WP2 Environmental risk management

Robert Aps, University of Tartu, Tallinn, 16 November 2017

European Union
European Regional Development Fund

KESKKONNAINVESTEERINGUTE KESKUS

PLAN4BLUE

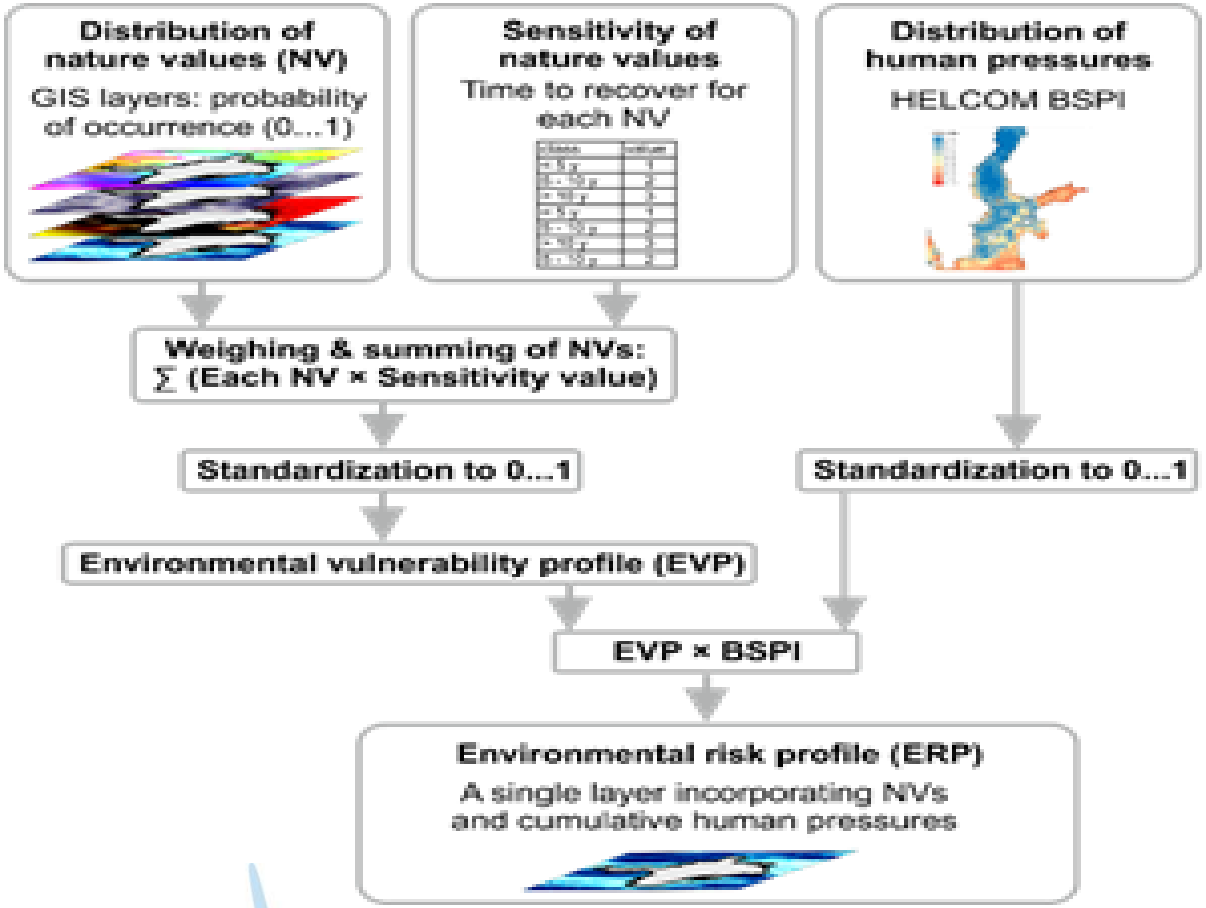
MARITIME SPATIAL PLANNING FOR SUSTAINABLE BLUE ECONOMIES

Interreg Central Baltic

Objective and methodology

- Objective of this study was to develop and implement transparent and flexible methodology to create environmental vulnerability and risk profiles for marine areas concerned
- Practical implementation of EVP/ERP methodology to support site selection for Blue Economy developments will be demonstrated in a course of Plan4Blue project developments

