

April 2026

Palud – diversity in miniature Palù – diversità in miniatura

ACTION PLAN

Wetland Contract

~

Special ornithological reserve
Palud-Palù

(as part of the GREW Project - Governance of Wetlands in Italy-Croatia
Cross Border Region)



CLIENT



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ABBREVIATIONS

DIRH State Inspectorate of the Republic of Croatia

HAZU Croatian Academy of Sciences and Arts

JU..... Public institution

JUNE..... Public Institution "Natura Histrica"

POP Areas of conservation important for birds

POR Special ornithological reserve

POVS Areas of conservation important for species and habitat types

TZ Tourist Board

0 SUMMARY

Wetland Contract for Palud-Palù Special Ornithological Reserve was developed within the *CREW project – Coordinated Management of Wetlands in the Cross-Border Area of Italy and Croatia* with the aim of improving the protection, restoration and sustainable management of wetlands in this area. Its development was based on a participatory approach that included an analysis of the current situation, identification and involvement of key stakeholders and the implementation of a series of workshops. Through this process, common priorities, concrete activities and a governance structure consisting of the Stakeholder Forum, the Management Board and the Technical Secretariat were defined, which ensured continuous cooperation and exchange of information among the stakeholders involved.

The revision of the Contract was carried out as part of *the project GREW – Wetland Management in the Italy-Croatia Cross-Border Region*, and it builds on the previous document while taking into account new scientific knowledge and increasingly pronounced challenges, especially those related to climate change. During the revision, it was found that some of the previously planned measures were successfully implemented, some were additionally adapted to current management needs, while some measures, primarily those aimed at the development of the tourist offer, were abandoned in order to reduce pressures on the ecosystem and preserve biodiversity, especially in sensitive periods such as bird nesting.

The new Contract defines 10 priority activities for the period from 2027 to 2031, which are distributed in three strategic areas: governance, environment and socio-economic development. A total budget of EUR 230,500.00 has been estimated for their implementation, with the largest share of funds focused on the improvement of management capacities, then on environmental preservation and restoration measures, while a smaller part includes activities related to the sustainable development of the local community. A total of 22 stakeholders is involved in the implementation of the Contract, including public authorities at various levels, scientific and professional institutions, as well as representatives of the local community and the interested public.

The aim of the revised Contract is to establish an efficient, integrated and long-term sustainable management system for the Palud-Palù wetland, which will enable the preservation of its high ecological value while responsibly using natural resources. Special emphasis is placed on strengthening cooperation between stakeholders, preventing potential conflicts in the use of space and integrating climate change adaptation measures, in order to ensure the resilience of this ecosystem in the future.

INTRODUCTION

The wetlands of the coastal part of Italy and Croatia represent extremely valuable natural capital and are among the most important carriers of biodiversity in the cross-border region.

Within the **CREW project – Coordinated Wetland Management in Italy – Croatia Cross Border Region**, the Wetland Contract **tool was established**, which enabled the definition of common priorities and the establishment of cross-border cooperation in the protection and restoration of wetlands. At the same time, the Contract represents a mechanism for the implementation of the overall objective of the CREW project, which is to contribute to the protection and restoration of biodiversity in Croatia and Italy through coordinated action and improved management.

However, the increasing impacts of climate change, including changes in precipitation patterns, sea level rise, the frequency of droughts and extreme weather events, pose new challenges for the conservation and management of these fragile ecosystems. To ensure their long-term resilience and functionality, it is necessary to further improve existing governance models and integrate climate change adaptation measures into strategic and operational documents.

The **GREW project – Governance of Wetlands in Italy-Croatia Cross Border Region**, builds on the results of the CREW project with the aim of strengthening management capacities and developing advanced approaches to wetland management. Special emphasis is placed on recognizing and assessing the impact of climate change, defining specific adaptation goals and formalizing stakeholder obligations for the implementation of appropriate measures.

This revision of the Contract is designed to align the existing governance framework with new knowledge and challenges related to climate change. It incorporates the results of pilot activities, data collected and governance models developed, as well as contributions from various stakeholders, including the public, through a citizen science approach.

The aim of the revised Contract is to establish an efficient, resilient and long-term sustainable wetland management system, which will enable the preservation of its ecological value while using resources responsibly and actively involving all relevant stakeholders.

The Wetland Contract does not represent a new planning document or a new level of management and decision-making but should be understood as a continuous process aimed at quality spatial management. In this process, the principles of voluntariness, active involvement, cooperation and acceptance of obligations are emphasized. It is extremely important to include a wider range of stakeholders to enable the recognition of the needs and requirements of all users, as well as the exchange of information, knowledge and experience, and interconnection (networking).

In the area of the Istrian County, the activities on the CREW and GREW projects take place in the Special Ornithological Reserve Palud-Palù, near Rovinj, which is managed by the Public Institution "Natura Histrica" (JUNH).

1 EVALUATION OF THE SITUATION

1.1 Description of the pilot area – Palud–Palù Special Ornithological Reserve

The Palud-Palù Special Ornithological Reserve (POR Palud) is the only ornithological reserve in the Istrian County and was declared in 2001. It is located south of Rovinj, on the seashore, which also represents its southern and western borders. It occupies an area of 220 ha, of which the water surface (marsh) occupies a maximum of about 18 ha (Image 1).



Image 1. Location of the Special Ornithological Reserve Palud-Palù

The central part of the reserve is occupied by a brackish marsh. It is surrounded by coastal evergreen forest and macchia dominated by holm oak and is connected to the sea by an artificial channel about 200 m long and underground connections (Image 2).



Image 2. Marsh in Palud Special Ornithological Reserve from the air

Specific geological and geomorphological (natural penetration of seawater into the marsh), hydrological (gradation of salinity in the marsh from north to south) and other factors determine a high degree of biodiversity.

The area is characterized by extreme biodiversity and about 240 species of birds have been recorded so far, of which the most numerous are waterfowl that stay on Palud during nesting and wintering, and interesting species are often recorded during migrations, such as the Osprey (*Pandion haliaetus*), the Greater flamingo (*Phoenicopterus ruber*) and others.

The reserve also includes diverse agricultural habitats (olive groves, vineyards, fields) and ecotones, and a narrow belt of supralittorals, which also contributes to its biodiversity.

Within the boundaries of the reserve, there are also valuable archaeological and historical sites, and ichnofossils (remains of dinosaur footprints) are also visible on the coast. By the decision of the Ministry of Economy and Sustainable Development from March 2021, dinosaur fossils and their sites (including two sites in the Palud POR) were declared protected areas of nature.

1.2 Protection

The reserve partly overlaps with the area protected in the category *significant landscape "Rovinj Islands and Coastal Area"*. In addition, it is part of the ecological network, namely Areas of Conservation Important for Species and Habitat Types (SPAs) *HR2001360 Wider Rovinj area* (Image 3). The Palud brackish marsh is classified as a habitat type *Coastal lagoon* (Natura code: 1150), which represents a priority habitat type in the Republic of Croatia. Within the Palud POR there are also point localities with habitat type *Mediterranean sitines* (*Juncetalia maritimi*) (Natura code: 1410).

In the area of the surrounding waters there are two more POVS areas of the ecological network: *HR3000462 Islands of the Rovinj area – underwater world* i *HR5000032 Waters of western Istria*, and one Area of Conservation Important for Birds (SPA): *HR1000032 Waters of western Istria* (Image 3).

