



CB005.2.12.085 "Common Value Black sea - Let The World Breathe"

Contract No CB005.2.12.012/085-PP2-3 / LOT 2

Results from the implemented „Field and laboratory studies for the needs of the project

“Common Value Black Sea – Let The World Breathe”

CONTRACTING AUTHORITY	“EUROPE AND WE” ASSOCIATION
PROJECT	“Common Value Black Sea – Let The World Breathe”
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Prime Consulting

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METHODOLOGY FOR IMPLEMENTATION OF THE STUDY

Methodology for implementation of the study includes execution of the following consistent steps (fig. 1).

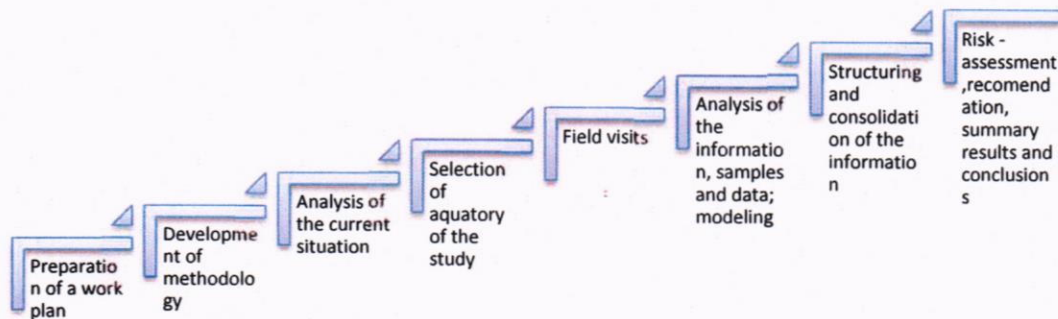


Figure 1 Consecutive steps of the study.

TEAM

The working team consists of scuba divers with the qualification "Scientific Diver", experts in seagrass ecology and GIS and an expert - technical maintenance (Table 1). A working moment of the study is shown in Fig. 2.

Table 1. The working team implemented the study

	Name	Position
1	Anton Krastev	Scuba diver, transport
2	Atanas Machev	Scuba diver
3	Valentin Panayotov	Scuba diver – support, GIS expert
4	Dimitar Yovchev	Technical maintenance
5	Elitsa Hineva	Specialist – sea grasses, GIS expert
6	Nikola Nietresta	Scuba diver – support, transport



Fig. 2. Sampling seagrasses in the area of Nessebar. Photo: Nikola Nietresta

DESCRIPTION OF THE CURRENT SITUATION AND SOURCES FOR ANTHROPOGENIC IMPACT

The selected study area covers parts of the aquatory of the Nessebar Bay, areas south of the Nessebar Peninsula to cape Akrotiria, from cape Akrotiria to cape Ravda and from cape Ravda to Pomorie salt pans. The area is entirely within the range of the Burgas Bay and falls within the zone for conservation of NATURA 2000 habitats - "Aheloy-Ravda-Nessebar" (<http://natura2000.moew.government.bg/Home/Natura2000ProtectedSites>).

The coastline in the different sections of the region changes its direction and orientation, which determines a different exposure to waves approaching from different azimuths and respectively a different vulnerability to sea-based sources of pollution. The catchment area of surface waters in the region is formed by the catchments of the rivers Kurudere, Hadjiyska, Aheloy. Larger rivers (Aheloy and Hadjiyska) has shown deviations in their water quality in terms of physico-chemical elements (both rivers), zoobenthos and fish (Hadjiyska) and all biological quality elements (Aheloy) (River Basin Management Plan 2016-2021). Near the surveyed area, two WWTPs discharged directly into the coastal waters - "Elenite" and "Ravda - Sl. Bryag – Nessebar - Aheloy". The latter one has a step for removal of nitrogen and phosphorus, in addition to mechanical and biological treatment.

SUBJECT OF THE SEA SURVEY AND CONSERVATION STATUS

Seagrasses, unlike algae, are higher plants (angiosperms, flowering plants). Their habitats are protected because of the high ecological value they represent (Table 2).

Table 2. Conservation status of the identified habitats and macrophytic species

Species	Condition according the Red list of IUCN	Habitats Directive 92/43/EU and BDA	Red Data Book of Bulgaria (Todorova V., 2011; Todorova V. and Panayotova M., 2011)
1 <i>Zostera marina</i> L.	Least concern	Habitat 1110	vol. III Habitats - endangered