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# Next generation of ecosystem service maps, can we reach flow?

**Louise Forsblom**, Elina Virtanen, Susanna Jernberg  
Finnish Environment Institute  
MAREA project final event 2.11.2022





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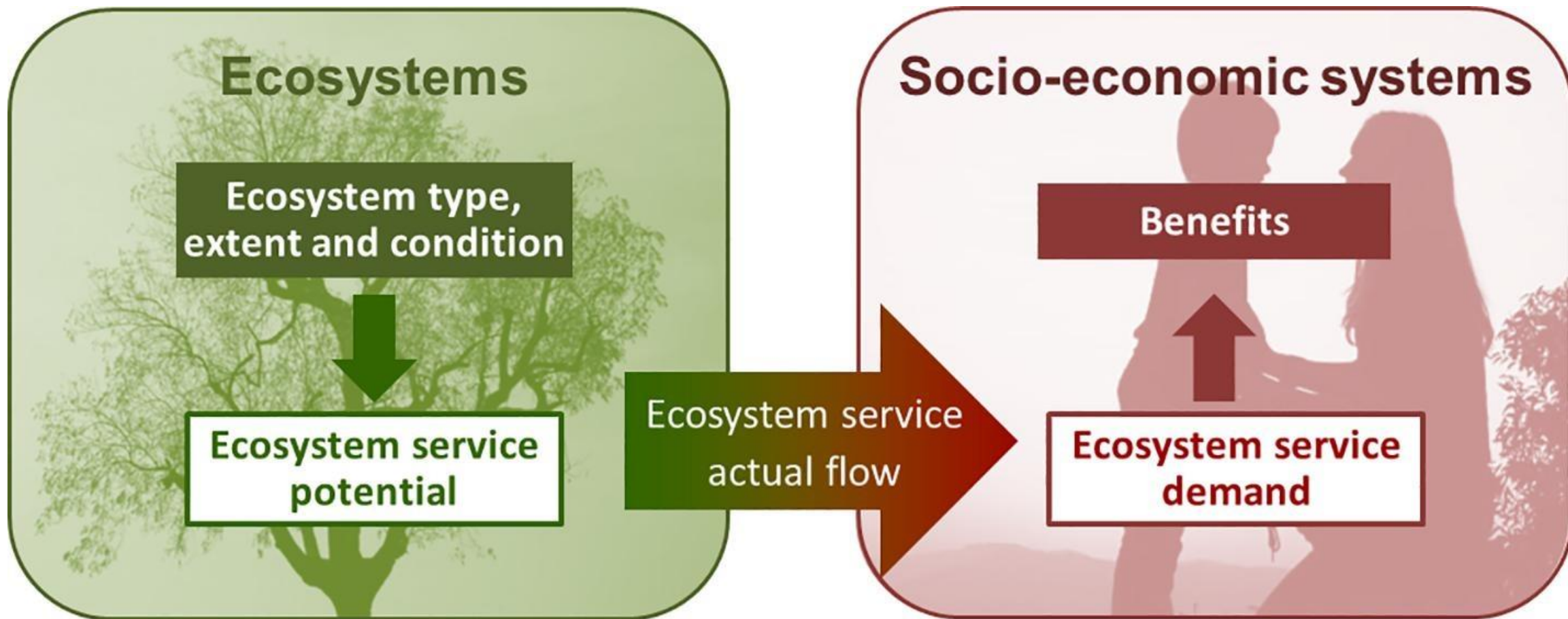


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# Next generation of ecosystem service maps, can we reach flow?

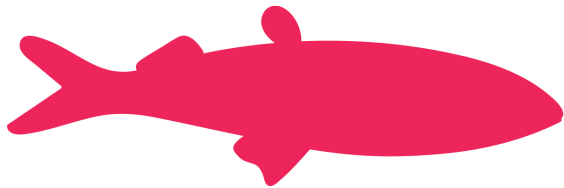
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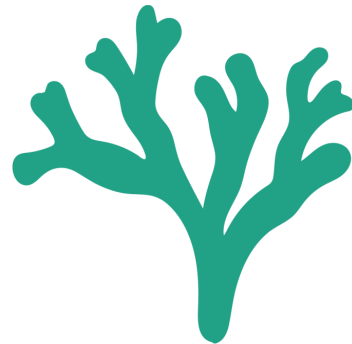


