bothnian Bay



Background

- Lots of exploitation pressure (protection, fishing, boating, ships, harbours, possible wind power etc.)
- Sparse knowledge of habitats & species
- No joint management plans (FIN & SWE), no joint habitat maps

→ **Underwater nature recognizes no borders**

- We require data to manage/achieve EU-directive requirements (*Habitat directive, Marine directive, Marine spatial planning directive and Water framework directive*)



Objectives

- 1) **Harmonizing** underwater **mapping methods** and **habitat type descriptions/definitions** across Finnish-Swedish border
- 2) Creating **harmonized underwater habitat and species maps** for **Bothnian Bay marine areas**

...in order to...

...manage the Bothnian Bay marine area seamlessly across the border, based on sufficient knowledge, enabling sustainable development in the region.

Partners



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LAPIN LIITTO

Swedish Agency
for Marine and
Water Management



SGU
Sveriges geologiska undersökning
Geological Survey of Sweden



Länstyrelsen
Norrbotten



- Metsähallitus MH (FIN) – project coordinator
- Finnish Environment Institute SYKE (FIN)
- Centre for Economic Development, Transport and the Environment ELY (Northern Ostrobothnia and Lapland) (FIN)
- Geological Survey of Finland GTK (FIN)
- Country Board of Norrbotten Lst (SWE)
- Geological Survey of Sweden SGU (SWE)

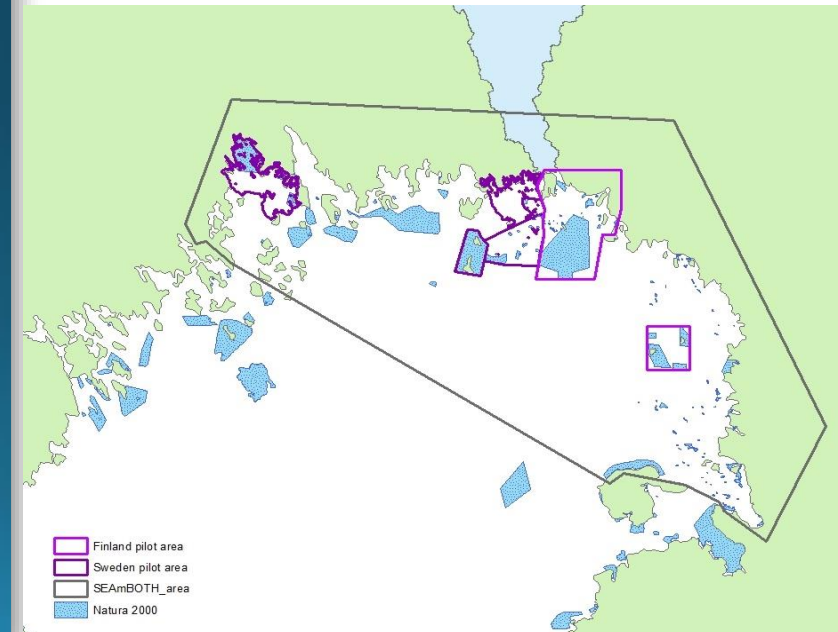
Timetable & project area

- Interreg Nord – culture and environment granted SEAmBOTH 2,9 milj € 30.5.2017
- Project time 1.5.2017-30.4.2020 (three field seasons)
- Project area:
 - Whole northern part of Bothnian Bay (seamless maps)
 - Field work areas /pilot areas:
 - Haparanda Skärgårds National Park + Bothnian Bay National Park & north shore (represent very northern river influence area)
 - Råneå & Krunnit archipelagos (outer areas)

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Activities

- 1) Project management (MH)
- 2) Communication #SEAmBOTH
- 3) Defining layers needed for modelling (humic substances, chlorophyll, substrate, depth etc) (SYKE & Länsstyrelsen)
- 4) Field inventories
 - Geological field inventories (side scan sonar, multibeam sonar, samples) (GTK & SGU)
 - Depth information from shallow areas (side scan, multibeam) (GTK & SGU)
 - Biological inventories (drop-video, scuba-diving, snorkeling, benthic samples, water samples) (MH, Länsstyrelsen, ELYt)
 - Data management (MH & SYKE)
- 5) Modelling and map creation (MH & SYKE)
- 6) Harmonization of habitat definitions and conservation values (Länsstyrelsen & ELYs)
- 7) Implications and support for management and mapping (Länsstyrelsen & ELYs)

