

Ecosystem service information in regional level maritime spatial planning

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About me & our work

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The effective Finnish Maritime Spatial Plan 2030, approved in 2020

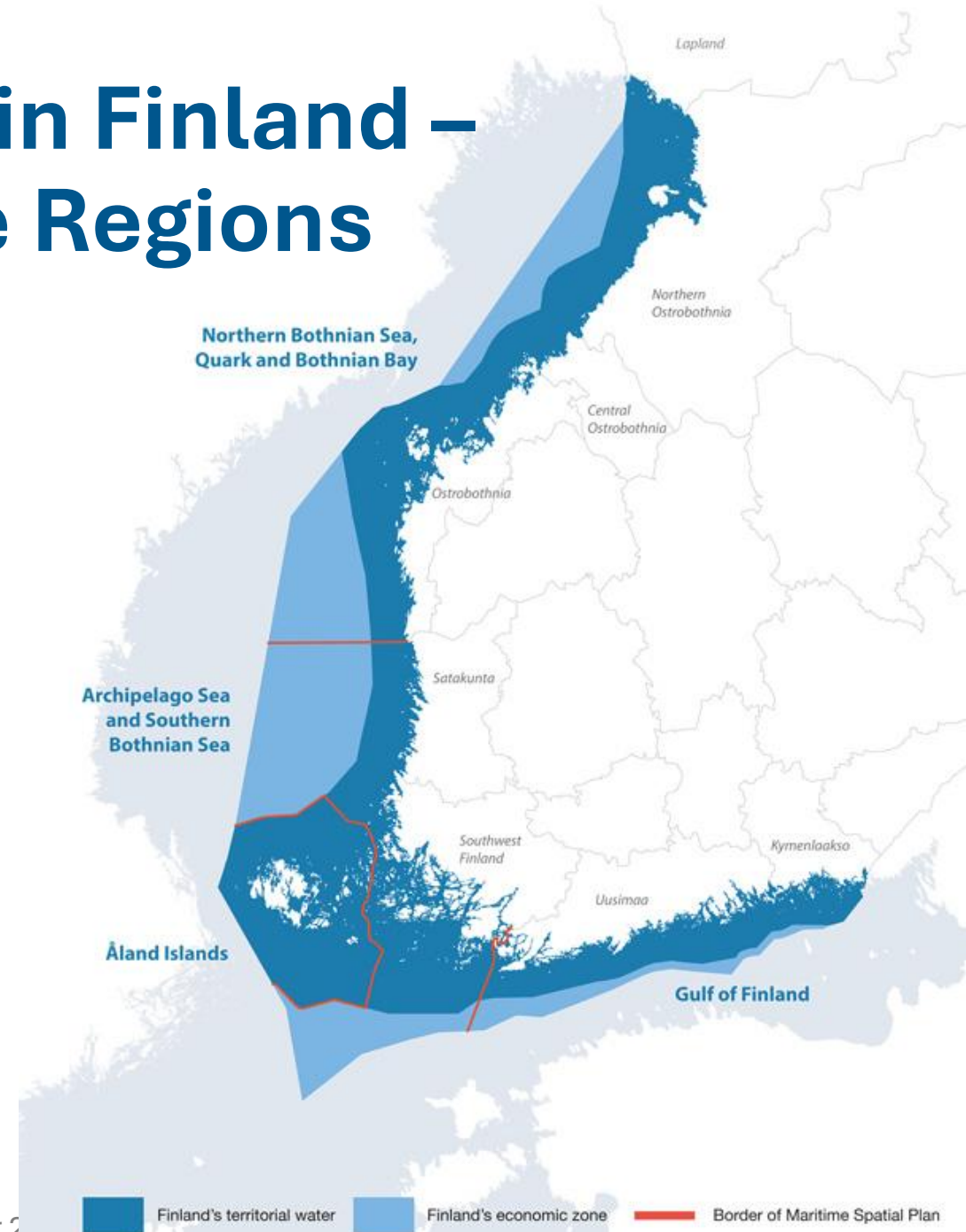


Agenda

1. Maritime Spatial Planning at the Regional Level in Finland
2. Valuable areas for Ecosystem services in Finland's marine areas
3. Incorporating cultural ecosystem services to MSP
4. How ecosystem services are reflected in Finland's ongoing MSP round

