Maritime Spatial Planning Forum







Workshop 7

Integrating Land-Sea Interactions into MSP Lessons, stories & insights from MSP in the Central Baltic

Andrea Morf, Senior Research Fellow, Nordregio

Mari Pohja-Mykrä, Coordinator of the Finnish MSP cooperation

Margarita Vološina, Ministry of Environmental Protection and Regional Development of the Republic of Latvia



















What is LSI? Should we think more LSI? Varying views & degree of institutionalisation

"We have always taken land-sea interaction issues into account. If we consider this a basic planning principle, there is no need to think about it too much." (Survey respondent, 2018)





Pan Baltic Scope

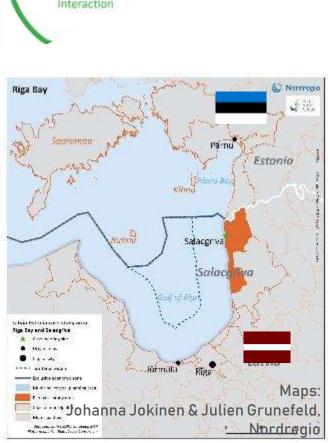
EU MSP Dir!



Pan Baltic Scope WP 1.3 Integrating Land-Sea Interactions into MCD

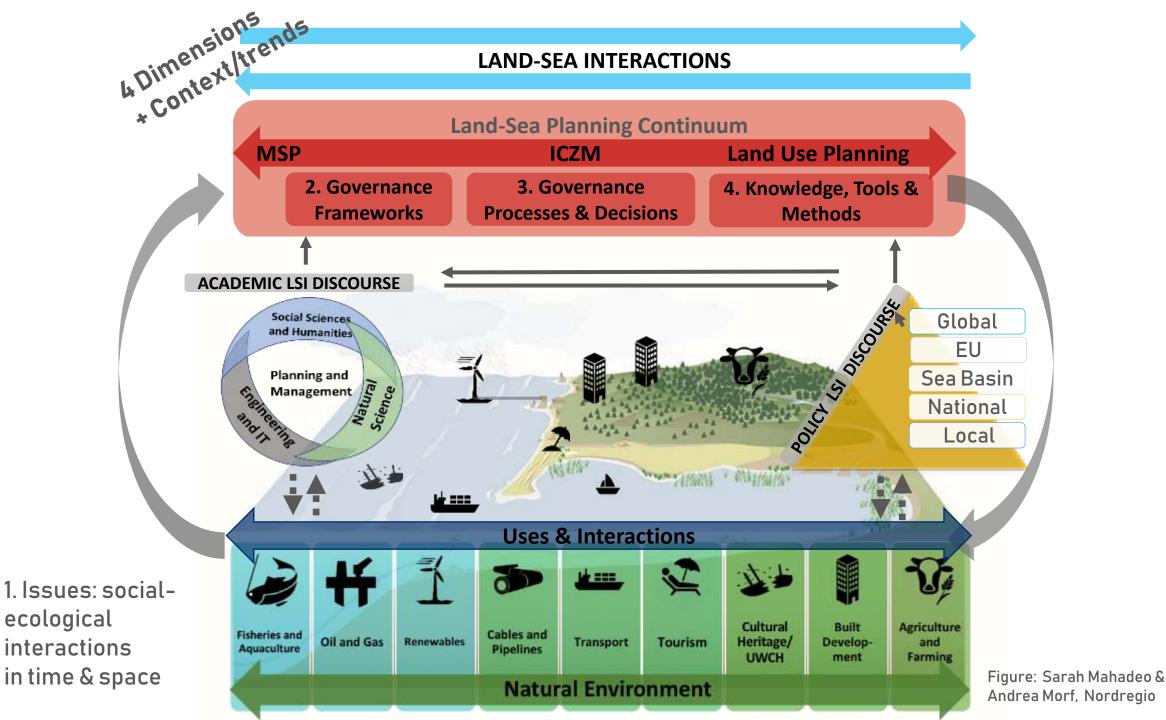
- Scoping: how to think LSI
 & where to work
 - \Rightarrow 2 cases + subcases
 - ⇒ 4 D Framework to think LSI
- Working:
 - ⇒ Planning: stakeholder mobilisation, data collection, pilot plan, workshops with planners & stakeholders
 - ⇒ Challenges & enablers in 4D to report
- Concluding & sharing: Now!





