



**TEDEN SREDOZEMSKÉ OBALÉ
IN MAKROREGIONALNIH
STRATEGIJ**

Izola, Slovenija
16. – 20. september 2024

**MEDITERRANEAN COAST
AND MACRO-REGIONAL
STRATEGIES WEEK**

Izola, Slovenia
16 – 20 September 2024



Consultation within TSG 3: Construction Activities in the Sea and on the Seashore and Achieving good environmental status of the Sea



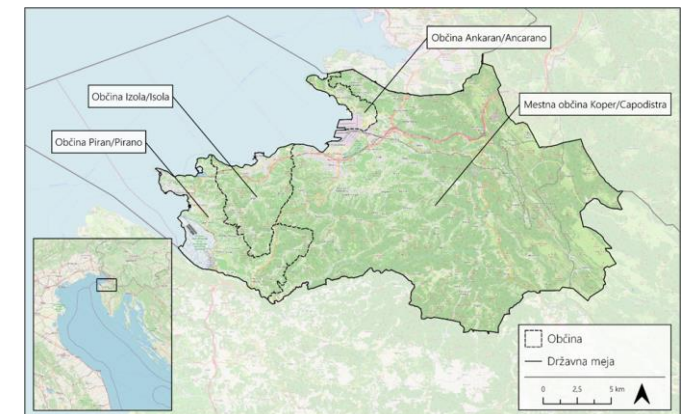
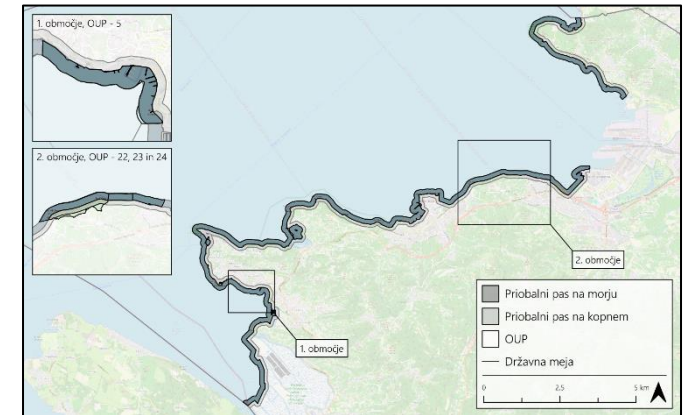
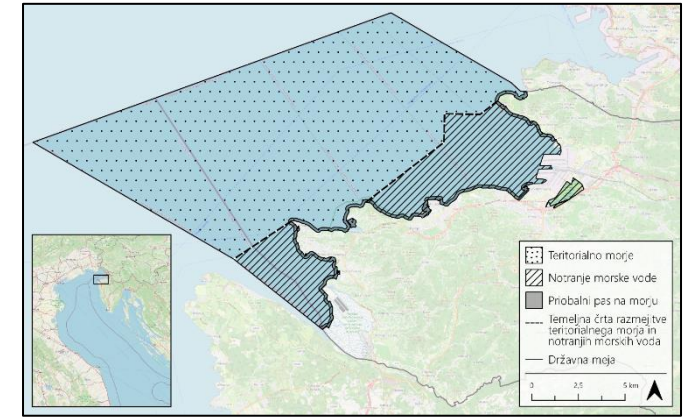
**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development

Assessment of acceptability and cumulative impacts for spatial arrangements planned with the Maritime Spatial Plan of Slovenia

Sabina Cepuš,
ZaVita d.o.o.