Maritime Spatial Planning in Finland – Conducted together by the Regions

- MSP is implemented regionally by **eight coastal councils**, as mandated by the Land Use and Building Act to jointly prepare and align plans for the territorial waters and EEZ.
- Together, eight councils prepare **one national maritime spatial plan**, divided into three regional parts:
 - Gulf of Finland
 - Archipelago Sea and Southern Bothnian Sea
 - Northern Bothnian Sea, Quark and Bay of Bothnia



Valuable areas for Ecosystem services in Finland's marine areas

- Study identified key marine areas valuable for ecosystem services — known as ESPA areas.
- ESPA areas are based on comprehensive spatial data, participatory mapping, and stakeholder collaboration, following the CICES v5.1 classification.

CICES = The Common International Classification of Ecosystem Services, and are divided into regulating services, provisioning services, and cultural services

- The study seeks to balance offshore wind power development with ecosystem service values — originally its main focus, but more broadly supporting sustainable MSP





Key messages from the study



- **Showing importance of ecosystem services in MSP**
 - Three main categories of ecosystem services are mapped across Finland's marine and coastal zones.
- **Make the benefits provided by biodiversity visible to people and helps to safeguard ecosystem functions**
 - Helps planners consider areas where ecosystem services should be protected, restored, or sustainably used.
- **Guide future sustainable use of marine ecosystems**
 - Nationally valuable concentrations of ecosystem services in Finland's marine areas were identified using comprehensive ecological, social, and cultural spatial data, as well as through a participatory mapping survey.
- **The data were produced directly in a spatial format compatible with use in maritime spatial planning**

Incorporating cultural ecosystem services – Adding new value to Finland's MSP

For the first time, cultural ecosystem services—areas important for recreation and nature-based tourism—have been comprehensively mapped

A participatory online mapping survey (Maptionnaire) gathered local and experiential knowledge on meaningful and culturally valuable places, strengthening stakeholder involvement and commitment

