Ympäristöministeriö
Miljöministeriet
Ministry of the Environment

Maritime spatial planning in the Baltic Sea region 2013

Tiina Tihlman
Ministerial Adviser
Seminar in Reykjavik 27.5.2013

Content of my presentation

1. MSP & EU policy context

2. Developing maritime spatial planning in the Baltic Sea area
   - HELCOM-VASAB MSP working group
   - EU preparatory action; Plan Bothnia pilot plan

3. Resent maritime spatial planning developments in Finland
   - Kymenlaakso maritime spatial plan
   - Underwater biodiversity research program VELMU

1. MSP & EU policy context

DG MARE (Maritime)

- 2007 The **integrated maritime policy IMP**
- 2008 “The MSP Roadmap” msp-principles and financing for preparatory actions
- 2013 European Commission adopted a **proposal for a Directive** on maritime spatial planning and integrated coastal zone management

… MSP & EU policy context

MSP directive proposal aims to integrate EU policies:

- the Marine strategy framework directive,
- The Common fisheries policy 2014 -2020,
- The Renewable energy directive,
- The Motorways of the Sea initiative,
- The Habitats Directive,
- The Blue growth initiative, and

- Europe 2020 - A strategy for smart, sustainable and inclusive growth

- EU Baltic Sea Strategy

The proposal for a Directive on maritime spatial planning and integrated coastal zone management, March 2013

Objectives of the proposal

- Economic development (Blue growth, synergies)
- Stable investment climate (predictability)
- Cross border cooperation (infrastucture)
- Coordination (administration)
- Environmental protection (reduce pressures)

Member states should establish and implement MSP and ICZM:

- Nominate an authority
- Establish a process
- Establish and implement maritime plan/plans and a coastal strategy/strategies

Definitions

"…process or processes cover the full cycle of problem identification, information collection, planning, decision-making, management, monitoring of implementation, and stakeholder participation."

Area of coastal strategies
- territorial waters and land

Area of msp plans
- EEZ and territorial waters

Objectives of msp-plans and strategies

- Apply ecosystem-based approach
- Secure energy supply,
- Promote marine transport,
- Foster the growth of fisheries and aquaculture,
- Ensure the protection and improvement of the environment
- Sustainable use of natural resources

Common requirements for maritime plans and coastal strategies

- Operational steps
- MSP plans and coastal strategies should be coordinated nationally and with neighboring countries
- Revised every 6th year

Specific requirements

for plans

- Mapping of actual, potential spatial and temporal distribution of all relevant maritime activities
- Consider at least energy, transport routes, cables and pipelines, fishing areas, sea farming sites, nature conservation sites

for coastal strategies

- Inventory of existing measures applied and evaluation of the need for new ones
- Consider at least natural resources, infrastructure, agriculture, industry, fishing, aquaculture, environment, climate change

MSP directive proposal

- Is without prejudice to member states competences for town and country planning
- MSP plans and coastal strategies should be done in three years after the entry of the directive and revised every 6th year
- The implementation of the directive should be reported to the Commission every 6th year

2. Developing maritime spatial planning in the Baltic Sea area

HELCOM; Convention on the Protection of the Marine Environment of the Baltic Sea Area (1974 Helsinki Convention).

- HELCOM Baltic Sea Action Plan

VASAB; Vision and Strategies around the Baltic Sea (1992)

- Long Term Perspective LTP

JointHELCOM-VASAB MSP WG 2010

- Baltic Sea States HELCOM and VASAB representatives, EU Commission, observers

EU Baltic Sea Strategy: Maritime spatial plan by 2020
EU Comission MSP communication 2008 requirement

HELCOM-VASAB MSP WG

So far the group has
- agreed on HELCOM-VASAB MSP and ICZM principles
- drafted a Legislative basis for msp –study
- drafted a paper Ecosystem approach in drafting a maritime spatial plan –study

HELCOM Ministerial meeting on October 2013 Copenhagen
VASAB Ministerial Meeting September 2014 Tallinn

2. Developing maritime spatial planning in the Baltic Sea area

The group needs now a new mandate for 2013-2016

Draft work plan 2013-2016:

- Exchange of experience
- Framework
- MSP and MSFD
- MSP and ICZM
- Data
- EU Baltic Sea Strategy Horizontal Action Spatial planning leadership
- To create better understanding of the specific conditions and need for MSP in BSR in EU and to seek common approach to EU initiatives

Status of maritime spatial planning in Baltic Sea countries

- Germany – spatial planning on territorial waters and on EEZ based on legistaltion
- Poland – developing msp
- Lithuania – developing msp
- Latvia – developing msp
- Estonia – developing msp – drafting regional maritime plans
- Norway – maritime spatial planning – non binding management plans
- Denmark – not developing msp - no planning on sea
- Russia – developing msp – no legislation on msp
- Sweden – developing legislation
- Finland – land use planing and building act implemented on territorial waters, no planning legislation on EEZ

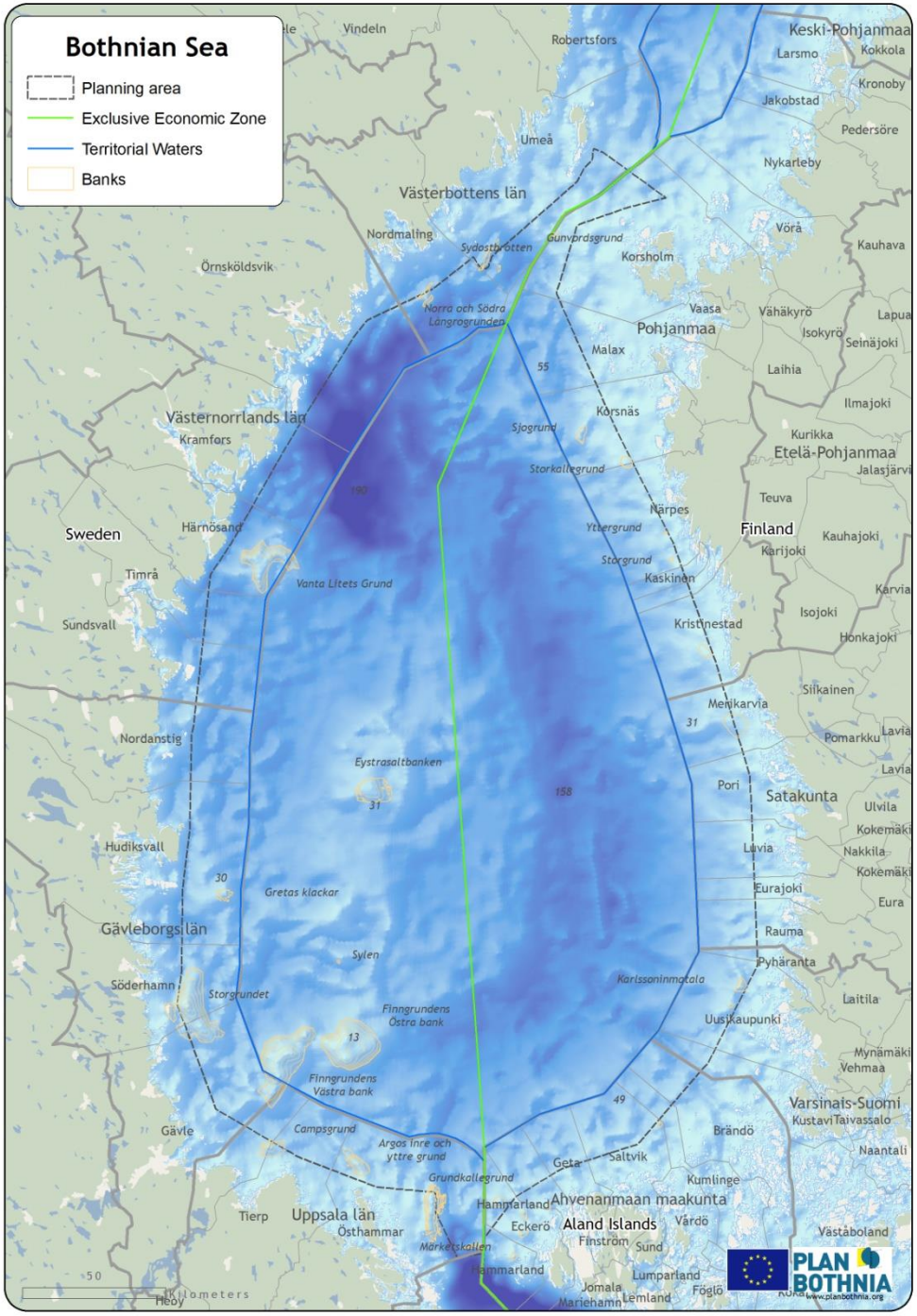
PLAN BOTHNIA - pilot plan project

- EU DG MARE MSP ”preparatory action”

- Joint HELCOM-VASAB MSP principles
- The 10 EU MSP principles in Roadmap

- Testing joint transboundary spatial planning in the Bothnian Sea between Finland and Sweden

- 18 months, 500 000 €


Bothnian Sea
Planning area
Exclusive Economic Zone
Territorial Waters
Banks
Vindeln
Robertsfors
Keski-Pohjanmaa
Larsmo
Kokkola
Kronoby
Jakobstad
Pedersöre
Umeå
Nykarleby
Västerbottens län
Nordmaling
Sydostgrunden
Gunvordsgrund
Vörå
Kauhava
Korsholm
Örnsköldsvik
Norra och Södra Långrogrunden
Vaasa
Vähäkyrö
Lapua
Isokyrö
Seinäjoki
Pohjanmaa
Malax
55
Laihia
Ilmajoki
Västernorrlands län
Kramfors
Sjogrund
Korsnäs
Kurikka
Etelä-Pohjanmaa
Jalasjärvi
Storkallegrund
190
Teuva
Närpes
Sweden
Härnösand
Yttergrund
Finland
Kauhajoki
Karijoki
Storgrund
Timrå
Vanta Litets Grund
Kaskinen
Karvia
Isojoki
Sundsvall
Kristinestad
Honkajoki
Siikainen
Merikarvia
31
Nordanstig
Pomarkku
Lavia
Eystrasaltbanken
Lavia
Pori
158
Satakunta
31
Ulvila
Kokemäki
Hudiksvall
Luvia
Nakkila
Kokemäki
30
Gretas klackar
Eurajoki
Eura
Gävleborgs län
Rauma
Sylen
Pyhäranta
Karlssoninmatala
Söderhamn
Storgrundet
Laitila
Finngrundens Östra bank
Uusikaupunki
13
Mynämäki
Vehmaa
Finngrundens Västra bank
49
Varsinais-Suomi
Kustavi
Taivassalo
Gävle
Campsgrund
Brändö
Argos inre och yttre grund
Naantali
Geta
Saltvik
Grundkallegrund
Kumlinge
Ahvenanmaan maakunta
Hammarland
Tierp
Uppsala län
Aland Islands
Vårdö
Eckerö
Östhammar
Finström
Sund
Västaboland
Märketskallen
Hammarland
Lumparland
Jomala
Föglö
Lemland
Mariehamn
Hoyo
50
Kilometers
PLAN BOTHNIA
www.planbothnia.org

PLAN BOTHNIA – a pilot plan

Phase I: Assessment

– Assessment document and GIS datasets (Spring-Autumn 2011)

Phase II: Spatial Plan

–Drafting of a MSP Pilot Plan (Winter 2011-2012)

- **No adoption -** test case and material for future Finland-Sweden dialogue

- Conference in Gothenburg 21-23 May 2012

Prospects for joint maritime spatial planning – extending spatial planning to the sea - starting points

- Municipalities has the planning mandate also on territorials seas
- In Finland regional plans drafted by Regional Councils
- No spatial planning legislation on EEZ
- Act on the EEZ; government authorize activities on sectoral basis
- In Sweden also an Act on Continental Shelf
- Both countries have own systems for safeguarding national interests

…Prospects for joint maritime spatial planning -

extending spatial planning to the sea - starting points

- Only few municipal plans covers also sea area both in Sweden and in Finland
- Finnish regional plans covers mainly coastal waters
- Sectoral planning – areal interests too
- International legislation

