



BEST PRACTICES AND MEASURES FOR IMPROVING THE ECOLOGICAL STATE OF THE COAST AND SEA

dr. Ida Jelenko Turinek

Ministry of Natural Resources and Spatial Planning of Republic of Slovenia

Izola, 21.9.2023

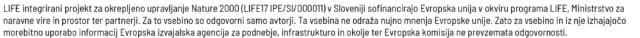








MINISTRSTVO ZA NARAVNE VIRE IN PROSTOR





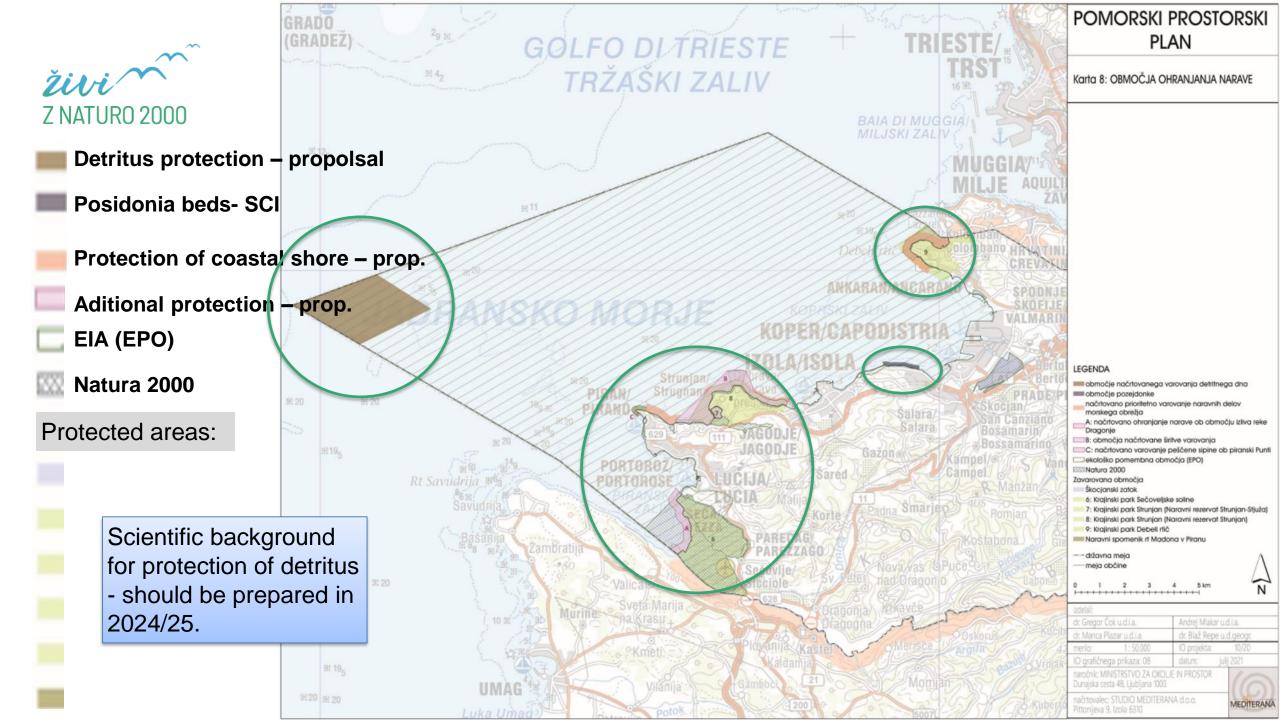


Nature protection at see in Slovenia

Decree on the Maritime Spatial Plan of Slovenia

The starting point for the implementation of all activities, regimes and uses at sea.

POMORSKI PROSTORSKI PLAN SLOVENIJE NAROČNIK Ministrstvo za okolje in prostor ODGOVORNI PREDSTAVNICI NAROČNIKA Valentina Lavrenčič Studio mediterana, d.o.o. Manca Plazar s.p., arhitekturna in urbanistična dejavnost **AVTORII** Blaž Repe Izola, Ljubljana, Lucija, julij 2021





Nature protection at see in Slovenia

Regulation on the Marine Environment Management Plan for the period 2022–2027

to ensure a clean, healthy and biodiverse marine environment with the management of the marine environment with an ecosystem approach.

Strategic objective 1: A clean marine environment,

Strategic objective 2: A biologically diverse and healthy environment...





