

Interreg
ADRION ADRIATIC-IONIAN



European Regional Development Fund - Instrument for Pre-Accession II Fund

EUSAIR FACILITY POINT



EU Strategy for the
Adriatic and Ionian Region
EUSAIR



**TEDEN SREDOZEMSKO OBALE
IN MAKROREGIONALNIH
STRATEGIJ**

Izola, Slovenija
18. – 22. september 2023

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

Izola, Slovenia
18 – 22 September 2023

PAP/RAC activities on climate change and MSP



ICZM Protocol

Barcelona Convention - Mediterranean Action Plan

Signed in Madrid, 21 Jan 2008

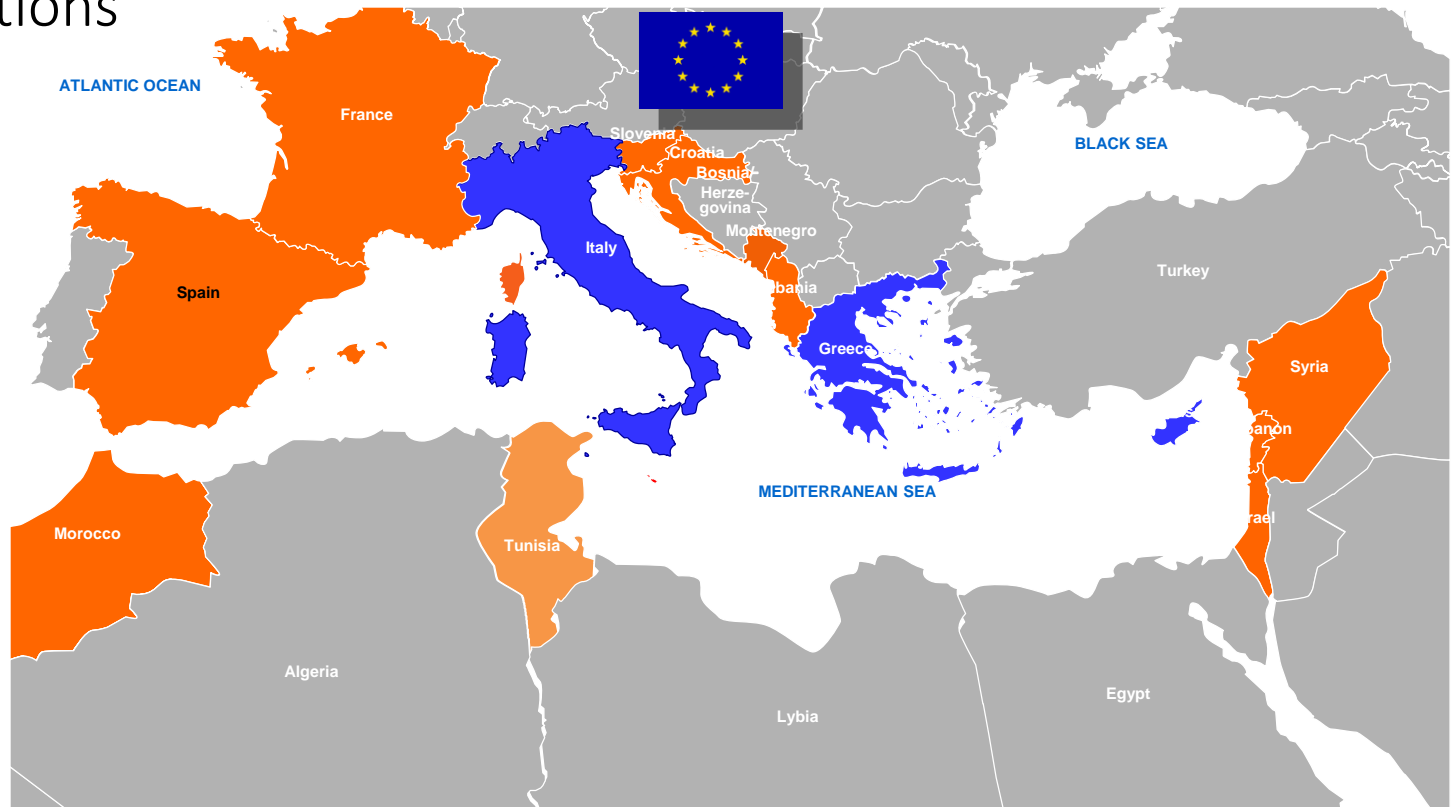
Entered into force, 22 February 2011



ICZM Protocol: Status of ratification as of September 2023

15 Signatories

13 Ratifications



AdriAdapt - a resilience knowledge platform for the Adriatic



Expert partners



Local partners



Communication partner



Interreg AdriAdapt project
January 2019 – June 2021

adriadapt.eu

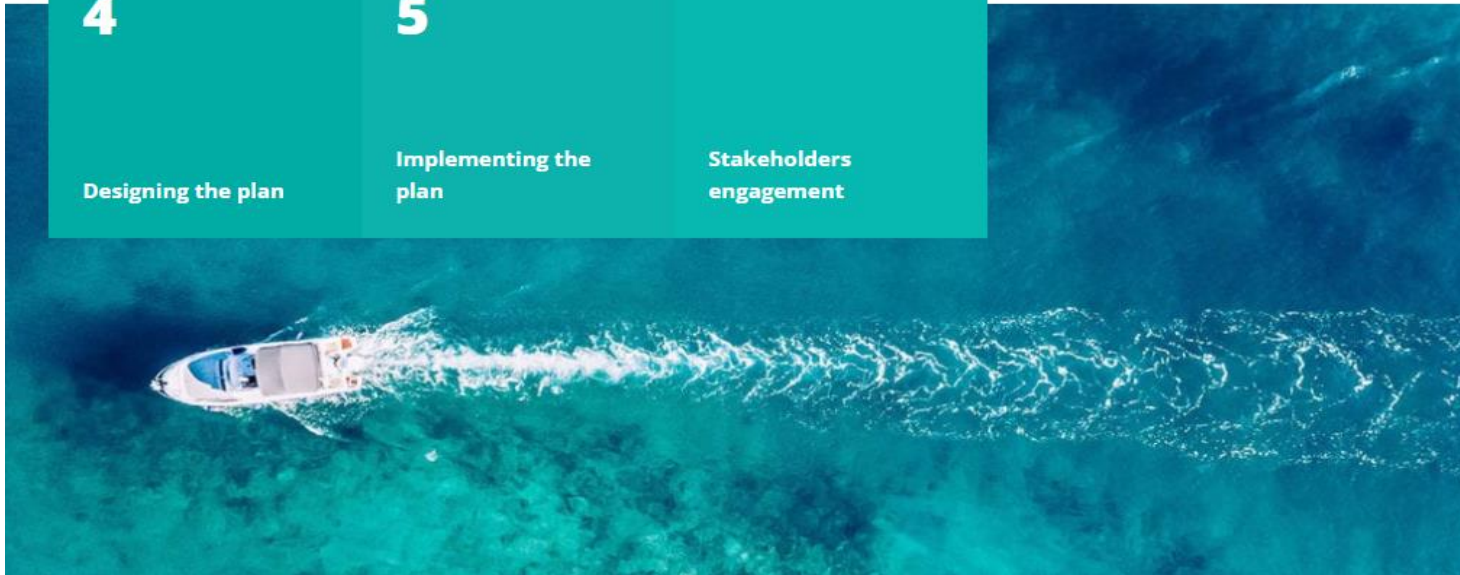


Integrated Adaptation Planning Tool



Five stages of the planning process for the local adaptation plan

[View All](#) →



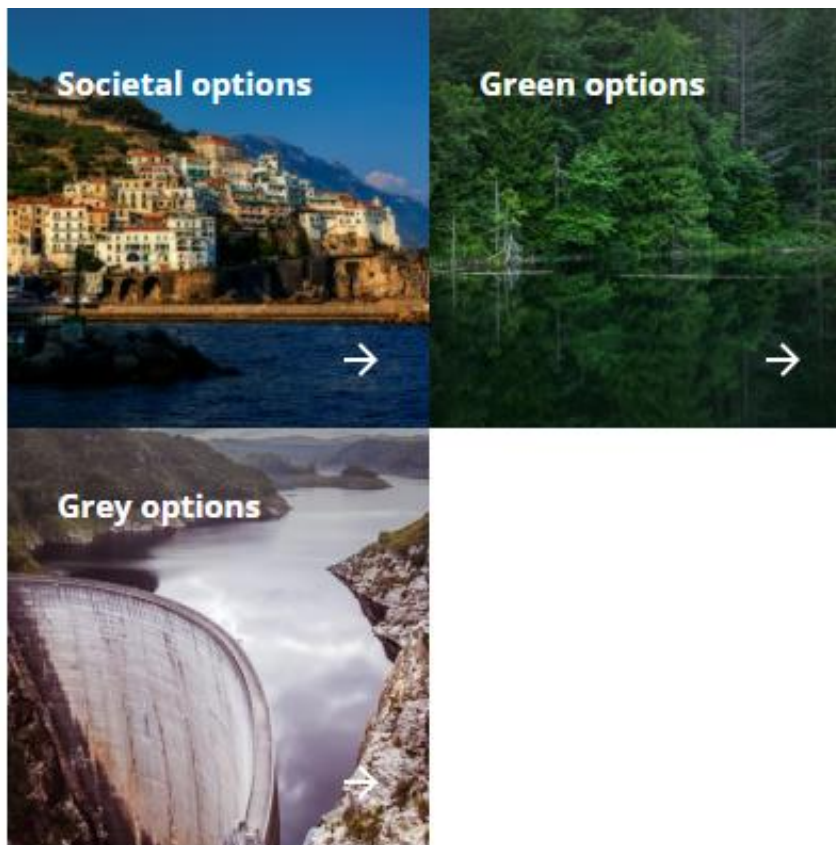
Adaptation options

More than 40 adaptation options

SOCIETAL OPTIONS

GREEN OPTIONS

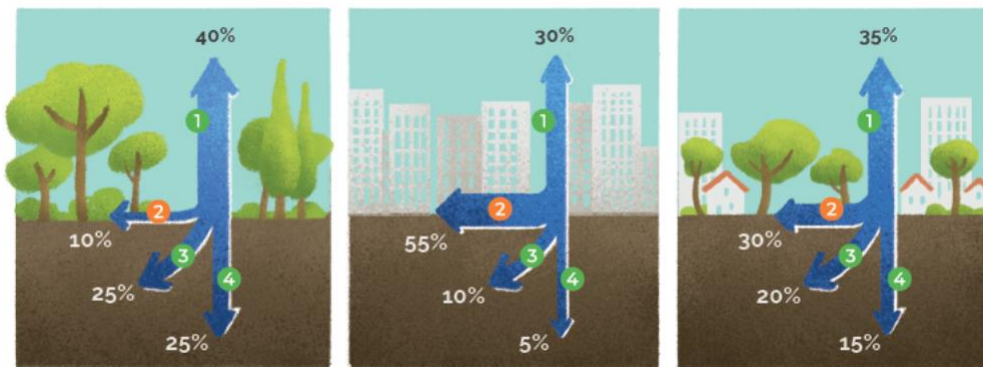
GREY OPTIONS



Adaptation options

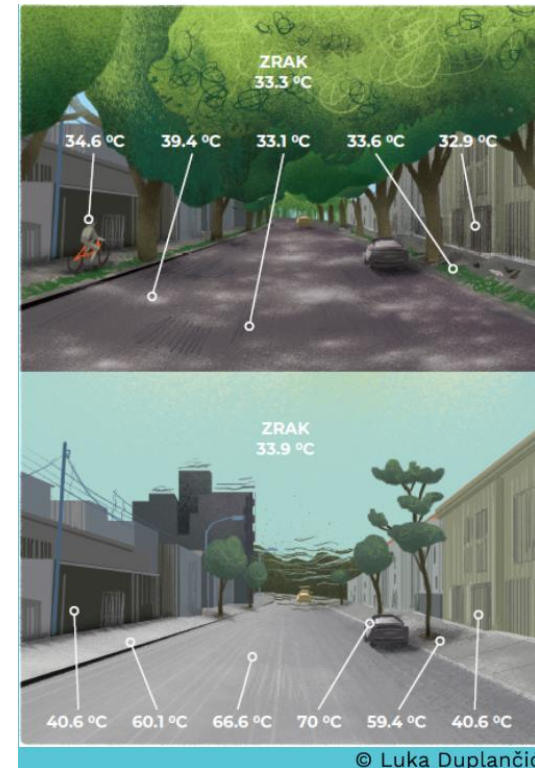
GREEN OPTIONS

Urban runoff



© Luka Duplančić

Urban Heat Island (UHI)



© Luka Duplančić

Case studies

11 case studies

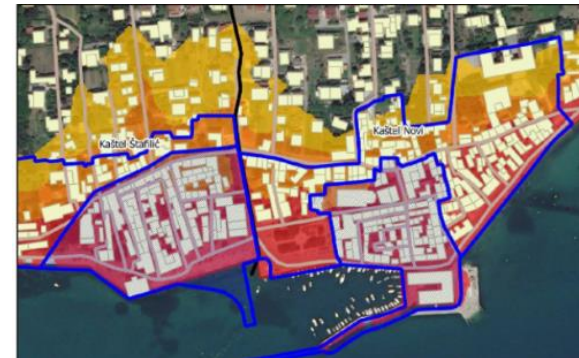
Retreat of Izola-Koper coastal road



