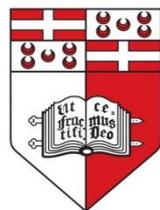




# LIFE BaHAR Best Practice Recommendations

Department of Fisheries and Aquaculture  
(DFA)



UNIVERSITY OF MALTA  
Faculty of Science  
Department of Biology



MINISTRY FOR THE ENVIRONMENT,  
SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE



PARLIAMENTARY SECRETARY FOR AGRICULTURE,  
FISHERIES AND ANIMAL RIGHTS



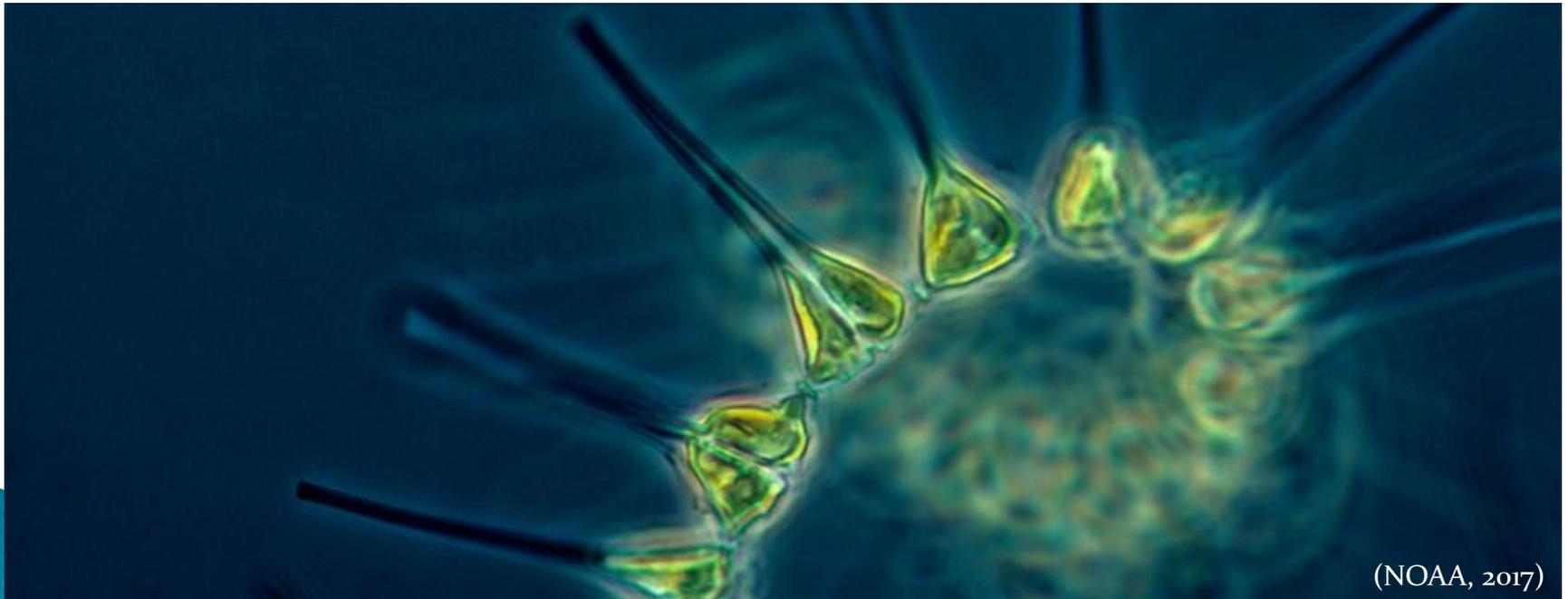
The LIFE BaHAR for N2K (LIFE12 NAT/MT/000845) Project  
is 50% co-financed by the EU LIFE+ Funding Programme

Il-proġett LIFE BaHAR for N2K (LIFE12 NAT/MT/000845) huwa  
kofinanzjat (50%) mill-fond LIFE+ tal-Unjoni Ewropea.



# The Marine Environment; An important resource

- **Provides** many services to *mankind* whilst also serving as a home for *many different species*.