OF LAND SCA

CRACTION





maritime spatial plans
+ maritime spatial plan for the Åland Islands

8 coastal regions

2 goals blue growth & good status of marine waters

2 public consultations, >250 members in a cooperation network Finalized by 31 March 2021

2. Land-Northern Bothnian Sea, Quark and Bothnian Bay Sea Ostrobothnia Interaction Cstrobothnia in the MSP Approach in Finland Satakumta Archipelago Sea and Southern Bothnian Sea

Mari Pohja-Mykrä

MARITIME SPATIAL PLANNING



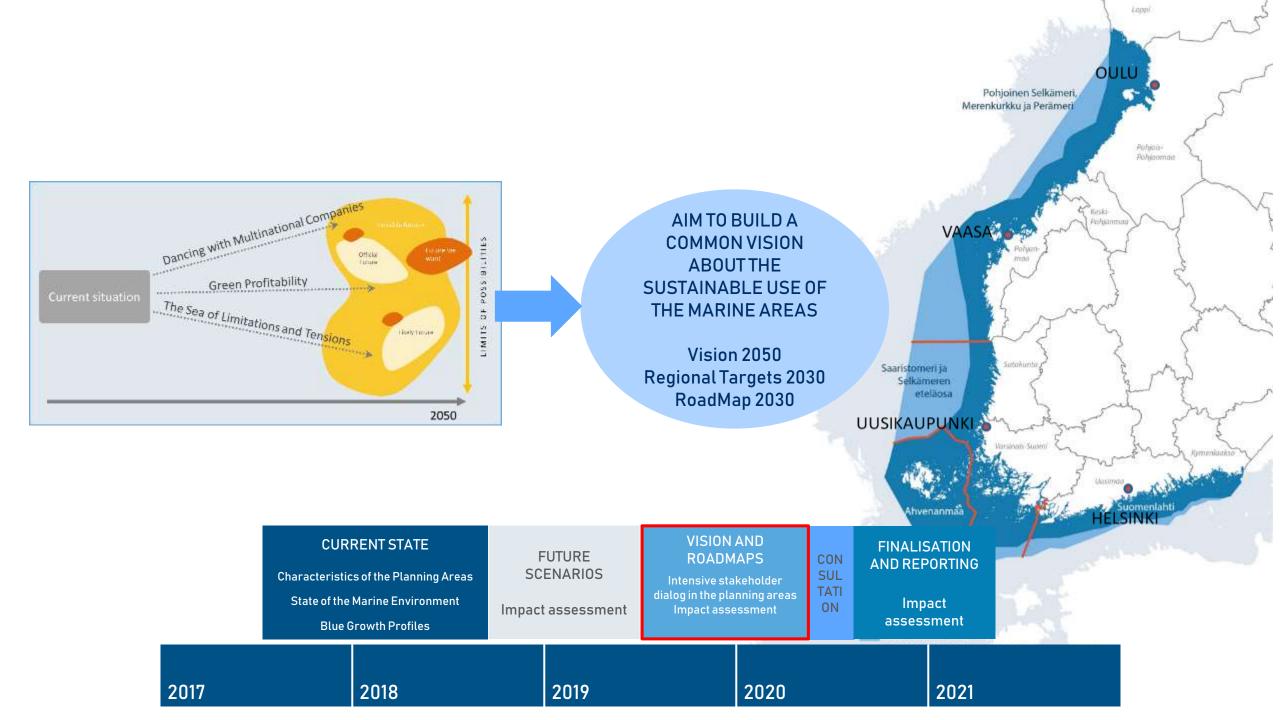
Aland Islands











TYPPI-JA FOSFORIKU ORMASTA suurin osa kulkeutuu tänmereen jokien mukana (typestä 85% ja fosforista 95%). Yleisesti suurin osa typpi- ja fos-Muuttolintujen reitit kulkevat meriulueiden yli. Suoforikuormasta on peräisin maataloudesta. Muita kuormituksen lähteitä messa pääasialliset lintujen muuttoreitit myötailevät. ovat fináksi metsátalous, yhdyskuntlen ja haja-asutuksen kuormitus, Soomen- ja Pohjaniahden rannikkolinjoja Kansainväteollisuus ja kalanviljely. Kuormituksen lähteiden asuudet vaihtelevat lisesti merkittävää on arktisten lintujen muuttoreitti, meriolue/ttain. (/mpdristii.fl, Kuormitus) joka sijoittuu Suomen alueella päättiin Suomenlahdelle. (Birdlife 2014) Tuoreimpien tutkimusten mukaan on näyttöä siitä, että metsätolouden a essus soutres olla huomattavasti alemmin aletettua suurempi, valta-Kevāt- ja syksymuuttojan lisäksi osa lajeista liilikuu rannikunnallisesti japa puolet maatalauden kuormituksesta. (Metsättilauden kolla mantereen ja saariston väililä ruokallu- ja pesimäalueiden väillä. Kaupunkialueita meriin kulkeutuu fladksi ravinteita, kiintooineita, kuten miršo- ja maršomuoveja. MERKITTÄVÄT VAELLUSKALOIEN LISÄÄNTYMISIOKIEN-JA NIIDEN EDUSTAN KALAVÄYLIEN fürvaaminen ovat sakisuistot. Aeskeisid Aulakuntojen elinvoimaisuuden tukemiseksi. Winder besimdealde motolat landet KALCUEN KUTUALUEET sijnittuvat pääasiassa matallin vesiin, rannikkoalueille. Milden