# Ecosystem Services classified according to Common International Classification of Ecosystem services (CICES v.5):

Provisioning services



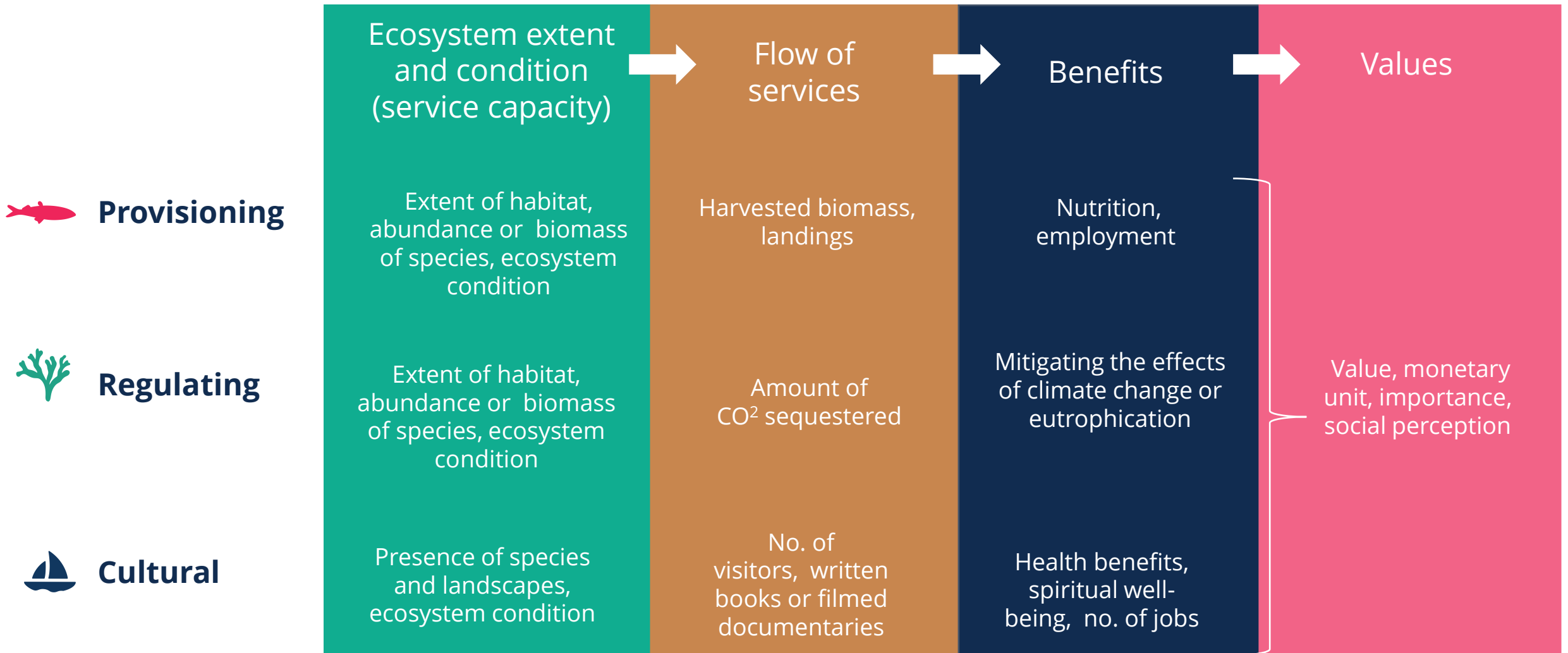
Regulating and maintenance services



Cultural services



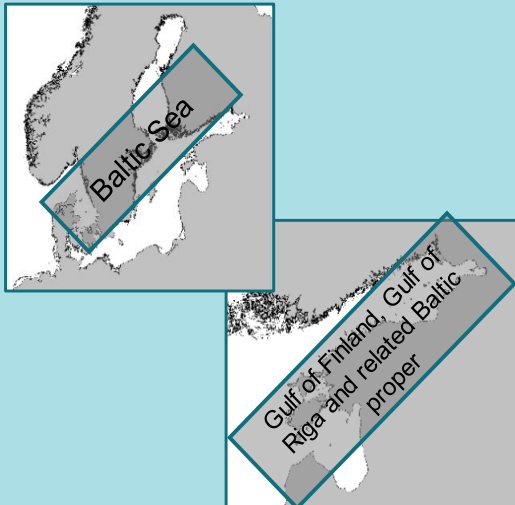
# Framework with examples of ecosystem service indicators



# Selection criteria

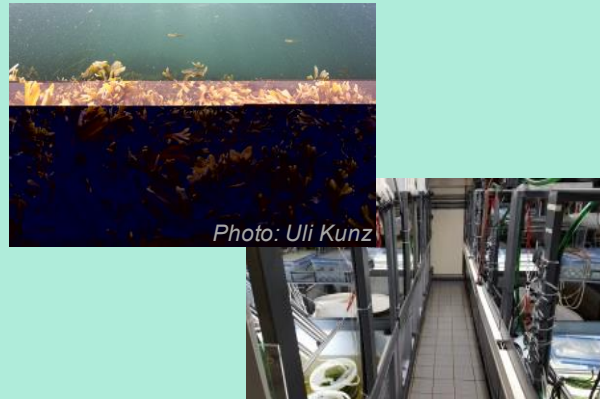
## Relevance

Only services relevant for the Baltic Sea and the study area



## Process-based

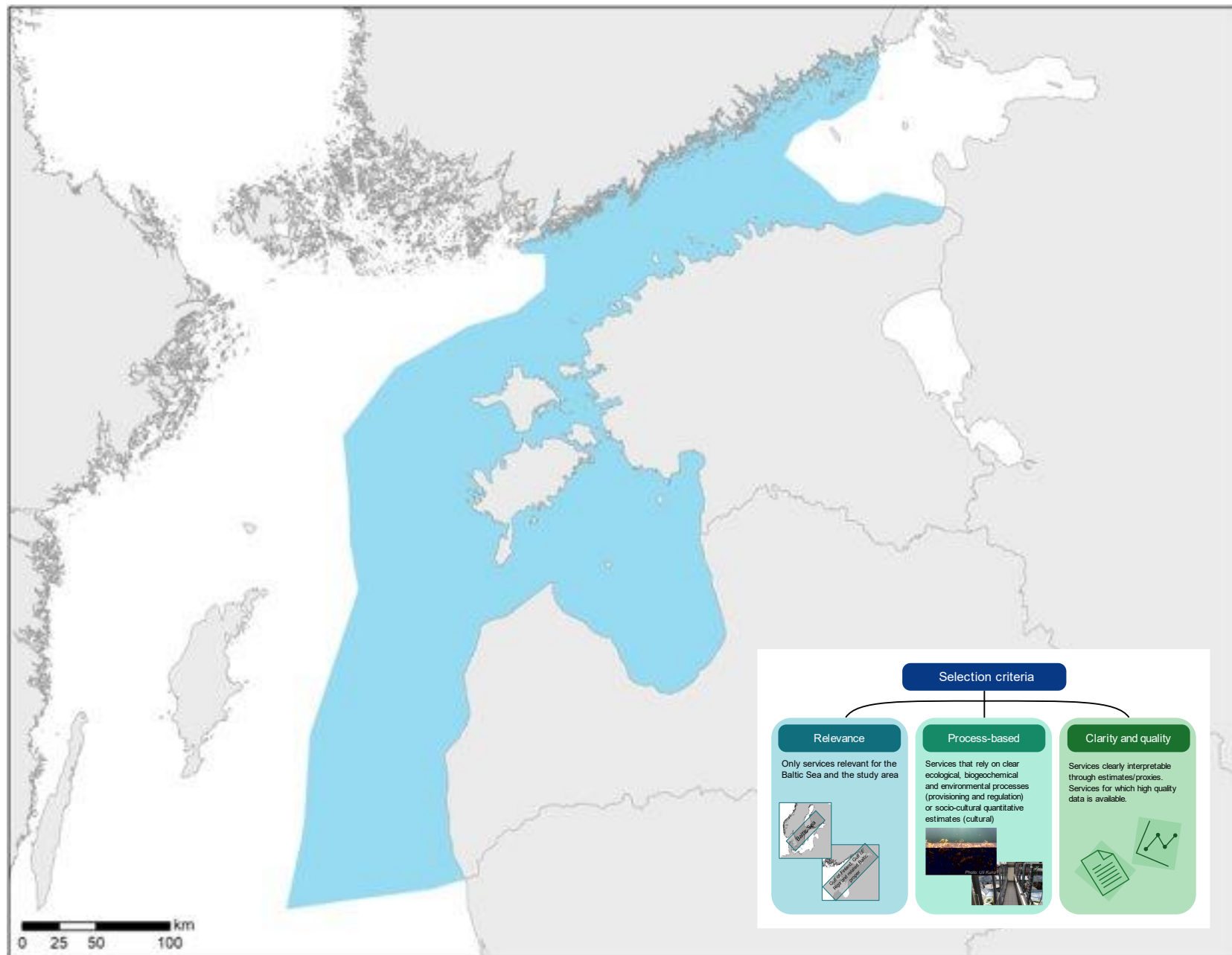
Services that rely on clear ecological, biogeochemical and environmental processes (provisioning and regulation) or socio-cultural quantitative estimates (cultural)