Protected areas in Slovenia (at the coast)

Nature Conservation Act (ZON)

+ other acts



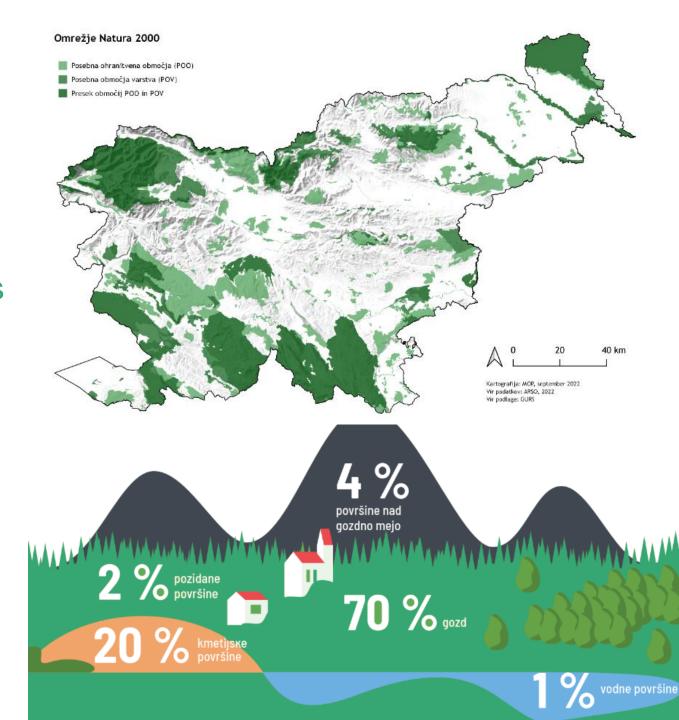


Natura 2000

Regulation on special protection areas (Natura 2000 areas)

Natura 2000 Management plan - NMP

- ✓ 2015-20
- √ 2023-28 (to be adopted)





NMP 2023-2028

Annex A: » Detailed objectives of NMP«

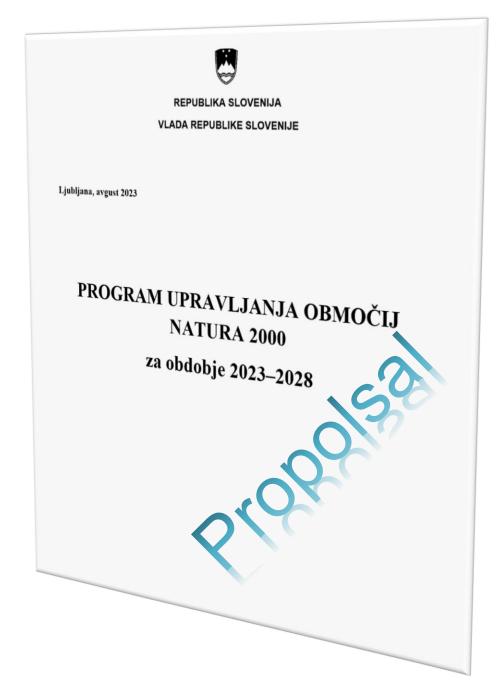
Annex B: »Measures of NMP«

Annex C: »Proposals for priority projects with a list of areas, habitat types, species and priority objects of cultural heritage«

Annex D: »List of plans required for the protection of Natura 2000 sites«

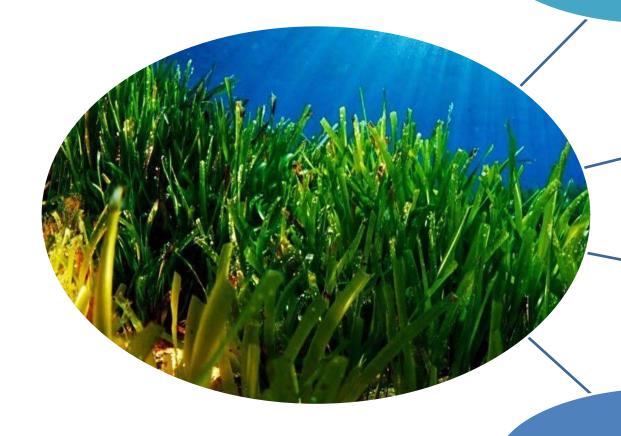
Annex E: »AECM
Target Areas for
Biodiversity
Conservation«

Annex F: »List of planned monitoring and research«





Actions in the field



Sectoral planning

Parallel measures

NMP Measure types

Communication



Annex C: Priority project proposals with a list of areas, habitat types, species and priority cultural heritage sites

Priloga C: Predlogi prednostnih projektov s seznamom območij, habitatnih tipov, vrst in prednostnih objektov kulturne dediščine