Aim and scope of the assignment

- Implementation of Maritime spatial plan
- A task composed of three sections:
 - Cumulative impact analysis (CEA) - spatial analysis of cumulative impacts for the entire sea
 - Carrying capacity of the coastal zone at sea for spatial planning in selected areas – determination of the limits of acceptable changes
 - Economic, social, and environmental carrying capacity of Istrian municipalities for tourism development – a diagnostic model for monitoring and guiding tourism development at the destination level

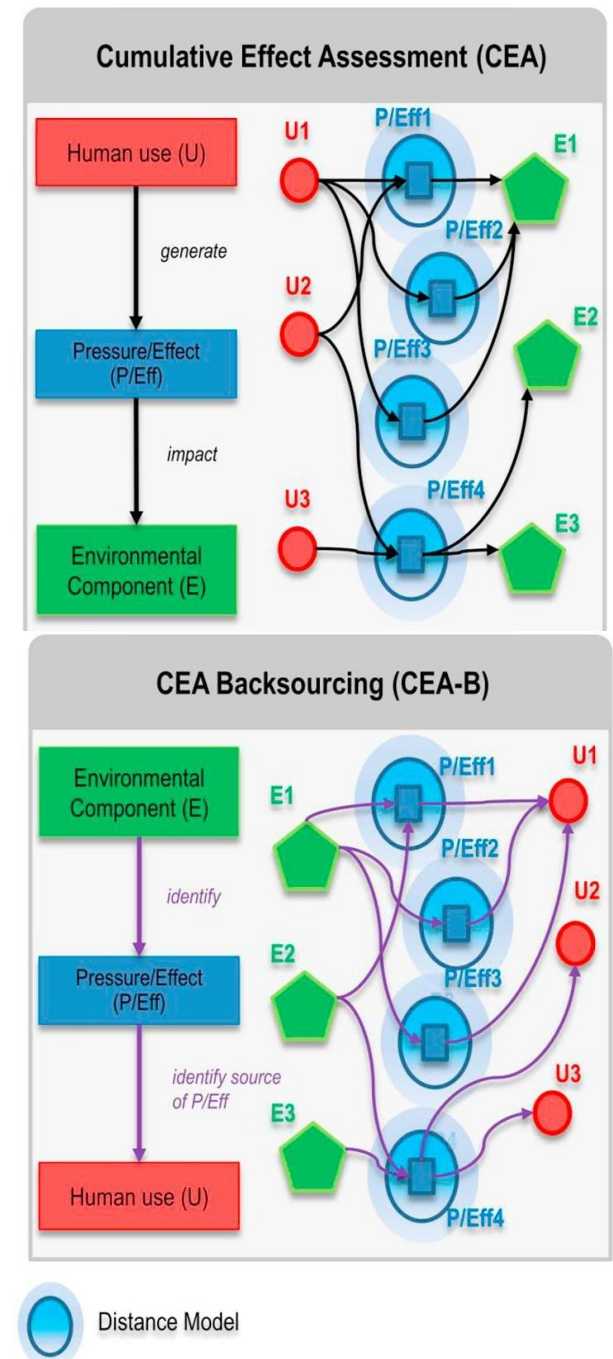


Method for section 1

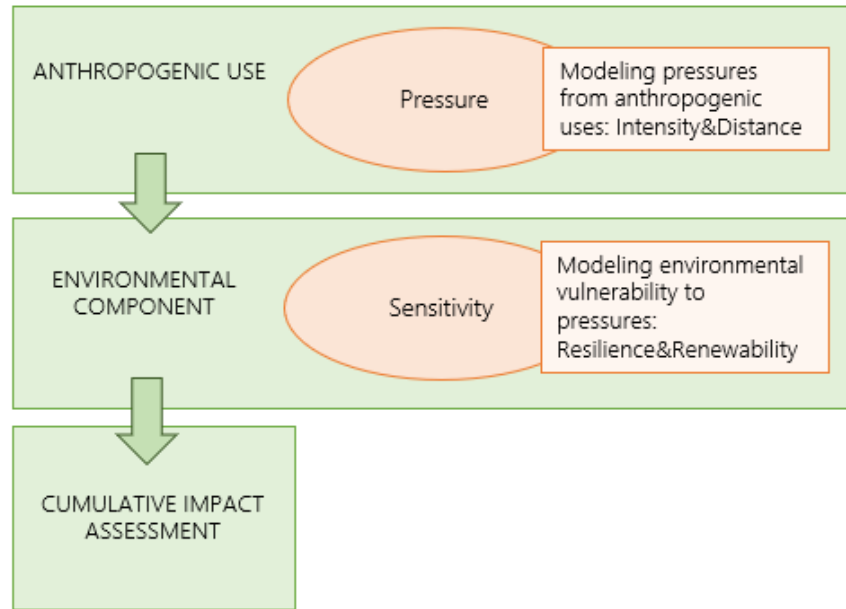
- CEA used within the PORTODIMARE project (INTERREG ADRION, 2021)
- based on an open-source web tool for geospatial analysis in maritime spatial planning: Tools4MSP*
- It offers:
 - an integrated web platform called the Tools4MSP Geoplatform,
 - includes tools for collaborative geospatial modeling of cumulative effects assessment (CEA)**and
 - a library for the assessment of cumulative effects (CEA) in the Adriatic Sea.**