## Clarity and quality

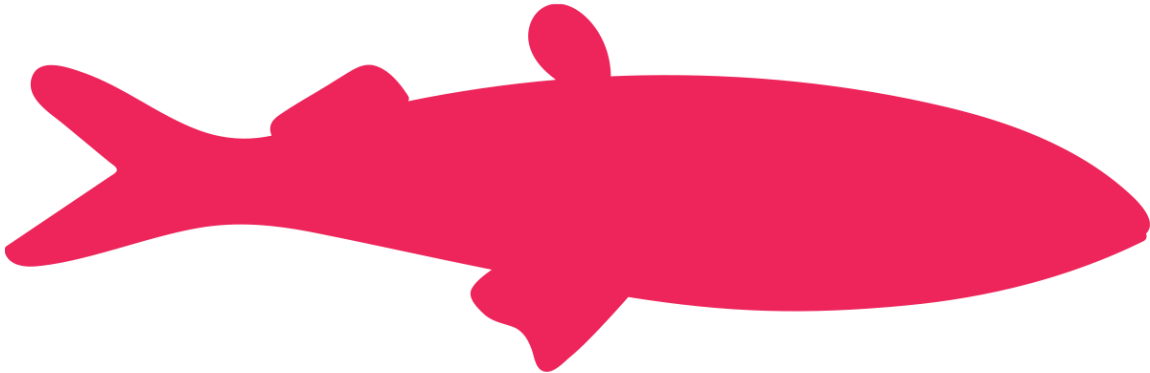
Services clearly interpretable through estimates/proxies. Services for which high quality data is available.