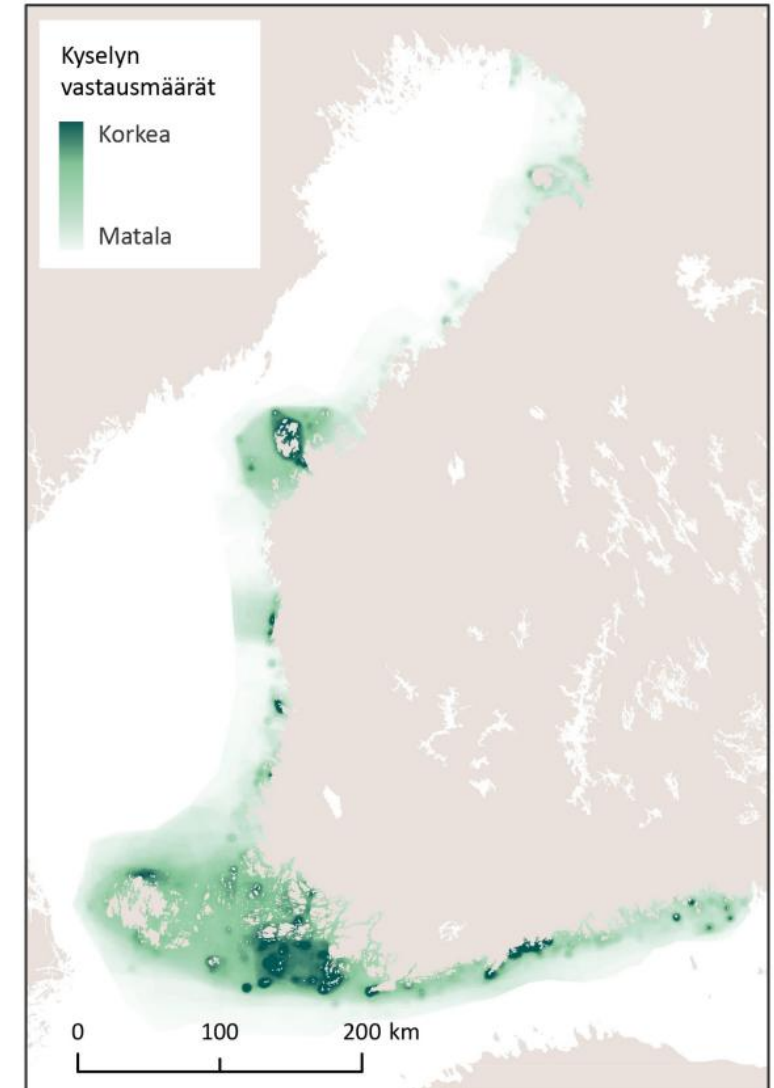
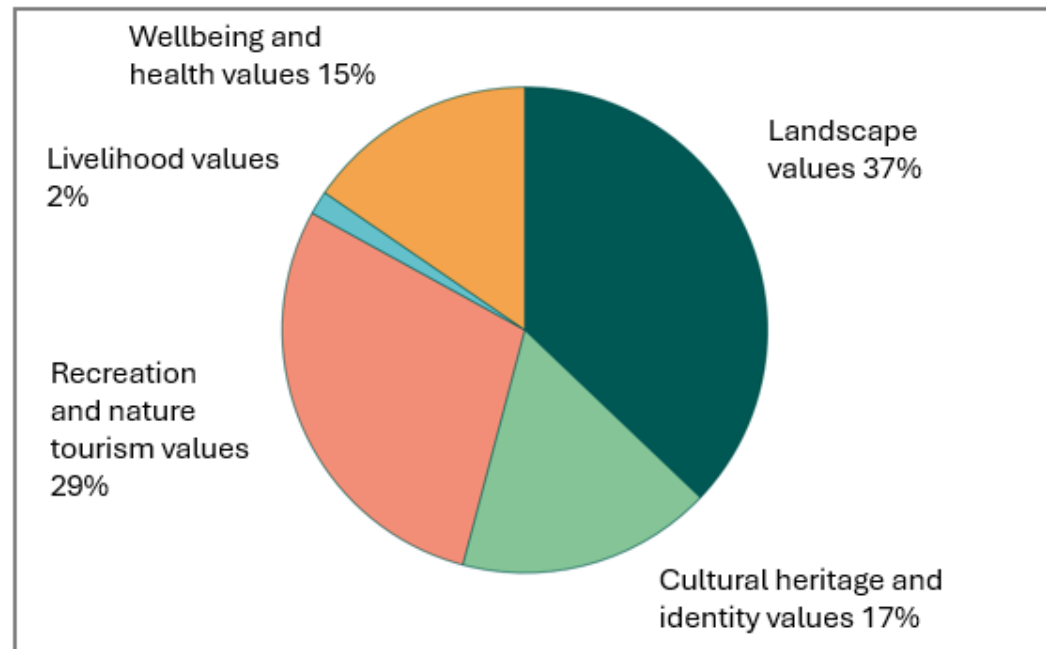
Other sources of data include:

- Recreation (camping/hiking related infrastructure, overnight stays, recreational fishing, hunting, birdwatching and other recreational activities)
- Valuable landscapes and maritime heritage
- Data from other previous PGIS surveys



Participatory mapping results

- 1952 respondents and in total 6466 markings on the map
- Including separate written descriptions of the results of the mapping for each planning area.



Significant areas for cultural ecosystem services

Method;