- Åland has its own spatial planning system

Finnish Land Use Planning System

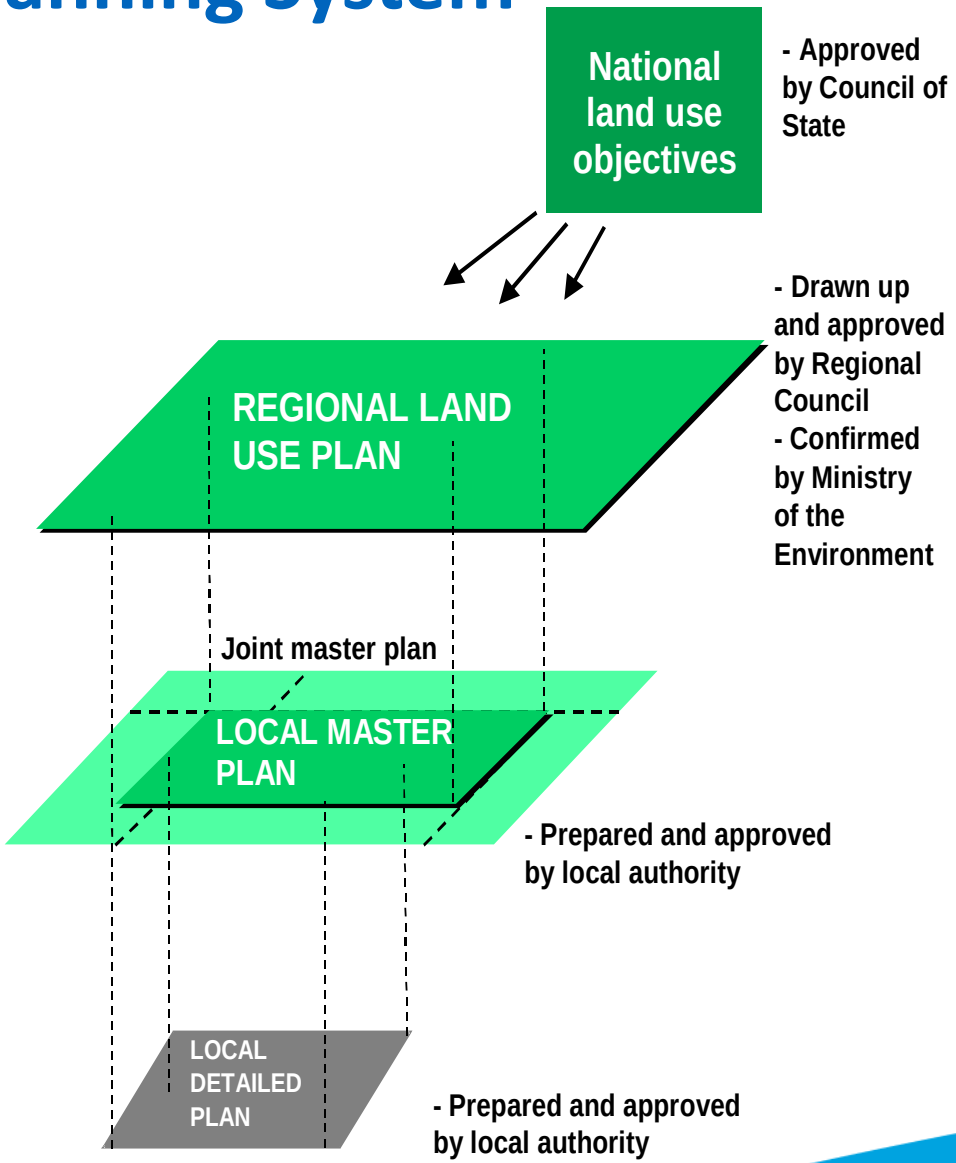


Photo Pirjo Ferin

A Regional land use plan

Sets out a general framework for the more detailed local plans

Must promote the implementation of the national land use guidelines

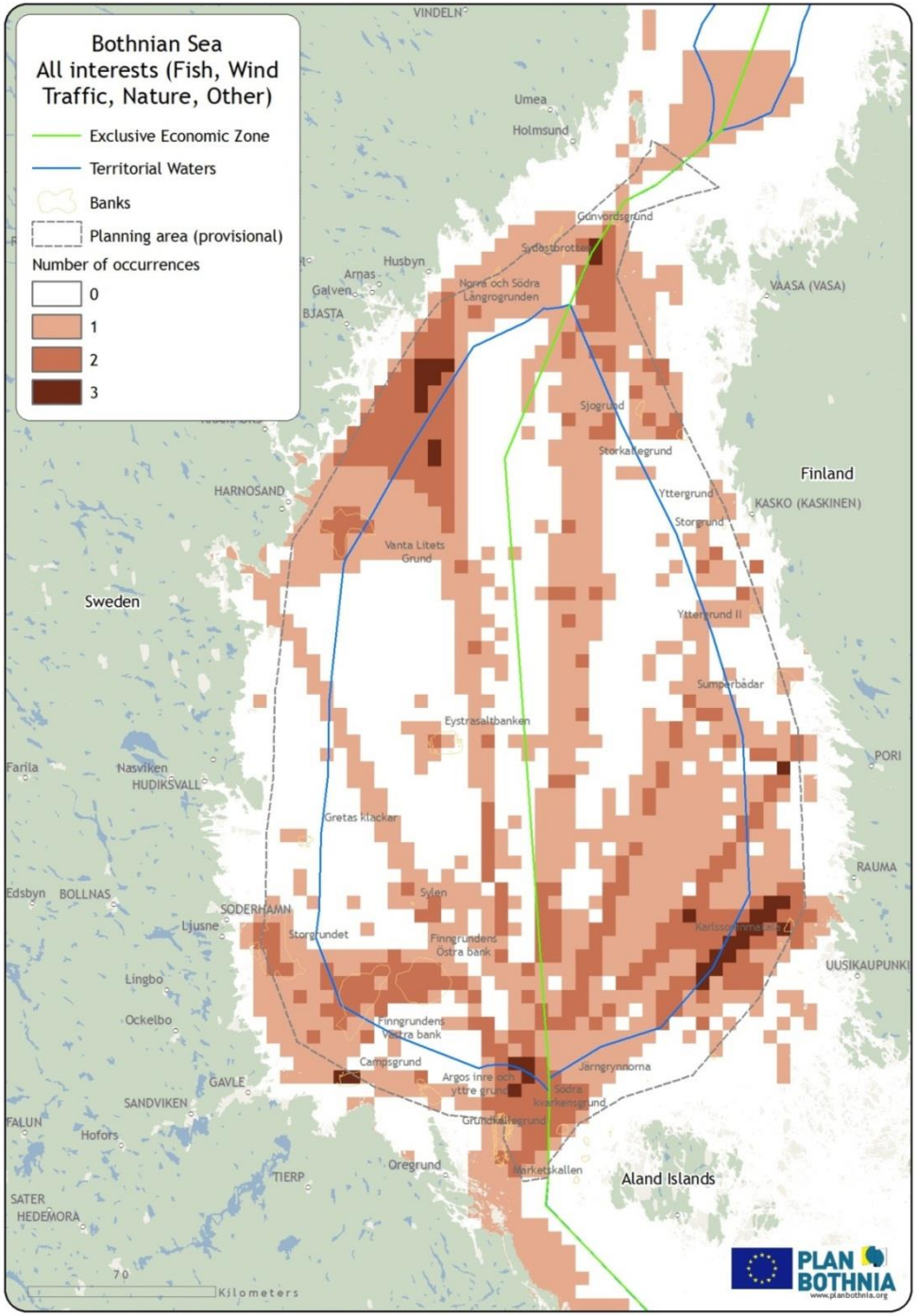
•Special attention is paid to:

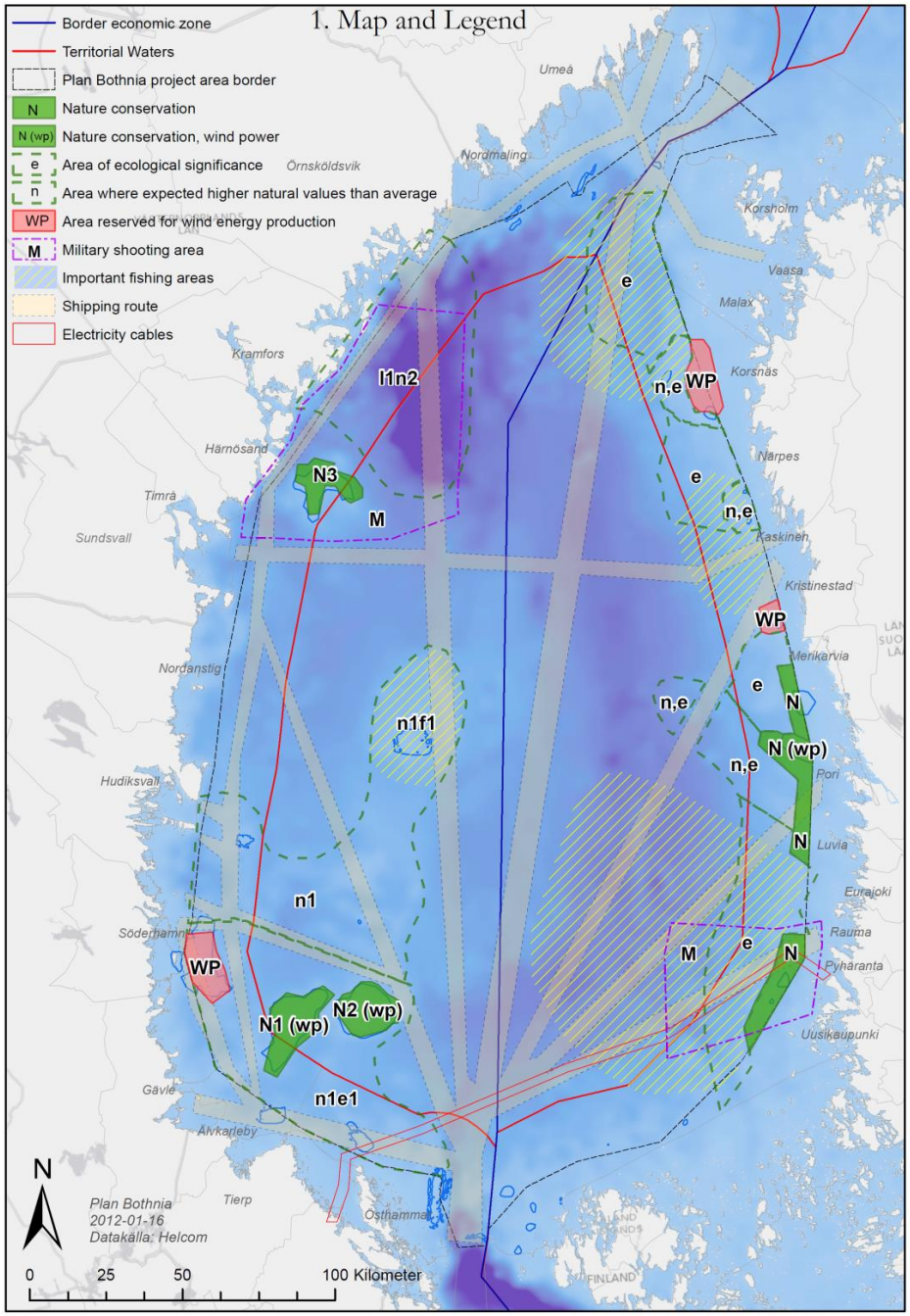
- structure of the region
- sustainability of land use, transport, technical services, natural resources
- region's businesses
- protection of landscape, natural values, and cultural heritage
- recreation

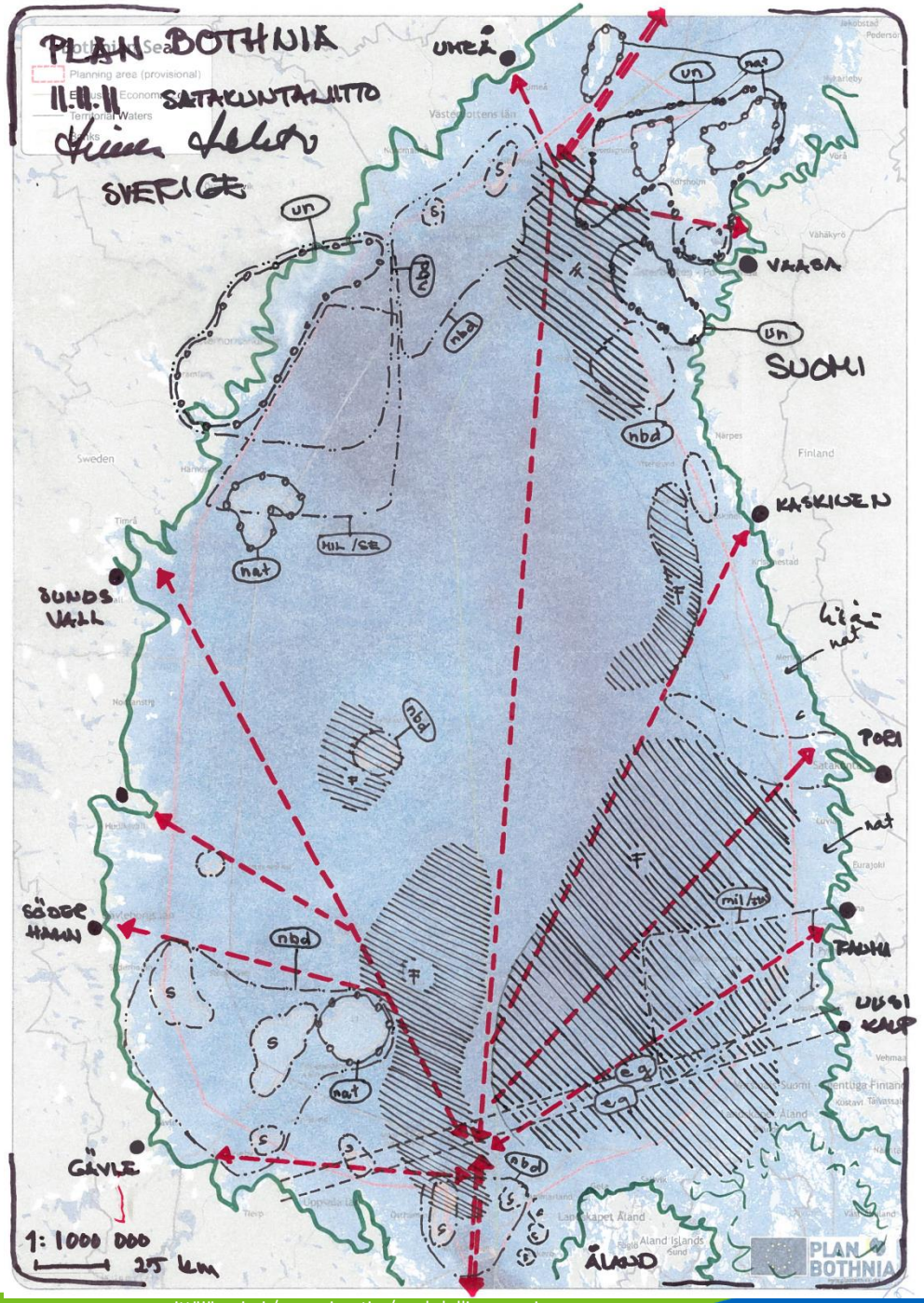
Finnish law on EEZ 2004/1058

Rights and jurisdiction

- Right to make research, exploit, preserve, manage, and to carry out activities aiming to economic use and research
- Jurisdiction according to international law to built artificial islands, constructions and use them as well as to protect and research the marine environment