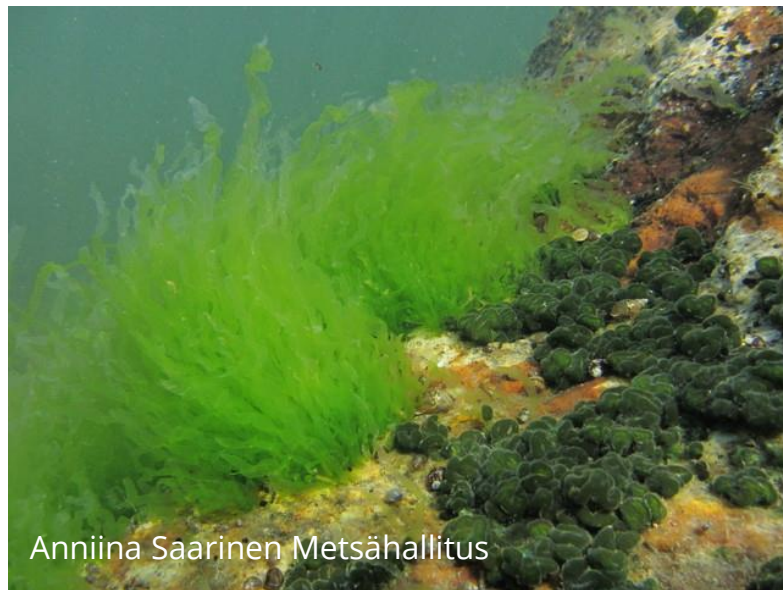


Schematic & map Francisco Barboza & Jonne Kotta University of Tartu

Provisioning







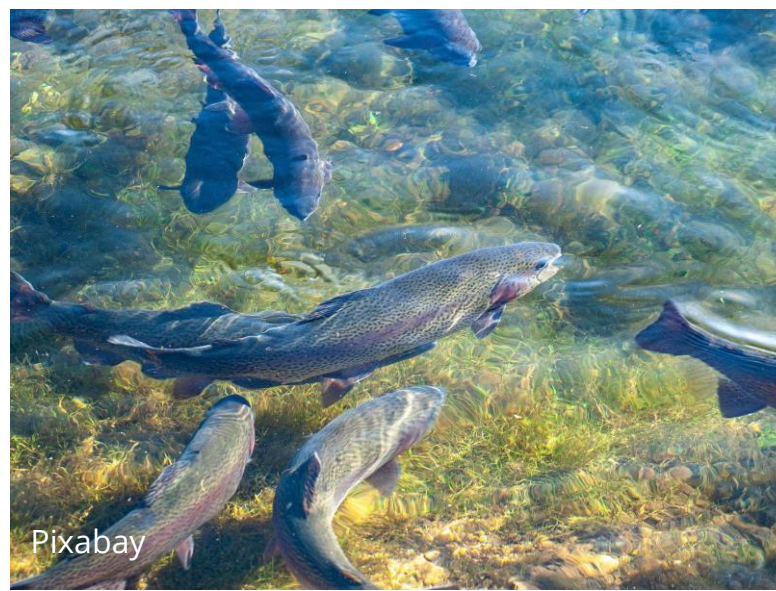
Anniina Saarinen Metsähallitus



Juuso Haapaniemi Metsähallitus

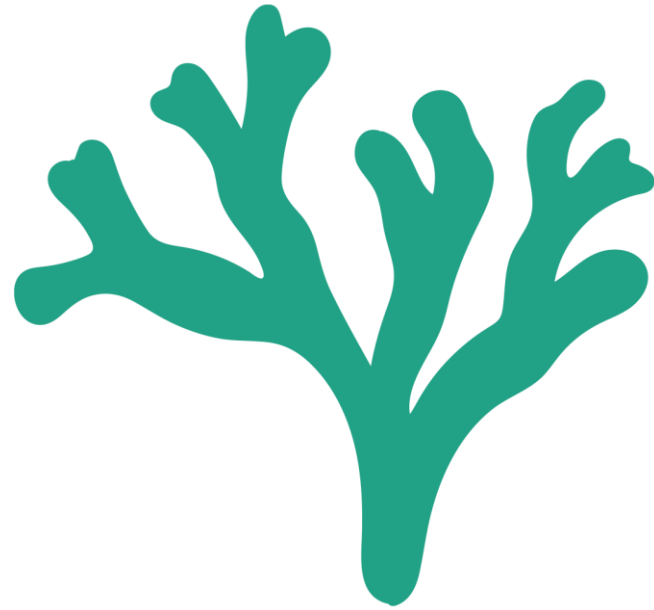


Heidi Arponen Metsähallitus



Pixabay