Mura

21 vrst in 6 HT, območji Mura (SI3000215) in Mura (SI5000010)

grmišča in travišča

Travniki s prevladujočo stožko (Molinia spp.) na karbonatnih, šotnih ali glineno-muljastih tleh (Molinion caeruleae) (HT_6410)

sladke celinske vode

Naravna evtrofna jezera z vodno vegetacijo zvez <u>Magnopotamion</u> ali <u>Hydrocharition</u> (HT_3150) Reke z muljastimi obrežji z vegetacijo zvez <u>Chenopodion rubri p.p.</u> in <u>Bidention p.p.</u> (HT_3270)

Vodotoki v nižinskem in montanskem pasu z vodno vegetacijo zvez <u>Ranunculion fluitantis</u> in Callitricho-Batrachion (HT 3260)

gozdni habitatni tipi

Obrečna vrbovja, jelševja in jesenovja (mehkolesna loka); (Alnus glutinosa in Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)) (HT 91E0)

Obrečni hrastovo-jesenovo-brestovi gozdovi (Quercus robur, Ulmus laevis in Ulmus minor, Fraxinus excelsior ali Fraxinus angustifolia), vzdolž velikih rek (Ulmenion minoris) (HT 91F0)

dvoživke

nižinski urh (Bombina bombina) (SP_1188)

hribski urh (Bombina variegata) (SP 1193)

panonski pupek (<u>Triturus dobrogicus</u>) (SP_1993)

veliki pupek (Triturus carnifex) (SP 1167)

hrošči

ovratniški plavač (Graphoderus bilineatus) (SP_1082)

hrastov kozliček (Cerambyx cerdo) (SP_1088)

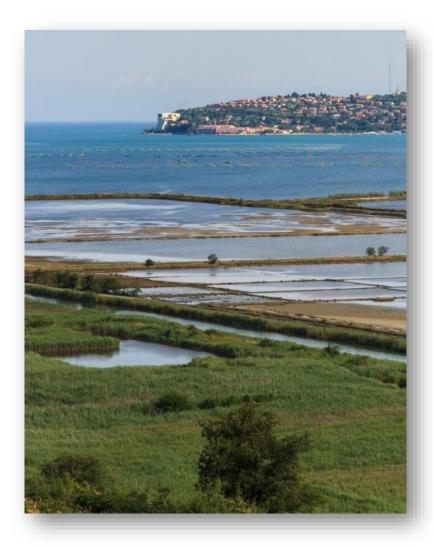
močvirski krešič (Carabus variolosus) (SP 4014)

kacji pastirji

dristavični spreletavec (Leucorrhinia pectoralis) (SP_1042)

kačji potočnik (Ophiogomphus cecilia) (SP_1037)

metulji

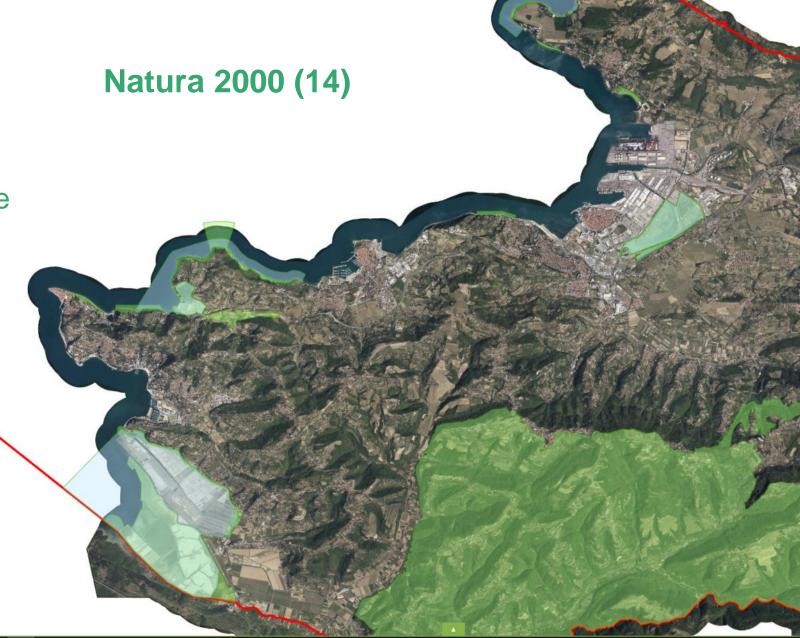




- Debeli rtič
- Ankaran-Sv. Nikolaj
- Žusterna-rastišče pozejdonke

NARAVOVARSTVENI ATLAS - ZO

- Strunjan
- Med Izolo in Strunjanom klif
- Med Strunjanom in Fieso
- Piranski klif
- Strunjanske soline s stjužo
- Sečoveljske soline
- Sečoveljske soline in estuarij Dragonje
- Kanal Sv. Jerneja
- Škocjanski zatok





