

# The Pelagos storyline







# Protecting Marine Mammals in Crowded Waters

The ECOPOTENTIAL project is using cutting-edge satellite imagery, ecological modelling and local knowledge to improve the conservation of marine mammals in the Mediterranean Sea

























# The Pelagos Sanctuary





- MPA established in 2002 between
  France, Italy and Monaco
  - Area≈90 000 km²
  - 2 levels of protection:
    LOCAL / REGIONAL
  - 15% of internal maritime waters
- 32% of territorial waters (up to 12nm)
  - 53% adjacent high seas



# The Storyline



#### **Drivers of change**

Environmental

**Anthropogenic** 

Temperature change Salinity change

Ship strikes Fixed gear fishing Overfishing Acoustic pollution Microplastics

# Management objectives To **protect** the population of activities in the area



#### Well being

Existence value Revenues from whale watching MPA access fees

Remotely

Existence value Landscape/Seas cape enjoyment

#### **Major ES**

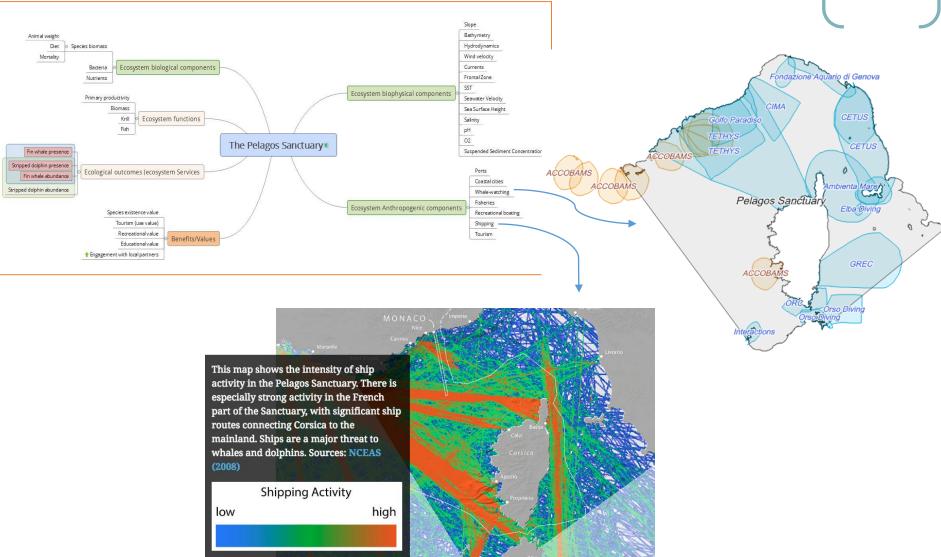
Whale watching tourism Enjoyment due to species existence value





### **Step 1: Understanding human activities**









# **Step 1b: Understanding the shipping industry**



# THESIS FRAMEWORK

Risk assessment

Hazard identification

Risk control option

3

5 IMO Recommen dation

Cost-benefit assessment

4

Predictive model / Big Data / IA

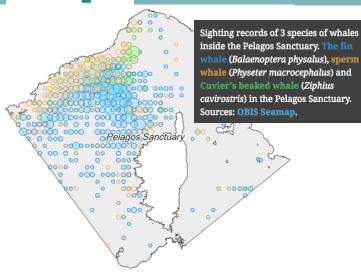




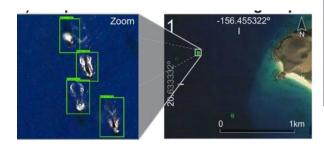


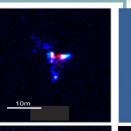
## **Step 2: Predicting the location of cetaceans**



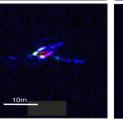


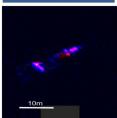
Remote sensing data: Satellite Imagery

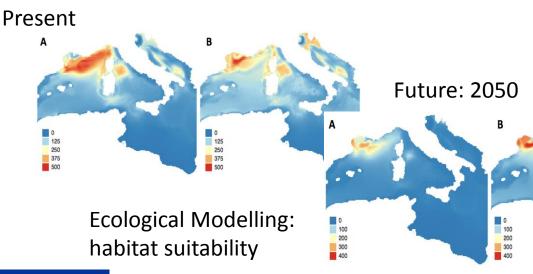


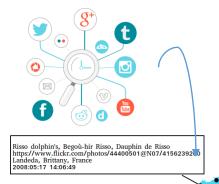




















# **Step 3: Bringing everything together**