Regulating



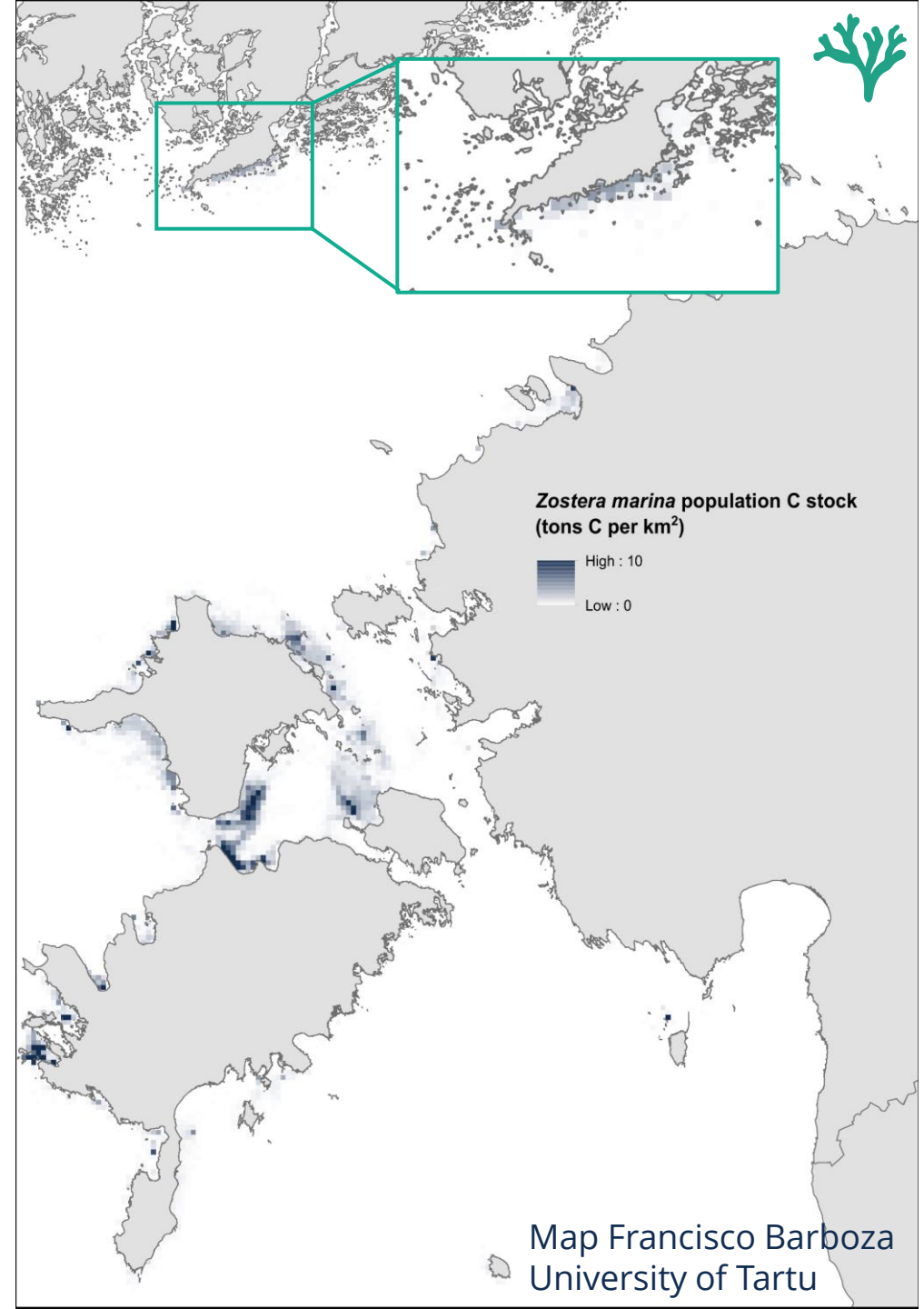


# Regulating

## Carbon storage (flow)



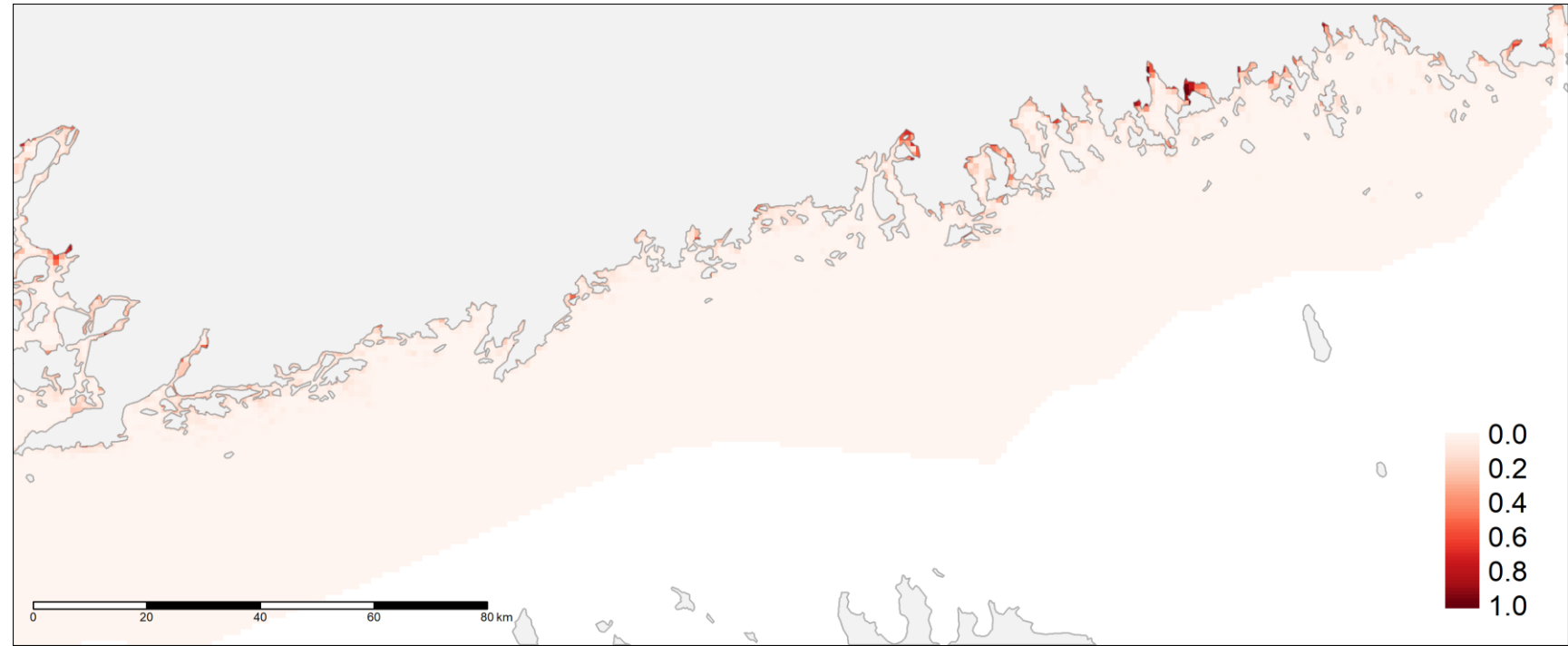
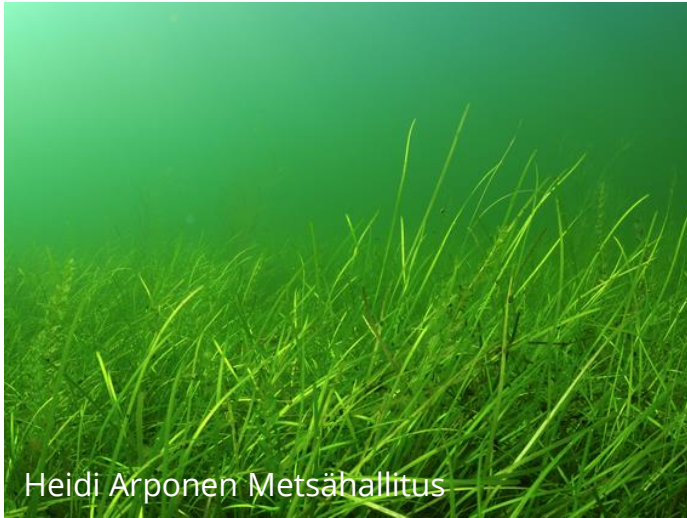
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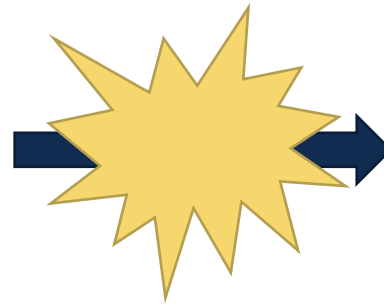
Map Francisco Barboza  
University of Tartu