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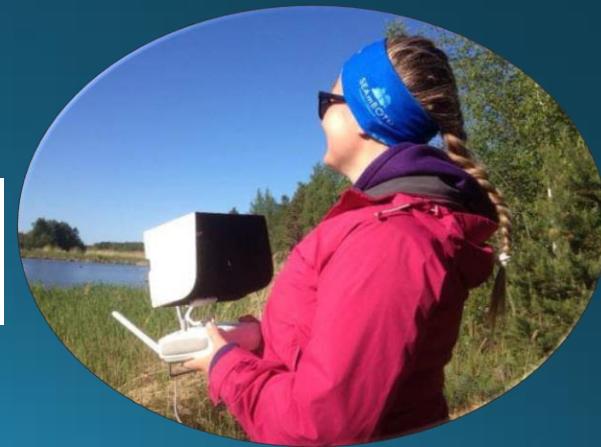
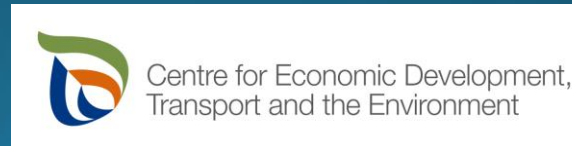


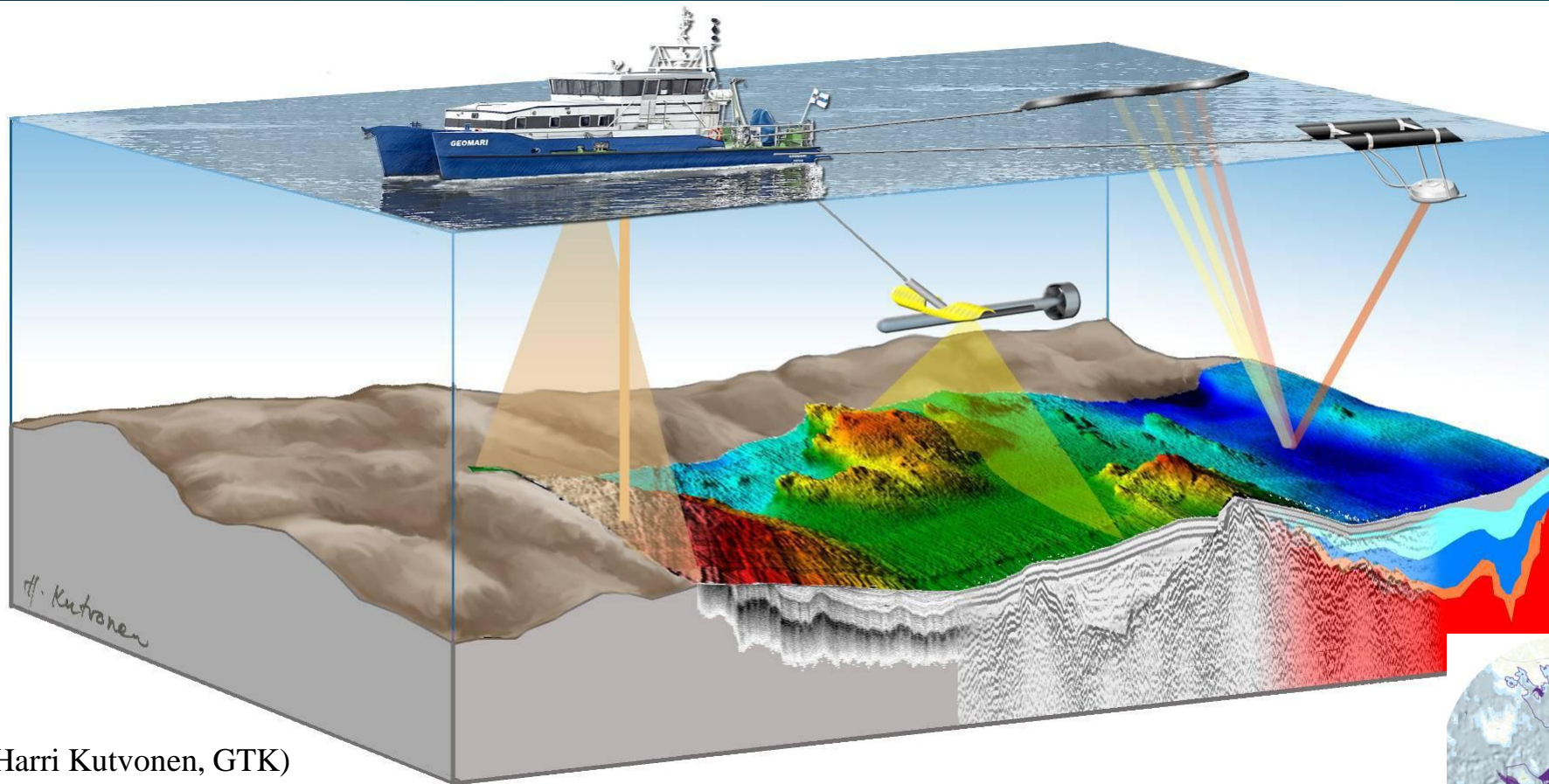
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Biological inventories