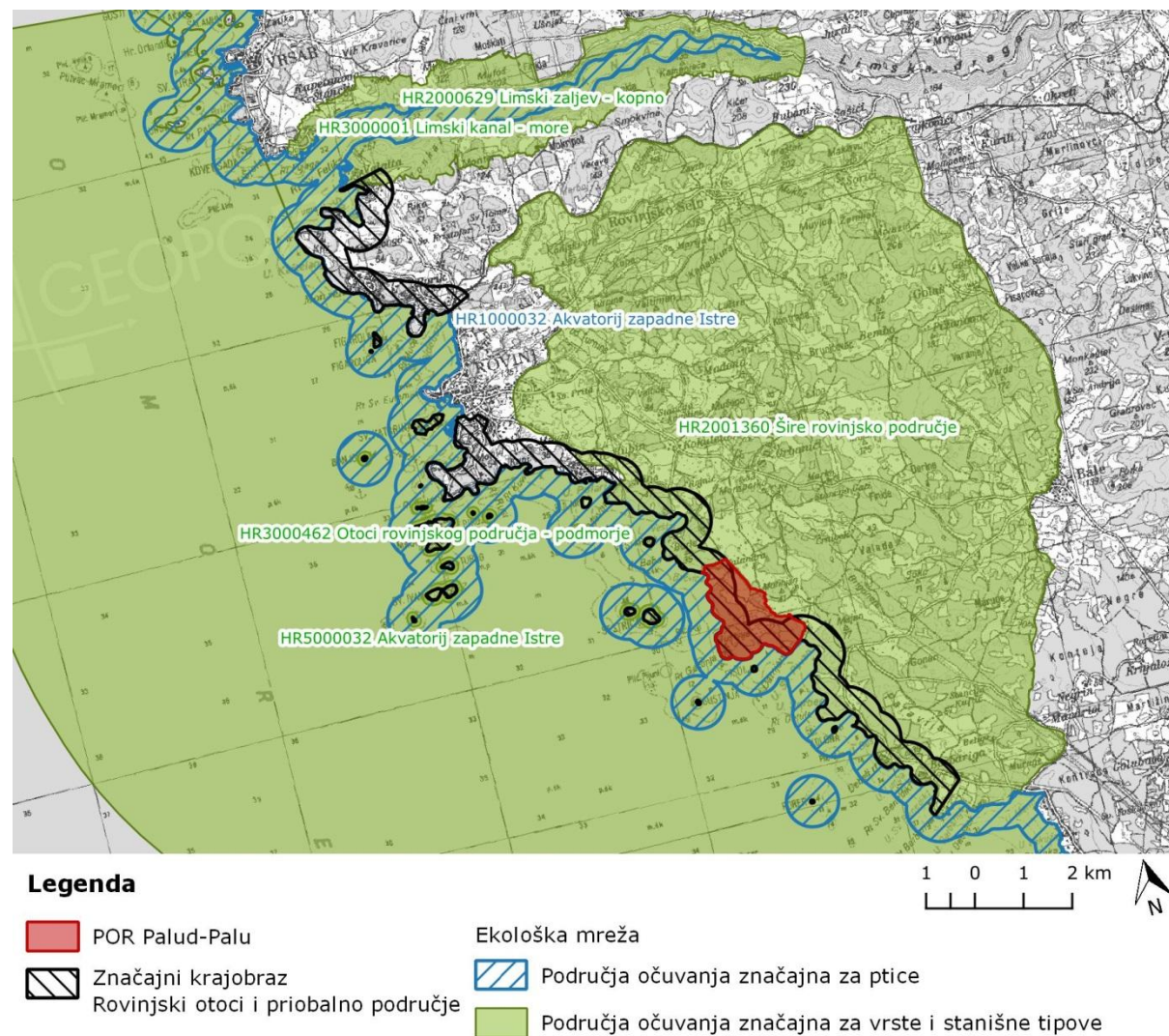


Image 3. Protected areas of nature and areas of the ecological network in the wider area

1.3 Infrastructure

Within the boundaries of Palud Special Ornithological Reserve, the infrastructure is not significantly developed. Several residential buildings have been built, which are mainly used as cottages, catering facilities or family farms. Within the reserve and in the immediate surrounding area, a network of paths and unclassified roads have been developed, which are mainly used by the local population, visitors to the reserve and beaches. The paths and roads are macadam and are also used by cars, cyclists and pedestrians. The maintenance of roads and paths is the responsibility of the local self-government unit.

In order to get as many people as possible involved in bird watching and enjoying their presence, an observation deck has been set up on the south side of the marsh with a view of the open part of the marsh. On the north side of the marsh there is a monitoring station and a bird ringing station. Several educational boards have been set up in the reserve that describe its natural and cultural values, and additional educational boards have been set up as part of newer activities with the aim of improving information and education of visitors.

As part of the activities aimed at adapting to climate change and improving the management of the water regime, a water level control barrier has been installed in the reserve, which has further improved the functionality of the infrastructure for the purpose of habitat and biodiversity conservation.

1.4 Basic problems

During the implementation of the Contract and its revision process, it was confirmed that some of the previously identified problems during the drafting of the Contract still existed, but at the same time new challenges related to the implementation of measures and climate change were also recognized. The key problems are:

- insufficiently continuous and systematic monitoring of the state of the ecosystem
- Limited monitoring capacity
- pronounced seasonal pressure of tourism and space load
- insufficiently developed visitor management system
- The need for stronger communication and involvement of the local community
- Too many and insufficient focus of measures
- Insufficient integration of climate change into governance.

These problems contribute to the need for clearer prioritisation of measures and strengthening the climate resilience of the management of the area.

2 FRAMEWORK FOR THE MANAGEMENT OF THE PALUD-PALÙ SPECIAL ORNITHOLOGICAL RESERVE UNDER THE WETLAND CONTRACT

As emphasized in the introductory part, *the Wetland Contract* does not represent a new planning document or a new level of governance and decision-making, but should be understood as a continuous participatory process in which the following principles are highlighted:

- voluntariness,

- active involvement,
- cooperation, and
- acceptance of obligations.

These four principles make up the distinctive approach of this tool, in which anyone can get involved (and sign the *Contract*) *at any time*, but at the same time no one is obliged to do so. All signatories – members of the *Contract* are invited to actively cooperate in the formulation and implementation of joint decisions and activities, and once they are involved (sign the *Contract*), the agreed activities and roles of individual stakeholders become binding. In other words, the *Wetland Contract* is a tool whose adoption is not mandatory, but once the activities have been agreed and the *Contract* is recognised as a 'governance' tool, it jointly establishes commitments, in an inclusive and participatory process.

The *Contract* enables the recognition of the needs and requirements of all users, as well as the exchange of information, knowledge and experience, and interconnection (networking).

2.1 Legal framework

European Union

At European Union level, no legislative instrument provides for the adoption of the *Wetland Contract* or the use of this tool for the purpose of wetland management. However, it pursues the main objectives of European directives, such as the Habitats Directive, the Birds Directive, the Water Framework Directive, the Floods Directive and the Marine Strategy Framework Directive.

In the meantime, the European Union's legislative framework has been improved with the adoption of Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration, which is a legally binding European instrument for the recovery of degraded ecosystems, with the aim of ensuring long-term and sustainable nature restoration for people, the climate and the planet, i.e. it emphasizes the need to restore degraded ecosystems and strengthen their resilience to climate change.

