

Regional service on ecosystem sensitivity to spills – EcoSensitivity tool

Helsinki | 06.03.2024

Anneliis Kõivupuu Jonne Kotta, Mihhail Fetissov, Robert Aps, Merli Rätsep,

interreg-baltic.eu/project/openrisk-ii/



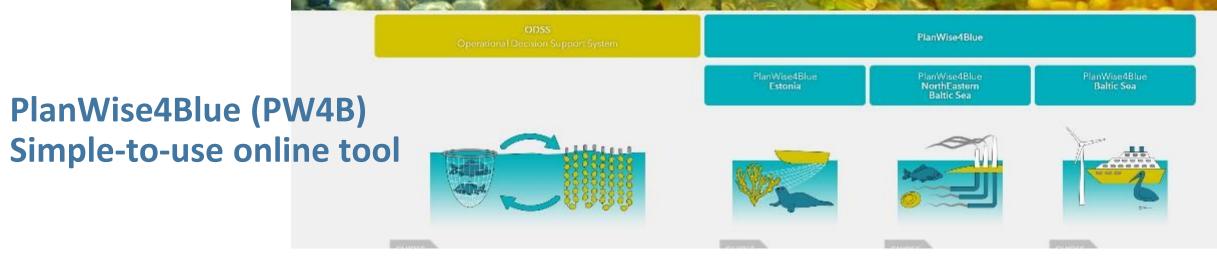
Regional service on ecosystem sensitivity to spills

Will be developed by Tartu University in cooperation with Helsinki University and the other Project Partners

Use & validate regional service on ecosystem sensitivity to spills

BLUE BIO SITES

Where cumulative impact analyses meet the future of low-trophic aquaculture



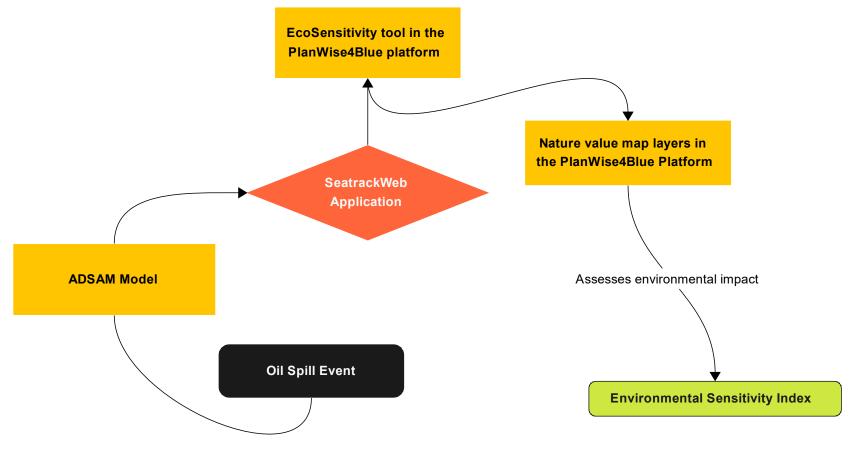
Assess cumulative human impacts on key ecosystem elements at 1 km² spatial scale

- 1. Combines layers of key nature values (e.g. maps of valuable habitats, birds)
- 2. Polygons of human pressures (e.g. maps of oil spill from e.g. Seatrackweb)
- 3. **Contain rules** (knowledge) on how different human pressures (including oil spill) affect different nature assets
- 4. Quantifies environmental impacts of these pressures based on the current best available knowledge and data

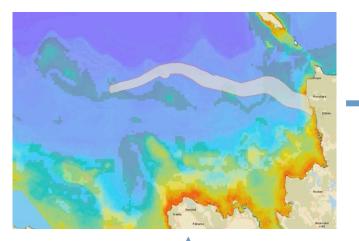
Concept 1: Real response

Data flow and analyses in the planned EcoSensitivity tool

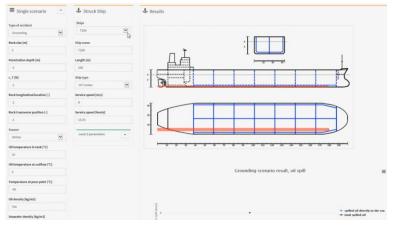
 Best solutions for minimizing environmental risks by targeting rescue operations to the areas where oil spills and damage to natural assets are most likely to occur under given weather conditions