(NOAA, 2017)

# The Marine Environment; Stakeholders

**Many stakeholders inside Malta's 25 nautical mile Fisheries Management Zone (FMZ)**



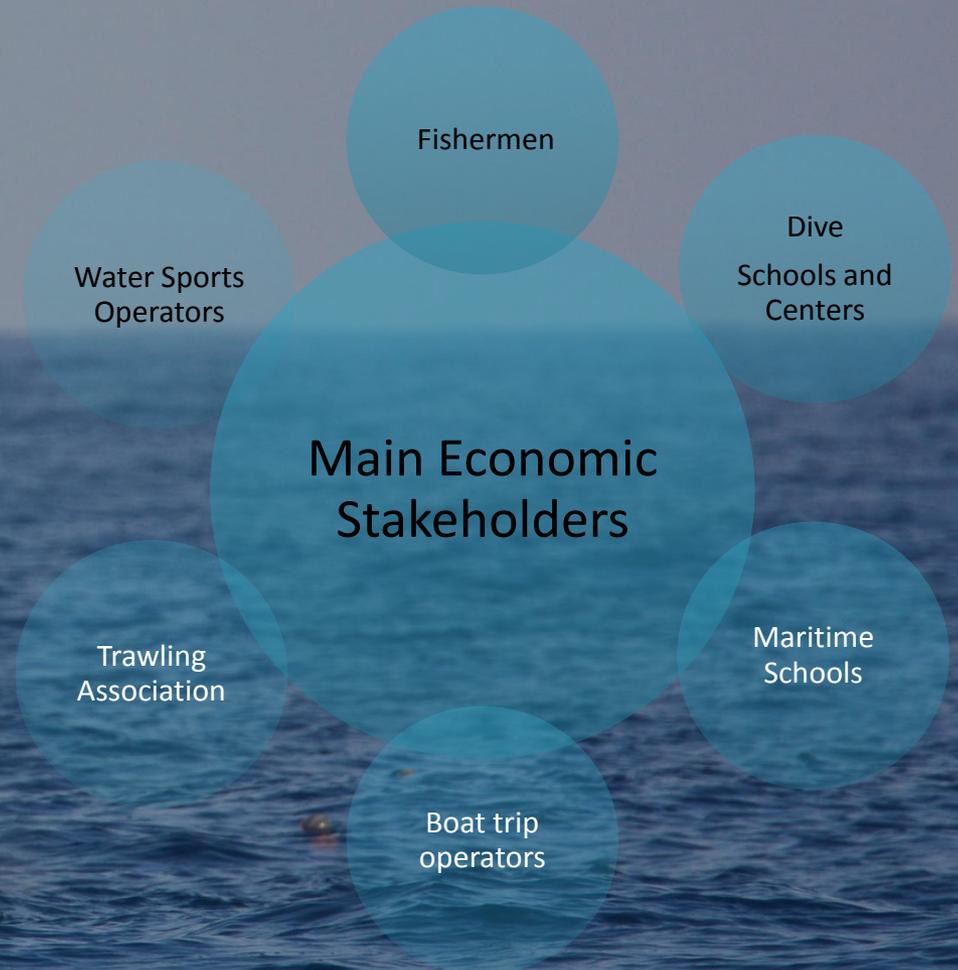
# The Marine Environment; Stakeholders

Stakeholders who have a stake in the marine environment;



# The Marine Environment; Stakeholders

Stakeholders who derive their **livelihood** from the sea;



# The Marine Environment; Management

- With so many stakeholders having a stake in the marine environment this resource must be **managed** in a way that will;
  - Address the **needs of all its users**.
  - Whilst recognising that the sea is a **finite resource** which needs to be conserved.
- Without one and the other you cannot have *good management*.

# Management Process

- In order to find the **best way forward** in the management of our seas;
  - Stakeholders were consulted in a number of **meetings** throughout the LIFE BaHAR project.
  - Stakeholders were also invited to **meet face to face** to discuss concerns and conflicts that might arise.



# Management Process

In these meetings the new MPA's were discussed and **information on the work done on LIFE BaHAR** was provided to stakeholders.

Other meetings involved discussions on how the creation of new MPAs would **impact stakeholders**.



# Management Process

A broad range of **questions** were asked to stakeholders regarding their activities and the potential impact of new MPAs on their livelihoods;



OCEANA / Carlos Minguell © LIFE BaHAR for N2K

- What are the **main activities** that you carry out that involve the sea?
- Do you think your **activities** could be **impacting** the marine environment in any way?

# Management Process

A broad range of **questions** were asked to stakeholders regarding their activities and the potential impact of new MPA's on their livelihoods;



OCEANA / Carlos Minguell © LIFE BaHAR for N2K

- Do you think your activities could be **impacting the reefs and caves** in any way?
- Do you think it is possible to find an **alternative** to reduce the impact? Do you think that this can be done personally or through help by the authorities?