*Menegon, S. in sod., 2018. Tools4MSP: an open source software package to support Maritime Spatial Planning. PeerJ Computer Science 4(4), 165 str

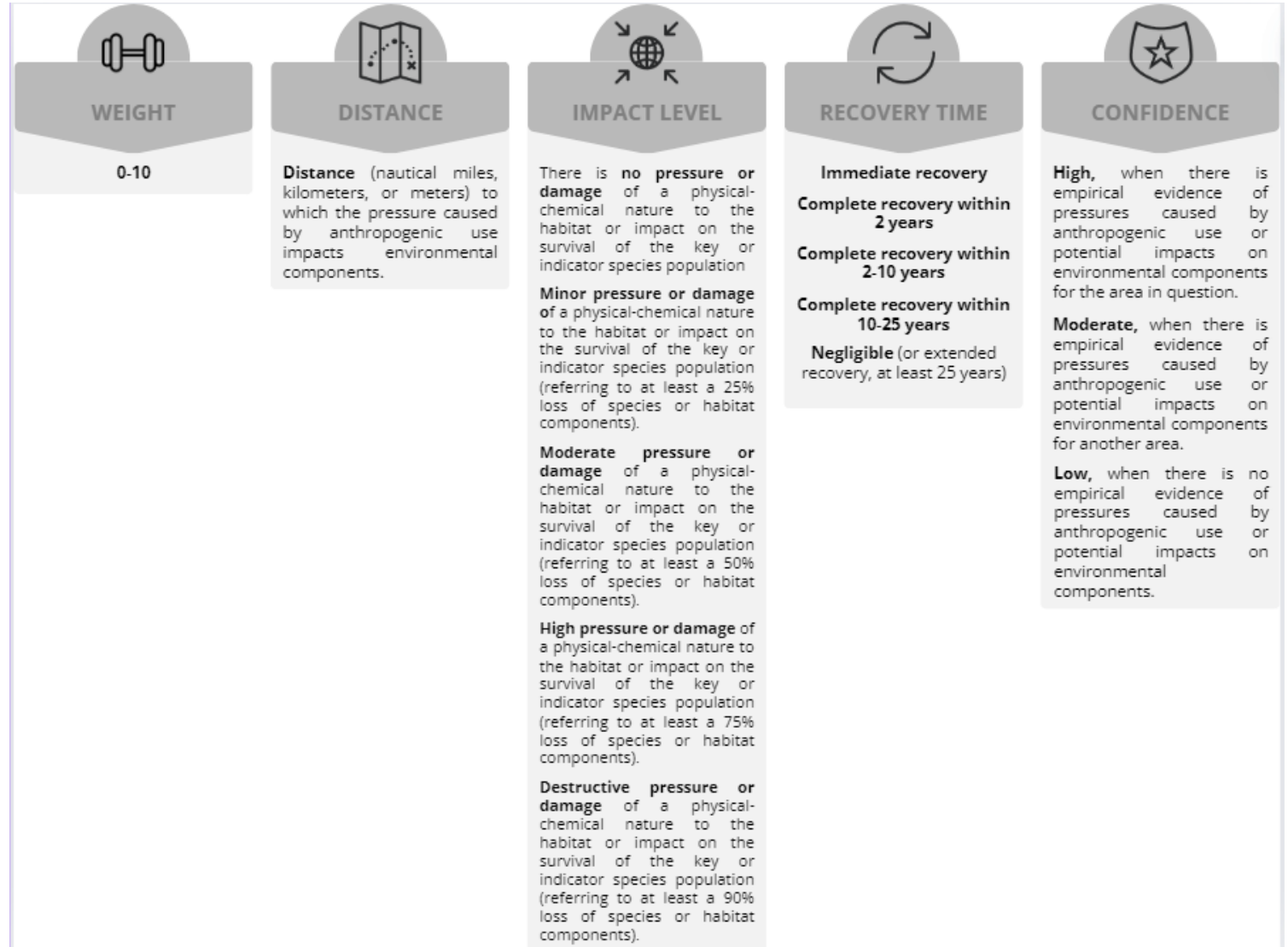
**Menegon S, Depellegrin D, Farella G, Gissi E, Ghezzi M, Sarretta A, Venier C, Barbanti A. 2018. A modelling framework for MSP-oriented cumulative effects assessment. Ecological Indicators 91:171181



