Report on MSP (Slovenia) relevant GIS databases Creation of data (Bathing sites, Traffic infrastructure)

MSP-MED PROJECT, WP 3

Final report

Koper, September 2022

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Acronyms

AADT -Annual average daily traffic
ARSO – Slovenian Environment Agency
CEA - Cumulative effect assessment
DRVS - Slovenian Water Agency
DMR –Digital terrain models
DMV -Digital elevation model
EIA - Environmental Impact Assessment
EMFF – European Maritime and Fisheries Fund
GIS – Geographic information system
GURS – Surveying and Mapping Authority
ICZM - Integrated coastal zone management
MAP - Mediterranean Action Plan
MKGP – Ministry of Agriculture, Forestry and Food
MOK - Municipality of Koper
MOP - Ministry of the Environment and Spatial Planning
MSP – Maritime Spatial Planning
MSs – Member states
MZI – Ministry of Infrastructure
NGO – Non-governmental organization
NSP – National Spatial Plan
NUMO - Marine Environment Management Plan
OGC - Open Geospatial Consortium
PA - Protected nature area
PAP/RAC - UNEP/MAP Priority Actions Programme Regional Activity Centre
RRC – Regional Development Center Koper
RS – Republic of Slovenia
SIS – Spatial Information System
SHAPE – Shaping an Holistic Approach to Protect the Adriatic Environment EU project
SSC – Slovenian State Cloud
SPU - Spatial planning unit
UZP – Liquefied natural gas
VNF - Valuable natural features
TCC - Tourism Carrying Capacity
ZVKDS – Institute for the Protection of Cultural Heritage of Slovenia
ZSRT – Promotion of Tourism Development Act

TABLE OF CONTENTS

1 Introduction

The northern Adriatic, which is shared by Slovenia, Croatia and Italy, is an area with a high concentration of uses. The most important activities are tourism/maritime tourism, maritime transport and ports, fisheries and mariculture, as well as gas extraction.

The Slovenian sea is limited in size, but nevertheless very important in economic, environmental, cultural and symbolic terms. Today, it is an area where multiple uses coexist, from maritime transport, fisheries, mariculture, salt production, defense and protection against natural and other disasters at sea, as well as nature conservation, scientific research, tourism, sport and recreation, and cultural heritage. The coast or the coastal strip is also either already heavily urbanized or protected, mainly in nature conservation contexts, with the highest density of uses and conflicts between existing uses and between uses and nature conservation.

Slovenia has completed the process of drafting and adopting the MSP in 2021. The Slovenian MSP is unique in that there is little room for new uses or expansion of existing uses in the Slovenian sea. As a result, its role in stimulating new investment in the blue economy is limited. The MSP therefore mainly provides for more detailed regulation of activities and uses in their current scope, with three exceptions: in the field of mariculture, it defines new possibilities for expanding activities; in the field of maritime transport, it defines areas for the relocation of marine sediments obtained during deep-sea dredging; and in the field of nature protection, it provides for the protection of additional areas.

The key added value of the Slovenian MSP is that it can contribute to reducing conflicts between uses (especially in the coastal strip, where the density of uses and the intensity of conflicts are the highest), protecting the environment (by assigning protected areas and identifying opportunities for multiple uses of space) and increasing cross-border cooperation between EU.

To this end, the Slovenian MSP defines the coastal strip, which comprises both the sea and the onshore part, as a special spatial planning area where the jurisdictions of the State and local communities intersect. (The size of the coastal strip is determined in greater detail by local municipal authorities).

The solution allows for a more integrated approach to spatial planning and more effective management of conflicts between uses as well as conflicts with nature conservation and environmental protection objectives, as compared to the fragmented approach of individual municipal jurisdictions. At the same time, it streamlines cooperation between national and local stakeholders, promoting an integrated approach to coastal zone planning and management.

1.1 Starting points and objectives

The project **"Information Support for Maritime Spatial Planning at Local Level: Spatial Planning in the Coastal Strip"** is being implemented as a sectoral expert basis for the broader **MSP-MED** project (Towards the operational implementation of MSP in our common Mediterranean Sea), which aims to support the preparation of Maritime Spatial Plans (MSPs) in countries bordering the Mediterranean Sea. The project is co-funded by the European Maritime and Fisheries Fund (EMFF) ats 80% of the eligible costs (EMFF Work Programme 2018 EASME tender EASME/EMFF/2018/1.2.1.5).
The main objective of the MSP-MED project is to facilitate the implementation processes of the MSP Directive in countries currently at different stages of implementation and to support the coherence and consistency of maritime spatial plans across the Mediterranean region.

The project is structured in 5 work packages. The three main work packages are WP2 - Setting-up of maritime spatial plans, WP3 - Data use and sharing and WP4 - Cooperation among Member States and third countries.

The present task is being implemented as part of WP3. The main objective of WP3 is making use of the best available data and organising the sharing of information in an exhaustive way, necessary for maritime spatial plans, by using relevant mechanisms and tools such as INSPIRE and EMODNet (in line with article 10 of the MSP Directive). WP3 aims to increase data use, information and knowledge sharing necessary for maritime spatial plans, enhancing existing IT platforms/systems aimed to share data and information, and using existing tools to develop MSP data analysis.

Sharing information in a MSP context requires: on the one hand, a strong commitment in adhering to and applying international and European rules and standards (e.g. OGC and INSPIRE data and service specifications) so that a common language and information basis is shared among MSs; on the other hand, a customised approach on how to tailor this common framework to specific national needs, considering variable advancement levels in the implementation of MSP and different strategic goals.

Therefore, WP3 is structured in 2 main blocks: one (3.1) supporting a common framework for cross-border data sharing, and the second (3.2–3.6) tackling national-specific needs.

Task 3.1 will work to build a common knowledge base and to support sharing and compatibility of MSP-relevant data at the Mediterranean scale by sharing and consolidating data and information needs, implementing a common knowledge catalogue of metadata on MSP-relevant information, and analysing the current data gaps and weaknesses.

Tasks 3.2 through 3.6 will focus on specific activities to support the implementation of MSP at national level in Italy, Malta, France, Greece and Slovenia.

This dual approach supports collaboration between Mss and homogenization both at national and basin scales in order to have a common dataset and information framework to achieve a coherent implementation of MSP in the Mediterranean.

The WP3 portion of the project allows Slovenian partners to elaborate in more detail on certain selected topics at local level relating to the coastal strip or the land-sea intersection, in line with the MSP prepared and adopted by the government.

There are still data gaps for more detailed planning of the coastal strip (in line with the MSP). Important issues that are not supported by sufficient data include the environment (nature, flood aspects, geology, cliff stability), cultural heritage and socio-economic (tourism development) in the area. The project has produced new databases that will be used in the implementation of the tasks arising from the adopted national MSP.

The priority topics addressed in WP3 were identified in communication with stakeholders. A workshop was carried out to identify priority data gaps and orientations for data generation. As the workshop did not lead to a definitive decision on the content, additional coordination sessions with stakeholders were held, leading to a final decision on the content of the Slovenian WP3.6. A more detailed description of the process is presented later in this document.

In this context, the **present expert groundwork** focuses on three key challenges in the implementation of the MSP: a) identifying gaps in available data and data gaps needed for effective implementation of the plan and identification of the competences and tasks of the local communities arising from the MSP, b) establishing a synthesised database for bathing and supporting transport infrastructure, and c) establishing a synthesised database for public maritime transport ports and public passenger transport stops on land. The task will also provide guidance on how to obtain the necessary data for the assessment of the carrying capacity of the area.

In view of the recently adopted MSP, which represents the most up-to-date collection of data, information, measures and competences for its implementation, the present task draws in many respects on the individual chapters of the MSP, or supplements them with the necessary new facts and data.

1.2 Definitions of terms

The following are key terms and definitions used in the present task (as taken from the MSP and other sources):

A **bathing site** is a properly maintained and equipped area for bathing (swimming) as a direct water use for bathing area activities and in accordance with the regulations

governing protection against drowning. The owner or operator of the bathing site is responsible for ensuring protection against drowning.

Bathing sites are divided into swimming pools and natural bathing areas. **Swimming pools** are indoor and outdoor swimming pools. **Natural bathing areas** are bathing sites in the sea, on still and moving waters. A natural bathing area is a bathing water area where bathing is practiced as a direct water use for bathing area activities and in accordance with the regulations governing protection against drowning.

The **capacity of bathing areas** is determined by the Rules on Measures for Protection Against Drowning in Public Bathing Areas (Official Gazette of the Republic of Slovenia, No 84/07, 22/13, 33/18 and 47/19).

Bathing waters are waters in which people bathe, where it is expected that a large number of people will bathe or where water is directly used for bathing area activities. The government determines a bathing water area on the basis of relevant legislation.

Bathing area is a bathing water area in which people bathe, where it is expected that a large number of people will bathe or where bathing is carried out as a direct use of the water for the activity of bathing, with associated coastal land.

Bathing is the general use of water and is permitted everywhere where it is not explicitly prohibited.

Coastal zone means the geomorphologic area either side of the seashore in which the interaction between the marine and land areas occurs in the form of complex ecological and resource systems made up of biotic and abiotic components coexisting and interacting with human communities and relevant socio-economic activities (Article 2 of the ICZM Protocol).

The seaward limit of the coastal zone is the external limit of the territorial sea of the contracting parties (paragraph one of Article 3 of the ICZM Protocol).

The landward limit of the coastal zone is the limit of the competent coastal units as defined by the

contracting parties – the area of four coastal municipalities (paragraph one of Article 3 of the ICZM Protocol).

Bathing infrastructure is service and accompanying facilities intended for bathers and for the bathing site: toilets, showers, locker rooms, rooms for deckchair storage. Hospitality services are not part of bathing infrastructure.

Basic coastal strip is a coastal area that is no less than 100 metres wide from the coastline boundary towards land, where construction is not allowed (paragraph two of Article 8 of the ICZM Protocol).

Public maritime passenger transport is a passenger transport service accessible to the general public in the maritime area and intended for the carriage of several persons at the same time. The public maritime passenger transport network is carried out by

passenger ships. A passenger ship is a vessel that can carry more than 12 passengers. A high-speed passenger vessel is a vessel that has special technical features that enable it to reach high speeds.

The service is most often financed directly by users through the purchase of tickets, but may also be subsidised to varying degrees (up to 100%) by by the State or local authorities through public funding. The authorities either commission a private company to run public transport services or run the service themselves. Regardless of the format, the provider operates a fleet of passenger ships that travel according to pre-established routes, schedules and prices.

The coastal boundary follows the outer limits of the offshore parcels.

Coastline boundary runs along the external boundaries of coastal land plots.

Tourism carrying capacity is the maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction (Source: https://iczmplatform.org/storage/documents/xxnSWbLStRM7QQQdnjsHx3jPfSNMb2U8zm6Gza4z.pdf)

Researchers have identified three basic levels of tourism carrying capacity, namely socio-cultural, environmental and economic.

Socio-cultural refers to the identification of impacts on tourism, an assessment of how these impacts can negatively affect tourism and what we can do about it to avoid these impacts, not only for ourselves, but also for future generations. Based on current and expected impacts on tourism, these results can lead to policy-oriented planning and orientations for socio-cultural sustainable tourism.

Environmental refers to ensuring that people do not cause environmental damage that reduces the resilience and natural functions of the system.

Economic refers to the fact that businesses, or anyone related to tourism, can operate profitably.

NUMO: The Marine Environment Management Plan is in force for the period 1015-2021, in accordance with the Marine Strategy Framework Directive (Directive 2008/56/EC). Currently under preparation is the Marine Environment Management Plan 2022-2027 (hereafter: NUMO 2022-2027). The plan is prepared by the Water Agency at the Ministry of the Environment and Spatial Planning (MOP, DRSV).

The purpose of the NUMO 2022-2027 is to manage the marine environment through an ecosystem approach to ensure a clean, healthy, biodiverse and productive marine environment, which, if used sustainably, will provide marine ecosystem services as well as adaptation to and mitigation of climate change. The NUMO 2022-2027 covers part of the Adriatic basin, namely the sea with groundwater, but also includes areas on land under nature protection and conservation regimes to ensure connectivity of the

marine environment with specific habitats. The vision of NUMO 2022-2027 will be achieved through five strategic objectives, which also represent the essential thematic clusters of the plan, namely:

- Strategic Objective 1: a clean marine environment to ensure the preservation of the nutrient status of the Slovenian sea, through the effective implementation of appropriate measures to tackle pollutant overloading and marine litter;
- Strategic Objective 2: a biodiverse and healthy environment, which aims to improve biodiversity through the protection of the ecosystem, species and habitats by implementing measures;
- Strategic Objective 3: the sustainable use of the marine environment, which through the implementation of measures aims to direct the use of the marine and coastal area in a sustainable manner;
- Strategic objective 4: tackling climate change by implementing measures that contribute to mitigating climate change while also helping society to adapt to climate change;
- Strategic Objective 5: implementing general measures to achieve a good environmental status of the marine environment, contributing to preventing the negative impacts of marine and coastal uses on the state of the marine ecosystem through the implementation of measures.

Beach: a place, an area by the water, made suitable for swimming, sunbathing.

The **Marine Spatial Plan of Slovenia** is an umbrella strategic (spatial development) document, which provides spatial development guidelines for activities and uses in the Slovenian sea and coastal area (MSP). The MSP sets goals and guidelines for the further development of activities and uses at sea with the aim of achieving sustainable spatial development, i.e. sustainable growth of the maritime economy, sustainable development of marine areas and sustainable use of marine resources.

Coastal strip on land with adjustments as per paragraph two of Article 8 of the Protocol on Integrated Coastal Zone Management in the Mediterranean is adapted to the situation along the Slovenian coast and can be narrower or wider than the basic coastal strip. The coastal strip on land encompasses at least the existing protected nature areas, inland water areas, natural coast (cliffs and forest surface areas), salt pans and cultural landscape (agricultural, forest land and dispersed construction, adapted with regard to the natural relief). The areas of valid national spatial acts, urban areas and areas of ports and marinas have been excluded from the coastal strip on land.

The scope of the coastal strip on land that Slovenia must determine as per the Protocol is determined by local communities in accordance with their competences with regard to spatial planning (via spatial acts). They should also take into account the guidelines for determining the scope of the coastal strip on land, determined in this plan by individual spatial planning units (SPUs).

Coastal strip at sea reaches 150 metres from the coastline towards the sea. Areas defined in state spatial planning acts that are currently in force and ports and marinas are excluded from the coastal strip at sea. Delineation between individual spatial planning units (SPUs) is determined by local communities in accordance with their spatial planning competences (with spatial planning acts).

Coastal strip encompasses the coastal strip on land and at sea.

Waterside land is a 25-metre wide coastal strip as determined in relevant regulations.

Navigation route in the territorial sea and inland marine waters of the Republic of Slovenia is the area at sea, the depth and width which enable safe navigation of vessels and is, if necessary, characterised with navigation safety facilities. The navigation safety facilities along the navigation routes are lighthouses, coastal lights, buoys and other signs, signal and radio stations, optical, sound, electric, electronic, radar and other devices for safe navigation at sea, navigation routes and in ports.

Maritime spatial planning is a procedure used by the competent authorities of a member state to analyse and organise human activities in marine areas to achieve ecological, economic and social objectives. Maritime spatial planning is specific due to the possible simultaneous implementation of coordinated activities and usages. Besides spatial aspects, time-related aspects are also planned, because various activities and usages in various periods are possible. The usage of water surface, water column and seabed and usage below seabed is planned. The implementation of most activities and usages at sea is connected to the existing legal regimes (international agreements, concessions and other legal acts). With maritime planning, constructive horizontal and vertical coordination of interests according to ecosystem approach principles must be implemented, and the participation of a wide range of stakeholders in the direction of marine environment management as well as assets of national importance must be ensured.

Port is a water and waterside area that encompasses an anchorage, built or non-built parts of the coast, breakwaters, devices and facilities intended for mooring, anchoring and protection of vessels, for the construction and maintenance of vessels, for embarking and disembarking passengers and cargo, for storage and other cargo-related activities, for the production, refining, control and processing of goods and for other economic activities that are in mutual economic, traffic or technological relation with such activities. The Republic of Slovenia or the local community should engage the port manager to manage, administer and develop port infrastructure as per the previous paragraph by granting a concession.

Ports are:

- ports intended for public transport (domestic and/or international);
- **ports for special purposes** (fishing, sport, tourist, local, for building and maintaining vessels, other – used for the performance of activities by business entities, although not intended for public transport);
- **military ports.**

1. Defining the content of WP3.6.

The more detailed content of WP3.6 was defined in cooperation with key stakeholders of the spatial planning of the coastal strip, including: coastal municipalities, the Ministry of the Environment and Spatial Planning, the Institute for the Protection of Cultural Heritage of Slovenia, the Institute of the Republic of Slovenia for Nature Conservation, the National Institute of Biology, the Marine Biological Station Piran, the Directorate for Water of the Republic of Slovenia, and NGOs (e.g. PINA Koper).

Several communication sessions with stakeholders were held in April and May 2021 to identify data gaps in the preparation of the Regional Spatial Plan for the Koper-Izola coastal area and to define the detailed content of the work.

The first part of the process focused on the content needed to support the preparation of the Regional Spatial Plan for the Koper-Isola coastal area. The available expert bases and relevant missing expert bases and/or data necessary for the preparation of the Regional Spatial Plan for the area were identified. The following topics were highlighted: geomechanical and geological characteristics of the cliffs, mapping of habitat types, detailed knowledge of cultural heritage (underwater archaeology). Participants also pointed out that the detailed definition of the content should be based on the Programme Concept of the area, which was being prepared under WP2.

The Mapping of Habitat Types was identified as a priority. In a separate discussion with representatives of the Institute of the Republic of Slovenia for Nature Conservation, it was concluded that the financial requirements and the time required for the preparation of the mapping of habitat types exceeded the scope of the MSPMED project, and this proposal was therefore withdrawn.

In the next series of communications, stakeholders raised the issue of the preparation of the Carrying Capacity Assessment of the Marine and Coastal Area and the data required for the assessment. Consensus was reached on preparing bathing area databases (whether or not they are located on the seaside and have bathing water status) and a database on public parking areas in the 300 m coastal strip, which will be useful for the preparation of the Assessment.

2 Responsibilities and tasks for local authorities (municipalities) in the management and planning process of coastal strip

2.1 Overview of competences and tasks

The constitutional framework of the Republic of Slovenia is based on a complete separation of municipalities and the state - municipalities are only responsible for local matters. A municipality's competence includes local matters which the municipality can regulate independently and which concern only the inhabitants of the municipality, as well as the performance of certain tasks falling within the competence of the state, which may be delegated by law to municipalities by the state, provided that it also provides the necessary resources for this purpose.

A municipal administration shall carry out administrative, professional, promotional and developmental tasks and tasks relating to the provision of public services falling within the municipal competence.

The primary tasks of municipalities are specified in Article 21 of the Local Self-Government Act. In order to meet the needs of its residents, a municipality shall independently perform the following duties, among others:

- ensuring the conditions for the economic development of the municipality and, in accordance with an Act, carrying out tasks in the areas of accommodation and food service, tourism and agriculture,
- planning spatial development, carrying out tasks related to activities affecting the physical space and the construction of facilities in accordance with an Act, and ensuring the public service of building land management,
- regulating, managing and providing local public services within its competence,
- providing for protection of air, soil and water resources, protection against noise and the collection and disposal of waste, and performing other activities related to environmental protection,
- regulating and maintaining water supply and power utility facilities,
- constructing, maintaining and regulating local public roads, public paths, recreational and other public areas,
- in accordance with an Act regulating traffic in the municipality and performing tasks concerning the municipal warden service,
- ensuring fire safety and organising rescue services,
- organising assistance and rescue in the event of natural and other disasters,
- adopting the statutes of the municipality and other general acts,
- organising the municipal administration,
- regulating other local matters of public interest.

In addition to the above tasks, a municipality performs statistical, registry and analytical functions for its own needs and obtains statistical and registry data for these purposes from the authorised statistical and registry data collection bodies. (Art.21a) The specific tasks and competences of municipalities are determined primarily by the laws governing specific areas (e.g. the Environmental Protection Act, the Services of General Economic Interest Act, the the Building Act, etc.) and by municipal statutes.

A municipality shall ensure the performance of local public services that are determined by its decree, and the performance of public services determined by an Act (local public services). The main activity of a municipality is the provision of utilities and other public services that guarantee the provision of material and other public goods (energy, sewerage,... - e.g. gas, water, sewerage, waste collection and disposal, road maintenance, parks; health, social services...). They are provided by the municipality through the municipal administration, by setting up public institutions and public undertakings, by granting concessions and by investing its own capital in the activities of private-law entities.

2.2 Management and maintenance of water and energy infrastructure, transport infrastructure and environmental protection

A municipality carries out out administrative, professional, promotional and other tasks relating to the provision of public services, transport, sustainable mobility, road and public space management and environmental protection.

A municipality manages and administers the public utility infrastructure, maintains a public utility infrastructure inventory, maintains and manages municipal roads, public areas and municipal ports, manages and develops transport and sustainable mobility, in particular urban regular passenger transport, stationary transport, cycling, emergency and overtime transport, deliveries, parking areas, taxis and other types of transport. In addition, a municipality manages energy, energy efficiency and public lighting, and prepares and implements measures, guidelines and recommendations in the fields of environmental protection and nature conservation, as well as other tasks within its area of work.

2.3 Competences for creating the conditions for the economic development of the municipality, in particular in the field of tourism

Article 19 of the Promotion of Tourism Development Act (ZSRT) (Official Gazette of the Republic of Slovenia, No.2/04, 57/12, 17/15, 52/16, 29/17 and 13/18) stipulates that the planning, organisation and implementation of policies to promote the development of tourism at the level of the tourist area is within the competence of the municipalities. Municipalities may delegate the tasks referred to in paragraph one of

this Article to legal entities that have acquired the status to perform activities in the public interest in accordance with Article 15 of the ZSRT. Municipalities shall follow the guidelines of the Slovenian Tourism Strategy when designing, organising and implementing the policy of promoting the development of tourism at the level of the tourist area of the municipality.

Coastal municipalities pursue a policy of promoting tourism development by adopting municipal tourism development strategies and implementing tourism development policies.

2.4 Competences in the field of spatial planning and development

Local communities plan spatial development, carrying out tasks related to activities affecting the physical space and the construction of facilities in accordance with an Act, and ensuring the public service of building land management. They carry out professional, administrative, organisational and other similar tasks in the fields of spatial, urban and landscape planning, development and property management. **In the field of spatial planning, a municipality is responsible for (Article 5(2) of the ZUreP-3):**

- the preparation of spatial planning acts at the municipal and inter-municipal level;
- participation in the preparation of regional spatial plans;
- participation in the preparation of national spatial planning acts;
- setting goals and baselines for the spatial development of the municipality;
- planning of development projects of local importance and determining the land-use designations and spatial implementation conditions in its area through spatial planning acts;
- implementing spatial planning measures and land policy tasks, including the preparation of other spatial planning acts at local level;
- carrying out tasks related to the operation of the spatial planning information system;
- carrying out tasks related to the preparation of programmes to support spatial and urban development;
- implementing and allocating funding for education and awareness-raising programmes on spatial planning;
- issuing consents or opinions on the compliance of interventions, construction or use of space with the spatial implementation acts under its competence in accordance with this Act and in procedures for issuing building permits in accordance with the regulations governing construction;
- carrying out inspections to monitor the implementation of municipal planning acts, insofar as this is not the subject of inspection procedures and competences laid down under any other law.

2.5 Competences and tasks in the field of marine and coastal planning and development

In the exercise of their spatial planning and spatial management competences, local authorities are also actively involved in integrated coastal strip planning (ICZM Protocol) and offshore planning (Directive 2014/89/EU):

- participation in the process of drafting the Maritime Spatial Plan of Slovenia (in accordance with the competent authorities, they participated in the coordination of land-sea interests, the siting of activities, proposals for spatial development in the sea and the coastal strip),
- participation in the Working Group for the Implementation and Monitoring of the Maritime Spatial Plan of Slovenia;
- preparing and implementing the municipality's strategic and implementing spatial planning acts and their expert bases at sea.

Only the municipality bordering a marine water area may carry out spatial management tasks (Article 5(2) of the ZUreP-3) in the offshore zone in the sea, in accordance with the second indent of the seventh subparagraph of Article 53(2) of the ZUreP-3. The boundary between the areas in the coastal strip in which each municipality is to perform its statutory tasks is defined by a set of points (Article 5(3) of the ZUreP-3).

Article 53(2)(7) of the ZUreP-3 defines spatial planning of national importance in the marine water area:

- all developments outside the coastal strip in the sea, which extends 150 m from the coastal boundary seawards;
- in the coastal strip in the sea, which comprises 150 m from the coastal boundary seawards, only those spatial developments which are designated as spatial developments of national importance in the other points of this paragraph.

2.6 Competences and tasks of local authorities under the MSP

The **MSP** gives rise to a number of tasks to be performed by municipalities in the further planning of sea-related spatial developments. These tasks include, in particular, the preparation of various required expert documents in the procedures for the drafting of municipal spatial planning acts, action plans and individual spatial interventions. We estimate that the competent spatial planning authorities will impose on the municipalities which expert documents they have to prepare in the individual environmental assessment procedures (Comprehensive Environmental Assessment (CEA), Environmental Impact Assessment (EIA)).

The MSP in Chapter VIII. Implementation, point 2. Implementation measures, stipulates that the managerial and financial aspects of the implementation of measures in tourism and recreation as well as urban development are assumed by the local communities within the scope of their competences.

Subsections 2.10 Tourism, sport and recreation and 2.12 Urban development also describe in detail the spatial and managerial measures that are within the competence of the local authorities - i.e. the four coastal municipalities.

Subsection 2.10 Tourism, sport and recreation stipulates that the municipalities are required to examine the **cumulative load on the environment is examined at least for the area of the entire coast in an individual municipality as part of drafting of implementing acts.** The assessment should be carried out prior to the siting of piers, platforms, built shorelines and other infrastructure for bathers. In doing so, the existing burden on the environment, restrictions and protection regimes in space, security restrictions, management plans for protected areas and other protection regimes, the necessary support infrastructure (for example, parking lots, access paths, infrastructure for waste, sanitary facilities), and the expected impact of the siting of developments on the marine environment, the state of waters, non-native species, protected and conservation areas of nature, areas of key elements of marine biodiversity, noise emissions and emissions into the air, use of water, needs of other activities, generation of waste and waste water, cultural heritage (underwater and on land) and landscape is taken into account. It needs to be ensured that the archaeological potential is examined and the cumulative impact of developments on comprehensive conservation of cultural heritage is assessed. The mapping of marine habitat types is carried out to enable assessment of the cumulative impact in the Comprehensive Environmental Assessment (CEA) for developments in the coastal strip.

In particular, subsection 1.12 Tourism sets out the requirements for local communities in relation to:

- **determining the scope of the coastal strip on land as is determined for Slovenia by the ICZM Protocol.** In doing so, they take into account the guidelines for determining the scope of the coastal strip on land, determined in the MSP by individual spatial planning units;
- **planning and implementation of the coastal promenade or coastal footpath from the Croatian border to the south to the Italian border to the north.** For the newly planned sections of the promenade, municipalities are required to prepare a landscape design concept, taking into account the guidelines of the spatial planning authorities and the Comprehensive Environmental Assessment (CEA).

Chapter 2.4. Maritime and Passenger Transport states that **expert basis for the assessment of the carrying capacity of the entire Slovenian sea and coastal strip** should be obtained before any expansion of municipal berths, marinas and piers for passenger traffic and a port for international public passenger transport with berths for large tourist yachts with a shipyard for the maintenance of smaller ships in Izola.

The MSP in Chapter VIII. Programme, point 2. Measures for implementation states that the managerial and financial aspects of implementation of individual measures are assumed by the competent ministries within the scope of their competences. The management and financial aspects of the preparation of the expert basis for the assessment of the carrying capacity of the entire Slovenian sea and coastal strip (from the perspective of maritime and passenger transport) are therefore undertaken by the Ministry of Transport.

At this point in time, the detailed methodology for producing the required expertise is still not defined. In the light of the legislation in force and the provisions of the MSP, the required expert basis will be determined during the Comprehensive Environmental Assessment (CEA) and Environmental Impact Assessment (EIA) process.

Experience in the preparation of spatial planning acts since the MSP came into force is so limited that it is not possible to assess how the commitments of the municipalities will be implemented in practice during the environmental assessment procedures **(Comprehensive Environmental Assessment (CEA), Environmental Impact Assessment (EIA)).** It can be assumed that the contracting parties or at the very least the paying parties of the expert documents will be the municipalities or interested investors.

On the basis of the clear provisions of the MSP concerning the delimitation of competences with regard to the management and financial aspects of the implementation of the individual MSP measures, the municipalities have a reasonable expectation that the state institutions competent for the implementation of maritime and passenger transport measures will be the contracting authority for the expert basis for the assessment of the carrying capacity of the entire Slovenian sea and coastal strip.

The MSP does not explicitly state that municipalities are also required to prepare a **carrying capacity assessment for tourism development.**

It is our opinion that the assessment of the carrying capacity would be useful and helpful in the preparation of expert documents for the assessment of the carrying capacity of the entire Slovenian sea and coastal strip, as well as in the planning of other spatial interventions. The carrying capacity assessment definitely requires gathering further input data:

- an assessment of the capacity of existing bathing sites and beaches,
- an assessment of the potential for expanding bathing sites and beaches,
- an assessment of the capacity of existing parking facilities within 300 m of the coastline,

- an assessment of the potential for using other transport systems, in particular public passenger transport on land and at sea,
- an assessment of the occupancy of bathing sites, beaches, parking areas and other supporting infrastructure.

We anticipate that the data collected will contribute to the assessment of the physical carrying capacity of the coastal strip for bathing. The data are available in different formats, but much of the data (the size of beaches and bathing areas) has not yet been collected and is the subject of this project.

Bearing in mind that there are three basic levels of carrying capacity for tourism development, i.e. socio-cultural, environmental and economic, municipalities need to collect the necessary data in a targeted manner and choose an appropriate methodology.

The socio-cultural level consists in collecting data on the current and expected social and cultural impacts on tourism. Municipalities would be required to produce expert bases that address the social impact of continued tourism development.

The environmental level involves collecting data on the potential environmental damage caused by tourism, which may reduce the resilience and natural functions of the system.

The economic level refers to the collection of data on tourism-related businesses, sole traders and individuals, in terms of whether and under what conditions they can operate profitably. Municipalities would need to produce expert bases that address the economic impact of continued tourism development.

3 Identification of data and data gaps for Maritime spatial planning in the coastal strip and preparation of the Carrying Capacity Assessment of the Marine and Coastal Area

A wide range of existing sources were analysed to identify existing data and data gaps. These include both publicly available **geoportals** as limited data or datasets prepared for a specific purpose. In this sense, they differ greatly in some key characteristics such as purpose of use, ownership, authorship, accessibility, etc. Although the identification was primarily aimed at examining the content of the data, we would like to start by pointing out some of the **fundamental concepts** that every piece of data contains:

a) data owner - the institution, company or individual that owns the data,

b) data controller - the institution, company or individual that manages the data, whether as owner, author or lessee (contractual controller),

c) data originator - institution, company or individual that produced the data,

d) data user - institution, business or individual using the data for its own activity or for a specific interest,

e) purpose of use - data are used for different purposes - in this project, the purpose of use is "strategic and implementation spatial planning, and implementation of specific activities and uses on land and at sea",

f) availability status - availability of the data can be public (public data) or restricted. Public data may also have certain restrictions (rights or conditions of use set by the owner)

g) metadata - data that contains information about, but is not part of, a piece of data. Metadata comprises information relating to the content, structure, quality, ownership, distribution, technology, purpose, usability and other elements relevant to the correct interpretation or use of the data.

In addition to these concepts, we also provide a definition of **a data gap, which** is: non-existent or insufficient data needed to carry out spatial planning.

3.1 Data identification

The following are the key data or datasets and their sources needed to carry out spatial planning in the coastal strip (21 in total). They have been divided into four groups according to their indirectness or directness of use, namely:

- formally established strategies, plans, acts and other sources (6 sources)
- cadastres relevant at local authority level (3 sources)
- data portals (5 sources)
- other sources (7 sources)

Their formal titles (names), status, steward and primary purpose of use are listed in the table below (Table 1). For each of the key sources (project, geoportal, etc.), more detailed descriptions of their content are given below, as well as an indication of their individual data layers.

Table 1: Identification of data and datasets, synthesised view.

	DATASET	STATUS	DATA STEWARD	PURPOSE
	Formally established strategies, plans, acts and other resources:			
1	**Maritime Spatial Plan of Slovenia (MSP)**	Spatial planning instrument	Ministry of the Environment and Spatial Planning of the RS	Strategic and implementation spatial planning at national, regional and local level
2	**Strategy for the Sustainable Growth of Slovenian Tourism 2017 - 2021 and Evaluation of the implementation and achievement of the objectives of the "Strategy for the Sustainable Growth of Slovenian Tourism 2017 - 2021" and guidelines for planning the development of tourism in the strategic period 2022 - 2077**	Strategy, evaluation of strategy implementation, strategic orientations	Ministry of the Economy of the RS	Strategic planning, implementation plan, guidelines at national level
3	**Municipal spatial strategy and implementation acts:** - Municipality of Ankaran - City Municipality of Koper - Municipality of Izola - Municipality of Piran	Spatial planning instrument	Municipalities	Strategic and implementation spatial planning at local level
4	**Sustainable Urban Development Strategy of the City Municipality of Koper**	The strategy	City Municipality of Koper	Strategic, development and spatial planning at local level

Co-funded by the European Maritime and Fisheries Fund

5	**Municipal tourism development strategies:** - no municipal strategy, short presentation on the municipal website, TIC Ankaran, - Strategy for the Development and Marketing of Tourism in the City Municipality of Koper until 2025, proposal, - Strategy for the Development of Tourism in the Municipality of Piran until 2025, proposal	The strategy	Municipalities	Strategic and development planning at local level
6	**Municipal Integrated Transport Strategies:** - Integrated Transport Strategy of the Municipality of Ankaran, - Integrated Transport Strategy of the City Municipality of Koper, - Integrated Transport Strategy Izola, - Integrated Transport Strategy of the Municipality of Piran.	The strategy	Municipalities	Strategic and development planning at local level
	Cadastres relevant at local community level:			
1	**Local community public infrastructure cadastres, additional** **Aggregated data / public passenger transport cadastres of local communities,** **Aggregated data / cadastres of stationary traffic of local communities:** - public parking spaces in the Municipality of Ankaran - number and graphical representation: https://obcina-ankaran.si/sl/zivljenje-v-ankaranu/promet - public parking areas in the City Municipality of Koper https://podatki.gov.si/dataset/javna-parkirisca-v-mestni-obcini-	Cadastres and Databases / records / miscellaneous	Municipalities	Database management

	koper/resource/a11a94f1-f82b-46ad-a3e3-6446c98cf85d - public parking spaces in the Municipality of Izola - locations on the flyer, https://podatki.gov.si/dataset/javna-parkirisca-v-obcini-izola?resource_id=5a591e05-0ce1-4405-ab6f-405e4e4d124b, - Municipality of Piran: Car Park Study, 2019, additional data, not including privately managed car parks, **The municipal data figures do not include privately managed areas of stationary traffic**			
2	**Aggregate data / cadastres of the tourism infrastructure of the local communities (number of beach spots, beach capacity, etc.)** for beaches managed by the local communities: - Municipality of Piran: calculations by area based on Article 19(3) of the Rules on Measures for Protection Against Drowning in Public Bathing Areas	Cadastre	Municipalities	Database management
3	**Water cadastre (hydrological, hydraulic studies) - e-water**	Cadastre	Slovenian Environment Agency (ARSO)	Database management
	Data portals:			
1	**Spatial Information System (SIS)**	geoportal	Public website	Different uses
2	**Environmental Atlas - Geoportal of the Slovenian Environment Agency (ARSO)**	geoportal	Public website	
3.	**Atlas of Waters - Geoportal of the Slovenian Water Agency (DRSV)**	geoportal	Public website	
4	**Water Register - Portal of the Slovenian Water Agency (DRSV)**		Public website	

5	**Nature Conservation Atlas of Slovenia** Interactive Geographic Information System	geoportal	Public website	
6	**3MAP municipality portals**	Information geoportal	Public website	Different uses
	Other sources: **International projects** - support for the development of integrated coastal zone management and the establishment of maritime spatial planning			
1	**CAMP Slovenia (2004 - 2007)** Coastal Area Management Programme	Supporting project	RRC Public website	Introducing an integrated approach to management, strengthening sustainable development in the coastal strip
2	**PLANCOAST (2006 – 2008)**	Supporting project	RRC Public website	Developing tools and capacities for effective integrated coastal and marine spatial planning
3	**SHAPE (2013 – 2014)** Shaping an Holistic Approach to Protect the Adriatic Environment between coast and sea	Supporting project	RRC Public website	Improving the management system by strengthening integrated coastal zone management, in line with the ICZM Protocol
4	**ADRIPLAN (2014 – 2015)** ADRiatic Ionian maritime spatial PLANning	Supporting project	RRC Public website	Supporting the establishment of MSP in the Adriatic-Ionian region - cross-border aspect
5	**ADRIATIC + (2016)**	Supporting project	Regional Development	Sharing experiences in the

			Centre Koper (RRC) Public website	management of marine and coastal areas in the Adriatic Sea area
6	**SUPREME (2018 – 2019)** SUporting maritime spatial Planning in the Eastern MEditerranean	Supporting project, MSP - pilot project	Regional Development Centre Koper (RRC) Public website	Assessment of the available data, interests and preferences, preparation of materials for the draft MSP, simulation of the MSP process and content
7	**PORTODIMARE (2018 – 2020)** geoPORtal of TOols & Data for sustaInable Management of coAstal and maRine Environment	Supporting project, Geoportal	Regional Development Centre Koper (RRC) Public website	Setting up of a shared information platform - geoportal, development of analytical tools for MSP, testing of the selected analytical tools,

3.2 Maritime Spatial Plan of Slovenia (MSP)

This document represents the most up-to-date collection of data required for spatial planning in the sea and, by extension, in the coastal strip (Table 2). The Maritime Spatial Plan (MSP) deals with the use for individual content areas. The plan takes into account the mutual impacts of the following twelve (12) activities and uses: 1. Mariculture ; 2. Fisheries; 3. Facilities and infrastructure for the research, exploitation and extraction of oil, gas and other energy sources, minerals and aggregates and the generation of energy from renewable sources; 4. Maritime affairs and maritime transport; 5. Defence and protection against natural and man-made disasters; 6. Nature conservation; 7. Raw material extraction; 8. Scientific research; 9. Submarine cables, product lines and pipelines; 10. Tourism, sport and recreation; 11. Protection of immovable cultural heritage; 12. Urban development.

The bulk of the data is derived from specific materials produced by the Geodetic Institute of Slovenia for the development of maritime spatial planning: 1.) Updating of the offshore use maps - Cartographic and geoinformation support for the state of the

territory of the Slovenian part of the Adriatic Sea(2015) and 2.) Cartographic and geoinformation support for maritime spatial planning (2016). In addition to the above digital bases, additional sectoral data, local community data and other input data (from the various stakeholders involved in the MSP preparation process) were obtained for the preparation of the MSP, which were integrated by the MSP into the plan's final form.

Table 2: List of MSP sectoral maps, their owners and manager, synthesised list.