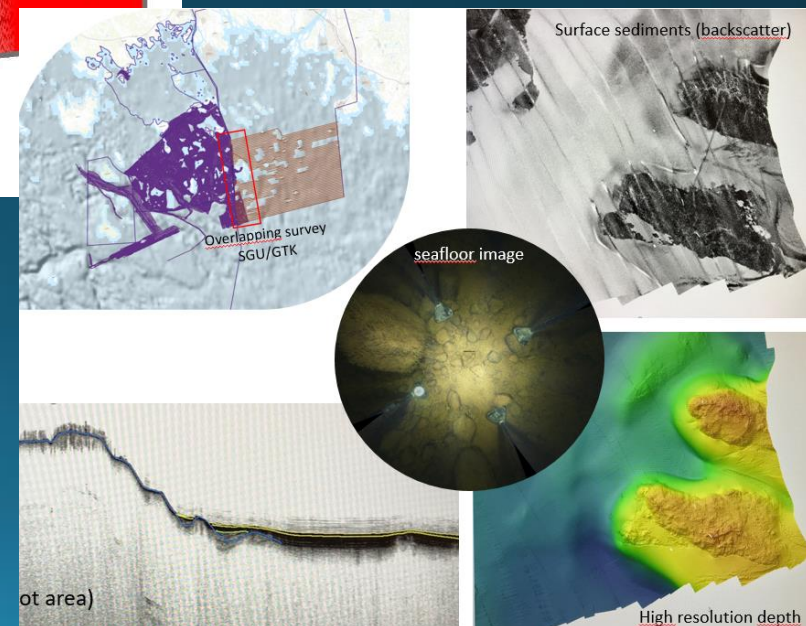




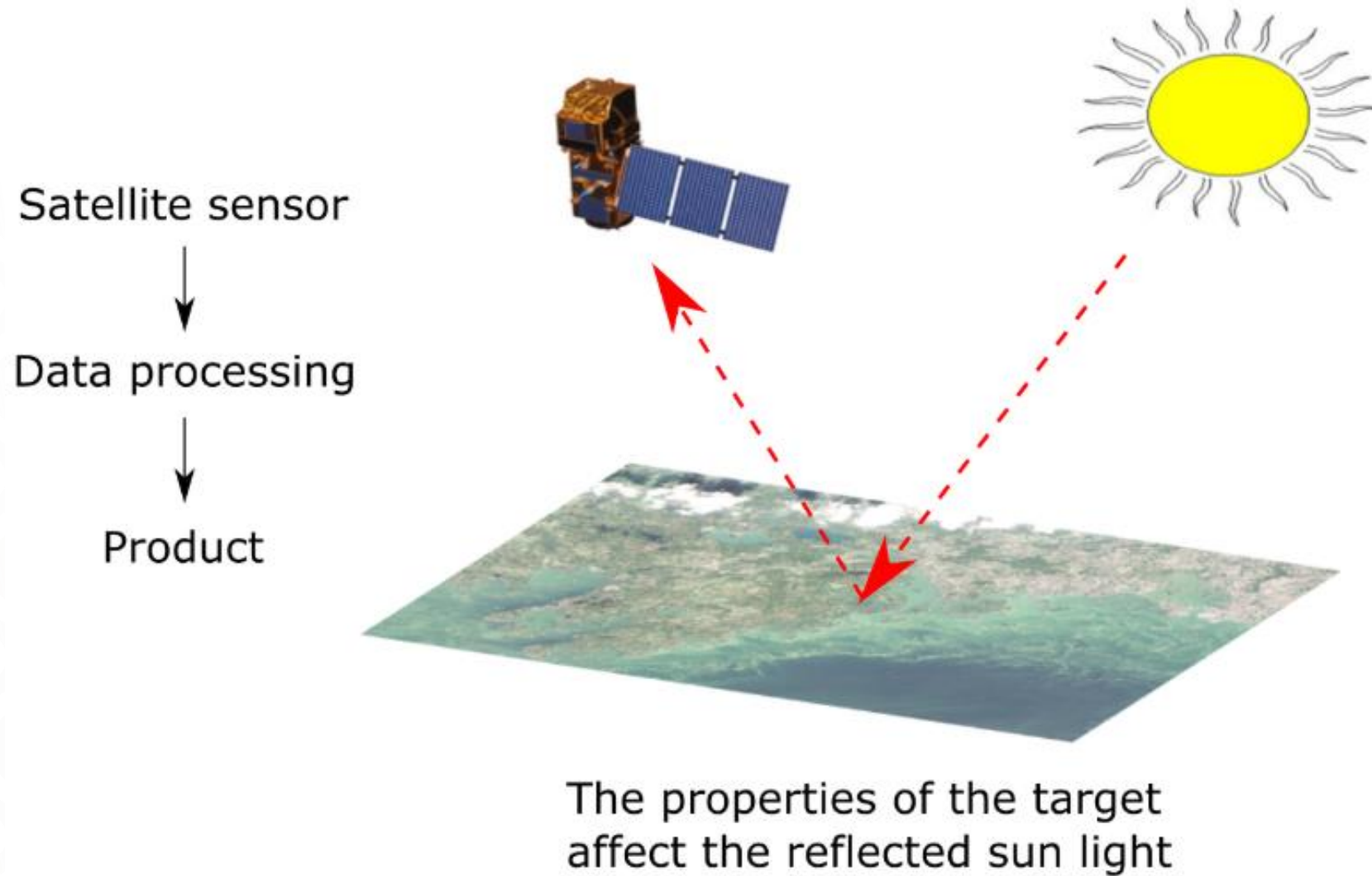
(Harri Kutvonen, GTK)