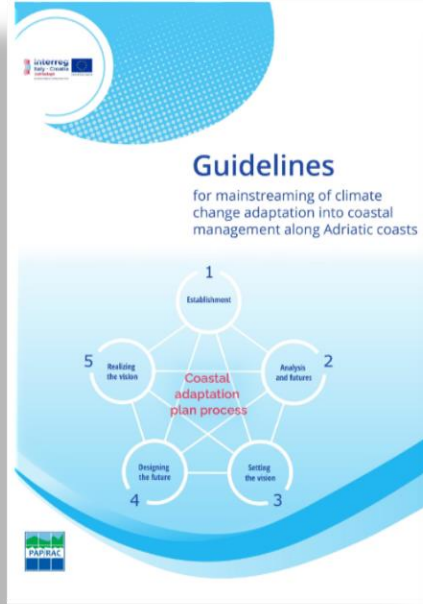
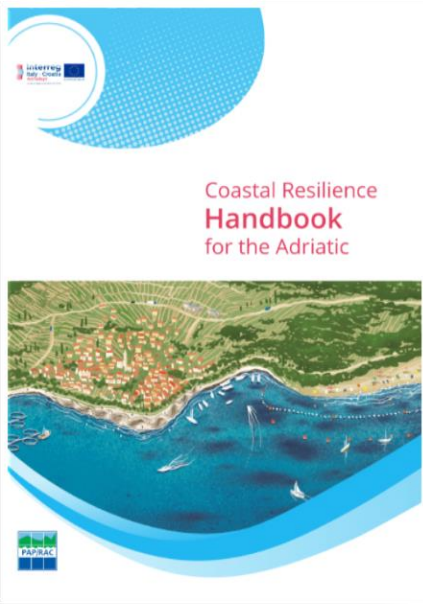
Dune restoration
in Bevano sud



ICZM Plan Kaštela



Guidelines and handbooks



- 1. conservation of Posidonia that helps mitigate the wave energy and climate change impacts
- 2. advantage given to thermophilic species in aquaculture
- 3. artificial reefs help protect against wave action and provide habitat
- 4. space for managed retreat
- 5. coastal setback of at least 100 m - safety zone and an important resource
- 6. protecting wetland areas to protect settlements
- 7. alternative beach as an alternative to nourishment
- 8. estuary protection (contact zones, high diversity levels)
- 9. raising and extending coastal land
- 10. dune construction and strengthening
- 11. beach nourishment with a careful selection of nourishment material
- 12. monitoring, forecasting and early warning systems
- 13. groynes, breakwaters and jetties
- 14. saving and recycling water
- 15. firebreaks, corridors and tracks
- 16. scaling-up green agriculture and farming coupled with the use of adapted crops and varieties
- 17. conservation of cultural and natural heritage of dry grasslands
- 18. improved monitoring of pests (such as bark beetle)
- 19. river restoration
- 20. retention and accumulation areas
- 21. early warning systems and crisis management systems
- 22. green corridors and reforestation
- 23. compact settlement boundaries
- 24. habitat protection and monitoring endangered species
- 25. intensify care for trees