MAP NO.	MAP TITLE	OWNER/MANAGER OF INDIVIDUAL LAYERS
1	MSP area	GIS, GURS, MOP (RRC-SHAPE), other
2	Cross-border impacts of the Slovenian sea	GIS, GURS, MOP, IZVRS, other
3	Sea and coast development concept	GIS, GURS, MOP, other
4	Mariculture areas	GIS, GURS, MOP, MKGP, MZI, other
5	Fishing areas, legal regimes and restrictions	GIS, GURS, MOP, MKGP, MZI, other
6	Maritime affairs and maritime transport areas	GIS, GURS, MOP, MZI, UZP, other
7	Defence and disaster protection areas at sea	GIS, GURS, MOP, MORS, other
8	Nature conservation areas,	GIS, GURS, MOP, ARSO, MBI/NBI, other
9	Areas of extraction of raw materials	GIS, GURS, MOP, other
10	Areas of scientific research	GIS, GURS, MOP, other
11	Tourism, sport and recreation areas	GIS, GURS, ARSO, MOP, UZP, other
12	Immovable cultural heritage protection areas	GIS, GURS, MK, MOP other
13	Coastal strip	GIS, GURS, MOP, RRC-SHAPE, other
14	Spatial planning units	GIS, GURS, MOP, RRC-SHAPE, other

The individual sector maps with all layers are listed below:

MAP NO.	TITLE	SCALE
1	MSP area	1:100,000
Base maps		species
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		format
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		format
	territorial sea	polygon, vector
	baseline delimiting the territorial sea and inland marine waters	line, vector
	inland marine waters	polygon, vector
	coastal strip at sea (150 m)	polygon, vector
	basic coastal strip on land	polygon, vector
	the national spatial plan (NSP) area for the comprehensive spatial arrangement of the international port in Koper	polygon, vector
	locations of detailed views	polygon, vector

MAP NO.	TITLE	SCALE
2	Cross-border impacts of the Slovenian sea	1:250,000
Base maps		species
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		format
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		format
	maritime passenger transport	line, vector
	maritime traffic routes	line, vector
	connection to land transport systems	line, vector
	separate navigation scheme area	polygon, vector
	port	point, vector
	airport	point, vector
	BLUE CORRIDORS	
	Blue Corridor lines	polygon, vector
	macro level	polygon, vector
	meso level	polygon, vector

	micro level	polygon, vector
	Blue Corridor areas	polygon, vector
	zone I, sea	polygon, vector
	zone II, sea	polygon, vector
	zone III, sea	polygon, vector
	inland, coast	polygon, vector
	GREEN CORRIDORS	
	inland, coast	polygon, vector

MAP NO.	TITLE	SCALE
3	**Sea and coast development concept**	**1:250,000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	hinterland - sea connections	line, vector
	maritime traffic routes	line, vector
	connection to land transport systems	line, vector
	maritime passenger transport	line, vector
	coast for bathing	line, vector
	coastal promenade	line, vector
	mariculture	polygon, vector
	fishing preserve	polygon, vector
	port	polygon, vector
	urban areas	polygon, vector
	airport	point, vector

MAP NO.	TITLE	SCALE
4	**Mariculture areas**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector

Special layers		**format**
	distance from the coastline boundary 1 nM	line, vector
	distance from the coastline boundary 1.5 nM	line, vector
	locations of existing mariculture farms	polygon, vector
	location of existing mariculture area without proper permits	polygon, vector
	areas that allow siting of mariculture farms by considering other activities and usages	polygon, vector
	potential locations of existing mariculture farms	polygon, vector
	area suitable for mariculture	polygon, vector
	ports where transhipment of mariculture products and equipment for the needs of other mariculture activities is permanently ensured	polygon, vector

MAP NO.	**TITLE**	**SCALE**
5	**Fishing areas, legal regimes and restrictions**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	1: area where the use of encircling nets is prohibited (300 metres from the shore)	line, vector
	2: area where the use of trawl nets is prohibited (1.5 nautical miles from the shore)	line, vector
	3: area where the use of trawl nets is prohibited (3.0 nautical miles from the shore)	line, vector
	4: night-time trawling area	polygon, vector
	5: fishing reserves	polygon, vector
	Protected areas	
	6: Sečovlje Salina Nature Park	polygon, vector
	7: Strunjan Landscape Park (Strunjan - Stjuža Nature Reserve)	polygon, vector
	8: Strunjan Landscape Park (Strunjan Nature Reserve)	polygon, vector
	9: Debeli rtič Landscape Park	polygon, vector
	10: Natural monument Cape Madonna in Piran	polygon, vector
	11: detrital seabed protection plan area	polygon, vector

	12: cultural heritage at sea/extending to the sea	polygon, vector
	13: Mariculture	
	locations of existing mariculture farms	polygon, vector
	location of existing mariculture area without proper permits	point, vector
	areas that allow siting of mariculture farms by considering other activities and usages	polygon, vector
	potential locations of existing mariculture farms	polygon, vector
	150 m zone around potential mariculture areas	polygon, vector
	14: Traffic regimes	
	the national spatial plan (NSP) area for the comprehensive spatial arrangement of the international port in Koper	polygon, vector
	area of effective daily berthing of ships	polygon, vector
	area of effective berthing under the Maritime Code	polygon, vector
	fishing restricted area due to navigation regime	polygon, vector

MAP NO.	TITLE	SCALE
6	**Maritime affairs and maritime transport areas**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	buoys, navigation and other objects at sea	point, vector
	other navigation regimes in the coastal strip (distance in m from the shore)	
	1: up to 150 m - bathing area	line, vector
	2: up to 200 m - limit for vessels other than speed boats	line, vector
	3: up to 250 m - limit for speed boats	line, vector
	4: up to 300 m - limit for ships	line, vector
	marine sediment relocation area	
	test relocation area	polygon, vector
	area of potential relocation	polygon, vector

	the national spatial plan (NSP) area for the comprehensive spatial arrangement of the international port in Koper	polygon, vector
	area of effective daily berthing of ships	polygon, vector
	traffic separation scheme lines	polygon, vector
	separate navigation scheme area	polygon, vector
	area of daily berthing under the Maritime Code	polygon, vector
	Izola shipyard	point, vector

MAP NO.	**TITLE**	**SCALE**
7	**Defence and disaster protection areas at sea**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	1: exclusive use area	polygon, vector
	2: area of possible exclusive use onshore	point, vector
	3: area of possible exclusive use (navigation)	polygon, vector
	4: areas of possible exclusive use at sea	polygon, vector
	5: area of restricted and controlled use	polygon, vector
	6: area of possible exclusive use on land	polygon, vector
	7: UXO temporary storage locations	point, vector

MAP NO.	**TITLE**	**SCALE**
8	**Nature conservation areas,**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	detrital seabed protection plan area	polygon, vector
	Posidonia area	polygon, vector

	planned priority protection of natural parts of the seafront	polygon, vector
	A: planned nature conservation along the Dragonja estuary area	polygon, vector
	B: Areas of planned extension of protection	polygon, vector
	C: planned protection of the area of the sand bank at the Piran Punta	polygon, vector
	ecologically important areas (EIA)	polygon, vector
	Natura 2000	polygon, vector
	Protected areas	
	Škocjan bay	polygon, vector
	6: Sečovlje Salina Nature Park	polygon, vector
	7: Strunjan Landscape Park (Strunjan - Stjuža Nature Reserve)	polygon, vector
	8: Strunjan Landscape Park (Strunjan Nature Reserve)	polygon, vector
	9: Debeli rtič Landscape Park	polygon, vector
	Natural monument Cape Madonna in Piran	polygon, vector

MAP NO.	**TITLE**	**SCALE**
9	**Areas of extraction of raw materials**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	salt pans	polygon, vector

MAP NO.	**TITLE**	**SCALE**
10	**Areas of scientific research**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector

Special layers		**format**
	oceanographic buoy (ODAS)	point, vector
	area where archaeological and other non-invasive scientific research can be carried out	line, vector

MAP NO.	TITLE	SCALE
11	**Tourism, sport and recreation areas**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	float area	line, vector
	water quality measurement points	point, vector
	port area	polygon, vector
	bathing waters	polygon, vector
	bathing waters - areas of influence	polygon, vector
	bathing waters - catchment areas	polygon, vector

MAP NO.	TITLE	SCALE
12	**Immovable cultural heritage protection areas**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	Protection regimes of cultural heritage (eVrd)	polygon, vector
	buildings	polygon, vector
	Other facilities and installations	polygon, vector
	parks and gardens	polygon, vector
	memorial heritage	polygon, vector
	buildings with parks or gardens	polygon, vector
	settlement heritage	polygon, vector

	cultural landscape	polygon, vector
	archaeological heritage	polygon, vector
	unknown	polygon, vector
	cultural heritage impact areas	polygon, vector

MAP NO.	TITLE	SCALE
13	**Coastal strip**	**1:50.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	coastal strip at sea (150 m)-schematic representation	polygon, vector
	basic coastal strip on land	polygon, vector

MAP NO.	TITLE	SCALE
14	**Spatial planning units**	**1:25.000**
Base maps		**species**
	DPK250_Morje_Barvna_TM_d48	raster
Basic layers		**format**
	national boundary	polygon, vector
	the municipality's border with the sea	line, vector
Special layers		**format**
	overview of the division of the coastal strip zone in the SPU	
	1. part (Figure 14a)	polygon, vector
	2. part (Figure 14b)	polygon, vector
	SPU (spatial planning units)	polygon, vector
	coastal strip at sea (150 m)-schematic representation	polygon, vector
	basic coastal strip on land	polygon, vector

3.3 Water Cadastre

(access: http://www.evode.gov.si/index.php?id=84)

The Water Cadastre is the official record of water management established under the Water Act. It consists of two main databases, the Water Inventory and the Inventory of Water Facilities, which are divided into several sub-databases.

All national water management programmes, water management plans and programmes of measures in accordance with the water regulations are also permanently stored and accessible as annexes in the Water Cadastre. Water Cadastre data are publicly available online.

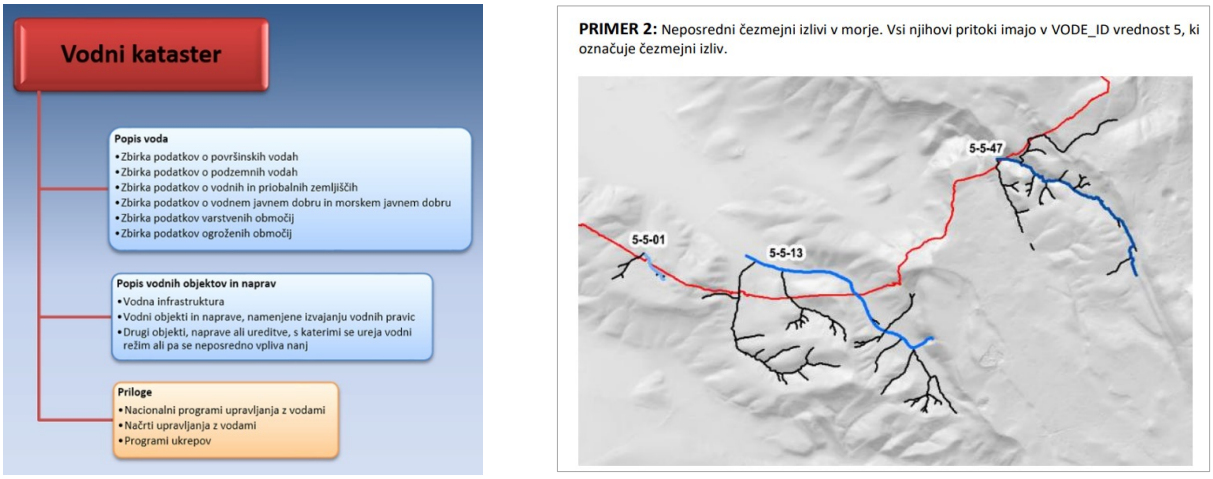


Figure 1: Structure of the Water Cadastre and reference data (cartographic material) (source: http://www.evode.gov.si/index.php?id=84)

3.4 Spatial Information System (SIS)

(access: http://www.pis.gov.si/)

The Spatial Information System is intended for the performance of tasks of the state and monitoring the tasks of municipalities in the field of spatial planning, including drafting and adopting national and municipal documents, monitoring the state of physical space and for enabling the public to be informed about the state of physical space. The Spatial Information System contains spatial databases, tools and services to support spatial planning and building construction processes. Within the framework of the SIS, the **public website** is dedicated to public access to freely available data and services of the Spatial Information System. Content areas:

- information on national spatial plans in force and currently being prepared,
- available data on detailed land-use designations from municipal spatial plans and zoning ordinances,
- information on detailed implementing measures,
- data on administrative acts in the field of building construction (building and occupancy permits, with effect from 1 June 2015),

- information on spatial restrictions (Natura 2000, protected areas, ecologically important areas, water protection areas, forest reserves, protective forests, protection of cultural heritage)
- real estate data (national boundaries, municipal boundaries, settlement boundaries, land cadastre and building cadastre).

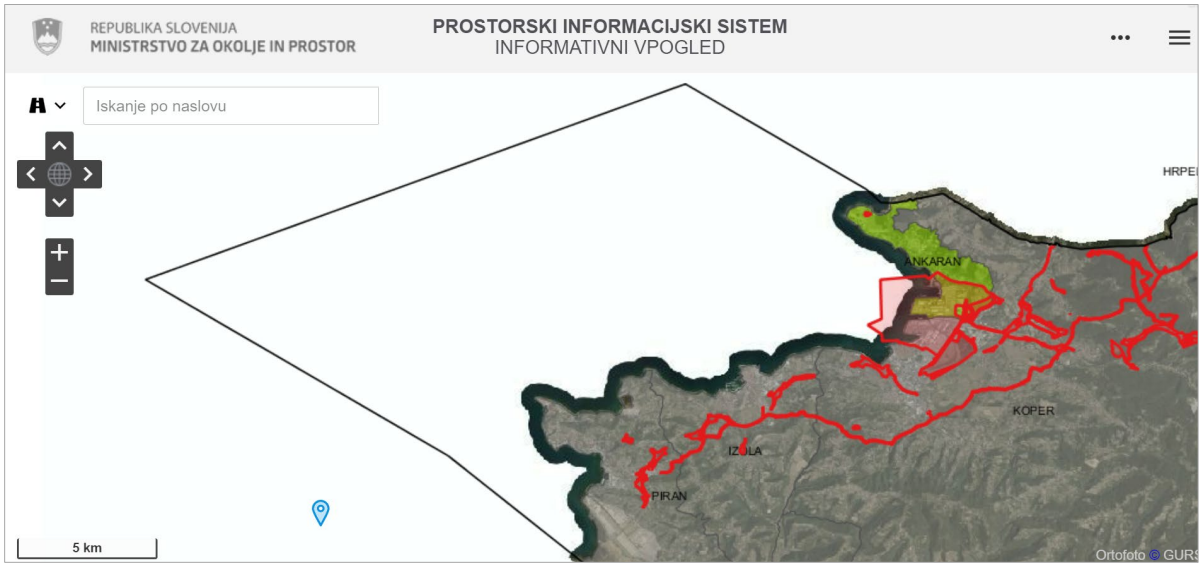


Figure 2 A reference view of the SIS landing page (source: https://storitve.pis.gov.si/pis-jv/informativni_vpogled.html)

3.5 Environmental atlas

(access: https://storitve.pis.gov.si/pis-jv/informativni_vpogled.html)

The Environmental Atlas of Slovenia is a web application which provides insight into spatial information by means of an internet browser. By means of the Atlas, the Slovenian Environment Agency (ARSO) provides insight into environmental spatial content to the widest circle of users. The ENVIRONMENTAL ATLAS shows spatial data in the official records of ARSO relating to environmental issues (water, nature, weather, earthquakes, environmental protection, etc.). The content is organised by thematic groups:

- measurement sites, - environment, - climate, - water, - nature - soil, - earthquakes.

Other national spatial records are also included in the system as additional data to be linked to environmental content:

Spatial units:

- the graphical part of the land cadastre, - streets and house numbers, - municipalities, settlements, administrative units, cadastral municipalities, - the

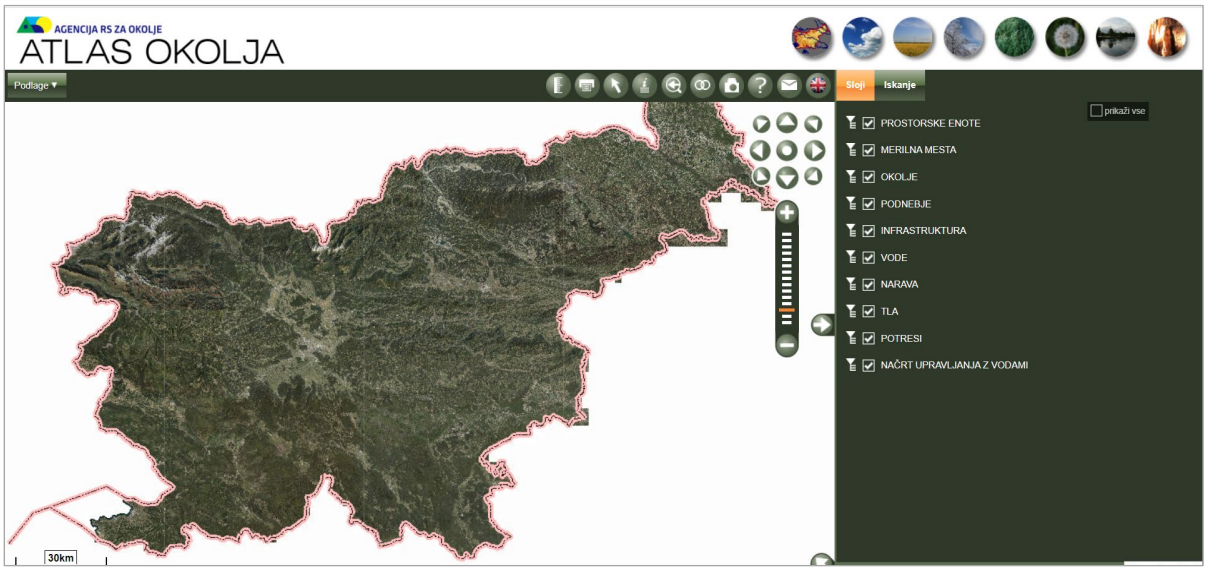
register of geographical names (basic national geoinformation layer),

Cartographic bases and orthophotos:

- digital orthophotos at a scale of 1:5 000, based on aerial photographs, - basic topographic plans at scales of 1:10 000 and 1:5 000, - topographic maps at scales of 1:25 000 and 1:50 000, - overview maps at scales of 1:250 000, 1:500 000 000 and 1:1 000 000 000, - digital terrain models (DMR 100, DMR 12,5, DMR 5) and a digital elevation model (DMV 5).

Infrastructure:

- national roads and annual average daily traffic (AADT) - sources of electromagnetic radiation



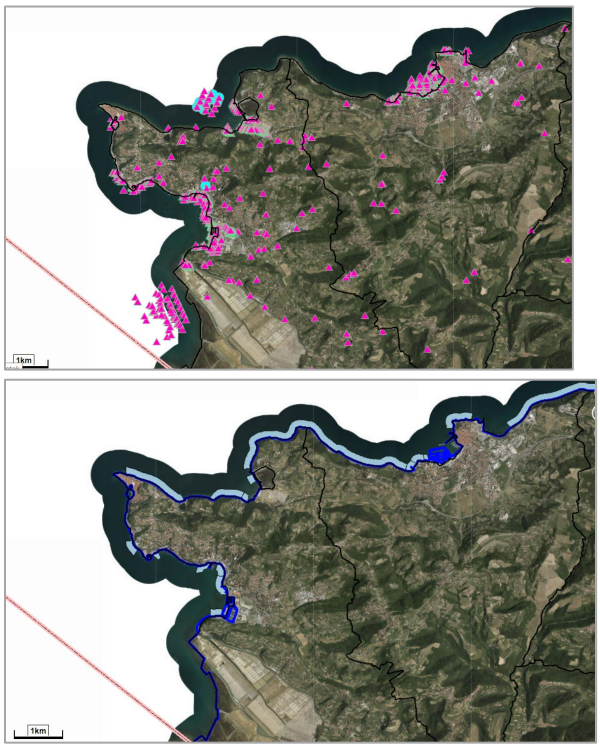


Figure 3 Reference view of the entry page (top), and an example of the representation of the situation in the area of water permits (bottom left) and coastline and bathing waters (bottom right) (source: https://storitve.pis.gov.si/pis-jv/informativni_vpogled.html).

3.6 Atlas of Waters

(access: https://gisportal.gov.si/portal/apps/webappviewer/index.html?id=11785b60acdf4f599157f33aac8556a6)

The Atlas of Waters is the first publicly available web viewer to be deployed on a national cloud (SSC). It contains a graphical representation of the updated content of the Water Cadastre and water rights. Metadata descriptions of the data from the Water Directorate of the Republic of Slovenia are available on the Slovenian INSPIRE metadata system.

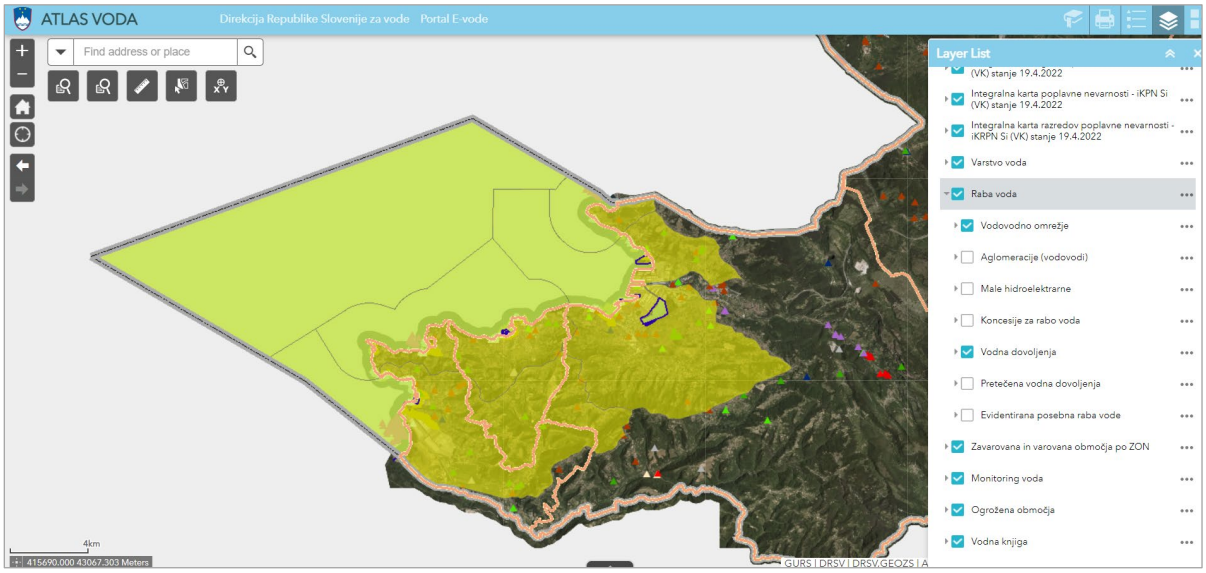


Figure 4: Reference display of data layers: water body, water body - catchment area, coastline, water permits, etc. (source: https://gisportal.gov.si/portal/apps/webappviewer/index.html?id=11785b60acdf4f599157f33aac8556a6).

3.7 Water Register

(access: https://www.kingprostor.si/blog/vodna-knjiga/)

In accordance with Article 2 Of the Water Register Regulation (Official Gazette of the Republic of Slovenia, No 48/18), the Water Register is a public register and consists of:

- records of water rights granted (the database includes water permits and concessions);
- records of registered special water use;
- records of water approvals granted; and
- collections of documents.

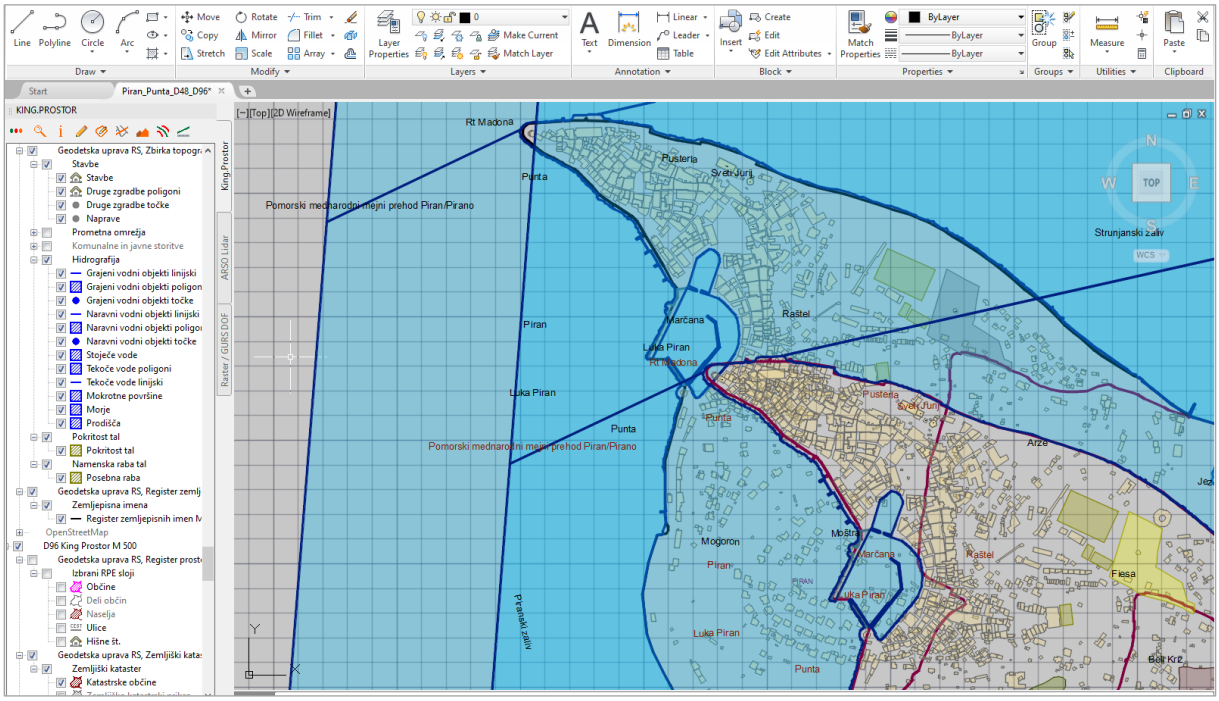


Figure 5: Reference view of data layers representation of Piran Punta before and after the transformation of the public spatial data from D48 to D96 coordinate system (Source: https://www.kingprostor.si/primeri.html).

3.8 Nature Conservation Atlas of Slovenia

(access: https://www.naravovarstveni-atlas.si/web/DefaultNvaPublic.aspx)

The Nature Conservation Atlas of Slovenia is an interactive geographic information system that displays information on areas of nature conservation importance in Slovenia. It comprises the following four datasets:

- Natura 2000,
- Ecologically important areas (EIA),
- Valuable natural features (VNF)
- Protected nature areas (PAs).

Each set comprises a number of cartographic bases and data layers.

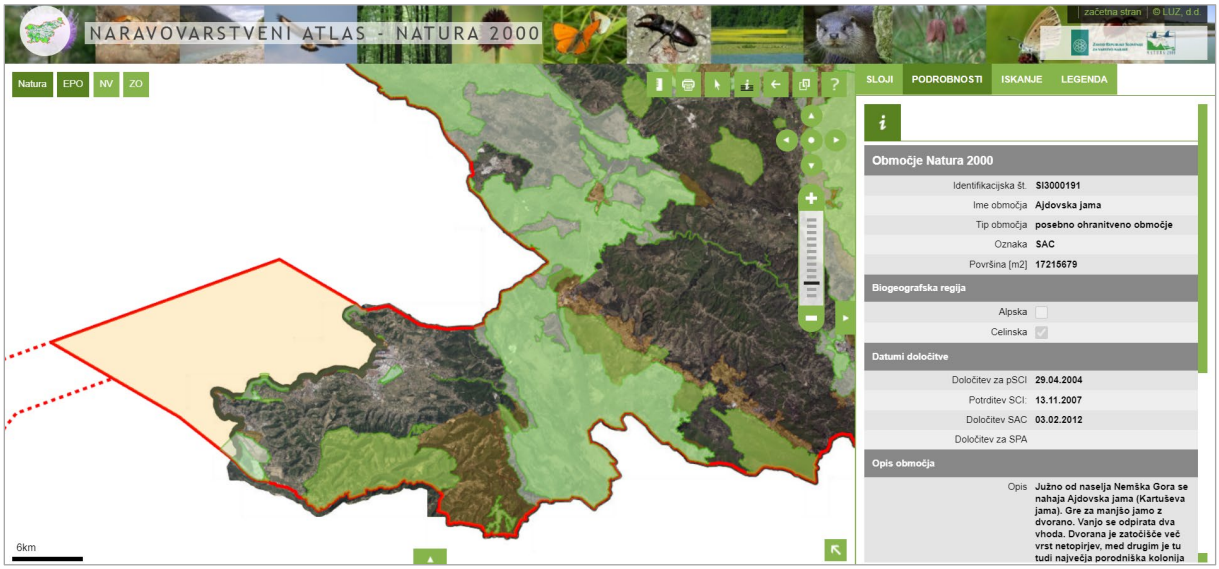


Figure 6: Reference view of data layers NATURA 2000 and EPO sites (Source: https://www.naravovarstveni-atlas.si/web/profile.aspx?id=N2K@ZRSVNJ).

3.9 PORTODIMARE

(access: https://www.portodimare.eu/)

The PORTODIMARE project aims to create a common information platform - a **geoportal** - to support the implementation of maritime spatial planning. As part of the project, specific analytical tools for the preparation of MSP were developed and tested.

The **GeoPortal** is publicly accessible and includes: 27 areas, 550 data layers and 23 individual data portals. A list of the owners/managers of each data layer is also provided. The website also provides links to other related data portals (e.g. Adriplan data Portal, Eurostat, etc.)

The main areas are based on the MSP Directive (but the portal also covers additional areas), i.e.: mariculture; biological characteristics (diversity); submarine cables and pipelines: *coastal defence*; coastal strip - land use; underwater cultural heritage; *raw material extraction*; fisheries; maritime boundaries and zones; maritime transport; defence; *miscellaneous*, six specific modules; energy (oil and gas); physical characteristics; ports; *pressure impacts*; nature protection; renewable resources; spatial policies; land boundaries; tourism and recreation; habitats.

The portal also provides data for **the Slovenian Adriatic Sea and coastal area**: *https://www.portodimare.eu/layers/?limit=20&offset=0&extent=-19.335937500000004,7.710991655433217,6.855468750000001,32.2499744558633 1*

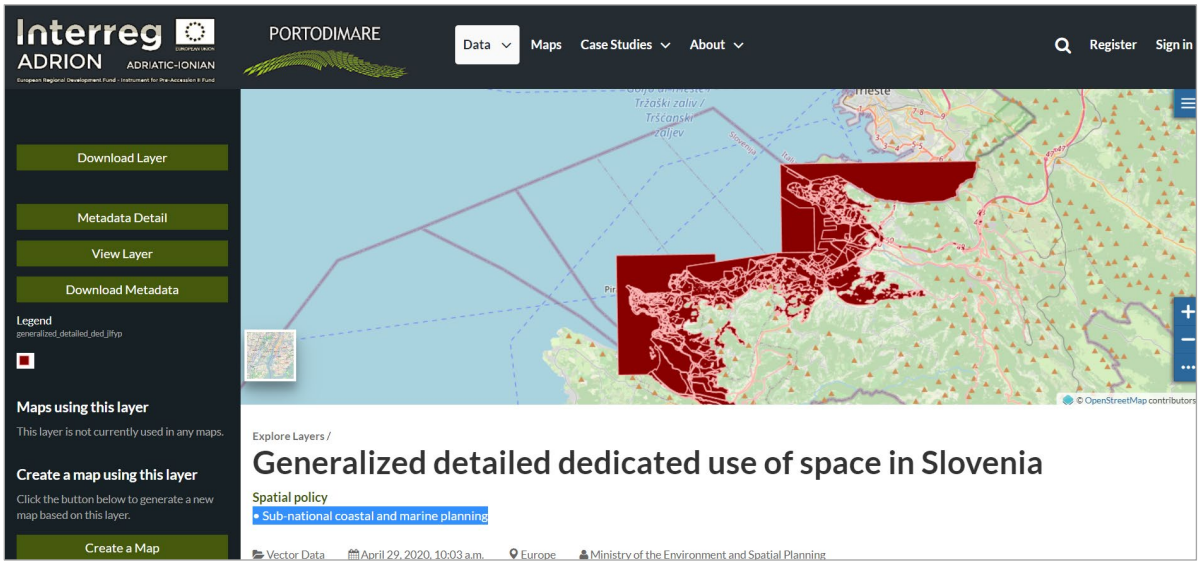


Figure 7: Reference display of data layers detailed Land Use Map of the Slovenian Coast (Source: https://www.portodimare.eu/layers_ext/geonode:generalized_detailed_ded_jlfyp#/).

3.10 Synthesised findings

From the above, we can conclude that indeed a very large amount of data has been produced for spatial planning at different levels and with varying degrees of accuracy. The potential shortcomings or limitations are in keeping them up to date, as many of these data layers were created for a specific purpose over a specific period of time. State-managed data (e.g. GURS) are the most reliable in terms of relevance. These include the various cadastres used by local authorities.

In our view, the effectiveness of offshore and coastal strip planning and implementation, after the MSPs and local municipal spatial plans are in place, is more a question of the implementation of the individual actions arising from these documents than a result of a lack of specific data.

Furthermore, it can also be noted that although all available data do exist, knowledge of them among stakeholders involved in the planning and programming process may be somewhat insufficient.

Despite all this, new facts about space and the processes that take place in it are constantly emerging in the course of spatial planning and design. The Slovenian sea and coast are currently facing challenges mainly in relation to the regulation of tourism and the supply (catering, accommodation, etc.) and transport requirements associated with it. There are some data gaps in this area, both in terms of beach capacity assessment, public transport capacity and other data related to the production of a carrying capacity assessment.

Key existing **data layers** that will form the basis for completing this task include:

- the municipality's border with the sea (line, vector),
- coastal strip at sea (150 m) (polygon, vector),
- basic coastal strip on land (polygon, vector),
- bathing waters (polygon, vector),
- port areas (polygon, vector).

In the following phases of the project, the data layers will be upgraded with new data in the fields of tourism (beaches) and transport (locations of areas of stationary traffic, public passenger transport stops) and maritime transport (potential locations for the establishment of maritime public passenger transport stops).

However, in terms of the tasks that the MSP imposes on municipalities, certain data are missing. The carrying capacity assessment requires gathering further input data:

- an assessment of the capacity of existing bathing sites and beaches,
- an assessment of the potential for expanding bathing sites and beaches,
- an assessment of the capacity of existing parking facilities within 300 m of the coastline,
- an assessment of the potential for expanding parking facilities within 300 m of the coastline,
- an assessment of the potential for using other transport systems, in particular public passenger transport on land and at sea,
- assessing the occupancy of bathing sites, beaches and parking spaces.

The following documentation will need to be obtained and prepared in order to produce expert bases in the field of cultural heritage protection:

- an assessment of the archaeological potential,
- preliminary archaeological research; and
- an assessment of the cumulative impacts of the interventions on the overall conservation of cultural heritage.

Nature conservation data will also be required, in particular mapping of habitats in the sea, in the coastal strip.

Bearing in mind that there are three basic levels of carrying capacity for tourism development, i.e. socio-cultural, environmental and economic, municipalities need to collect the necessary data in a targeted manner and choose an appropriate methodology.
The socio-cultural level consists in collecting data on the current and expected social and cultural impacts on tourism.

The environmental level involves collecting data on the potential environmental damage caused by tourism, which may reduce the resilience and natural functions of the system.
The economic level refers to the collection of data on tourism-related businesses, sole traders and individuals, in terms of whether and under what conditions they can operate profitably.

There is no dedicated geoportal for coastal strip planning. A geoportal needs to be established or upgraded to house all the databases foreseen by the MSP and required for planning.

The beginning stages of a geoportal have been set up in the framework of the SHAPE project. Although it was intended to be used by municipalities in their work, this has not materialised in practice.

In our view, existing municipal geoportals, which are used on a daily basis by employees, should be upgraded for end-users, in particular municipalities.

3.11 Right to use public data under the Infrastructure for Spatial Information in the EU (INSPIRE Directive)

Although much of the data previously mentioned is of public domain, we have identified certain ambiguities in their identification. Detailed rules on the use or sharing of data are/should also be defined by an international commitment defining the responsibilities and tasks in the field of infrastructure for spatial information. Below are some of the key features.

The establishment of an infrastructure for spatial information in the European Community is laid down in DIRECTIVE 2007/2/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 March 2007, known as the **INSPIRE Directive.**

This Directive addresses issues relating to the availability, quality, organisation, accessibility and sharing of spatial information and lays down general rules aimed at the establishment of the Infrastructure for Spatial Information in the European Community (hereinafter referred to as INSPIRE), for the purposes of Community environmental policies and policies or activities which may have an impact on the environment.

Member States are obliged to set up the infrastructure and to implement the provisions of the Directive in accordance with the set deadlines.

Iinfrastructure for spatial information comprises metadata, spatial data sets and spatial data services; network services and technologies; agreements on sharing, access and use; and coordination and monitoring mechanisms, processes and

procedures, established, operated or made available in accordance with the Directive. The Directive defines the precise meanings of the following terms: **spatial data, spatial data set, spatial data services, spatial object, metadata, interoperability, INSPIRE geoportal, public authority and third party.**

In the context of the use of **data for the purpose of the present task**, the following provisions are of particular relevance, as they impose the following tasks on States or public authorities:

- ensure the availability or sharing of spatial data between public authorities (Articles 10 and 17),

- ensure the sharing or limited sharing of data also to third parties (i.e. persons other than the public authority) (Article 10),

- provide (free of charge) search and review services for publicly accessible data (Article 11), both to public authorities and third parties,

- in the case of partial or total restriction of use, the competent authorities are required to state the reasons (these are mainly: confidential spatial or personal data, intellectual property rights, environmental protection, confidential commercial or industrial information, etc.) (Article 13),

- define the content of the data sharing agreement between public authorities (Article 21)

3.12 Identifying data/information gaps

The MSP identifies a number of technical bases that need to be developed before any further potential interventions on the sea and the coastal strip on land can be planned. All the technical bases that have yet to be developed can be characterised as data gaps.

In addition to the above, it is useful to define general data gaps that we know exist (e.g. floods, NUMO), marine monitoring, monitoring of MSP implementation.

The **methodology for determining the tourism carrying capacity of coastal municipalities in Slovenia has not yet been finalised, and** it is therefore not possible to determine with certainty what data would be needed to produce the expert basis.

Due to the lack of a defined methodology, this project analyses a few reference cases as proposed by the contracting authority. Following the analysis and some consideration, we propose the identification of the key data gaps for the case under consideration and recommend a methodology to address these gaps.

The data gaps that can be defined at this point in time are therefore:

1. Data gaps as identified by the MSP,
2. Data gaps that can be identified based on the methodologies analysed,
3. Additional data gaps will be identified through a participatory process involving key stakeholders and once the chosen methodology and the sustainable tourism indicators in the case under consideration have been defined in detail.

For the purposes of the project, we propose to divide the data gaps into several categories.

3.13 Data gaps identified by the Maritime Spatial Plan of Slovenia

The MSP defines a number of data gaps. Most of the work involves the preparation of expert bases, which must be produced before any further planning can take place in the coastal strip, both on land and at sea. The data gaps were identified through the process of spatial planning offshore and in the coastal strip, involving stakeholders, the public, local communities, expert institutions, spatial planners.

3.14 Reference examples of expert bases and projects to identify the tourism carrying capacity of coastal areas

3.15 EcAp-based marine vulnerability assessment as a basis for MSP in Montenegro

The vulnerability assessment was carried out in the framework of the project "Defining the methodological framework for marine spatial planning in Bokakotorska Bay (Montenegro)".

The project aimed at designing and testing a methodology for marine vulnerability assessment. Testing enabled also identifying shortcomings, obstacles, data needs and gaps of the proposed methodology, as well as the existing capacities for future plan development. The approach will be considered in the development of the future land-use plan of Montenegro that will be prepared for both terrestrial and marine areas, thus requiring compatibility and coherence of methodologies applied on land and at sea.

The vulnerability assessment included three main steps:

Identification and mapping of data related to EcAp indicators, including indicators of environmental state of the marine and coastal area (biodiversity and landscape features, including for example habitat distributional range, population abundance of selected species and alike) and indicators of existing pressures (mainly physical and chemical characteristics of the marine environment resulting from the existing human activities, including for example eutrophication, contamination, physical disturbance of the coastline, etc.).

Attribution of values to the current state (i.e. value index) and pressures to the marine areas (i.e. impact index). The value index reflects the level of the existing quality

of the environment and it is primarily based on information on the environmental state of the marine area. By using different criteria (such as conservation status, rareness, endemism, etc.) the value is attributed to different components of the environment for each spatial unit of the studied area on scale of 1 to 5. The impact index reflects the intensity of the impact on the marine environment and is defined based on criteria related to exposure to and sensitivity of the marine environment to the pressures coming from the existing human activities. For the impact index, each spatial unit has been assessed on the scale of 1 to 10.

Assessment of the vulnerability as potential magnitude of negative impacts (degree, extent and significance) of future activities which depends on the current state of the marine environment (value index), current intensity of pressures (impact index), characteristics of the future activities and resilience of the marine environment to the future activities (i.e. its capacity to absorb additional pressures). By using the attributed value for the value index (1-5) and impact index (1-10), based on the expert opinion on resilience of the marine environment to each individual future activity, vulnerability value was assigned on scale of 1-10 to each spatial unit.