Bothnian Sea
All interests (Fish, Wind Traffic, Nature, Other)
Exclusive Economic Zone
Territorial Waters
Banks
Planning area (provisional)
Number of occurrences
0
1
2
3
VINDELN
Umea
Holmsund
Husbyn
Arnas
Galven
BJASTA
Gonvordsgrund
Sydostbrotten
Norra och Södra Långrogrunden
VAASA (VASA)
Sjogrund
Storkallegrund
Finland
HARNOSAND
Yttergrund
KASKO (KASKINEN)
Storgrund
Vanta Litets Grund
Sweden
Yttergrund II
Sumparbadar
Eystrasaltbanken
PORI
Farila
Nasviken
HUDIKSVALL
Gretas klackar
RAUMA
Edsbyn
BOLLNAS
Sylen
SODERHAMN
Ljusne
Storgrundet
Finngrundens Östra bank
UUSIKAUPUNKI
Lingbo
Ockelbo
Finngrundens Västra bank
Campsgrund
Jarngrynnorna
Argos inre och yttre grund
Södra kvarkensgrund
GAVLE
SANDVIKEN
Grundkallegrund
FALUN
Hofors
Oregrund
Market skallen
TIERP
Aland Islands
SATER
HEDEMORA
70
Kilometers
PLAN BOTHNIA
www.planbothnia.org


1. Map and Legend
Border economic zone
Territorial Waters
Plan Bothnia project area border
N
Nature conservation
N (wp)
Nature conservation, wind power
e
n
Area of ecological significance
Area where expected higher natural values than average
WP
Area reserved for wind energy production
M
Military shooting area
Important fishing areas
Shipping route
Electricity cables
Umeå
Nordmaling
Örnsköldsvik
Kramfors
Härnösand
Timrå
Sundsvall
Nordanstig
Hudiksvall
Söderhamn
Gävle
Älvkarleby
Tierp
Osthammar
Korsholm
Vaasa
Malax
Korsnäs
Närpes
Kaskinen
Kristinestad
Merikarvia
Pori
Luvia
Eurajoki
Rauma
Pyhäranta
Uusikaupunki
FINLAND
l1n2
N3
M
n1f1
n1
N1 (wp)
N2 (wp)
n1e1
WP
n,e
e
N
N (wp)
M
N
Plan Bothnia
2012-01-16
Datakälla: Helcom
0
25
50
100 Kilometer


PLAN BOTHNIA
11.11.11
SATAKUNTALIITTO
SVERIGE
SUOMI
VAASA
KASKINEN
SUNDSVALL
PORI
GÄVLE
ÅLAND
1: 1000 000
25 km
PLAN BOTHNIA

Lessons learned

- Joint vision, goals and objectives needed
- A political decision and financing needed

Plan Bothnia vision:

”The Bothnian Sea will remain a place of unique natural beauty where maritime human activities are carried out within the boundaries of good ecological status, enable prosperous communities in the region and contribute to combating global climate change as a result of long term transpoundary cooperation.”

The vision should be implemented by:

a. Creating a basis framework to ensure the good status of ecosystems and their ecosystem services
b. Ensuring a network of offshore nature protected areas
c. Safeguarding maritime traffic
d. Designating sufficient suitable areas for sea based energy
e. Maintaining spawning, nursery and fishing areas necessary for maintaining a viable local fishery
f. Highlighting/illustrating the importance of the sea to the coastal communities

…lessons learned

- Transboundary maritime spatial planning is possible and also an effective tool for realizing commong goals for a shared regional sea
- Must be based on the governance structure of both countries to lay down legally effective recommendations or regulations in either country – also to safeguard the participation and rights to appeal
- MSP has role for laying down guidelines for the future appropriate use of larger sea areas and also solving confligting interests

…lessons learned

- Is perhaps not the most suitable tool to manage activities that are to very high degree dependent on regulations based on EU or international legislation like fishery or shipping – still, influencing on such policies might be possible
- Which questions/problems can be solved by a plan
- Quality information for drafting a plan needed – common understanding of basic structure, functions and needs of protections are crucial

Experiences of Planbothnia

Drafting a plan for a sea area jointly with another country

- Bring up topical questions
- Increased knowledge and experience
- Was involving regions and planners
- Many similarities between SE and FI
- Planning culture: Finland has plans on three planning level, Sweden has detailed planning -> results in planning regulations, markings
- Future needs

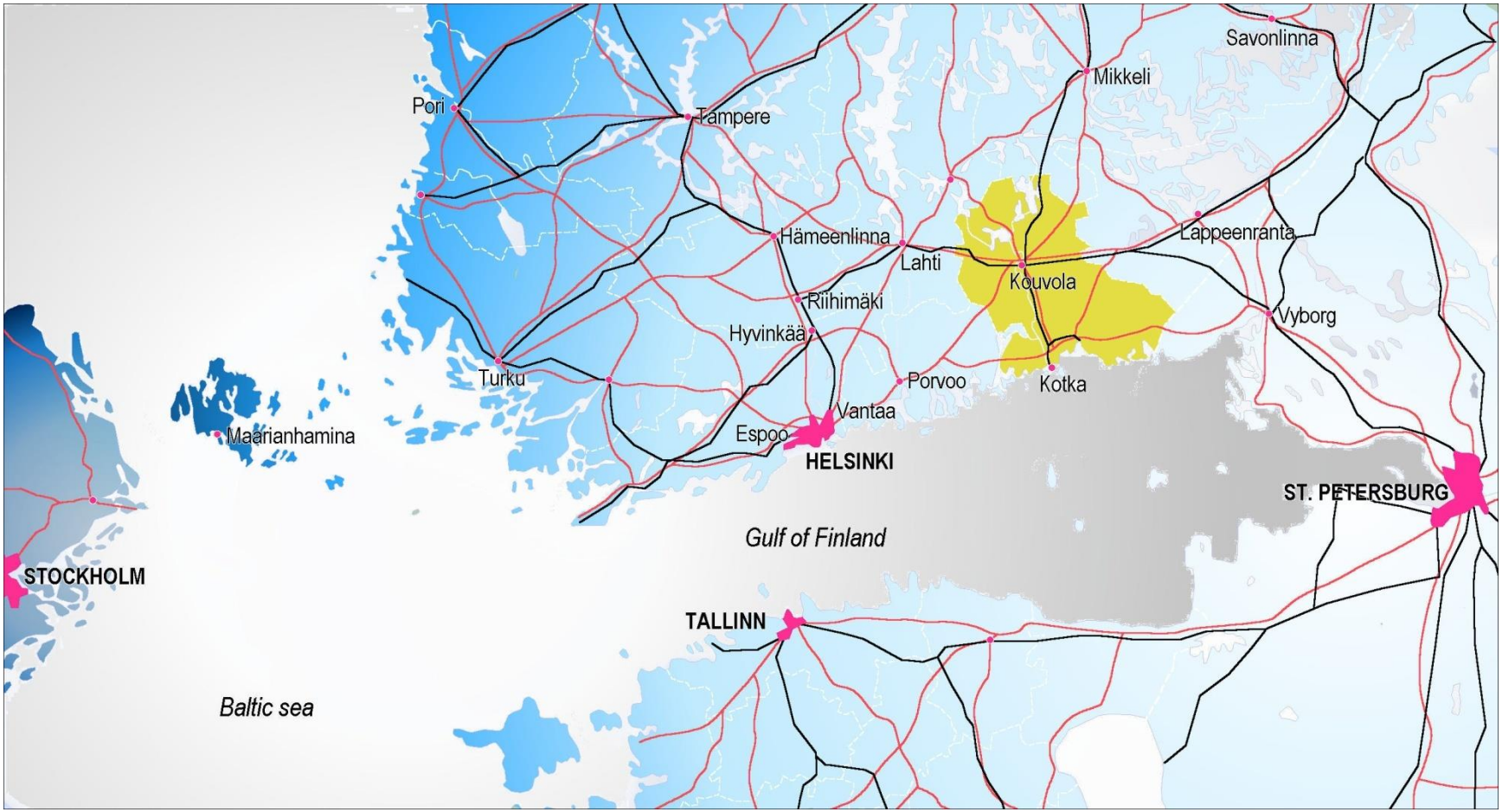
Reflection on MSP principles and the Bothnian Sea

- Plan Bothnia is fulfilling succesfully both EU and HELCOM-VASAB msp-principles

Maritime spatial planning in Kymenlaakso, Finland

Frank Hering
Environmental planner

Location


Savonlinna
Mikkeli
Pori
Tampere
Hämeenlinna
Lahti
Lappeenranta
Kouvola
Riihimäki
Vyborg
Hyvinkää
Turku
Porvoo
Kotka
Vantaa
Maarianhamina
Espoo
HELSINKI
ST. PETERSBURG
Gulf of Finland
STOCKHOLM
TALLINN
Baltic sea

MSP in the Kymenlaakso region

- The Regional Council of Kymenlaakso decided in 2012 to elaborate a regional plan focusing on MSP / ICZM
- The regional plan of Kymenlaakso is among the first regional plans in Finland focussing on questions related to MSP / ICZM

Central topics

- Considering underwater bio- and geodiversity
- Improving the environmental state of the sea
- Developing tourism / recreation
- Managing structural changes of the defence forces in the archipelago
- Improving maritime safety
- Developing the sustainable use of natural ressources (fish/ sand/ wind…)
- Enabling sustainable economic development…