# Regulating

## Carbon storage by aquatic vegetation on soft substrates (capacity)



FLOW

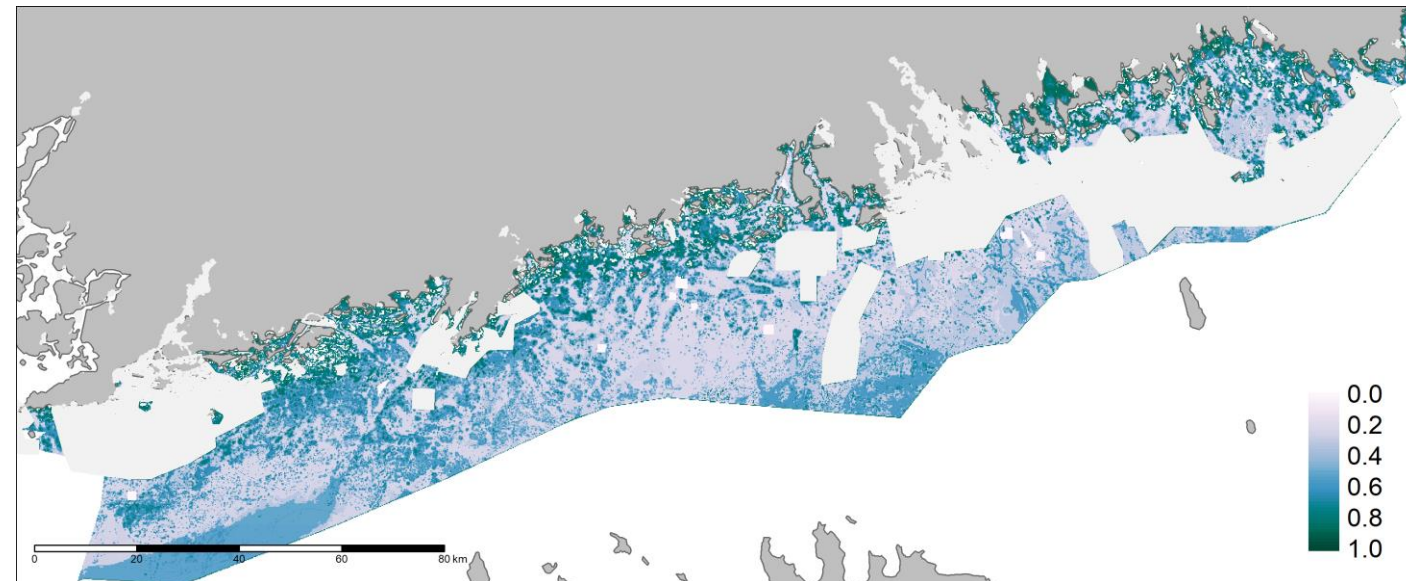
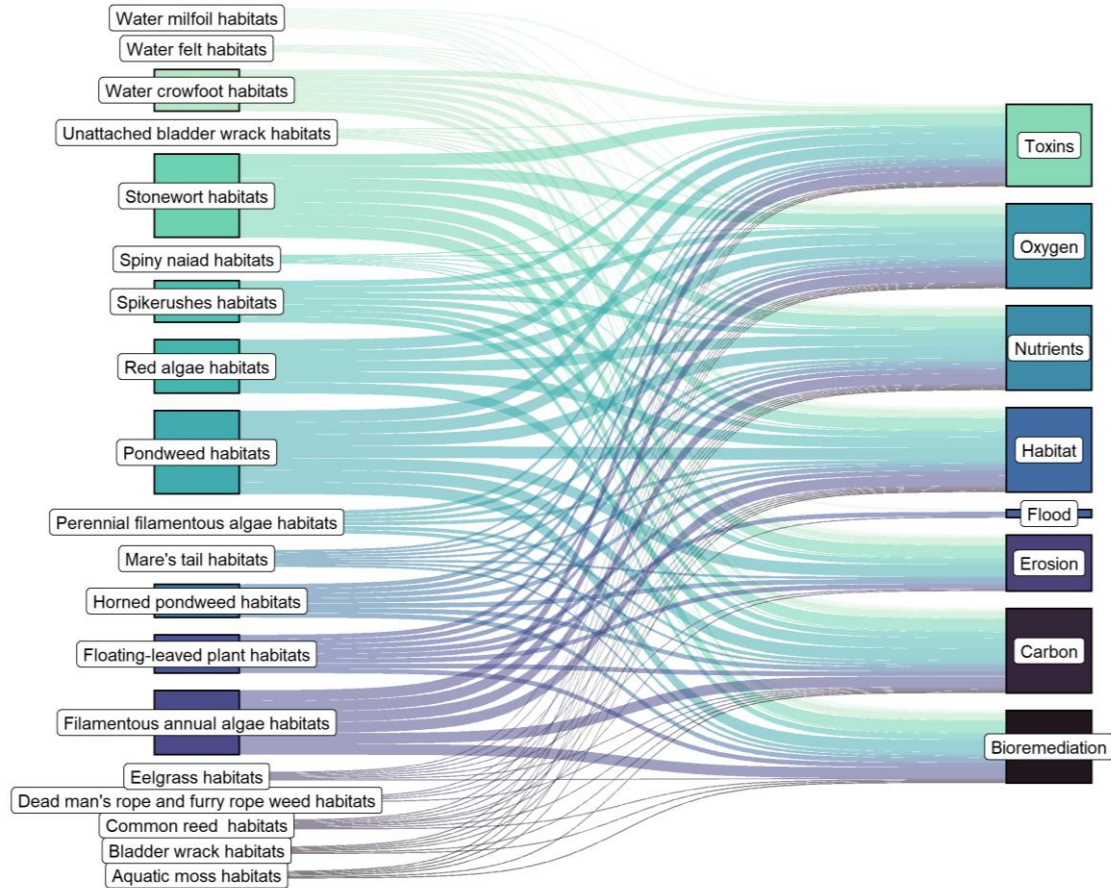


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# Applications for capacity maps