The vulnerability assessment enabled identifying most fragile and valuable areas of the Bokakotorska Bay that need to be preserved from future degradation, and therefore where future activities need to be planned carefully.

Methodology transferability: integration of the existing NUMO system is possible.

(Source: https://maritime-spatial-planning.ec.europa.eu/practices/ecap-based-marine-vulnerability-assessment-basis-msp-montenegro)

3.16 Guide to Good Practice in Tourism Carrying Capacity (TCC) Assessment

The document has been prepared by the Priority Actions Programme/Regional Activity Centre (PAP/RAC) of the Mediterranean Action Plan (MAP - UNEP).

The project has produced several test cases in Spain, Italy, Egypt, Albania, Greece, Malta and Croatia.

The findings of the project show that it **is not possible to apply a single or even a preferred methodology** for measuring carrying capacity. However, some broad guidelines can be followed in all cases. The **methodology should be chosen according to the target groups and objectives** identified for the assessment of the tourism carrying capacity in the early stages.

In all cases, the approach is based on assessment indicators, development scenarios and a participatory process. The PAP methodology can be synthesised into the following stages:

- data management;
- assessment and analysis;
- tourism development scenarios;
- participation process;
- calculation of carrying capacity;
- integration with planning and management.

The use of **sustainable tourism indicators** such as:

- environmental footprint,

- CO_2 emissions,

- securing water resources,

- wastewater treatment,

- impact on biodiversity,

- use of coastal land,

- waste production,

- employment growth, etc.

Methodology transferability: We do not consider the methodology to be directly transferable. Sustainable tourism indicators should be defined on a case-by-case basis. Based on the individually agreed methodology and the necessary indicators, additional data gaps are identified.

(Source: Zoran Klarič: Guide to Good Practice in Tourism Carrying Capacity Assessment, https://www.researchgate.net/publication/305781936_Guide_to_Good_Practice_in_Tourism_Carrying_Capacity_Assessment)

3.17 Regional Strategy for Sustainable Tourism Development - III. Carrying Capacity Assessment

The Strategy acknowledges that timely and comprehensive spatial planning is crucial for the planned implementation of sustainable tourism development, which locates the spatial interventions planned in the strategies. The carrying capacity assessment refers mainly to the coastal strip only, which is the most vulnerable area due to the attractiveness of the location and the development trends as well as the scale of tourism flows in the project area.

The Strategy defines:

• spatial-ecological indicators:

- beaches - capacity,
- bathing water quality,
- carrying capacity of green spaces and lawns,

• infrastructure indicators:

- drinking water consumption,
- public passenger infrastructure,
- accommodation facilities,

- socio-economic indicators:

- occupancy rates,
- residents' satisfaction with the impacts of tourism.

Transferability of the methodology: it is reasonable to include the proposed indicators, but additional indicators should be introduced.

*(**Source**: Regional Strategy for Sustainable Tourism Development 2006-2012, summarised by:: Hosting d.o.o., December 2006, CAMP, RRC/RRA: https://www.rrc-kp.si/sl/projekti/referencni-projekti/18-uncategorised/114-regionalna-strategija-trajnostnega-razvoja-turizma.html)*

3.18 Key data gaps

In addition to the data gaps identified by the MSP, it is possible at this point in time to identify data gaps arising from the methodologies analysed.

Data gaps **can be identified through a participatory process** involving key stakeholders and once the chosen methodology and the sustainable tourism indicators in the case under consideration have been defined in detail.

We suggest that the indicators and the related data gaps be defined in a meeting with representatives of the local community and other participating institutions. It is likely that additional data gaps will be identified by the various spatial planning authorities involved.

3.19 Data gaps defined in the MSP in relation to tourism development

Before moving forward with further spatial development in the field of tourism, a number of expert bases need to be produced. For the expansion of municipal berths, marinas and piers for the landing of passenger transport, port for international public passenger transport with berths for large tourist yachts with a shipyard for maintenance of small vessels in Izola is possible only after **expert bases are obtained in advance for the assessment of the load bearing capacity of the sea for the entire Slovenian sea and the coastal strip.** In doing so, they take into account the existing

burden on the environment, security restrictions and other restrictions and protection regimes in space, management plans for protected areas and other protection regimes, availability of the necessary support infrastructure (for example, parking lots, access paths, infrastructure for waste, sanitary facilities), and the expected impact of the siting of developments on the marine environment, possible introduction of non-native species, protected and conservation areas of nature, areas of key elements of marine biodiversity, noise emissions and emissions into the air, use of waters, needs of other activities, generation of waste and waste water, cultural heritage (underwater and on land) and the landscape.

It needs to be ensured that the **archaeological potential is examined and the cumulative impact of developments on comprehensive conservation of cultural heritage is assessed.** Before the increase in the number of berths in marinas, ports and berths, **preliminary archaeological research** should be carried out to determine whether the interventions in cultural heritage units are acceptable and if they are, under which conditions.

The siting of piers, platforms, built coast and other infrastructure for bathers is possible only if consent is obtained in advance from the spatial planning authorities. Such development work is not planned in naturally preserved coastal areas. Expansion of piers, platforms, built coast and other infrastructure for bathers is possible only if **expert bases are produced in advance and nature protection guidelines are observed. The cumulative load on the environment is examined at least for the area of the entire coast in an individual municipality as part of drafting of implementing acts.** In doing so, the existing burden on the environment, restrictions and protection regimes in space, security restrictions, management plans for protected areas and other protection regimes, the necessary support infrastructure (for example, parking lots, access paths, infrastructure for waste, sanitary facilities), and the expected impact of the siting of developments on the marine environment, the state of waters, non-native species, protected and conservation areas of nature, areas of key elements of marine biodiversity, noise emissions and emissions into the air, use of water, needs of other activities, generation of waste and waste water, cultural heritage (underwater and on land) and landscape is taken into account. Newly built coasts and their expansion into the sea is possible only if the state of seawater is maintained and if expert bases and environmental impact assessments are made in advance.

In detailed planning of these developments, the necessary appertaining infrastructure for waste collection on land needs to be envisaged and further appropriate management of waste ensured (handover to people authorised for waste management). It needs to be ensured that the **archaeological potential is examined and the cumulative impact of developments on comprehensive conservation of cultural heritage is assessed.**

The mapping of marine habitat types is carried out to enable assessment of the cumulative impact in the Comprehensive Environmental Assessment (CEA) for developments in the coastal strip.

When development is planned of infrastructure that is needed for intensifying the tourism, sport and recreation activity in the marine environment, **the impact of this development and activities should be examined in terms of the introduction and spreading of non-native species and, when infrastructure that is needed for intensifying the activity of tourism and recreation and urbanisation in the marine environment is being established and the occurrences of non-native marine organisms on surfaces that could be used as substrate should be monitored.**

Cultural heritage protection is included in spatial development planning by considering the preservation of cultural monuments, registered archaeological sites and heritage features, which are determined in heritage protection areas in the process of plan preparation. The protection of archaeological remains is included in spatial development planning so that the implementation of **preliminary archaeological research for the evaluation of archaeological potential is ensured in early planning phases in the process of plan preparation in the areas of envisaged interventions that have not been researched and where the archaeological potential is unknown. On the basis of the results of this research, further measures are implemented for newly discovered archaeological sites, including regular monitoring of heritage.**

For the siting of coastal promenade, a landscape concept is drafted by considering the vulnerability, attractiveness and suitability of the coastal strip, as part of which variant solutions of the promenade route are examined. In doing so, the expected changes to the coastline caused by climate change and related flood protection measures should also be considered. The promenade route is coordinated with protection regimes as part of the landscape concept and the most appropriate variant is chosen. Since the promenade crosses registered cultural heritage units, cultural heritage protection conditions and guidelines are obtained from the ZVKDS, while nature conservation guidelines are obtained for the parts where the promenade crosses areas with nature conservation status. The landscape concept should be a mandatory expert basis for the siting of the promenade as part of the regional spatial plan or spatial plans of the coastal municipalities. On this basis, a comprehensive and coherent development of the entire route, adapted to the local spatial characteristics (cultural heritage, nature protection, architecture, local materials, vegetation, recognisable landscape features) should be ensured. As part of the design, appropriate infrastructure for waste collection and waste management (checking if containers are full, regular transport and handover of waste to processors) should also

be envisaged. If possible, presentation of the natural and cultural heritage and recreational areas inland should be connected to the promenade.

The coastal promenade can also be planned as maintenance of the existing walking path. It is not necessary to make a landscape concept for maintenance of the existing footpaths.

The **expert bases for locating and vetting locations for the island** are described in detail.

The Water Agency at the Ministry of the Environment and Spatial Planning (MOP, DRSV) drafts a **Strategy for adaptation of the use and activities on the Slovenian coast due to the impact of climate change on the sea water surface level** within two years after the entry into force of the MSP..

The Water Agency at the Ministry of the Environment and Spatial Planning (MOP, DRSV) **makes a comprehensive study of flood and erosion risk for the coastal area that encompasses other areas that have not been included in the areas of significant impacts of floods (AIIF) within three years after the entry into force of the MSP.** The study should include a comprehensive analysis of flood risk and related erosion risk, determine the objectives for the reduction of flood risk and objectives for the good state of waters, define measurable indicators for the attainment of objectives and plan appropriate measures for attaining the objectives in the entire coastal area.

3.20 Data gaps resulting from the methodologies analysed

Regarding the assessment of the tourism carrying capacity of the environment:

- hotel and private accommodation capacities and their projected growth up to 2030 remain unclear,
- there is no comprehensive/interactive representation of bathing capacities, only the locations and equipment of bathing facilities are presented. Bathing site accessibility, including sustainable accessibility, is not clearly defined and mapped,
- the possibilities for expanding bathing sites remain unclear (areas, bathing site statuses),
- no comprehensive/interactive mapping of parking areas in all four municipalities, in particular by type (cars, caravans, buses),
- The municipal data figures do not include privately managed areas of stationary traffic,
- No comprehensive/interactive mapping of public passenger transport infrastructure in coastal municipalities and in the coastal strip on land and at sea

(public passenger transport infrastructure that could also serve the needs of tourism infrastructure).

- Data on water supply to residents and visitors (as a starting point for carrying capacity assessment),
- Data on wastewater treatment capacity (as a starting point for carrying capacity assessment),
- Data on the necessary restrictions on the number of visitors to natural bathing areas and other bathing areas, especially in more vulnerable and protected areas,
- Sea carrying capacity according to NUMO,
- Data concerning restrictions on the number of visitors to immovable cultural heritage sites, including the identification of such sites.

3.21 Additional data gaps

Data gaps can be identified through a participatory process involving key stakeholders and once the chosen methodology and the sustainable tourism indicators in the case under consideration have been defined in detail.
We suggest that the indicators and the related data gaps be defined in a meeting with representatives of the local community and other participating institutions. It is likely that additional data gaps will be identified by the various spatial planning authorities involved. (workshop proposal)

3.22 Conclusion

All of the above data gaps point to the need for a comprehensive approach to the assessment of the "Tourism carrying capacity of coastal areas". In this context, we recognise the need for a specific analytical study to define the starting points, the objectives, the appropriate methodology, the key stakeholders and their competences, and the desired outcomes.

4 Bathing sites

4.1 Overview and analysis of the current state of bathing sites

4.2 Maintaining a register of bathing areas and natural marine bathing areas

The following data were used to establish a register of bathing sites, beaches and other areas where bathing activities take place:

1. **bathing waters**, as listed in the MSP (and other official records),

2. **areas of natural bathing sites** with a water permit, as listed in the Atlas of Waters (and other official records),

3. information on **other areas** where bathing activities are also carried out (other bathing sites), provided by the local authorities (municipalities).

In the process of obtaining data for the category of**"bathing sites"**, we have encountered widely differing terminology within the official records. A distinction must be made between the **terms** defining the water and land parts separately, in particular those that:

- occur in everyday vernacular: **bathing site, beach, beach facilities, bathing shore, bathing sea**, etc., or:

- are formally defined as: **bathing area**, **natural bathing area**, **bathing waters**, in the Water Act.

In principle, there are two groups of bathing areas, namely:

- (a) **bathing sites** as listed in official records,

- b) **other bathing areas** or **areas** where bathing activities also take place.

They are therefore distinguished by their status. Below, we reiterate the official citation:

► ***Water Act (ZV-1-NPB7)****; clean copy:*

Article 77 (bathing waters)
(unofficial consolidated version)

*(1) A **bathing area** shall be the bathing water area where a large number of people bathe or are expected to bathe, or where bathing is not permanently prohibited or permanently advised against, including the appertaining waterside land.*

*(2) A **natural bathing area** shall be a bathing water area where bathing is practiced as a direct water use for bathing area activities and in accordance with the regulations governing protection against drowning, including the appertaining infrastructure.*

*(3) **Bathing waters** shall be waters where a large number of people bathe or are expected to bathe, or where bathing is practiced as a direct water use for bathing area activities, and where bathing is not permanently prohibited or permanently advised against.*

(4) The Government shall define bathing waters and the types and methods of carrying out the tasks of bathing water quality management.

(5) The criteria for quality assessment of bathing waters and the classification thereof according to their quality, and the obligation and method of carrying out the monitoring of bathing waters shall be defined by the regulations governing environmental protection.

(6) In a bathing area or natural bathing area, no permanent or temporary facilities or other barriers that might prevent free passage along the water public good or marine public good may be set up.

(7) The Minister shall prescribe detailed criteria for the identification of bathing waters, referring in particular to:

- *the compliance of the body of eater with the prescribed parameters,*
- *the number of bathers in the bathing area, and*
- *the existing special and general water uses in the area.*

Official Gazette of the RS, No. 67/2002 of 26. 7. 2002: 77. article ZV-1

Official Gazette of the RS, No. 57/2008 of 10. 6. 2008: ZV-1A

Official Gazette of the RS, No. 57/2012 of 27. 7. 2012: ZV-1B

Official Gazette of the RS, No. 100/2013 of 6. 12. 2013: ZV-1C

Official Gazette of the RS, No. 67/02, 2/04 - ZZdrI-A, 41/04 - ZVO-1, 57/08, 57/12 and 100/13: ZV-1-NPB5

Official Gazette of the RS, No. 67/02, 2/04 - ZZdrI-A, 41/04 - ZVO-1, 57/08, 57/12, 100/13 and 40/14: ZV-1-NPB6

Official Gazette of the RS, No. 67/02, 2/04 – ZZdrI-A, 41/04 – ZVO-1, 57/08, 57/12, 100/13, 40/14 and 56/15: ZV-1-NPB7

For the purpose of the present study (register and capacity assessment), all these areas are relevant mainly in terms of their size and location in relation to their proximity to or distance from urban centres. In terms of formal provisions concerning the size of "bathing areas", we have identified the "official data" on the minimum surface area per bathing person that is required to achieve the safe operation of a bathing site and drowning prevention. This area is 7 m^2 / bather, as stated in the following act:

► ***Rules amending the Rules on technical measures and requirements for safe operation of bathing sites and for protection against drownings at bathing sites (pisrs.si)***

2. Natural bathing areas

Article 39

"There shall be no limit to the maximum number of bathers allowed at natural bathing areas. A natural bathing area shall be considered to be adequately occupied if each visitor has at least 7 m² available for sunbathing, relaxing and resting. If the manager of a bathing site finds that the number of visitors is higher, he/she shall adjust the safety measures in accordance with the rules on organisational measures for the protection against drowning...."

Other standards (norms) are found in the relevant literature (international examples), ranging from 5 m² to 20 m² / bather, depending on the status of the bathing area (e.g. urban or open-air), or the supporting infrastructure (security staff, shading, toilets, changing rooms, etc.) that is required and available.

Table 3 shows the terminological variations in relation to bathing sites recorded in our analysis (official records and other sources).

Table 3: Terminology in the field of bathing waters and bathing sites with different statuses.

	STATUS - DIFFERENT TERMINOLOGIES (IN RECORDS AND IN PRACTICE)
1	Bathing waters (MSP) (according to ZV-1-NPB7)
2	Bathing area in a bathing water area (according to ZV-1-NPB7)
3	Natural bathing area in a bathing water area (with a water permit - manager) (according to ZV-1-NPB7)
4	Natural bathing area located in an area other than a bathing water area (with a water permit - manager)* (exception)
5	Natural bathing area in a bathing water area (without a water permit - manager)** (exception)
6	Other bathing areas - areas with recorded bathing activity, both within and outside bathing waters ***
* example: Strunjan (Krka) ** example: Pacug *** data provided by local authorities (municipalities)	

There are **21** registered **bathing water areas** in all coastal municipalities. Total number of **bathing sites**:

- natural bathing areas in bathing water areas (with water permit + exceptions): **17**
- other bathing sites: **29**
- total: **46**

Table 4 provides the names of bathing waters and bathing sites as listed in the official records. It is apparent that even such records lack consistent terminology (see the example of bathing water No 10, where the term 'beach' is used for the designation of the bathing water).

Table 4: List of bathing waters and bathing sites as recorded in the official records.

BATHING WATER NO.	MUNICIPALITY	BATHING WATER	BATHING SITE (WITH WATER PERMIT)
1	Ankaran	Debeli rtič bathing area	DEBELI RTIČ NATURAL BATHING AREA*
2	Ankaran	RKS MZL Debeli rtič natural bathing area	RKS MZL Debeli rtič natural bathing area
3	Ankaran	Adria Ankaran bathing site	Adria Ankaran bathing site
4	Koper	Koper city bathing site	Koper city bathing site ("Mokra mačka")
5	Koper	Žusterna bathing site	Žusterna bathing site**
6	Koper/Izola	Žusterna bathing site - AC Jadranka	**
7	Izola	Pri svetilniku bathing area	Pri svetilniku bathing area
8	Izola	Delfin natural bathing area	Delfin natural bathing area
9	Izola	Bathing area Rikorvo - Simon’s Bay	***
10	Izola	Simon's Bay Beach	Simon's Bay Beach
11	Izola/Piran	Bathing area Simon’s Bay - Strunjan	***
12	Piran	Seaside bathing site - Krka beach - Health Resort Strunjan	Seaside bathing site - Krka beach - Health Resort Strunjan

13	Piran	Salinera natural bathing area	Salinera natural bathing area
14	Piran	Bathing area Salinera - Pacug	Bathing area Salinera - Pacug****
15	Piran	Bathing area Fiesa - Piran	Bathing area Fiesa - Piran****
16	Piran	Grand Hotel Bernardin beach	Grand Hotel Bernardin beach
17	Piran	Vila Park Hotel beach	Vila Park Hotel beach
18	Piran	Hoteli Morje bathing site	Hoteli Morje bathing site
19	Piran	Portorož central beach	Portorož central beach
20	Piran	Metropol Portorož natural bathing area	Metropol Portorož natural bathing area
21	Piran	Lucija Campsite natural bathing area	Lucija Campsite natural bathing area***
* the only one that has a proper name, the other bathing areas are unnamed ** Part of the bathing water is located in the Žusterna bathing water (most of it), and the other part in the Jadranka AC (a small part) *** no bathing site with a water permit on record **** extraction only-Pacug; no water permit (Fiesa)			

Synthesised list: bathing sites - location, scale and name

In order to establish a synthesised database (of all bathing sites) and to calculate their respective capacities, a synthesised list of the names of the bathing sites was drawn up on the basis of official records and, additionally, in cooperation with all the coastal municipalities, their location and size (in m^2) were defined. The m^2 / bather formula is used to calculate the capacities.

The capacity of bathing sites and beaches was calculated according to the Rules for protection against drownings, which provide for a bathing area of $7m^2$ / bather. The actual capacity of a bathing site or beach area depends on the beach type (urban, natural) and the expected level of privacy, natural vulnerability, morphology (rocky, concrete, sandy beach), the provision of bathing infrastructure and other factors.

More detailed descriptions of the bathing sites in each municipality are given below. For the sake of clarity, the studied area has been divided into 9 spatial sections (Figure 8). A synthesised overview of the surface areas and capacity estimates is presented in Chapter 4.1.2.

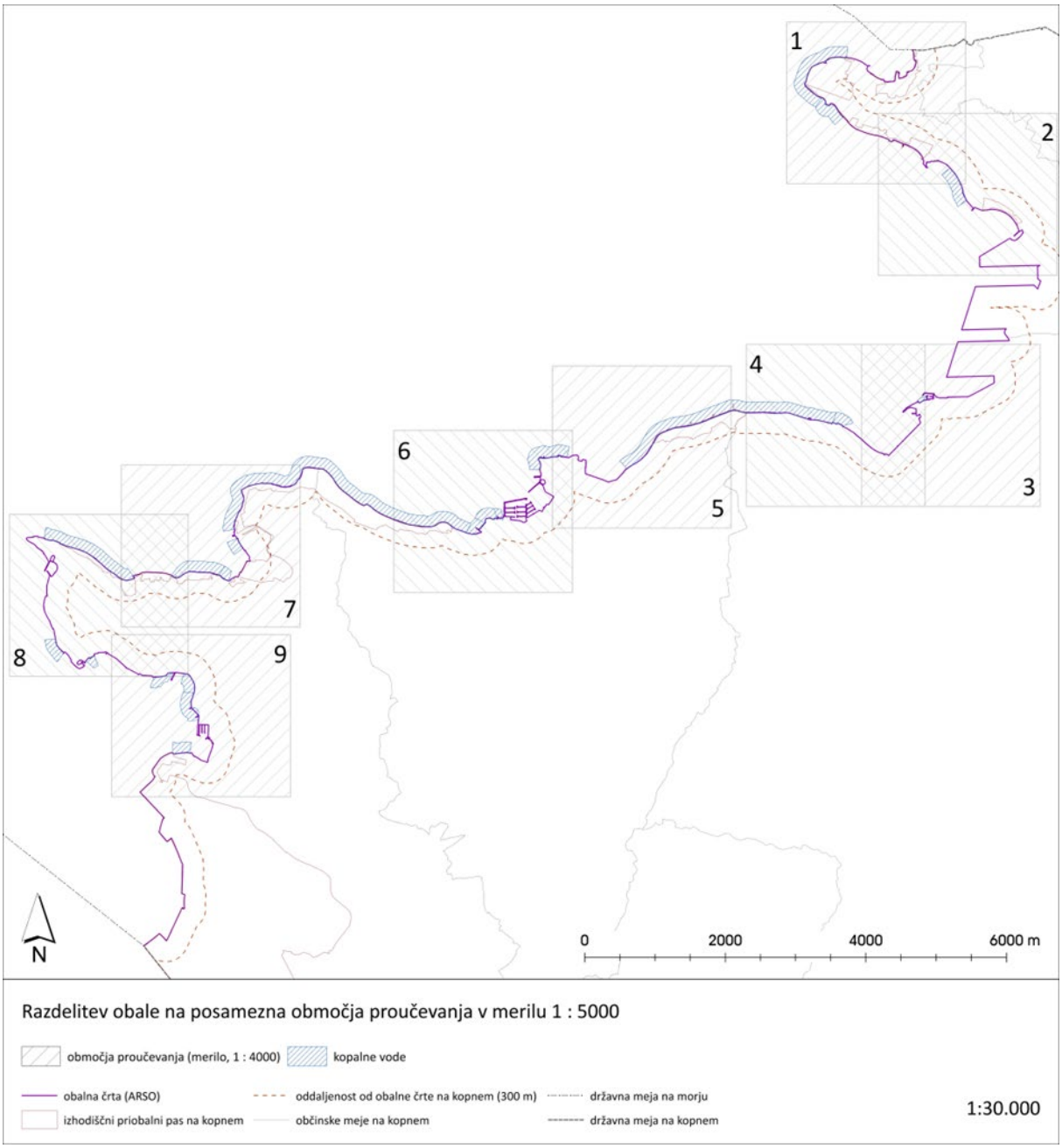


Figure 8: Structure of bathing sites' spatial sections, maps/figures 1 - 9.

Municipality of Ankaran

A total of **nine bathing sites** were recorded in the Municipality of Ankaran (Figures 9 and 10). Of these, two are recorded in official records (5. Debeli rtič and 9. Adria) and seven are other areas where bathing activities are also carried out (Table 5).

Table 5: Bathing sites in the Municipality of Ankaran.

Id	Bathing site (all)	Municipality	Bathing waters/other	surface area (m2)
1	Lazaret 1	Ankaran	other	5392.4
2	Lazaret 2	Ankaran	other	2943.1

3	Lazaret 3	Ankaran	other	7077.8
4	Debeli rtič	Ankaran	other	11330.3
5	Debeli rtič	Ankaran	bathing w./water permit	3035.4
6	Under the vineyards (pod vinogradi)	Ankaran	other	8377.5
7	Existing student beach (plaža študent)	Ankaran	other	3767.2
8	Oltra	Ankaran	other	4316.3
9	Adria	Ankaran	bathing w./water permit	8946.6

In the area of Debeli rtič, certain sections beneath the cliffs are very limited in terms of space. In calculating the carrying capacities, we took into account a narrow strip, which is further constrained by the high tide (photo: S. Mezek, 2022).

The 'Student' beach is spatially divided into two parts. The new landscape concept of the Municipality of Ankaran for this area includes a landscape-architectural renovation (the concrete platforms and the natural state of the coastline are to be renovated and preserved) (photo: S. Mezek, 2022).

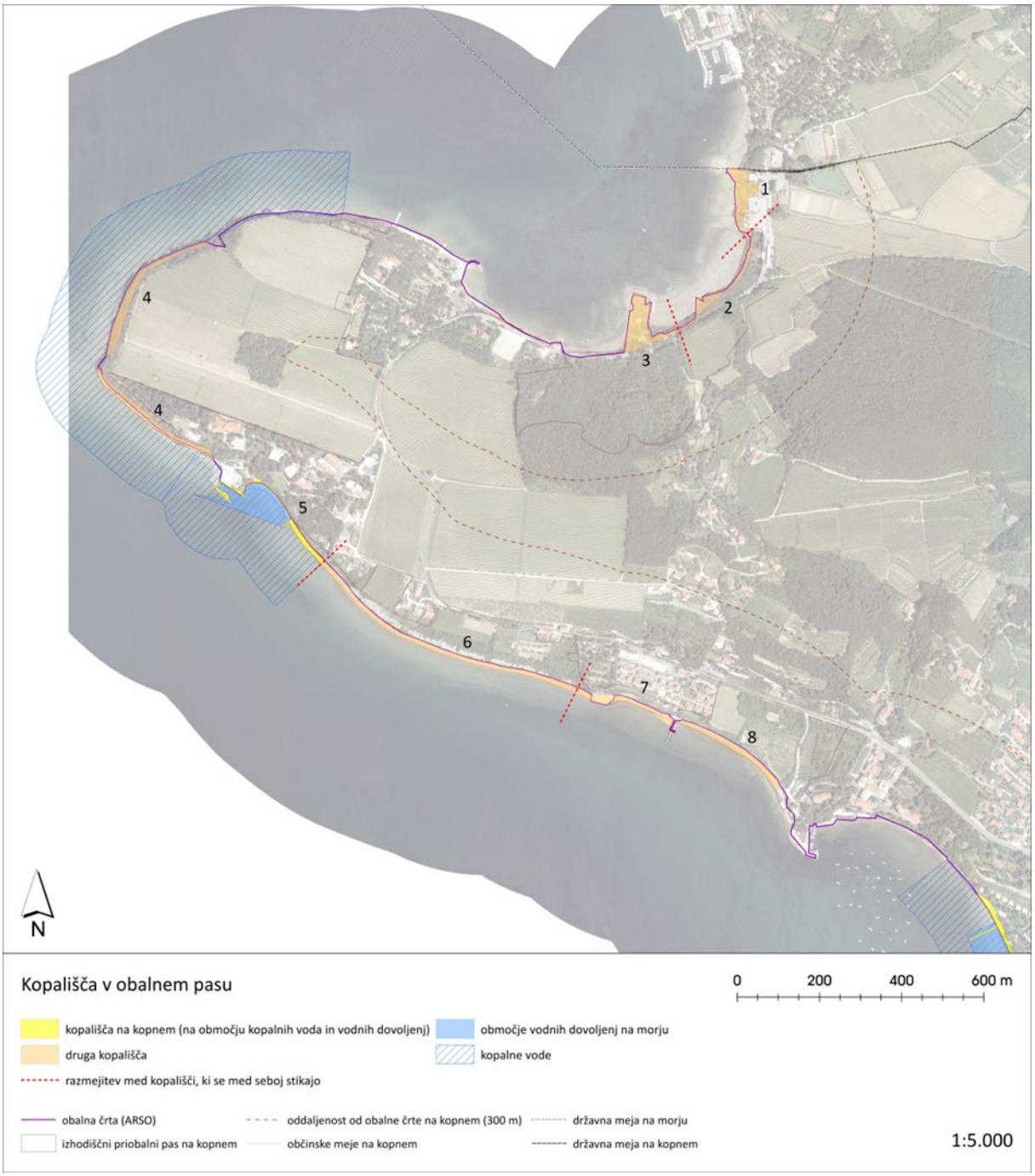


Figure 9: Bathing sites in the Municipality of Ankaran (1). (NB: the number in brackets indicates the location of the site on the coastline as a whole - see Figure 8).

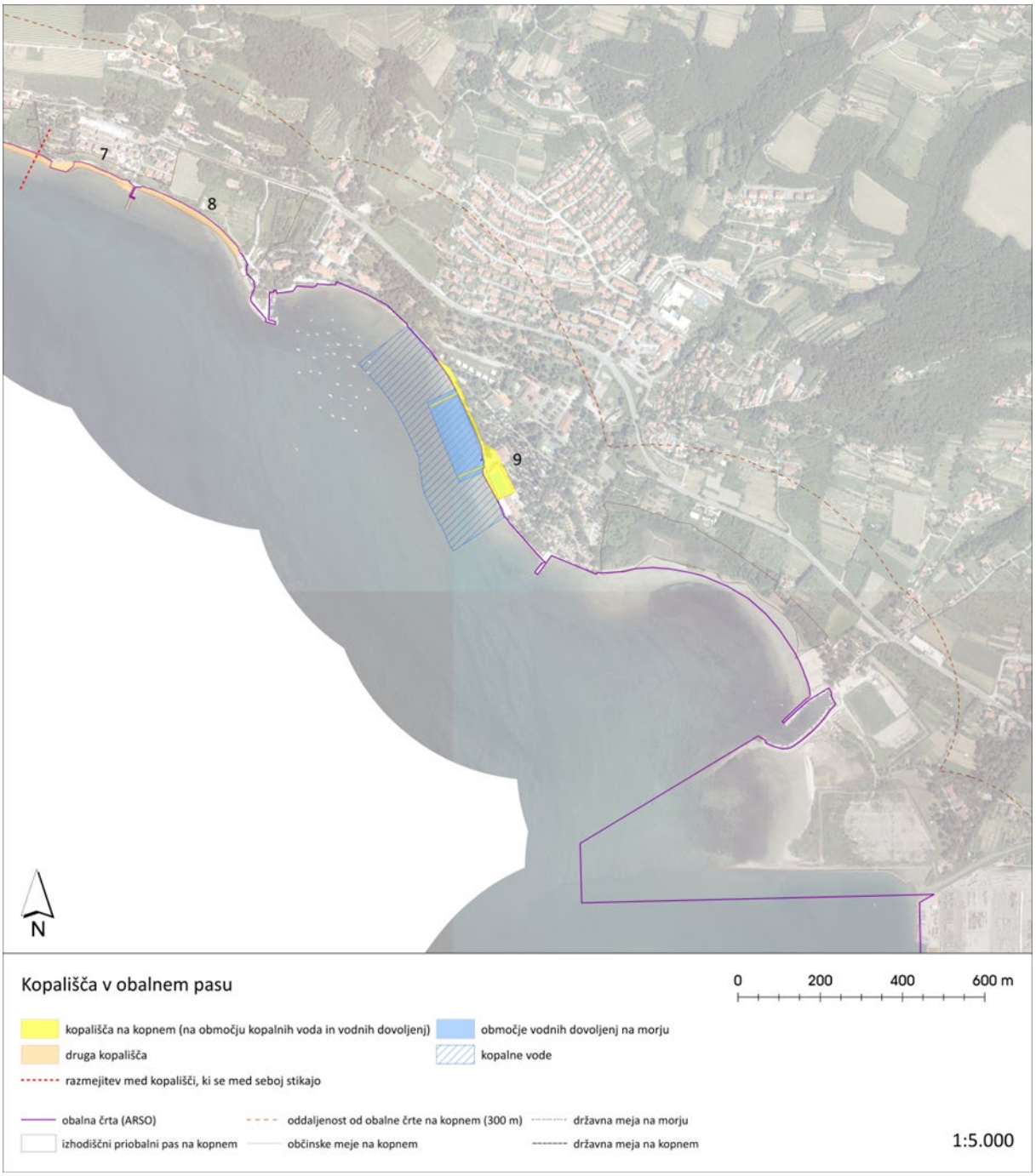


Figure 10: Bathing sites in the Municipality of Ankaran.(2).

The bathing sites and beaches in the Municipality of Ankaran cover most of the coastal strip on land. The entire coastal strip is used for bathing and is suitable for bathing in terms of morphology, accessibility and absence of other uses. Bathing activities take place in both the northern and southern parts of the peninsula, but most of the bathing areas are located in Debeli rtič and along urban areas.

City Municipality of Koper

A total of **four bathing sites** were recorded in the City Municipality of Koper (Figures 11 and 12). Of these, two are recorded in official records (10. Koper city bathing site and 13. bathing area Koper - Izola) and two are other areas where bathing activities are also carried out (Table 6).

Table 6: Bathing areas in the City Municipality of Koper.

ID	BATHING SITE (ALL)	MUNICIPALITY	BATHING/OTHER	SURFACE AREA (M2)
10	Koper city bathing site ("Mokra mačka")	Koper	bathing w./water permit	5876.7
11	Semedela bathing area (Seaside Park)	Koper.	Other	34930.5
12	Žusterna bathing site	Koper.	bathing w./water permit	11210.8
13	Bathing area Koper - Izola (in the City Municipality of Koper)	Koper.	Other	6179.3

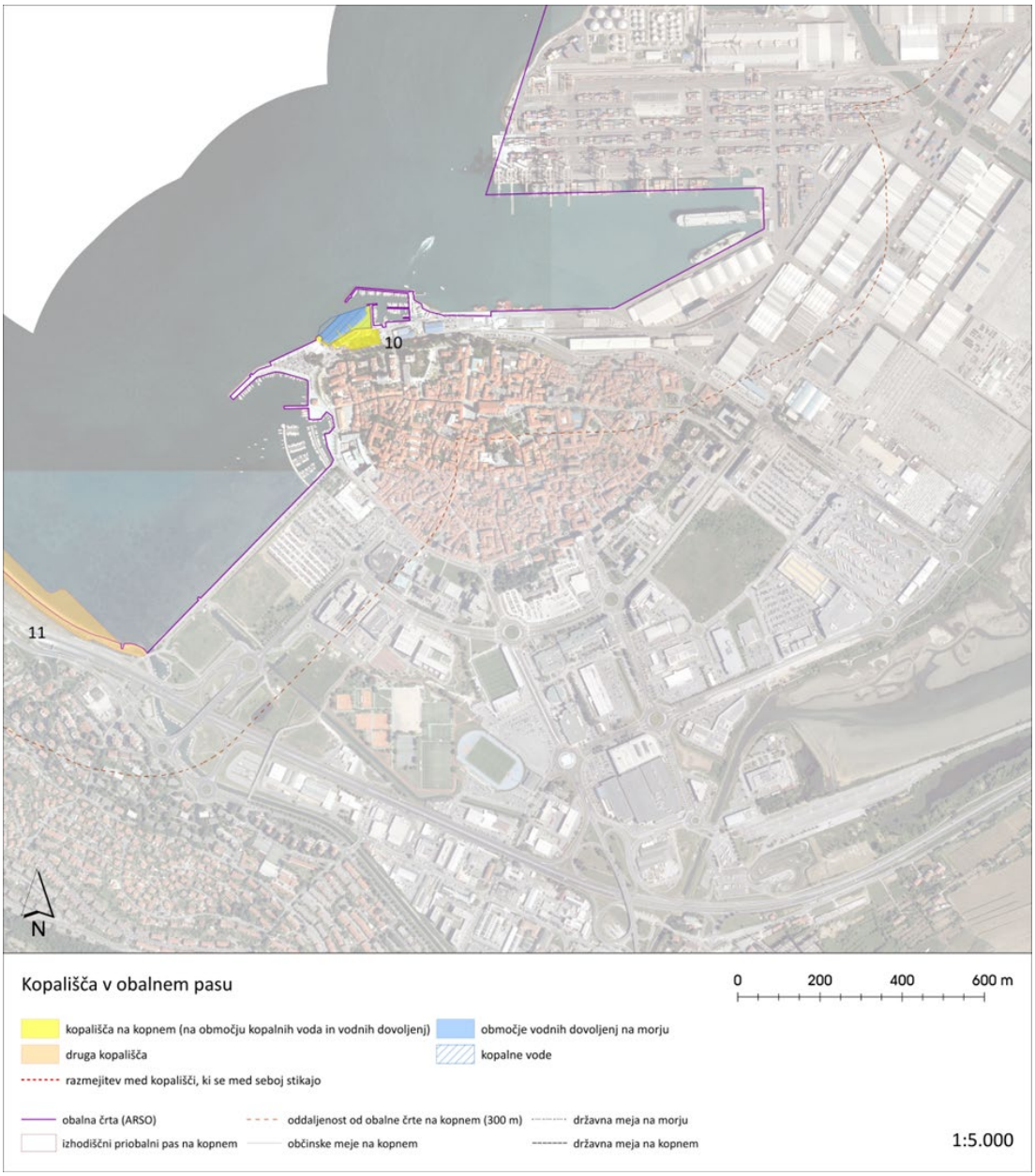


Figure 11: Bathing sites in the City Municipality of Koper (3).

Due to the presence of the Port of Koper, which occupies a large part of the coastal strip in the City Municipality of Koper, the areas available for bathing in the City Municipality of Koper are smaller than in other coastal municipalities. Apart from the Koper city bathing site, the rest of the bathing areas are located between the estuary of the Badaševica river and the border with the Municipality of Izola. In recent years, the City Municipality of Koper has been focusing on the intensive expansion of bathing areas.

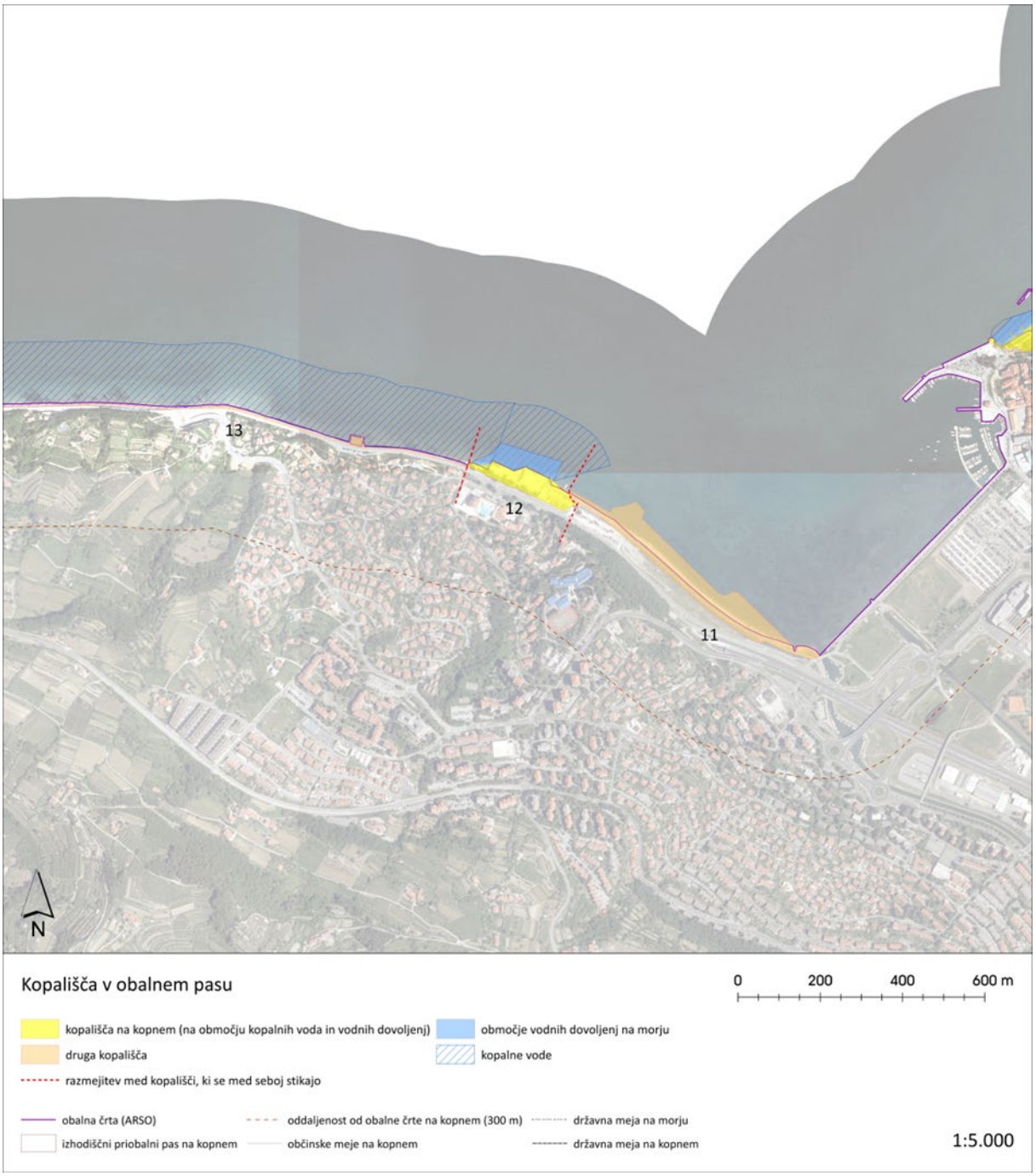


Figure 12: Bathing sites in the City Municipality of Koper (4).