säilymisen uhkina ovat muun muussa ronturukentaminen, rehevõityminen, ARCHIPELAGO liettyminen ja ruoppoukset. (Luke) rannikon laguunit HARMAAHYLKEEN population tile vastas meren hyvan tilan modnitelmäd kaikilla Suomen mericlueillo. ITAMERENNORPAN coults populació on hyvássá tilassa Pohjaniahdella, mutta Saaristomeren OUTER DELAGO ja Suomenlähden asalta populaation runsaus ja levinneisys eivät vastaa hyvää tilaa. (Impäristä.) Merinisoldalide ja linnut) **ILMASTONMULTOS** Meret ovat sitoneet ihmiskunnan hillidiaksidipäästöistä japa neliäsasan. Merten lömmetessä niiden kyvyn toimia hilinieluna on oletettu heikentyvän. Amastonmuutsiksen oletetaan Asdavan Suomessa telvisin sadantaa ja samalla roudon vähetessä makeanveden valunta mereen kasvaa oletettavasti lisäten kuprmitusta. Itämeren suolopitoleuuden ennakoiduan vähenevän, minkä puolestaan oletetaan helkentävän esimerkiksi avainiajien elimnimaisuutta. veden lämpeneminen lisää veden kerrostuneisuutta, mikä val vaikuttaa neogblyisest sevan meren olosuhteisiin lisäten hapettomia alueita ja sisäata kuormitusta. Näiden tekijäiden myötä esimerkiksi sinileväntilanteen ennakui-Reheváltyminen ja hapettomat pohjat daan huanonevan. (Furman ym. (tnim.)) Mereen valuva typpi- ja fasfonkuarma kidd plankton- ja sinilevien määrää. Levät vajoavat kuoltuaan pahjaan ja hajatessaan ne kuluttavat happea ja pohjan happiolasuhteet heikkenevät. Hapettamissa olosuhteissa pohjoan aiemmin MARINE ECOSYSTEMS kerdantynyttä fosfaottia vapautuu mereen. (Furman ym. (taim.)) Itámeren pohjasta jopa kolmannes kársii hapen poutteesta (Itamerikooste) ECOSYSTEM SERVICES AND LAND SEA INTERACTIONS

LSI approach in Finland

Meren ekusyoteemien toiminnosi kannalta merkittävässä asemassa uvat avaintajit ja tietyt kuomotyyyit. Mooimuutalsuuden kannalta merkittävid aluelta sijoituu erityisetti motoloilin vesiin, saorten ja luotojen vedensiloilin asiin sakä motoliin hiekkapohyiin.