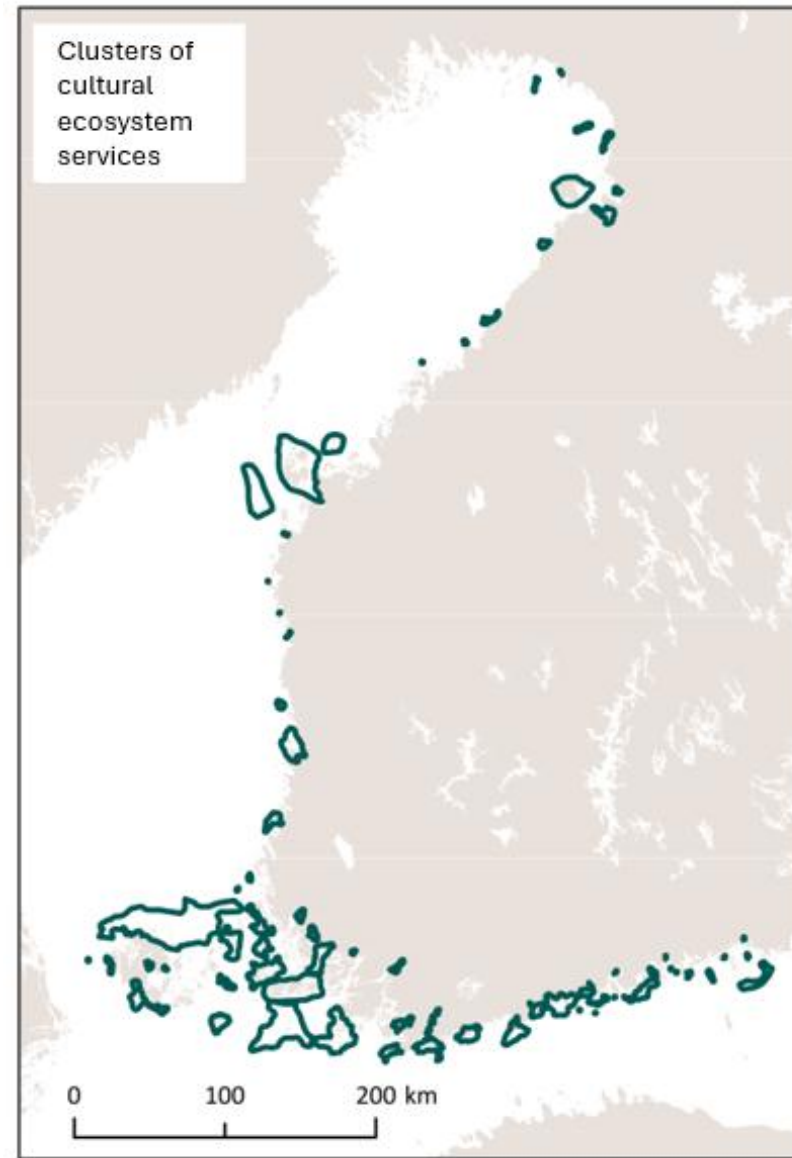
Includes areas on-land max. 200m from the coastline.

All data layers were transformed into density surfaces, scaled to a common range and then summed.