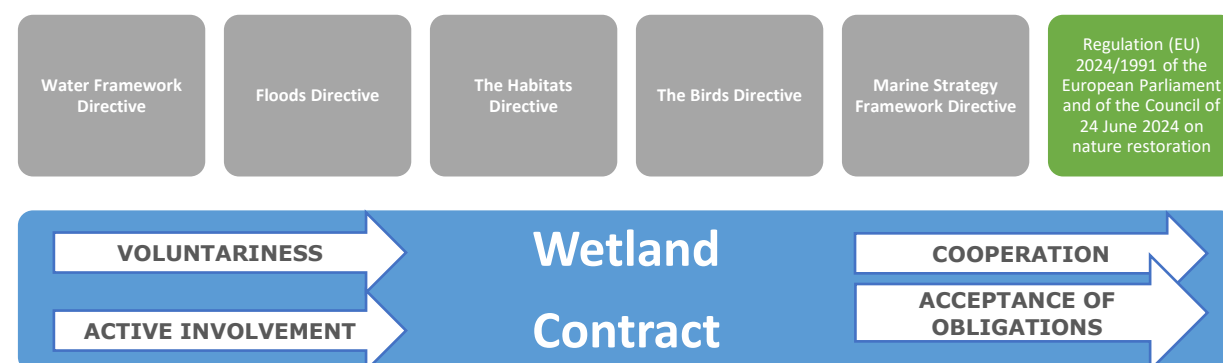


Image 4. Legislative framework at the EU level for the use of *Wetland Contract* as a tool for participatory governance

Republic of Croatia

At the national level, the *Wetland Contract* is not a legally binding instrument, but it is in line with the relevant legislative and strategic framework. The basic regulation is the Nature Protection Act, which regulates the system of protection and conservation of nature, including wetlands, and emphasizes the conservation of biodiversity, landscape diversity and contribution to climate stability.

Given the growing importance of climate change, the Climate Change and Ozone Layer Protection Act, which defines a framework for climate change mitigation and adaptation, including the management of vulnerable ecosystems such as wetlands, is particularly important.

Strategic documents further emphasize the need for active management and adaptation. The Nature Conservation Strategy and Action Plan of the Republic of Croatia 2017-2025 recognize wetland habitats as particularly endangered, while the River Basin Management Plan 2022-2027 emphasizes the importance of preserving and restoring natural retention and wetland areas as a water management measure and flood risk reduction.

A key document for climate resilience is the Climate Change Adaptation Strategy of the Republic of Croatia, which envisages integrated management of natural resources and concrete measures for the preservation and restoration of wetland ecosystems, including ensuring favorable hydrological conditions and applying nature-based solutions.

In operational terms, the management of the area is further defined through the Western Istria Waters Management Plan, which also includes the area of Palud, which ensures the connection of the *Contract* with specific management measures on the ground.

2.2 Methodology and results of the process of drafting the Contract for the Special Ornithological Reserve Palud-Palù

The process of developing the *Wetland Contract* consists of several steps in which it is important to ensure the involvement and participation of key stakeholders – users of this area in order to achieve the goals of a *Contract*. (, Table 1).