Municipality of Izola

A total of **11 bathing sites** were recorded in the Municipality of Izola (Figures 13 and 14). Of these, three are recorded in official records (16. Beach for the Blind and Visually Impaired, the bay 19. Delfin and 21. Simon's Bay) and eight are other areas where bathing activities are also carried out (Table 7).

Table 7: Bathing areas in the Municipality of Izola.

Id	Bathing site (all)	Municipality	Bathing waters/other	surface area (m2)
13	Bathing area Koper - Izola (Izola)	Izola	Other	9078.4
14	Jadranka	Izola	Other	8861.7
15	"Šampjera" by the cliff	Izola	Other	465.4
16	Beach for the Blind and Visually Impaired	Izola	bathing w./water permit	2158.7
17	Lighthouse (Svetilnik)	Izola	Other	8445.4
18	Jetty (Valobran)	Izola	Other	3686.7
19	Delfin	Izola	bathing w./water permit	732.9
20	"Pebble beach" ("Na kamenčkih")	Izola	Other	1538.2
21	Simon's Bay	Izola	bathing w./water permit	5463.2
22	Pod Belvederjem	Izola	Other	618.0
23	Strunjan (note: 2m area under the cliffs in the municip. of Izola)	Izola	Other	2101.1

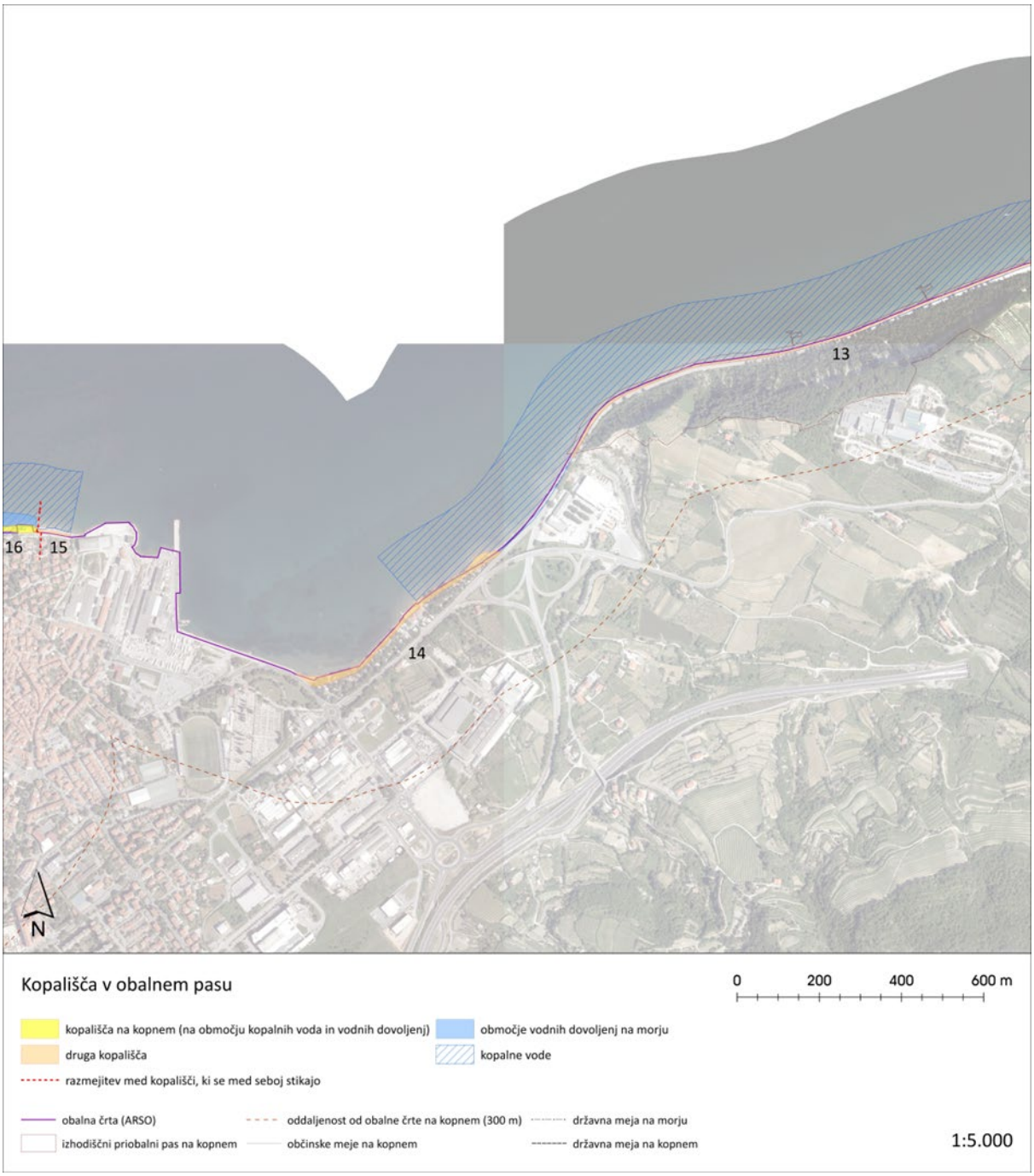


Figure 13: Bathing sites in the Municipality of Izola (5).

The Municipality of Izola has some developed bathing areas in all parts of the coastal strip, where morphology, accessibility and other uses allow. The bathing sites and beaches are evenly distributed from the border with the City Municipality of Koper to Jadranka and from the marina to the border with the Municipality of Piran.

There are also several bathing sites in the urbanised area of Izola, on the north and north-west sides of the peninsula.

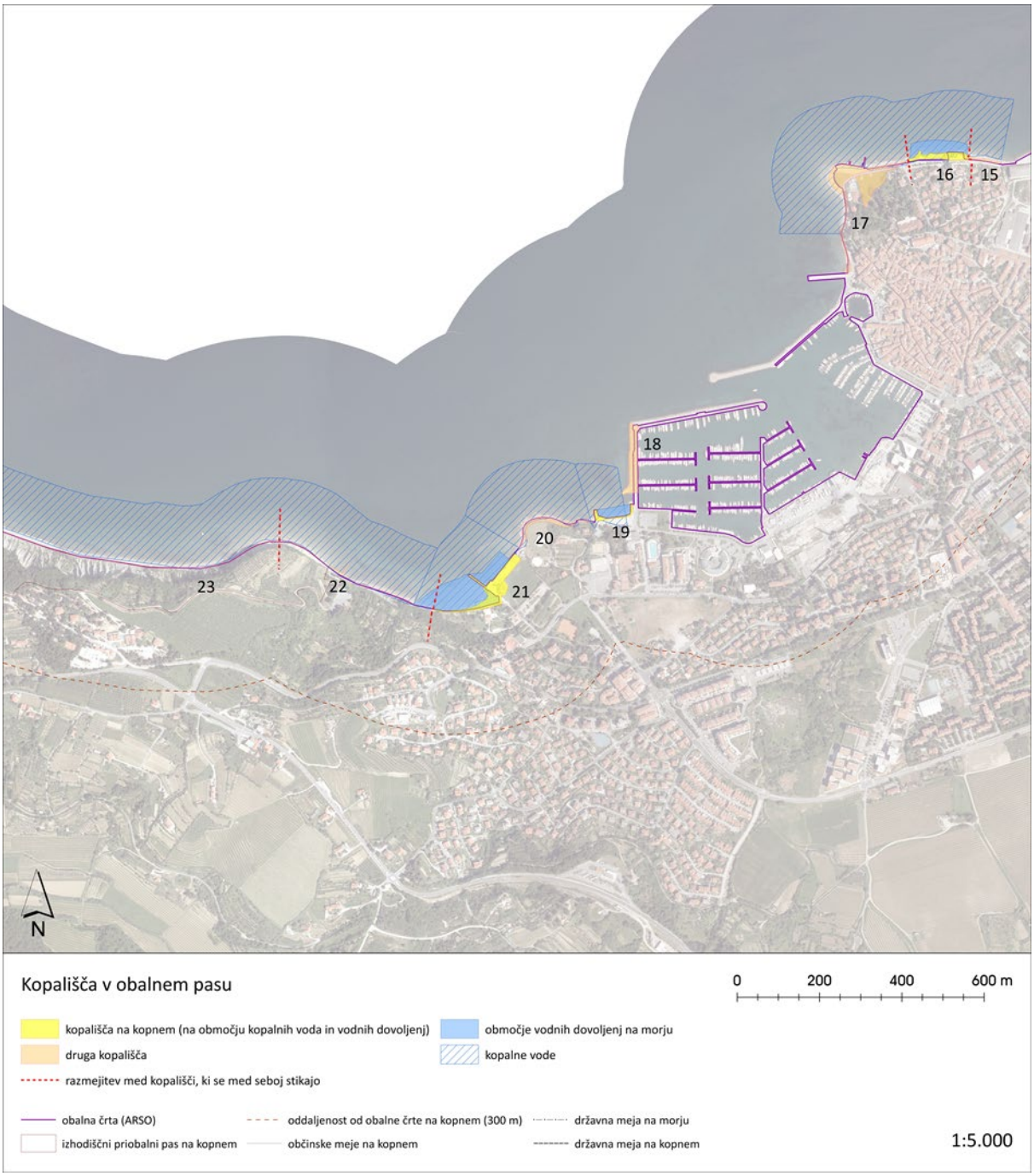


Figure 14: Bathing sites in the Municipality of Izola (6).

Municipality of Piran

A total of **22 bathing sites** were recorded in the Municipality of Piran (Figures 15, 16, 17). Of these, ten are recorded in official records (24. Krka Strunjan, 25. Salinera, 27. Pacug, 29. Fiesa, 34. Bernardin, 36. Vila Park Hotel beach, 39. Meduza, 40. Portorož Central Beach, 41. Lucija Beach and 44. Lucija Campsite) and twelve are other areas where bathing activities are also carried out (Table 8).

Table 8: Bathing sites in the Municipality of Piran.

Id	Bathing site (all)	Municipality	Bathing/other	Surface area (m2)
24	Krka Strunjan	Piran	bathing w./water permit	14967.3
25	Salinera	Piran	bathing w./water permit	17245.6
26	Bathing area Salinera - Pacug	Piran	Other	1195.3
27	Pacug	Piran	bathing w./water permit	5293.0
28	Area used for bathing Pacug - Fiesa	Piran	Other	1037.2
29	Fiesa	Piran	bathing w./water permit	13821.6
30	Bathing area Fiesa - Piran	Piran	Other	2449.8
31	Punta	Piran	Other	8667.6
32	Riviera - Fornače	Piran	Other	4052.9
33	Fornače	Piran	Other	1784.1
34	Bernardin	Piran	bathing w./water permit	4743.4
35	Lepa Vida	Piran	Other	4551.1
36	Vila Park Hotel beach	Piran	bathing w./water permit	11853.9
37	Children's beach at the club	Piran	Other	1111.0
38	Korotan	Piran	Other	2818.4
39	Meduza	Piran	bathing w./water permit	10863.7
40	Portorož central beach	Piran	bathing w./water permit	19316.2
41	Lucija Beach	Piran	bathing w./water permit	19959.1
42	Marina 1	Piran	Other	1981.7
43	Marina 2	Piran	Other	4417.2
44	Lucija Campsite	Piran	bathing w./water permit	2779.8
45	Seča	Piran	Other	21707.5

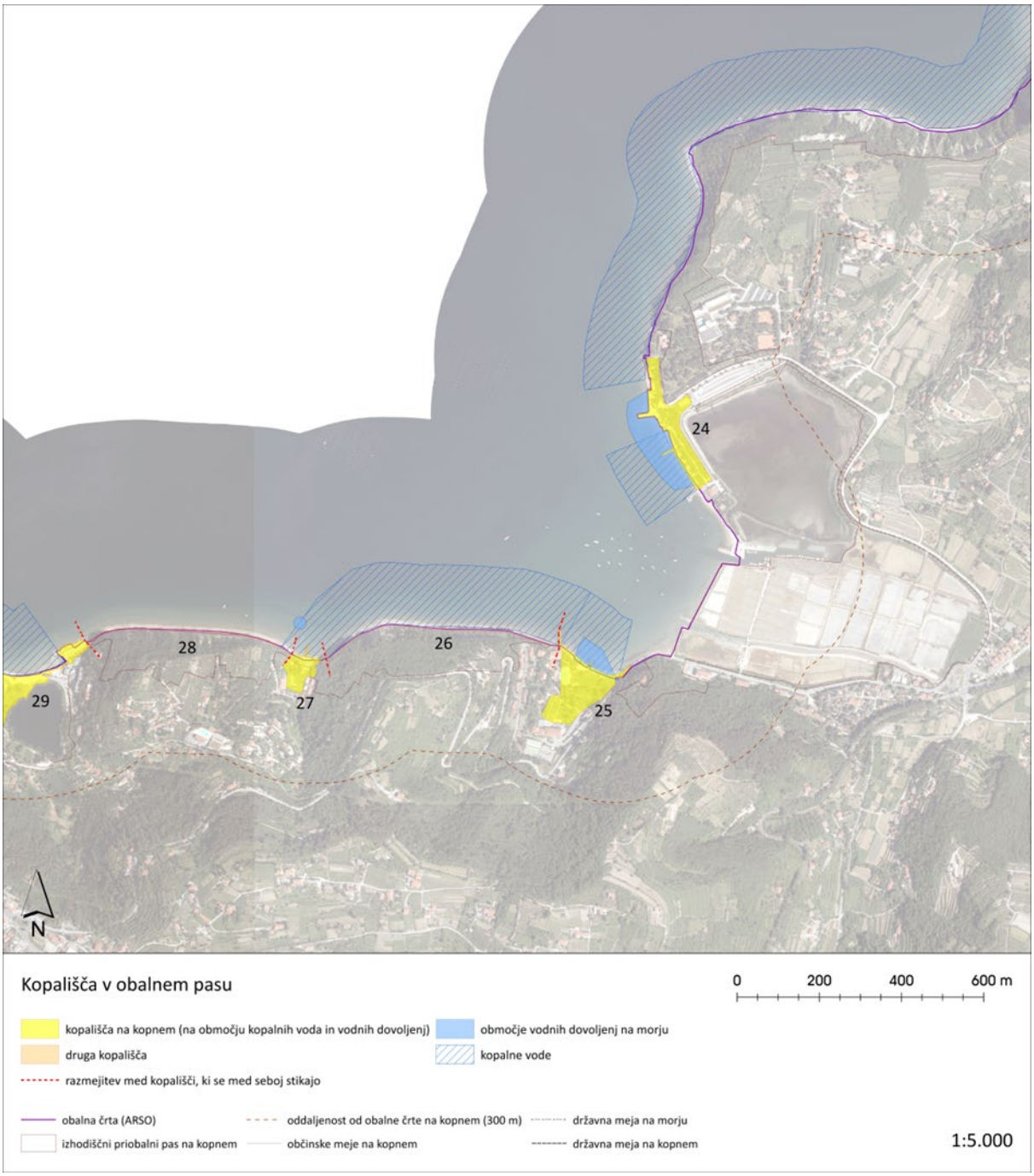


Figure 15: Bathing sites in the Municipality of Piran (7).

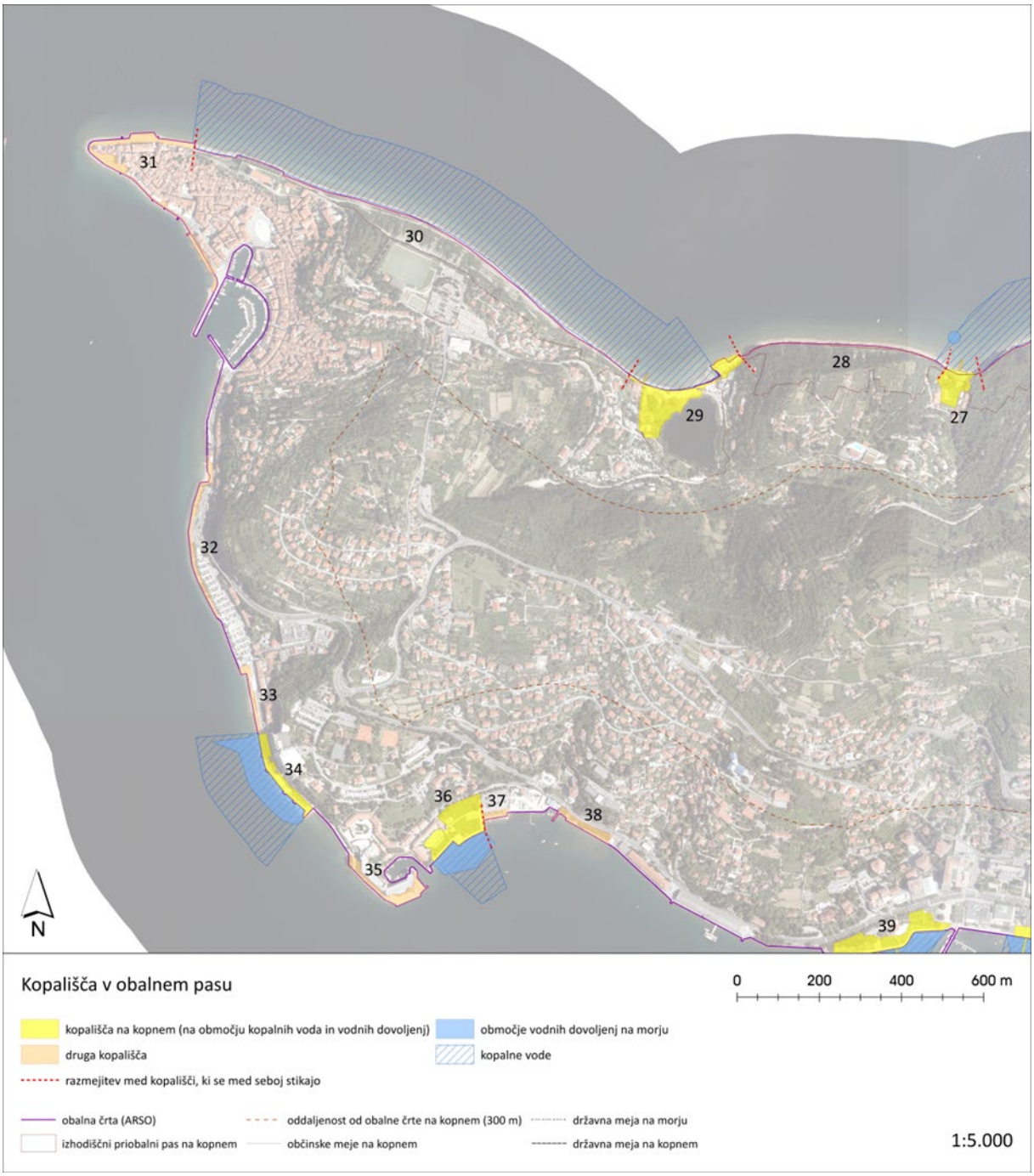


Figure 16: Bathing sites in the Municipality of Piran (8).

The bathing sites and beaches in the Municipality of Piran cover most of the coastal strip on land. The entire coastal strip is used for bathing and is suitable for bathing in terms of morphology, accessibility and absence of other uses.

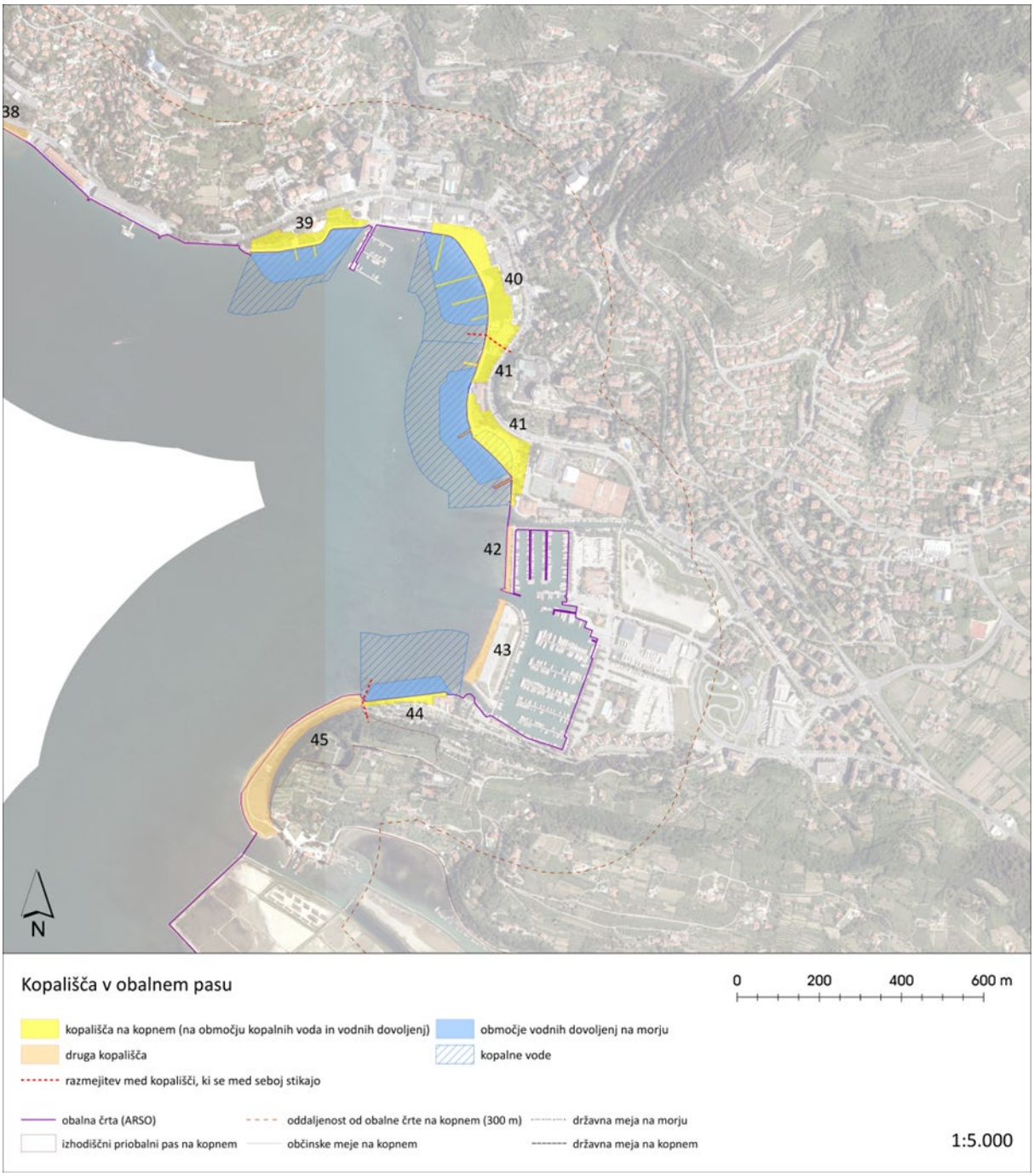


Figure 17: Bathing sites in the Municipality of Piran (9).

4.3 Estimation of the carrying capacity of bathing sites and bathing areas (individual bathing site/bathing area, municipality, entire Slovenian coastline)

The carrying capacity assessment of bathing sites and bathing areas is partially already covered by official records in the "marine bathing water profiles" document, which was drafted by ARSO in 2008-2011. At that time, the data for the capacity assessments for individual bathing sites were obtained mainly by collecting data from bathing site managers and partly on the basis of partial assumptions and estimates. The total capacity of all bathing sites in the bathing water areas according to these records is 14,400 bathers (see https://www.gov.si/teme /kopalne-vode/).

In the present project, the carrying capacity assessment (in addition to obtaining data from the managers, which was used as an additional source) used the approach of calculating the actual areas and assuming a minimum area (m^2) per bather.

Based on official data (ARSO), we have calculated the length of the coastline, which is 52.641 km. The total length of the **21 bathing water areas** is 16.509 km. Thus, bathing waters account for a good third, or **31.3%** to be precise, of the length of the entire coastline (Figure 18).

Below is a synthesised overview of the size and capacity of the bathing sites in the municipalities shown above (Table 9).

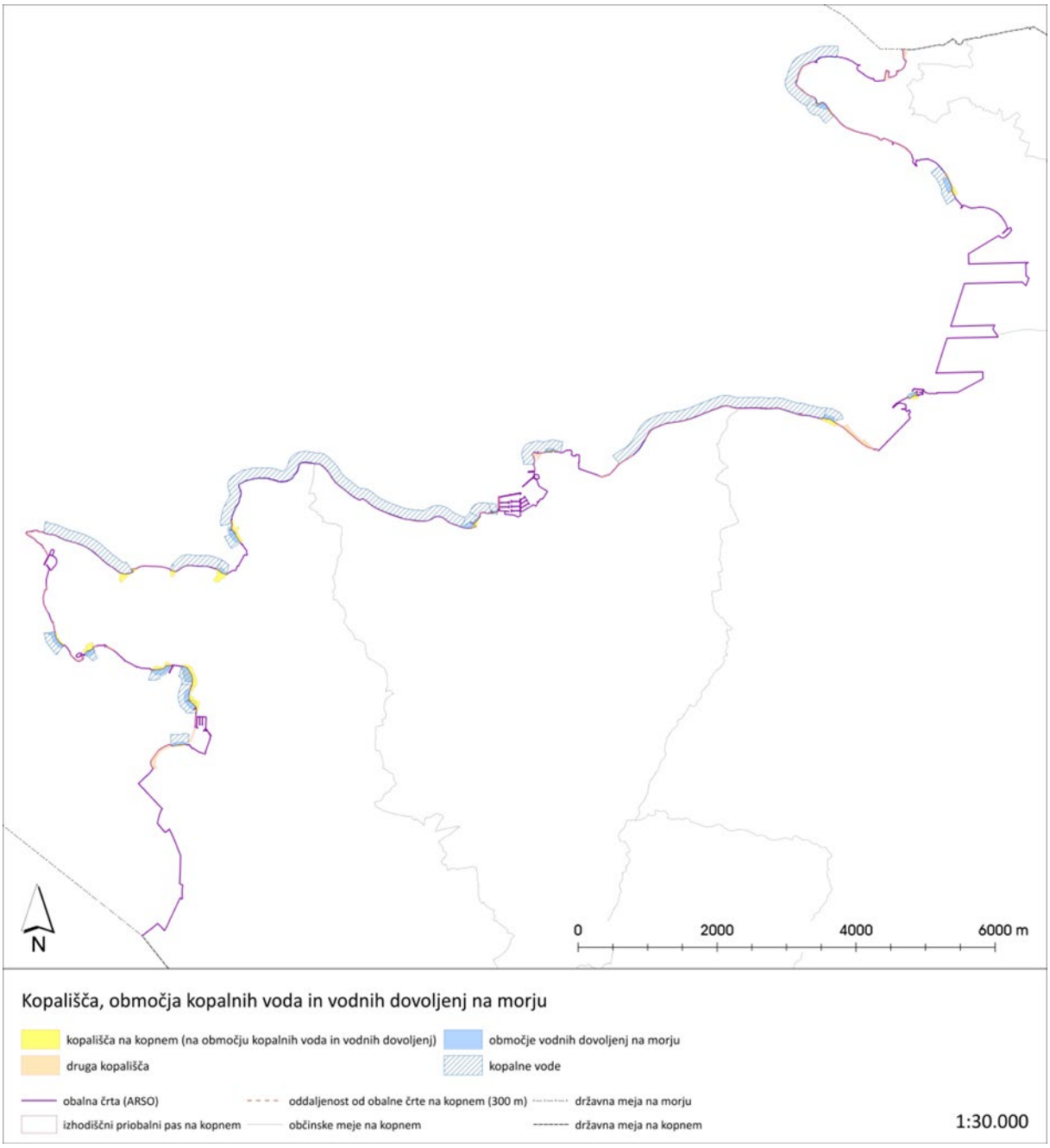


Figure 18: overview of all bathing waters and bathing sites in the coastal municipalities.

Table 9: overview of the names, sizes and carrying capacities of all bathing sites, based on the 7 m^2/bather approach.

ID	BATHING SITE (ALL)	MUNICIPALITY	BATHING WATERS/OTHER	SURFACE AREA (M2)	SURFACE AREA (M2)* REDUCED	NO. OF BATHERS (7M2)
1	Lazaret 1	Ankaran	other	5392.4	-	770
2	Lazaret 2	Ankaran	other	2943.1	-	420
3	Lazaret 3	Ankaran	other	7077.8	-	1011
4	Debeli rtič*	Ankaran	other	11330.3	788.65	112
5	Debeli rtič	Ankaran	bathing w./water permit	3035.4	-	434
6	Under the vineyards (pod vinogradi)*	Ankaran	other	8377.5	709.4	101
7	Existing student beach (plaža študent)	Ankaran	other	3767.2	-	538
8	Oltra	Ankaran	other	4316.3	-	617
9	Adria	Ankaran	bathing w./water permit	8946.6	-	1278
10	Koper city bathing site ("Mokra mačka")	Koper.	bathing w./water permit	5876.7	-	840
11	Semedela bathing area (Seaside Park)	Koper.	other	34930.5	-	4990
12	Žusterna bathing site	Koper.	bathing w./water permit	11210.8	-	1602
13	Bathing area Koper - Izola (in the City Municipality of Koper)*	Koper.	other	6179.3	1337.6	191
13	Bathing area Koper - Izola *	Izola	Other	9078.4	1455.8	207
14	Jadranka	Izola	Other	8861.7	-	1266
15	"Šampjera" by the cliff	Izola	Other	465.4	-	66
16	Beach for the Blind and Visually Impaired	Izola	bathing w./water permit	2158.7	-	308
17	Lighthouse (Svetilnik)	Izola	Other	8445.4	-	1206
18	Jetty (Valobran)	Izola	Other	3686.7	-	527
19	Delfin	Izola	bathing w./water permit	732.9	-	105
20	"Pebble beach" ("Na kamenčkih")	Izola	Other	1538.2	-	220

21	Simon's Bay	Izola	bathing w./water permit	5463.2	-	780
22	Pod Belvederjem*	Izola	Other	618.0	415.5	59
23	Strunjan	Izola	Other	2101.1	-	300
24	Krka Strunjan	Piran	bathing w./water permit	14967.3	-	2138
25	Salinera	Piran	bathing w./water permit	17245.6	-	2464
26	Bathing area Salinera - Pacug*	Piran	Other	1195.3	597.1	85
27	Pacug	Piran	bathing w./water permit	5293.0	-	756
28	Area used for bathing Pacug - Fiesa*	Piran	Other	1037.2	520.1	74
29	Fiesa	Piran	bathing w./water permit	13821.6	-	1975
30	Bathing area Fiesa - Piran*	Piran	Other	2449.8	1225.2	175
31	Punta	Piran	Other	8667.6	-	1238
32	Riviera - Fornače	Piran	Other	4052.9	-	579
33	Fornače	Piran	Other	1784.1	-	255
34	Bernardin	Piran	bathing w./water permit	4743.4	-	678
35	Lepa Vida	Piran	Other	4551.1	-	650
36	Vila Park Hotel beach	Piran	bathing w./water permit	11853.9	-	1693
37	Children's beach at the club	Piran	Other	1111.0	-	159
38	Korotan	Piran	Other	2818.4	-	403
39	Meduza	Piran	bathing w./water permit	10863.7	-	1552
40	Portorož central beach	Piran	bathing w./water permit	19316.2	-	2759
41	Lucija Beach	Piran	bathing w./water permit	19959.1	-	2851
42	Marina 1	Piran	Other	1981.7	-	283
43	Marina 2	Piran	Other	4417.2	-	631

44	Lucija Campsite	Piran	bathing w./water permit	2779.8	-	397
45	Seča	Piran	Other	21707.5	-	3101

Notes: * in the seven highlighted cases, due to the unique spatial conditions (a narrow coastal strip beneath the cliffs, further restricted by the tide), a reduced area of a 1 m wide coastal strip was taken into account in the capacity calculation.

Table 10 provides the partial and synthesised calculations. We can conclude that:

- the **total capacity of natural bathing ares** in the bathing water area (with a water permit) in the Municipality of **Ankaran is 1,711** bathers, **2,441** bathers in the City Municipality **of Koper**, **1,193** bathers in the Municipality of **Izola** and **17,236** bathers in the Municipality of **Piran**; or a total of **22,609** bathers in all four municipalities, in a total of 17 bathing sites,

- the **total capacity of other bathing sites** in the Municipality of **Ankaran is 3,570** bathers, **5,180** bathers in the City Municipality **of Koper**, **3,851** bathers in the Municipality of **Izola** and **7,632** bathers in the Municipality of **Piran**; or a total of **20,235** bathers in all four municipalities, in a total of 29 bathing sites,

- the **total capacity of** all bathing sites (those included in the official records and all others) is **42,781** bathers.

Table 10: bathing sites capacity per municipality and in total.

	ANKARAN			CITY MUNICIPALITY OF KOPER			IZOLA			PIRAN			TOTAL		
	number	*surface area (m2)*	*1 bather /7m2*	*number*	*surface area (m2)*	*1 bather /7m2*	*number*	*surface area (m2)*	*1 bather /7m2*	*number*	*surface area (m2)*	*1 bather /7m2*	*number*	*surface area (m2)*	*1 bather /7m2*
A: bathing sites with bathing w./water permit	2	11982	1711	2	17087	2441	3	8354	1193	10	120843	17263	17	158267	22609.
B: other bathing sites	7	43204	3570	2	41109	5180	8	34794	3851	12	55773	7632	29	174883	20235.
total	9	**55186**	**5281**	4	**58197**	**7621**	13	**43149**	**5045**	22	**176617**	**24896**	46	**333150**	**42781**

We can conclude that the size (or capacity) of the "other bathing sites" is almost equivalent to the size of the bathing sites recorded in the official records. This is particularly evident in the municipalities of Ankaran, Koper and Izola, where spatial conditions allow it (coastal road, area under the cliffs, northern coast of the Piran peninsula, etc.).

Presumably, this is due to the smaller number and scale of bathing sites in the municipalities of Ankaran, MOK (City Municipality of Koper) and Izola, which are recorded in official records. In these three municipalities, the bathing sites recorded in the official records are mainly those linked to direct urban and tourist use, or those recorded adjacent to urban centres or individual tourist facilities. In some cases, however, only the parts of the bathing areas that are actually used are recorded in the official records.

In the Municipality of Piran, the use of bathing sites for tourism is more pronounced and the proportion of bathing sites recorded in official records is higher. However, the municipality of Piran also has a larger number of other bathing sites, particularly in the area of Piran and Fornače, which are not registered in the official records, despite being used for both urban and tourist purposes.

Note: the assessment is based on the 7m 2 /bather standard as defined for “natural bathing areas” in the above mentioned Regulation. This standard may vary (be lower) in the case of bathing areas with a special status (urban bathing areas, swimming pool facilities, etc.). In such cases, the other relevant provisions of the Regulation shall be applied as appropriate, but the actual typology (requirements and norms) of such bathing areas should be defined beforehand.

4.4 Bather load (data to be obtained from bathing site managers, municipal tourism staff)

We have sought to obtain data on bather load in relation to the capacity of bathing sites and beaches from the participating coastal municipalities and bathing site operators. The municipalities and bathing site operators were unable to produce accurate bather load data as, according to the information we have obtained and to our knowledge, they do not keep track of the number of bathers at beaches and bathing sites. However, they do believe that counting beach-goers would be worthwhile and, in some cases, necessary. The issue of the bather load of bathing sites was raised again at the meeting on June 1, 2022 at the Regional Development Centre Koper (RRC) in Koper. All participants at the meeting agreed that bathing and beach areas are extremely crowded during the summer months.

We believe that counting bathers in the busier months would be worthwhile, as it would provide information on the actual occupancy, carrying capacity and bather load of bathing sites, which would be helpful in planning transport and other support infrastructure for beach visitors.

4.5 Future needs assessment (target year 2030)

The assessment of future needs was based on expected economic trends and the plans, strategies and trends for tourism development in the coastal municipalities, which are included in the tourism and other strategies of the coastal municipalities.

One of the flagship products of Slovenia's tourism strategy is "Sun & Sea", which focuses on beaches, sun, swimming, relaxation, fun and activities.

- The Municipality of Ankaran does not foresee a significant increase in population and tourism (Integrated Transport Strategy of the Municipality of Ankaran). The objectives are to promote sustainable tourism by increasing the attractiveness of the municipality through good accessibility to tourist destinations, while preserving the maritime identity and not causing additional negative traffic impacts on the municipality.

- The objectives of the City Municipality of Koper by the year 2025 (Tourism Development and Marketing Strategy in the Municipality of Koper until 2025, table of measures):

  - to increase the total number of beds by 1/3,
  - to increase the number of overnight stays by 50%
  - to extend the length of stay,
  - to offer new tourist products, including water sports (public urban transport, water sports centre, more beach areas between Koper and Izola, smart beaches, etc.)

- The Municipality of Izola (Tourism Development Strategy of the Municipality of Izola 2021-2025, September 2020) adds three additional strategic policies to the basic ones: green, blue and 365-day tourism. In the new strategic period, the Municipality of Izola aims to achieve a further development breakthrough in the field of tourism by developing new, more authentic tourist experiences, by increasing its visibility on tourist markets and by having a presence on tourist markets throughout the year.

- The vision of tourism development in the municipality of Piran until 2025 (Strategy for Tourism Development in the Municipality of Piran until 2025, proposal) is to become a premium destination, to tailor quality services to key segments (business, couples, families) and to become a top destination in the northern Adriatic. The objectives include:

  - reducing seasonality,
  - 2% tourism volume growth per year,
  - halting the decline in average length of stay.

The municipality also aims to achieve its objectives by improving the quality of services in the coastal strip, by upgrading its public spaces (beaches, promenades, squares, public facilities, sustainable mobility), by making the sea more accessible, by improving public maritime transport, and by further developing nautical tourism.

According to demographic trends, the number of permanent residents in coastal municipalities is not expected to increase significantly until 2030. The future needs and expectations of residents relate in particular to new or redeveloped beach areas

(expanded or renovated beaches), which would allow for reduced crowding, better amenities and accessibility.

The tourism strategies and other strategies of the coastal municipalities predict a moderate increase in the number of tourists and visitors. However, we estimate that needs for beach areas will increase further by 2030, especially due to the expected steady increase in the number of tourists and day visitors.

In our view, the content of tourism strategies should focus even more on the amenities, accessibility and attractiveness of beach areas rather than on their expansion. New mobility schemes between urban centres, mobility points and beaches should be developed as a priority.

4.6 Identification of potential areas/locations for new bathing sites

Based on an analysis of the scale of bathing sites, beaches, bathing areas and other areas used as beach areas, particularly in the summer months, we find that virtually all the areas already currently in use include:

- areas not used for other mutually exclusive activities, e.g. maritime transport, ports, mariculture, municipal berths, marinas, shipbuilding, defence and other activities;
- areas that are suitable for bathing in terms of morphology, i.e. they have at least a sufficient coastal zone to allow access to the sea, sunbathing and other activities,
- areas that are reasonably accessible, either from land or sea.

We have identified only three additional areas immediately adjacent to the coastline (Figures 19, 20, 21) where potential beach areas could be expanded.

We have not considered the coastline between Koper and Izola as a new beach area because we understand that bathing is already taking place there and that it would not be possible to significantly increase the bathing area.