Adaptation options



1. Conservation de la Posidonia qui aide à atténuer l'énergie des vagues et les impacts du changement climatique
 2. Préférence des espèces thermophiles en aquaculture
 3. Récifs artificiels pour la protection contre les vagues et l'amélioration de l'habitat
 4. Espace pour une retraite gérée

5. Zone non-construisible d'au moins 100 m - zone tampon et ressources importantes
 6. Préservation des zones humides pour la sécurité des zones construites
 7. Protection des estuaires (zone de contact, haut niveau de diversité)

8. Soulèvement et élargissement de la bande côtière
 9. Construction et consolidation des dunes de sable
 10. Recharge des plages uniquement avec des matériaux soigneusement sélectionnés
 11. Systèmes de surveillance, de prévision et d'alerte précoce

12. Epis, brise-lames et jetées
 13. Economie et recyclage de l'eau
 14. Chemins destinés à la lutte contre l'incendie, corridors et coupe-feu
 15. Développement de l'agriculture et de l'élevage verts avec l'utilisation de cultures agricoles adaptées

16. Amélioration de la lutte contre les parasites
 17. Restauration des cours d'eau
 18. Zones de rétention et d'accumulation
 19. Système d'alerte précoce et de gestion de crise


20. Corridors écologiques et reboisement
 21. Limitation de l'expansion des agglomérations
 22. Protection de l'habitat et surveillance des espèces menacées d'extinction
 23. Entretien renforcé des arbres (arboriculture)

CREATE project

June 2022/June 2023

Major outputs: „Thursday CREATivE Talks” - a series of 12 webinars on climate change adaptation

40.000 visitors
from 140 countries



The screenshot shows the homepage of the AdriAdapt website. The background is an aerial view of a rocky coastline with turquoise water. The website header includes the Interreg Italy - Croatia AdriAdapt logo, the European Union logo, and navigation links for 'About', 'Knowledge', 'EU policies', and 'Country Profiles'. A search bar is located on the right. The main content area features the title 'AdriAdapt' and a subtitle: 'a Resilience information platform for Adriatic cities and towns (featuring CREATE project)'. Below this is a button that says 'Check out our videos'. To the right, there are two columns of content: 'Integrated Adaptation Planning Tool' and 'Guidelines and Handbooks', each with a downward arrow. At the bottom, there are three more buttons: 'Adaptation Options', 'Case Studies', and 'Climate Information'.

www.adriadapt.eu

Šibenik-Knin region - coastal plan themes



1. Space as the key resource of the coastal zone
2. Climate variability and change, the transversal issue, with effects on:
 - waters & water management,
 - infrastructure,
 - forest fires,
 - economy and society.

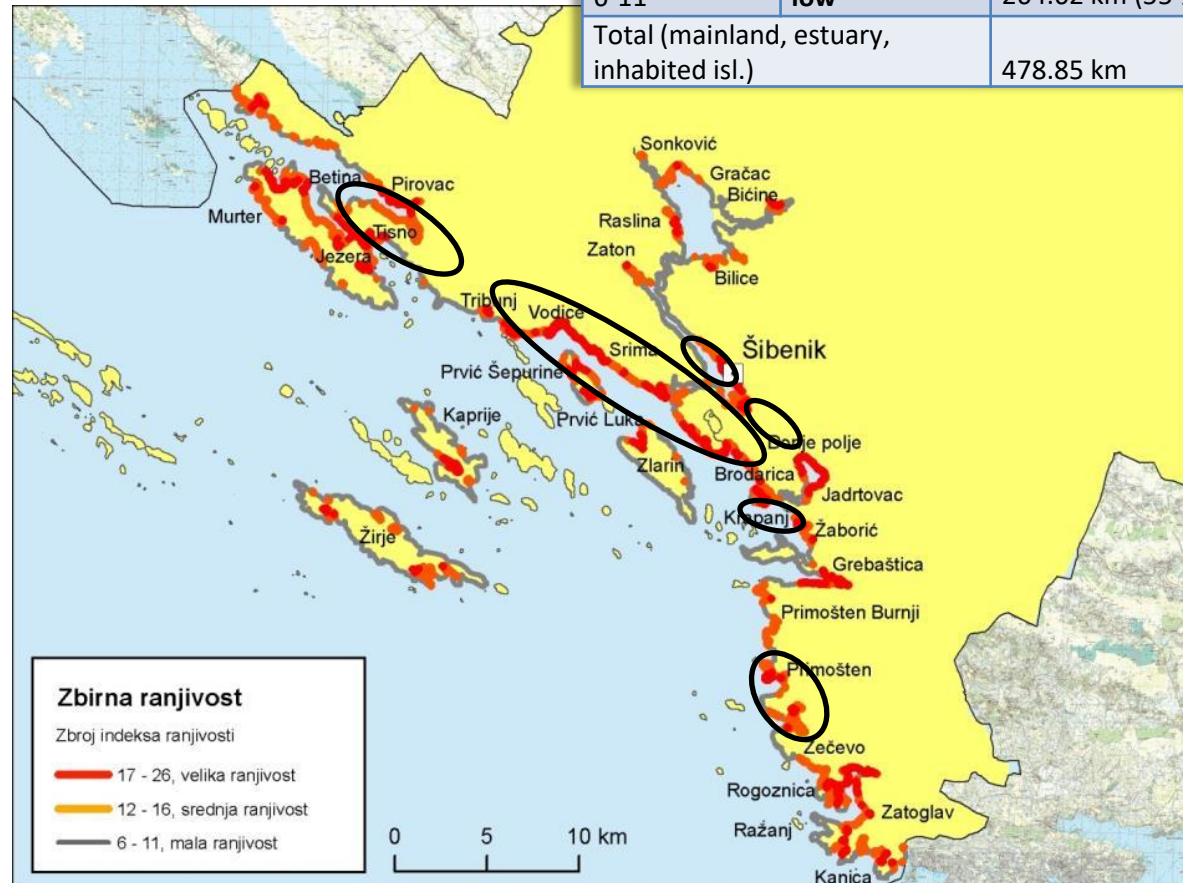
3. Tools – GIS

Cummulative vulnerability

The most vulnerable zones:

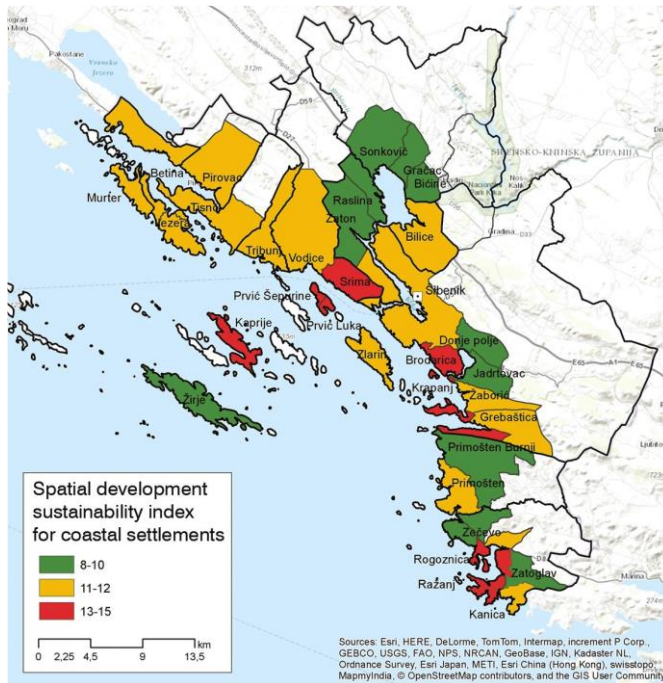
- Murter – Tisno
- Tribunj – Brodarica with island Krapanj
- Šibenik
- Morinje
- Grebaštica
- Zečevo - Ražanj

Sum of subindexes	Cumm. vulnerability	Length (%)
17-26	high	79.68 km (17 %)
12-16	medium	134.55 km (28 %)
6-11	low	264.62 km (55 %)
Total (mainland, estuary, inhabited isl.)		478.85 km