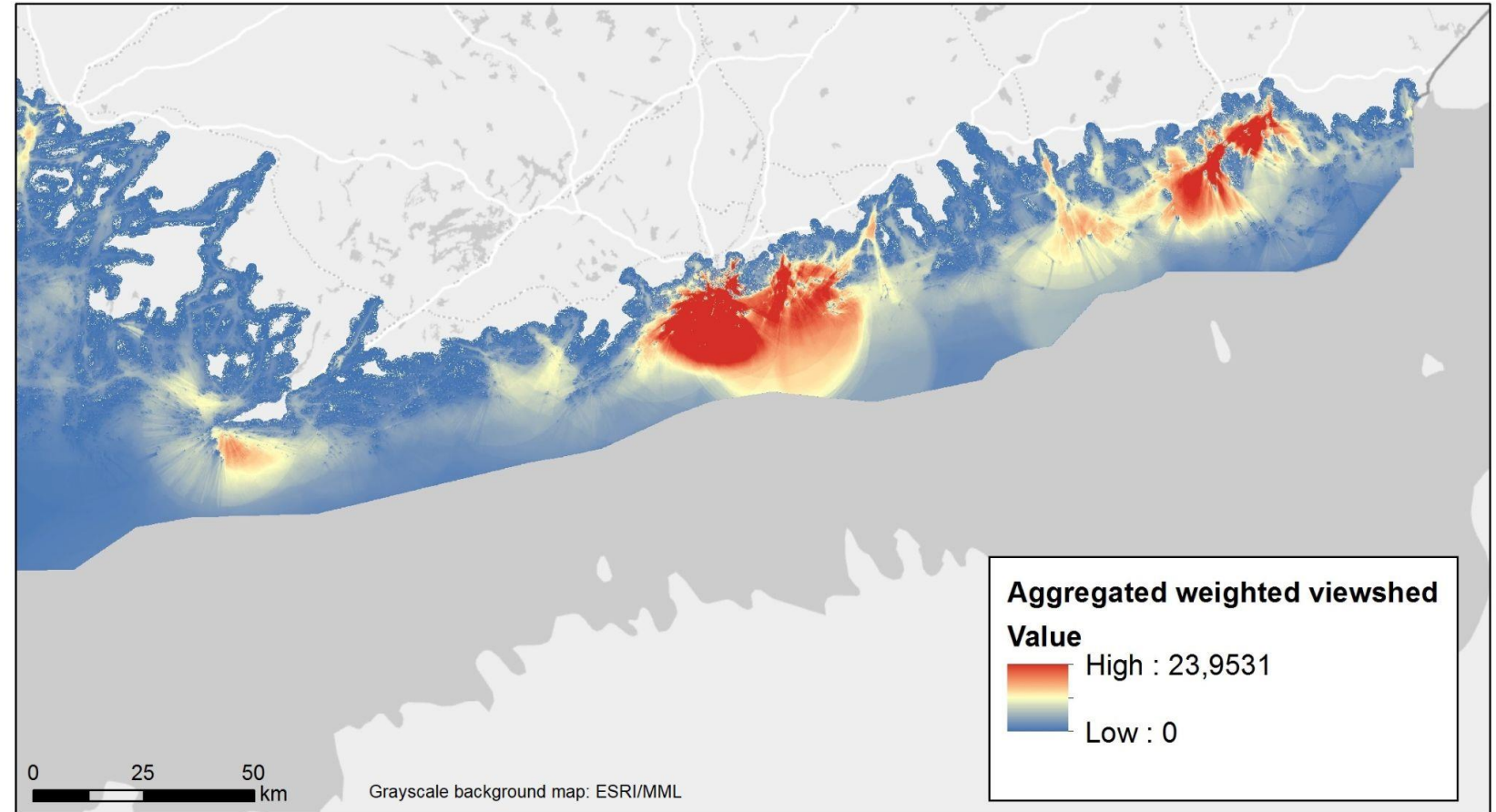




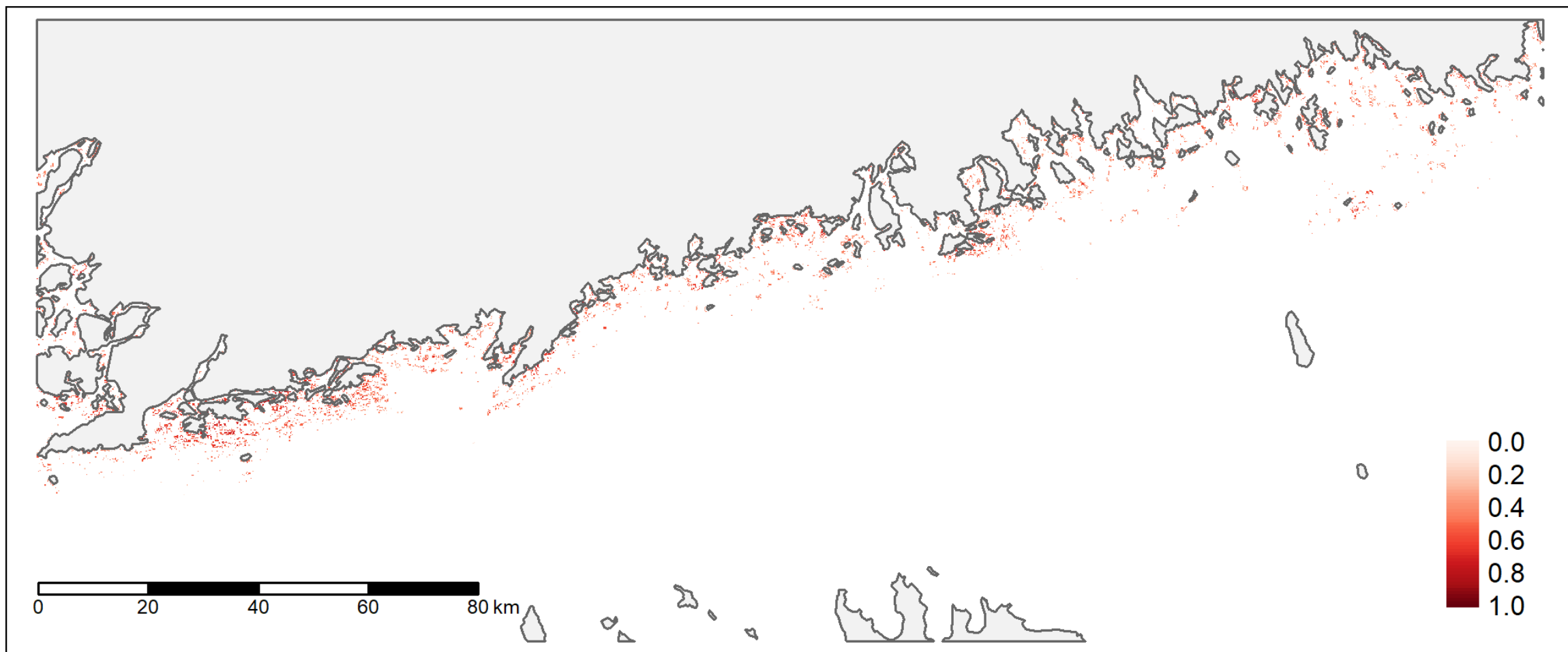
Heidi Arponen Metsähallitus



Anu Suonpää Metsähallitus

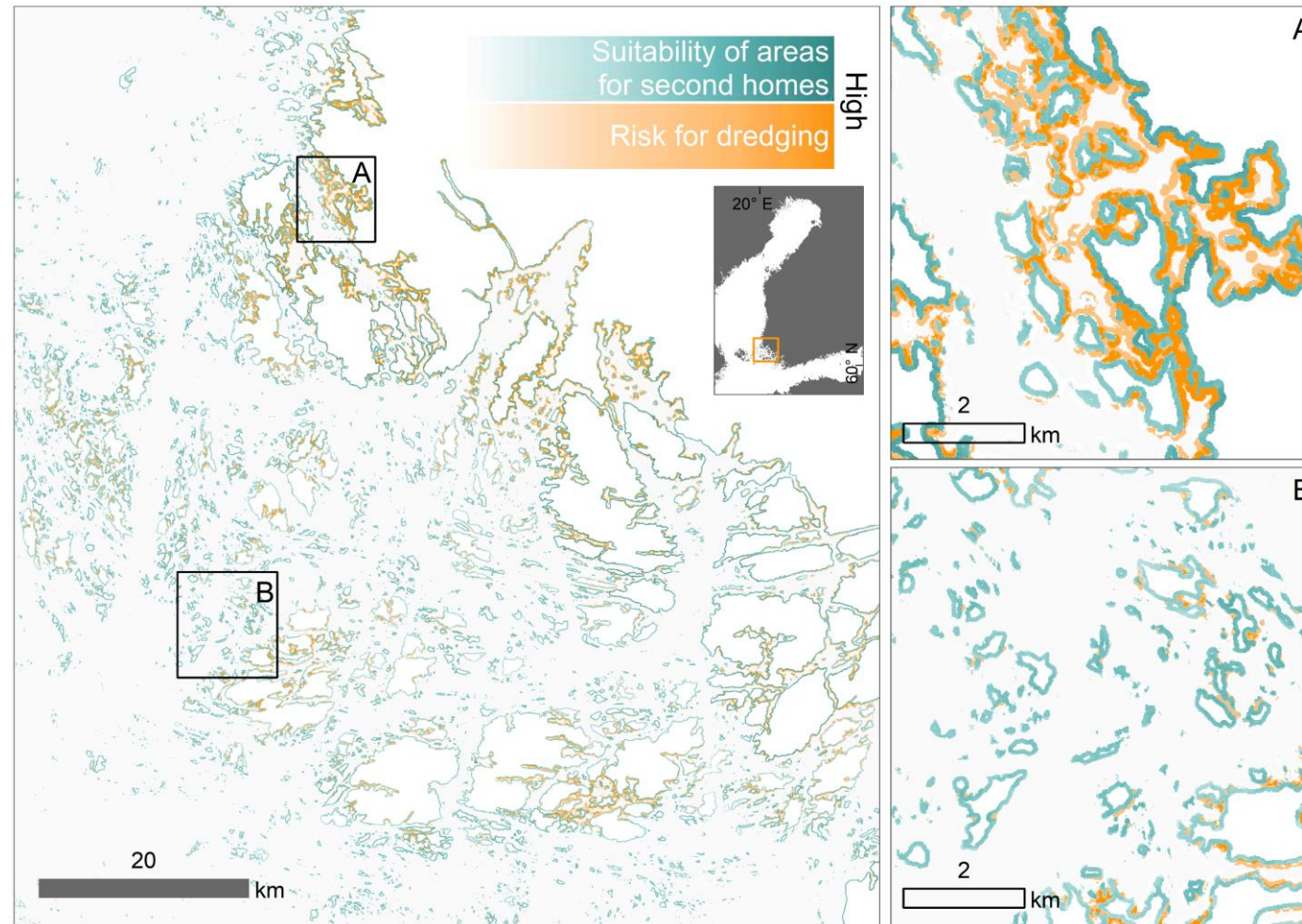


Map Marco Nurmi SYKE





# Applications for cultural service maps





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# Thank you!



Pellervo Economi  
Research



S Y K E

**WP1 deliverable and output contributors:** Louise Forsblom, Jonne Kotta, Elina Virtanen, Marco Nurmi, Niko Kallio, Francisco R. Barboza, Robert Aps, Ilmar Kotta, Holger Jänes, Helen Orav-Kotta, Robert Szava-Kovats, Liisi Lees, Anneliis Kõivupuu, Sander Loite, Kristjan Herkül, Anda Ruskule, Kristīna Veidemane, Agnese Reķe, Harri Kuosa, Tin-Yu Lai, Susanna Jernberg, Ville Karvinen, Kirsi Kostamo