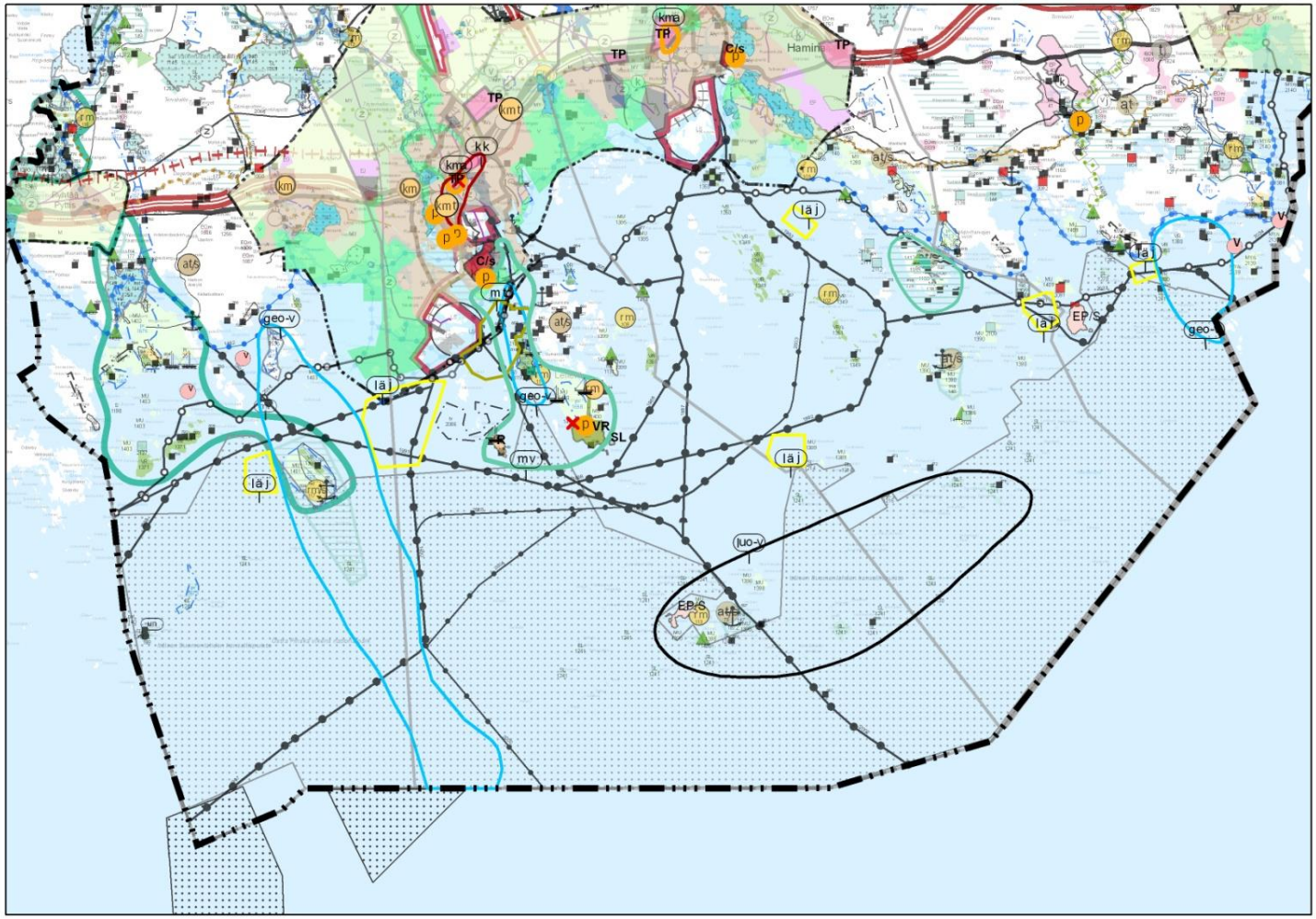
Permanent issues

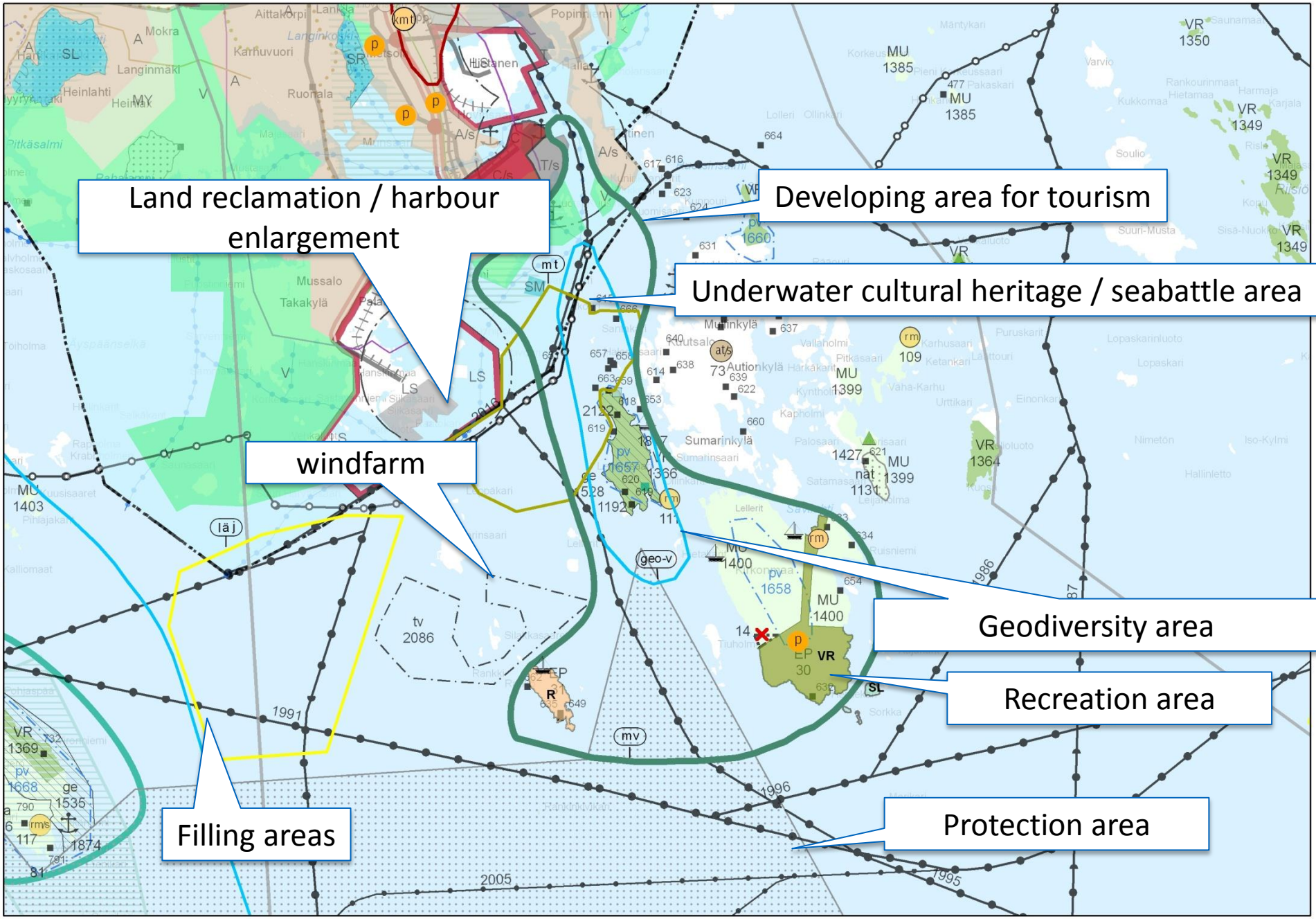
- Lack of ressources…
- Lack of data…

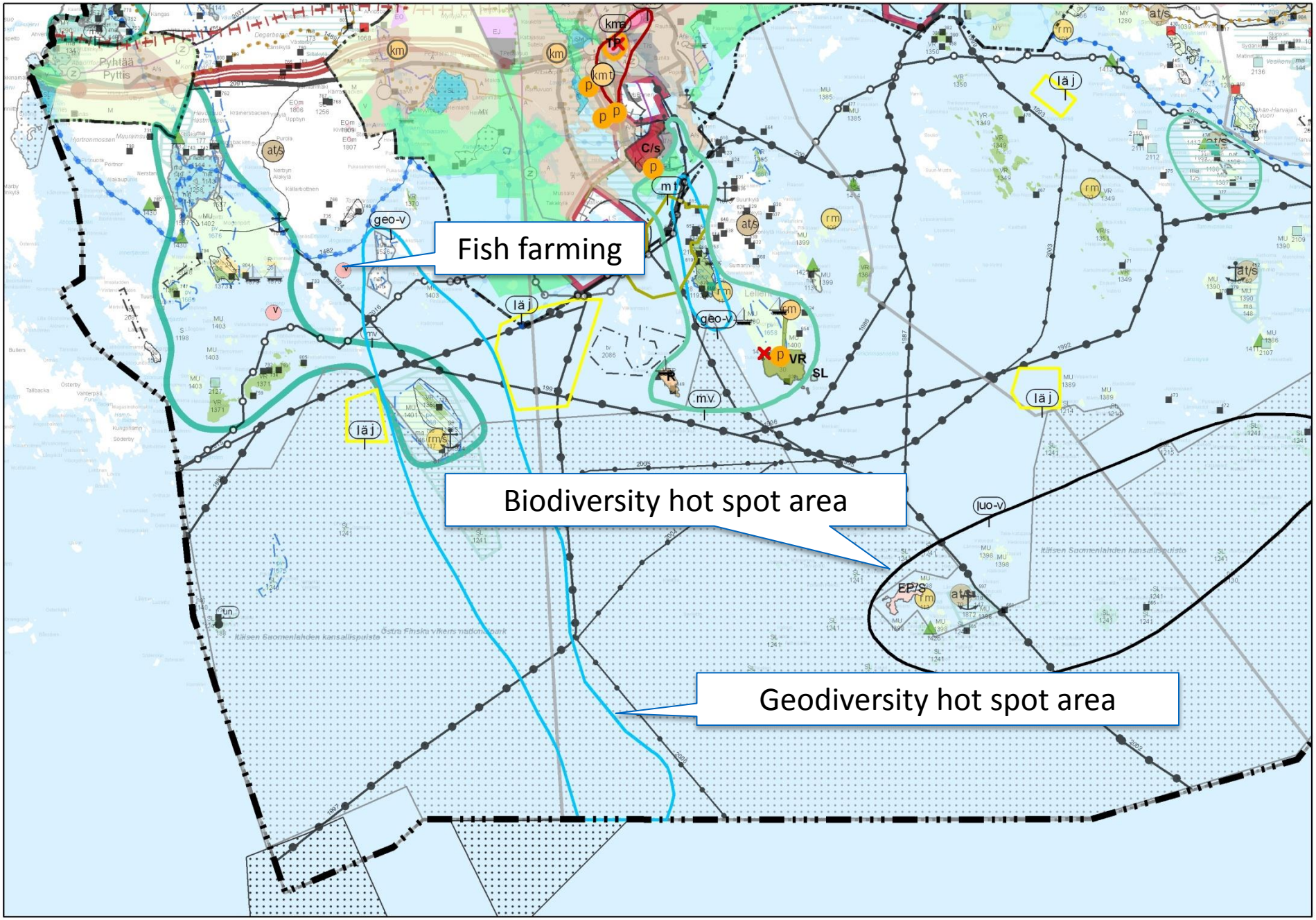
MSP and regional planning in Finland

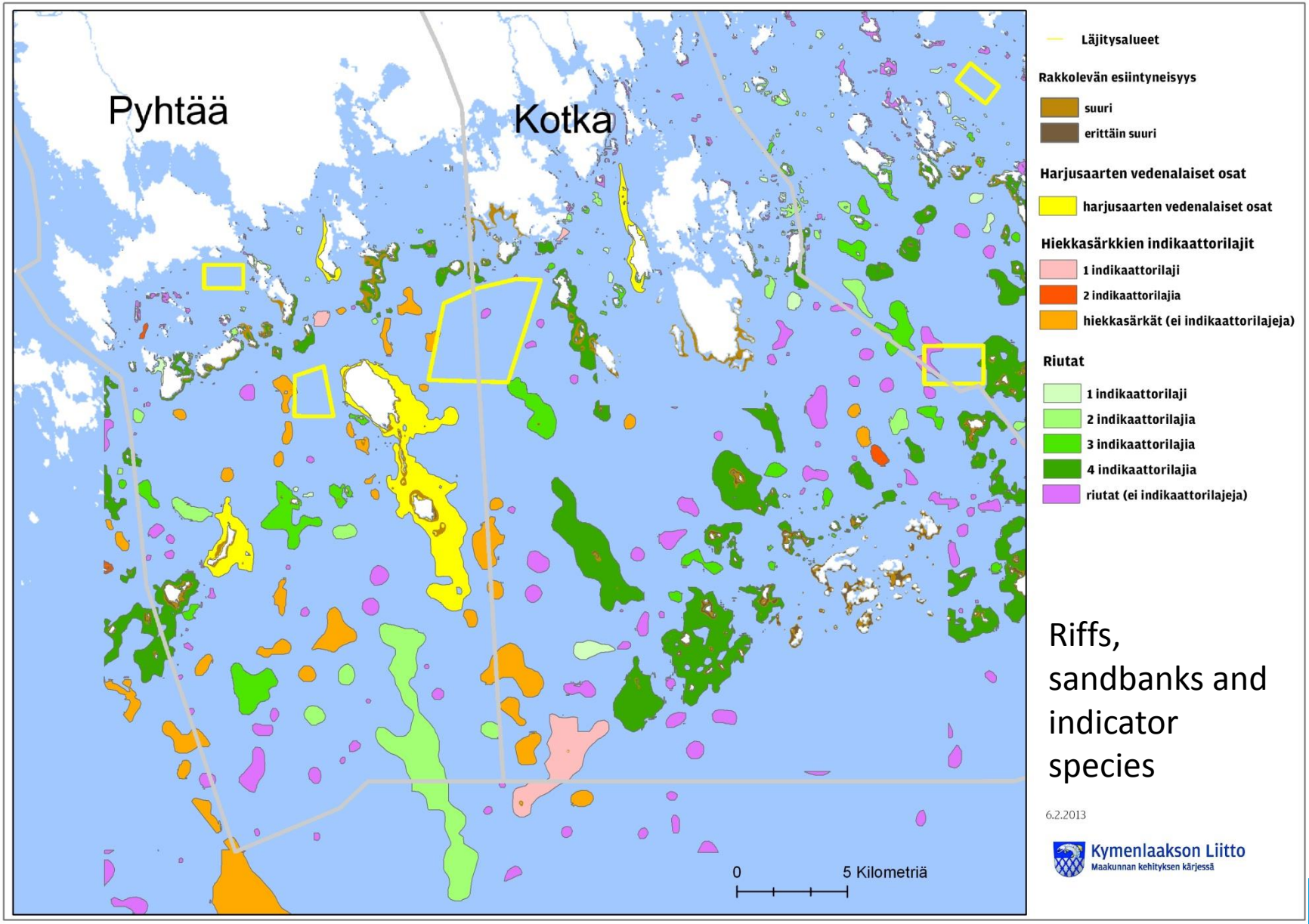
- Didn´t we already do MSP and ICZM in the past?
- Do we have to start from zero or do we just have to improve our existing planning schemes and methods?
- Can we afford? What is the benefit for the region?
- Where do we get data from?
- Is our legislation ready?
- How do we improve International cooperation?
- …

Regional plan of Kymenlaakso




Land reclamation / harbour enlargement
Developing area for tourism
Underwater cultural heritage / seabattle area
windfarm
Geodiversity area
Recreation area
Protection area
Filling areas