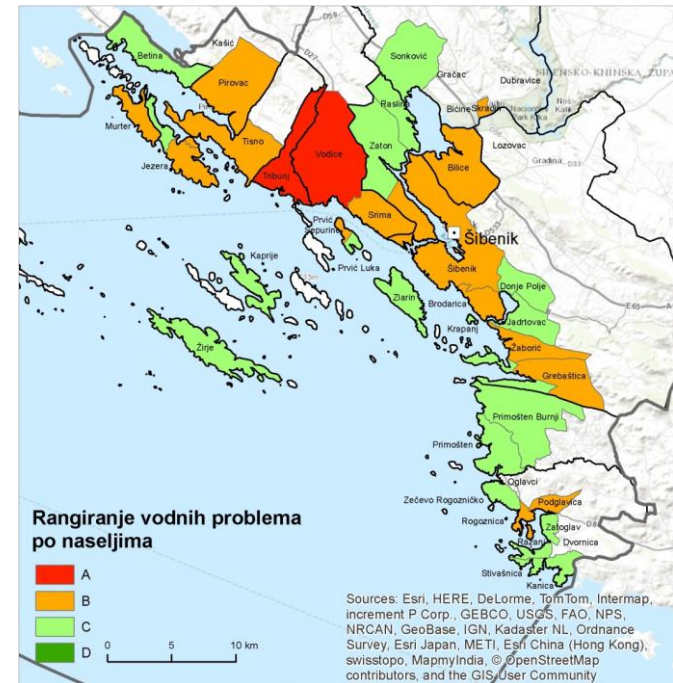


Sustainability ranking

SPATIAL DEVELOPMENT

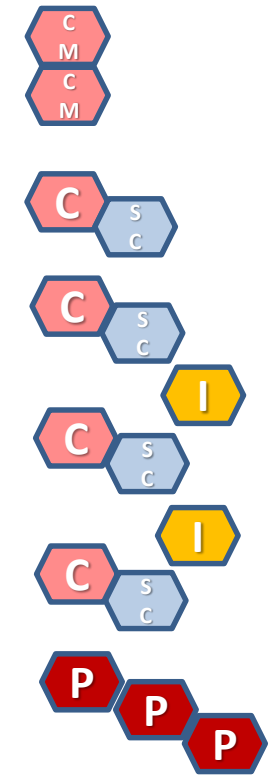
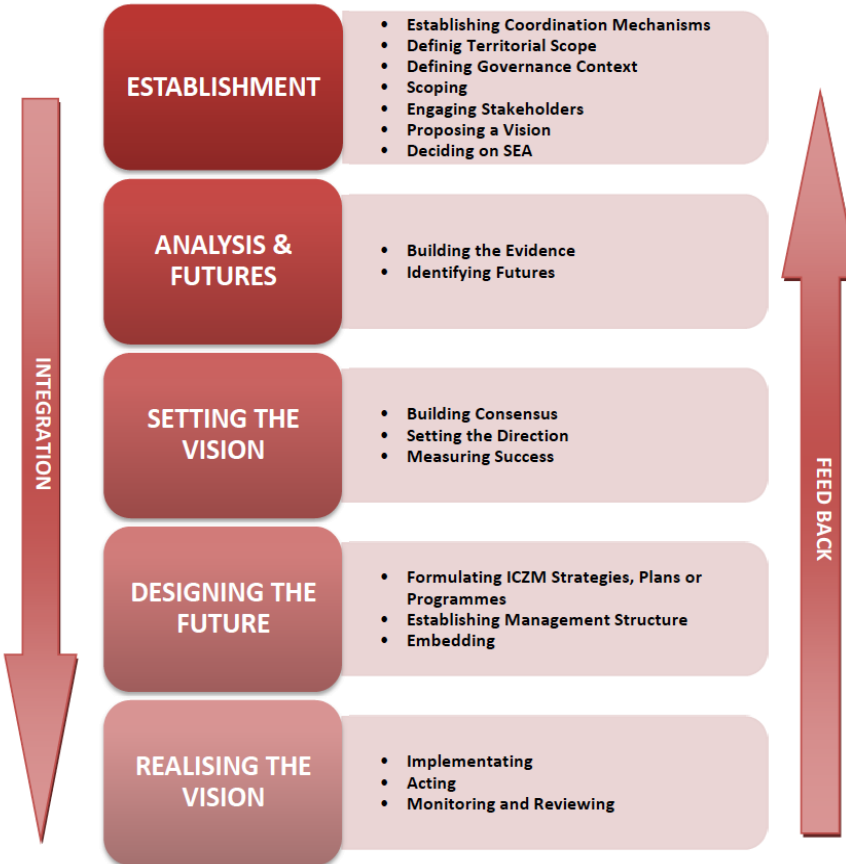


WATER RESOURCES MANAGEMENT



Plan preparation and implementation process

Information/education, consultation and participation



C. COMMITTEE FOR IMPLEMENTATION



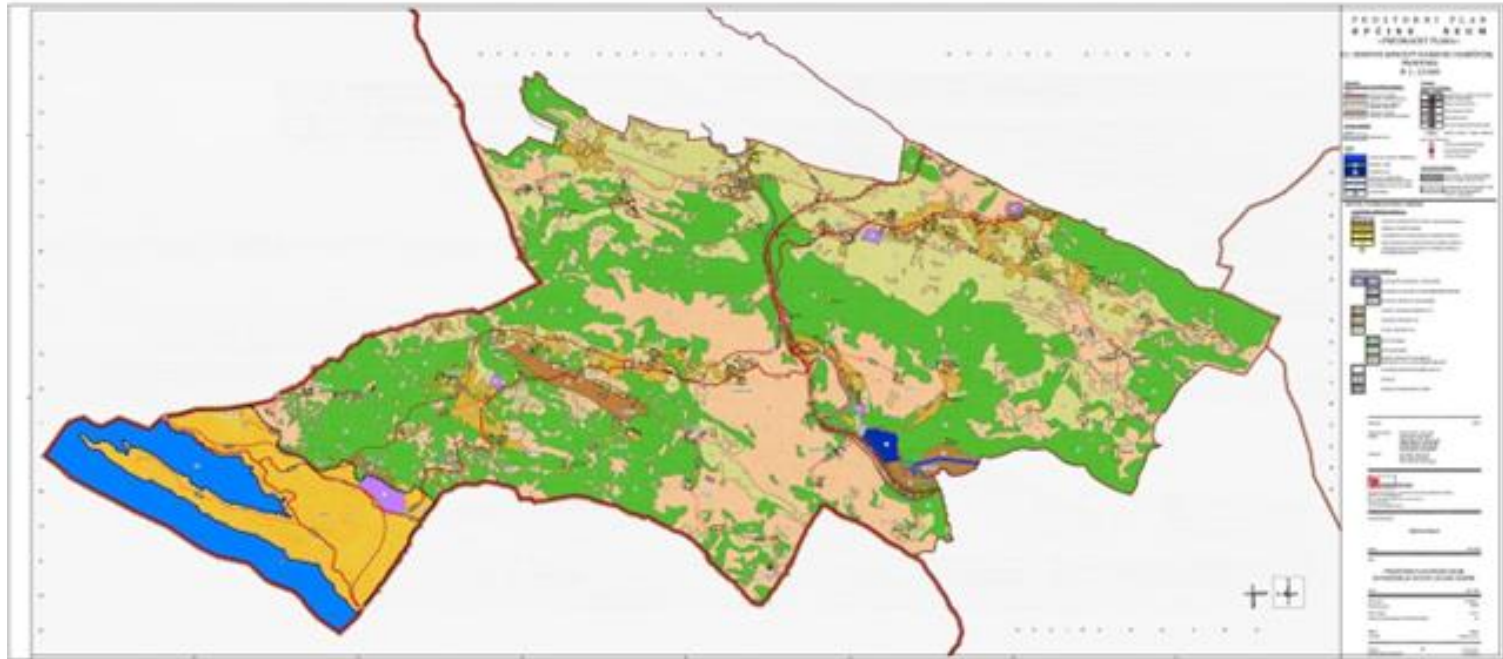
Measures: narrow coastal belt



- I Adaptation of the existing coastal objects, waterfronts, marinas and entire coastal infrastructure, including beaches, promenades, etc. to the extreme weather events;
- II Protection of hydro-dynamic features of the coastal sea, biodiversity and positive natural processes of sediment transport; and
- III Integration of these considerations in planning and realisation of any coastal intervention.