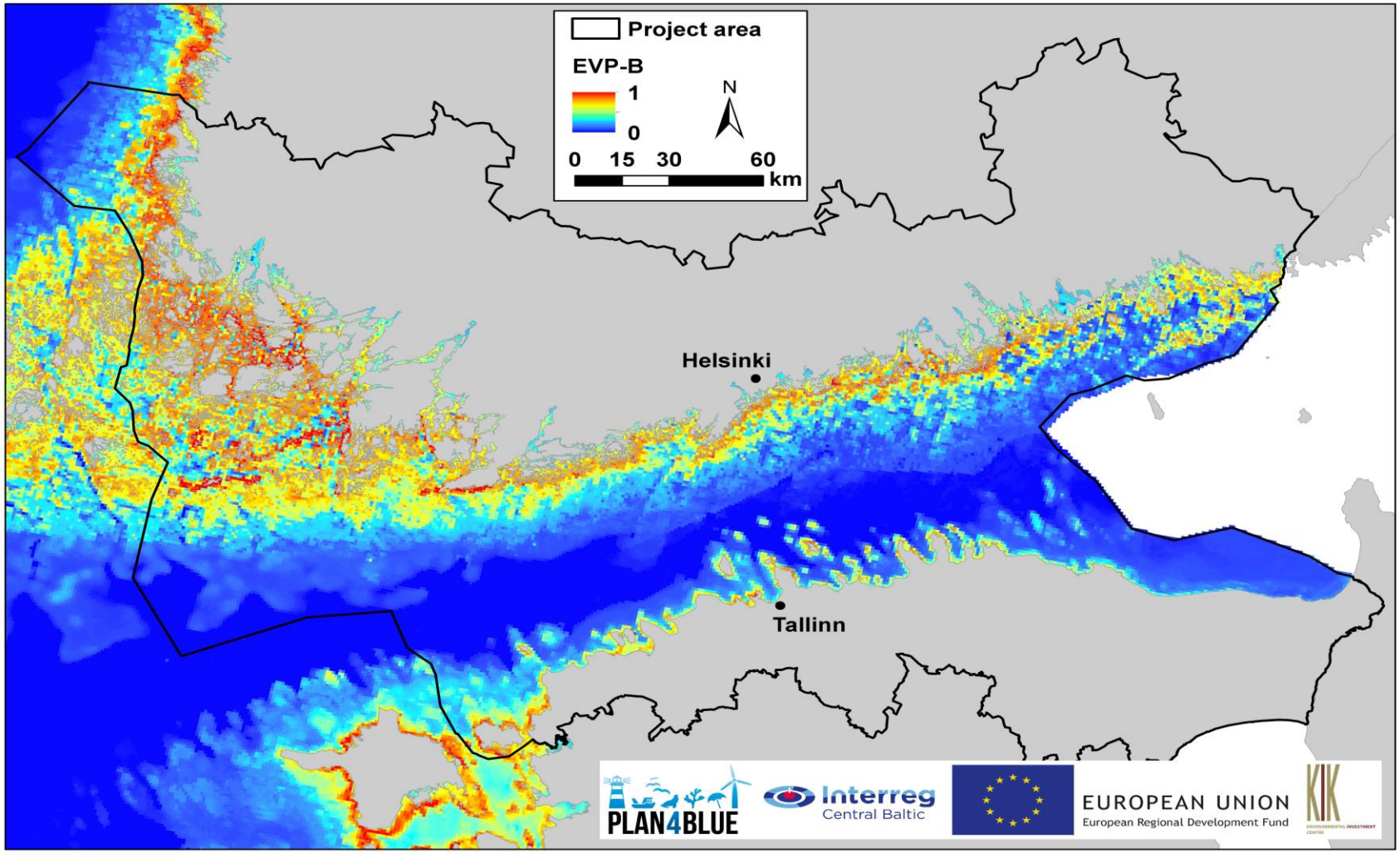
General scheme of calculations of environmental vulnerability profile (EVP) and environmental risk profile (ERP)