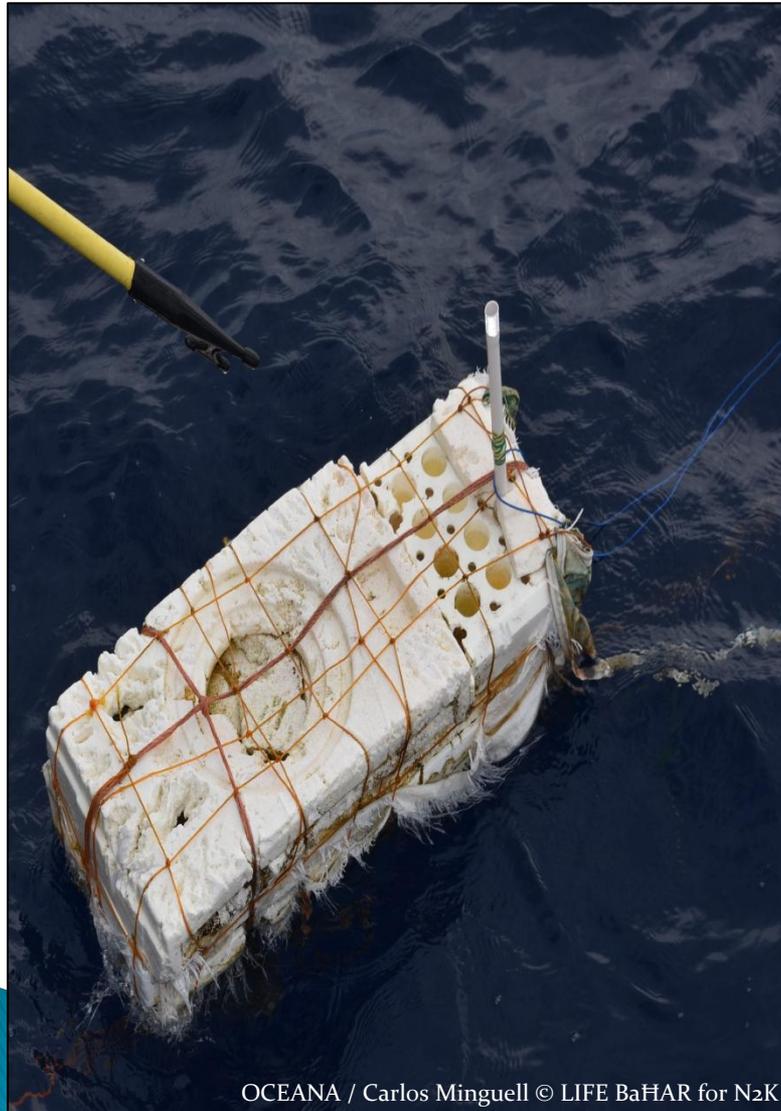
# Management Process

**Possible management, conflict diminishing and alternative livelihood option** were presented to stakeholders.

They were asked to **rate these options on a scale of 1 to 5**. One being strongly disagree with proposal and five being strongly agree with proposal.



# Management Process



OCEANA / Carlos Minguell © LIFE BaHAR for N2K

Proposed options include;

- Enabling complementary activities such as **Pesca-tourism**.
- More efficient and clearer methods of **informing stakeholders** of existing legislation.
- Establishment of a **zoning no take system** that restricts certain activities in particular core areas of the MPAs.
- Fishing gear to use **biodegradable technologies** to reduce ghost fishing.

# Management Process



Proposed options include;

- Creation of an **MPA eco label** (certification) awarded to economic stakeholders that clearly identifies operators that are sustainable operators in their particular activities.
- A **closed season** in certain areas
- Dedicated **marine enforcement units** covering both surface and underwater activities
- Banning **recreational fishing** from certain areas in MPAs.

# Management Process

- Most of the proposals put forward were **greeted with enthusiasm** by most of the stakeholders, including those whose livelihood is predominantly dependant on the sea.
- The **overall consensus** was that there is a need for *enforced action* sooner rather than later, and that stakeholders are *willing to participate* in the protection of the seas.



# Management Process

**Examples from existing MPA's in other countries were also looked at so that lessons could be derived from areas which have undergone this process before.**



Karimunjawa National Park, Indonesia, Printrest, 2018



Ecotourism Australia, 2017

# Management Process

Specific attention was given to MPA's from other **Mediterranean countries**, since issues might be more similar to those found in Maltese waters than those from other regions.