Avaintajit voivat mahdolistas eiinmahdollisuuksia lukuisalle joukolle muuta lajistoa. Soomen merialuella avaintajeja ovat erityisesti rakkohauru, sin- ja bejusimpuhat ja meriajokas. (Merialuesuunnittelu 2019)

Merellianta luontofyypeistä ekorysteemien toimionan kannalta merkittäviä ja suojettuja avat HELCOMIN ja EU:n luontodisektiviin mukaan jokisuitost, kopeot murtivesilogunini, lanjat motoiot johdet, horjusmoret, vedenalaiset hiekkosiirkiit, riutus sekä uikassaristan handot ja saaret [rempäristä ili Luontotyyppien esittelist]

VYÖHYKKEIDEN OMINAISPIIRTEITÄ

Sisäsaariston / sisempien rannikkovesien vyöhykkeellä veden syvyys on pääseisusa matalas. Alue on merituonnon menimuotoisuoden kannalta merkittävää. Suojeltavien luontotyyppien osalta vyöhykkelle sijoittuu joksusistoja, rannikkolaguuneja, kapeita murtovesilahtia ja matalia lahtia, vedenalaisia hiekkasärikkiä ja riuttoja.

Ulkosaariston / ulompien rannikkovesien vyöhykkeellä suojeltavista luontotyypeistä korostuvat vedenalaiset hiekkasärkät ja riutat. Lisäksi ulkosaariston koodot ja saaret ovat luontourvolltaan merkittäviä.

Avomerialueella merenalaisia suojettavia luontotyyppejä on harvalulkuisemmin, mutta matalimmilla alueilla löytyy vedenalaisia hiekkasärkkiä ja riuttoja. Vyöhykkeellä on runsaasti hapettomia syvänteitä.

Gurrer

Blottife 2014. Lintujen pitämuurtseeritti Suomeura

Furman ym, (toim.). Hûmeri, Ympiriotii ja ekologia.

Hümerityante, frümen ja sen fils.

http://www.hamanheasts.net/Seton_melsts/formerie_stia

139K, Lorentemprohestru, Kalejon Frähmyndsalvær ja aluetuurreitetti (4.8.7018) Merijalvatuurreitetti 2013 Merijalvatuurreitetti Suomerijalvatet suurreitetuluen omiraajalvaset 1.4.2018

Vegäristä fi. Kuormitus. Netja: //www.peparista.fr/fi-P/Man/Stila-ps: Jasmanan dis/Kuormitus Vegärista.fi. Luorisetyyppen aultelyt: luoriselysitrin luorisetyypi.

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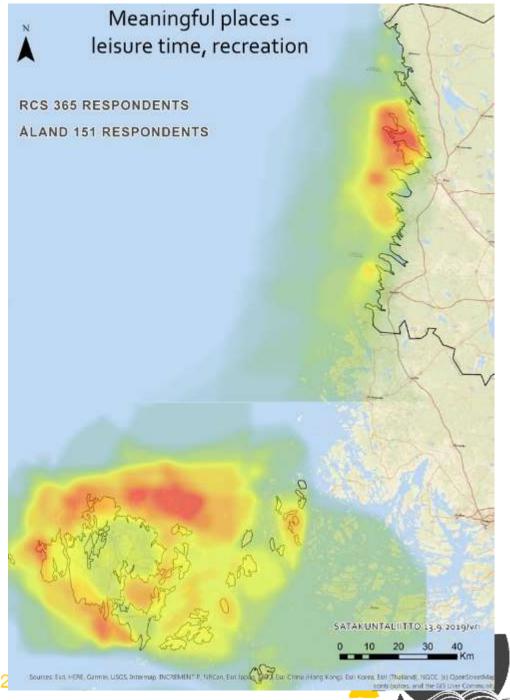
pit/Lucetatyypaler_acittelyt Yespansii fi. Merinsäkkää ja firmit.

https://www.ymperists.fc/fi-Pi-Meni-Milla_on_itameren_stip/Meni-Millacon_is_ linear



Participatory GIS to gain local-level knowledge about meaningful places and processes in the coastal and sea area

- Data
 - > RCS: 467 respondents, 840 map markings
 - Åland: 361 respondents, 450 map markings
- Meaningful places 4 categories (+conflicting places)
 - ➤ Leisure time/recreation, emotions, livelihood, nature and cultural values
- How to interpret the data?
 - ➤ Where?
 - > For who?
 - ➤ Why?
 - ➤ When?
 - > What is needed to maintain it?