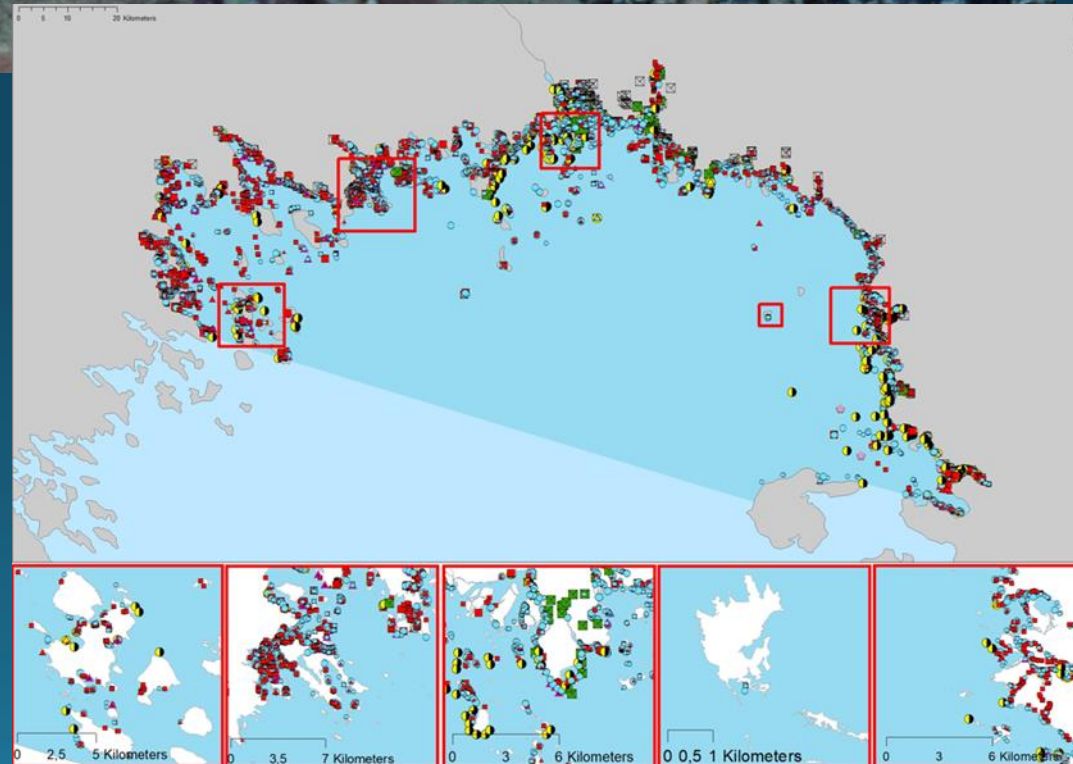