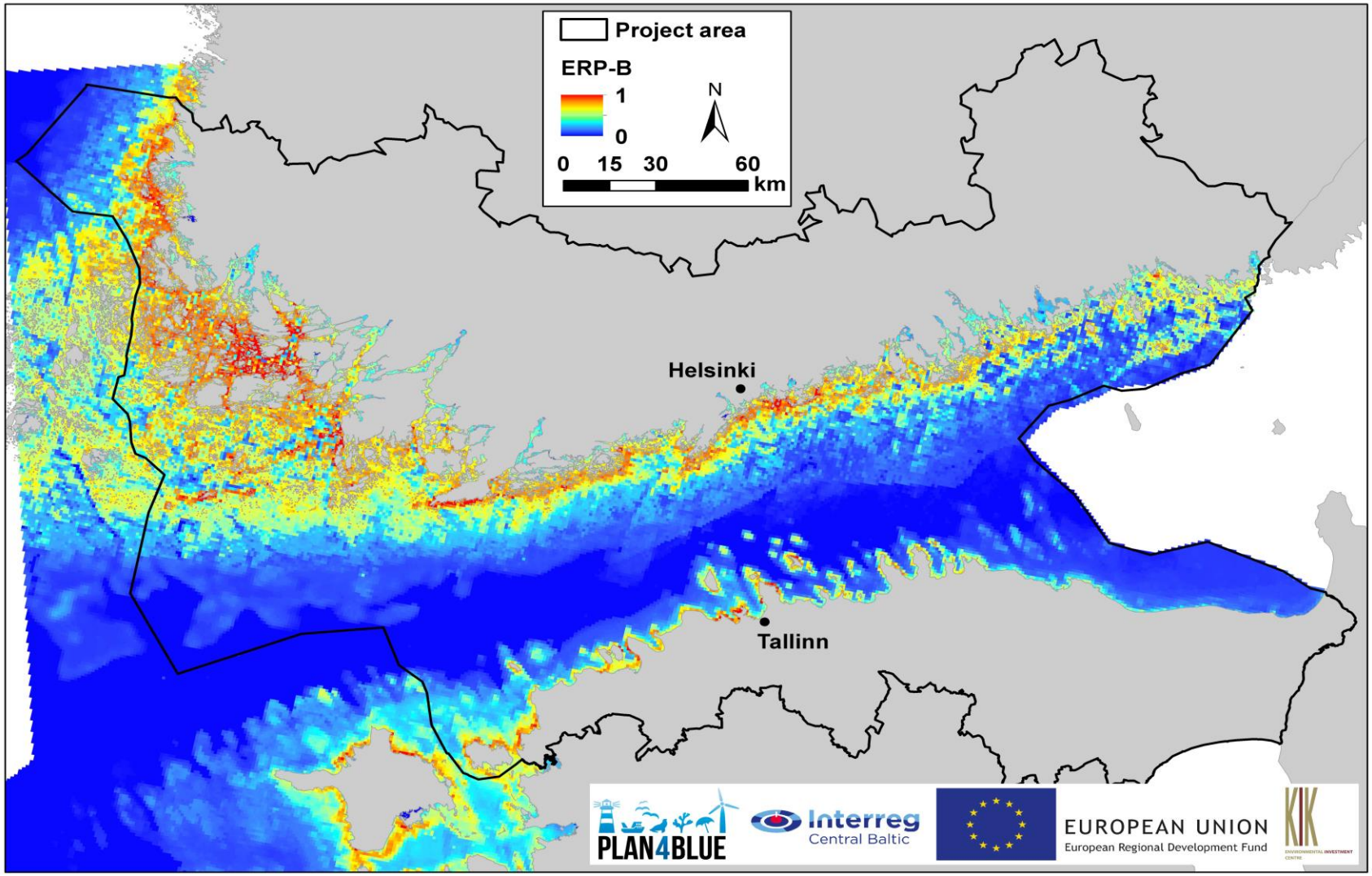
Data sources

- A macrobenthos database of the Estonian Marine Institute, University of Tartu and HERTTA database of the Finnish Environment Institute were used as data sources for Estonian and Finnish datasets, respectively
- Data from 11523 Estonian and 4409 Finnish benthos sampling stations were used as an input for species distribution models
- Estonian dataset covered both flora and fauna observations while in Finland HERTTA database was used only for benthic invertebrate data
- Finnish macrophyte data were collected by Finnish Inventory Programme for the Underwater Marine Environment (VELMU) and the dataset consisted of 31230 dive transect points