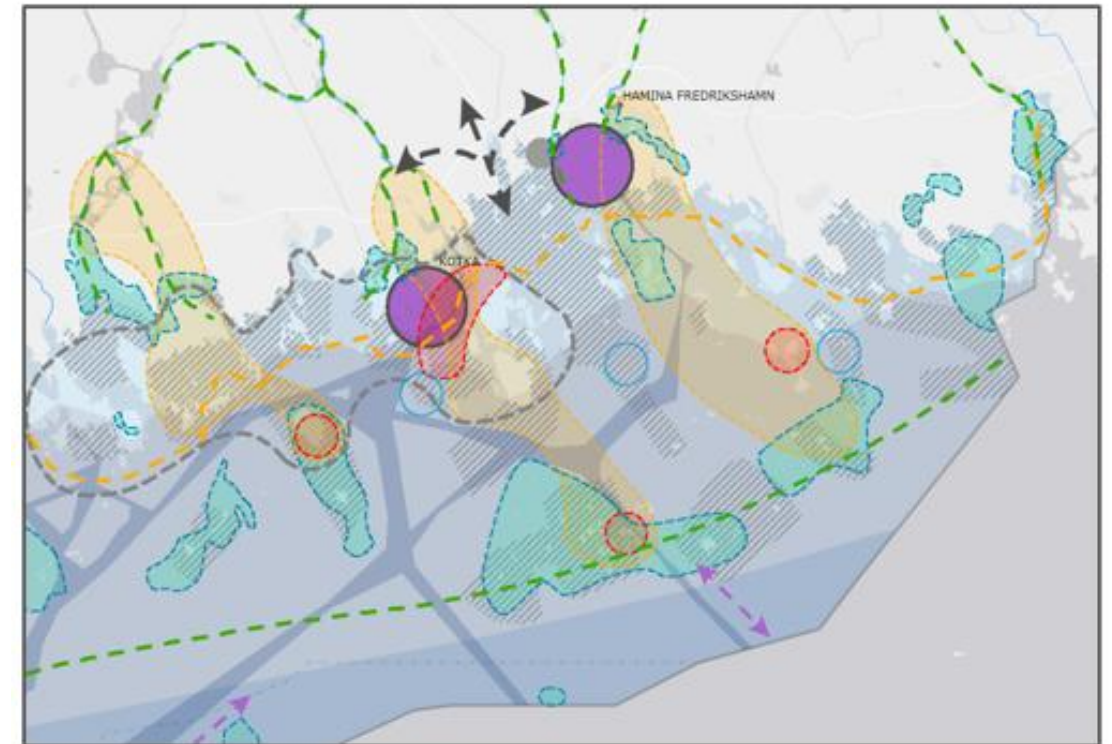
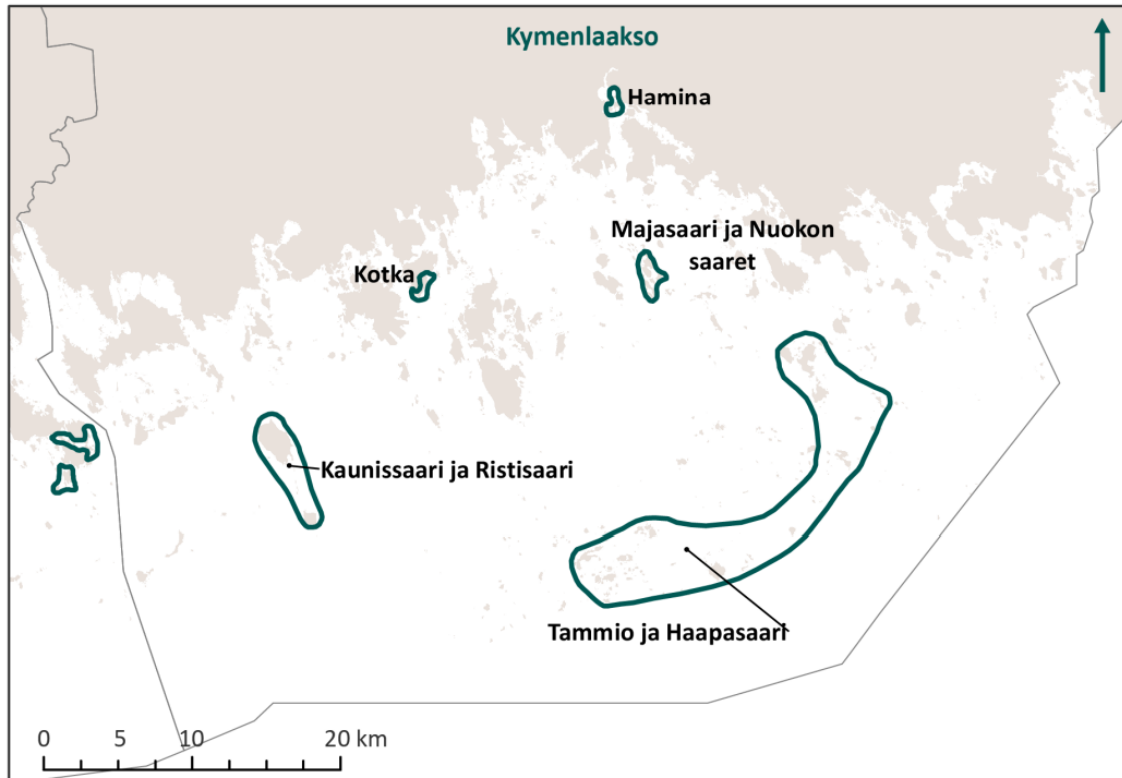
The highest 5% of the values were identified as the significant areas (the 0,95 quantile).

Results validated in a workshop with MSP Planners.