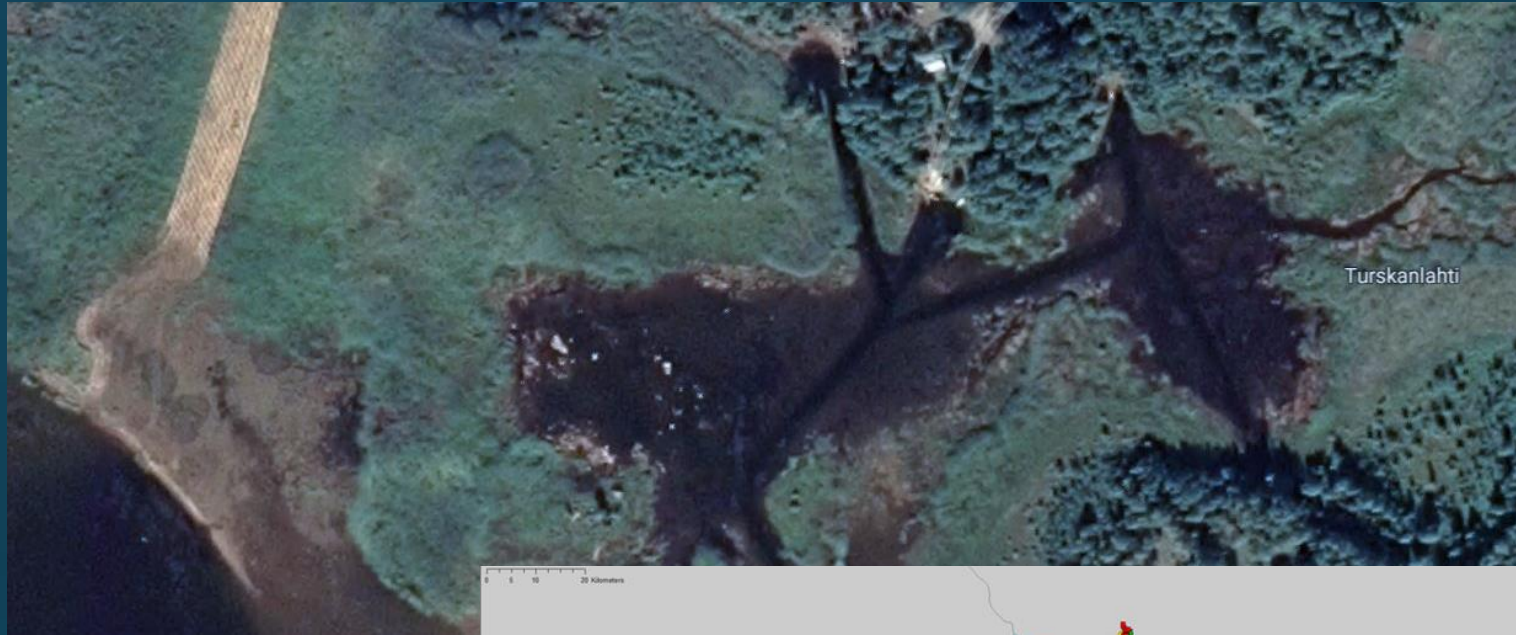