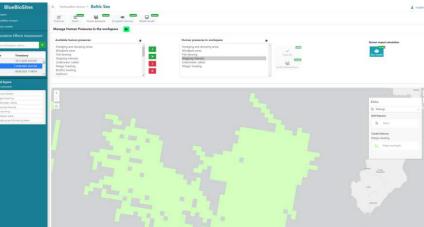
SeatrackWeb



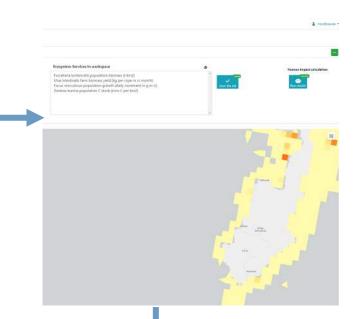
ADSAM module



PlanWise4Blue: human pressures (oil spill)



PW4B: Nature values



PW4B: Calculating impacts (Environmental Sensitivity Index)





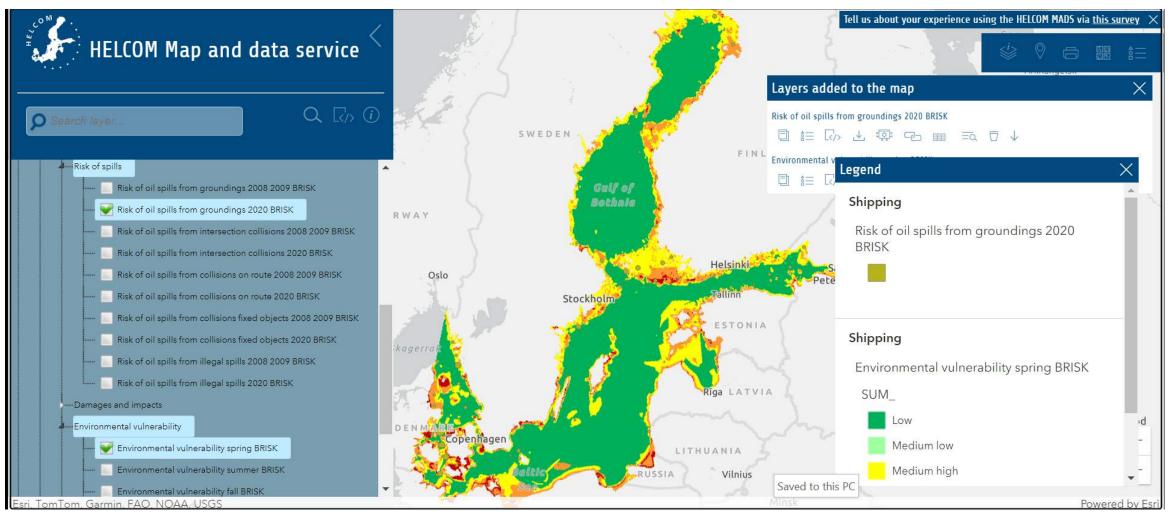
Current uncertainties about concept 1

- Currently, we don't have enough knowledge and information about the new fuel types most commonly used in the Baltic Sea.
 - Ultra Low Sulfur Fuel Oil (ULSFO) etc.

2. In what timeframe will the new fuel types be added to the SeatrackWeb application etc. and is it feasible with our timeframe?



Concept 2: Strategic planning What's already there and what's coming?



What are the realistic development opportunities?

Mapping stakeholder needs and interests?



Thank you!



Co-funded by the European Union