Method for section 1

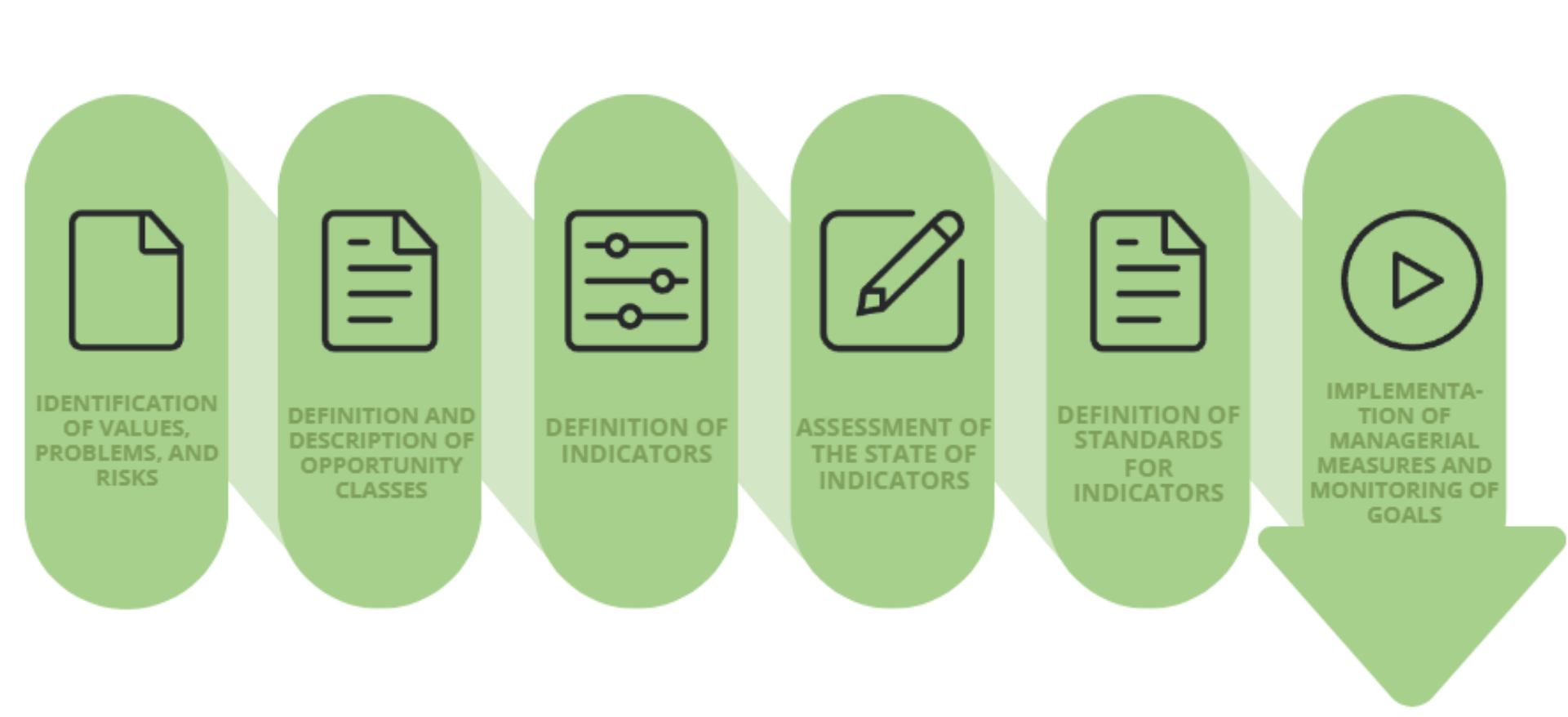


- 17 pressures
- 24 anthropogenic uses
- 32 environmental components



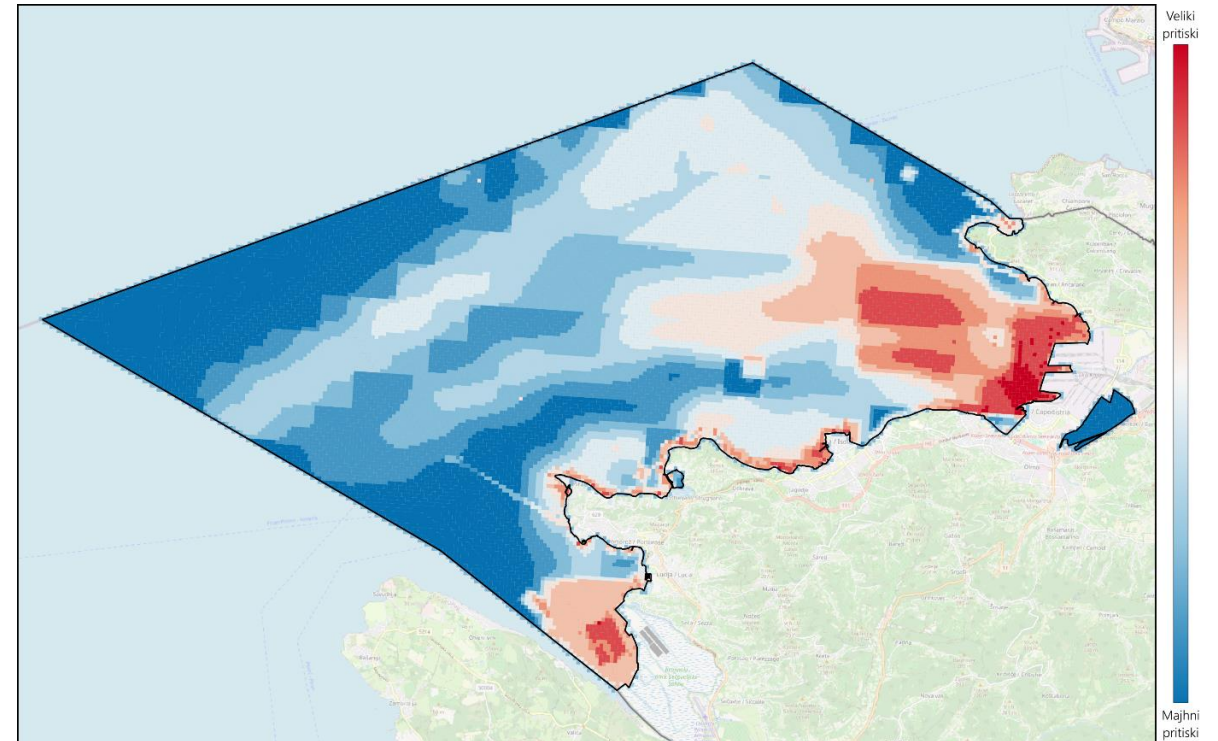
Method for section 2

- Limits of acceptable changes



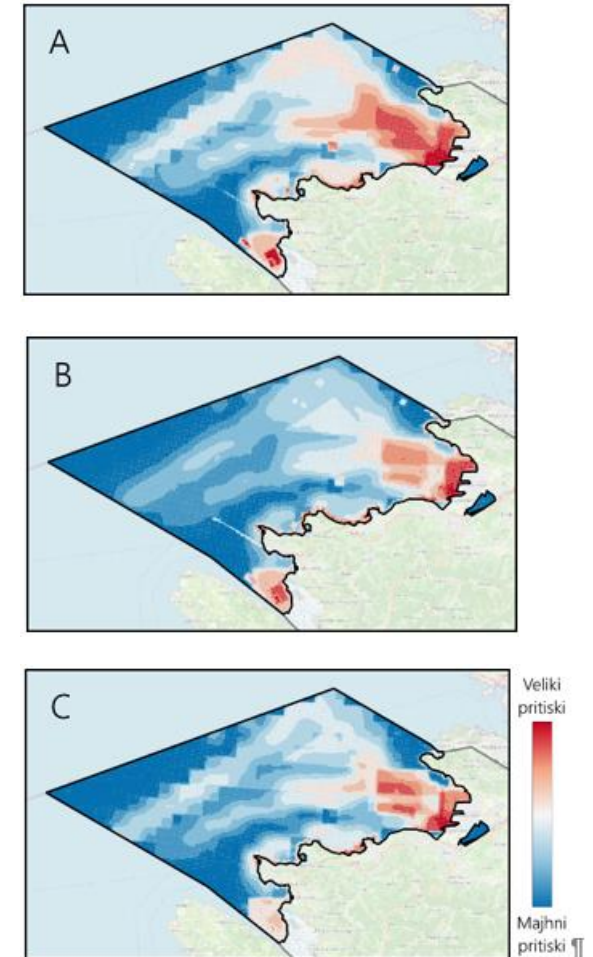