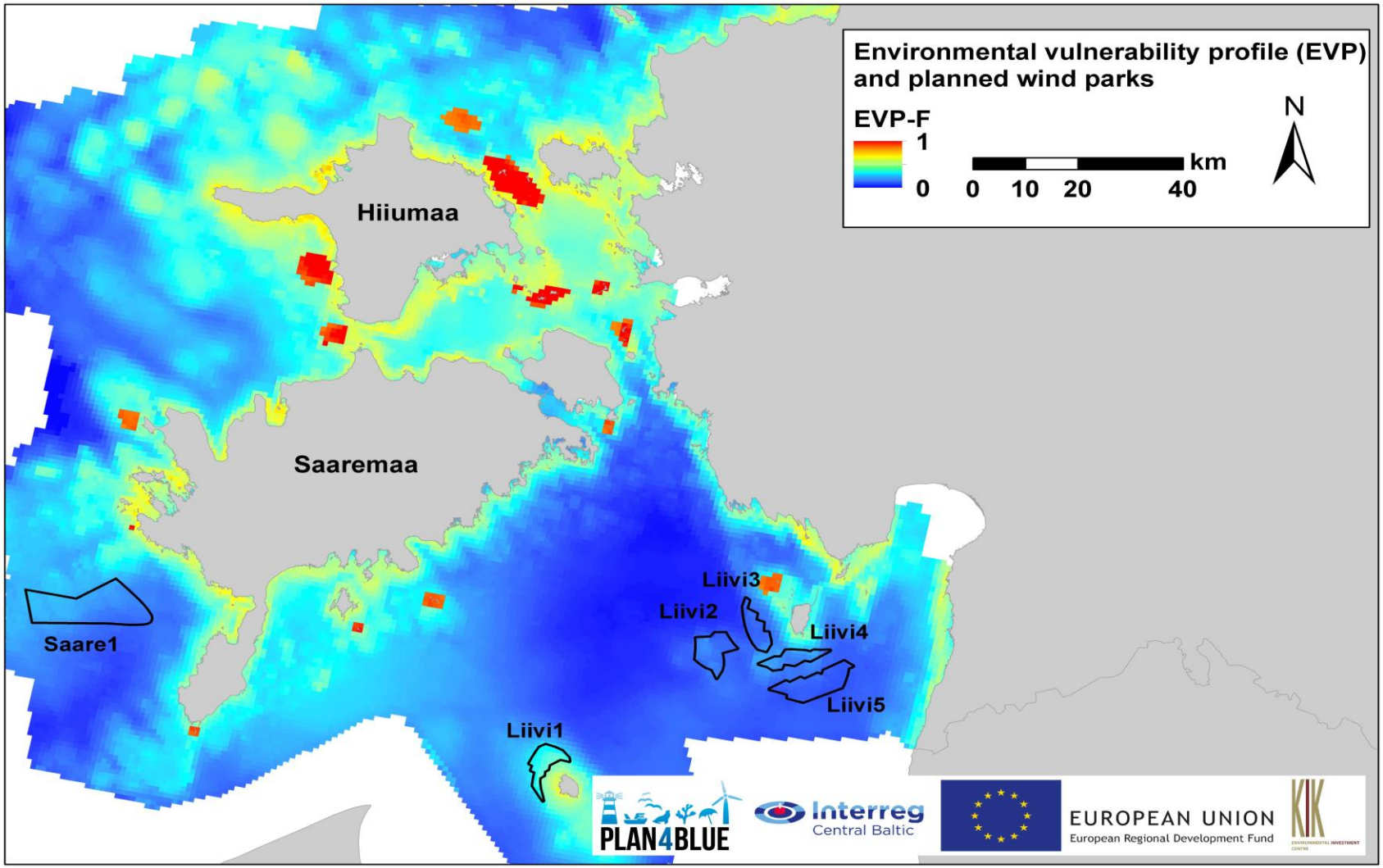
Gulf of Finland environmental vulnerability profile