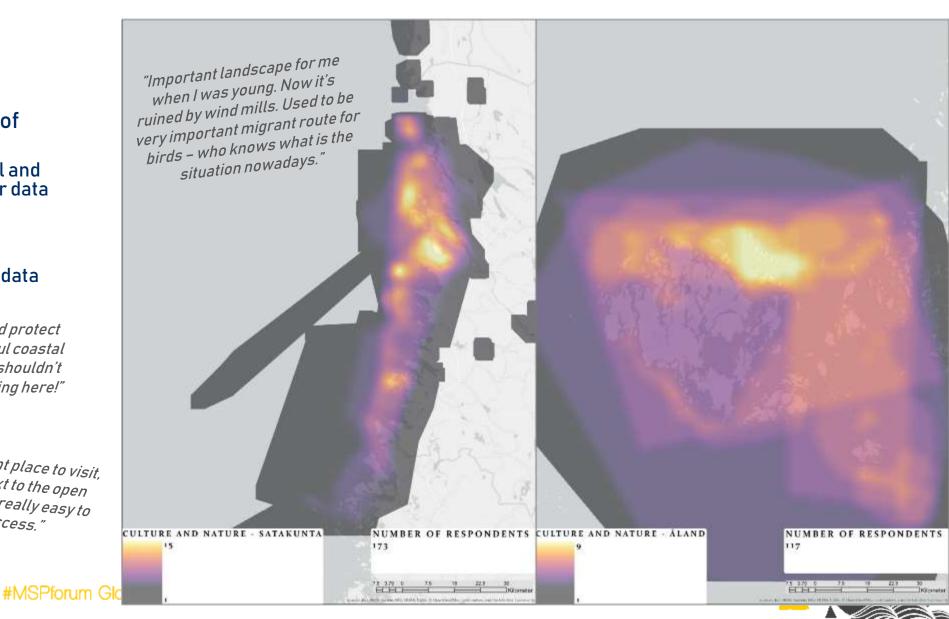
What about LSI issues?

- Local knowledge data (94 % of respondents)
 - Complements the regional and national-level stakeholder data
- Meaningful places
 - ➤ Indication of LSI issues → data classification

"Our family cottage is on the island. We hunt waterfowls, fish, enjoy nature. It's really sad to see how bad the status of the sea is and how it effects on fish stocks nowadays."

"One should protect this beautiful coastal area – you shouldn't build anything here!"

> "Excellent place to visit, just next to the open sea and really easy to access."



3. The Pan Baltic Scope Riga Bay Case

Margarita Vološina

Planners, experts, stakeholders and local municipalities from Estonia and Latvia

working together within Pan Baltic Scope

Context:

*MSPs on their way

(LV approved in 2019, EE expected in 2020)

*different legislative frameworks & planning systems

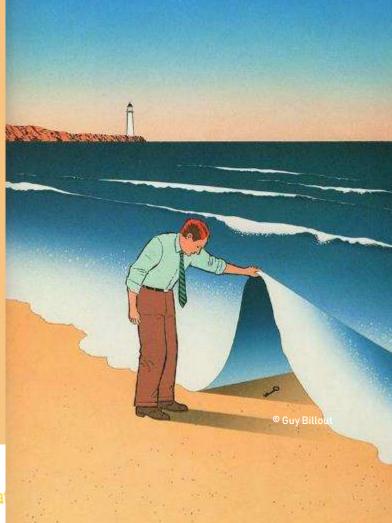
(MSP & terrestrial plans - LV 2 km overlap, EE O km overlap)

Challenge:

How to involve local authorities (municipalities/communities) in MSP?