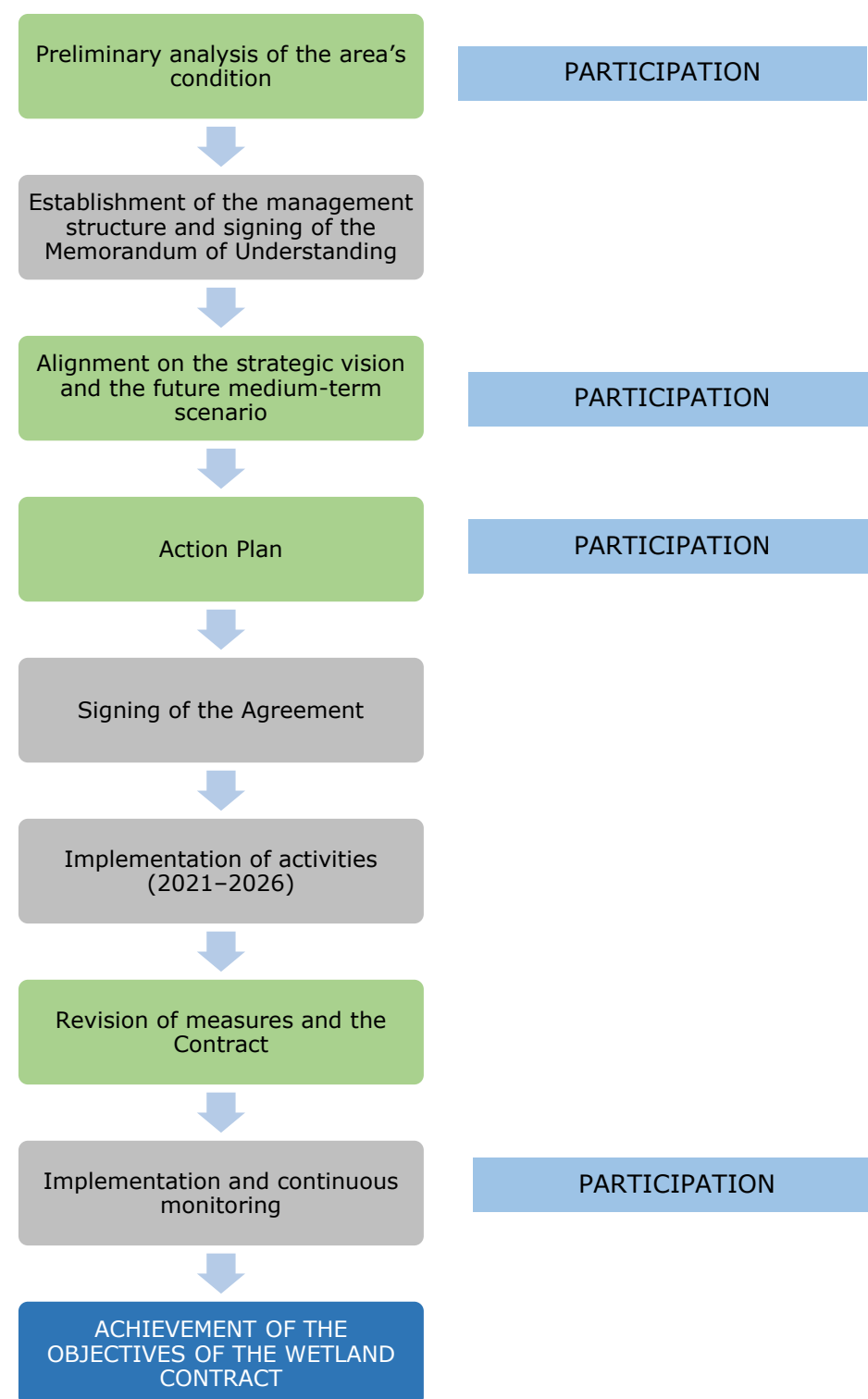


Table 1. Steps and Flow of the revision Process of *Wetland Contract*

Step	Description
1. Preliminary analysis of the state of the area	It refers to the analysis of the legislative and governance framework for the Paluda area, the evaluation of the current situation (SWOT analysis from environmental, socio-economic and governance aspects) and the analysis of stakeholders. As part of the revision of the Contract, this analysis has been updated and supplemented with new data collected during implementation, stakeholder experiences and additional knowledge related to the impact of climate change on wetland ecosystem management.
2. Establishment and operation of the governance structure	The task of the governance structure is to coordinate the process of implementation and revision of the Contract and, if necessary, to agree common objectives with key stakeholders through existing cooperation mechanisms. During the revision process, continuous cooperation with stakeholders continued, with special emphasis on the implementation of workshops in Rovinj, aimed at strengthening the participatory approach, exchanging experiences from the implementation and defining guidelines for future governance.
3. Aligning the strategic vision and medium-term scenario	Through a participatory process and the implementation of workshops during 2026, the existing strategic vision was revised and an updated medium-term scenario for the development of the area was defined. Special emphasis was placed on climate change adaptation, strengthening ecosystem resilience and sustainable wetland management.
4. Revision of the action plan	The action plan defines priority activities, stakeholder roles, communication and implementation methods, and a monitoring system. Based on the results of the implementation and revision so far, a new action plan for the next five-year period is being developed, with an emphasis on climate change adaptation measures and strengthening ecosystem resilience.
5. Updating and Confirmation of the Contract	The Contract is a formal document confirming the shared commitment of stakeholders to implement defined activities. The revised Contract builds on the previous version, considering lessons learned and new challenges related to climate change.
6. Implementation of activities	The activities defined in the Contract were implemented in the period 2021–2026, and the revised Contract establishes a framework for the continuation of implementation in the next five-year period. The Natura Histrica Public Institution and relevant stakeholders are involved in the implementation, in accordance with the defined priorities and the action plan.
7. Monitoring the implementation of activities and the effectiveness of the Contract	The implementation of the Contract shall be monitored by the Technical Secretariat and shall provide the Steering Board and the Stakeholder Forum with information on the progress and effectiveness of the achievement of the agreed objectives, in the form of a periodic report on the implementation of the Action Plan, at least annually.

The process of drafting and revising the Contract for the Palud-Palù wetland Special Ornithological Reserve

The process of drafting the Contract for the management of the Palud-Palù Special Ornithological Reserve began in April 2020 with a preliminary analysis of the current state of the area and an analysis of stakeholders. During the process, due to the circumstances caused by the COVID-19 epidemic and the lack of previous experience of stakeholders with participatory planning models, there was a deviation from the usual sequence of steps, with the establishment of the management structure being carried out in the final phase of the process.

Figure 5 Process of implementation of the Wetland Contract

In the period 2020-2021, workshops with stakeholders were conducted, including SWOT analysis, development of trend scenarios, identification of stakeholder activities and roles, and agreement on the governance framework and communication methods. Despite the restrictions related to the pandemic, the process enabled the active involvement of key stakeholders from different sectors and the development of the first participatory Contract, which was formally adopted in 2021.

From 2021 to 2026, the Contract was implemented through defined activities aimed at the management and conservation of the Palud area, with the continuous involvement of stakeholders and the gradual upgrade of management measures through practice. During this period, a number of field and scientific activities were initiated and developed, which contributed to a better understanding of the ecological processes and the state of the area.

Key activities started during this period are currently underway (detailed in Annex 1):

- Hunting and control of invasive species (blue crayfish and nutria) using traps and viviparous traps
- Installation of wildlife monitoring cameras
- extensive geodetic and bathymetric measurements of the wetland and drainage system, including integration with LiDAR data
- Hydrological monitoring and preparation of hydrological-hydraulic analyses for the needs of ecological restoration
- systematic research of water, sediments and microbial communities and modelling of water circulation
- Monitoring of invasive species and ichthyofauna
- educational tours for visitors and schools to raise awareness of the value of the area
- Production of educational and promotional materials
- Revision of the Contract (2026)

In 2026, the process of revising the Contract began through the implementation of the Territorial Laboratory, and the process was structured through three thematic units:

- Impact of tourism on the environment and sustainability
- climate change and adaptation of management measures
- Sociological research and testing of the survey instrument

A combined methodological approach was used, which included digital evaluation of measures, group work and structured discussions. Emphasis was placed on the identification of priority actions, the assessment of their feasibility and the reduction of the total number of measures in order to increase the operational efficiency of the Contract.

The results of the revision process showed a high level of agreement among stakeholders on key challenges, including the pressure of tourism, the lack of systematic monitoring, the need to strengthen monitoring and the insufficient involvement of the local community. At the same time, the

need to integrate climate change adaptation measures, especially in the segment of water regime management and habitat conservation, was emphasized.

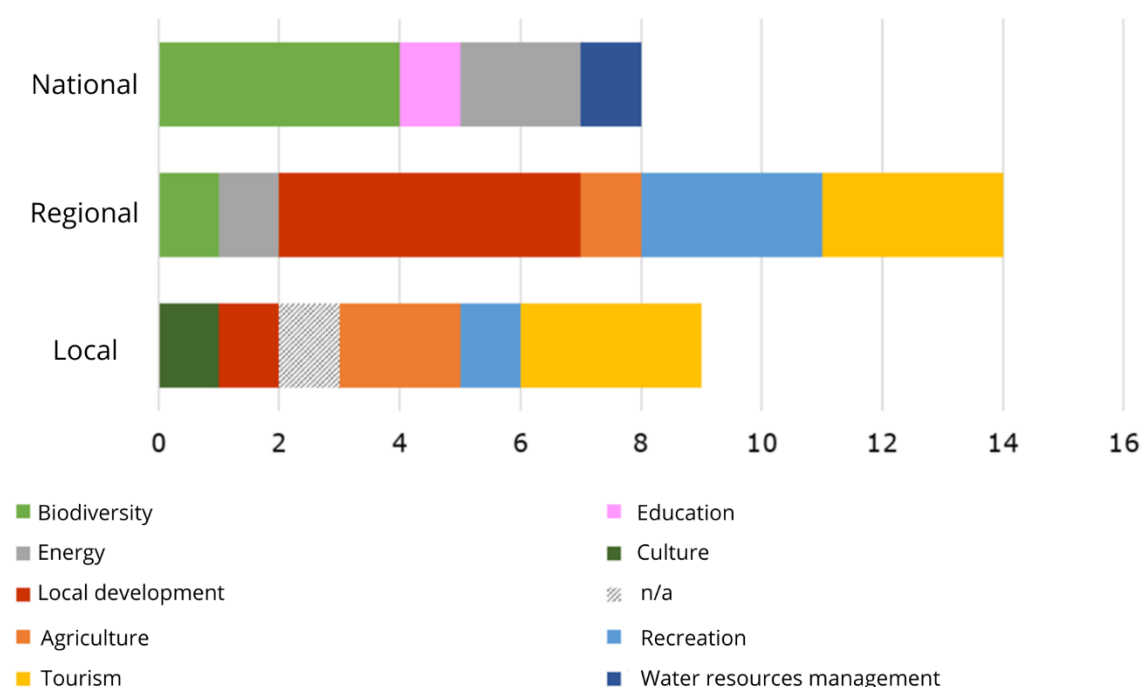
The revision of the Contract resulted in:

1. simplifying and prioritising actions
2. strengthening the focus on actionable governance activities
3. greater integration of climate change adaptation measures
4. Focus on participation and adaptive governance
5. acknowledging the importance of continuous involvement of the local community and sectoral stakeholders

Results of individual steps in the process of drafting the Contract

Stakeholder analysis

A preliminary stakeholder analysis showed that the majority of stakeholders were recognised at regional and local level¹, from the regional development and tourism sectors. At national level, most stakeholders belong to the nature and biodiversity protection sector (Image 6).



*n/a refers to the local population, regardless of their involvement in a particular sector

¹ In the analysis of stakeholders, the County of Istria is listed as one stakeholder, regardless of the fact that the stakeholders are recognized in different administrative departments

Image 6. Stakeholder structure by sector and level of governance

Most stakeholders from the public administration at all levels are more familiar with and have some experience related to the activities of the JUNH, i.e. the management of protected areas, while stakeholders from the private sector and the local population (marked "n/a" in the figure) are less familiar with it. When it comes to familiarity with the way of management through this type of *Contract*, no stakeholder has had previous experience with it.