CAMP BOSNIA and HERZEGOVINA



Adaptation to climate change

Adaptation measures: tourism, urban development, agriculture, water resources

	mjera	opis	procijenjene koristi	procijenjeni troškovi (KM)
4	Jačanje kapaciteta za protupožarnu zaštitu	izgradnja protupožarnih prosjeka i puteva (trošak oko 50.000 KM/km), nabavka opreme za ranu detekciju, nabavka opreme za gašenje požara	povećanje sigurnosti stanovništva, smanjenje šteta nastalih zbog požara, očuvanje bioraznolikosti, smanjenje potrošnje vode	2.500.000
5	Lokalna proizvodnja električne i toplotne energije	promocija i izgradnja solarnih elektrana (električna energija) i solarnih kolektora za grijanje sanitarne vode; izrada studije za čitavu Općinu i audita velikih turističkih kapaciteta; izgradnja punionica za električna vozila sa solarnim elektranama i baterijama	smanjenje vršnog opterećenja elektroenergetske mreže, smanjenje troškova za energiju, veći udio obnovljivih izvora energije i smanjenje neizravnih emisija stakleničkih plinova	3.000.000
6	Povećanje učinkovitosti korištenja energije i vode	promocija i provedba mjera učinkovitog korištenja energije i vode posebno u turističkim kapacitetima; korištenje učinkovitih dizalica topline za grijanje i hlađenje (temeljeno na korištenju otpadne vode), učinkovitih tuš baterija i dr.; rangiranje turističkih objekata i spram ugljičnog otiska	smanjenje vršnog opterećenja elektroenergetske mreže, smanjenje troškova za energiju, smanjenje neizravnih emisija stakleničkih plinova	5.000.000
7	Unapređenje sustava navodnjavanja u zaleđu	promocija i implementacija modularnih sustava za navodnjavanje na solarnu energiju; racionalno korištenje vode (uz korištenje kišnice i iskorištene vode); spremnici vode; edukacija poljoprivrednika o načinu obrade zemljišta s ciljem minimalnog gubitka vlage i učinkovitim navodnjavanju	smanjenje šteta u poljoprivredi zbog suša uz unapređenje poljoprivredne proizvodnje, zaštita bioraznolikosti	2.000.000

2023 Quality Status Report

Candidate Common Indicator 25 “Land cover change”

Adriatic sub-region

Key findings

1. Largest land cover change (10 km belt; 2012 - 2018) = increase of built-up area by **27 km²**.
2. Decrease of forest and semi-natural land (24 km²), water bodies (3 km²) and agricultural land (2 km²).
3. The increase of built-up in **0-300 m** (2012-2018) is **4.4 km²** while in 300 m-1 km the increase is 3.5 km² Decrease of forests and semi-natural land, water bodies and wetlands.

LECZ (up to 5 m a.s.l.) occupies 17% (4 955 km²) of the coastal zone (10 km width), of which the built-up areas is 10% (484 km²).

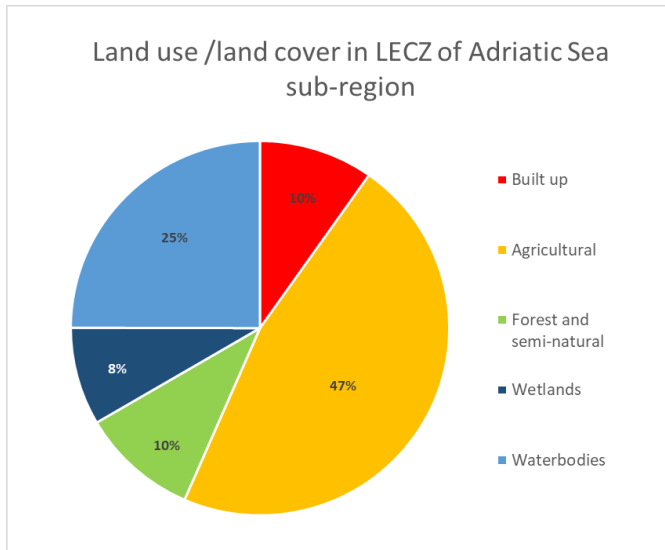


Figure: LECZ of the Adriatic sub-region

Built-up increase from 2012 to 2018 within LECZ in km²

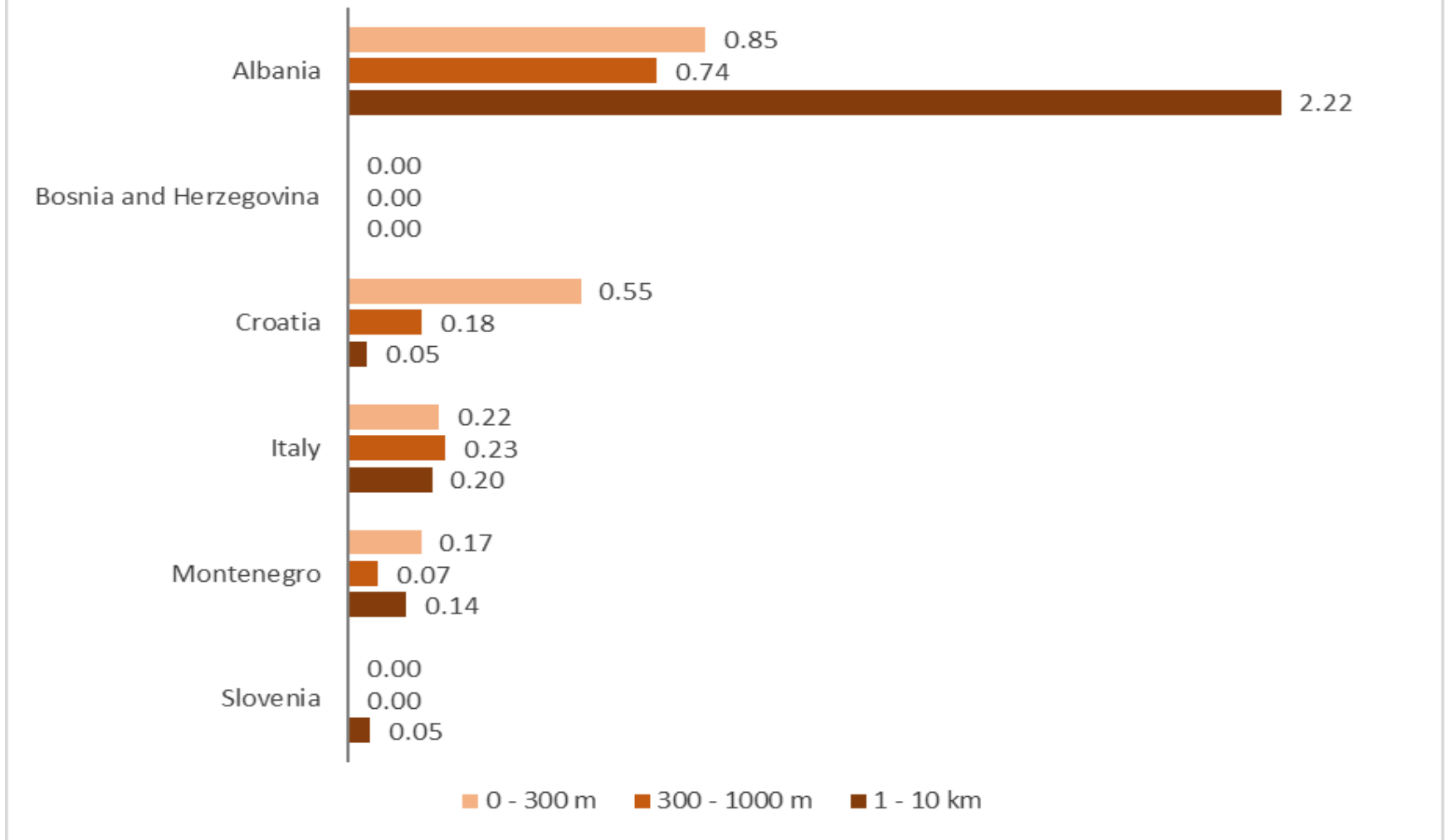


Figure : Land take in the LECZ per country per coastal strips in km²

Why NBS?