Debeli rtič (ID 5000028, ID 3000243)

Species/habitat types:

- mediterranean shag (Phalacrocorax aristotelis desmarestii)
- 1110 Sandbanks which are slightly covered by sea water all the time
- 1210 Annual vegetation of drift lines
- 1240 Vegetated sea cliffs of the Mediterranean coasts with endemic Limonium spp.

Measures:

- to improve the shape or the method of tying the floats (for shag overnight stay)
- without hardening of the abrasion terrace, foot, face and upper edge of the cliff
- without making new paths
- management of protected area:
 - to implement the Decree on Landscape Park Debeli rtič (without anchoring)
 - the propolsal of the Management plan is prepared
 - perform direct supervision
 - communication activities
 - Implementation or management of the infrastructure for visitors





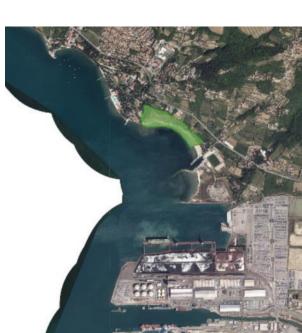
Ankaran - Sv. Nikolaj (ID 3000241)

Habitat types:

- 1140 Mudflats and sandflats not covered by seawater at low tide (only planning)
- 1410 Mediterranean salt meadows (*Juncetalia maritimi*)

Measures (only 1410):

- restoration: remove dumped garbage
- contractual protection or concession fort he management of HT
- mulching 1 time per 3 years, after the flowering of coastal flax and other halophytes in October
- implementation or management of the infrastructure for visitors
- planning





Žusterna - rastišče pozejdonke (ID 3000251)

Habitat types:

1120 * Posidonia beds (Posidonion oceanicae)

Measures:

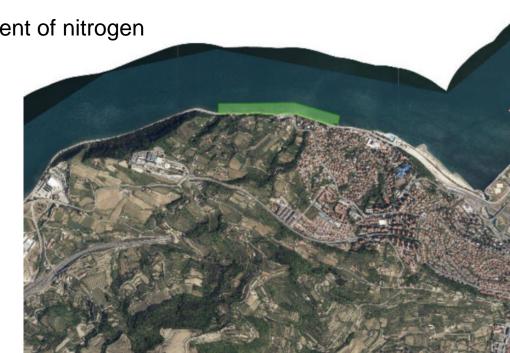
- to adopt the legal act of protection
- to adopt the decree with the prohibition of anchoring and/or establishment of berths

establishment of monitoring locations of water quality (the content of nitrogen

compounds, pesticides and drug residues)

planning

Scientific background for legal protection - should be prepared in 2024/25.





Strunjan (ID 5000031)

Species:

- little egret (*Egretta garzetta*)
- mediterranean gull (*Larus melanocephalus*)
- sandwich tern (Sterna sandvicensis)
- mediterranean shag (Phalacrocorax aristotelis desmarestii)

Measures:

restore the fields and protect the banks with vegetation (egret)

management of protected area (direct the visit)

to improve the shape or the method of tying the floats (for shag overnight stay)

define a comprehensive reference value of the population at the level of the Gulf

of Trieste

to investigate the extent of bycatch (Shag)

planning





Med Izolo in Strunjanom - klif (ID 3000249) Med Strunjanom in Fieso (ID 3000307)

Habitat types:

- 1170 Reefs
- 1210 Annual vegetation of drift lines
- 1240 Vegetated sea cliffs of the Mediterranean coasts with endemic Limonium spp.

Measures:

- without hardening of the abrasion terrace, foot, face and upper edge of the cliff
- removal of anthropogenic structures
- management of protected area:
 - to update the Decree on Landscape Park Strunjan
 - prohibition of anchoring and expansion of the protected area
 - perform direct supervision
 - communication activities,
 - direct the visit
- planning

Scientific background

– project MEDPAN

(2023 – 2025)





Strunjanske soline s stjužo (ID 3000238)

Species/Habitat types:

- narrow-mouthed whorl snail (Vertigo angustior)
- mediterranean banded killifish (Aphanius fasciatus)
- 1130 Estuaries
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1150 * Coastal lagoons
- 1310 Salicornia and other annuals colonizing mud and sand

1420 Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)

Measures:

- to restore the water regime
- maintain and restore salt pans
- management of protected areas (direct the visit)
- planning





Piranski klif (ID 3000247)

Habitat types:

- 1210 Annual vegetation of drift lines
- 1240 Vegetated sea cliffs of the Mediterranean coasts with endemic Limonium spp.

