

The MPA Engage harmonized monitoring approach

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Interreg
Mediterranean



MPA Engage

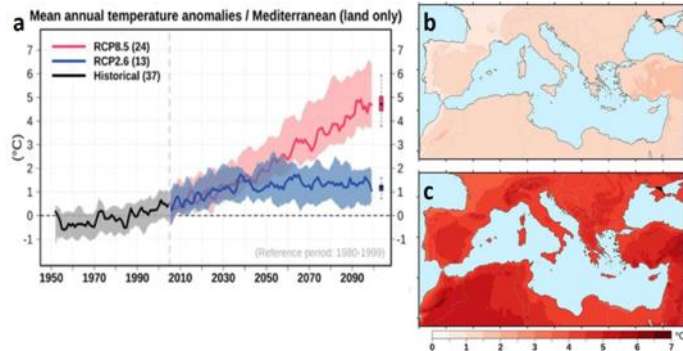


CLIMATIC HOTSPOT

During the 21st century, the basin mean sea surface temperature is expected to **warm up** by 2.7 to 3.8°C and 1.1 to 2.1°C under the RCP8.5 and the RCP4.5 scenarios, respectively (very high confidence).

Marine **heat waves** will very likely increase in spatial extent, become longer, more intense and more severe than today

MEDECC 2020 (conclusions of 190 Mediterranean Scientists)
<<https://www.medecc.org/first-mediterranean-assessment-report-mar1/>>



MEASURABLE IMPACTS

MASS mortalities



TRANSITION to termophilic

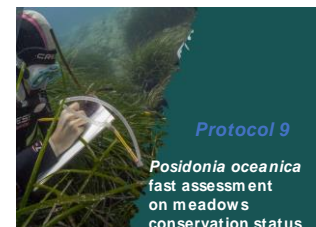
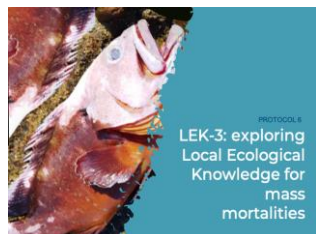


TROPICAL invaders



MANY others





- ✓ Ecosystem approach
- ✓ Scientifically robust
- ✓ Feasibility and cost effectiveness
- ✓ Public participation