SWOT analysis (analysis of the results of the 1st workshop)

At the first workshop, held in July 2020, the strengths and weaknesses of the Palud area were identified, as well as opportunities for further development and threats that could hinder and/or prevent further sustainable development while protecting the values of this area. The results of the analysis of the results are presented below, which were the basis for further elaboration of trend scenarios and identification of possible activities with the aim of improving the situation and realizing potential opportunities for further sustainable development.

STRENGTHS	DISADVANTAGES
- There is interest from the local community and other stakeholders - Proximity to tourist centers - Easy accessibility - Not very visited - There is legal protection - Preserved nature and biodiversity - Other peculiarities of the area (archaeological, cultural, traditional...)	- Abandonment of traditional activities - Insufficient communication and dialogue with the state and county administration and cooperation with scientific institutions - Insufficient communication and dialogue with space users (landowners) and their education - Insufficient promotion, information and education about Palud Special Ornithological Reserve - Insufficient tourist valorization and networking with other (tourist) "attractors" at the regional level - Insufficient international cooperation and use of EU funds - Inadequate infrastructure and equipment for visitors - Insufficient monitoring of the area - Inadequate protection of natural resources (regulation of water through the canal, overgrowth of marshes, abandoned agricultural land, pollution, invasive species..) - Inadequate protection of cultural heritage
OPPORTUNITIES	THREATS

- | | |
|--|---|
| <ul style="list-style-type: none"> Ensure better and more regular monitoring and improve communication with the local population Improving communication between institutions Involvement of the local community Potential for organic farming and livestock development Tourist valorization and better tourist offer Improvement of visitor infrastructure and visitor systems Development of educational content and activities Ensure self-sufficiency through billing Improving the promotion of Palud Special Ornithological Reserve and JUNH Linking natural and cultural values Encouraging scientific and research cooperation Protection and conservation of nature and biodiversity Potential for research | <ul style="list-style-type: none"> Lack of resources for site management (including exploration and monitoring) Unsustainable use of space (unresolved property and legal relations, lack of management documentation, ..) Restrictions in management due to non-compliance of legal regulations and "overlapping" of powers (Hunting Act, Nature Protection Act, limited concession approvals...) Climate change |
|--|---|

IDENTIFIED ISSUES BY STAKEHOLDER GROUP

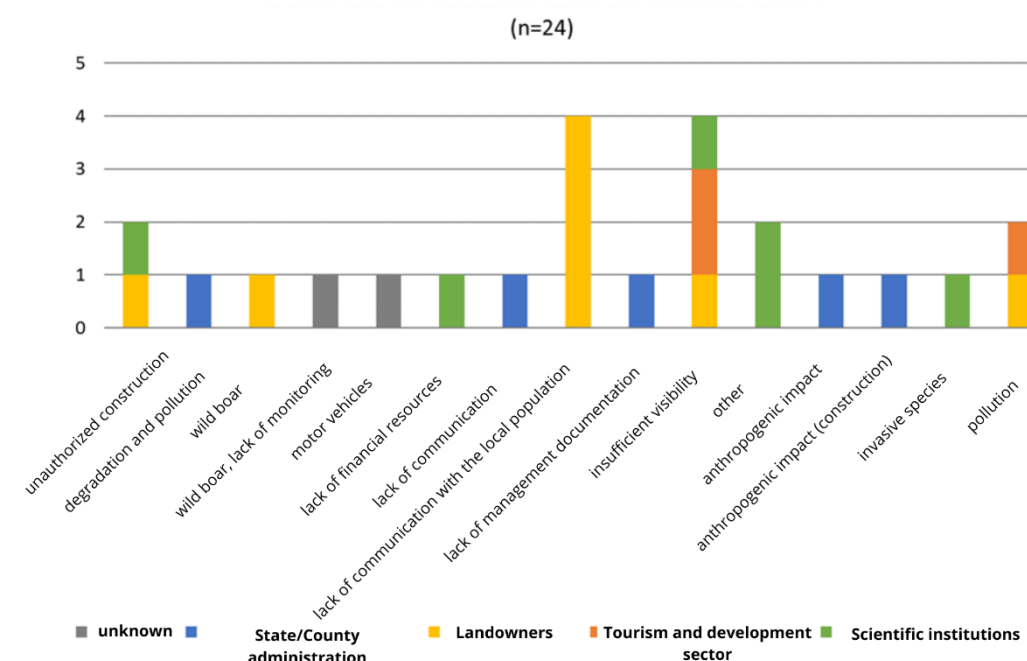


Image 7. Identified problems in the Palud area by stakeholder groups

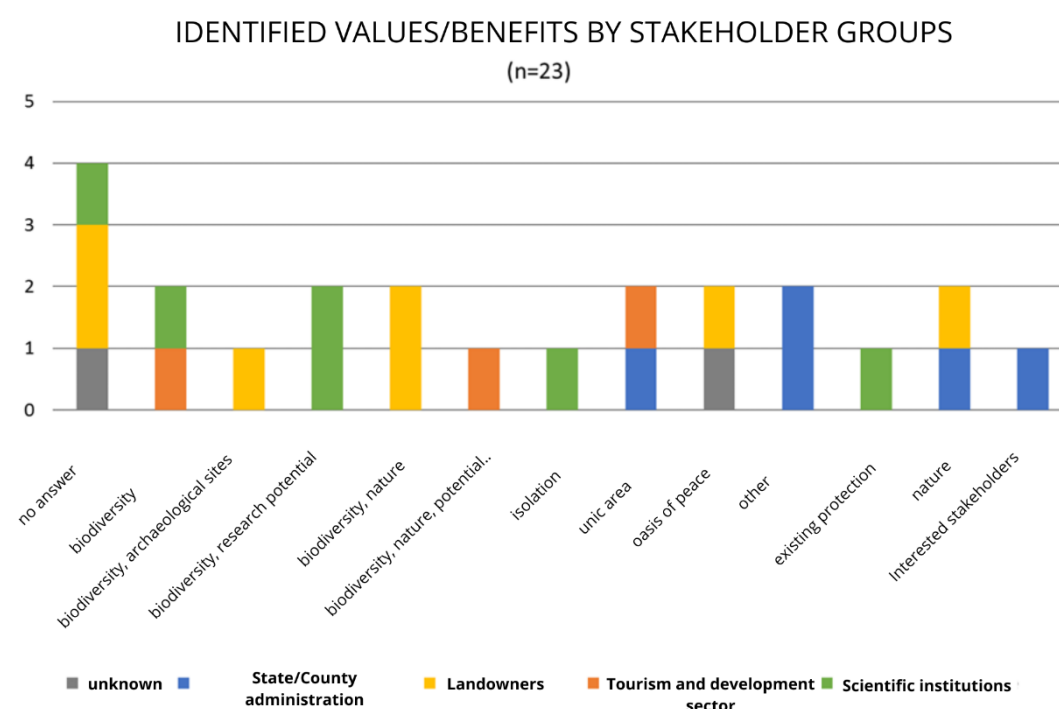
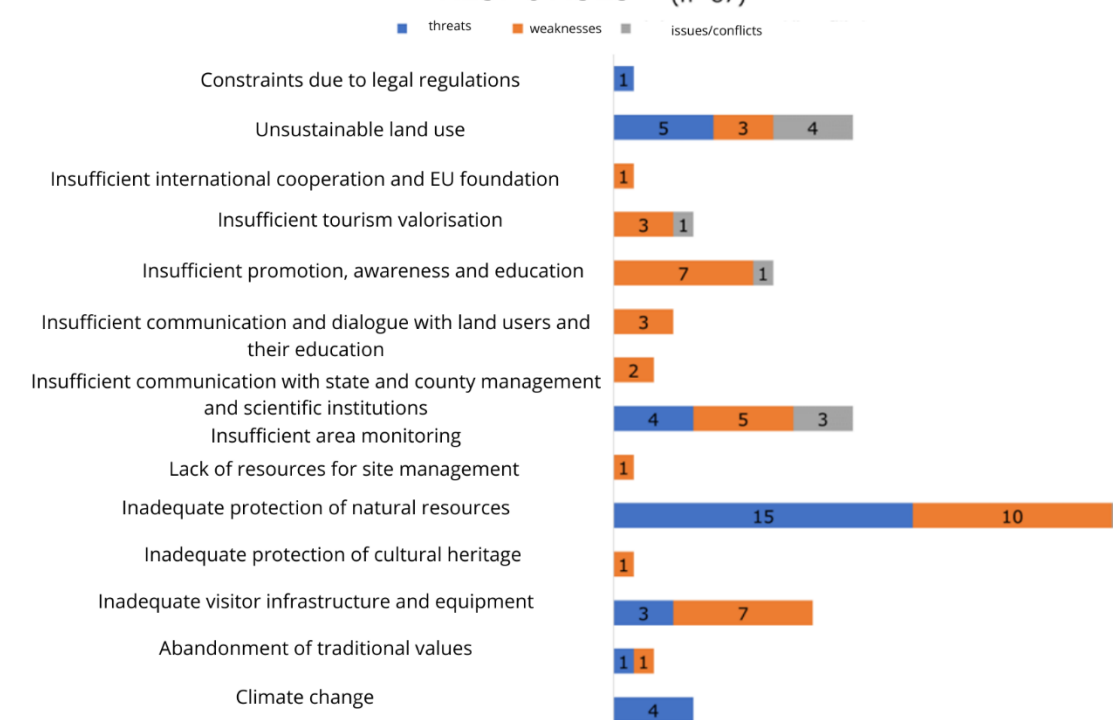