The first area is on Koper's main pier (Figure 19), where a parking area is currently located. We estimate that the existing Koper city beach could be extended to the west side, to the main fishing pier. The area of the existing parking lot needs to be redeveloped. We foresee that, once the parking garage under the Muzejski trg Square is built, part of the parking area could be removed and the area could be used to expand the city beach. The beach could also encompass the existing park area.

An extension of the city beach would be an especially welcome solution, as it is currently extremely crowded and cannot serve the needs of the population. In addition, an expansion of the city beach would not generate additional traffic flows.

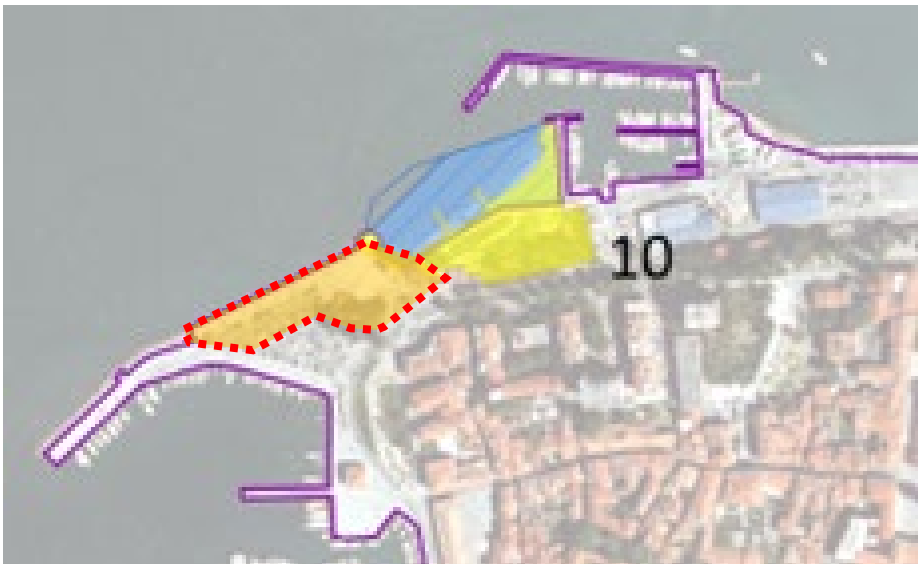


Figure 19: Proposed expansion of the Koper city beach.

Another potential new beach area is the extended beach at Jadranka in Izola (Figure 20). The Municipality of Izola plans to close the Jadranka campsite and to convert the entire area of the current campsite to a bathing area. In our opinion, the initiative of the Municipality of Izola is appropriate and integrates well with the planned sports and recreational areas in the hinterland.

The beach is conveniently located close to the centre of Izola and does not generate additional traffic flows.

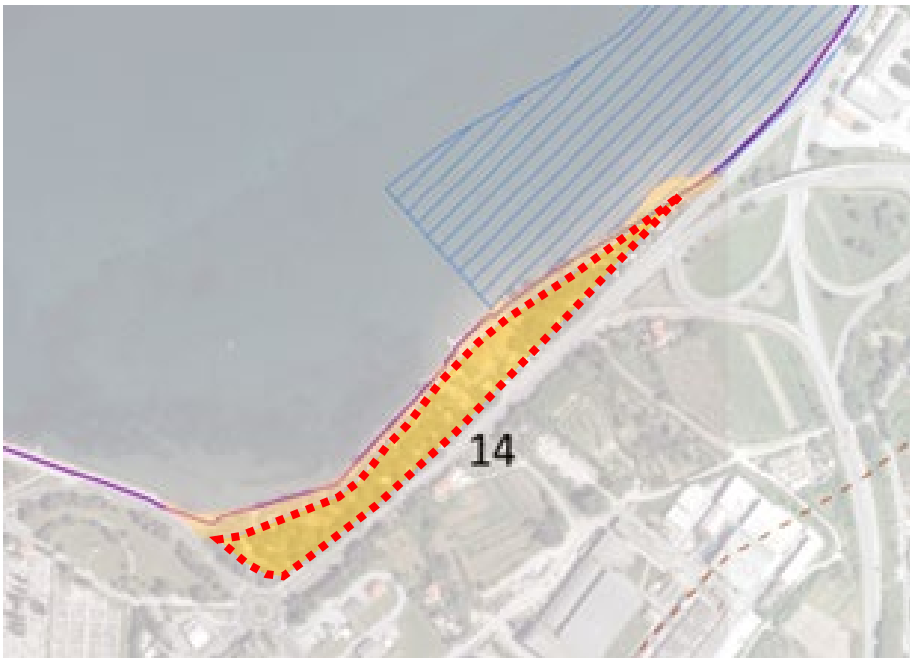


Figure 20: Proposed expansion of Jadranka beach in the municipality of Izola.

A third potential new beach area was identified within the Shape project (2014) and is an extension of the Krka beach area in Strunjan (Figure 21). Part of the area could be developed instead of the current parking area, as it is a direct continuation of the existing beach. However, part of the area could be developed along the south side, towards the fishing harbour.

We estimate that the expansion of the beach area in Strunjan would be less advisable, as according to the Strunjan Landscape Park, the current number of bathers is already endangering the nature reserve (which certainly requires investigation). In addition, we estimate that an increase in the number of bathers would result in a significantly higher additional traffic load, as it would generate additional traffic flows into the heart of the Strunjan Landscape Park. Therefore, we conclude that the extension of the beach areas in Strunjan is not possible until the traffic scheme serving the beach is substantially changed.

Figure 21: Proposed extension of Krka beach in the municipality of Piran.

4.7 Findings and recommendations for spatial planning in terms of bathing infrastructure

It is our assessment that until a substantial change is made to the mobility or transport scheme (transit options to the beaches), the only beaches eligible for development, new infrastructure or expansion are urban beaches, i.e. beaches that can reasonably

be expected not to generate additional traffic flows, but will rather be used by citizens and tourists.

All beaches require:

- improved accessibility through alternative modes of transport (cycling, walking, public transport, maritime public transport),
- sensible and limited improvements to the infrastructure of bathing sites, particularly in the case of urban beaches, but not in the case of beaches located further away from urban centres. In this respect, we recommend that beaches be classified according to their natural preservation status, function - natural/urban beaches, accessibility, and that comprehensive recommendations be made as to their bathing facilities. For example, the beach in Moon Bay (Mesečev zaliv) is not suitable for any kind of bathing infrastructure, whereas the city beach in Koper is suitable for a complete bathing infrastructure.

Depending on the type of beach (urban, natural), accessibility, natural vulnerability, availability of bathing facilities and other factors, the maximum bather load that a beach area can be subjected to should also be determined.

4.8 The applicability of the thematic data to the preparation of the Carrying Capacity Assessment of the Marine and Coastal Area (carrying capacity of the area).

We estimate that the data collected on the sizes and capacities of bathing sites and beach areas can be used as one of the pieces of input data for the preparation of the Carrying Capacity Assessment of the Marine and Coastal Area for tourism.

The sizes of bathing sites and beach areas used for bathing have been estimated with a reasonable degree of accuracy.

However, we draw attention to the calculated capacity of bathing sites and beaches. For the purpose of this task, we have calculated the capacity according to the Rules for protection against drownings, which provide for a bathing area capacity of 7m^2 / bather. Estimates from literature suggest that a single bather needs between 5 m^2 and 20 m^2 of surface area. The views of those involved in the project go as far as estimating that, for example, only 3 to 4 m^2 per swimmer are needed on urban beaches.

We estimate that the actual capacity of a bathing site or beach area depends on the beach type (urban, natural) and the expected level of privacy, natural vulnerability, morphology (rocky, concrete, sandy beach), the provision of bathing infrastructure and other factors. For the purpose of this task, we believe that a capacity of 7m^2 / bather is a sufficiently sound baseline.

One of the key input data for assessing the tourism carrying capacity of the sea and coastline will be the maximum bather load of each particular beach.

4.9 Compiling a database of bathing sites and bathing areas

The database has been prepared in SHX format and is attached to this report.

4.10 Key stakeholders meeting report

List of activities carried out by the project developers with key stakeholders:

-**24 May 2022**: telephone conversation with the Maritime Administration, participants:, Mr Jadran Klinec, Mr Gregor Čok: The Maritime Administration of the RS has information on the status of the jetty, and the Maritime Administration will provide the necessary information to the project contractors for the purpose of project preparation,

-**26 June 2022**: Zoom meeting with coastal municipalities, client, project contractors. One of the key proposals is the one by Mr Marko Starman, Municipality of Izola, that we do not propose to extend the bathing waters, as this is the competence of the DRSV. In his opinion, the bathing site can also be located outside the bathing water area.

-**26 May 2022**: telephone consultation with Mr Ljubo Bertok, Municipality of Piran, briefing on the meeting, agreement to meet on 1 June 2022.

-**30 May 2022**: email correspondence regarding bathing sites, participants: Ms Manca Plazar, Mr Iztok Škerlič, Mr Ljubo Bertok, Mr Gregor Čok, Mr Aleksej Skok: Discussion on the appropriateness of the 7m^2 / bather standard. Some concerns have been raised about this, there is a need to differentiate between bathing sites in terms of location (urban, suburban or remote); the aim of the project is to obtain a first or at least a rough estimate of the capacity of all bathing sites on the Slovenian coast; there is also a suggestion to start counting visitors as soon as possible.

-**1 June 2022**: meeting of the Municipality of Piran, contractors present, Mr Ljubo Bertok, Mr Boris Kočevar, Mr Nesi Dulai. Briefing on planned changes to bathing waters and bathing areas, discussion about traffic and bathing areas, bathing waters.

-**1 June 2022**: meeting of the Municipality of Piran, contractors present, Mr Boris Kočevar, establishing a record of bathing areas and bathing sites in the Municipality of Piran.

-**7 June 2022:** telephone consultation with Ms Vesna Vičič, Municipality of Ankaran, discussion on the preparation and methods of preparation of bathing and parking areas, deadlines.

-**7 June 2022:** telephone consultation with Mr Marko Starman, Municipality of Izola, to discuss the preparation and methods of preparation of bathing and parking areas, deadlines.

-**9 June 2022**: telephone consultation with Mr Nesi Dulai, discussion on the preparation and methods preparation of bathing and parking areas, deadlines, agreement to meet after 15 June 2022.

-**10 June, 2022:** attendance at the meeting in Izola, discussion on the preparation of the study on the Cumulative Impacts and Carrying Capacity of the Marine Environment, outline of the content of the MSP-MED project (annex: conclusions/minutes - gmail).

-**14 June 2022:** meeting of the Municipality of Piran, contractors present, Mr Boris Kočevar, recording of the remaining bathing sites and bathing areas in the Municipality of Piran.

-**15 June, 2022:** working meeting in Koper (RRC): presentation of the work done so far, review of the individual bathing and parking areas, comments from participants (annex: conclusions/minutes - gmail).

-**28 June, 2022:** Zoom meeting on the topic: Identification of additional bathing capacities (new beaches), participants: G. Čok; S. Mezek; M. Plazar.

-**31 August 2022:** telephone consultation with Ms Mateja Poje (ARSO) regarding the definition of beach capacities for the purpose of the preparation of bathing water profiles in 2008-2011, participants: G. Čok; M. Poje.

-**31 August, 2022:** Zoom meeting on the topic: definition of prerequisites for the estimation of the actual areas beneath the cliffs (new beaches), participants: G. Čok; S. Mezek; M. Plazar.

5 Traffic infrastructure in the coastal strip

In the field of transport infrastructure, the following areas have been identified: parking areas and public passenger transport stops on land (hereafter referred to as public passenger transport - PPT stops), and potential public passenger transport - PPT stops at sea (public passenger transport - PPT piers). We have drawn on data from various sources and recent studies: Multimodal scheme for sustainable mobility in the coastal strip (hereafter referred to as the Multimodal scheme), developed within the CHESTNUT project (2019). Table 11 provides an overview of the final dataset used for the traffic analysis and the production of the synthesised database. In addition to the above, additional information or clarifications were sought from local authorities or relevant services during the process.

Table 11: List of sources used

DIGITAL LAYER	FORMAT	OWNER/AUTHOR
DOF5 digital orthophotos	raster	GURS
coastline	vector, line	Slovenian Environment Agency (ARSO)
Multimodal scheme		
Multimodal point (P+R, bike share)	vector, point	traffic study, RRC Koper (GIS SHP data obtained)
Multimodal point (P+R)	vector, point	traffic study, RRC Koper (GIS SHP data obtained)
Bus lines of the city's public passenger transport network (PPT)	vector, line	traffic study, RRC Koper (GIS SHP data obtained)
Bus stop	vector, point	traffic study, RRC Koper (GIS SHP data obtained)
Bus & Bike	vector, point	traffic study, RRC Koper (GIS SHP data obtained)
Parking and bike rental locations	vector, point	traffic study, RRC Koper (GIS SHP data obtained)
Residents' parking spaces (incomplete, missing data)	vector, point	traffic study, RRC Koper (GIS SHP data obtained)
Parking area data		
Ankaran	vector, polygon	areas drawn (redrawn) on the basis of the 7 studies on public parking areas available on the website (traffic) of the Municipality of Ankaran

		https://obcina-ankaran.si/sl/zivljenje-v-ankaranu/promet
Koper.	vector, polygon	GIS SHP data directly extracted from the OPSI web portal https://podatki.gov.si/dataset/javna-parkirisca-v-mestni-obcini-koper/resource/a11a94f1-f82b-46ad-a3e3-6446c98cf85d
Izola	vector, polygon	GIS SHP data extracted from the OPSI web portal https://podatki.gov.si/dataset/javna-parkirisca-v-obcini-izola?resource_id=5a591e05-0ce1-4405-ab6f-405e4e4d124b
Piran	vector, polygon	areas drawn (redrawn) on the basis of the Parking study conducted under the management Okolje Piran (Public company OKOLJE Piran)
Piran (parking spaces)	vector, point	GIS SHP data, provided by Mr Igor Grmek, also available on the OPSI web portal https://podatki.gov.si/dataset/javna-parkirisca-v-obcini-piran

5.1 Parking areas

5.2 Overview and analysis of the current situation (managed, illegal, public)

Our analysis of the current situation has shown that there is a wide range of parking areas with different statuses in the coastal zone. Compiling a record of all the different forms of parking (legal and illegal, privately owned, temporary, etc.) would require targeted research (traffic counts, ownership records, etc.), which is beyond the scope of this task, hence our focus was on **public parking areas**, which constitute a reliable starting point for the calculation of parking capacities.

The analysis focused on car parks within the 300 m coastal zone, which are deemed to provide sufficient parking capacity to support all bathing sites During the course of this process, it was found that in addition to the car parks within the 300 m corridor in question, there are several other parking areas (within a reasonable distance) which the local communities also consider to have potential for providing parking to bathing sites, and which have therefore been taken into account.

5.3 Existing capacities

The calculation of existing capacities is based on available data from official records (which are managed by the services in charge of public car parks). It should be noted that in this area (as in the case of bathing sites) there are also some discrepancies, mainly due to the constantly evolving situation in the area and the fact that the records are not kept up to date. There are also differences in the level of detail of the data, with

some municipalities having a detailed classification of the parking spaces (hereafter "ps") by purpose (ps for disabled persons, taxi, motorbike, caravan, temporary ps, etc.) and others only reporting the total number of all the ps for each parking space.

A total of 79 (72 + 7) parking areas were recorded in all four municipalities (Table 12), which represent a realistic potential for providing parking for the bathing sites.

Table 12: parking areas in the coastal strip.

	NO. OF PARKING AREAS IN THE 300 M ZONE	NO. OF PARKING AREAS IN THE IMMEDIATE VICINITY OF THE 300 M ZONE
Municipality of Ankaran	6	1
City Municipality of Koper	16	2
Municipality of Izola	20	0
Municipality of Piran	30	4
Total:	**72**	**7**

More detailed information on the number of parking areas and the number of parking spaces in each municipality is provided below. For the sake of clarity, the studied area has been divided into 9 spatial sections (Figure 8).

Municipality of Ankaran

Seven parking areas with a total capacity of 517 ps were identified in the municipality of Ankaran (Table 13, Figures 22, 23). Of these, only parking area No. 6 "Ankaran centre" is located at a slight distance from the 300 m coastal corridor, but still presents a potential for providing parking to the bathing sites on the coast.

Table 13: public parking areas in the municipality of Ankaran.

NO.	MUNICIPALITY OF ANKARAN	NO. OF PS
1	Lazaret parking area	49*
2	Debeli rtič Landscape Park - main parking area	140
3	Debeli rtič Landscape Park - bathing site parking area	100
4	Valdoltra - West parking area	29
5	Valdoltra - East parking area	26
6	Ankaran centre parking area	110
7	Parking area: St. Catherine (Sv. Katarina)	63
	Total:	**517**
* the 49 ps figure is calculated on the basis of DOF data, and is not an official figure provided by the competent parking authority.		

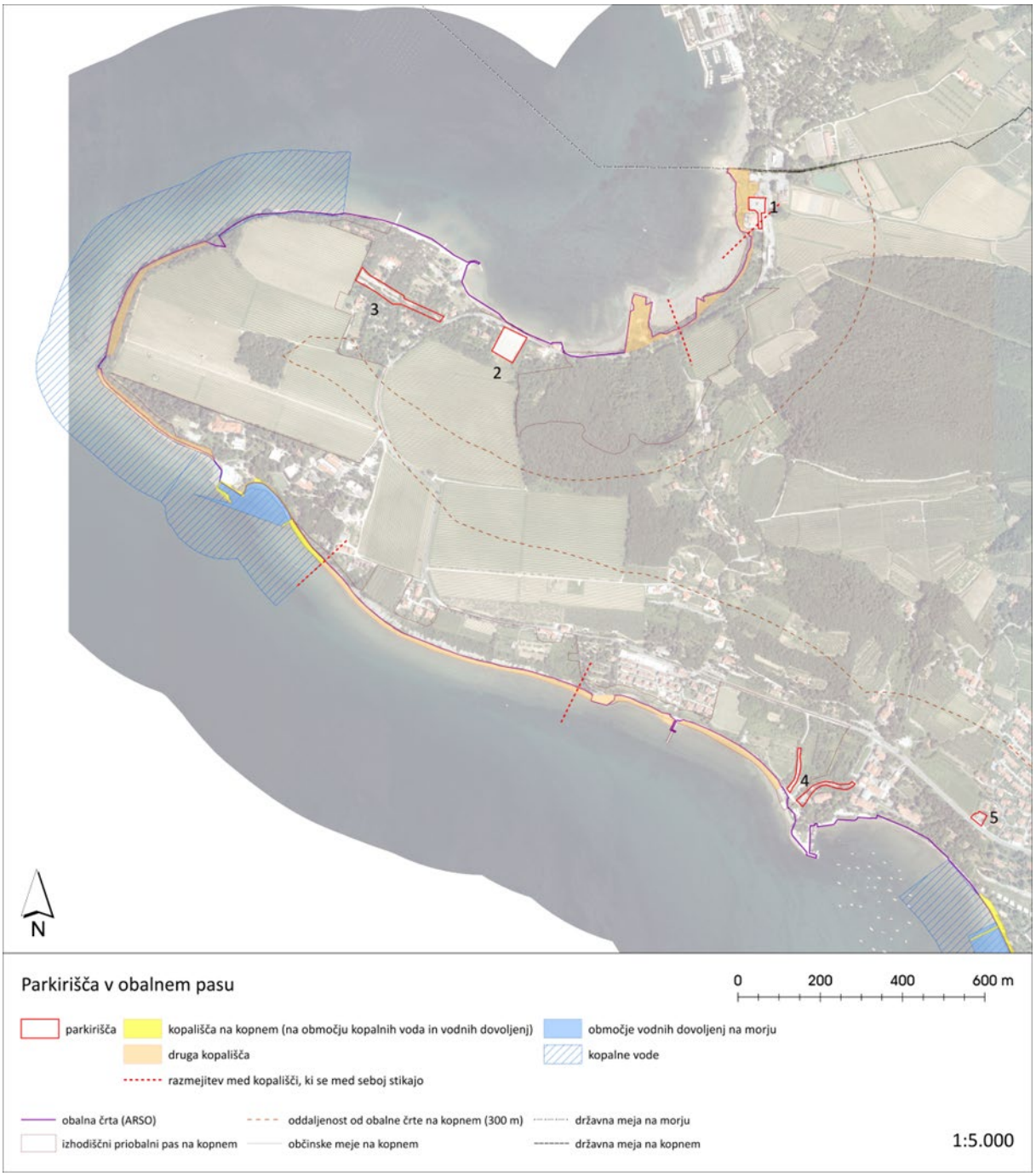


Figure 22: public parking areas in the Municipality of Ankaran (1).

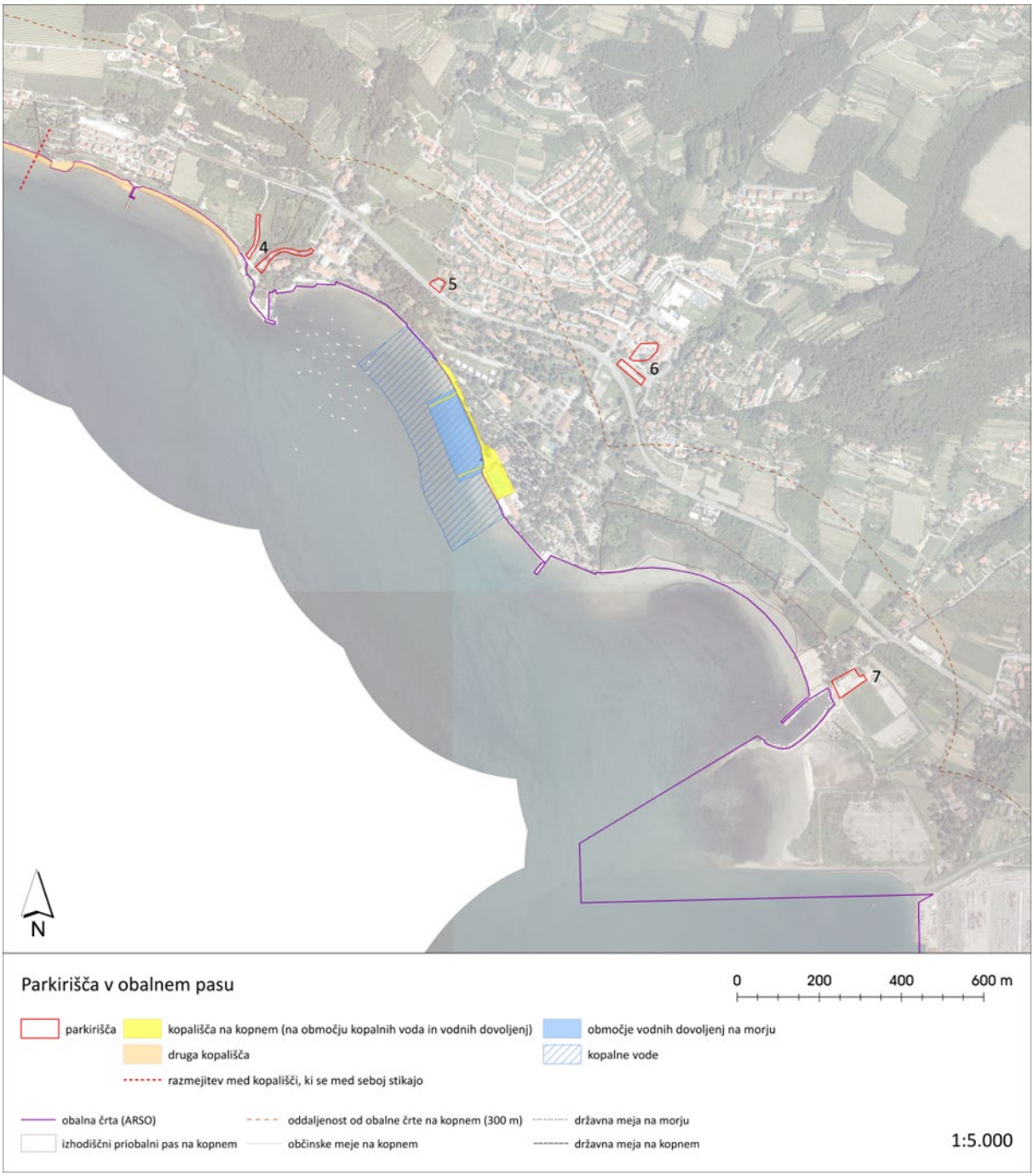


Figure 23: public parking areas in the Municipality of Ankaran (2).

The public parking areas that could provide parking to the bathing sites and beaches in Ankaran are relatively unevenly distributed.

There is only one public parking area in the Lazaret area. In the area of Debeli rtič, there are two parking areas with a total of 240 ps, which in turn provide parking to a large bathing area. The next nearest public parking area is located in the Valdoltra area, and there is no public parking area in the entire stretch between the northern part of Debeli rtič and Valdoltra, despite the existence of an extensive area used as a

beach. In the rest of the area, public parking areas are more evenly distributed, although there is a noticeable lack of public parking spaces in the vicinity of Adria.

City Municipality of Koper

Eighteen parking areas with a total capacity of 2,969 ps were identified in the City Municipality of Koper (Table 14, Figures 24, 25). Of these parking areas, No. 12 "By Semedela" and No. 18 "By the Stadium" are located at some distance from the 300 m coastal corridor, but still present a potential for the provision of parking for the needs of bathing sites on the coast. Parking areas No. 5 "Ukmarjev trg" and No. 15 "Žusterna parking area" are located in the immediate vicinity of the bathing sites.

Table 14: public parking areas in the City Municipality of Koper.

NO.	CITY MUNICIPALITY OF KOPER	NO. OF PS
1	Parking area: Northern Bypass 4	66
2	Parking area: Northern Bypass 3	41
3	Parking area: Vergerjev trg Square	62
4	Parking area: Brolo 1,2	91
5	Parking area: Ukmarjev trg Square 1,2	177
6	Parking area: Market with parking lot gates	466
7	Parking area: Market parking meter 1	79
8	Parking area: Market parking meter 2	102
9	Parking area: Gravel parking behind the market	252
10	Parking area: Zeleni park 1,2	111
11	Parking area: Piranska cesta Street - Olympic swimming pool	110
12	Parking area: By Semedela (Ob Semedeli)	271
13	Parking area: By Mandrač (Ob Mandraču)	86
14	Parking area: Semedela Nova ulica Street	34
15	Parking area: Žusterna parking area	500
16	Parking area: Anton Ukmar Primary School	69
17	Parking area: Molet	18
18	Parking area: By the Stadium	434
	Total:	**2,969**

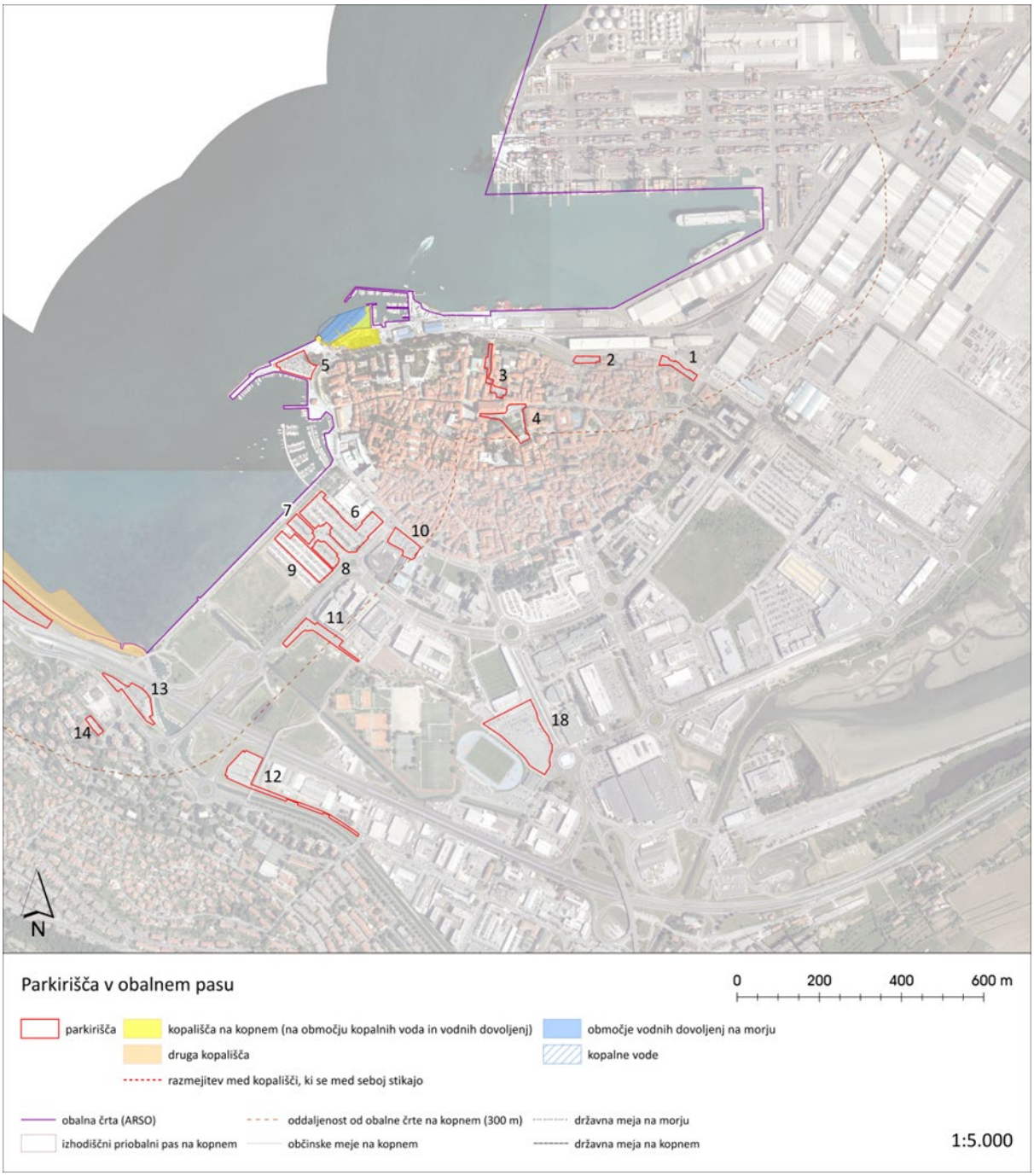


Figure 24: public parking areas in the City Municipality of Koper (3).

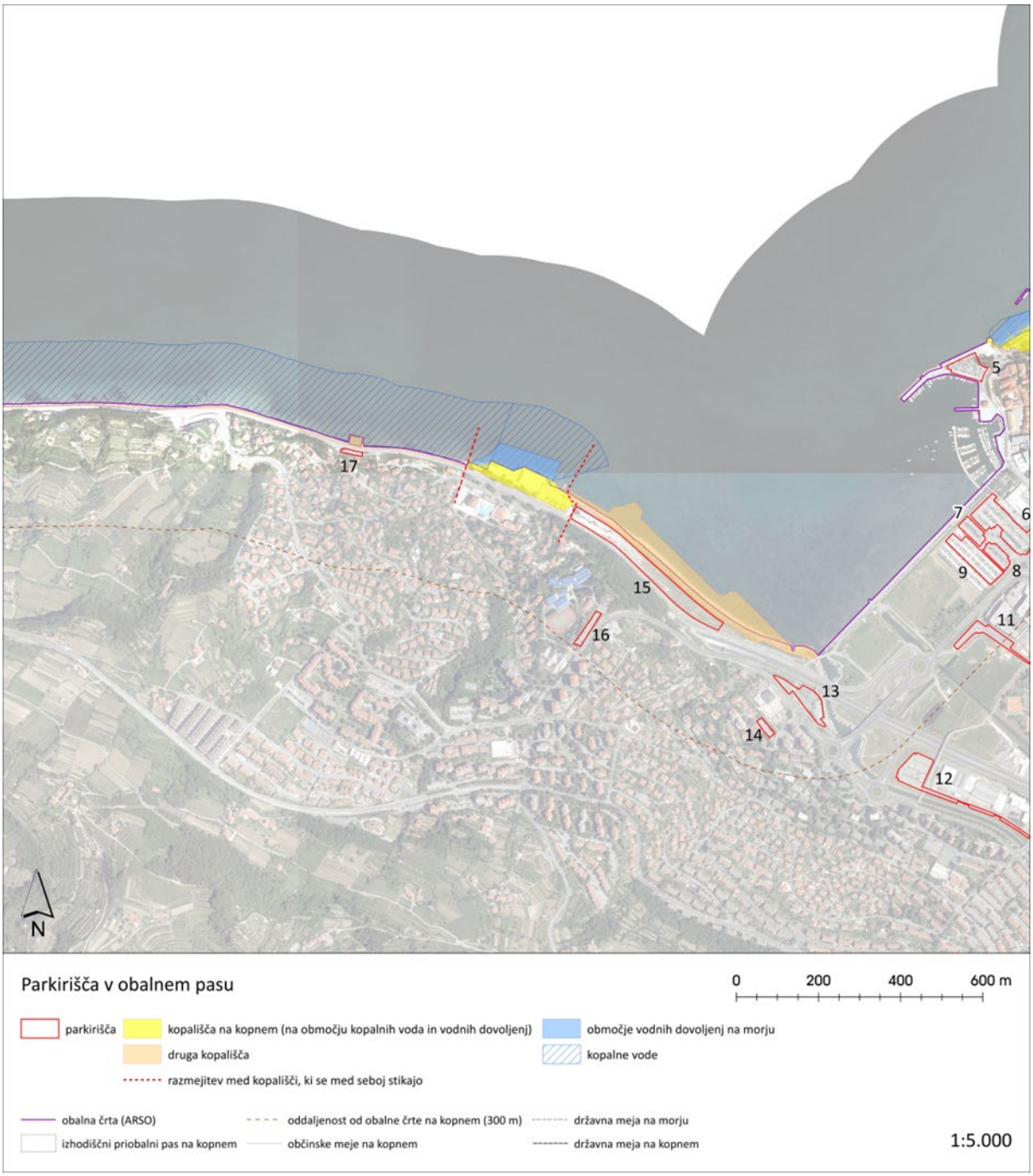


Figure 25: public parking areas in the City Municipality of Koper (4).

There are numerous and large public parking areas that could serve the bathing sites and beaches in the City Municipality of Koper, which are also relatively evenly distributed. According to the data analysed, 2,969 ps are available.

Public parking areas are not designed to provide parking for bathing sites and beaches, but rather to serve the needs of other users. The only exception is the Žusterna parking area, which mainly serves the needs of beach users, especially in the summer months.

Municipality of Izola

Two databases were available for the Municipality of Izola. The first database was obtained from official records (OPSI - as for other municipalities) and the second was provided by the local community. This is still an ongoing process of data harmonisation and updating, which is why we provide both options in the table below (Table x), while the calculation is limited to the first source (OPSI).

Based on the first source, we have identified 20 parking areas in the Municipality of Izola with a total capacity of 1,829 ps (Table 15, Figures 26, 27), all located within the 300 m corridor.

Table 15: public parking areas in the municipality of Izola.

NO.	MUNICIPALITY OF IZOLA	CODE P (INTERNAL) SOURCE: OPSI	NO. OF PS SOURCE: OPSI	CODE P (INTERNAL) SOURCE: MUNICIPALITY OF IZOLA *SITUATION AFTER JULY 1, 2021*	NO. OF PS SOURCE: MUNICIPALITY OF IZOLA
1	Parking area: By Ruda (Pri Rudi)	P14	81	P9	60
2	Parking area: Mehano		53		
3	Parking area: By the cemetery (Pri pokopališču)	P12	11	P13	13
4	Parking area: By the shipyard (Pri ladjedelnici)		96		
5	Parking area: Shipyard (Ladjedelnica)	P7	370	P4	365
6	Parking area: Stadium	P8	70	P11	63
7	Parking area: Post office	P4	96	P3	65
8	Parking area: By Pittonijeva street (Ob Pittonijevi)	P9	20	P10	20
9	Parking area: By the Royal Bar		26		
19	Parking area: Beneath Vojka	P16	40	P12	30

	Šmuc Primary School				
11	Parking area: Medical centre	P3	30		
12	Parking area: Veliki Trg Square	P2	63	P2	61
13	Parking area: Lonka	P1	162	P1	167
14	Parking area: Argo	P6	345	P5	351
15	Parking area: Next to the lawn bowling court (Pri balinišču)	P11	39		
16	Parking area: By the Sonja restaurant	P10	38	P17	48
17	Parking area: Tomažičeva	P13	37	P6	171
18	Parking area: By the gasworks (Pri plinarni)	P13	19	P20	16
19	Parking area: By Tomažičeva Street (Ob Tomažičevi)	P13	165	P15	37
20	Parking area: Pod Belvederjem	P5	68	P8	78
		total	**1,829**		

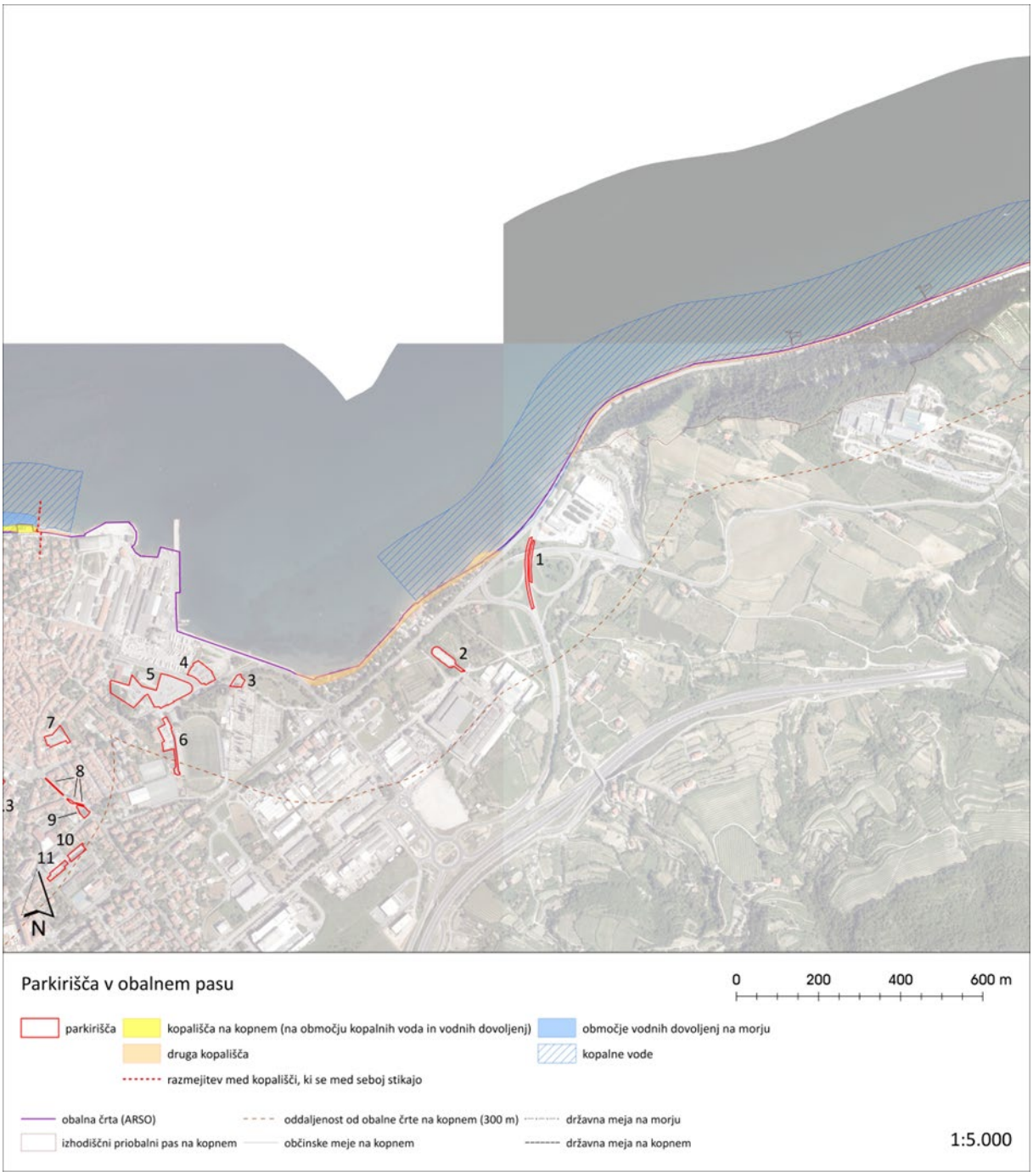


Figure 26: public parking areas in the Municipality of Izola (5).