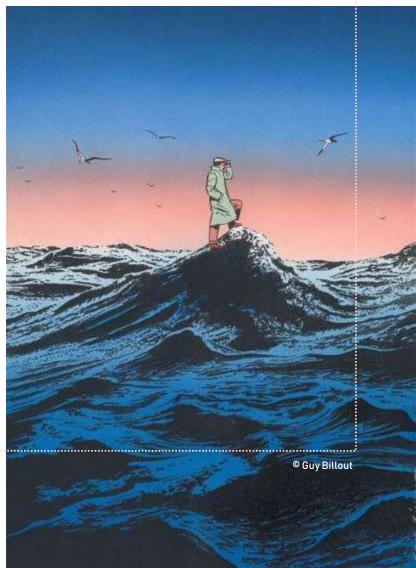






Step into the sea

- Thinking
- Drawing
- Talking





Step into the sea

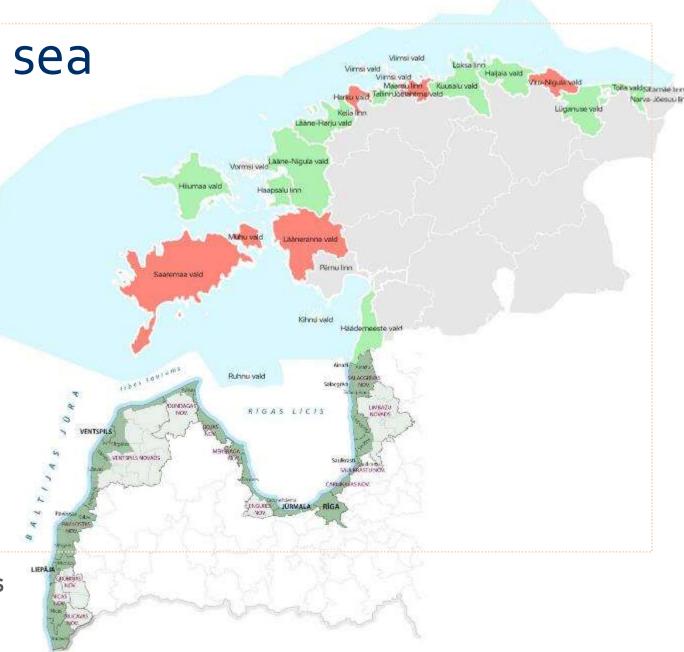
Thinking

1) considerations to use and/or to plan the uses of Drawing coastal marine waters?

Talking

2) for what activities?

- 3) what type of document?
- 4) which sectors/themes should be included?
- 5) to separate/define national and local mandates acting in coastal marine areas? #MSPforum Global Meets





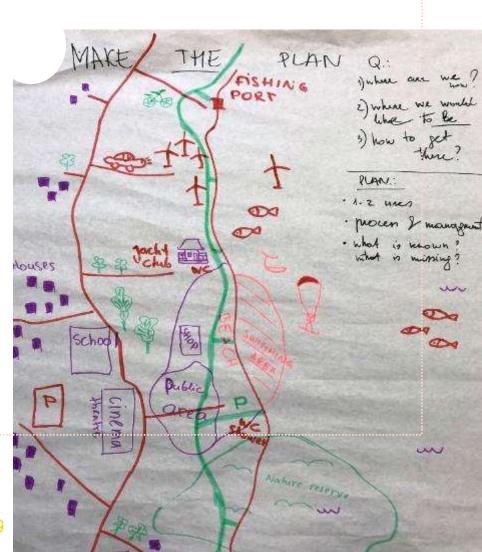
Step into the Sea

Thinking

Drawing

Talking







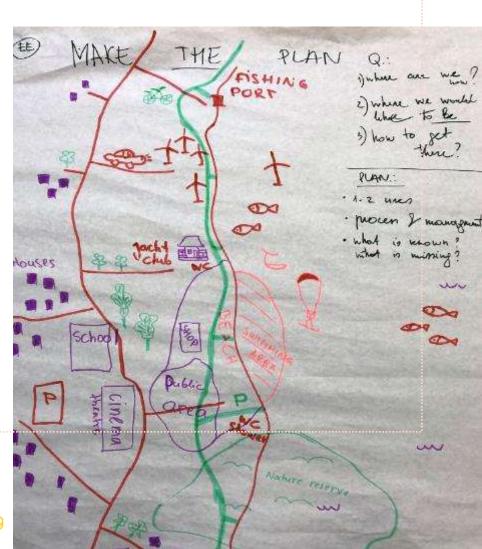
Step into the Sea

Thinking

Drawing

Talking







Step into the sea

Thinking

Drawing

Talking





Findings & takeaways

*planning for municipalities should not stop at the coastline

*communication between different kinds of stakeholders and experts is essential and challenging, but even more challenging is to lift the possible solutions to the level of political agreement