Image 8. Identified values in Palud by stakeholder groups

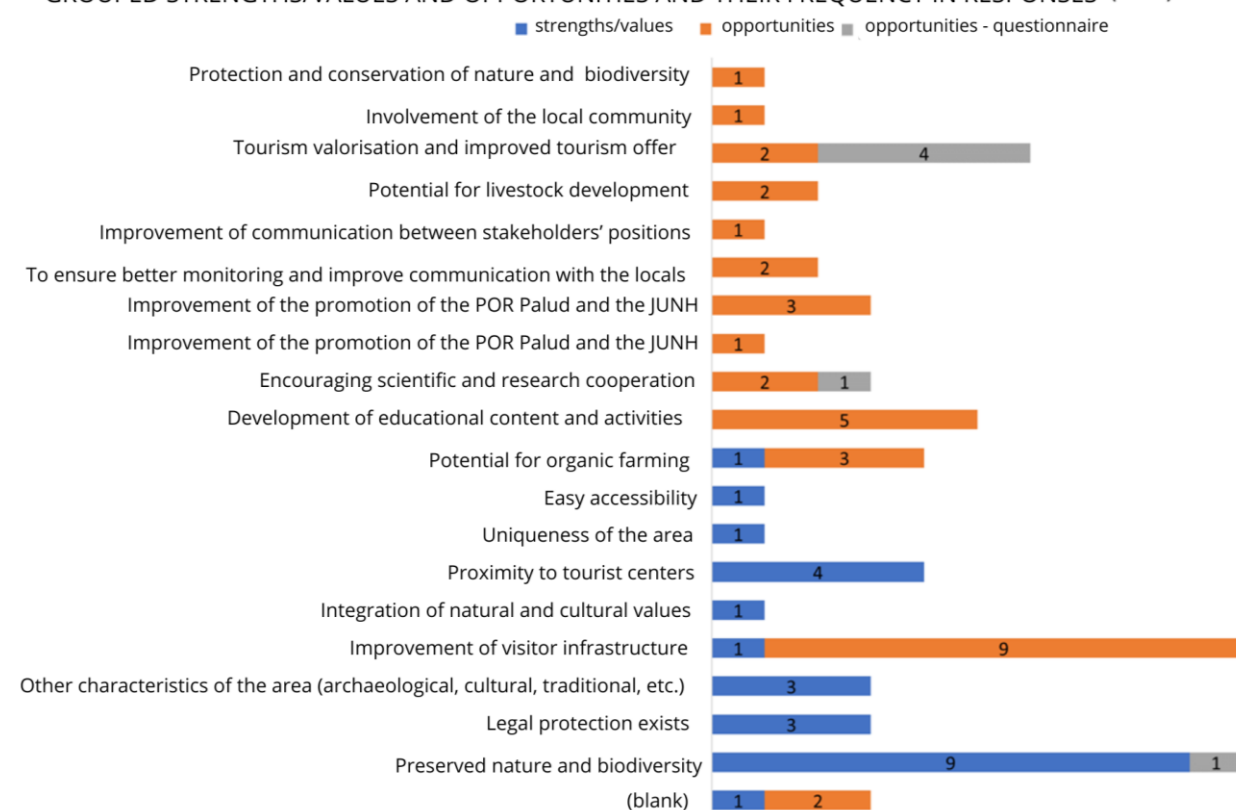
GROUPED WEAKNESSES/ISSUES/THREATS AND THEIR FREQUENCY IN RESPONSES (n=87)



"Threats" (blue) and "weaknesses" (orange) are the result of group work in the workshop; "weaknesses/problems/conflicts" (grey) represent the responses obtained from the survey

Image 9. Grouped weaknesses/problems/threats in the Palud area and their frequency in responses

GROUPED STRENGTHS/VALUES AND OPPORTUNITIES AND THEIR FREQUENCY IN RESPONSES (n=65)



"Strengths/values" (blue) and "opportunities" (orange) are the result of group work in the workshop; "opportunities-questionnaire" (grey) represent the responses obtained from the survey

Image 10. Grouped strengths/values/opportunities in the Palud area and their frequency in responses

Elaboration of trend scenarios

The trend scenario aims to predict in which direction the area of Palud Special Ornithological Reserve would develop if the existing trends and development patterns continued. It is based on the weaknesses, problems and threats that were identified at the 1st workshop with stakeholders. The scenario was developed for three strategic areas: governance (**U**), environment (**O**) and socio-economic development (**R**). For each identified problem, it is looked at what its failure to solve (consequences) can lead to and what are the critical factors and threats now and in the future that make it impossible or difficult to solve a particular problem.

From the table below, it is evident that this scenario does not contribute to the preservation of the values for which the area is protected, nor to the well-being and satisfaction of the users of this area,

the owners of land within and in the immediate vicinity of Palud Special Ornithological Reserve, and greatly hinders the sustainable management of the area.