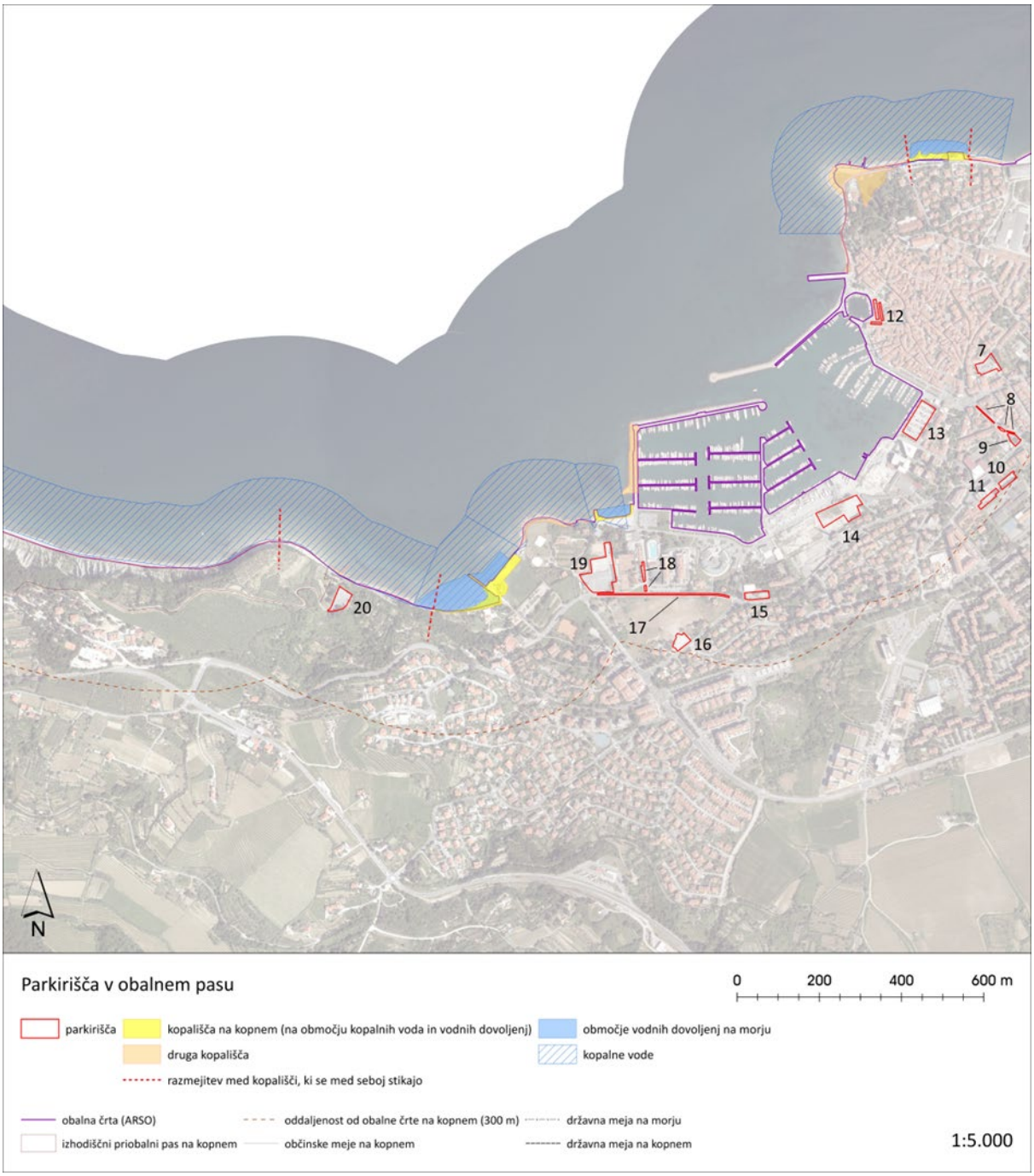


Figure 27: public parking areas in the Municipality of Izola (6).

There are numerous and large public parking areas that could provide parking for the bathing sites and beaches in the Municipality of Izola, most of which are located in the urbanised and tourist area of the town of Izola. According to the data analysed, 1,829 ps are available.

Areas where there is a lack of available ps near bathing sites and beaches are the area of the Koper - Izola coastal road, the Pod Belveder area and the Strunjan area. Since these are non-urbanised, vulnerable areas where a large number of bathers is not desirable, we do not consider the lack of ps within the scope of this project to be a deficiency and do not recommend increasing the number of ps.

Municipality of Piran

In the Municipality of Piran, we recorded the largest number of parking areas, namely thirty-four with a total capacity of 2,695 ps (Table 16, Figures 28, 29, 30). Five of these parking areas (Nos. 29 - 33) are located outside of the 300 m corridor, that is, in the area of Lucija. The spatial distribution of most of the parking areas in the Municipality of Piran is logically aligned with the needs of the bathing sites. The basic urban and transport concept of the "Portorož coastal promenade" is designed in a similar way, and is based on ensuring direct accessibility to the hotels and the bathing sites (and the availability of parking spaces). The Municipality of Piran has not planned any new parking areas in its spatial planning documents.

Table 16: public parking areas in the Municipality of Piran.

NO.	MUNICIPALITY OF PIRAN	NO. OF PS	MOTORCYCLE	TAXI
1	Parking area: Strunjan	358	18	
2	Parking area: Hotel Barbara	45		
3	Parking area: Fiesa	110		
4	Parking area: Piran: Azre	19		
5	Parking area: Piran: GH Azre	216		
6	Parking area: Piran: Cemetery (Pokopališče)	5		
7	Parking area: Piran: Oljčna	46		
8	Parking area: Piran: Rozmanova	45		
9	Parking area: Piran: The Walls (Obzidje)	29		
10	Parking area: Piran: IX. Korpus	85	5	
11	Parking area: Piran: Punta	193		
12	Parking area: Piran: Tri Papige	33	12	
13	Parking area: Piran: By the fire station (Pri gasilcih)	13	5	
14	Parking area: Piran: Mali Mandrač	17		
15	Parking area: Piran: Streets of Piran	78	6	
16	Parking area: Piran: Dantejeva	25	3	
17	Parking area: Piran: Bus stop	49		
18	Parking area: Piran: Ramp	40		
19	Parking area: Piran: Fornače	504	6	
20	Parking area: Portorož: Mercator	7		
21	Parking area: Portorož: Between the warehouses (Med skladišči)	27		
22	Parking area: Portorož: Salt warehouse (Skladišče soli)	18		
23	Parking area: Portorož Hotel Marko	27		
24	Parking area: Portorož Obala 1	159	48	7
25	Parking area: Portorož Obala 2	178	39	

26	Parking area: Stari Kaštel	54		
27	Parking area: Novi Kaštel	34		
28	Parking area: Splošna plovba	15		
29	Parking area: Lucija Bučko	46		
30	Parking area: Pharmacy	4		
31	Parking area: Post office	29		
32	Parking area: Park Sonce	38		
33	Parking area: Commercial and business centre - TPC	100	9	1
34	Parking area: Seča - Ribič	19 (+30)		
	Total:	**2,695**	**151**	**8**

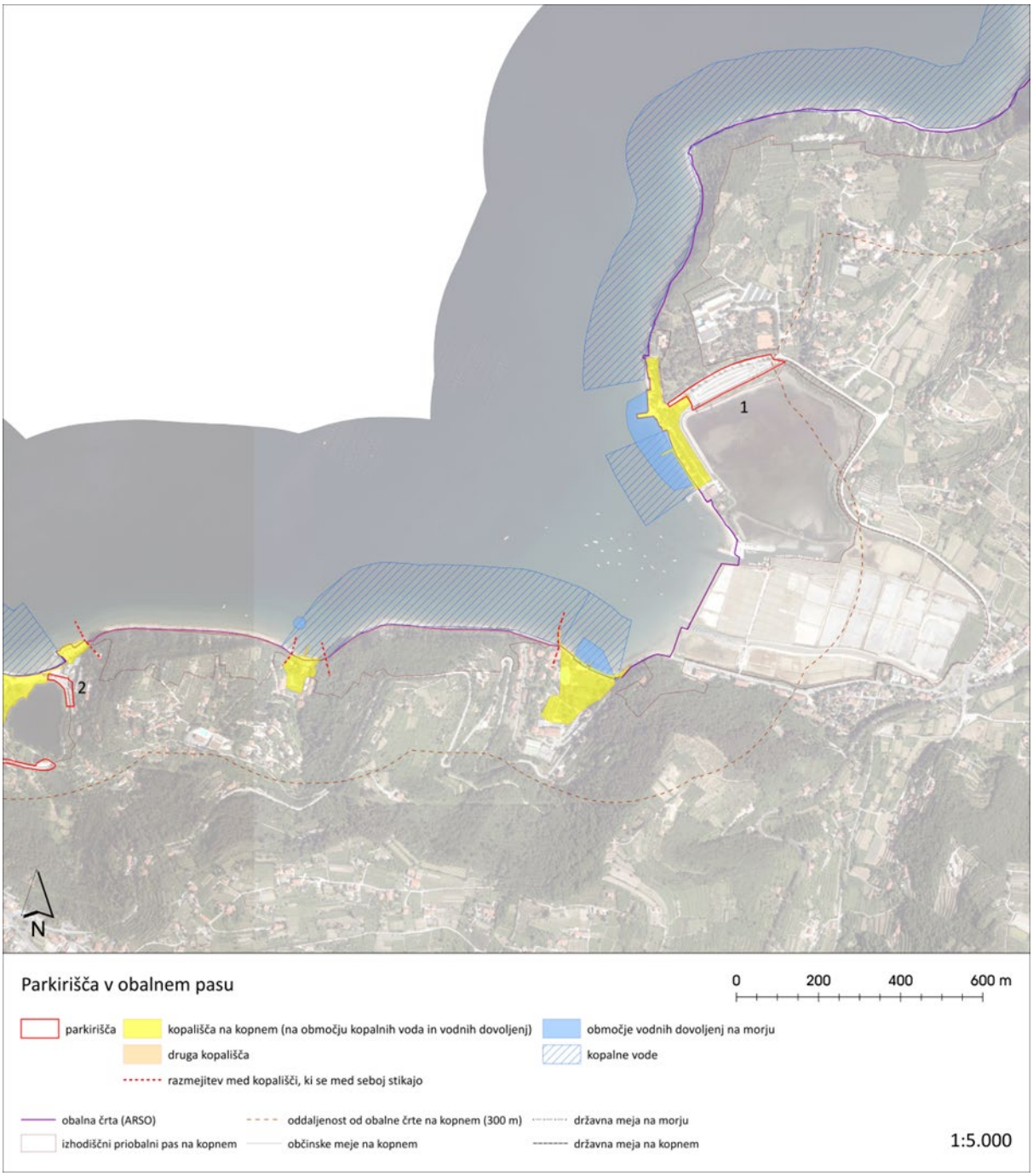


Figure 28: public parking areas in the Municipality of Piran (7).

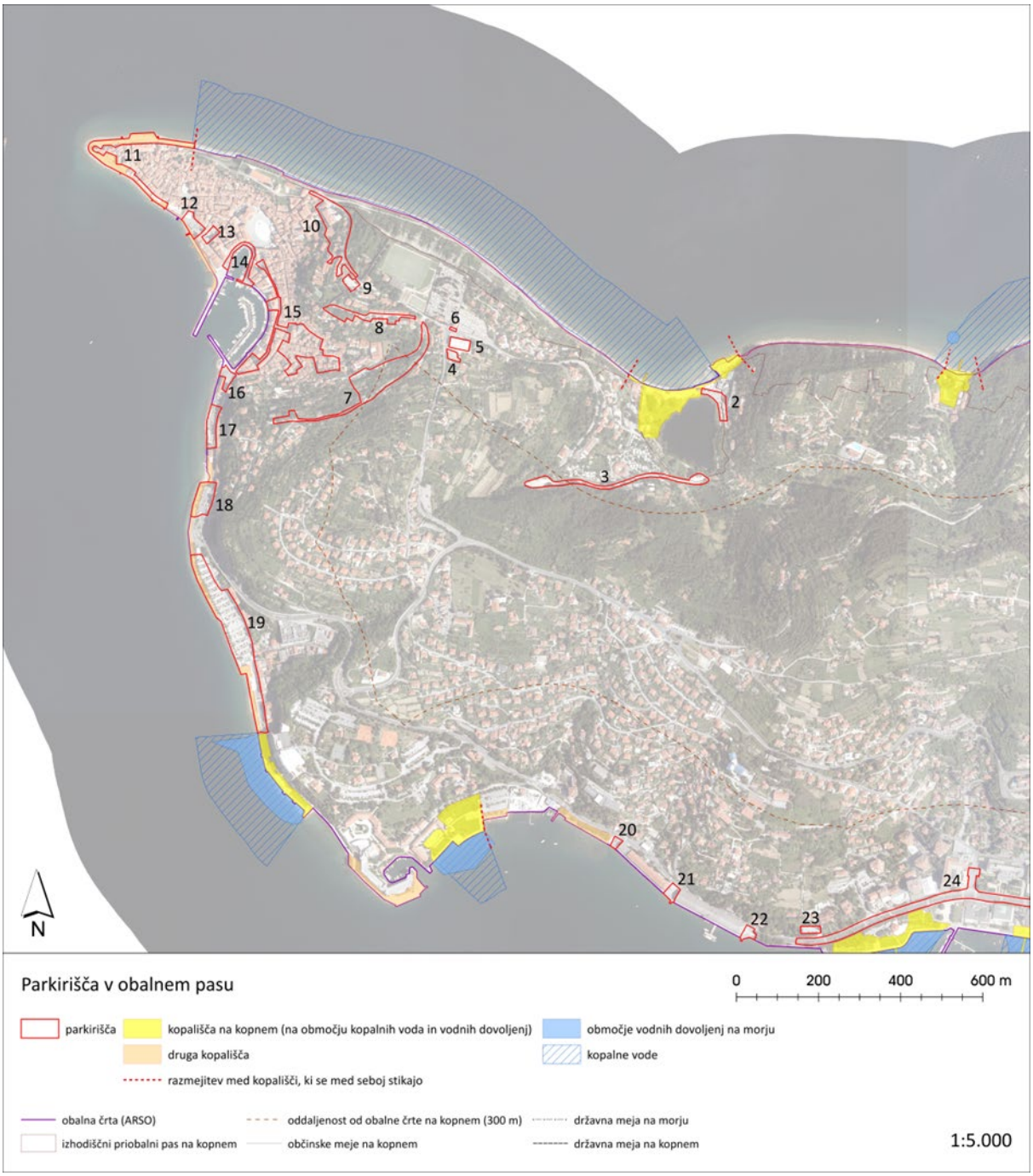


Figure 29: public parking areas in the Municipality of Piran (8).

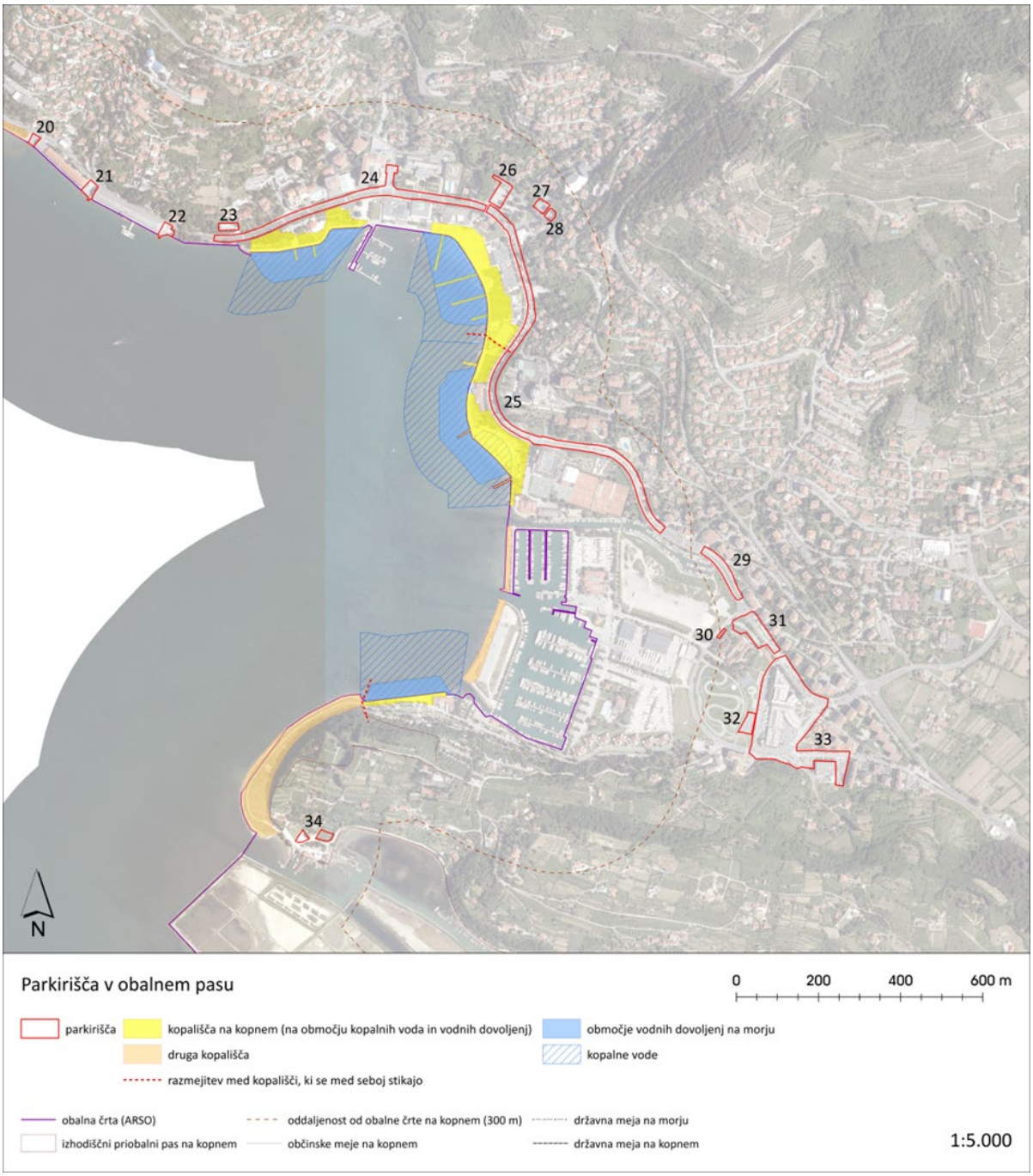


Figure 30: public parking areas in the Municipality of Piran (9).

There are 34 registered public parking areas that could provide parking for the bathing sites and beaches in the Municipality of Piran. The majority of these are small and medium-sized parking areas, which altogether provide a total of 2,695 ps for cars.

As previously mentioned, the parking spaces are evenly distributed. However, the accessibility of some of the ps is questionable, as the ps in Piran, for example, are reserved exclusively for parking permit holders under specific conditions, and are not available to tourists, visitors or beach users. In the rest of the Municipality, the ps are available to the general public. Ps are mainly located in urbanised and tourist areas.

Public parking areas are not reserved exclusively for bathers, but are also available for other urban and tourist uses..

Data synthesis

The total number and capacity of all public parking areas is: 79 parking areas with 8,010 parking spaces (Table 17). It is estimated that other parking areas are also used to provide parking for the various bathing sites. Furthermore, local bathers tend to access the bathing sites directly from their residences.

Table 17: overview of all public parking areas and parking spaces in the 300 m coastal strip.

	NO. OF PARKING AREAS IN THE 300 M ZONE	NO. OF PARKING AREAS IN THE IMMEDIATE VICINITY OF THE 300 M ZONE	NO. OF PARKING SPACES
Municipality of Ankaran	6	1	517
City Municipality of Koper	16	2	2,969
Municipality of Izola	20	0	1,829
Municipality of Piran	30	4	2,695
Total:	**72**	**7**	**8,010**

► In order to establish the exact link between the parking areas and the bathing sites (establishing the cumulative carrying capacity of the area), proper traffic counts will have to be carried out and/or the actual links between the users of the parking areas and their coastal destinations (bathing sites or other points of interest) will have to be established.

5.4 Future needs assessment and possible solutions

Based on the material analysed and our meetings with representatives of local authorities, we have concluded that:

- the municipalities of Ankaran, Koper, Izola and Piran have no provision in their spatial plans for the coastal strip for new areas dedicated to the development of public parking areas,
- in its conceptual designs, drafted for its own needs, the Municipality of Izola has made plans for public parking areas in the area of the planned sports grounds (the hinterland of the current Jadranka campsite), with an approximate number of 650 ps, which are intended to provide parking for the sports grounds, the

"Jadranka" beach, and possibly a number of parking spaces for the existing programmes of the commercial zone to the south (the area from "Jereb" to "Mehano"), as well as for the programmes of the coastal strip.

The coastal municipalities are committed to making strategic efforts to reduce motor traffic throughout the entire municipal area, and in particular in the coastal strip.

It should be noted that both the MSP and the multimodal scheme, in their policies and provisions, redirect motorised and stationary traffic to the hinterland. Any new parking plans in the coastal zone would be in conflict with the existing guidelines for reducing parking in the coastal strip.

Transit to the beach areas should be facilitated by public passenger transport by land and sea, as well as by cycling and walking. Any additional parking surfaces in the 300 m seafront strip would constitute a departure from the provisions of the MSP and the sustainable mobility scheme.

5.5 Database - Parking areas

The database has been prepared in SHX format and is attached to this report.

5.6 Public transport stops and connections to the bathing sites (footpaths, cycle paths, bicycle rentals, etc.)

5.7 Overview and analysis of the current state

Compiling a record of public passenger transport stops and connections to the bathing sites (footpaths, cycle paths, bicycle rental facilities) was carried out on the basis of existing data or spatial records. Following a discussion with the developers of the **multimodal scheme** project, who have studied in detail the **sustainable mobility** aspect for the entire coastline (both the narrow coastal strip and the bordering hinterland), we were informed that the concept of establishing an **integrated network** of pedestrian and cycle routes, a network of bicycle rental shops and multimodal points (connecting pedestrian and bicycle routes, or a connection to the land and sea PPT, etc.) is still in the process of being developed. Some networks are already in place, while others are in the planning phase and others are still at the conceptual or location planning stage. The **sustainable mobility** solutions as presented in the multimodal scheme are effectively based on the Integrated Transport Strategies (ITS) of all the coastal municipalities. Representatives of the municipalities were involved in the preparation of the scheme and informed of its results. However, the implementation of individual solutions or their incorporation into municipal spatial planning acts is at different stages.

The objective of the subject task (MSP-MED) is to establish a database to support the implementation of the MSP, and we have therefore focused on synthesizing data from official records. We have found that only the locations of public passenger transport stops can be reliably identified in the official records in this area.. Furthermore, we found that this information is also not complete, as the Infrastructure Directorate of the Republic of Slovenia disposes of only a fragment of all the data (PPT stops). We have opted to complement this database with OSP data (Open Street Map) and data from the company that runs the public transport service (Arriva Slovenia Group; data on PPT lines and stops). The synthesised overview, which was produced on the basis of these disparate sources, is therefore subject to some variations (tolerances).

The **synthesised database** has been supplemented with data on the potential piers where maritime passenger transport could be carried out according to the study proposal or the multimodal scheme. We use the term **"PPT piers"** to refer to these piers (see graphical representations below).

To show **"all the elements" of sustainable mobility**, including the creation of multimodal points (P+R+W, etc.), the reduction and removal of stationary traffic from the narrow coastal strip (the so-called "green zone", as an area without public parking and the so-called "yellow zone", as an area of reduced parking), the introduction of a system for overcoming distances, the strengthening public passenger transport on land and at sea, etc., which are presented at a conceptual level, we provide maps of the proposed solutions at the end of this chapter (source: multimodal scheme, PNZ developer, 2019).

Public passenger transport stops register

The record of the bus stops in all four coastal municipalities was compiled using the following data: the database of the Directorate for Infrastructure of the RS, Open Street Map, (bus routes and bus stops), Arriva's records and data layers from the multimodal scheme (PNZ, 2019). We identified the bus stops located within the 300 m corridor along the coastline (in some specific cases, we also recorded reference bus stops outside this corridor).

Below are the locations of PPT stops and PPT piers by municipality. For the sake of clarity, the studied area has been divided into 9 spatial sections (Figure 8).

Municipality of Ankaran

In the area of the Municipality of Ankaran we recorded (Figures 31, 32):

- 4 PPT stops, as listed in the official records, and an additional 5 PPT stops, based on other sources,

- 5 PPT piers, as indicated in the multimodal scheme. These include: Lazaret, Debeli rtič Resort, Valdoltra, Adria-Ankaran and St. Catherine (Sv. Katarina) pier.

The connections to other sustainable mobility elements (cycling and walking networks, bicycle stops, multi-modal points and other transport infrastructure elements) are shown in the multimodal scheme maps (source: PNZ, 2019), which are attached at the end of the chapter.

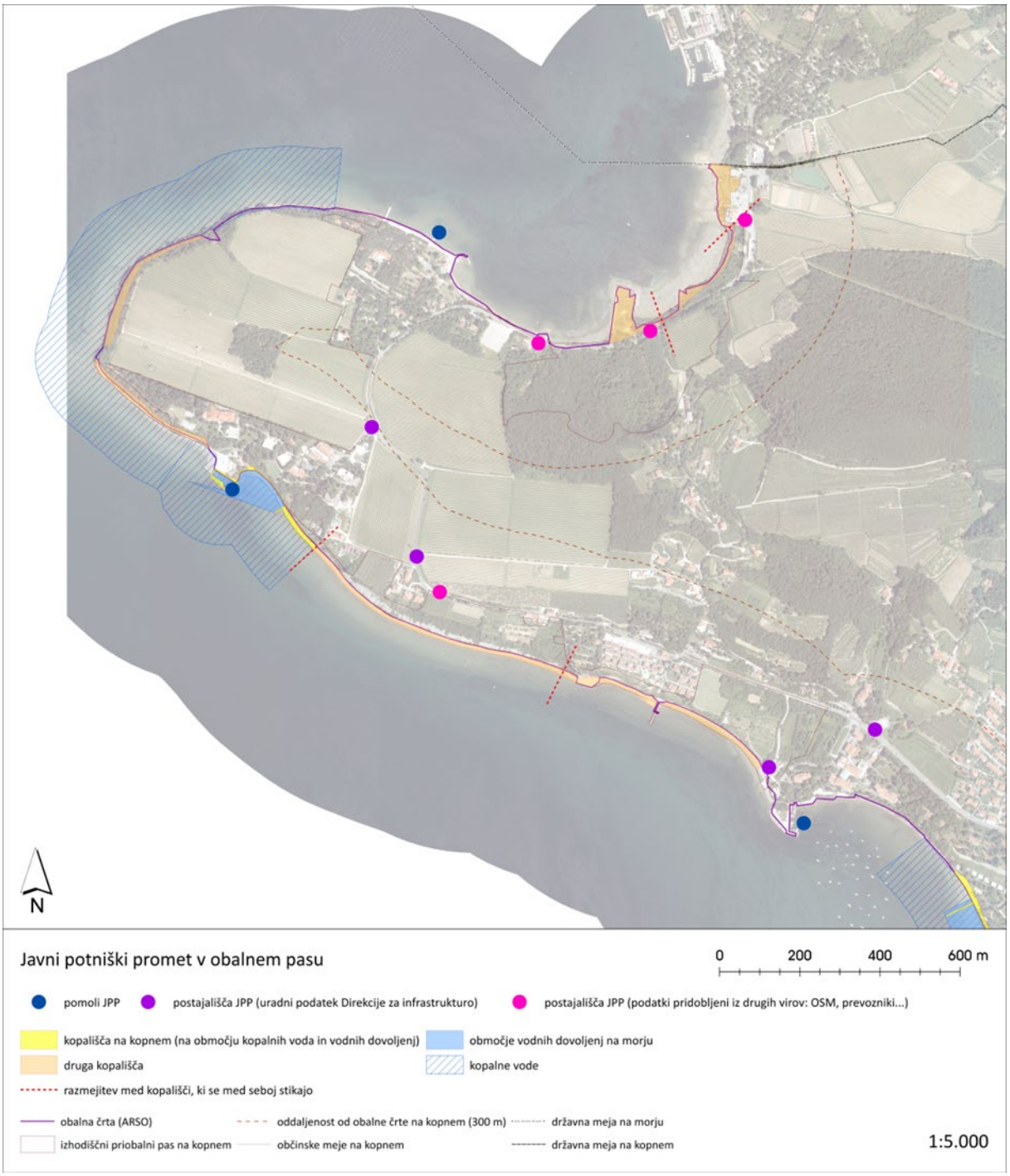


Figure 31: PPT stops in the municipality of Ankaran (1).

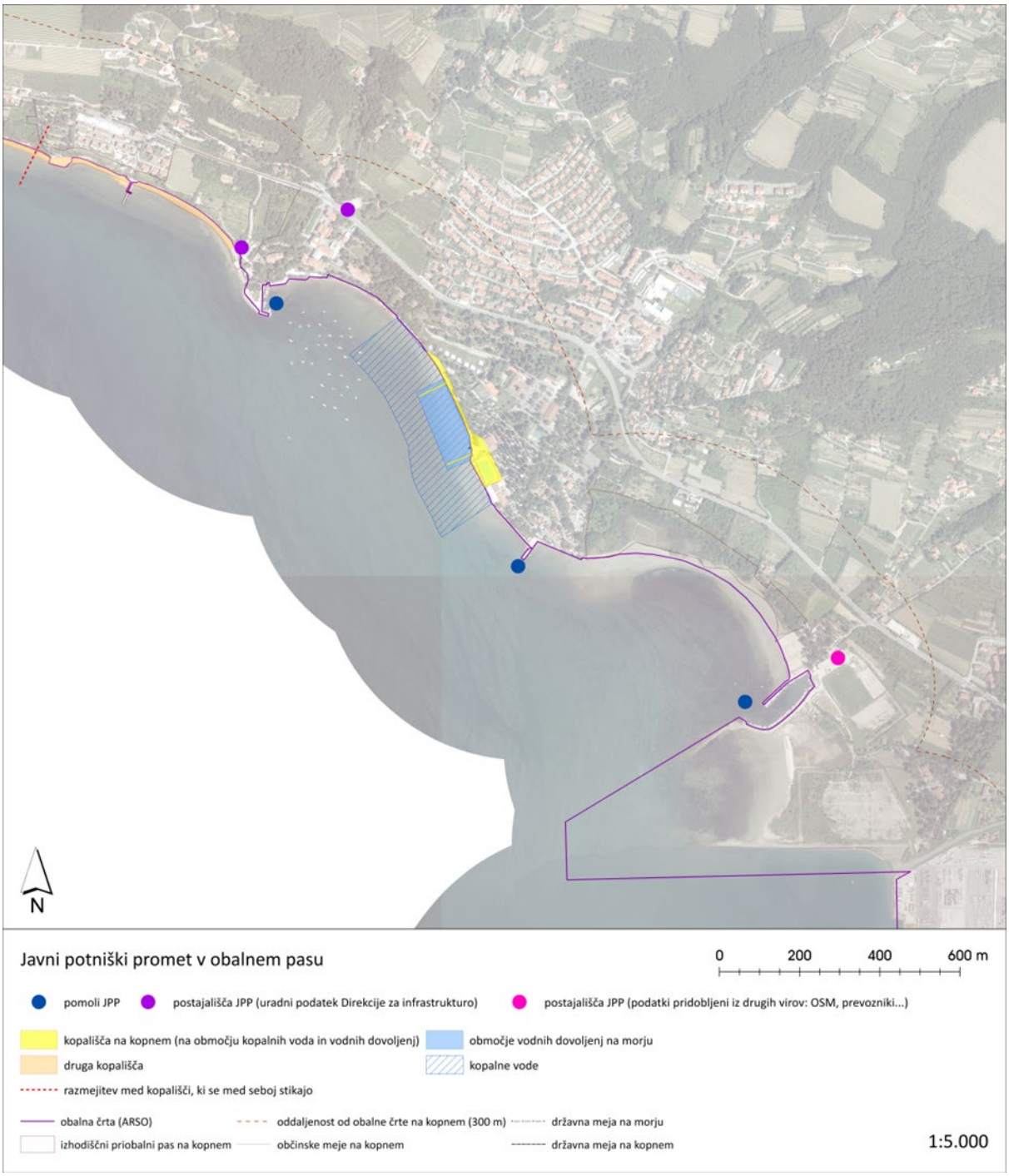


Figure 32: PPT stops in the municipality of Ankaran (2).

City Municipality of Koper

In the territory of the City Municipality of Koper, we have recorded the following (Figures 33, 34):

- 13 PPT stops as indicated in the official records and an additional 12 PPT stops, based on other sources,

- 2 PPT piers, as indicated in the multimodal scheme. These are: the Koper Passenger Terminal and Žusterna

The connections to other sustainable mobility elements (cycling and walking networks, bicycle stops, multi-modal points and other transport infrastructure elements) are shown in the multimodal scheme maps (source: PNZ, 2019), which are attached at the end of the chapter.

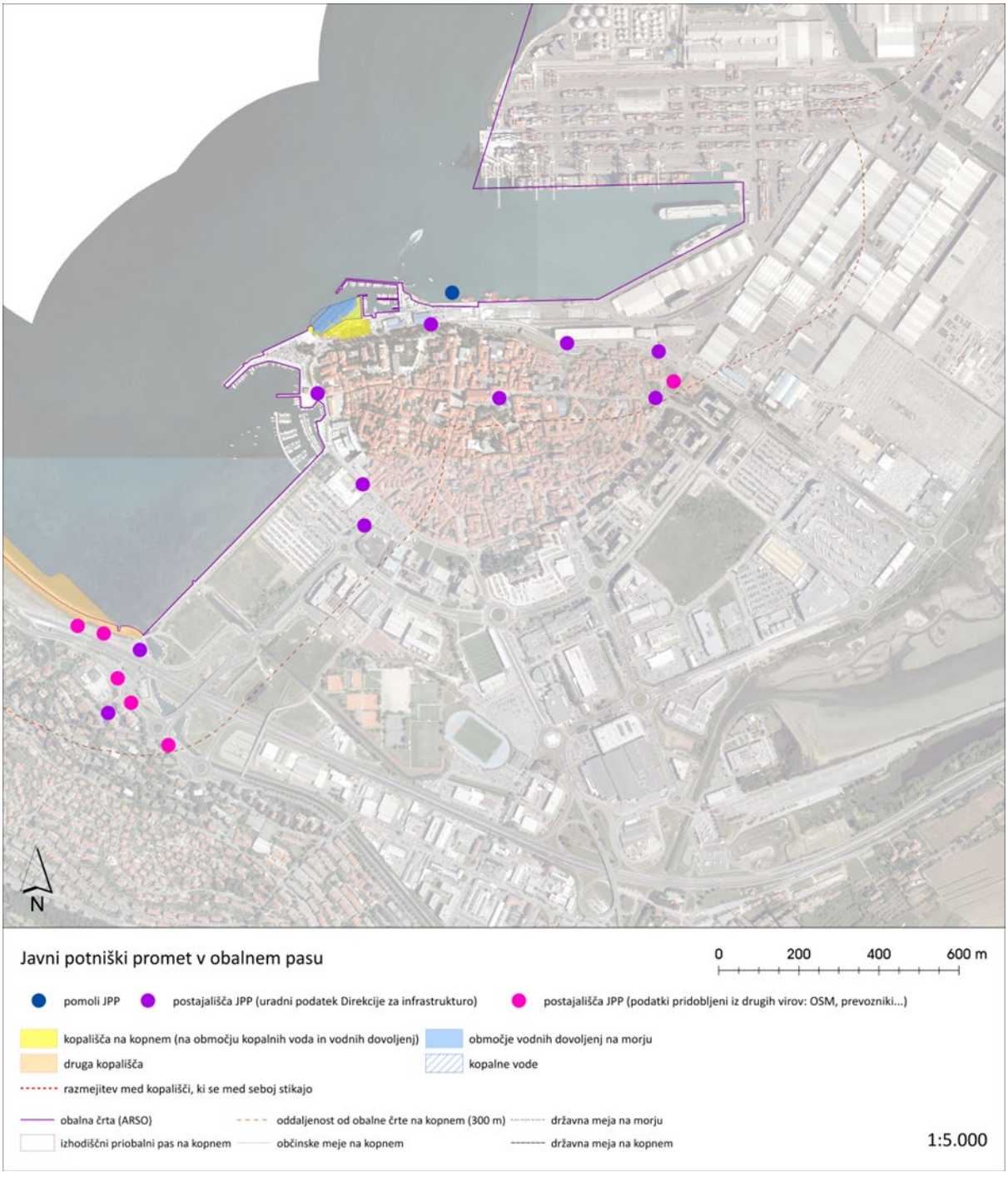


Figure 33: PPT stops in the area of the City Municipality of Koper (3).

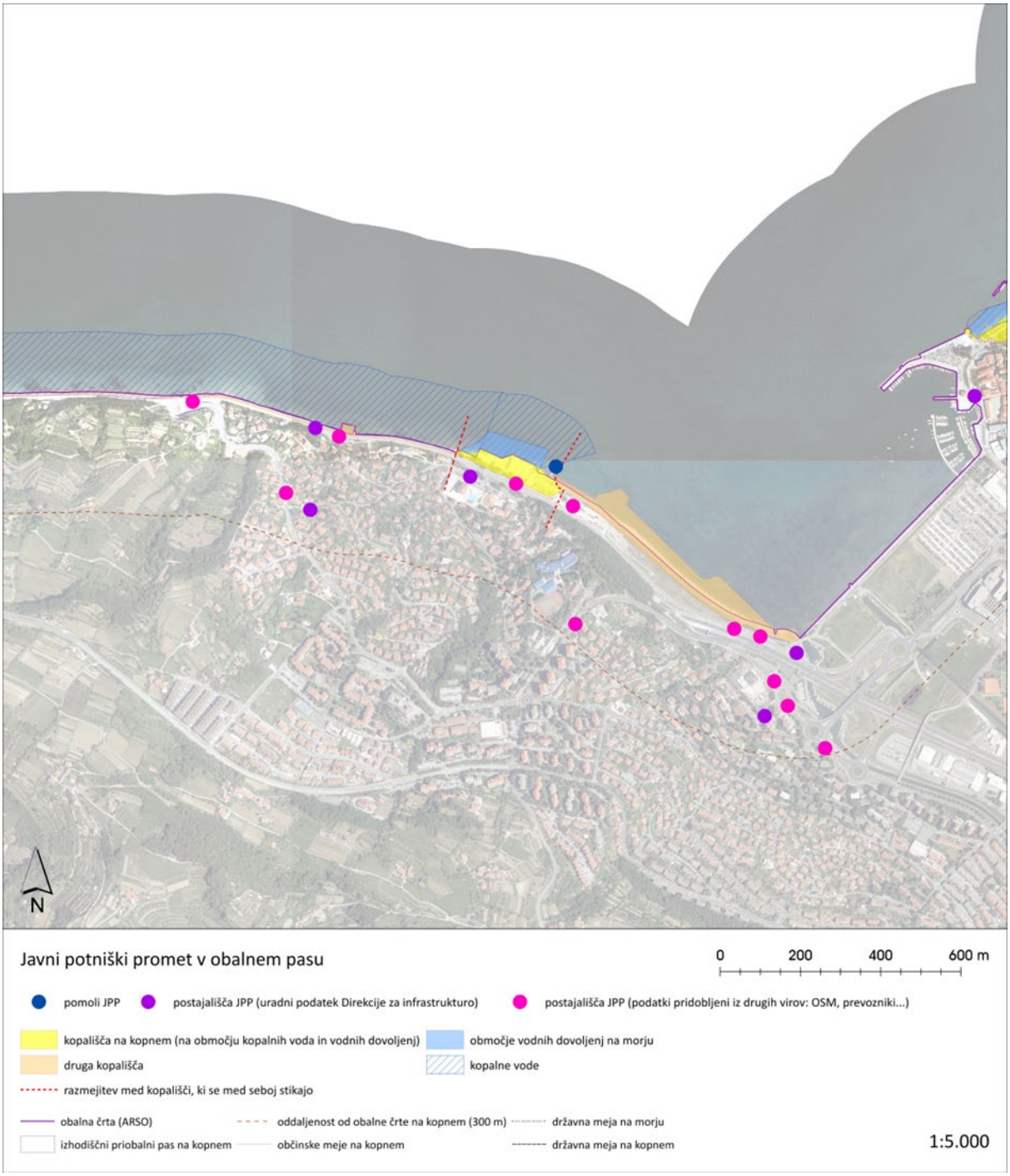


Figure 34: PPT stops in the area of the City Municipality of Koper (4).

Municipality of Izola

In the area of the Municipality of Izola, we have recorded (Figures 35, 36):

- 11 PPT stops as indicated in the official records (matching other sources),

- 2 PPT piers, as indicated in the multimodal scheme. These are: the Izola customs pier and the Simon's Bay pier.

