FutureMARES

Climate Change and Future Marine Ecosystem Services and Biodiversity



PROJECT ACTIVITIES AND MEDITERRANEAN CONTEXT











EVENT: MPA ENGAGE CAPITALIZATION EVENT DATE: JUNE 18TH, 2021 (ONLINE) SPEAKERS: MYRON PECK, NIOZ





Our overarching goal - Provide socially and economically viable actions, strategies and Nature-based Solutions (NBS) for Climate Change (CC) adaptation & mitigation to safeguard future biodiversity, and ecosystem functions, maximising natural capital and its delivery of services from marine and transitional ecosystems.





LC-CLA-06-2019 Inter-relations between climate change, biodiversity and ecosystem services 4 years (1st September 2020 – 31st August 2024), 15 nations, 33 Partners 8.5 million €

Geographical coverage of our activities in Med We call them "Storylines"... there are 11

West



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- Balearic Islands: seagrass (P. oceanica) Jorge Terrados (CSIC)
- 2 Habitat-forming macroalgae / corals in Western Med. Joaquim Garrabou (CSIC)
- 2 Tuscan Archipelago: P. oceanica Fabio Bulleri (UNIPI)
- 2 Aegean pelagic and demersal communities Stelios Katsanevakis (AUTH)
- 2 Karpathos & Saria seagrasses & meadows, soft/rocky bottom Eva Chatzinikolaou (HCMR)
- East 2 3 SE Reef & canopy-forming macroalgae and alien invasive spp. Gil Rilov (IOLR)
 - 2 Basin-wide sea turtle conservation Antonios Mazaris (AUTH)
 - 2 3 Basin-wide spatial management measures Marta Coll (CSIC)











Nine Integrated Activities

(next slides = five examples of how you can get involved)













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(₍)

Q1) How are species traits and community roles, ecological functions and ecosystem services linked and impacted by CC?

A1) Compile and statistically analyse the best available large-scale in situ data sets to identify tipping points.

Get Involved) Identify ecosystem services and ecological indicators of highest interest (from policy and management perspective).













Q2) What are the future physical and biogeochemical impacts of CC on marine and transitional waters?

A2) Deliver ensemble projections of the physical and biogeochemical effects of CC at appropriate spatiotemporal scales that reduce uncertainty and identify climate hotspots and refugia.

Get Involved) Identify outputs of highest interest for ongoing and future management and policy actions (e.g. time horizons, specific factors).











Q3) What are the consequences of CC for important (keystone, structural, endangered) species and consequences for marine biodiversity?

A3) Perform climate projections using a suite of state-of-the-art, mechanistic and spatially-explicit species and ecosystem models.

Get Involved) Help create scenarios to be tested, recommend types of outputs, and carefully examine and critique our results.



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Q4) How will ecological and social factors interact to affect the climate risks to dependent human communities?

A4) Conduct novel, social-ecological risk assessments ranking the severity of effects of projected CC on various ecosystem services and dependent human communities. Create online, flexible tool for risk assessments.

Get Involved) Identify elements most important to examine in risk assessments and provide input on outputs to be produced.













Q5) In light of CC, what areas are most or least suitable to support NBS within the time frame of specific policies, and what spatially managed uses exist in those areas (MPA, fishing ground, windfarm, etc)?

A5) Conduct evidence mapping of ecological projections to address relevant questions in the time frame of specific policies.

Get Involved) Identify best timeframe for analyses (2030, 2050...) and key implementation mechanisms, including overarching policies (national/EU level), bi-lateral agreements, Conventions, etc.

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Goals of Stakeholder Engagement

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Co-develop our activities and maintain dialog with stakeholders responsible for the stewardship of marine

natural capital, biodiversity and ecosystem services... many of you!











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Thank you!

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