Fish farming
Biodiversity hot spot area
Geodiversity hot spot area

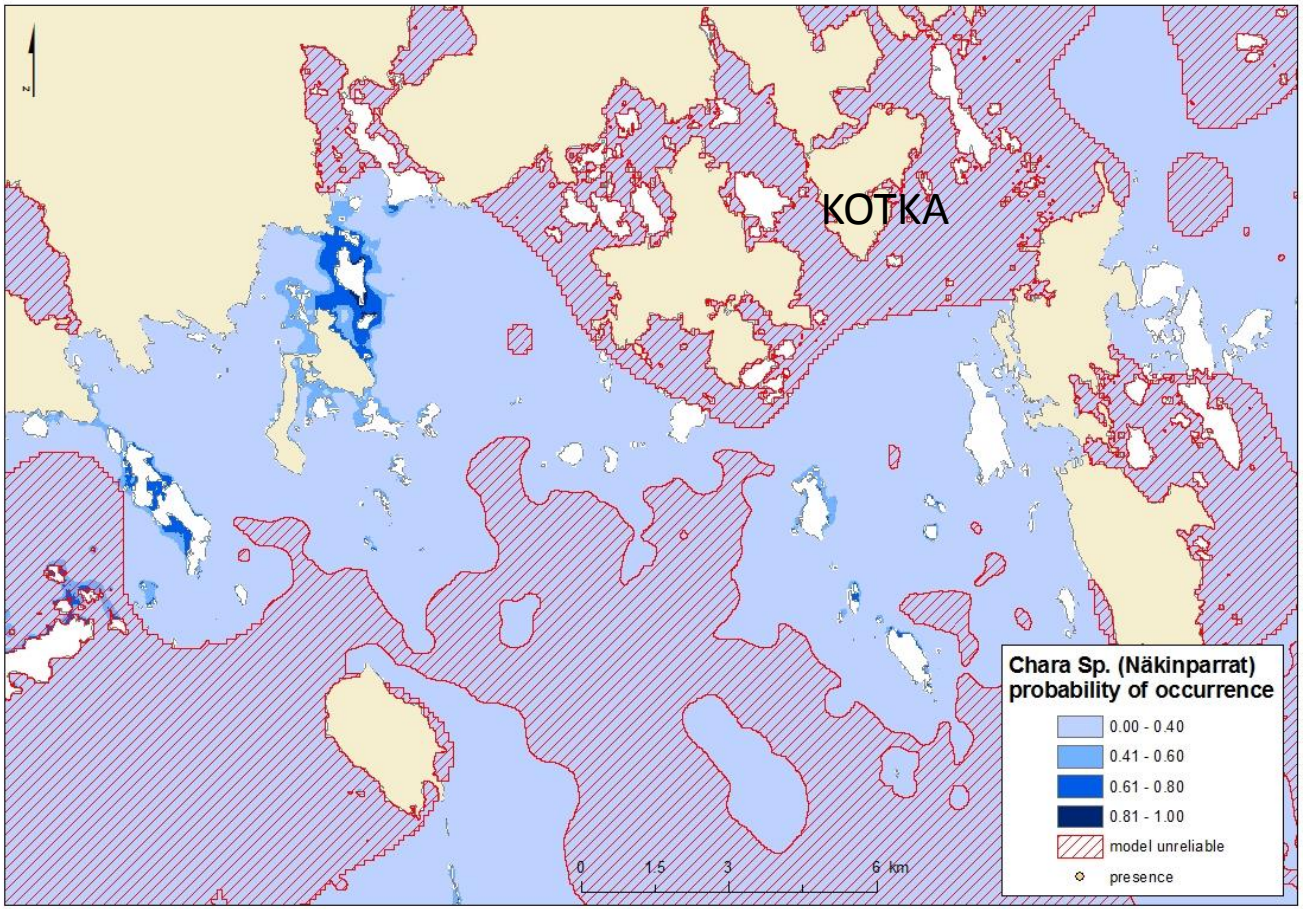


Riffs, sandbanks and indicator species

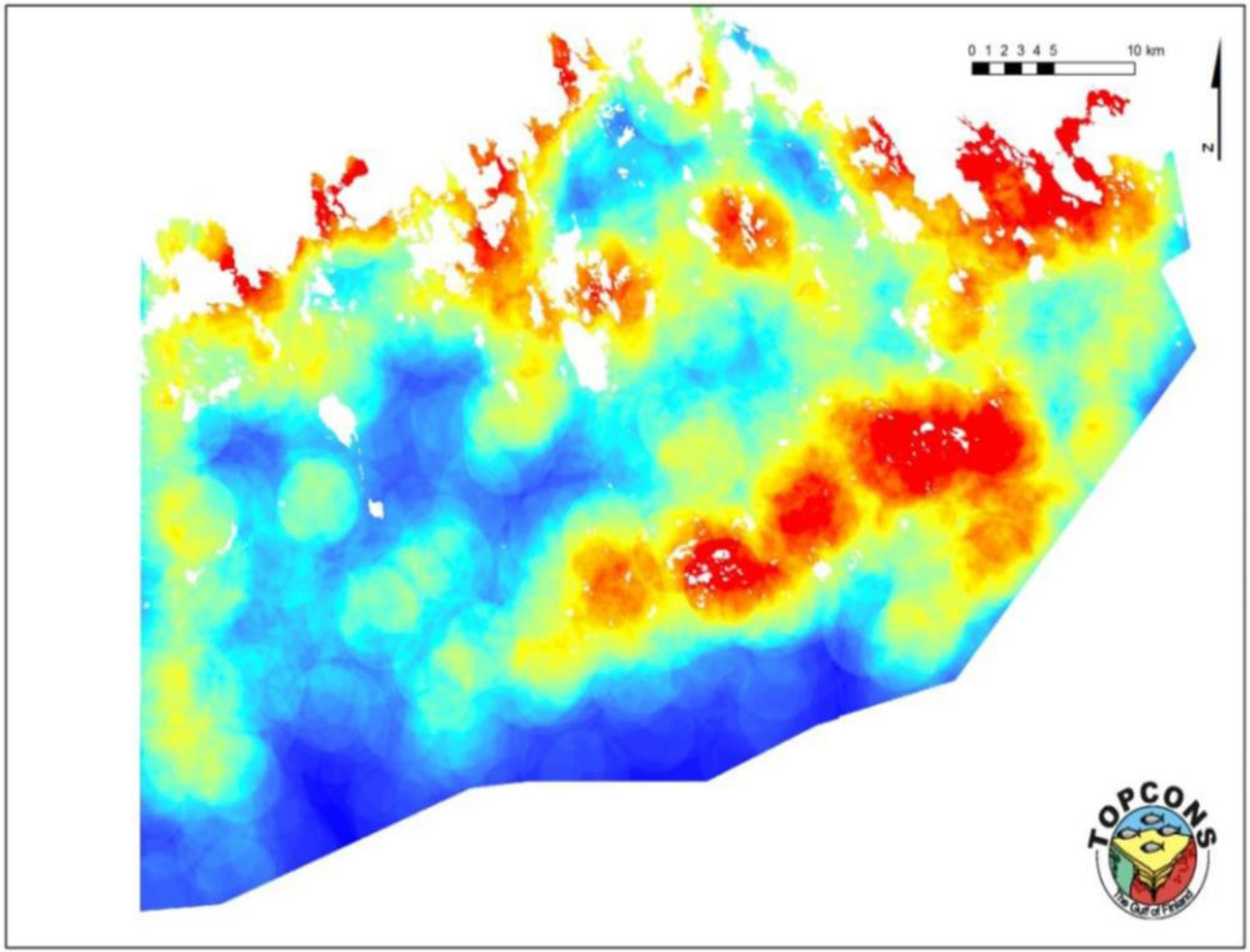
6.2.2013

Kymenlaakson Liitto
Maakunnan kehityksen kärjessä

Modelling diversity



TOPCONS, Seabed structural diversity, Finnish part of the study area/draft 04.02.13



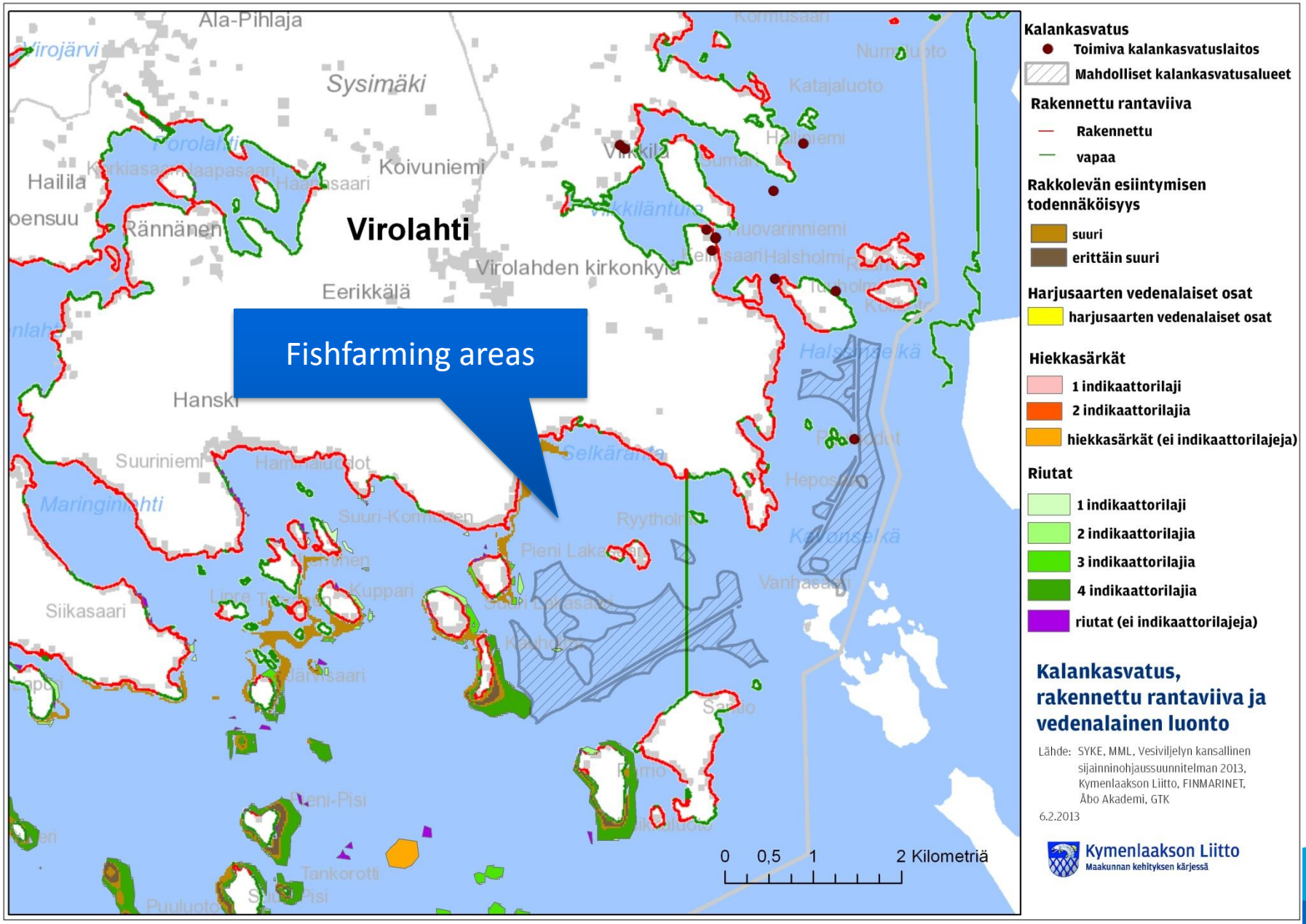
Topographical diversity

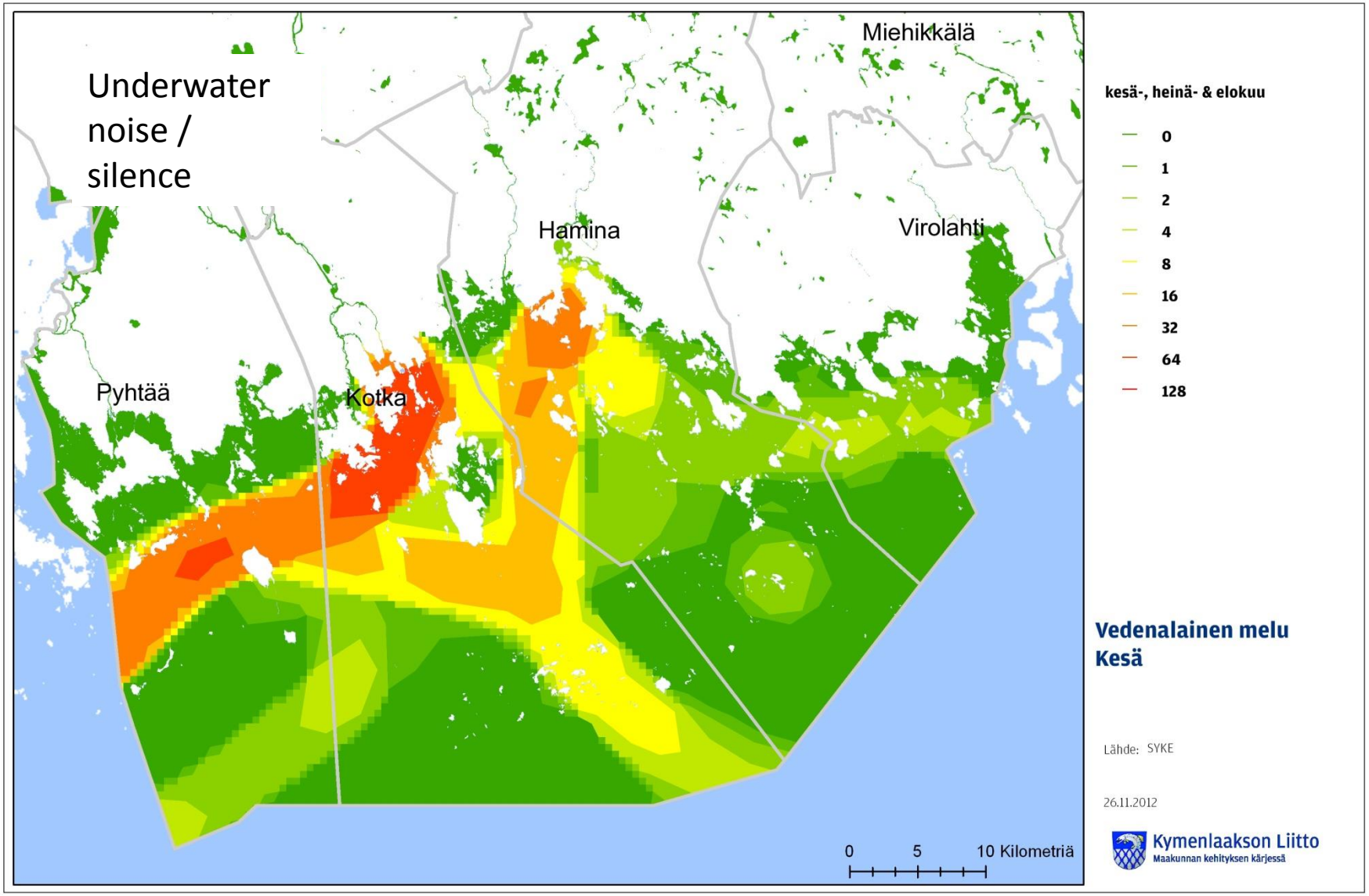
High : 232

Low : 1

TOPCONS project produces tools for marine spatial planning and management to support decision making at an international, national and regional level.
Project webpage:http://www.merikotka.fi/topcons/