The connections to other sustainable mobility elements (cycling and walking networks, bicycle stops, multi-modal points and other transport infrastructure elements) are shown in the multimodal scheme maps (source: PNZ, 2019), which are attached at the end of the chapter.

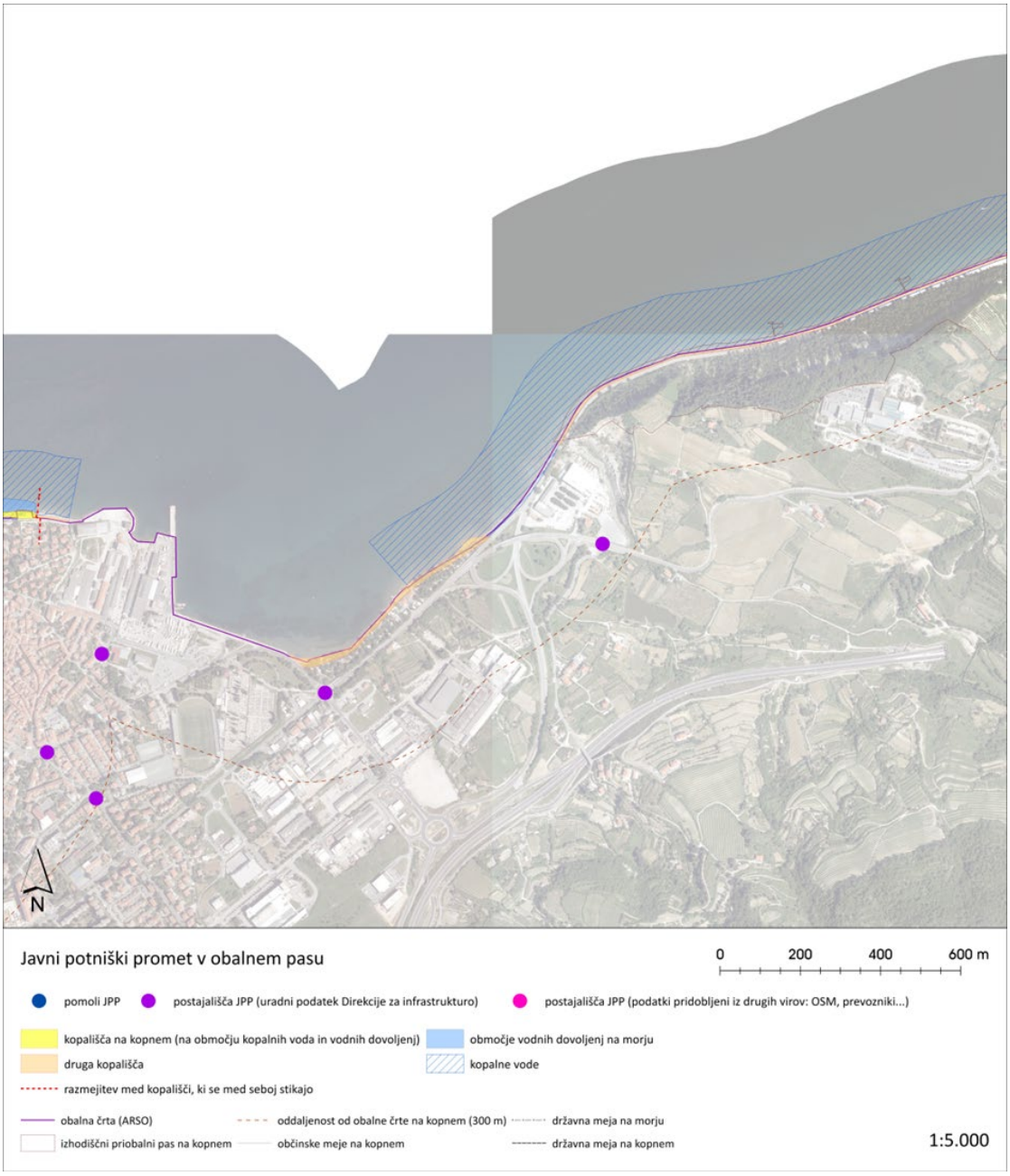


Figure 35: PPT stops in the Municipality of Izola (5).

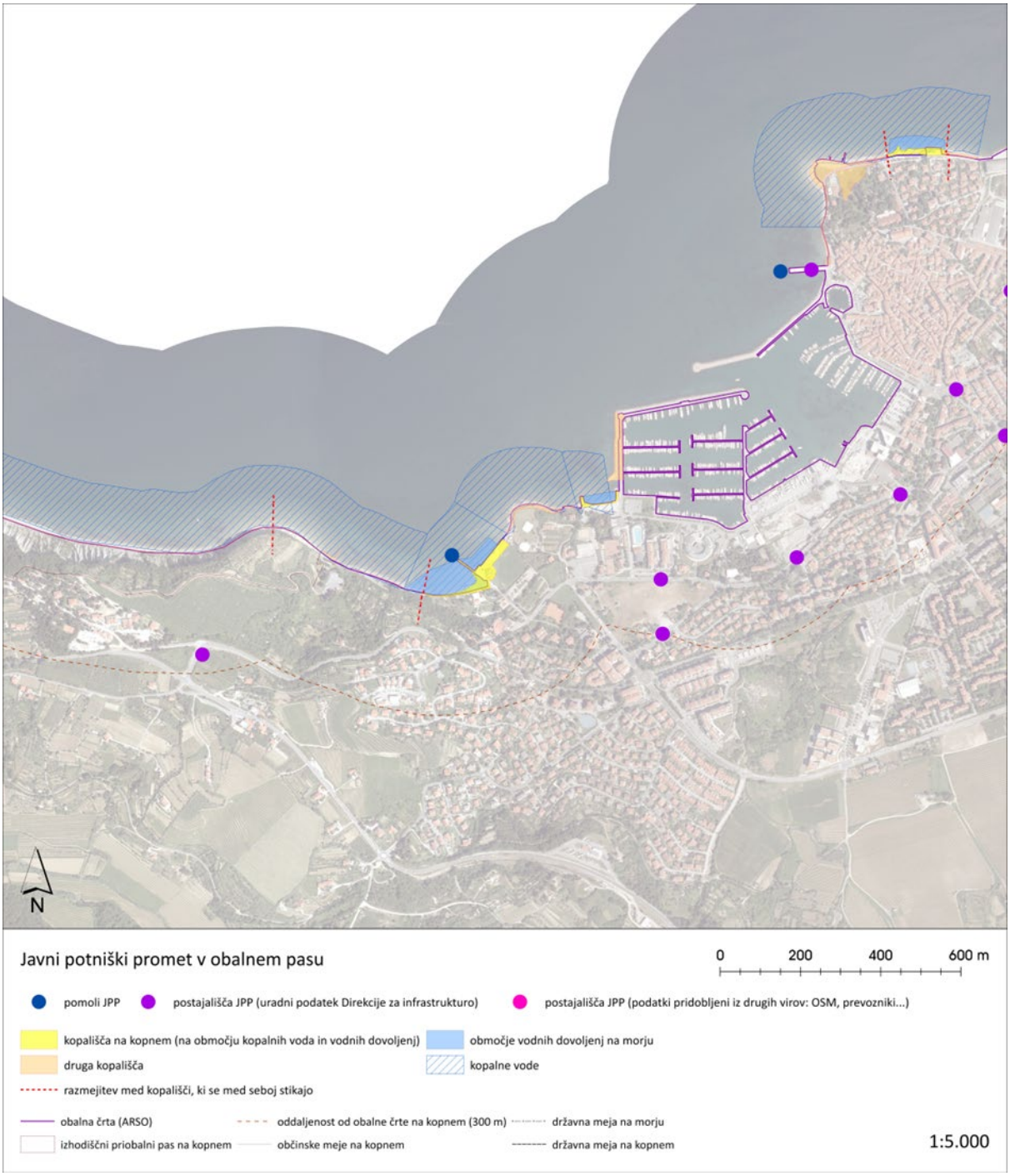


Figure 36: PPT stops in the Municipality of Izola (6).

Municipality of Piran

In the Municipality of Piran, we have recorded (Figures 37, 38, 39):

- 14 PPT stops (2 of them outside the subject corridor), as indicated in the official records, and an additional 8 PPT stops, based on other sources,

- 7 PPT piers, as indicated in the multimodal scheme. These include: Strunjan, Fiesa, Piran, Bernardin, Portorož, Marina (Portorož) and Seča (Ribič). The connections to other sustainable mobility elements (cycling and walking networks, bicycle stops, multi-modal points and other transport infrastructure elements) are shown in the multimodal scheme maps (source: PNZ, 2019), which are attached at the end of the chapter.

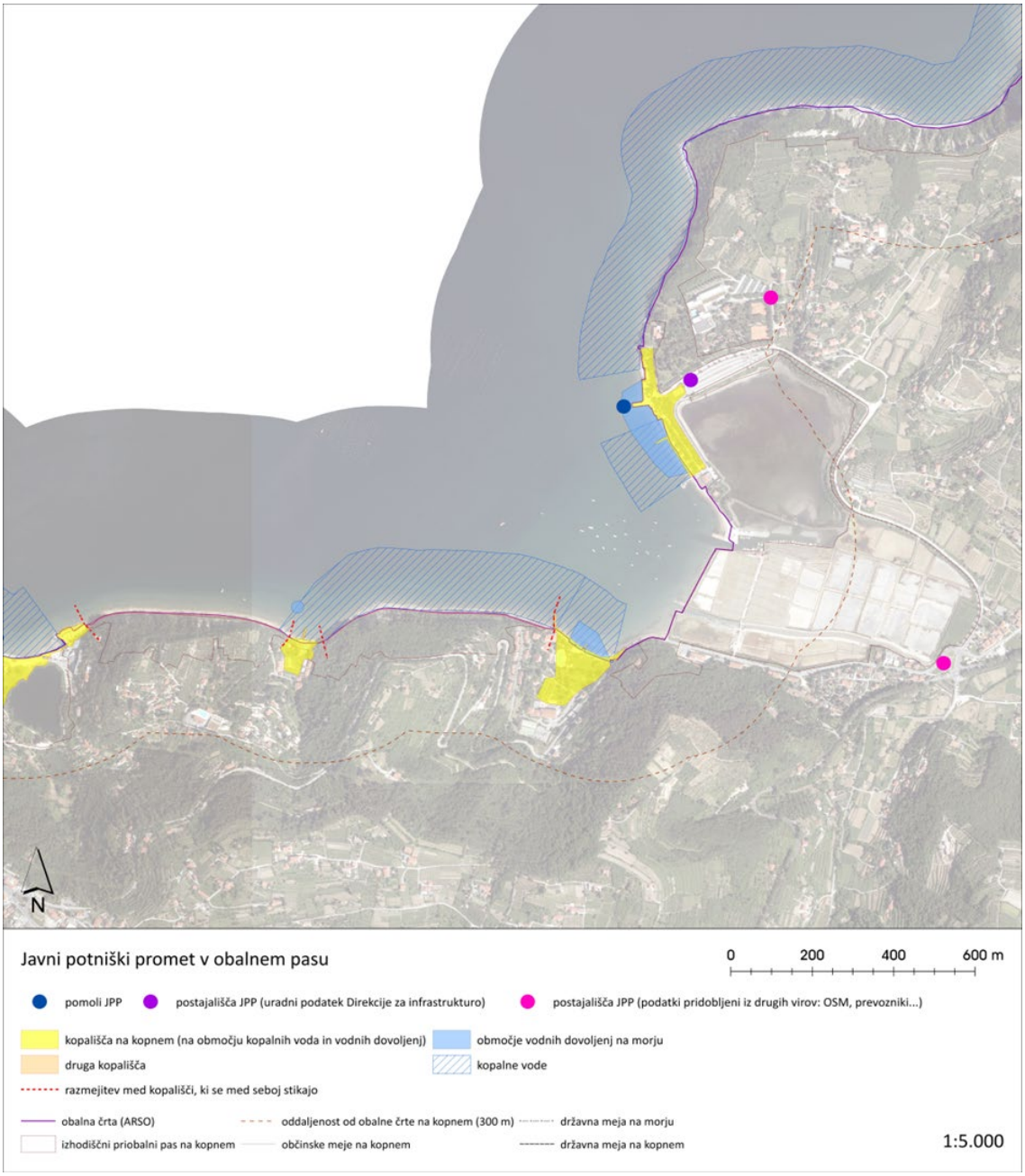


Figure 37: PPT stops in the area of the Municipality of Piran (7).

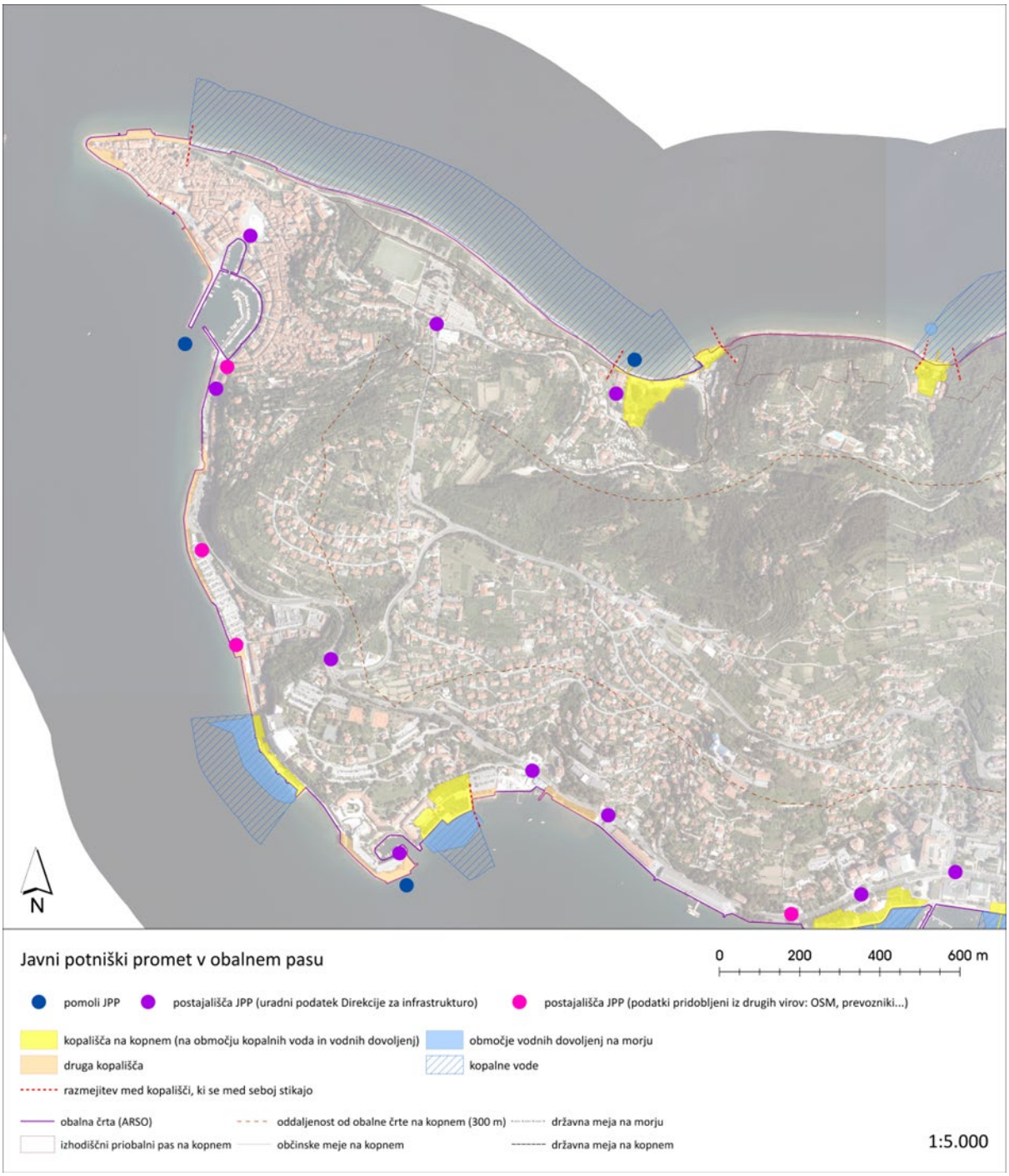


Figure 38: PPT stops in the area of the Municipality of Piran (8).

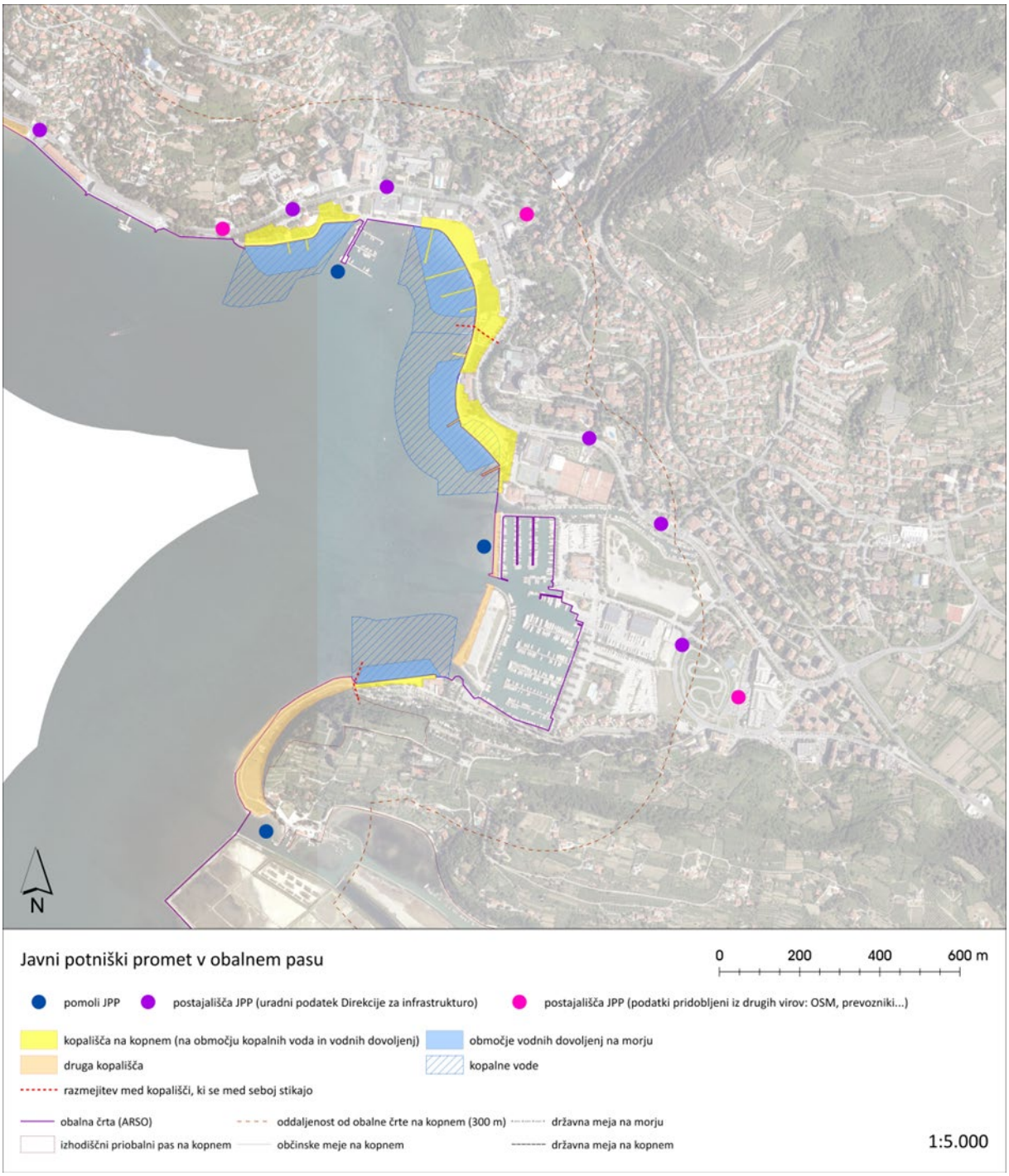
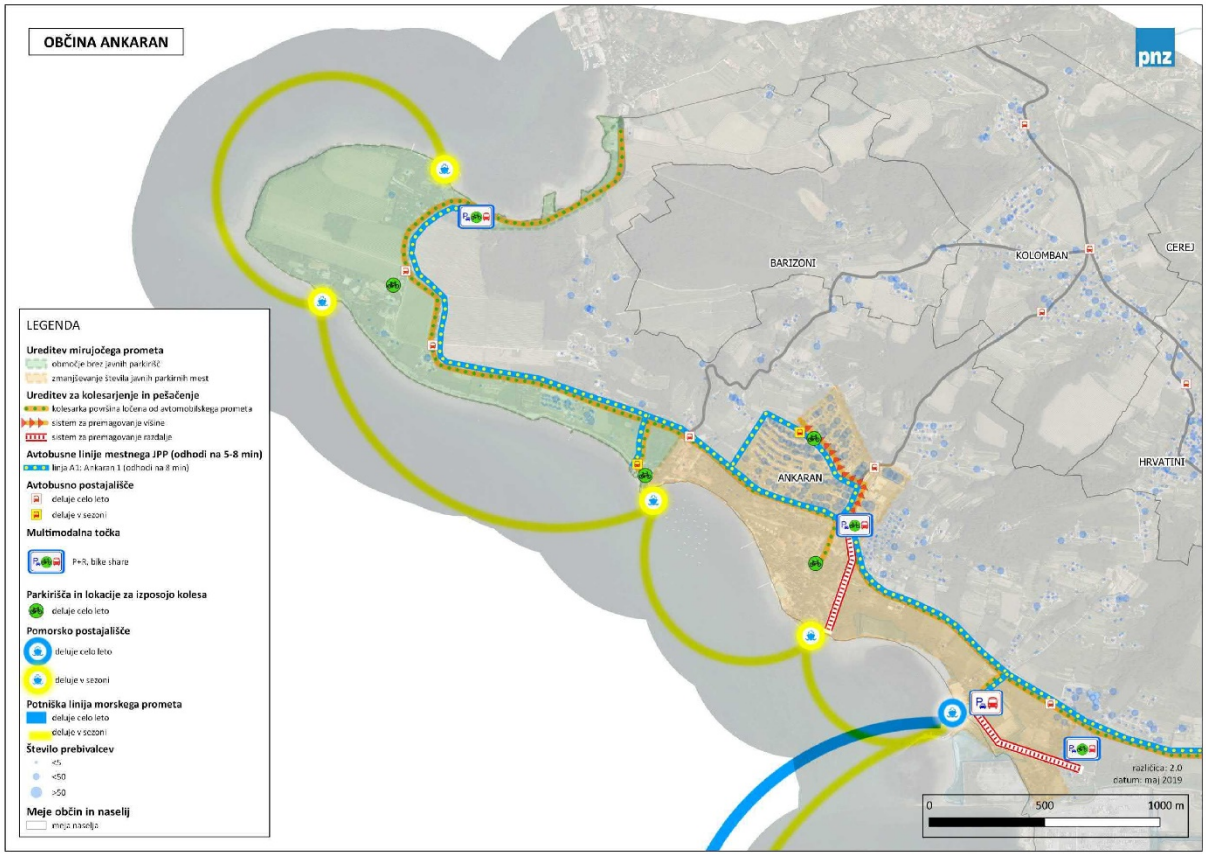
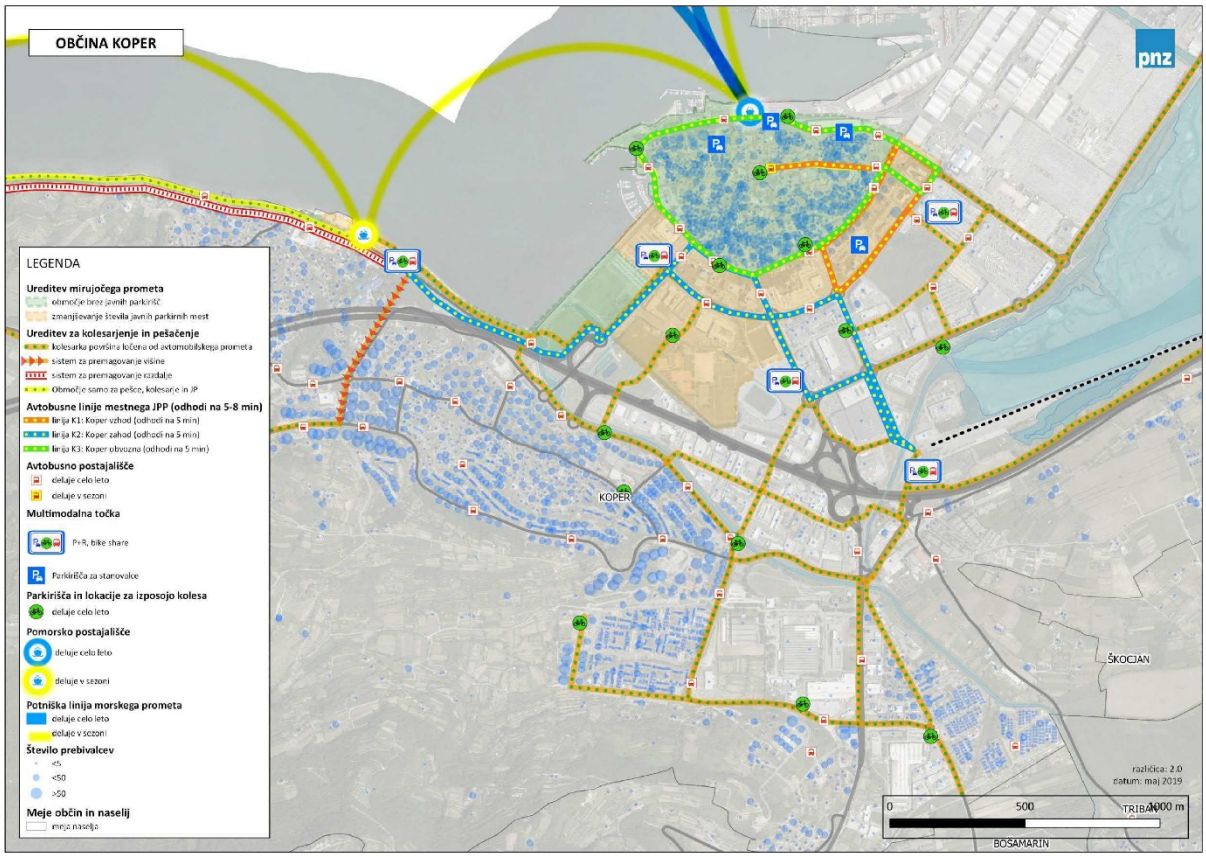


Figure 39: PPT stops in the Municipality of Piran (9).

Annex:

→ Proposal for spatial solutions for the development of sustainable mobility, source: Multimodal scheme (PNZ, 2019)




OBČINA KOPER
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zmanjševanje števila javnih parkirnih mest
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kolesarska površina ločena od avtomobilskega prometa
sistem za premagovanje višine
sistem za premagovanje razdalje
Območje samo za pešce, kolesarje in JP
Avtobusne linije mestnega JPP (odhodi na 5-8 min)
linija K1: Koper vzhod (odhodi na 5 min)
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linija K3: Koper obvozna (odhodi na 5 min)
Avtobusno postajališče
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Parkirišča za stanovalce
Parkirišča in lokacije za izposojo kolesa
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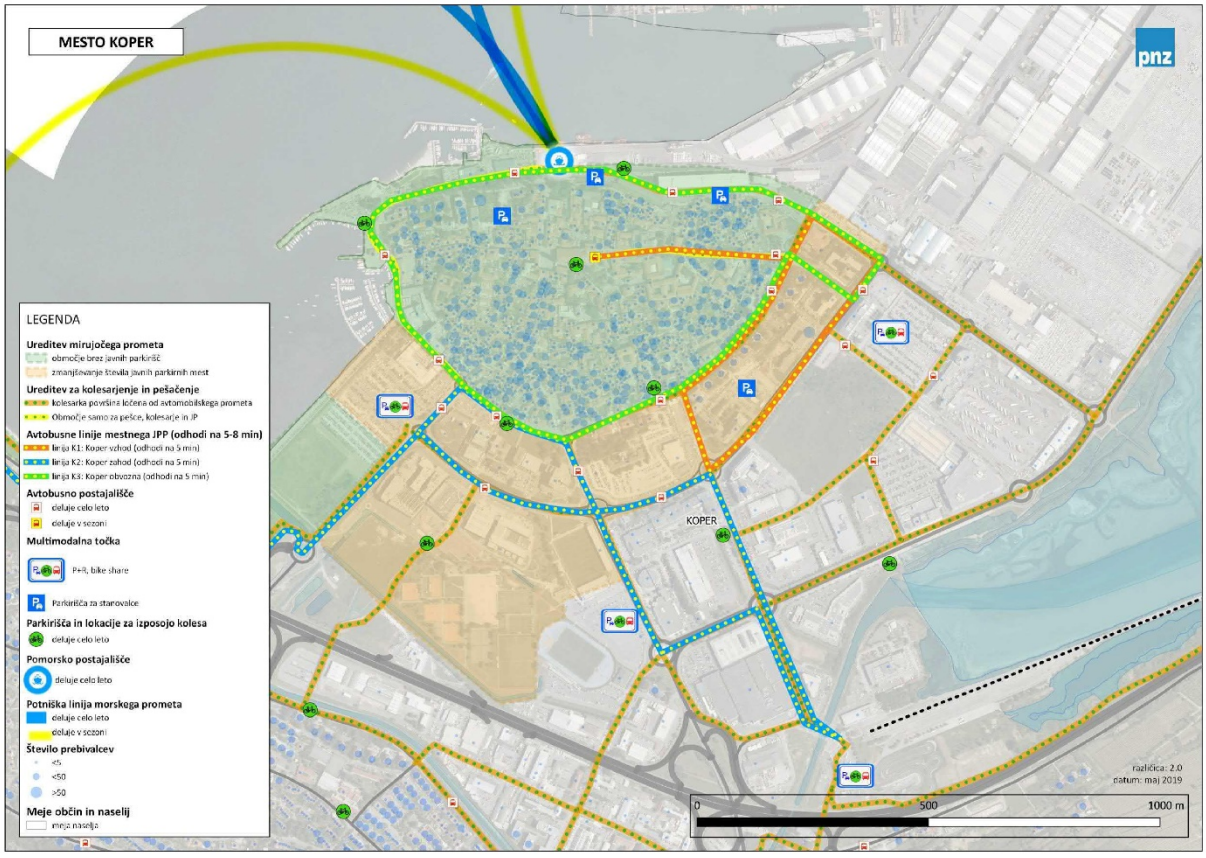
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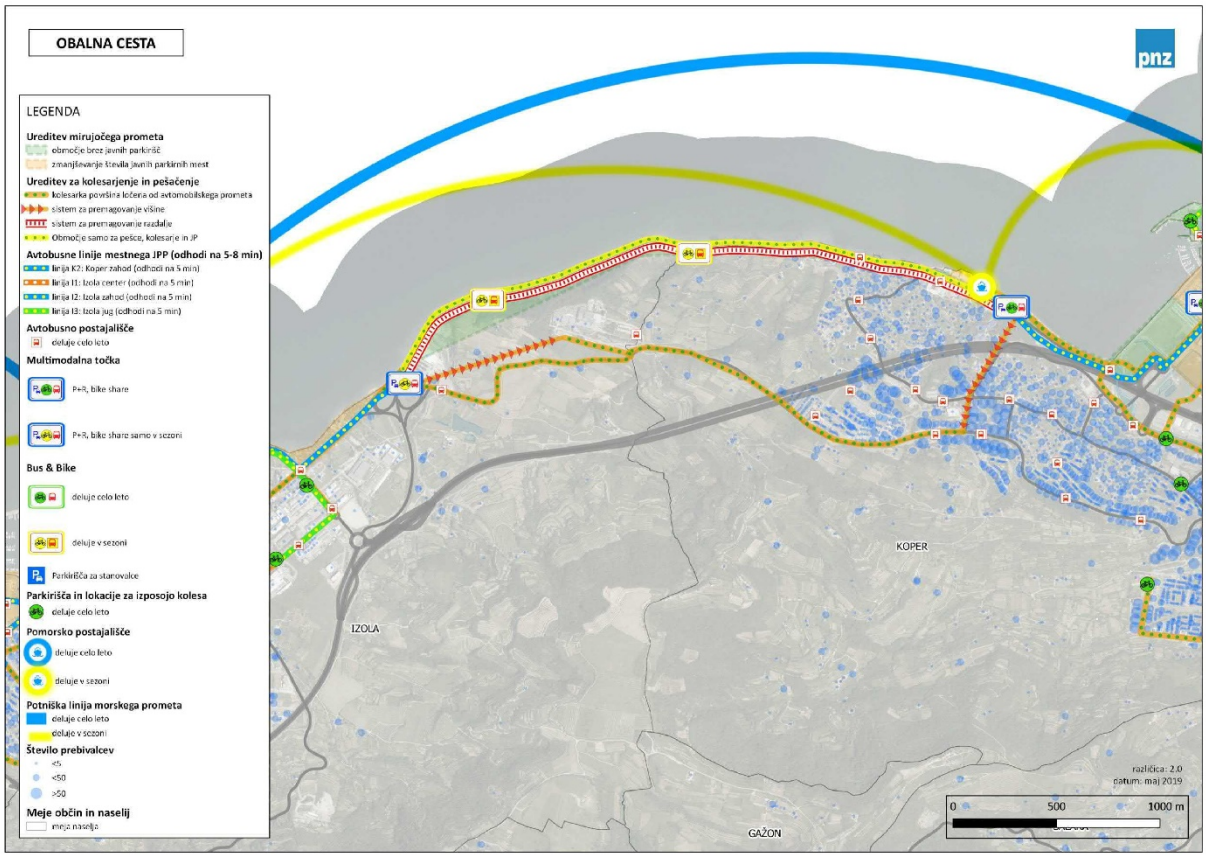
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linija I1: Izola center (odhodi na 5 min)
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Bus & Bike
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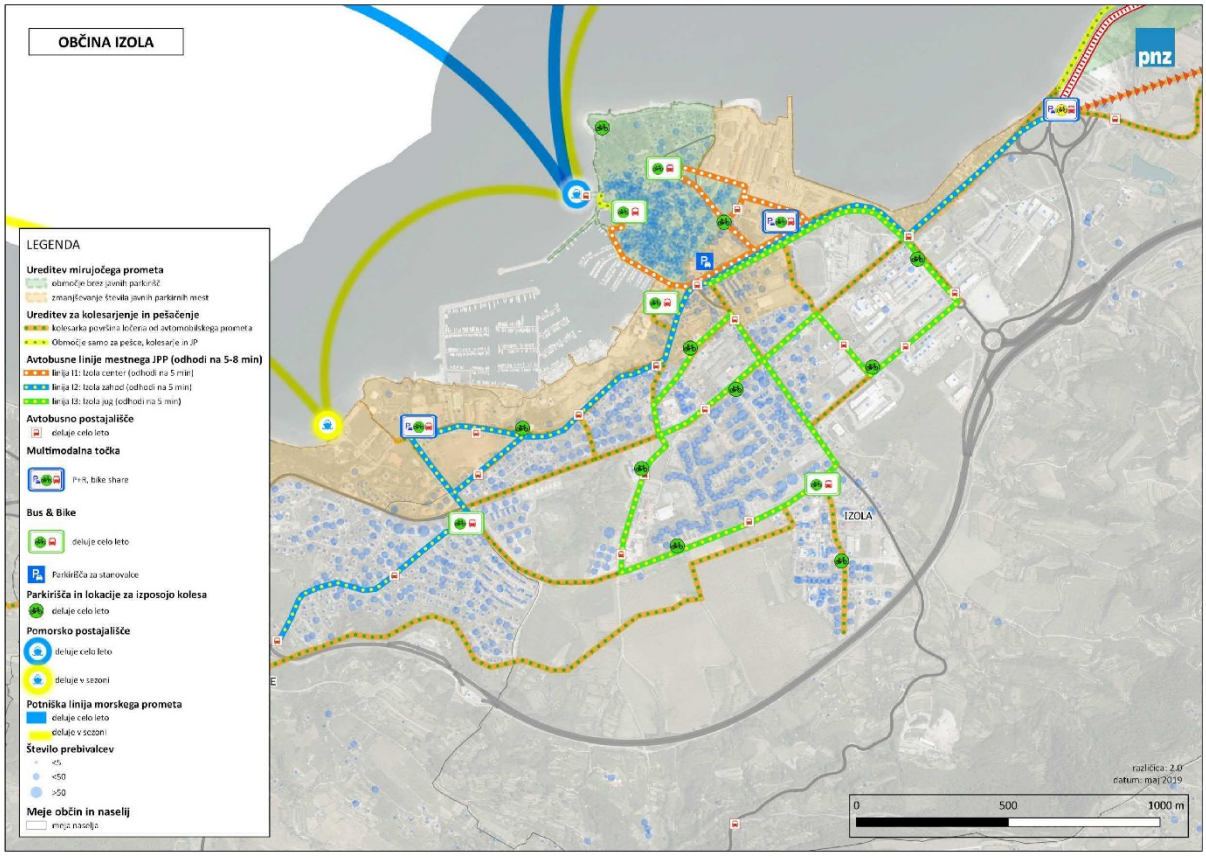
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P+R, bike share
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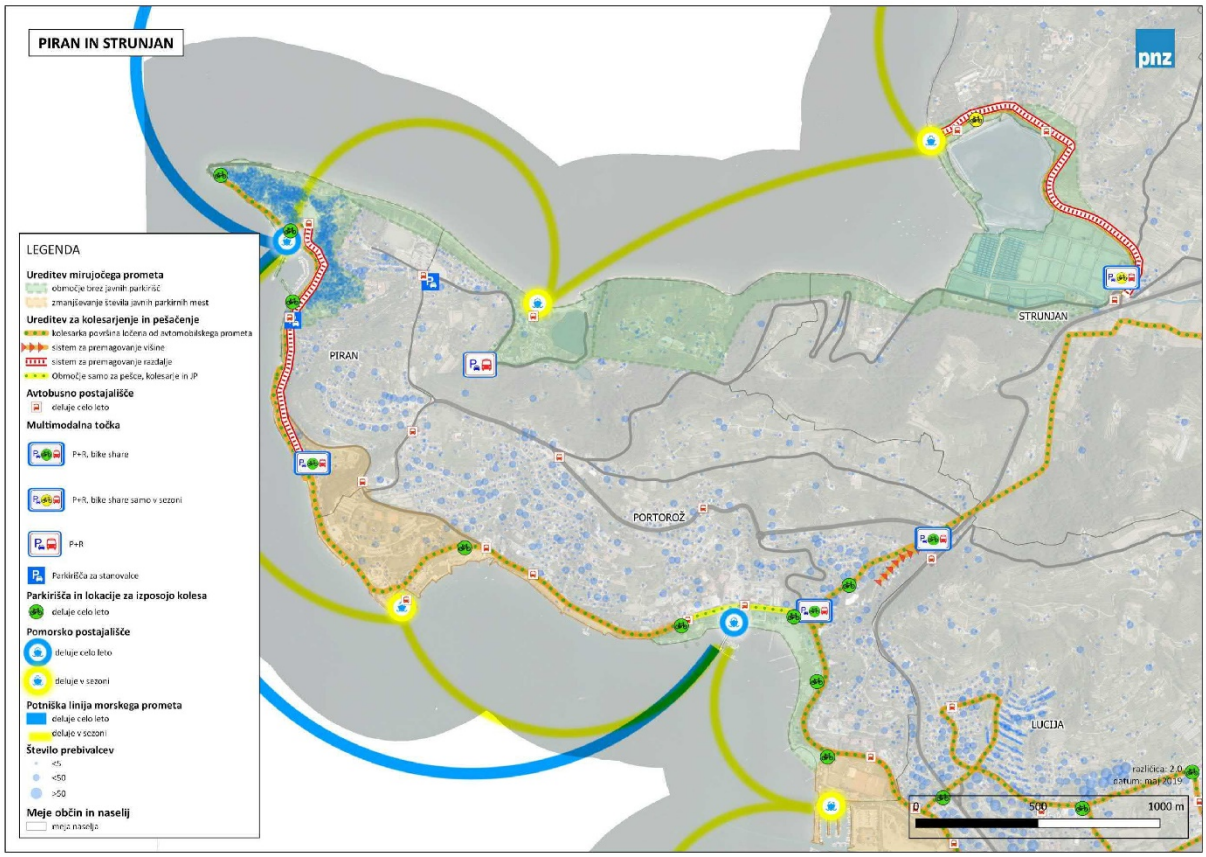
PIRAN IN STRUNJAN
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Območje samo za pešce, kolesarje in JP
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P+R, bike share samo v sezoni
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Parkirišča za stanovalce
Parkirišča in lokacije za izposojo kolesa
deluje celo leto
Pomorsko postajališče
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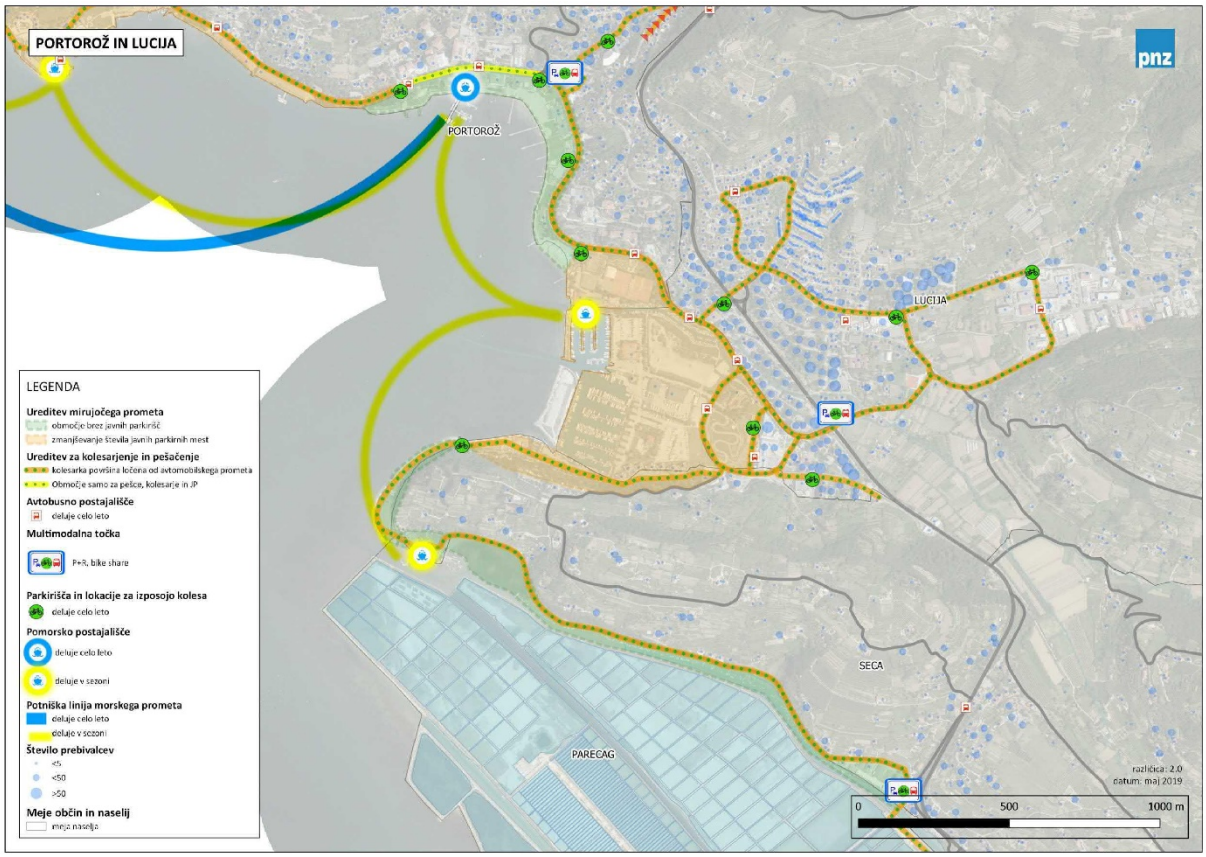
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P+R, bike share
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5.8 Existing capacities

In the area of PPT stops, it was possible to record their location and number on the basis of the above.