Table 2. Trend scenario for each strategic area – governance (U), environment (O) and socio-economic development (R)

Strategic area	Problem/weakness	Consequences[what can be caused by recognizing a problem?]	Critical factors and threats[what are the critical factors that make it impossible or difficult to solve the identified problem now or in the future?]
U.GOVERNANCE	PU1. Inadequate infrastructure and equipment for visitors	- Visitors are not familiar with the rules of conduct and restrictions within Palud Special Ornithological Reserve - Visitors are not familiar with the natural and cultural values of Palud Special Ornithological Reserve - Illegal parking along the coast and along natural and cultural values and degradation of space - Dusty roads and roads used by cars, cyclists and pedestrians, all of which detract from the experience of the Palud area	- Lack of financial resources - Insufficient communication and dialogue with the state and county administration - Unresolved property and legal relations
	PU2. Insufficient monitoring of the area	- Unregulated camping/parking/lighting fires/noise - Dissatisfaction and distrust of residents and users of the area and landowners - Poaching - Damage to existing infrastructure.	- Insufficient number of nature rangers in the entire area managed by JUNH (4 nature rangers for 28 protected nature areas and 56 areas of the ecological network) - Lack of communication with the locals
	PU3. Unresolved property and legal relations and lack of management documentation	- Unsustainable use of space - Illegal construction within and in the immediate surrounding area of Palud Special Ornithological Reserve - The coastal area is under pressure from a large number of tourists during the tourist season from the mainland (cars, unregulated parking, camping, etc.) and from the sea (waste, motorboats...) - Loss of part of the identity of the area (due to the abandonment of traditional activities and agriculture...)	- A large number of landowners - The resolution of property and legal relations is not within the competence of JUNH - Insufficient communication and dialogue with the state and county administration

Strategic area	Problem/weakness	Consequences[what can be caused by recognizing a problem?]	Critical factors and threats[what are the critical factors that make it impossible or difficult to solve the identified problem now or in the future?]
O.ENVIRONMENT		- Inability to further develop infrastructure - Failure of certain tenders due to unpreparedness of project documentation	
	PU4. Limitations in development due to non-compliance of legal regulations	- Concessionaires do not invest in long-term investments and business improvement, which leads to their dissatisfaction and lack of dialogue with JUNH - Inability to regulate the population of wild boars that cause damage to the users of the premises - Abandonment of agriculture and other activities (e.g. tourism) - Inability to encourage "eco-friendly" activities (e.g. cycling)	- Overlapping powers in management – the same area is managed according to the Nature Protection Act and the Hunting Act "Outdated" Decision on Protection Measures for Palud Special Ornithological Reserve and Restrictions Arising from It - Insufficient communication and dialogue with the state and county administration
	PO1. Potential threat to biodiversity	- Threat to the fundamental values of the Palud and Natura 2000 Habitats and Species Nature Conservation Area - Potential loss of protected area status - Decline in biodiversity and the emergence of invasive species - Loss of attractiveness of space and opportunities to increase the value of products and services in the area (e.g. organic production)	- Ignorance of the value and vulnerability of the area - Lack of funding for research - Lack of control (poaching) - Abandonment of agriculture and neglect of land (spread of invasive species) - Climate change
	PO2. Overgrowth and changes in water quality and composition	- Changes in habitat conditions and population structure of plant and animal species - Cessation of former traditional activities (e.g. eel and mullet hunting)	- Climate change - Unregulated water flows through the sluice - Ignorance of hydrological conditions - Lack of funding for research - Lack of maintenance of the canal and accumulation of waste in it
	PO3. Unpreserved and insufficiently valorized cultural heritage	- The Decline of Rich Cultural and Historical Heritage - Loss of attractiveness of the area and possible opportunities for the development and increase of	- Lack of interest from the authorities in solving the problem - Insufficient communication and dialogue and linking of the natural and cultural heritage of

Strategic area	Problem/weakness	Consequences[what can be caused by recognizing a problem?]	Critical factors and threats[what are the critical factors that make it impossible or difficult to solve the identified problem now or in the future?]
		the value of the area from the aspect of cultural heritage	the area of Palud Special Ornithological Reserve Lack of investment in the valorization and arrangement/restoration of cultural heritage in the area of Palud Special Ornithological Reserve
R.SOCIO-ECONOMIC DEVELOPMENT	PR1. Abandonment and Failure to Recognize the Possibility of Development of Traditional Activities	- Potential loss of value of agricultural land - Reduced use of reeds (previously used to cover roofs, fences...) - Cessation of former traditional activities (e.g. eel and mullet hunting) - Loss of possible opportunities to develop and increase the value of indigenous local products and "branding" - Illegal construction and "turning" to (unsustainable) tourism	- Unresolved property and legal relations - Lack of management documentation - Insufficient communication and dialogue with the local population, the tourism sector and local and regional administration
	PR2. Insufficient promotion, information and education about Palud Special Ornithological Reserve	- Palud Special Ornithological Reserve is not recognized as a valuable visitor destination for nature lovers - Visitors can hardly find information on how to get to Palud - The locals are not sufficiently informed and educated to guide visitors during their tour and increase their experience of Paludo - There is insufficient interest from local schools and other educational institutions in education about Palud - The information is mostly limited to the underlying phenomenon – the wetland and the birdlife, although the Palud SPA covers a wider area that includes valuable areas under grasslands and forests, as well as agricultural areas as well as cultural heritage	- Insufficient communication and dialogue with the state and county administration, as well as cooperation with educational institutions and the tourism sector - Lack of management documentation - Insufficient communication and dialogue with space users (land owners) and their education - Lack of information officers in JUNH

Strategic area	Problem/weakness	Consequences[what can be caused by recognizing a problem?]	Critical factors and threats[what are the critical factors that make it impossible or difficult to solve the identified problem now or in the future?]
	PR3. Insufficient tourist valorization and networking with other (tourist) "attractors" at the regional level	- Palud Special Ornithological Reserve is not recognized as a valuable visitor destination - Cultural heritage has not been recognised as an important visitor element in the area - Loss of possible opportunities to develop and increase the value of indigenous local products and "branding" - Limited visitor offer - the offer of Palud Special Ornithological Reserve provides specific experiences and attracts tourists who are interested in this type of experience ("birdwatching" and the like); in addition, the coastal part is under pressure due to swimmers	- Insufficient communication and dialogue with the state and county administration and cooperation with stakeholders from the tourism sector - Lack of management documentation - Insufficient communication and dialogue with space users (landowners) and their education - Inadequate visitor infrastructure
	PR4. Insufficient international cooperation and use of EU funds	- Difficult financing of management and investment in visitor infrastructure - Loss of possible opportunities to develop and increase the value of indigenous local products and "branding" - Insufficient protection of biodiversity and specific aquatic ecosystem	- Lack of management documentation - Unresolved property and legal relations

Overview of identified possible activities with the aim of sustainable management of the Palud-Palù wetland

Below is an overview of the recognized activities with the aim of sustainable management of the Palud-Palù wetland, which are the result of the 2nd workshop, which, due to the circumstances caused by the COVID-19 epidemic, was conducted through a written survey and individual working meetings with individual stakeholders. Possible stakeholders and their roles in the implementation of these activities were also identified. In addition, in September 2020, a working meeting was held in September 2020 with the local population on the same topic.