Last IPCC - Report

Preservation

Improvement
and management

Restoration

Establishing of
new systems



Typology of NBS

Preservation / Improvement and management / restoration -
creation of:

- Soils and vegetated land
- Coastal forests and woods
- Coastal riparian buffers
- Wetlands / Marshes
- Dunes
- Coastal freshwater ponds
- Seagrass meadows /
Brown algal forests



Settlements infrastructure

Establishing of:

- Porous pavements
- Green roofs
- Biodiverse / Brown roofs
- Rain gardens
- Vegetated swales
- Rainwater harvest zones
- Detention ponds
- Infiltration trenches

NUEVAS TENDENCIAS EN EL DRENAJE URBANO SOSTENIBLE

19 Mayo 2022 9:00h-11:00h

PONENTES:

Sara Perales, Consejera Delegada de Blue Green Management (Grupo TYPSA)
Leonardo Nanía, profesor titular área de Ingeniería Hidráulica (E.T.S. I.C.C.P. Granada)

CONTENIDO:

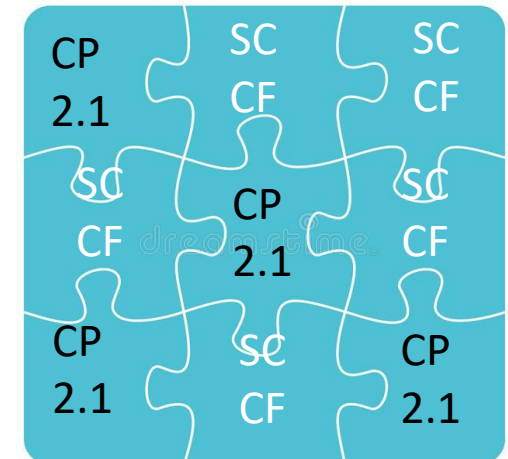
- Retos actuales del Drenaje Urbano. El caso de Málaga.
- SUDS: Soluciones Basadas en la naturaleza.
- Experiencias en la implementación de SUDS en ciudades españolas.
- Ejemplos de Málaga: Campamento Benítez y Normas Técnicas en elaboración de EMASA.
- Preguntas y debate



National ICZM Strategy and Coastal plans



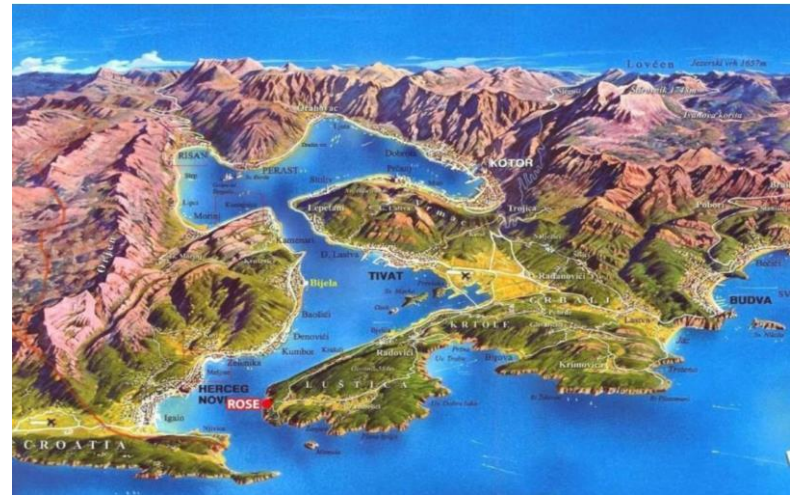
- National ICZM Strategy and Integrated management plan in Damour (Lebanon)
- Coastal plan / SRL Tanger-Tetouan-Al Hoceima (Morocco)
- Coastal plan of Boka Kotorska Bay (Montenegro)
- Vulnerability to CC assessments (Algeria)



Coastal Plan for the Boka Kotorska bay

The area – Boka Kotorska Bay

- UNESCO World Heritage Site – Kotor-Risan bay
- High vulnerability to coastal flooding
- High population density
- Vulnerability to droughts, forest fires, stormy and heavy rains

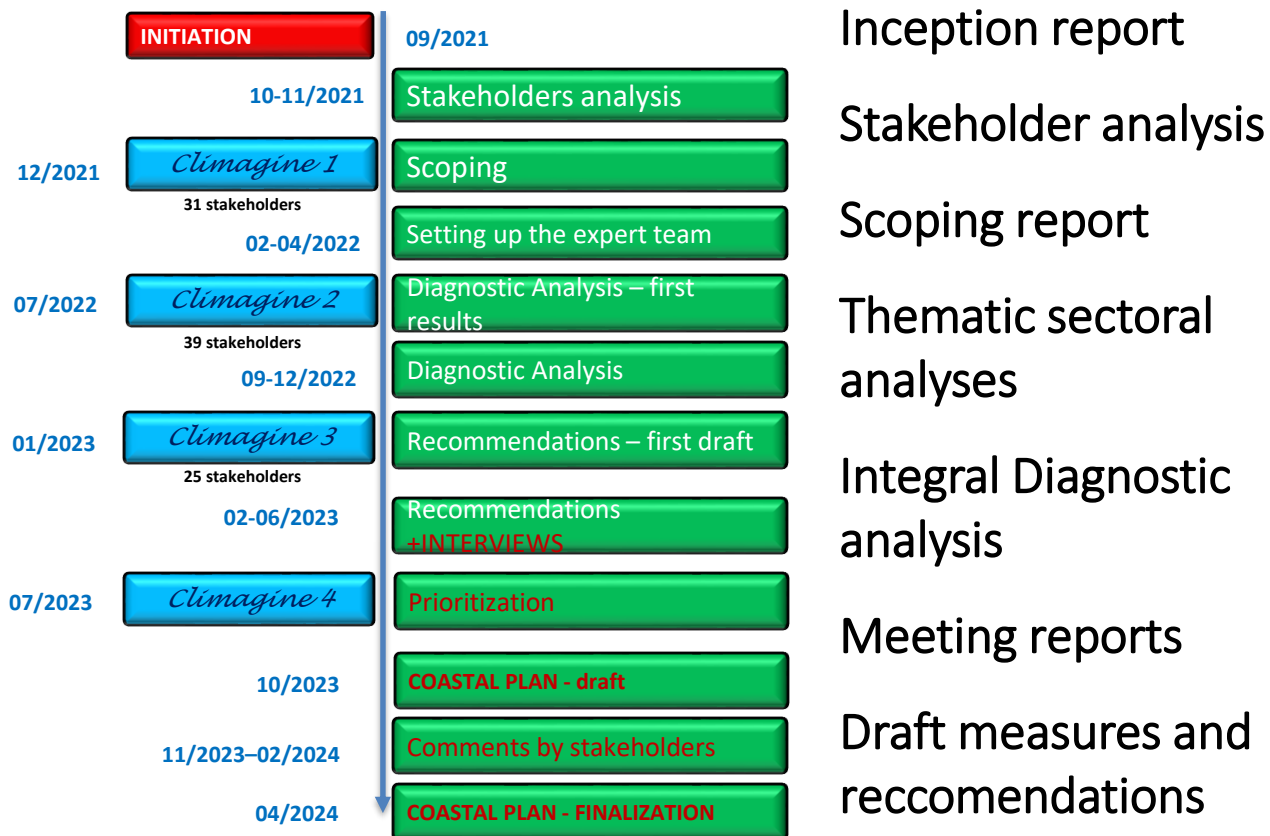


Objectives

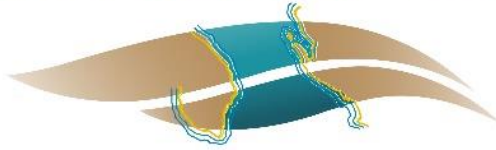
- The plan will provide a comprehensive cross-sectoral framework for the protection and development of the valuable resources of Boka bay, with solutions and recommendations for sustainable development and adaptation to climate change
- The plan will be integrated into the local and regional plans as well as Spatial Plan of Montenegro up to 2040

Boka Kotorska Bay - Process, achievements and results

Participatory approach



TRANSBOUNDARY
CAMP OTRANTO PROJECT



CAMP Otranto is the first transboundary project since the launch of the Coastal Areas Management Programme (CAMP) in 1989.