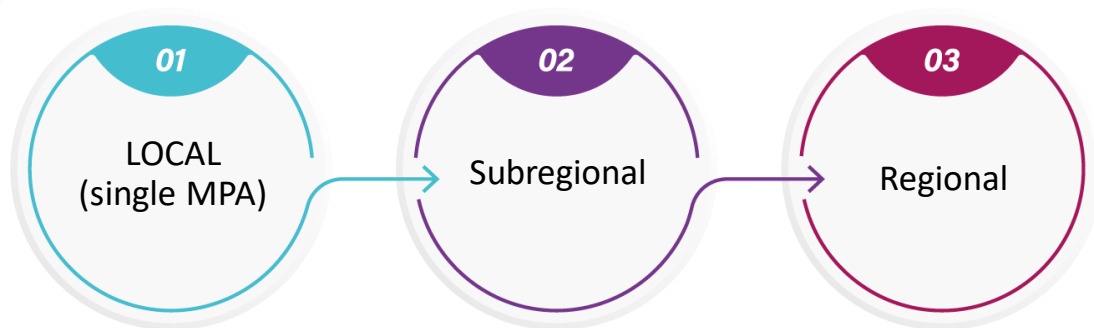
BUILD BASELINES

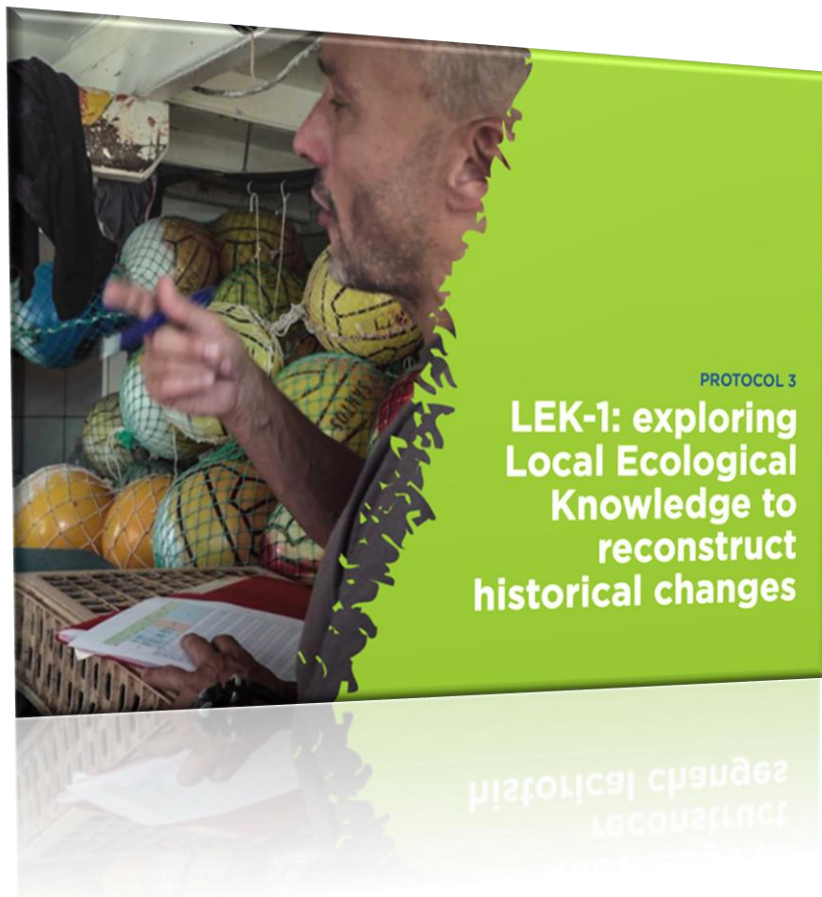
Reconstruct HISTORICAL CHANGES



TRACK CHANGES

Build TIME SERIES





Not just protocols TOOLKITS AVAILABLE

Freely accessible at:
<https://mpa-engage.interreg-med.eu>

OUR TRAINING MATERIAL



Webinar presentation here!



The excel file where to input the data-
[DATA_LEK_1.xls](#)

Interview sheet to be printed -
[Questionnaire LEK-1](#)



Video Webinar!

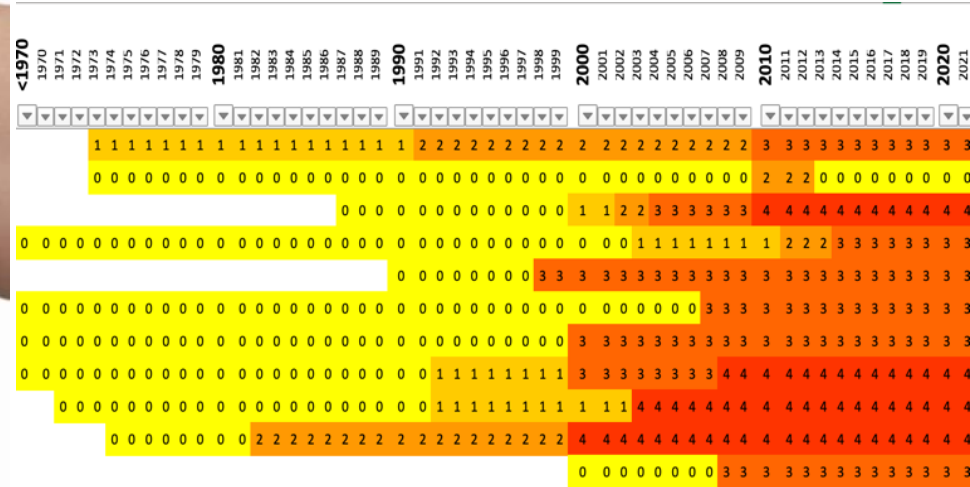
Video Tutorial!

Our video documentary -Trailer

Our video documentary -Eplside 1

Our video documentary -Eplside 2

SUPPORTING the ENTIRE MONITORING PROCESS



KNOW HOW SAMPLING DATABASE

MONITORING

INDICATORS DATA analysis

INTERPRETATION

ASSESSMENT

MANAGEMENT decisions

The basis of harmonized monitoring in the Mediterranean

11

Descriptors/ecological objectives



IMAP

Integrated Monitoring and Assessment Programme of the
Mediterranean Sea and Coast and Related Assessment Criteria
The 19th Meeting of Contracting Parties in 2016



MSFD

Marine Strategy Framework Directive

Climate change is not deliberately considered by regional Monitoring programmes.