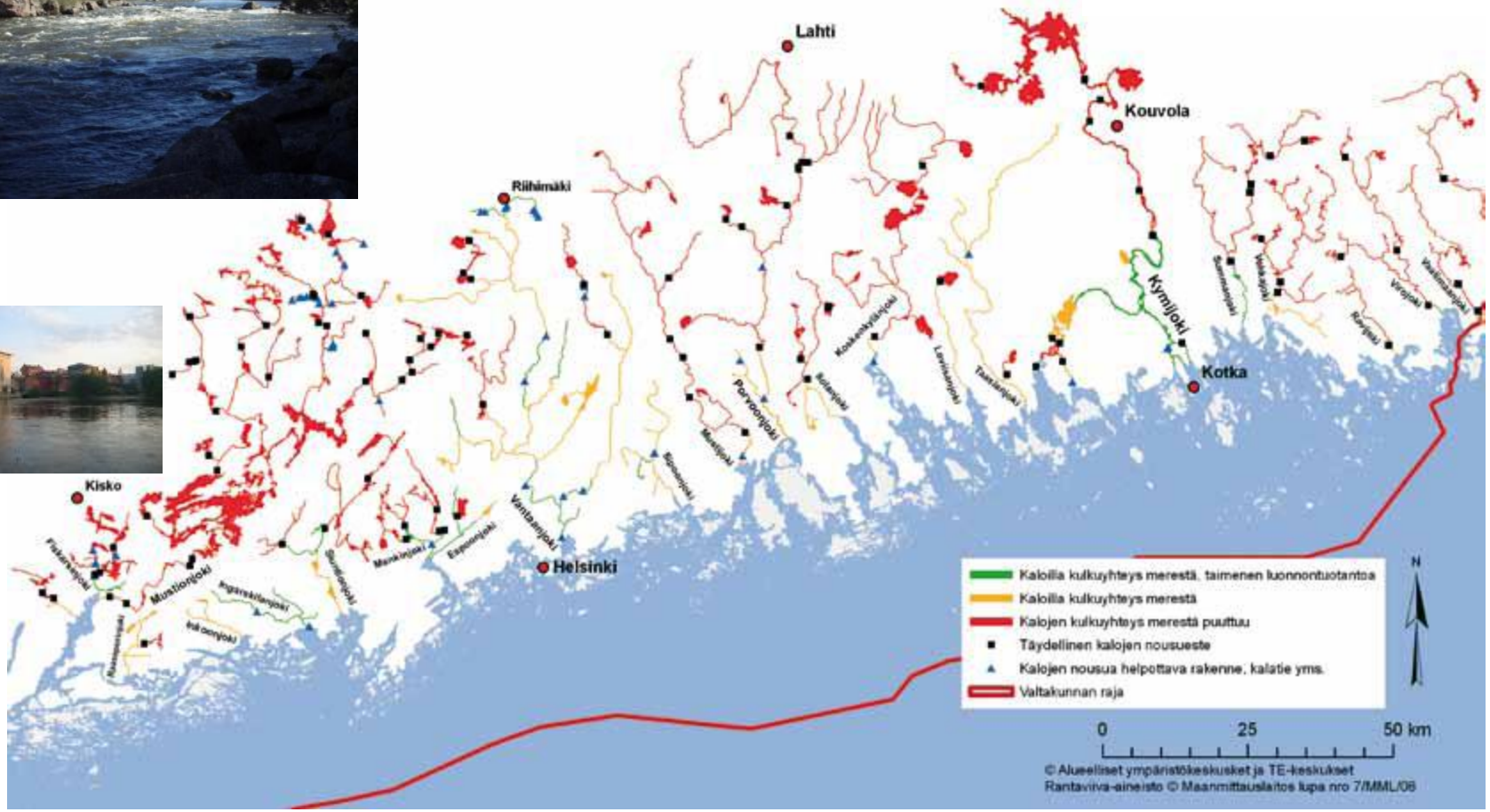
TOPCONS seabed structural diversity identifies areas of high topographical diversity. These areas may reflect high underwater diversity, both geodiversity and biodiversity. This presentation is a draft and may change during the TOPCONS project.
The TOPCONS partners give no warranty as to the quality or accuracy of the data or its suitability for any use or purpose.
More info: TOPCONS report xxx
Last update: 04.02.2013


Ala-Pihlaja
Virojärvi
Sysimäki
Koivuniemi
Hailila
Rännänen
Virolahti
Virolahden kirkonkylä
Eerikkälä
Fishfarming areas
Hanski
Suuriniemi
Siikasaari
Kalankasvatus
Toimiva kalankasvatuslaitos
Mahdolliset kalankasvatusalueet
Rakennettu rantaviiva
Rakennettu
vapaa
Rakkolevän esiintymisen todennäköisyys
suuri
erittäin suuri
Harjusaarten vedenalaiset osat
harjusaarten vedenalaiset osat
Hiekkasärkät
1 indikaattorilaji
2 indikaattorilajia
hiekkasärkät (ei indikaattorilajeja)
Riutat
1 indikaattorilaji
2 indikaattorilajia
3 indikaattorilajia
4 indikaattorilajia
riutat (ei indikaattorilajeja)
Kalankasvatus, rakennettu rantaviiva ja vedenalainen luonto
Lähde: SYKE, MML, Vesiviljelyn kansallinen sijainninohjaussuunnitelman 2013, Kymenlaakson Liitto, FINMARINET, Åbo Akademi, GTK
6.2.2013
Kymenlaakson Liitto
Maakunnan kehityksen kärjessä
0 0,5 1 2 Kilometriä


Underwater noise / silence
Miehikkälä
Hamina
Virolahti
Pyhtää
Kotka
kesä-, heinä- & elokuu
0
1
2
4
8
16
32
64
128
Vedenalainen melu
Kesä
Lähde: SYKE
26.11.2012
Kymenlaakson Liitto
Maakunnan kehityksen kärjessä
0
5
10 Kilometriä

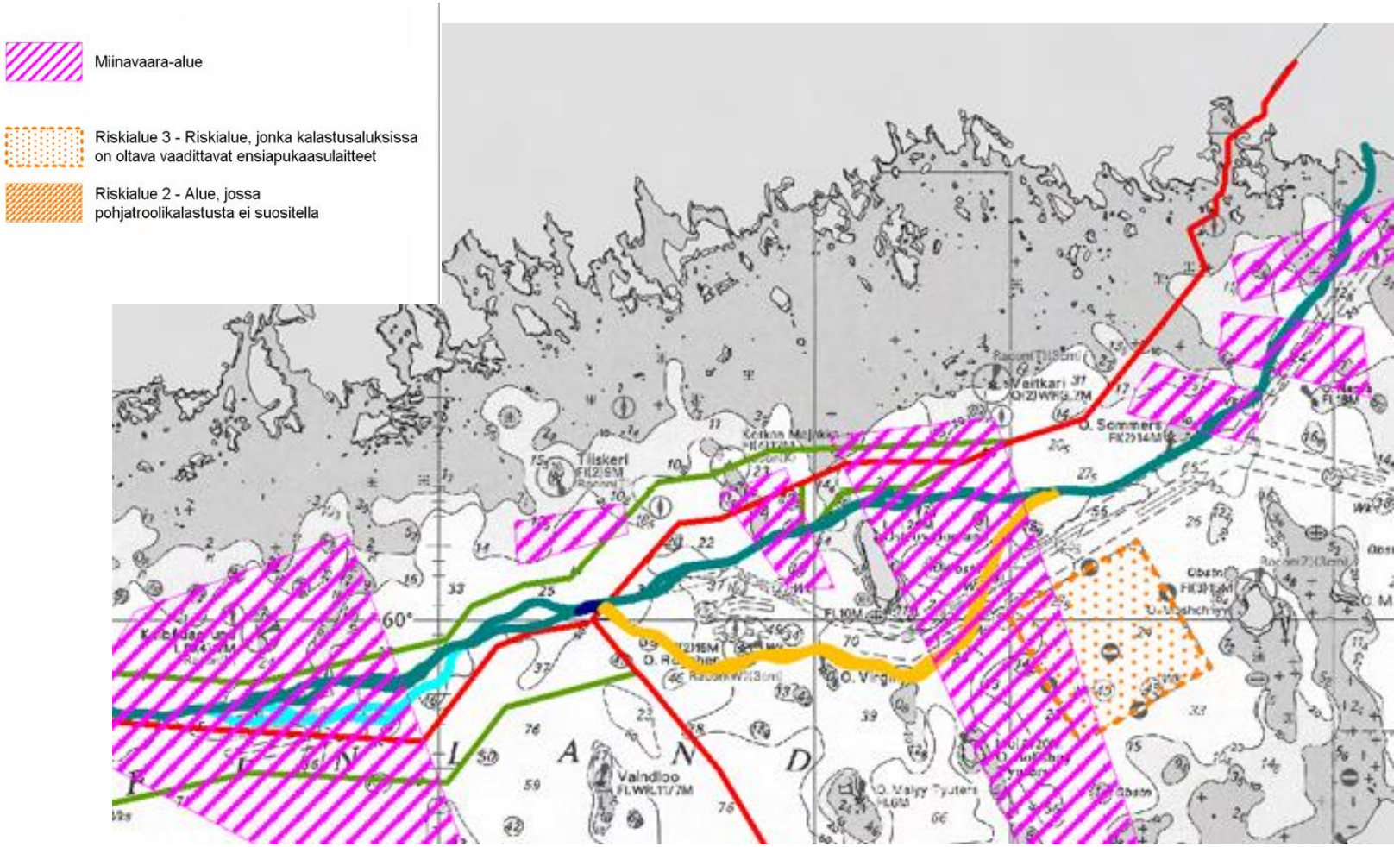
VELMU
– Underwater biodiversity research program

Vaelluskalat



Asiantuntijataho ja paikkatiedot: RKTL, Kaakkois-Suomen ELY-keskus / ympäristöhallinto

EIA Nordstream (minerisk areas etc.)



Planning the marine conservation and sustainable use of marine resources: how underwater inventories can help?

Markku Viitasalo, Finnish Environment Institute

VELMU
vedenalaisen meriluonnon monimuotoisuuden inventointiohjelma

The Finnish Inventory Programme for Underwater Marine Environment

SYKE

Uses of marine space are increasing

Oulunsalo-Hailuoto windmill park (Bothnian Bay) – planned for 2012-2018: 43-75 turbines (100 m high)

Source: Environment Impact Assessment, virtual image

Habitats

Habitats Directive Annex I:

- ✓ Sandbanks slitghtly covered by water
- ✓ Reefs
- ✓ Sea cliffs
- ✓ Shingle or stony beaches
- ✓ Mudflats and sandflats
- ✓ Coastal lagoons
- ✓ Large shallow inlets and bays
- ✓ Estuaries
- ✓ Boreal Baltic narrow inlets

Nature Heritage Services

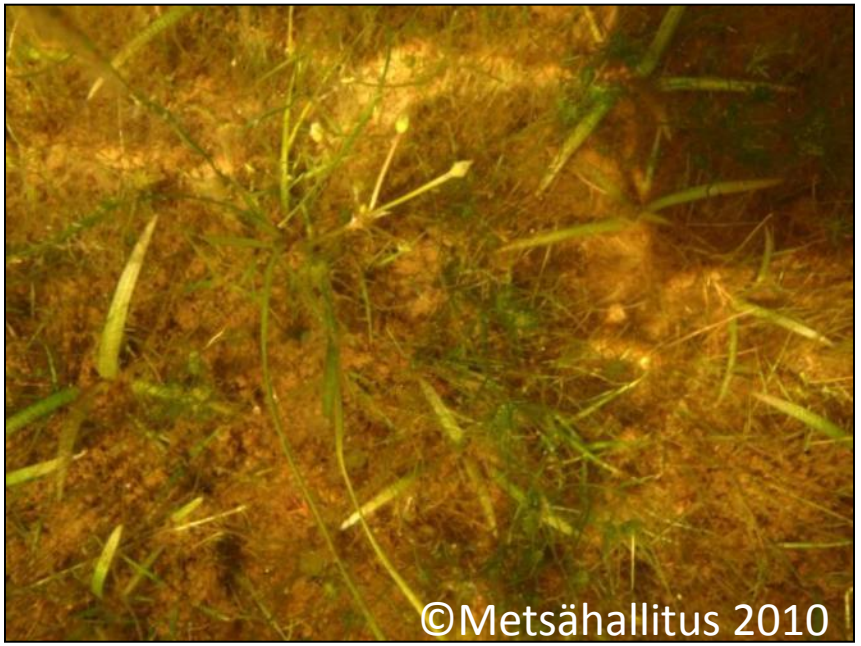
Annex II: Species

Species

Hippuris tetraphylla

- Within the EU occurs only in Finland
- The habitat directive demands Finland to protect its habitats

Alisma wahlenbergii



- An aquatic plant species endemic to the Baltic Sea
- Most of its occurrences found in Finland
- A species in need of ”especial protection”

Convention on Biological Diversity

The Convention Cartagena Protocol Nagoya Protocol

CBD target:

10 % of World's marine areas efficiently protected until 2020

SYKE

VELMU
vedenalaisen meriluonnon monimuotoisuuden inventointiohjelma

The Finnish Inventory Programme of Underwater Marine Environment

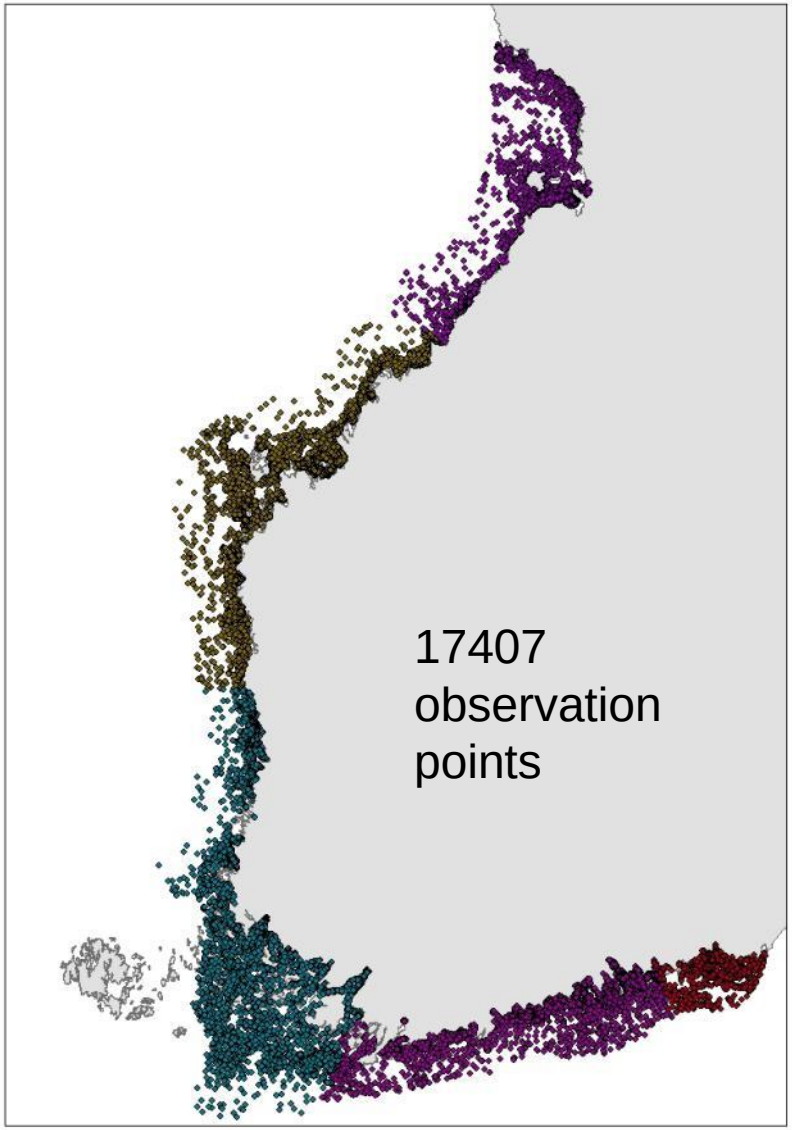
Heidi Piiroinen / HS

”The VELMU-programme secures the gain of information on marine underwater environment.”