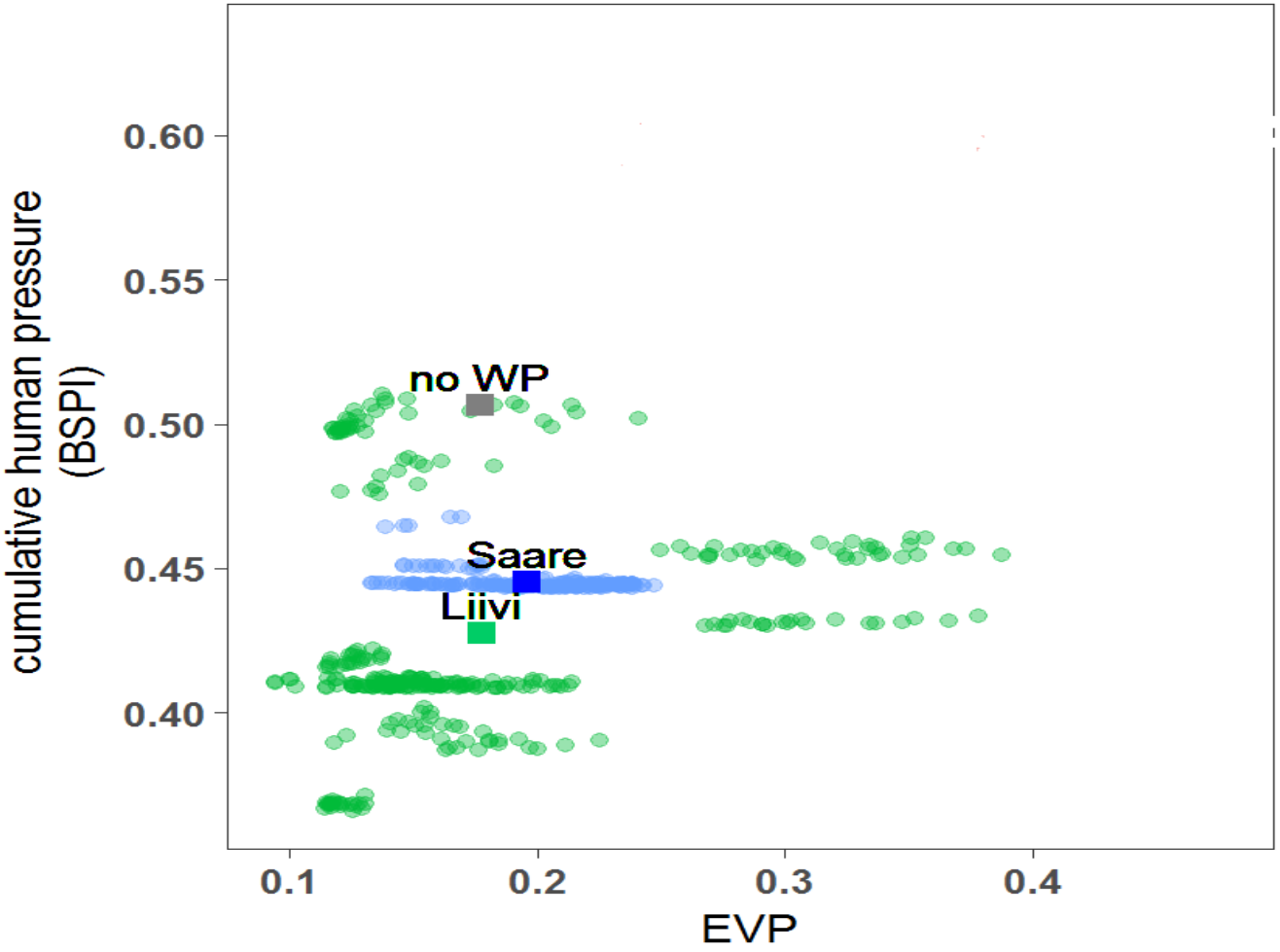
Gulf of Finland environmental risk profile