Table 18 provides synthesised data, indicating that the total number of all PPT stops in the corridor is **67**, and the number of PPT piers is **16**.

Table 18: summary overview of all public parking areas and parking spaces in the 300 m coastal strip.

	NO. OF PPT STOPS ON LAND (IN THE 300 M ZONE)		NO. OF PPT STOPS AT SEA (PIERS)
	Source: Infrastructure Directorate of the RS	Source: Open Street Map and carriers (total)	Source: multimodal scheme (2019)
Municipality of Ankaran	4	5	5
City Municipality of Koper	13	12	2
Municipality of Izola	11	-	2
Municipality of Piran	14	8	7
Total:	**42**	**25**	**16**

► In order to accurately determine the actual capacities or connections between onshore and offshore PPT stops and bathing sites (a necessity in determining the cumulative carrying capacity of the area), a proper determination of the actual connections between the users of the stops and their coastal destinations (bathing sites or other points of interest) will need to be carried out.

5.9 Database - PPT stops

The database has been prepared in SHX format and is attached to this report.

5.10 Maritime passenger transport infrastructure

5.11 Overview and analysis of the current state (UZP RS records)

Within the scope of this project, only PPP data and multimodal scheme data were available to us in the field of maritime passenger transport infrastructure. See Chapter 5.2 for details in this respect.

5.12 Review of the legal status of the infrastructure (use permit),

As part of the data collection process, we obtained the "Register of ports and piers" for the coastal area covering all four municipalities from the "Maritime Administration of the Republic of Slovenia". The register lists two categories of ports and piers: a) Ports with an assigned status and b) Other harbours (mandrači), piers and berths. The register provides the following information:

1. Name (of the port);
2. Operator;
3. Description (status);
4. Municipal ordinance, operating permits, etc.
5. Footnote or reference to the document(s) concerned

The records show that for a number of ports and other areas or facilities, not all data is (yet) available, or that all the locations do not (or not yet) have a relevant Municipal Ordinance to regulate them, or lack an operating permit, etc. The following can be gathered from the records:

a) Ports (with a status), 21 in total, of which:

- 1 x port for international traffic
- 1 x port for international and domestic public transport (also: local port)
- 1 x port for public transport (also: local port)
- 1 x public urban port (also: local port)
- 1 x urban port (also: fishing port)
- 3 x fishing port
- 2 x harbour or mandrač (for the berthing, maintenance and storage of vessels)
- 1 x local harbour or mandrač (for the berthing, maintenance and storage of vessels)
- 2 x local port
- 1 x local and public harbour
- 1 x recreational port
- 3 x tourist port
- 1 x special-purpose port
- 2x (no special status/description)

b) Other harbours (mandrač), piers and moorings, 15 in total, of which:

- 2 x docking facility foreseen
- 2 x intended as a port
- 1 x local port
- 2 x bathing pier
- 1 x pier
- 1 x port for visitors to the salt pans
- 6 x (no specific status/description)

The above indicates that there is a wide variety of terminology in this area as well, with regard to the name and purpose of a particular port (pier, mandrač, etc.). It is also evident that many of the locations are still under development, both in terms of spatial design and administrative status. The annex to the report provides a detailed record with reference to the documents concerned.

5.13 Existing capacities

See chapter 5.2.

5.14 Future needs assessment and possible solutions

In the course of the preparation of this project (as well as all the previous ones), in our discussions with representatives of the local communities (and the Slovenian Maritime Administration), we have repeatedly pointed out that those ports (and other sites; harbours, piers, etc.) that still have no proper spatial planning and administrative status, need to be properly regulated. Considering the known “limitations of the marine environment” (already discussed in the process of preparation of the MSP, more detailed limitations will also be provided by the planned study regarding the carrying capacity of the marine environment), we conclude that there are virtually no more options available on the Slovenian coast for the planning of new ports, but rather for the proper dimensioning and regulation of existing ones. This task falls under the responsibilities of local authorities in the preparation of Municipal Spatial Plans and Municipal Detailed Spatial Plans (already defined in the MSP).

Although all four municipalities (the general public) have expressed an interest in installing new berths (especially in the area of municipal berths; see the lists of applicants in line for municipal berths), we believe that this is not feasible due to spatial and environmental constraints. There may be some solutions to this problem, such as the implementation of “dry moorings” in the hinterland, as well as the implementation of individual solutions, as outlined in the Multimodal Scheme for the development of maritime public passenger transport and multimodal points.

5.15 Database - maritime passenger transport infrastructure

There may be some solutions to this problem, such as the implementation of “dry moorings” in the hinterland, as well as the implementation of individual solutions, as outlined in the Multimodal Scheme for the development of maritime public passenger transport and multimodal points. The multimodal scheme proposal may also be taken into account, although individual solutions have not yet been implemented in the spatial planning acts of the individual municipalities (See chapter 5.2 and annex Port Register of the Maritime Administration).

6 Stakeholders

6.1 Identification of the stakeholders

In the process of developing the present project, we have identified various stakeholders who:

a) acquire, store and manage spatial data,
b) keep the data up-to-date,
c) commission and/or monitor projects for the planning of interventions in the coastal strip,
d) manage public car parks, public passenger transport, bathing sites and beaches and related data,
e) make decisions on spatial development.

Within the scope of this project, we have identified the following as key stakeholders that have a significant impact on the information support for the implementation of maritime spatial planning in the coastal strip:

- representatives of local communities (coastal municipalities) who manage data related to land-use planning, spatial planning, bathing sites, public car parking areas and public passenger transport,
- stakeholders acting as plan makers (spatial projects at strategic and implementation level),
- the branches and departments of the relevant ministries, in particular the Ministry of Infrastructure, the Maritime Administration of the RS, and the Ministry of the Environment and Spatial Planning,
- public companies that operate beaches, public parking areas and public passenger transport: JP Marjetica Koper, JP Komunala Izola, d.o.o., JP Okolje Piran, d.o.o.,
- representatives of other organisations or services related to spatial development, tourism, transport and maritime affairs, such as local tourist boards.

7 Conclusion

In light of all the above, the following conclusions can be drawn with regard to the provision of information support for the implementation of municipal tasks under the MSP and spatial planning in the coastal strip:

- there is a significant lack of terminological clarity in the available (official) data on bathing sites,

- the main point to note is that the size (number and capacity) of bathing sites recorded in official records (ARSO: Atlas of Waters, bathing water profiles, etc.), is significantly lower than the actual situation in the area. The areas where bathing activities are also carried out are almost twice as large in terms of area. Presumably, this is due to the smaller number and scale of bathing sites in the municipalities of Ankaran, MOK (City Municipality of Koper) and Izola, which are recorded in official records. In these three municipalities, the bathing sites recorded in the official records are mainly those linked to direct urban and tourist use, or those recorded adjacent to urban centres or individual tourist facilities. In some cases, however, only the parts of the bathing areas that are actually used are recorded in the official records. In the Municipality of Piran, the use of bathing sites for tourism is more pronounced and the proportion of bathing sites recorded in official records is higher. However, the municipality of Piran also has a larger number of other bathing sites, particularly in the area of Piran and Fornače as well as in the Seča area, which are not registered in the official records, despite being used for both urban and tourist purposes,

- the areas of bathing sites or beach areas that we have recorded do not reflect/reflect ownership, land-use or any other legal regimes. These areas have been recorded solely to assess the state of the area, in collaboration with the managers and representatives of the local communities,

- the capacity of bathing sites and beaches was calculated according to the Rules for protection against drownings, which provide for a bathing area of 7m^2 / bather. The actual capacity of a bathing site or beach area depends on the beach type (urban, natural) and the expected level of privacy, natural vulnerability, morphology (rocky, concrete, sandy beach), the provision of bathing infrastructure and other factors,

- the analysed strategies predict a moderate increase in the number of tourists and visitors. However, we estimate that needs for beach areas will increase further by 2030, especially due to the expected steady increase in the number of tourists and day visitors,

- based on an analysis of the scale of bathing sites, beaches, bathing areas and other areas used as beach areas, particularly in the summer months, we find that virtually all the areas already currently in use include:

- areas not used for other mutually exclusive activities, e.g. maritime transport, ports, mariculture, municipal berths, marinas, shipbuilding, defence and other activities;
- areas that are suitable for bathing in terms of morphology, i.e. they have at least a sufficient coastal zone to allow access to the sea, sunbathing and other activities,
- areas that are reasonably accessible, either from land or sea.

- in terms of additional potential (new bathing sites), we have identified only three areas directly along the coastline in Koper, Izola and Strunjan, where potential beach surfaces could be expanded,

- in our view, the content of tourism strategies should focus even more on the amenities, accessibility and attractiveness of beach areas rather than on their expansion. New mobility schemes between urban centres, mobility points and beaches should be developed as a priority,

- it is our assessment that until a substantial change is made to the mobility or transport scheme, including transit options to the beaches, the only beaches eligible for development, new infrastructure or expansion are urban beaches, i.e. beaches that can reasonably be expected not to generate additional traffic flows, and can be reached by pedestrian, bicycle or public passenger transport,

- we find the existing bathing water areas, which in some locations are interrupted in the segments where bathing activities are effectively taking place, to be ill-conceived (example: the Municipality of Piran). We recommend the regulation of the legal regimes,

- in terms of data related to parking areas (all, public and private) and public passenger transport, the key challenges identified were the fragmentation of records, the lack of data accuracy and the undefined system of seasonal and off-seasonal regimes,

- most of the parking areas we have recorded are not specifically designed to provide parking for beaches but rather for urban and other activities. One exception are individual parking areas outside urban centres, which are mainly used by beach goers. These are the parking areas at Debeli rtič, Adria, Žusterna, Strunjan, Fiesa and Seča,

- most of the parking areas we have recorded are not specifically designed for transit to the beaches. The exceptions are the stops in the area of Lazareto, Žusterna, Strunjan, and in summer also Bernardin and Portorož.

- sea public passenger transport stops are not yet in operation or only operate occasionally,

- in the field of sustainable mobility development, we have recorded both projects that have already been implemented and those that are still in the planning phase. While sustainable mobility has, in our assessment, moved beyond the initial phase, a number

of projects and regimes will still need to be implemented to develop an integrated network and deploy effective measures.

We estimate that the data collected on the sizes and capacities of bathing sites and beach areas, as well as the data collected on public parking and public passenger transport stops, can be used as one of the pieces of input data for the preparation of the Carrying Capacity Assessment of the Marine and Coastal Area for tourism and for the preparation of the Cumulative Impact Assessment.

The new, synthesised databases resulting from this project provide a reliable starting point for the assessment of individual capacities. In this respect, they can be a valid tool for calculating the cumulative capacity of a given area for tourism, but as such they are of course only part of the data needed to produce accurate and analytically supported results.

The synthesised list of all bathing sites, their sizes and their names, represents the first database of its kind. Naturally, certain deviations or errors are possible, but the list will continue to be expanded and profiled in the future.

Further targeted studies will be required to identify the connections and functional connectivity between bathing sites and public and other parking areas, onshore and offshore public transport stops, multi-modal points and other elements of sustainable mobility infrastructure.

The sizes of bathing sites and beach areas used for bathing have been estimated with a reasonable degree of accuracy. For the purpose of this task, we have calculated the capacity of bathing sites and beaches according to the Rules for protection against drownings, which provide for a bathing area capacity of 7m^2 / bather. Estimates from literature suggest that a single bather needs between 5 m^2 and 20 m^2 of surface area. The views of those involved in the project go as far as estimating that, for example, only 3 to 4 m^2 per swimmer are needed on urban beaches. The actual capacity of a bathing or beach area depends on various factors, as explained in detail in the task. For the purposes of this task, we have used a capacity of 7 m^2 / bathers, which we consider to be a sufficiently sound baseline.

8 Presentation of the Results – Report

The final presentation of the results of the project was carried out at the meeting of the "Working Group for the Implementation and Monitoring of the Maritime Spatial Plan of Slovenia" on September 9, 2022 in Izola), which was attended by representative stakeholders. In addition to representatives from all four coastal municipalities, representatives from key institutions,administrations and ministries were also present: Ministry of the Environment and Spatial Planning; Ministry of Agriculture, Forestry and Food; Ministry of Culture; Ministry of Infrastructure; Slovenian Maritime Administration; Ministry of Defence; Slovenian Administration for Civil Protection and Disaster Relief; Slovenian Water Directorate; Slovenian Nature Conservation Institute; Slovenian Institute for the Protection of Cultural Heritage; Slovenian Adriatic Sea Council; Slovenian Fisheries Institute; Izola Public Institute; Marine Biology Station Piran; and Port of Koper.

The presentation of the content and results of the MSP-MED project, WP3, took place in two parts. In the first part, Mr Slavko Mezek from the RRC Koper introduced the SME-MED project and explained that it was funded by the EU Maritime and Fisheries Fund. He underlined that the objective is to facilitate maritime spatial planning procedures, to provide support for the implementation of the plan and to enable partners (including non-EU countries) to participate.

As Slovenia had already prepared and adopted a MSP, the Slovenian contribution was mainly focused on the coastal strip. Mr Mezek informed the participants that the WP3 integral report "Information Support for Maritime Spatial Planning at Local Level: Spatial Planning in the Coastal Strip" is publicly available on the RRC Koper website and invited them to review the report and, if relevant, to send any comments to the RRC Koper e-mail address.

He also took the opportunity to announce the bilateral meeting of the partners of the Slovenia-Italy project MSP-MED-NORTHERN ADRIATIC, which will take place on 21 September 2022 in the framework of the Mediterranean Coast Week.

In the second part, Mr Gregor Čok, the representative of the authors of the project, explained the scope of the project and presented some of the results in more detail. He pointed out that, compared to the preparation of the MSP, this task was carried out on a more detailed level. It covered bathing areas, parking facilities and infrastructure for public passenger transport (PPT). In order to arrive at a reliable assessment of the capacity of the Slovenian coastline as a whole in terms of the number of bathers, an inventory of all bathing sites (or bathing areas, both those in the official records and all others) was conducted. On the basis of the registered bathing sites, the next step was to estimate the capacity, using the approach of calculating the beach area and the prescribed standard of 7 m 2 /bather (in accordance with the current bathing site operation regulations).

In addition, the authors have also identified potential future locations for new bathing sites (as potential backup locations). He pointed out the terminological inconsistency between what is considered a “beach” and what is considered a “bathing site”. A total of 46 sites used as bathing areas were recorded. The municipality of Piran has the largest number of “official” bathing sites.

According to the official ARSO records, the bathing sites can accommodate 14,400 bathers. However, the study concluded that the capacity of the total number of bathing sites (or bathing areas) is significantly higher, i.e. 42,700 bathers. The authors noted that virtually all areas where there are no specific restrictions in place are already used for bathing, and estimated that the number of bathers will continue to increase over the coming years. It was therefore suggested that the existing beaches in particular (from the official records) should be regulated and improved both in terms of quality and logistics. They identified 4 locations as “possible backup locations” where bathing facilities could eventually be installed, namely in Koper near the main pier, in Izola near the Jadranka campsite, in Strunjan above Stjuža and in Ankaran (Valdoltra).

The chapter on the assessment of tourism development in each coastal municipality was also presented. The various development strategies indicate that virtually all the municipalities are anticipating and planning for a moderate increase in tourist arrivals. However, the data are not sufficiently precise to provide an exact numerical estimate (e.g. increase in the number of visitors, overnight stays, bathers, etc.).

As regards maritime public passenger transport and public parking on land, Mr Čok drew attention to the already developed “Multimodal Sustainable Mobility Scheme”, which has recently been prepared in cooperation with all 4 coastal municipalities. This project has provided the relevant expert basis or supporting documentation for the implementation of the MSP in the coastal strip and for the preparation of other spatial planning acts at local level.

Mr Čok concluded by stating that the results of this project constitute a reliable baseline for further steps in the planning of interventions in the coastal strip and, more importantly, a baseline for the ongoing project “Assessment of the Acceptability and Cumulative Effects of Activities in the Maritime Area”. The detailed record of all bathing sites and bathing areas and the assessment of bathing capacities for the entire coastline is virtually the first of its kind in Slovenia.

The record of all bathing sites and assessment of their capacities is not the only tangible result of the MSP-MED project, as it also produced a database in SHX format (multiple layers), which is accessible to all potential planners or users.

The presentation was followed by a discussion. It focused mainly on how the results could be used inthe implementation of the MSP. The representative of the Municipality of Izola drew attention to the wide variety of bathing sites and suggested that the next steps should be to define their respective typology in terms of which bathing sites have an urban or city character and which do not. The type of bathing site affects the supporting infrastructure and, consequently, its capacity, i.e. the standard in terms of

m2 of surface area required per bather. The representative of the Water Directorate of the Republic of Slovenia commended the authors for producing a registry of all bathing sites and highlighted the necessity for further steps to be taken to monitor and regulate bathing activities in these areas. From the point of view of the Directorate, this is vital information for limiting coastal and marine pollution and for establishing a system for monitoring bathing water quality.

The discussion also emphasised the importance of taking into account the existing MSP when proposing the designation of new bathing waters and the cancellation of existing bathing waters. All participants agreed that the fundamental purpose of the MSP, which is to coordinate activities and uses on land and at sea, should be rigorously observed in these procedures.

9 Sources and Literature

- Environmental Atlas of Slovenia - ARSO Geoportal, https://storitve.pis.gov.si/pis-jv/informativni_vpogled.html.
- Atlas of Waters – DRSV Geoportal, https://gisportal.gov.si/portal/apps/webappviewer/index.html?id=11785b60acdf4f599157f33aac8556a6).
- EcAp-based marine vulnerability assessment as a basis for MSP in Montenegro, https://maritime-spatial-planning.ec.europa.eu/practices/ecap-based-marine-vulnerability-assessment-basis-msp-montenegro.
- Guide to Good Practice in Tourism Carrying Capacity (TCC) Assessment, *Zoran Klarič,* https://www.researchgate.net/publication/305781936_Guide_to_Good_Practice_in_Tourism_Carrying_Capacity_Assessment.
- Geodetic Institute of Slovenia: Prikaz stanja prostora za slovenski del Jadranskega morja in obalo, 2019.
- INSPIRE: Direktiva 2007/2/ES Evropskega parlamenta in Sveta z dne 14. marca 2007 o vzpostavitvi infrastrukture za prostorske informacije v Evropski skupnosti (INSPIRE), http://data.europa.eu/eli/dir/2007/2/oj.
- Locus: Krajinska zasnova Ankaran, Obalni pas Ankaran in Ankaran zaledje, 2017.
- Ministrstvo za okolje in prostor: Profili kopalnih voda na morju, https://www.gov.si/teme/kopalne-vode/.
- Ministrstvo za okolje in prostor: Profili kopalnih voda na morju, https://www.gov.si/teme/kopalne-vode/.
- Ministrstvo za okolje in prostor, Agencija RS za okolje, 2022. Kakovost kopalnih voda v Sloveniji – Poročilo za l. 2021, https://www.gov.si/assets/organi-v-sestavi/ARSO/Kopalne-vode/Porocilo-Kopalne-vode-2021.pdf.
- Naravovarstveni atlas Slovenije, Interaktivni geografski informacijski sistem, https://www.naravovarstveni-atlas.si/web/DefaultNvaPublic.aspx).
- Municipal Integrated Transport Strategies: Integrated Transport Strategy of the Municipality of Ankaran, Integrated Transport Strategy of the City Municipality of Koper, Integrated Transport Strategy of Izola, Integrated Transport Strategy of the Municipality of Piran.
- Decree on the Municipal Spatial Plan of Ankaran, 2020,https://obcina-ankaran.si/sl/zivljenje-v-ankaranu/obcinski-prostorski-nacrt/odlok-o-obcinskem-prostorskem-nacrtu.
- Decree on the Municipal Spatial Plan of the City Municipality of Koper, 2022,https://www.koper.si/wp-content/uploads/2022/02/11_odlok_cistopis.pdf.

- Rules on technical measures and requirements for safe operation of bathing sites and for protection against drownings at bathing sites (Official Gazette of the RS, No. 88/03, 56/06, 26/07 - ZVU-A and 84/07).
- Spatial Information System (SIS), http://www.pis.gov.si/).
- Maritime Spatial Plan of Slovenia, 2021, https://dokumenti-pis.mop.gov.si/javno/veljavni/PPP2192/index.html.
- Regional Strategy for Sustainable Tourism Development 2006-2012, summarised by: Hosting d.o.o., December 2006, CAMP, RRC/RRA, https://www.rrc-kp.si/sl/projekti/referencni-projekti/18-uncategorised/114-regionalna-strategija-trajnostnega-razvoja-turizma.html.
- Regional Development Programme of the Obalno-Kraška Region for the period 2021-2027. https://www.rrc-kp.si/images/stories/RRP_obalno-kra%C5%A1ka_2021-2027_4.5.2022.pdf.
- Spatial Development Strategy of Slovenia 2050 (draft),https://www.gov.si/assets/ministrstva/MOP/Dokumenti/Prostorski-razvoj/SPRS/SPRS-2050_gradivo-za-javno-razpravo.pdf.
- Strategy for the Sustainable Growth of Slovenian Tourism 2017 - 2021.
- Tourism Development Strategy for the Municipality of Ankaran (no municipal strategy, short presentation on the municipal website, TIC Ankaran).
- Strategy for the Development and Marketing of Tourism in the City Municipality of Koper until 2025 (proposal).
- Strategy for the Development of Tourism in the Municipality of Piran until 2025 (proposal).
- Trošt, D.: Feasibility study for multimodal transport systems, Transport Study. 2019.
- Sustainable Urban Strategy of Koper,https://www.koper.si/wp-content/uploads/2021/03/TUS-novelacija-2030.pdf.
- Water cadastre (hydrological, hydraulic studies) - e-water, http://www.evode.gov.si/index.php?id=84).
- Water Register - Portal of the Slovenian Water Agency (DRSV), https://www.kingprostor.si/blog/vodna-knjiga/).
- Water Act (Official Gazette of the RS, No. 67/02, 2/04 – ZZdrI-A, 41/04 – ZVO 1, 57/08, 57/12, 100/13, 40/14, 56/15 and 65/20).
- Spatial Management Act (ZUreP-2, Official Gazette of the RS; No 61/2017), http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO7341.
- Spatial Management Act (ZUreP-3, Official Gazette of the RS; No 199/21),https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2021-01-3971?sop=2021-01-3971.
- Nature Conservation Act (Official Gazette of the Republic of Slovenia, No. 96/04 - official consolidated text, 61/06 - ZDru-1, 8/10 - ZSKZ-B, 46/14, 21/18 - ZNOrg, 31/18, 82/20 and 3/22 - ZDeb), http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO1600#.

- Promotion of Tourism Development Act (ZSRT) (Official Gazette of the RS, No. 2/04, 57/12, 17/15, 52/16, 29/17 and 13/18).
- Zavita: Environmental Report for the Maritime Spatial Plan of Slovenia, Phase: updates after public consultation, 2021,https://dokumenti-pis.mop.gov.si/javno/veljavni/PPP2192/1/3_priloge/okoljsko_porociilo/OP_PPN_23122020_dopolnitve_20210604_cistopis.pdf.
- **Aggregated data / cadastres of stationary traffic of local communities:**
- public parking spaces in the Municipality of Ankaran - number and graphical representation: https://obcina-ankaran.si/sl/zivljenje-v-ankaranu/promet.
- public car parks in the City Municipality of Koper, https://podatki.gov.si/dataset/javna-parkirisca-v-mestni-obcini-koper/resource/a11a94f1-f82b-46ad-a3e3-6446c98cf85d.
- public parking spaces in the Municipality of Izola - locations on the flyer, https://podatki.gov.si/dataset/javna-parkirisca-v-obcini-izola?resource_id=5a591e05-0ce1-4405-ab6f-405e4e4d124b.
- public parking spaces in the Municipality of Piran: Car Park Study, 2019.
- **Aggregate data / cadastres of the tourism infrastructure for beaches managed by the local communities:**
- Municipality of Piran: calculations by area based on Article 19(3) of the Rules on Measures for Protection Against Drowning in Public Bathing Areas

10 Annex: databases

The databases are in SHX format.

11 Annex: Ports and piers (Maritime Administration)

KOPER

NO.	PORT	PORT OPERATOR	DESCRIPTION OF THE PORT	MUNICIPAL ORDINANCES, OPERATING PERMITS, ETC.	NOTE	FOLDER
1.	FREIGHT PORT OF KOPER	Luka Koper d.d. Vojkovo nabrežje 38, Koper	**port for international public transport**		Konc.pog. LK.pdf	LK.jpg
2.	CITY PORT OF KOPER	Public utility company Marjetica Koper, d.o.o. Ul. 15. maja 4. / KOPER (Teja Mahnič – Skrt 041 616 916)	a **city port**, used for the public transport of passengers and goods as well as for berthing, maintenance and storage of vessels; the **fishing port** is intended for fishermen to carry out fishing activities	Operating permit No. 373-15/2008/9, 10.08.2009 (MZP/URSP) valid for an indefinite period of time Port Ordinance No. 373-1/2009 of the City Municipality of Koper		Koper.pdf
3.	FISHING PORT OF KOPER	Public utility company Marjetica Koper, d.o.o. Ul. 15. maja 4. / KOPER (Teja Mahnič – Skrt 041 616 916)	**fishing port**	Operating permit No. 373-9/2012/xx 13.12.2013 (MZP/URSP) valid for an indefinite period of time Port Ordinance No. 373-1/2009 of the City Municipality of Koper		
4.		Public utility company Marjetica Koper, d.o.o. Ul. 15. maja 4. /		Operating permit No. 373-9/2012/40 26.05.2014		

Co-funded by the European Maritime and Fisheries Fund

	MANDRAČ at the mouth of the BADAŠEVICA	KOPER (Teja Mahnič – Skrt 041 616 916)	a **harbour** or "**mandrač"** for the berthing, maintenance and storage of vessels	(MZP/URSP) valid for an indefinite period of time Port Ordinance No. 373-1/2009 of the City Municipality of Koper		Badaševica.pdf
5.	KOPER MARINA	Marina Koper, d.o.o. Kopališko nabrežje 5, KOPER (A. Jakomin 030 333 850)	**tourist port**	Operating permit No. 373-15/2008/9, 10.08.2009 (MZP/URSP) valid for an indefinite period of time		See Koper.pdf above
6.	"ADRIA" PIER ANKARAN	Public utility company Marjetica Koper, d.o.o. Ul. 15. maja 4. / KOPER (Teja Mahnič – Skrt 041 616 916)	a **harbour** or **mandrač** for the berthing, maintenance and storage of vessels	Port Ordinance No. 373-1/2009 of the City Municipality of Koper	cadastral municipality OLTRA 1355	
7.	MANDRAČ VALDOLTRA	Public utility company Marjetica Koper, d.o.o. Ul. 15. maja 4. / KOPER (Teja Mahnič – Skrt 041 616 916)	**local port**	Operating permit No. 373-9/2012/39 26.05.2014 (MZP/URSP) valid for an indefinite period of time Port Ordinance No. 373-1/2009 of the City Municipality of Koper	cadastral municipality OLTRA 3/29	Ankaran.pdf
8.	ST. CATHERINE PIER AREA	Public utility company Marjetica Koper, d.o.o. Ul. 15. maja 4. / KOPER (Teja Mahnič – Skrt 041 616 916)	a local **harbour or "mandrač"** for the berthing, maintenance and storage of vessels	Port Ordinance No. 373-1/2009 of the City Municipality of Koper		

IZOLA

NO.	PORT	PORT OPERATOR	DESCRIPTION OF THE PORT	MUNICIPAL ORDINANCES, OPERATING PERMITS, ETC.	NOTE	FOLDER
1.	PORT OF IZOLA	Komunala Izola, d.o.o. Industrijska cesta 8, IZOLA (05/6634955)	NORTHERN PIER (customs) - **a public city harbour** intended for the public transport of passengers, the transhipment of fish and other goods, the refuelling of vessels, and the docking, mooring, anchoring and secure storage of vessels, as well as for the performance of customs and border control, MAIN HARBOR - a harbour intended primarily for fishing and mariculture vessels and, after 1 January 2021, also for other vessels. MANDRAČ - the southwestern section is a fishing harbour, intended for fishing and mariculture vessels; the northwestern section is a **local harbour**. THE TWO MANDRAČ PIERS - small northern pier of the “Mandrač” - from the east side a port intended for fishing vessels and mariculture vessels up to 8 m in length; small southern pier of the “Mandrač” from the east and west - a harbour intended for fishing berths, mariculture vessel berths, commercial berths, municipal berths, special-purpose vessel berths, fixed-term berths and day berths SUNNY SHORE HARBOUR (OB SONČNEM NABREŽJU) -	Operating permit No. 373-15/2008/1, 26.03.2008 (MZP/URSP) valid for an indefinite period of time Official publications of the Municipality of Izola No. 24-2.		Izola.pdf

			local port intended for day moorings, municipal and fixed-term moorings and special-purpose moorings			
2.	IZOLA MARINA	MarinaUp Izola, Porting d.o.o. Tomažičeva 4a, SI-6310 Izola, Slovenija Tel.: +386 5 66 25 400 Email: izola@marinaup.com (Marko Peruzin 041 653 119)	**tourist port**	Operating permit No. 373-15/2008/8, 23.05.2008 (MFA/URSP) valid for an indefinite period of time		
3.	IZOLA SHIPYARD	Ladjedelnica Izola Cankarjev drevored 23. IZOLA, Livjo Gropajc 051 357 054		**NO OPERATING LICENCE!**		Ladjedelnica-sklep.pdf

PIRAN

NO.	PORT	PORT OPERATOR	DESCRIPTION OF THE PORT	MUNICIPAL ORDINANCES, OPERATING PERMITS, ETC.	NOTE	FOLDER
1.	PORT OF PIRAN	Public company Okolje Piran, d.o.o. Arze 1b, PIRAN. (Egon Štibilj 041 860 390)	a port for **international and domestic public transport;** - a PIER which lies perpendicular to the pier for the international border crossing point and runs parallel to the coastal wall of the larger “mandrač”, with a length of 166 m; - International border crossing PIER a **local port** for the berthing and storage of vessels, set up in the form of communal moorings and comprising part of the small “mandrač” area and part of the large “mandrač” area	Operating permit No. 373-15/2008/3, 18.04.2008 (MFA/URSP) valid for an indefinite period of time	Odlok o pristanišču Piran - neuradno pr	Piran.pdf
2.	FISHING PORT OF KOPER STRUNJAN	Public company OKOLJE Piran, d.o.o. Arze 1b, PIRAN. (Egon Štibilj 041 860 390)	a **fishing port** intended for the berthing, mooring and secure storage of vessels, as well as for the embarkation and disembarkation of persons and cargo	Operating permit No. 373-17/2015/14 28.10.2016 (MZP/URSP) valid for an indefinite period of time (Strunjan)		Strunjan ribiško prist..gif
3.	FISHING PORT OF SEČA	Public company Okolje Piran, d.o.o. Arze 1b, PIRAN. (Egon Štibilj 041 860 390)	a **fishing port** intended for the berthing, mooring and secure storage of vessels, as well as for the embarkation and disembarkation of persons and cargo.	The area of the Seča fishing harbour or aquaculture base is defined by the Municipal Ordinance on the Seča - Peninsula Location Plan (Official publications of the Primorske novice	Konc.pogodba-za-u pravljanje-pristanisc	Seča.pdf

				newspaper, No. 35/05 and 2/05).	Odlok o lokacijskem načrtu S	

PORTOROŽ

NO.	PORT	PORT OPERATOR	DESCRIPTION OF THE PORT	MUNICIPAL ORDINANCES, OPERATING PERMITS, ETC.	NOTE	FOLDER
1.	PORT OF BERNARDIN	Hoteli Bernardin, d.d. Obala 2. PORTOROŽ (Dejan Jagrinec 051 371 319)	**local and public harbour** Mandrač and Pier Lighthouse	Operating permit No. 373-15/2008/7, 23.05.2008 (MFA/URSP) valid for an indefinite period of time		
2.	RECREATIONAL PORT Portorož	Sports and Youth Centre Piran.	**recreational port**	Decree on the Portorož Recreational port; OS Municipality of Piran, 26.9.2017	Odlok o šortnem pristanišču Portorož Športno pristanišče Portorož_skica.pdf	Portorož.pdf
3.	FPP Boathouse	UL FPP (Faculty of Maritime Studies and Transport) and GEPŠ (High school, electro and Maritime College Piran)(?)	(special-purpose ports)?			

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4.	"DROGA" Pier	Droga Kolinska d.d. (?)				
5.	PORT OF PORTOROŽ	Public company Okolje Piran, d.o.o. Arze 1b, PIRAN. (Egon Štibilj 041 860 390)	a port **intended for public transport,** for the berthing, mooring and secure storage of vessels, as well as for the embarkation and disembarkation of persons and cargo. the part of the pier within 30 m of the pierhead towards the base of the pier, on the left side of the pier is intended for the docking of vessels operating regular passenger services; a **local port** intended for the berthing of vessels, set up in the form of local (communal) moorings and comprising the harbour seawall in its entirety; and the part of the pier 64 m from the base of the pier towards the end of the pier.	Operating permit No. 373-9/2017/19, 13.07.2017 (MZP/URSP) valid for an indefinite period of time	Odlok o pristanišču Portorož - neuradno	
6.	"KANAL FAZAN" PORT	Marina Portorož, d.d. Cesta solinarjev 8, PORTOROŽ (Tomi Susman 031 719 710	**local port**			Marina Port-fazan.pdf
7.	PORTOROŽ MARINA	Marina Portorož, d.d. Cesta solinarjev 8, PORTOROŽ (Tomi Susman 031 719 710)	**tourist port**	Operating permit 373-15/2008/2, 14.04.2008 (MZP/URSP) valid for an indefinite period of time		

OTHER "MANDRAČ" HARBOURS, PIERS, MOORINGS...

NO.	MANDRAČ, PIER, MOORING...	PORT OPERATOR	DESCRIPTION OF THE PORT	MUNICIPAL ORDINANCES, OPERATING PERMITS, ETC.	NOTE	FOLDER
	Ankaran Debeli rtič bathing beach (Police Beach)		According to the Decree on the Municipal Spatial Plan (OPN) of the Municipality of Ankaran - Official Gazette of the Republic of Slovenia, No. 161/2020 of 10. 11. 2020 **docking facility foreseen**	Generalised land use (City Municipality of Piran - MOP), Recreation, leisure and sports areas; Municipal Spatial Plan - OPN - Collection of spatial planning acts (2020) Actual use: Ministry of Agriculture, Forestry and Food	cadastral municipality JERNEJ 2592 1754/4 1754/6 cadastral municipality MORJE 3/29	 Pomol.policplaža.gif
	Ankaran MZRK Debeli Rtič (Youth Health Resort Debeli rtič)	RKS Debeli rtič Youth Health Resort Jadranska cesta 73, 6280 Ankaran, +386 (0) 5 909 70 00	According to the Decree on the Municipal Spatial Plan (OPN) of the Municipality of Ankaran - Official Gazette of the Republic of Slovenia, No. 161/2020 of 10. 11. 2020 **not intended as a port**	primary use: water area Actual use: Ministry of Agriculture, Forestry and Food	cadastral municipality OLTRA 86/2, 86/3	See 6. Ankaran.pdf
	Ankaran Student Beach		According to the Decree on the Municipal Spatial Plan (OPN) of the Municipality of Ankaran Official Gazette of the RS, No. 161/2020 of 10. 11. 2020 **not intended as a port**	Actual use: Ministry of Agriculture, Forestry and Food	cadastral municipality OLTRA cadastral municipality MORJE 3/29	See 6. Ankaran.pdf
	Ankaran Gradis Pier		According to the Decree on the Municipal Spatial Plan (OPN) of the Municipality of Ankaran - Official Gazette of the Republic of Slovenia, No. 161/2020 of 10. 11. 2020 docking facility foreseen	Ordinance on the Location Plan for the Development of Valdoltra Beach (Official Gazette of the Republic of Slovenia, No. 57/2005) Actual use: Ministry of Agriculture, Forestry and Food	cadastral municipality OLTRA 1328/2 cadastral municipality MORJE 3/29	

	Ankaran Madrač Valdoltra (indoor)	Municipality of Ankaran	local port		cadastral municipality OLTRA cadastral municipality MORJE 3/29	See 6. Ankaran.pdf
	Koper Mandrač "Moleto" Žusterna		Bathing pier	Bathing pier		Mandrač Moleto Žusterna.gif
	Izola - pier in Simon's Bay		Bathing pier	Bathing pier		Pomol v Simonovem zalivu.gif
	Strunjan Lambada pier					Strunjan-Pinija.gif
	Strunjan-Salinera (Holy Spirit)					Sv.Duh.gif
	Strunjan - Pacug					Pacug.gif
	Piran - Fiesa			Pomol		Fiesa.gif
	Piran Fornače / (Manca)					Fornače pomol.gif
	Seča - Jernej Canal				Odlok o lokacijskem načrtu S	Jernejev kanal.gif
	Canal Grande (Drnica)					kanalGrande.gif
	Canal Džasi		A port for visitors to the salt pans.			

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