MSFD and IMAP

The Ecosystem Approach in the Mediterranean is being implemented in accordance with a seven-step roadmap since its adoption at COP15 in 2008, Decision IG.17/6. It is now fully integrated into the MAP and Barcelona Convention framework and is in line with the EU Marine Strategy Framework Directive (MSFD) and the decisions of the Convention on Biological Diversity (CBD) regarding the ecosystem approach and the Aichi targets. As part of this process, COP19 adopted the Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and related Assessment Criteria (IMAP; Decision IG.22/7).

To enhance alignment:

- COHERENCE among Good Environmental Status (GES) definition, targets and indicators monitoring and assessment work on regional/sub-regional level
- CO-OPERATION between EU and non-EU countries of the same sub-region/region
- CAPACITY-BUILDING to promote common capacities and ownership of the process
- DATA-SHARING principles and practices to be put into practice

MARINE STRATEGY
FRAMEWORK DIRECTIVE
11 Descriptors (D)

INTEGRATED MONITORING
AND ASSESSMENT PROGRAMME
11 Ecological Objectives (EO)

| | | |
|------------------------------|-----|--|
| BIODIVERSITY | 1. | BIODIVERSITY |
| NON-INDIGENOUS SPECIES | 2. | NON-INDIGENOUS SPECIES |
| COMMERCIAL FISH STOCKS | 3. | HARVEST OF COMMERCIALY EXPLOITED FISH AND SHELLFISH |
| FOOD WEB | 4. | MARINE FOOD WEBS |
| EUTROPHICATION | 5. | EUTROPHICATION |
| SEA-FLOOR INTEGRITY | 6. | SEA-FLOOR INTEGRITY |
| HYDROGRAPHICAL CONDITIONS | 7. | HYDROGRAPHY |
| CONTAMINANTS | 8. | COASTAL ECOSYSTEMS AND LANDSCAPES |
| SEA-FOOD CONTAMINANTS | 9. | POLLUTION |
| MARINE LITTER | 10. | MARINE LITTER |
| ENERGY AND NOISE | 11. | ENERGY INCLUDING UNDERWATER NOISE |

Coherent with the principles of IMAP and MSFD

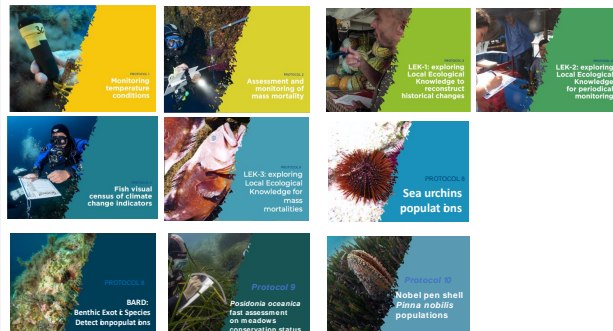
MSFD and IMAP

The Ecosystem Approach in the Mediterranean is being implemented in accordance with a seven-step roadmap since its adoption at COP15 in 2008, Decision 10.17/6. It is now fully integrated into the MAP and Barcelona Convention framework and is in line with the EU Marine Strategic Framework Directive (MSFD) and the decisions of the Convention on Biological Diversity (CBD) regarding the ecosystem approach and the Aichi targets. As part of this process, COP19 adopted the Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and related Assessment Criteria (IMAP Decision 10.22/7).

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POSSIBLE INTEGRATION with MSFD and IMAP

Integrating existing IMAP descriptors and indicators

Filling a gap on Climate related impacts

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NON-INDIGENOUS SPECIES



2.



NON-INDIGENOUS SPECIES

FOOD WEB



4.



MARINE FOOD WEBS

SEA-FLOOR INTEGRITY



6.



SEA-FLOOR INTEGRITY

CONTAMINANTS



8.



COASTAL ECOSYSTEMS
AND LANDSCAPES

SEA-FOOD CONTAMINANTS



9.



POLLUTION

MARINE LITTER



10.



MARINE LITTER

ENERGY AND NOISE



11.



ENERGY INCLUDING
UNDERWATER NOISE



Concluding remarks

A cost effective harmonized observation system is ready to help Mediterranean MPAs to become sentinel sites and play a primary role in the fight against Climate Change. The resulting outputs are key to support mitigation strategies and effective adaptation plans at both local, subregional and regional level.

Act Local Think Mediterranean!



Single
MPA

Subregion

MED
Region