71 areas with separate descriptions of services



How to utilize the significant areas for cultural ecosystem services in MSP?



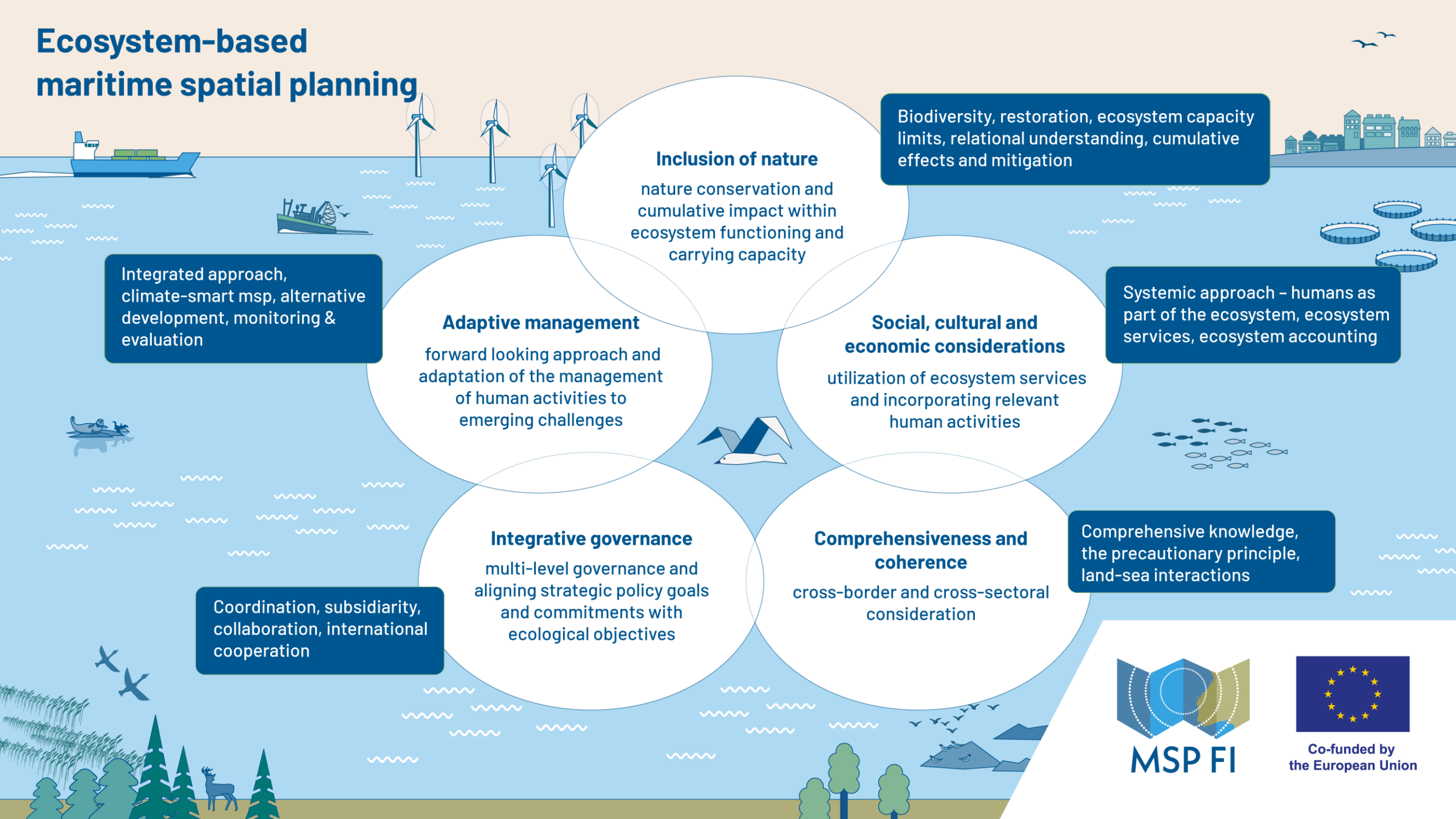
-  Cultural values
-  Tourism and recreation
-  Tourism and recreational connection

How ecosystem services are reflected in Finland's ongoing MSP round?