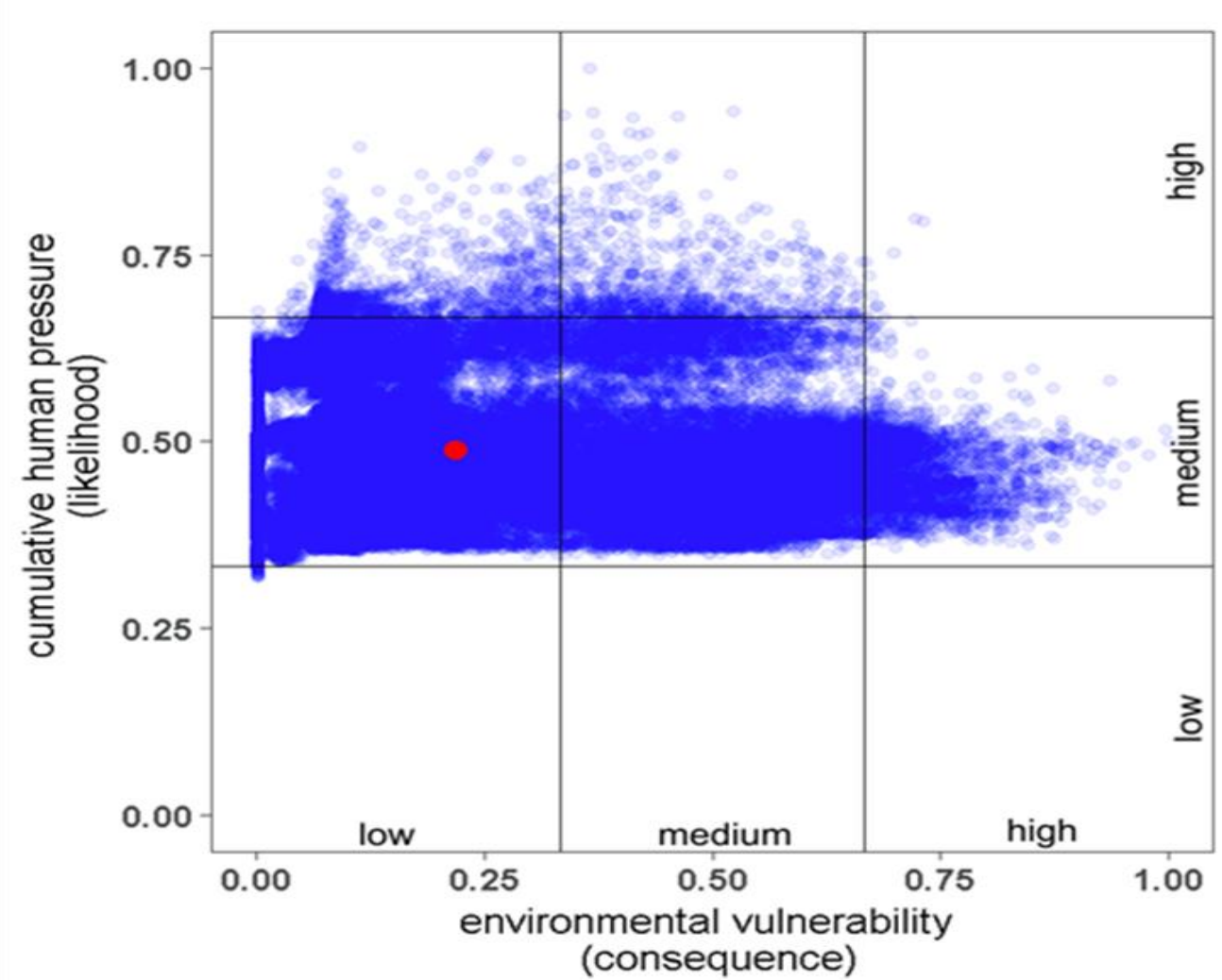
Planned Saare and Liivi wind park (WP) areas



WP areas (Saare – blue, Liivi – green) and only mean value is shown for “no WP”



Environmental Spatial Cumulative Risk Matrix



Environmental Spatial Cumulative Risk Management

"Given that a scientific assessment is objective and is based on facts, it would simply reflect likelihood and magnitude leaving the severity, tolerability or values to the governance decision-making processes and stakeholder constituency"

ICES. 2014. Report of the Joint Rijkswaterstaat/DFO/ICES Workshop

Timeline

Activity 3.1	Developing the Gulf of Finland marine and coastal environmental vulnerability profile	01.09.2016	03.03.2017	0.00
Deliverable 3.1.1	The Gulf of Finland marine and coastal environmental vulnerability profile		4.00	03.03.2017
Activity 3.2	Developingthe Gulf of Finland marine and coastal environmental risk profile	01.03.2017	02.08.2018	0.00
Deliverable 3.2.1	The Gulf of Finland marine and coastal environmental risk profile		4.00	02.08.2018
Activity 3.3	Developing environmental management strategy for MSP	01.09.2018	02.03.2019	0.00
Deliverable 3.3.1	Environmental management strategy for MSP		4.00	02.03.2019
Activity 3.4	Developing guidelines on environmental management for sustainable maritime spatial planning	30.04.2019	30.08.2019	0.00
Deliverable 3.4.1	Guidelines on environmental management for sustainable maritime spatial planning		4.00	30.08.2019

Type: Implementation

WP Nr	WP title	WP start date	WP end date	WP Budget
4	Spatial analysis of socioeconomic-environmental interactions	2016-12	2019-05	

Acknowledgements

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Thank you very much for your attention!

Partners

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Thank you!

MORE INFORMATION
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