# Cinque Terre in Italy

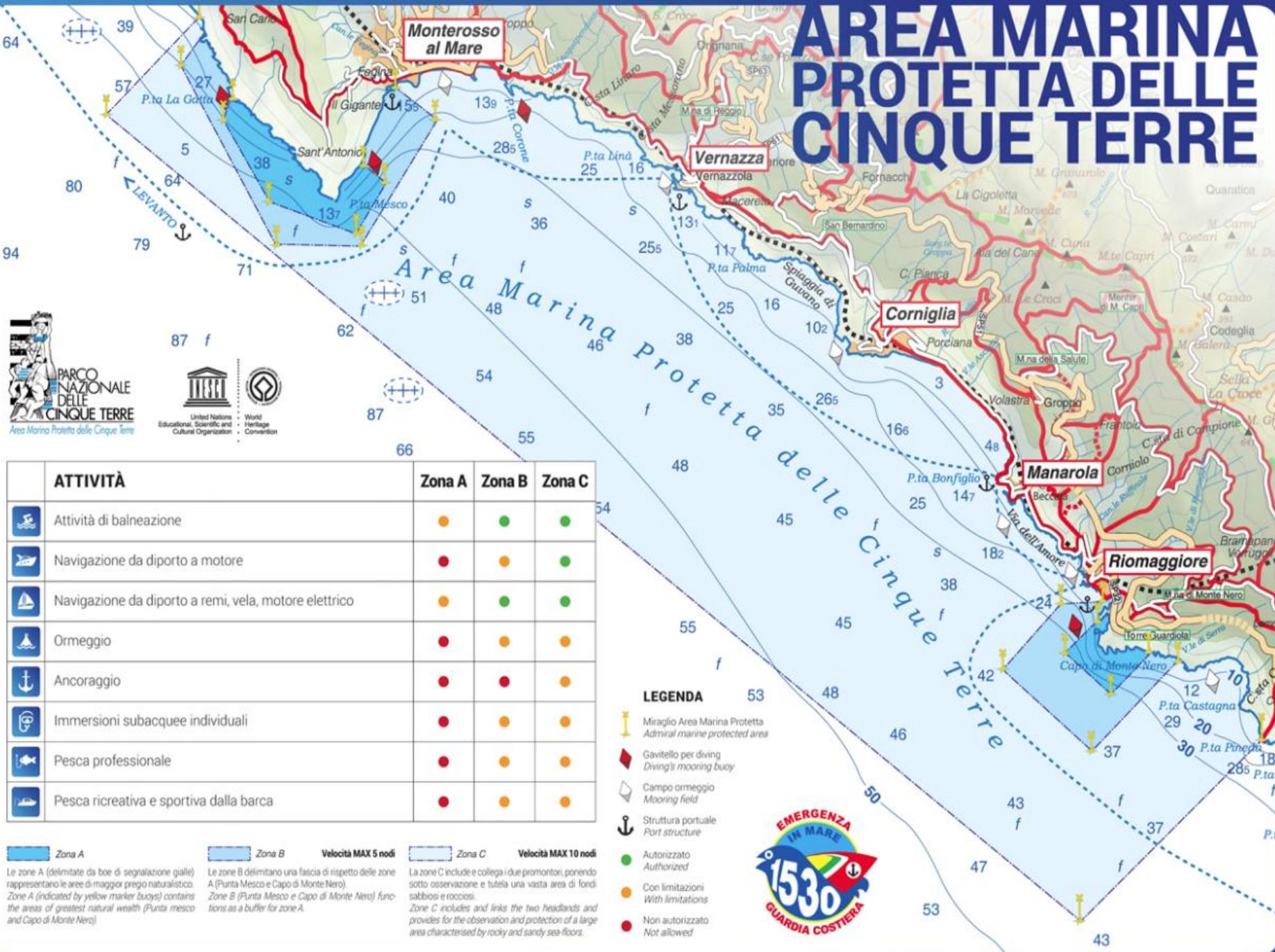


Medium Corporation

# Cinque Terre in Italy

1. Managing environmental and cultural heritage **with stakeholders**. This was facilitated by;
    - A sustainability report
    - Obtaining the **European Charter for Sustainable Tourism (ECST)**.
  2. The establishment of a project of **sustainable tourism for scuba divers** of all abilities.
  3. The establishment of an **Environmental Education Center**.
  4. The setting up of an **application form for each activity** (both commercial and recreational).
  5. Recreational fishermen must **submit record book** of the captures for the monitoring of the recreational fishing activity every year
  6. A zonation system.
- 