*at the moment institutional capacity & specific knowledge for planning ahead in the marine waters is limited





Results Riga Bay

www.panbalticscope.eu

*Pilot Thematic Plan

*Guidelines for planning marine coas al waters and the adjacent land areas at

the local level





So, what... have we learned...?
What do we want to share?

- LSI Synthesis Report: challenges & enablers
- FIAXSE-Storymap & LV Guideline
- Framework & Recommendations



I. Be aware of Land-Sea Interactions (spatial, flows and other types) throughout the planning loop

LAND-SEA INTERACTIONS

IV. Promote interaction of institutions and stakeholders (all types!) to address LSI. Clarify mandates & influence

SCALEIS III. Keep a differentiated view on LSI also regarding scale, context & over time

Land-Sea Planning Continuum "One Space"

2. Governance **Frameworks**

4. Knowledge, Tools & Methods

Built

Develop-

ment

II. Promote a differentiated (4-dimensional) understanding of land-sea interactions: issues, governance frameworks, processes, knowledge & methods

VI. Allocate resources, develop capacity and share experiences for working with LSI, (especially local/ regional level authorities)

1. Issues, social ecological interactions in time & space

V. Promote the development of reliable and sharable knowledge on LSI, Fisheries and including maps Aquaculture

Natural Environment

Uses

Figure: Sarah Mahadeo & Agriculture and Andrea Morf, Nordregio Farming

Maritime Spatial Planning Forum

Global Meets Regional







THANKS!



Get the results: **Draft Report** excerpt available @Nordregio stand





Lessons, Stories

and Ideas on how

to integrate Land

Sea Interactions

into MSP





in the beauty







Maritime Spatial Planning Forum





Global Meets Regional

Assessing the impacts of MSP on society – economic and social analyses

Heini Ahtiainen

Luke Dodd, Elina Laurila, Maija Holma

HELCOM

Pan Baltic Scope, Activity 1.2.5



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Economic, social, cultural and ecosystem service impacts of MSP