Government Program of the PM Jyrki Katainen, p. 70 (22.6.2011)

SYKE

VELMU plan for 2012-2014



Some 24.000 points have been done earlier (since 2004)

Most of them are in ”grids”

How are the observations made in practise?

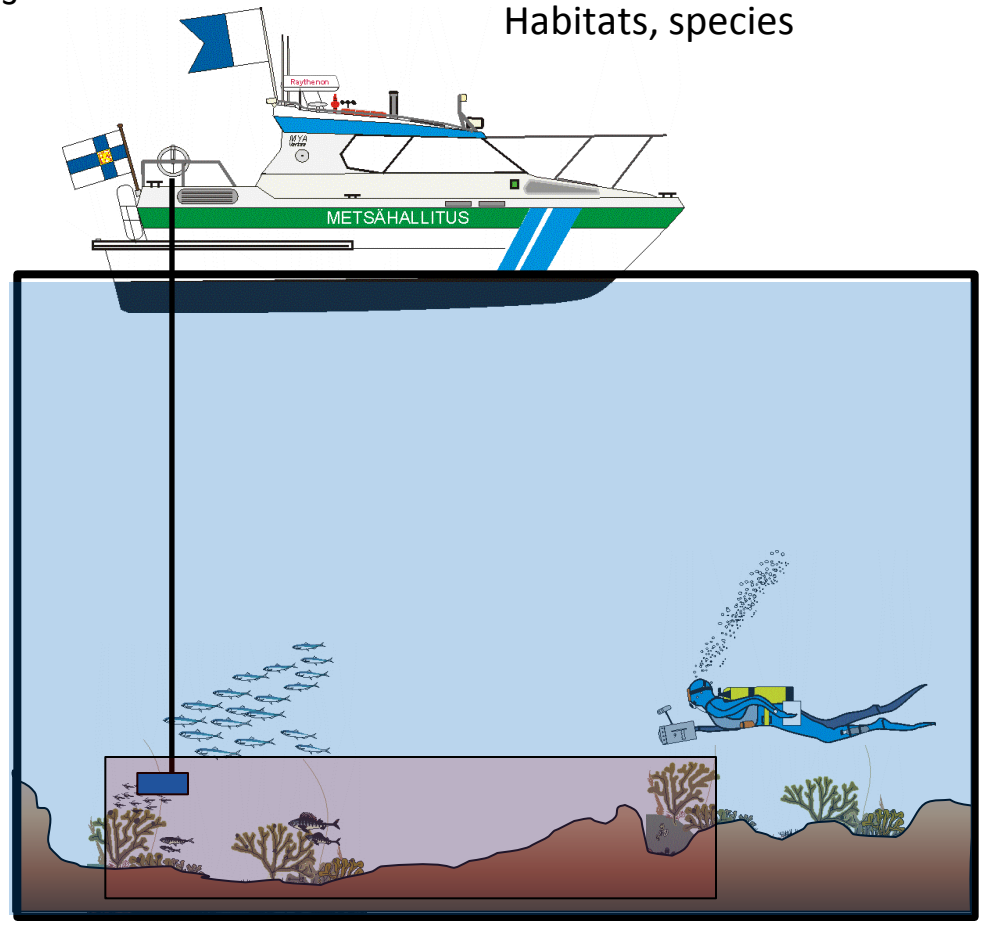
Species and communities

”Drop-video”

Habitats, large species

Scuba diving

Habitats, species



Metsähallitus, luontopalvelut

Benthic sampling

Benthic species

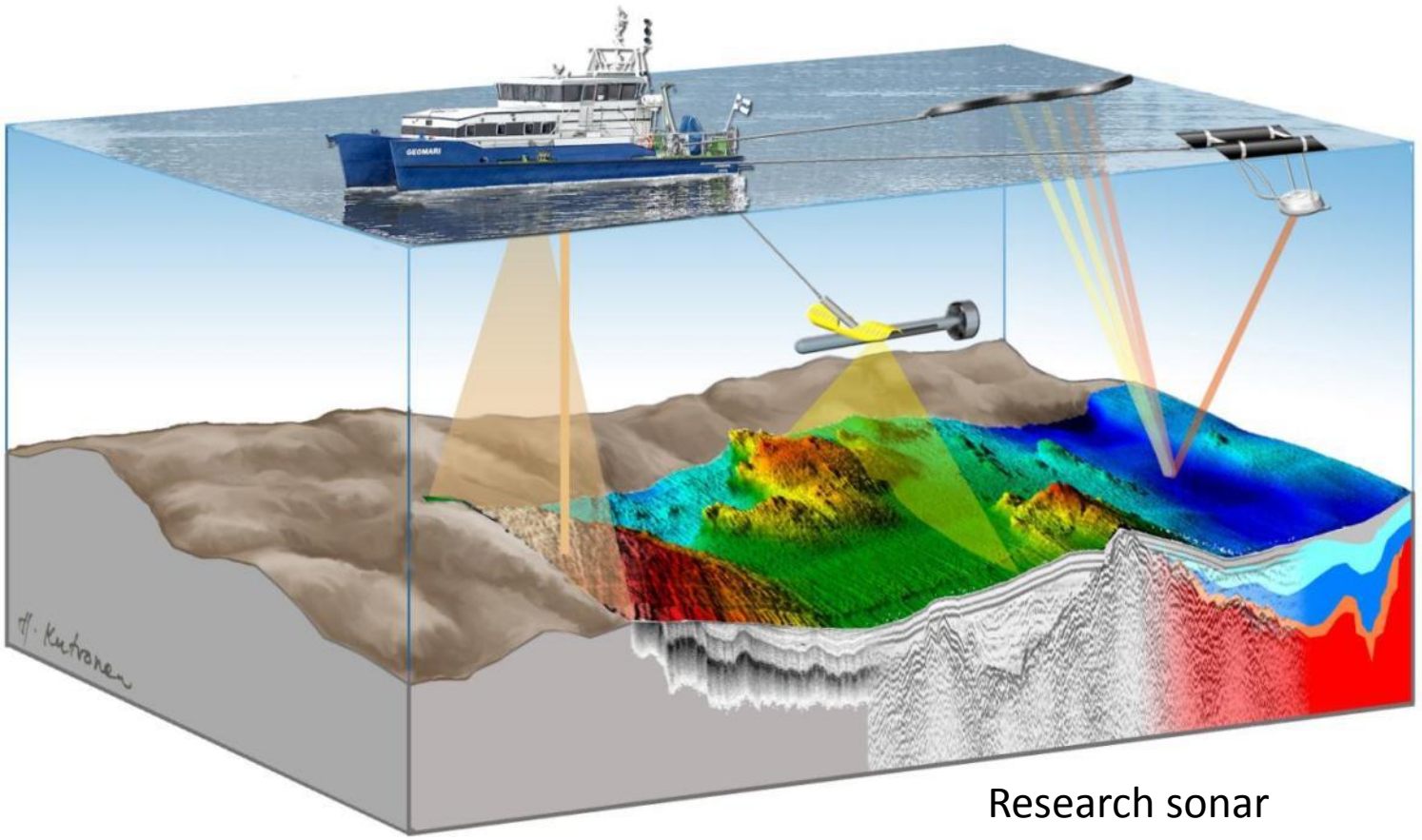
SYKE

The new High Definition drop-video

DeepVision HD-video camera,
Max. depth 70 m

Tiina Asp, Natural Heritage Services

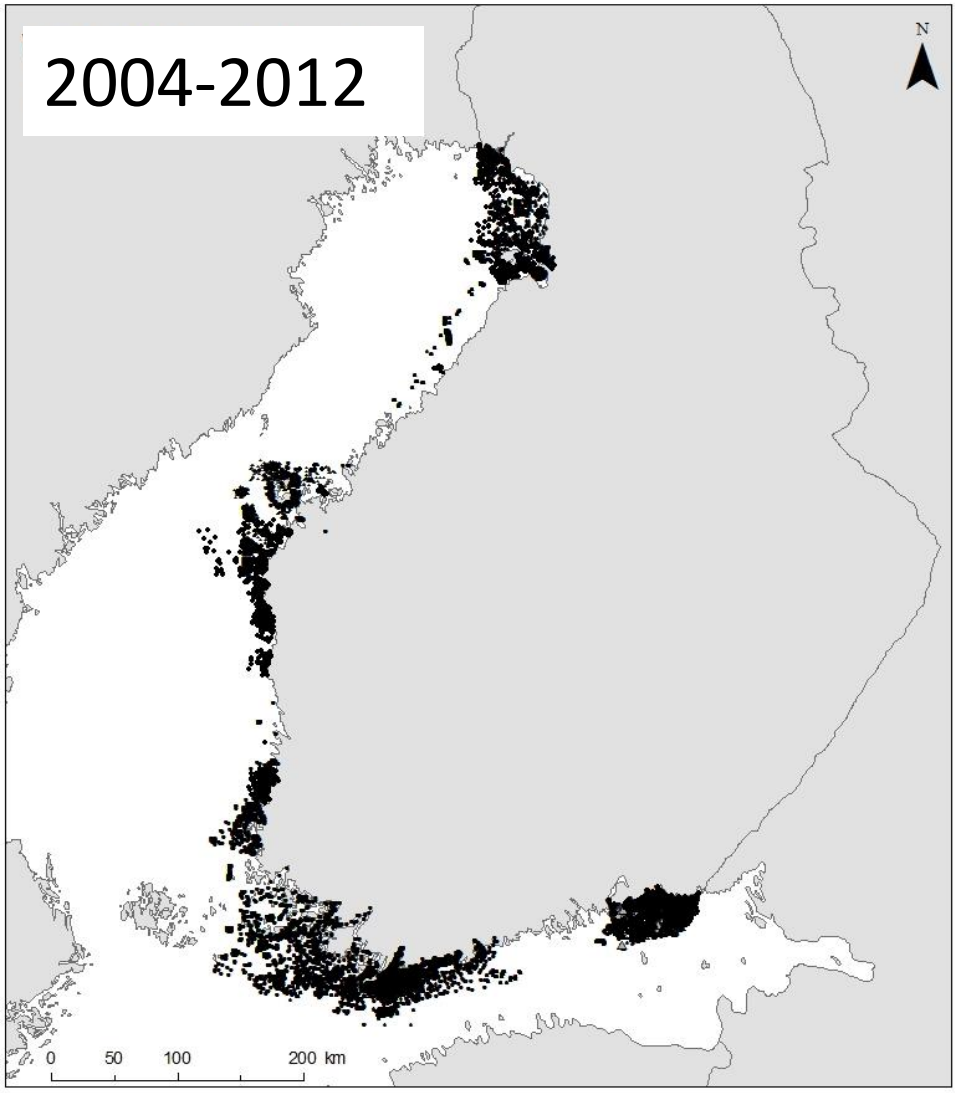
Geological inventories



Research sonar
Side scan sonar
Multibeam sonar
Seismic reflection profiler

Where are we today?