Measures:

- without hardening of the abrasion terrace, foot, face and upper edge of the cliff
- without making new paths
- communication activities
- planning





Sečoveljske soline (ID 5000018)

Species:

- black-throated loon (Gavia arctica)
- little egret (*Egretta garzetta*)
- great egret (Egretta alba; Ardea alba)
- common crane (Grus grus)
- black-winged stilt (Himantopus himantopus)
- pied avocet (Recurvirostra avosetta)
- kentish plover (Charadrius alexandrinus)
- european golden-plover (Pluvialis apricaria)
- mediterranean gull (*Larus melanocephalus*)
- sandwich tern (Sterna sandvicensis)
- common tern (Sterna hirundo)
- little tern (Sternula albifrons)

- tawny pipit (Anthus campestris)
- mediterranean shag (Phalacrocorax aristotelis desmarestii)
- yellow-legged gull (*Larus michahellis*)
- greater flamingo (Phoenicopterus roseus)





Sečoveljske soline in estuarij Dragonje (ID 3000240) Kanal Sv. Jerneja (ID 3000239)

Species/Habitat types:

- narrow-mouthed whorl snail (Vertigo angustior)
- mediterranean banded killifish (Aphanius fasciatus)
- european pond turtle (Emys orbicularis)
- 1130 Estuaries
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1310 Salicornia and other annuals colonizing mud and sand
- 1320 Spartina swards (Spartinion maritimae)
- 1410 Mediterranean salt meadows (Juncetalia maritimi)
- 1420 Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)





Sečoveljske soline (ID 5000018) Sečoveljske soline in estuarij Dragonje (ID 3000240)

Kanal Sv. Jerneja (ID 3000239)

Measures:

- management of protected area:
 - to regulate visits in accordance with the carrying capacity of the protected area
 - to maintain the saltworks infrastructure (and keep the Fontanigge only for the preparation of brine)
 - to maintain the water regime, terrestrial structures, vegetation
 - maintain surface area, species composition and structure
 - monitor the condition and remove non-native species of turtles
- to perform direct supervision
- communication activities
- determination of nest sites and protection of nests (pond turtle)
- restore the habitat in the Alto and Rudnik area
- agriculture (occasional mowing, no ploughing, fertilization and use of pesticides in the coastal zone - stricter control)
- planning

Scientific background for the expansion of PA to underwater meadows near the mouth of the Dragonja River should be prepared in 2024/25.





Škocjanski zatok (ID 3000252, ID 5000008)

Species:

- great bittern (Botaurus stellaris)
- common little bittern (*Ixobrychus minutus*)
- squacco heron (Ardeola ralloides)
- little egret (*Egretta garzetta*)
- purple heron (Ardea purpurea)
- glossy ibis (*Plegadis falcinellus*)
- short-toed snake eagle (Circaetus gallicus)
- water rail (Rallus aquaticus)
- black-winged stilt (Himantopus himantopus)
- kentish plover (Charadrius alexandrinus)
- ruff (Philomachus pugnax)
- eurasian curlew (*Numenius arquata*)

- common tern (Sterna hirundo)
- common reed warbler (Acrocephalus scirpaceus)
- great reed warbler (Acrocephalus arundinaceus)





Škocjanski zatok (ID 3000252, ID 5000008)

Species/Habitat types:

- narrow-mouthed whorl snail (Vertigo angustior)
- mediterranean banded killifish (Aphanius fasciatus)
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1150 * Coastal lagoons
- 1310 Salicornia and other annuals colonizing mud and sand
- 1410 Mediterranean salt meadows (Juncetalia maritimi)
- 1420 Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)





Škocjanski zatok (ID 3000252, ID 5000008)

Measures:

- management of protected area (concession):
 - water regime management
 - cleaning of secondary channels
 - to carry out maintenance work and raise land areas in the lagoon
 - to carry out maintenance work without significant changes in the habitat surfaces
 - to implement extensive grazing and late mowing
- to perform direct supervision
- properly managed pasture without signs of overgrazing and under-grazing
- Inspection: check the connection and adequacy of the drainage and treatment of municipal waste water





Thank you for your attention!

Questions can be sent to: pun.mnvp@gov.si