TRANSBOUNDARY
CAMP OTRANTO PROJECT

FOSTERING
PARTNERSHIPS
ACROSS THE
ADRIATIC SEA

For coastal sustainability in Albania and Italy

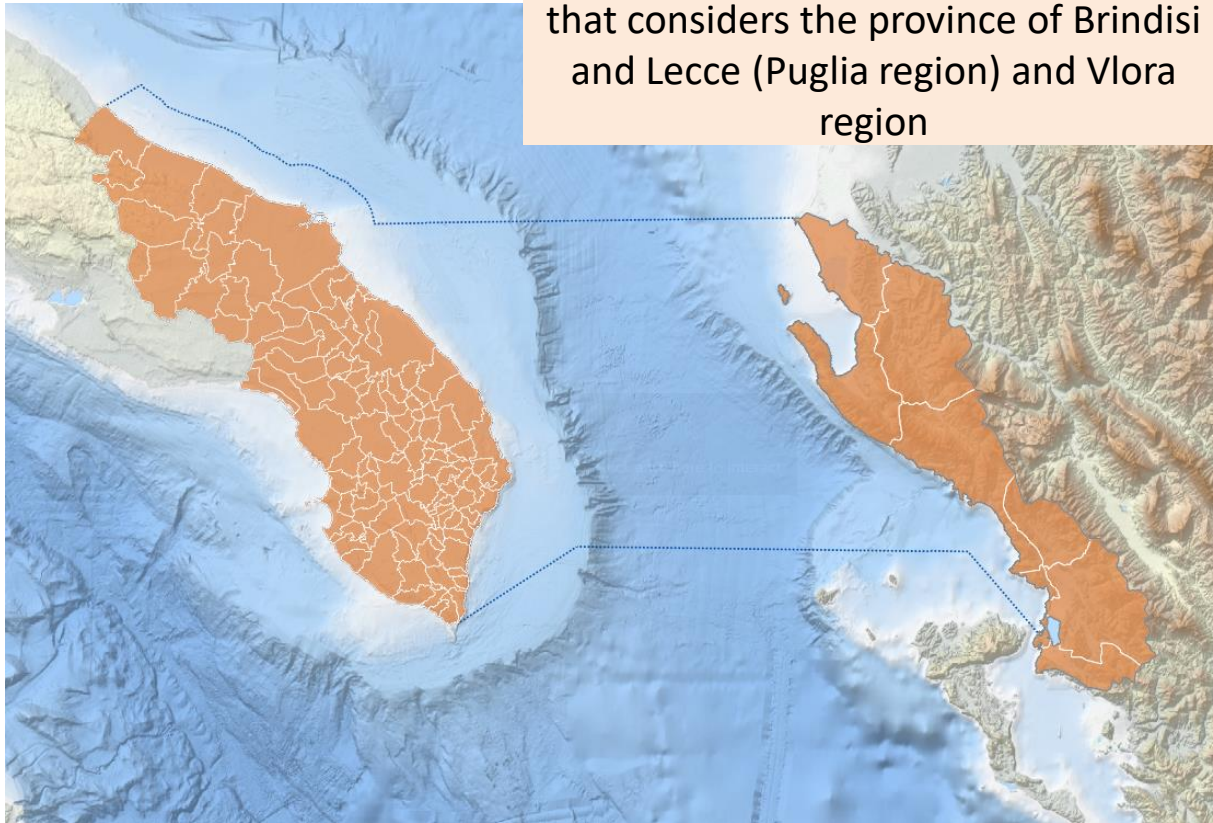
#CAMPOtranto | camp-otrantocom
transboundary@camp-otrantocom

UN environment programme | Mediterranean Action Plan Barcelona Convention | PAP/RAC | info RAC | REGIONE PUGLIA | AKZM



CAMP area

Single complex project area →
between the Southern Adriatic and
the Northern Ionian Sea
Focuses on the marine-coastal space
that considers the province of Brindisi
and Lecce (Puglia region) and Vlora
region



- Assessment of environmental status and pressures, and existing measures
- Policy and governance analysis
- Elaboration of a proposal for the establishment or designation of an ABMT
- Identification of possible measures
- Workshops and meetings at national & transboundary levels

Concept note on MSP – Albania

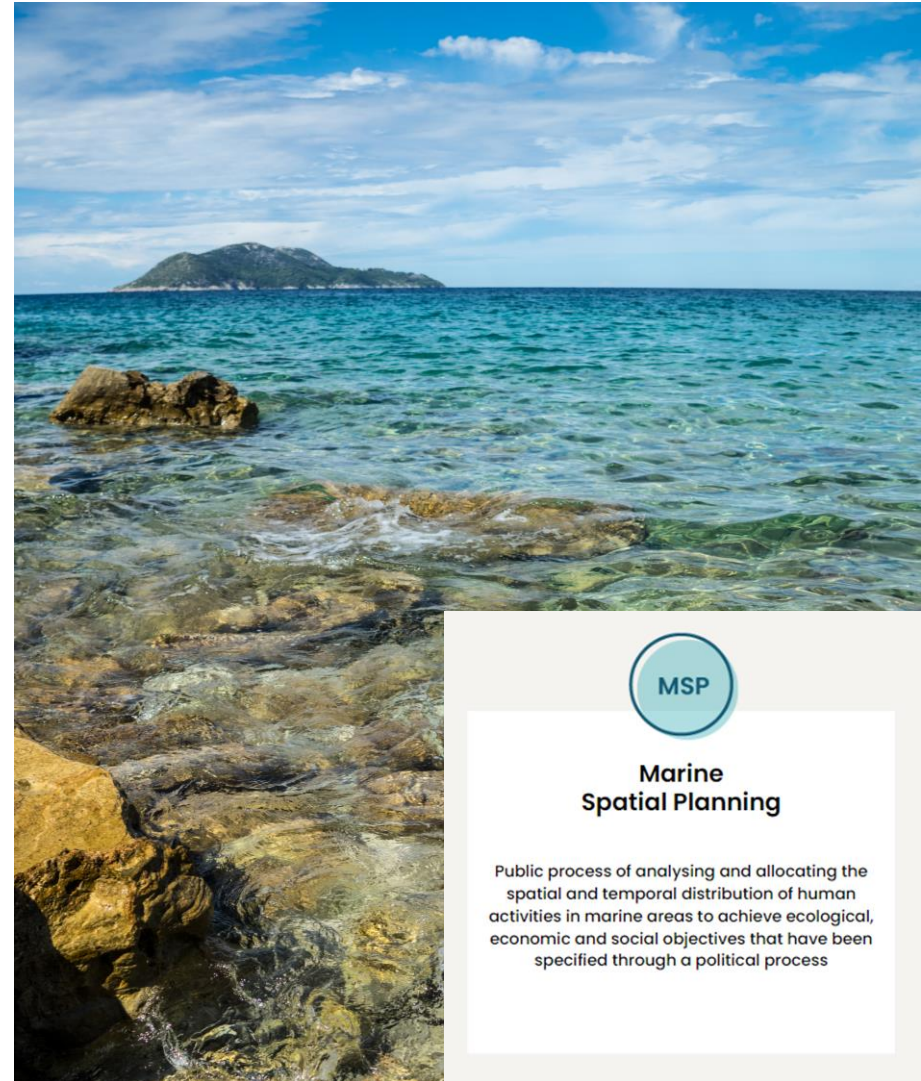
Initiate the process of transposing the directive into Albanian legislation

Consideration of the suitability of the existing institutional set-up for initiating the process of preparing the MSP

Analyse the availability of the data and prepare an initial plan on how to fill the gaps

Analyse the main Land Sea Interactions

Prepare a roadmap for the Albanian authorities for the full approximation of the directive



Marine Spatial Planning

Public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that have been specified through a political process

Need for MSP within Barcelona Convention



Common Regional Framework for ICZM
adopted
Conceptual Framework for MSP – took note



There are seven interrelated stages
in the MSP process.



msp.iczmplatform.org



Mediterranean MSP Workspace

MEDITERRANEAN MARINE SPATIAL PLANNING (MSP)