Results – CEA (work in proccess)

- The **highest values** - the port for international traffic and on the area of urbanized coast + areas with high density of env. components
- Areas with **moderate values** are widely distributed throughout the studied region result of traffic from vessels and fishing
- **Lowest values** -coastal areas distaned from ports and areas with forbiden fishing



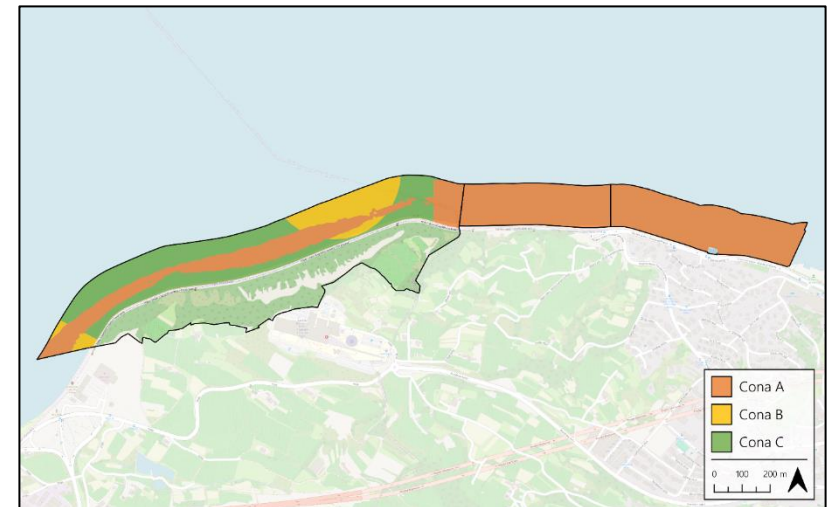
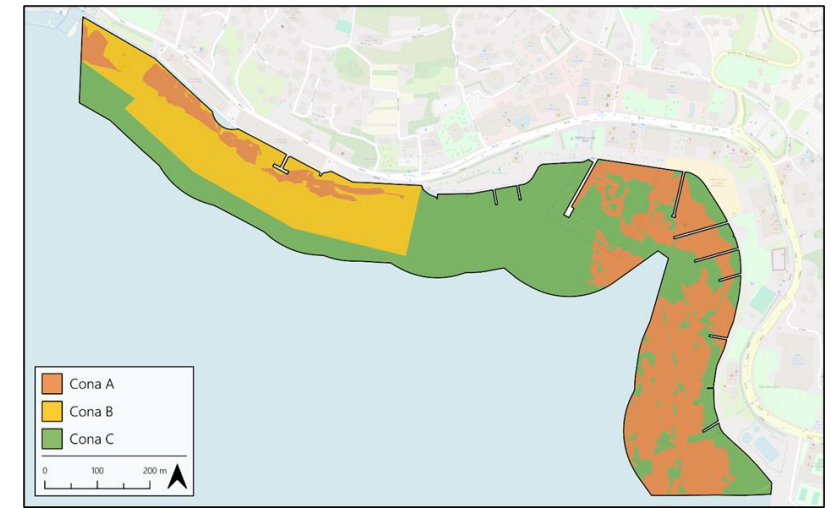
Results – CEA (work in process)