Recommendations on developing a regional framework

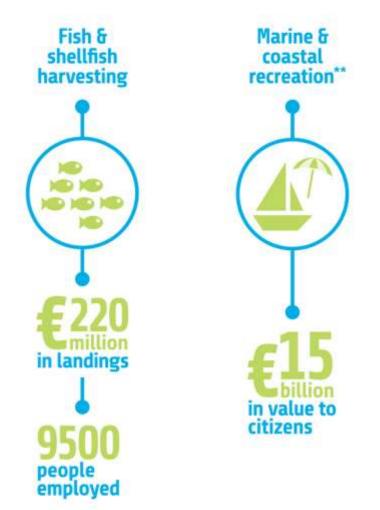
Take-home messages





Use of the marine environment affects human well-being

Benefits from the Baltic Sea*



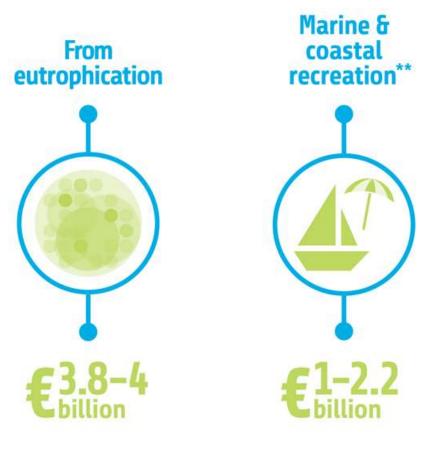




Environmental status affects human well-being

Potential revenue losses*

when good environmental status is not achieved



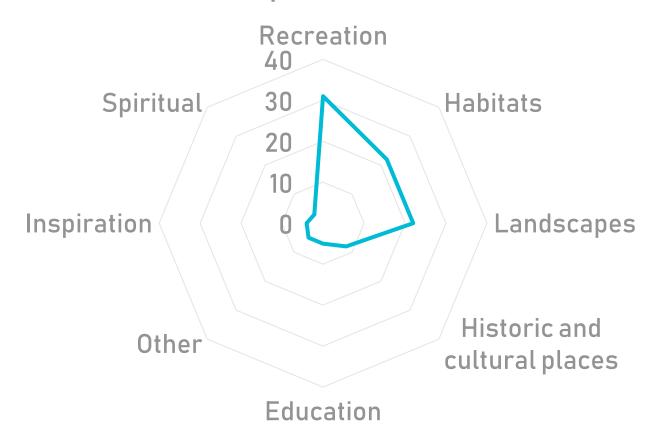
Fish stock & habitat degradation

* Per year ** Travel cost method Source: State of the Baltic Sea report, Second HELCOM Holistic Assessment



Importance of cultural ecosystem services in the Baltic Sea

Mean points (out of 100)





What did we do?

• Literature review and survey of assessing economic, social, cultural and ecosystem services impacts in MSP (lead: HELCOM)

 Recommendations on developing a regional framework for economic and social analyses in MSP (lead: HELCOM)

Presented in Workshop 4: Assessing Cumulative Impacts in MSP

• PlanWise4Blue: Integrated economic and cumulative impacts model (lead: Estonian Ministry of Finance)





Why assess economic, social, cultural and ecosystem service impacts of MSP?

- Implement the ecosystem-based approach
 - Interaction between the ecosystem and socio-economic system
 - Sustainable use of marine goods and services
- Consider economic, social and environmental aspects (EU Maritime Spatial Planning Directive)
- Capture all relevant impacts on human welfare
- Improve the comparability of impacts





Challenges

- Lack of data, resources and expertise
- Lack of comparable approaches and results
- Considerable room for interpretation on what kind of approaches and results are needed

→ Need for development work and collaboration





Economic and social analyses for MSP

Economic contribution from sea uses

Effect of changes in environmental state/ecosystem services

Relative importance of sea uses and ecosystem services

Comparison of the benefits and costs of alternative spatial plans





Benefits of regional work on economic and social analyses

- Enhancing regional cooperation and coherence of approaches and outputs across countries
- Aiding national and local authorities
- Improving the consideration of economic, social, cultural and ecosystem services impacts in MSP

 Example of a regional framework for economic and social analyses in Second HELCOM Holistic assessment (HOLAS II)





Recommendations on developing a regional framework for economic and social analyses in MSP (1/2)



Aim for overarching assessment of economic, social, cultural, environmental and ecosystem services impacts of MSP



Conduct integrated analysis of the ecosystem and socio-economic system to follow the ecosystem-based approach



Build on existing work and frameworks for the integrated assessment



Recommendations on developing a regional framework for economic and social analyses in MSP (2/2)



Develop approaches, data and results for spatial analyses



Develop common indicators for assessing economic, social and cultural aspects of MSP



Enable and support regional cooperation and coherent approaches and results



Developing the framework in practice (1/2)



Work in international and interdisciplinary cooperation



Engage stakeholders



Target the specific needs of planners and policy-makers



Ensure continuation and institutional memory



Developing the framework in practice (2/2)



Develop expertise and allocate resources for the analyses



Establish common terminology and understanding



Find synergies and commonalities between MSP and other policies



Ensure flexibility to allow for differences across areas



Take-home messages

- MSP has various impacts on economic, social, cultural and ecosystem service aspects
- 2. These impacts should be identified and assessed to account for effects on human well-being
- 3. Regional frameworks and increased coherence across countries benefit also national and local authorities



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Thank you!

More information:

heini.ahtiainen(at)helcom.fi

http://www.panbalticscope.eu/activities/advancing-the-implementation-of-the-ecosystem-based-approach-and-data-sharing/economic-and-social-analyses/

Leaflet and report on recommendations available

Background report coming soon!

