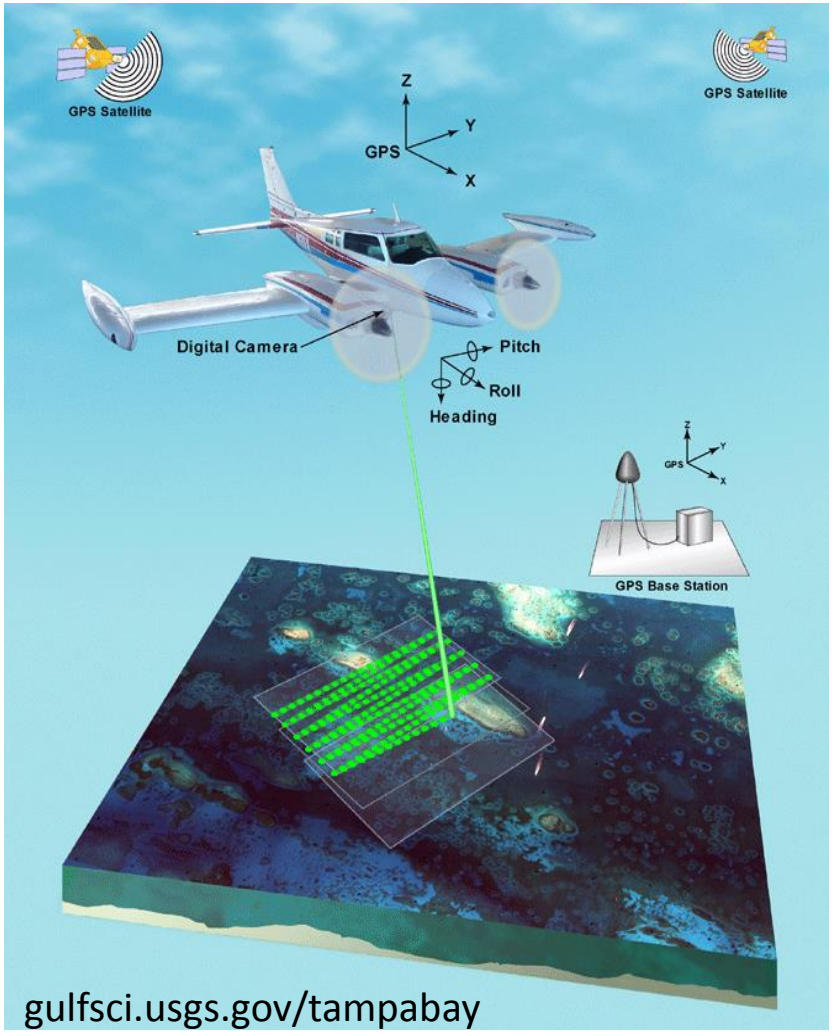
Biological inventories



Method development: Remote sensing of underwater geo- and biodiversity

LIDAR

Light Detection and Ranging



gulfsci.usgs.gov/tampabay

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End products of VELMU
(and related projects)

GIS data and maps on the distribution of species, communities and habitats

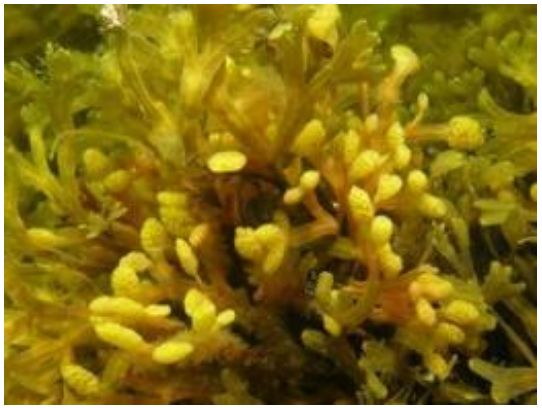
General maps of the distribution of hot-spots of biodiversity and human pressures

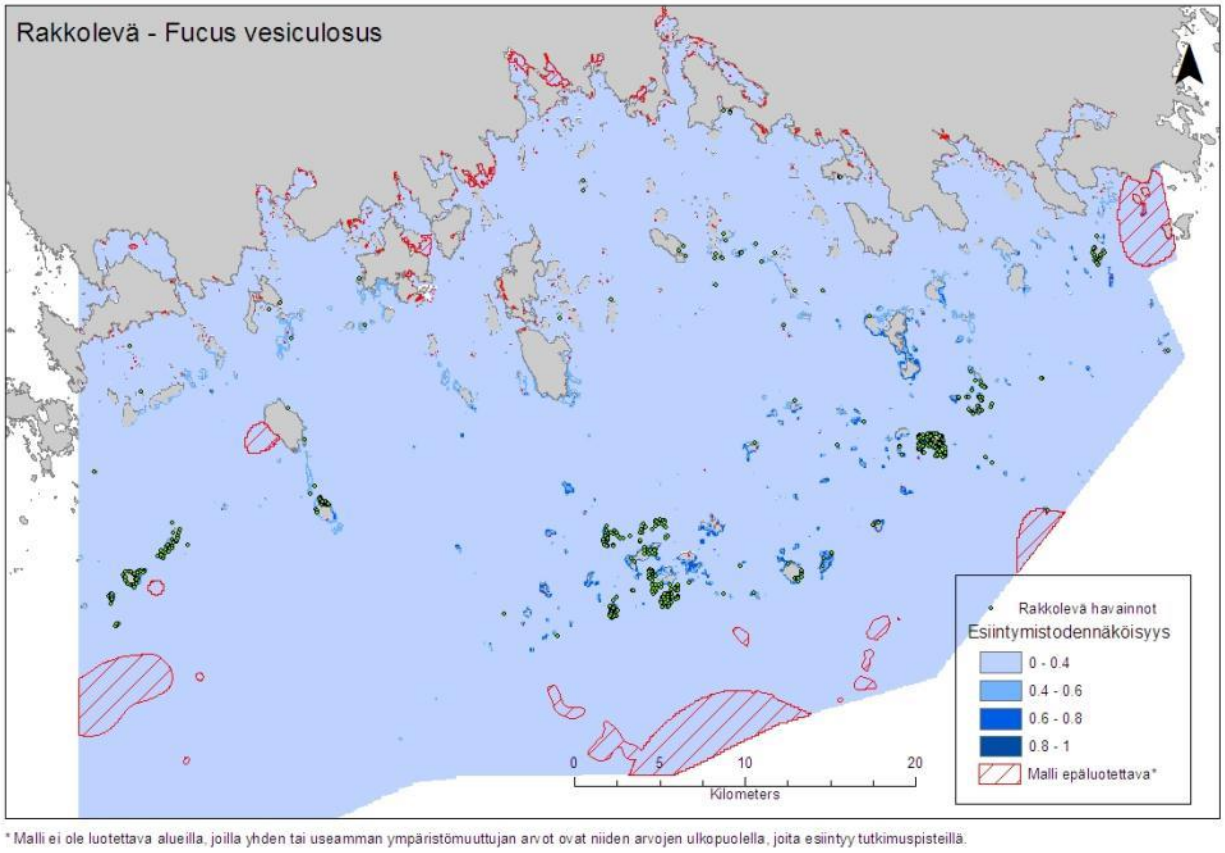
Biodiversity-indices

Finnish Marine Atlas

Modelling key species

Bladderwrack *Fucus vesiculosus*

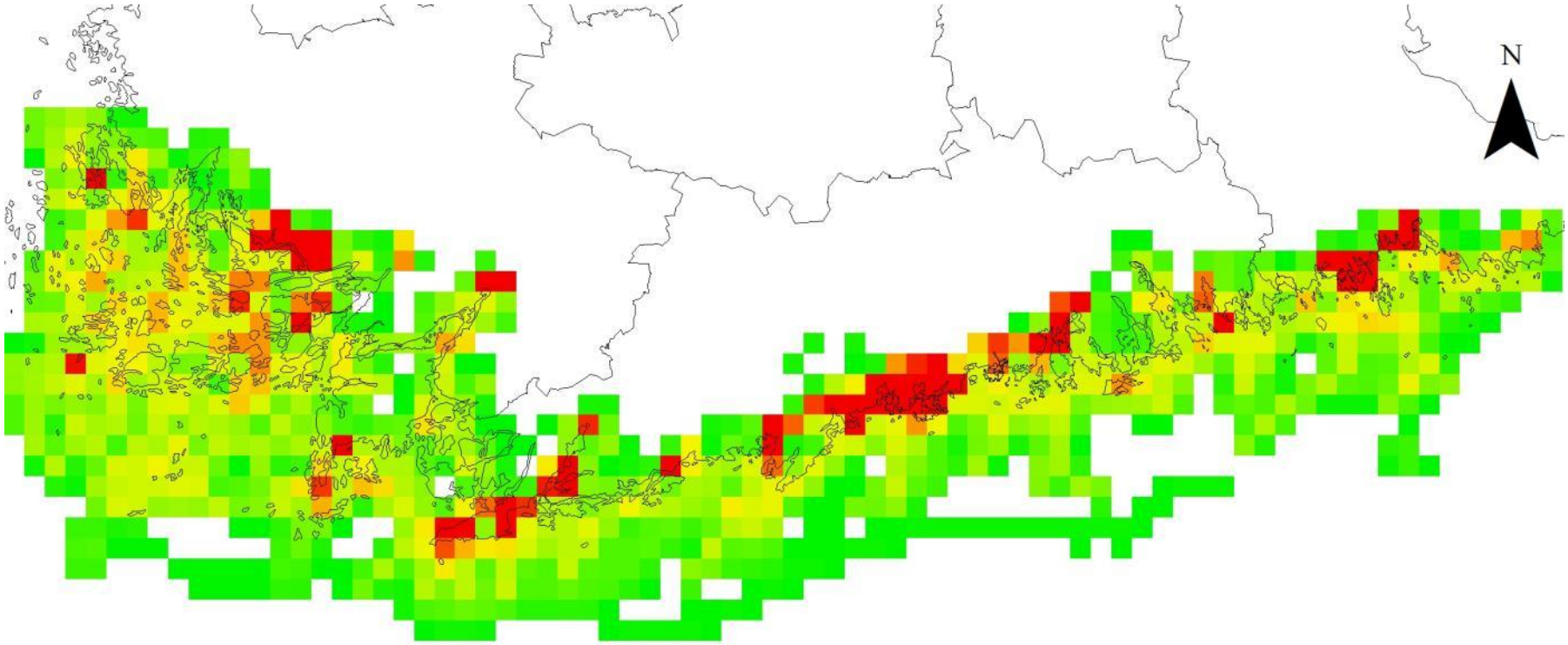




* Malli ei ole luotettava alueilla, joilla yhden tai useamman ympäristömuuttujan arvot ovat niiden arvojen ulkopuolella, joita esiintyy tutkimuspisteillä.

Henna Rinne, Åbo akademi

GIS analysis of human pressures



Preliminary analysis of human pressures on the S and SW coast of Finland (1 km grid cell)

MERIGIS-project / Marco Nurmi

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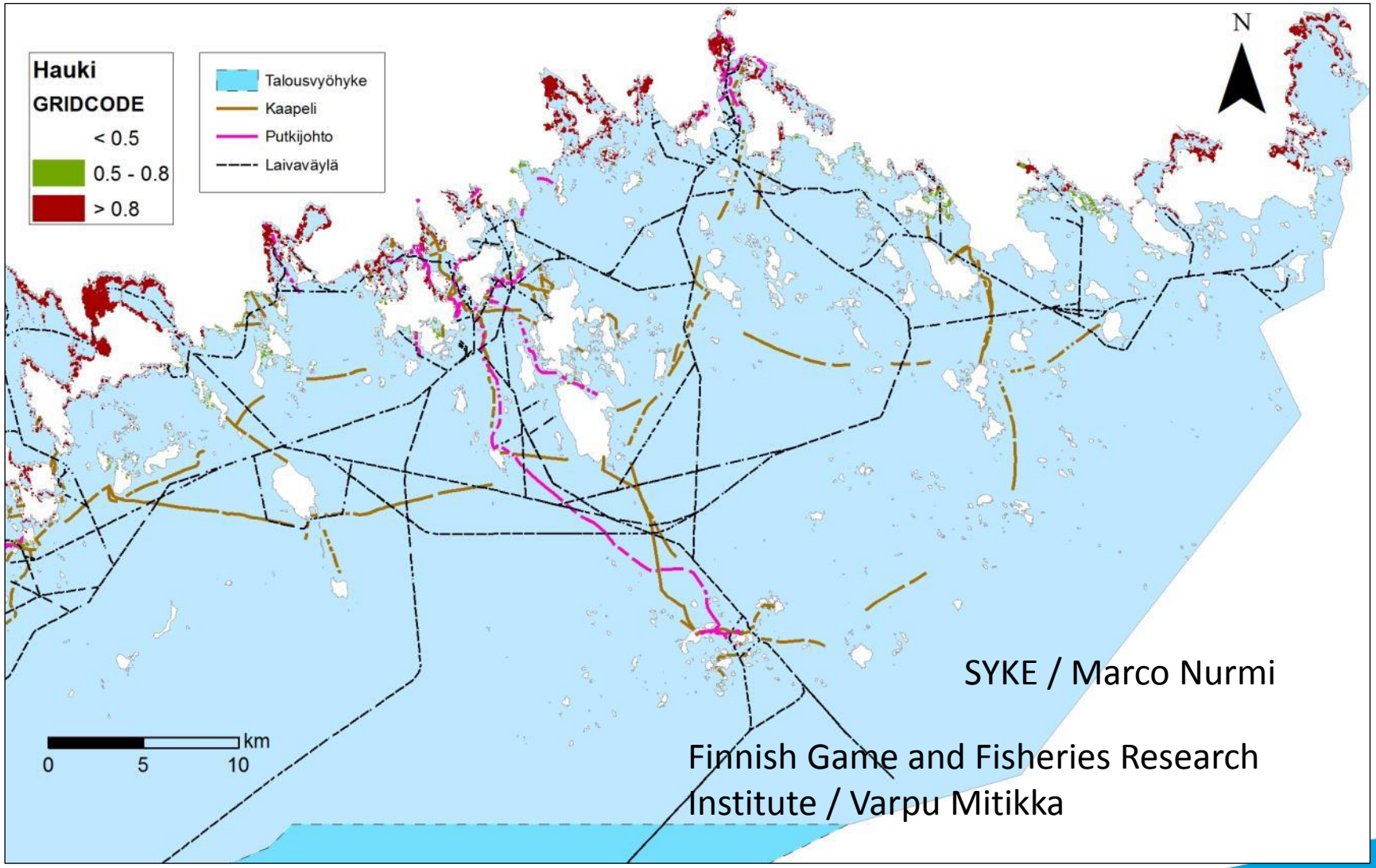
Combining info on biota and human pressures
Example: pike, fairways, cables and other leads



Summary

- A great need for protecting marine space
- However, good data for species, habitats and environmental variables are lacking
- VELMU collects data to support protection and sustainable use of marine space

Ympäristöministeriö
Miljöministeriet
Ministry of the Environment

Thank you for your attention

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