- Ecosystem services are more systematically integrated into the planning process, particularly through the use of identified ESPA areas
- The planning process applies the ecosystem-based approach, in which ecosystem services form an essential component
 - The HELCOM-VASAB MSP WG's updated principles for the ecosystem-based approach will be incorporated in the current MSP process

Ecosystem-based maritime spatial planning

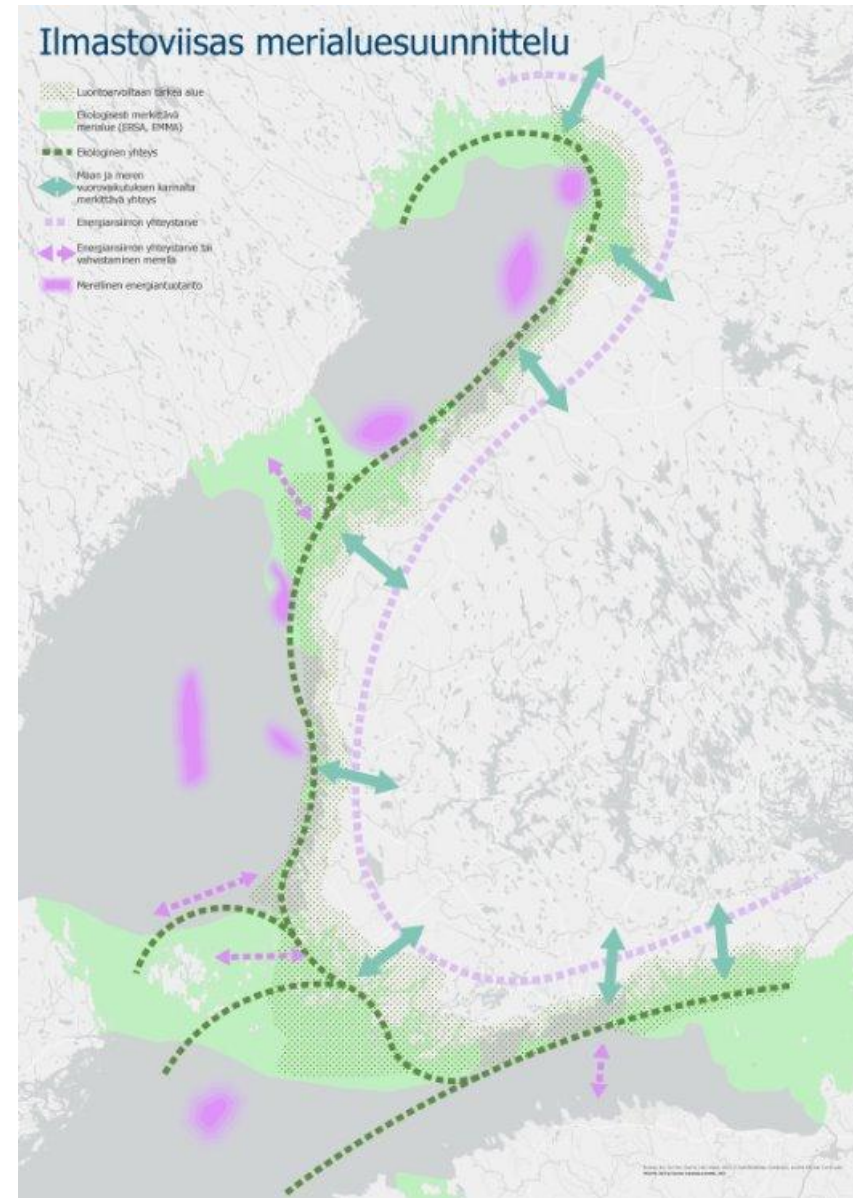


Thematic perspective - Climate-smart MSP

Climate-smart MSP is one of the strategic themes of the current MSP planning round

During the **draft plan phase** and as part of the **SEA process**, three **theme-based planning perspectives** have been developed.

In the climate-smart planning perspective, **regulating ecosystem services form an important layer** supporting sustainable and resilient spatial solutions.



THANK YOU!

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