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LIFE NatuReef

NATURE-BASED REEF SOLUTION FOR COASTAL PROTECTION AND MARINE BIODIVERSITY ENHANCEMENT

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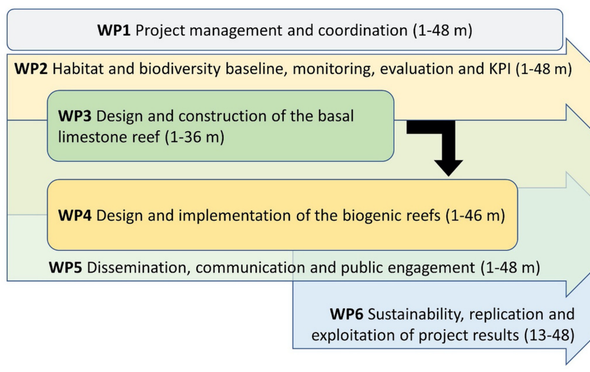
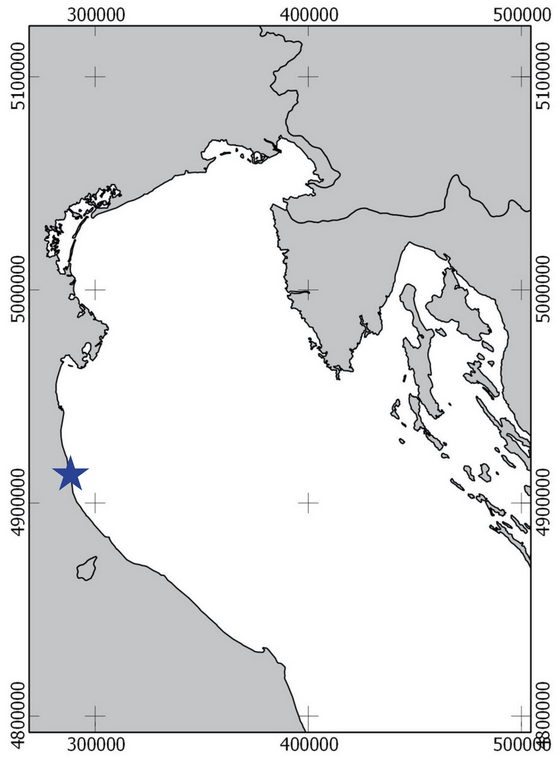
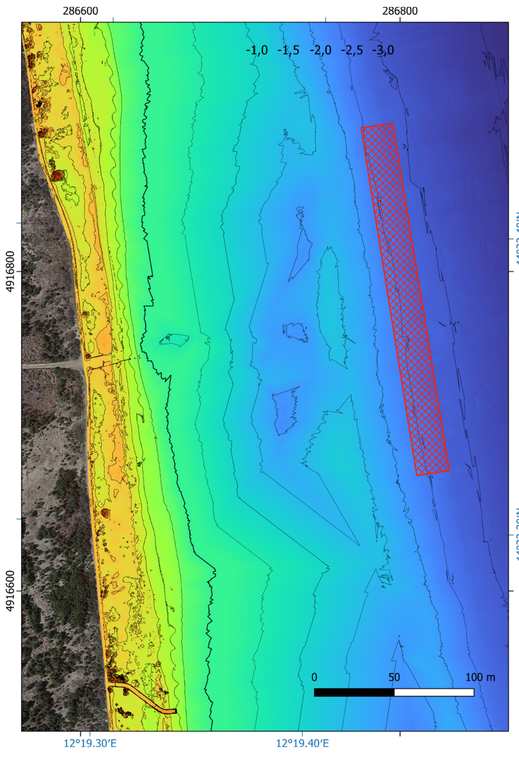
LIFE NatuReef aims to restore native oyster (*Ostrea edulis*) and sabellariid (*Sabellaria spinulosa*) reefs off a pristine beach in the North Adriatic, inside the EU Natura 2000 SAC and SPA Bevano river mouth (IT4070009, Italy). These ecologically extinct ecosystem engineers will build three-dimensional reefs providing for ecological niches, high biodiversity, and nursery habitats. They also will protect coastal habitats by retaining sediments, dissipating wave energy, and counteracting coastal erosion.







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After the topographic, geological, and biological surveys, a reef base made of limestone rubble enclosed in iron cages will be positioned according to the hydraulic models' results. Scientific divers will manually transplant oyster specimens and sabellariid worm nuclei from donor populations. The site will be monitored in subsequent years to assess key project indicators. Guided snorkelling, freediving, and scuba diving tours will be organised. A digital twin, based on 3D underwater surveys, will also be made to allow virtual tours.