- The strongest pressure groups:
 - Material, waste, and energy pressures (37%) - A
 - Biological pressures (33%) - B
 - Physical pressures (30%) - C
- The strongest individual pressures:
 - Disturbance of species due to human presence (16%)
 - Physical disturbance of the seabed (14%)
 - Marine litter input (10%)
- The most impactful use: Maritime traffic
- The most sensitive env. Component – fish



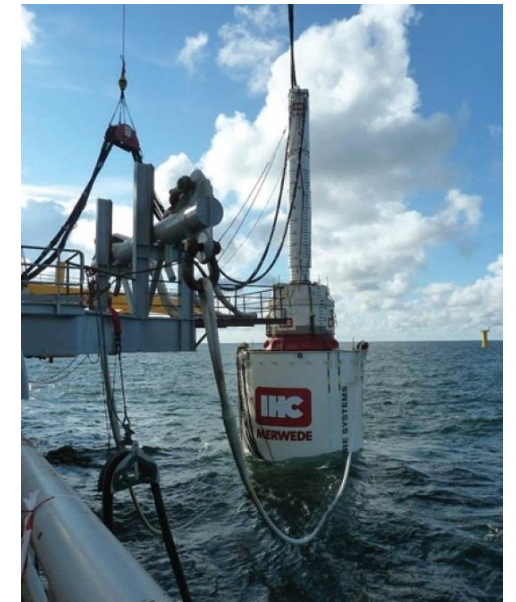
Results-LAC (work in proces)

- *Spatial scope – 2 short areas of the coast*
- *Deskwork analysis, workshop, survey*
- *Set of values defines and described*
 - *Important habitats, cultural, touristic, recreational, aesthetic, spatial etc. Values*
- *Classes of oportunity*
 - *bathing, diving, sport, recreation, maritime traffic, culural haritage*
- *Indicators of environmental changes*
 - *Habitat areas, physical loss and disturbance area, water and descriptor status, bathing water quality, cultural heritage status*
 - *Area of piers, area of ports and berths, bathing areas, no. of WW outflows*
- *Standards for environmental changes*
 - *legally prescribed, implementation on local area*
 - *Use of zoning*
- *List of locally needed measures*



Construction Activities in the Sea and on the Seashore in the context of LAC

- Addressed through indicators
 - *physical loss and disturbance area, water and descriptors status, bathing water quality*
 - *area of piers, area of ports and berths, bathing areas, area of changed coast*
- Addressed through standards of indicators – different for each zone
- Addressed through measures
 - Restrained and targeted coastal encroachment, exclusively point-fixed piers, customized pier form, construction techniques for prevention of siltation and suspended sediments propagation (eg. silt curtains), sedimentation monitoring, erosion control, use of noise abatement techniques



Construction Activities in the Sea and on the Seashore - conclusions

Key recommendations include:

- Mitigation of Physical and Noise Disturbances
- Zoning and Area-specific Standards
- Collaborative Monitoring
- Sustainable Coastal Development



Thank you for your
attention!

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