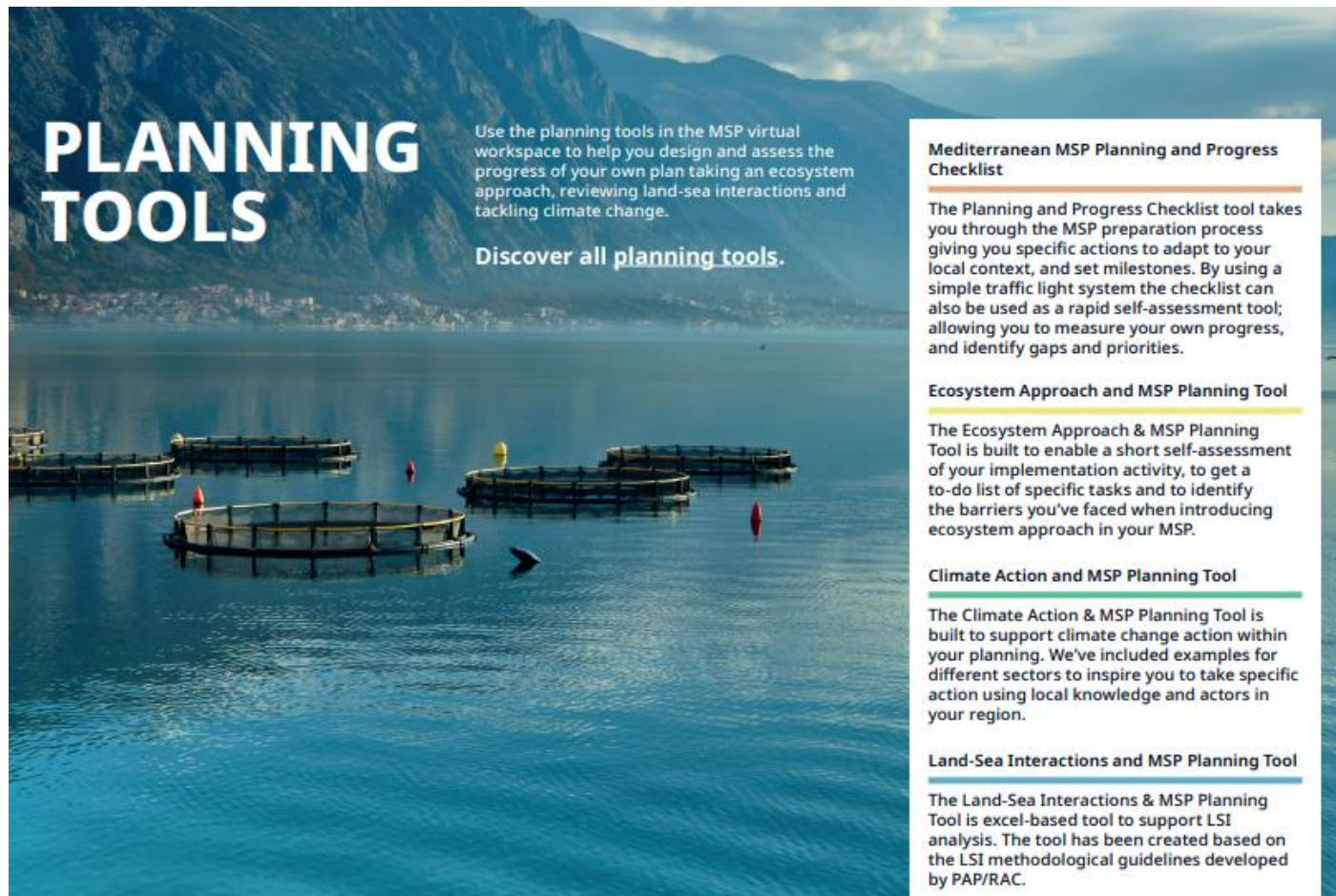
A practical guide to support the virtual workspace and planning tools for MSP

Using the seven stage MSP process and including:

- ✓ Climate Actions
- ✓ Ecosystem Approach
- ✓ Land-Sea Interactions

www.msp.iczmplatform.org

Mediterranean MSP Workspace



PLANNING TOOLS

Use the planning tools in the MSP virtual workspace to help you design and assess the progress of your own plan taking an ecosystem approach, reviewing land-sea interactions and tackling climate change.

Discover all [planning tools](#).

Mediterranean MSP Planning and Progress Checklist

The Planning and Progress Checklist tool takes you through the MSP preparation process giving you specific actions to adapt to your local context, and set milestones. By using a simple traffic light system the checklist can also be used as a rapid self-assessment tool; allowing you to measure your own progress, and identify gaps and priorities.

Ecosystem Approach and MSP Planning Tool

The Ecosystem Approach & MSP Planning Tool is built to enable a short self-assessment of your implementation activity, to get a to-do list of specific tasks and to identify the barriers you've faced when introducing ecosystem approach in your MSP.

Climate Action and MSP Planning Tool

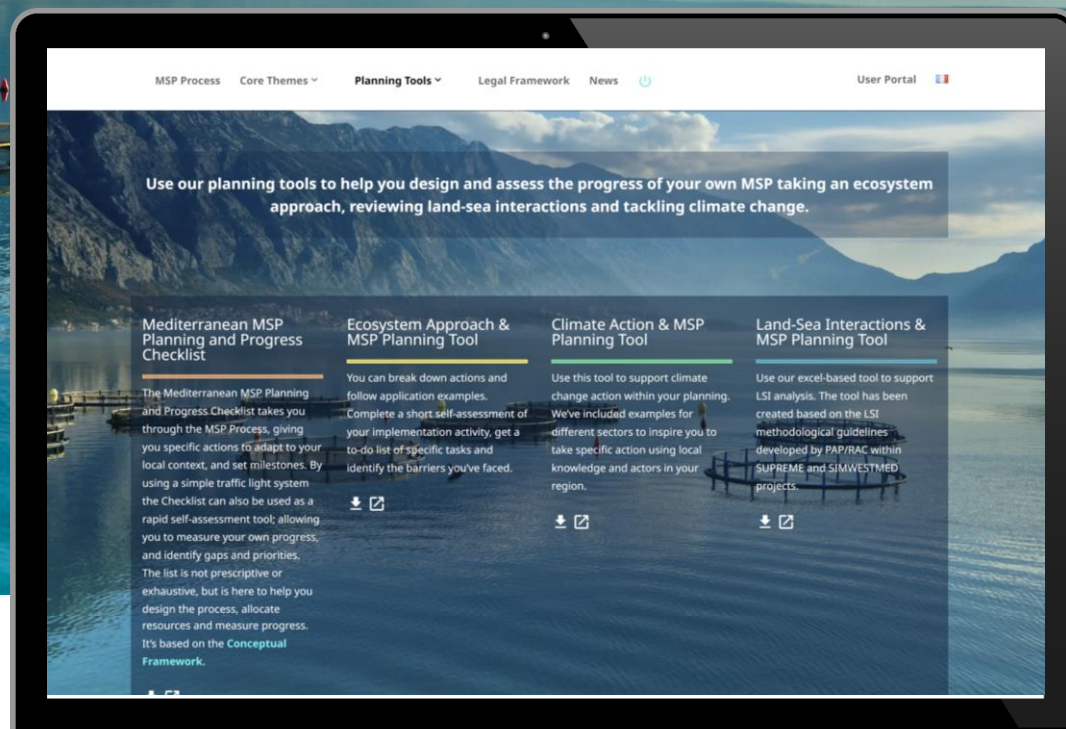
The Climate Action & MSP Planning Tool is built to support climate change action within your planning. We've included examples for different sectors to inspire you to take specific action using local knowledge and actors in your region.

Land-Sea Interactions and MSP Planning Tool

The Land-Sea Interactions & MSP Planning Tool is excel-based tool to support LSI analysis. The tool has been created based on the LSI methodological guidelines developed by PAP/RAC.

<https://msp.iczmplatform.org/planning-tools/>

The planning tools can be used for assessing and strengthening governance, climate action, ecosystem approach and Land-Sea Interactions.



msp.iczmplatform.org



MSP4BIO project



- **2nd General Assembly** meeting of the MSP4BIO Horizon project – contributing to better integration between marine spatial planning (MSP) and nature protection → March 2023 / Ostend, Belgium
- **Communities of Practice** are established in each of the 6 pilot sites for the effective interaction with planners, regulators, and researchers relevant for MSP and MPAs
- <https://msp4bio.eu/>

COP 23, Slovenia, December 2023; Decision

Conceptual Framework for Implementing Marine Spatial Planning in the Mediterranean

ONU programme pour l'environnement | Plan d'action pour la Méditerranée Convention de Barcelone | PAP/RAC

PLANIFICATION DE L'ESPACE MARITIME EN MEDITERRANEE

24 avril, 2023
Split, Croatie

UN environment programme | Mediterranean Action Plan Barcelona Convention | PAP/RAC

MARINE SPATIAL PLANNING IN THE MEDITERRANEAN

24 April, 2023
Split, Croatia

Thank you for your attention!

UNEP Mediterranean Action Plan
Priority Actions Programme
Regional Activity Centre (**PAP/RAC**)

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<http://paprac.org>

<http://iczmplatform.org>