# AREA MARINA PROTETTA DELLE CINQUE TERRE



ATTIVITÀ	Zona A	Zona B	Zona C
Attività di balneazione	●	●	●
Navigazione da diporto a motore	●	●	●
Navigazione da diporto a remi, vela, motore elettrico	●	●	●
Ormeggio	●	●	●
Ancoraggio	●	●	●
Immersioni subacquee individuali	●	●	●
Pesca professionale	●	●	●
Pesca ricreativa e sportiva dalla barca	●	●	●

**Zona A** (delimitate da boe di segnalazione gialle) rappresentano le aree di maggior pregio naturalistico. Zone A (indicated by yellow marker buoys) contains the areas of greatest natural wealth (Punta mesco and Capo di Monte Nero).

**Zona B** (delimitate da boe di segnalazione gialle) rappresentano le aree di maggior pregio naturalistico. Zone B (Punta Mesco e Capo di Monte Nero) functions as a buffer for zone A.

**Velocità MAX 5 nodi**

**Zona C** include e collega i due promontori, ponendo sotto osservazione e tutela una vasta area di fondi sabbiosi e rocciosi. Zone C includes and links the two headlands and provides for the observation and protection of a large area characterized by rocky and sandy sea floors.

**Velocità MAX 10 nodi**

## LEGENDA

- Miraggio Area Marina Protetta Admiral marine protected area
- Gavittello per diving Diving's mooring buoy
- Campo ormeggio Mooring field
- Struttura portuale Port structure
- Autorizzato Authorized
- Con limitazioni With limitations
- Non autorizzato Not allowed



# Management Process

From the results obtained in these exercises a number of **best practice recommendations** were derived that will provide a baseline in protecting biodiversity hotspots such as **reefs and caves**.



# *Best Practice Recommendations*

In order to ensure;

**Longevity** of the marine environment, whilst meeting the **needs of stakeholders**

Each stakeholder should look to carry out their activities utilising a **best practice** approach.



# Best Practice Recommendations



- Any form of **waste** should be **disposed** of in an appropriate manner.
- Fishing gear should **not be discarded** at sea.
- If fishing gear becomes **entangled** with the seabed, this should be *retrieved* where possible, as it could cause significant harm to the marine ecosystem.

# Best Practice Recommendations



OCEANA / Carlos Minguell © LIFE BaHAR for N2K

- If *fishing gear* becomes entangled with the seabed and cannot be retrieved, a **report** is to be submitted to relevant authorities.
- Where possible, **biodegradable material** should be used to reduce impacts from *lost/abandoned fishing gear*.

# Best Practice Recommendations



- **Fishing gear** should be employed (utilised) in such a manner to *reduce bycatch*.
- Fishers can contribute to *data collection* on the marine environment and assist **injured protected species**, thereby being stewards of the seas.

# Best Practice Recommendations



Trip Advisor, 2017

*Water sport and boat trip operators should respect the **integrity of caves** and not disturb wildlife and marine species found in and around such natural features.*

# Best Practice Recommendations

A blue-tinted underwater photograph of two divers in a cave. One diver is in the foreground, and another is further back, illuminated by a bright light. The scene is dark and atmospheric, with light rays filtering through the water.

- *Divers* should only enter particular caves if they have the **necessary experience** and training, and should avoid highly diverse and sensitive caves.
- The **number of divers visiting caves** on a daily basis should be recorded and limited by the dive schools and centres.

# Best Practice Recommendations

- **Information** should be made available in relation to cave features and diver *experience grade requirements*, during diver training and at dive site locations.
- **Permanent ecological moorings** can be installed in particular sensitive zones for use by various stakeholders.



# Long term environmental benefits

The objective is to ensure that the habitats achieve, or remain in, a **good conservation status**.

If these **best practices are implemented** by stakeholders, significant harm to the marine environment **could be avoided**.



# Way Forward

**Further analysis of the data** collected and dissemination of project results, as well as **continued networking with stakeholders** after the project conclusion will ensure the *longlivity of this finite resource* whilst ensure that socio-economic factors are taken into account during the management process.



# Thank you



Photography;  
OCEANA / Carlos Minguell © LIFE BaHAR for N2K