Geological inventories



Measuring water quality from space – remote sensing



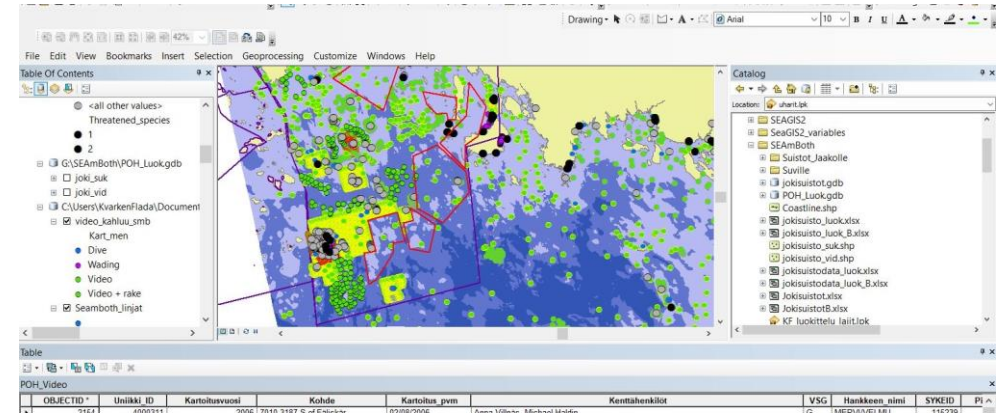
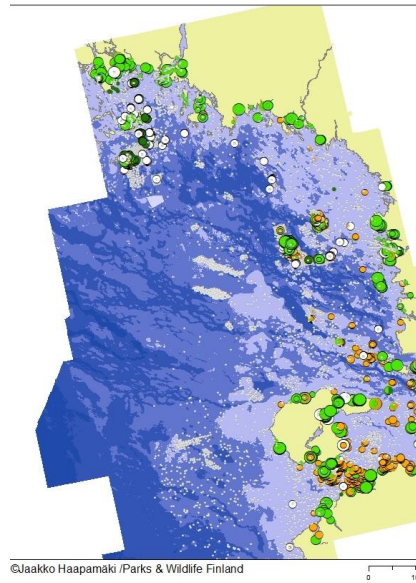


Legend

- Dredging, small
- Dredging, big
- Dredging, MEGA
- Jetty, small
- Jetty, big
- Breakwater, small
- ▲ Breakwater, big
- Leisure harbour
- Harbour
- Bridge, free standing
- Bridge, on land/clain
- Fresh water outlet
- ▲ Jetty on breakwater
- Coastal building
- Other

Human pressures





Modelling and creating maps



#SEAmBOTH -communication



- School happenings
- Events
- Teaching the teachers
- Stakeholder meetings and workshops
- Media: blogs, Face, Twitter, Instagram, radio, TV, newspapers, Podcasts, magazines
- National workshops, seminars, meetings
- International congresses
- Volunteer opportunities

Thank you for your interest!

