Future MARES

Climate Change and Future Marine Ecosystem Services and Biodiversity

Our goals

FutureMARES is an EU-funded research project examining the relationships between climate change, marine biodiversity and ecosystem services.

We will develop strategies to work with and enhance nature to help coastal societies and businessesto survive and thrive. These strategies are called nature-based solutions (NBS).

Our main goals are:

1| Understand the relationship between the ecology of marine habitats and the ecosystem services they provide.

2| Predict future climate change impacts and determine which marine regions will be most affected.

3| Research how human communities living with the sea are affected by the changes in marine ecosystems.

4| Investigate how nature-basedsolutions can help us adapt to climate change, and calculate the economic costs and benefits of implementing them locally.

The Mediterranean

The Mediterranean Sea is expected to warm by 25% more than the global mean. Its biodiversity is collapsing because of lethal heatwaves, pollution, overfishing and invasive species.

FutureMARES will look at ways to improve its NBSs, assess their performance, and how they are affected by climate change, eutrophication and invasive species.

FutureMARES in the Mediterranean

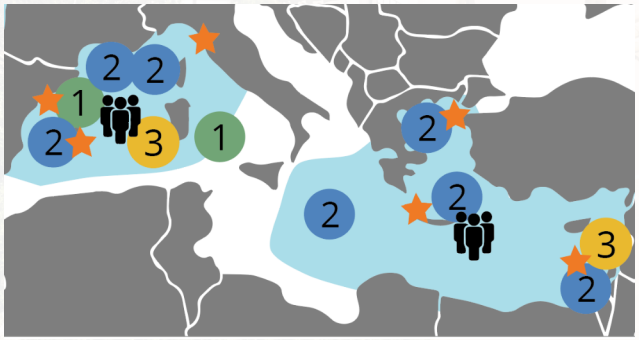
1 NBS1 – Effective Restoration

2 NBS2 – Effective Conservation

3 NIH – Nature-inclusive Harvesting

Socio-economic Climate Risk Assessments (CRA)

Planned field work



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NBS 1
EFFECTIVE RESTORATION

Restoring habitat-forming species that can act as 'climate rescuers'

Habitats such as seagrasses, mangroves, and shellfish reefs form natural coastal protection. This helps to protect against increased storminess, sea level rise and flood risks resulting from climate change.

NBS 2
EFFECTIVE CONSERVATION

Conservation strategies that consider how climate change will affect habitat suitability

Conservation strategies are at their most effective when they consider the impacts that climate change will have for flora and fauna of habitats.

NIH

Sustainably harvesting seafood from fisheries and aquaculture

Ecosystem management and a multi-species approach can help adapt to shifts in species' productivity, distribution and interactions. For example, growing and catching seafood lower in the food web will be more sustainable in the long term.

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