Activity	Link to the problem	Link to the thematic area	Potential stakeholders proposed in the survey
HORIZONTAL THEMES			

Activity	Link to the problem	Link to the thematic area	Potential stakeholders proposed in the survey
Establishment of a communication platform (managing authority)	All	All	All
Improving cross-sectoral cooperation at national level (competences and targeted incentives)	All	All	All
Strategic area: GOVERNANCE (U)			
Development of the Management Plan	PU2, PU3	O, R	JUNH, Istria County - Tourism Board, other stakeholders
Solving the problem of illegal construction and property relations	PU3		City of Rovinj-Rovigno
Better visibility of <i>online</i> and <i>in situ</i> rules of conduct	PU1	R	JUNH, Istria County - Tourism Board
Engagement of the person in charge of Palud	PU3		Istria County - Board of Directors for Sustainable Development, Croatian Waters, Croatian Forests, Landowners, Non-Governmental Organizations, Professional Institutions, Competent Ministries and Agencies
Improvement of supervision (more frequent and effective); Development of a Poaching Monitoring Protocol	PU2		JUNE, BIOM
Additional employment of nature rangers and informants/educators	PU1, PU2		JUNH, all interested stakeholders
Monitor the implementation of the Agricultural Land Disposal Program	PU3		Istria County - Board of Directors for Sustainable Development, Croatian Waters, Croatian Forests, Landowners, Non-Governmental Organizations, Professional Institutions, Competent Ministries and Agencies
Improve the parking system	PU1		
Regulate anchoring charges, limit the number of vessels and protect the coastal zone from anchoring	PU1	O, R	
Improving transport infrastructure	PU1		
Possibility of improving the existing infrastructure for performing agricultural activities	PU3, PU4	R	
Arrangement of access roads and paths	PU1, PR2	R	JUNH, Tourist Board of the City of Rovinj-Rovigno, City of Rovinj-Rovigno
Infrastructural improvement (circular trail, additional viewpoint/observation deck, info-educational boards, photo point, souvenir shop, etc.)	PR2, PR3, PU1	U	JUNH, Istria County - Tourism Board
Infrastructure investments	PR3, PR4, PU1	U	national institutions, Istria County, City of Rovinj-Rovigno, Tourist Board of the City of Rovinj-Rovigno
Info-point	PR3, PU1	U	City of Rovinj-Rovigno, Tourist Board of the City of Rovinj-Rovigno, Tourist Board of Istria County, educational institutions

Activity	Link to the problem	Link to the thematic area	Potential stakeholders proposed in the survey
Setting up an educational trail and an observation deck	PR2, PR3, PU1	U	NH, experts
Strategic area: ENVIRONMENT (O)			
Analysis of Hydrological Conditions and Influencing Environment of the Palud Area	PO2		Scientists and local stakeholders
Determination and monitoring of the ecological status of waters and sediments	PO2		JUNH, Centre for Marine Research Rovinj, Institute for Agriculture and Tourism Poreč (Centre for Invasive Species), scientists and local stakeholders
Determination and monitoring of surface and groundwater	PO2		Faculty of Civil Engineering in Rijeka, Faculty of Science, Teaching Institute of Public Health of the Istrian County, scientists and local stakeholders
Determination of zero status and establishment of monitoring	PO1, PO2		professional institutions and associations, competent ministries
Installation of a shut-off to regulate the flow of water and proper regulation of the water level	PO2		JUNH, Croatian Waters, different profiles of experts (hydrologists, biologists, experts in different taxonomic categories...), Department of Ornithology
Habitat management to improve the status of some species (e.g. terns)	PO1		Biome
Maintenance of wetlands	PO2		Biome
Zoning as part of the Management Plan	PO1, PU1	U	JUNH, ornithologists, Department of Ornithology
Determining and monitoring the status of birds	PO1		JUNH, ornithologists, Department of Ornithology
Control/Reduction of the Wild Boar Population			competent institutions, associations, tourist boards, City of Rovinj-Rovigno, Istria County, Rovinj Hunting Association
Maintenance of the area (cleaning, removal of vegetation,...)	PO1, PO2		Tourist Board of the City of Rovinj-Rovigno, City of Rovinj-Rovigno
(Re)valorization of cultural and historical heritage	PO3		JUNH, Istria County, City of Rovinj-Rovigno, tourist boards, schools, faculties, Ministry of Culture and Media
Development of cultural tourism	PO3	R, U	Tourist boards, City of Rovinj-Rovigno, Istria County, schools, faculties
Revitalization of traditional activities (e.g. eel and mullet fishing)	PO1	R	
Strategic area: SOCIO-ECONOMIC DEVELOPMENT (R)			
Encouragement/facilitation for the revitalization of traditional activities	PR1	O	JUNH, Istria County - Tourism Board, Sustainable Development Board, Competent Ministries and Agencies
Targeted incentives for organic production	PO1	R	JUNH, Istria County, private owners, local population
Creating a marketing strategy that would include:			

Activity	Link to the problem	Link to the thematic area	Potential stakeholders proposed in the survey
Strengthening informative and educational activities	PR2		JUNH, Istria County - Tourism Board, City of Rovinj-Rovigno, Municipality of Bale-Valle
Creating educational materials for different target groups	PR2		JUNH, experts - biologists, Department of Ornithology
Promotional and informative activities	PR2		Tourist boards
Creation and/or installation of signage and information boards	PR1, PU1, PR3	R	Public institution NH, City of Rovinj-Rovigno, Tourist Board of the City of Rovinj-Rovigno, experts, Biom, Hyla, Bioteka
Promotion and networking (of protected areas)	PR3		City of Rovinj-Rovigno, Tourist Board of the City of Rovinj-Rovigno
Promotional and informative activities (multimedia...)	PR2		JUNH, Juraj Dobrila University of Pula, experts in mobile applications and GIS
Development and implementation of a virtual assistant (chatbot)	PR1		Scientists, users, students
Android app and QR codes	PR1, PU1	R	
Designing tourist itineraries and package arrangements	PR3, PO1, PR4	O	JUNH, Rovinj Tourist Boards, experts
Resolving property and legal relations as a prerequisite for development	PR1, PU3	O	
Organizing events in order to promote traditional values	PR1		Istria County Tourist Board, Rovinj-Rovigno Tourist Board, City of Rovinj-Rovigno
Development Strategy for the Development and Branding of Palud through EU Projects	PR4	O	state institutions, Istria County, Tourist Board of the City of Rovinj-Rovigno, City of Rovinj-Rovigno
Development and implementation of an intelligent monitoring system (ISS)	PR1, PU2	O, U	Scientists, users, students

Results of the 3rd and 4th workshop

The third and fourth workshops were held online in April 2021. The third workshop was divided into three parts according to strategic areas to make the discussion as efficient and focused as possible. At the fourth workshop, an agreement was finally reached on the planned activities and organization of the managing authority. The results of the third and fourth workshops refer to the defined activities and the roles of individual stakeholders in their implementation, i.e. the Action Plan contained in Appendix 1 of this *Contract*. At these workshops, the governance structure was also agreed, as described in Chapter 5.

Signing of the Contract

The formal signing of the *Contract* took place in July 2021. As previously noted, some stakeholders pointed to administrative limitations related to the formal signing of the *Contract*. Therefore, it was agreed that, in addition to the "signatories", a part of the stakeholders would be identified as an

"associate member". At the same time, therefore, the "signatories" of *the Contract* are all those stakeholders who do not have any major administrative or other obstacles to signing the *Contract*, while the "Associate Members" are those who have such administrative problems because they are mostly larger systems with a large number of organizational units. It was also agreed that in that case there will be no official signatories, but people will be appointed who will monitor the entire process and be in the Stakeholder Forum.

Neither of these two statuses reflect the scope of work or engagement of an individual stakeholder, nor does it entail any legal consequences, nor does it exclude the previously mentioned principles of voluntariness, active involvement, cooperation, and acceptance of obligations. That is, all stakeholders involved, whether signatories or associate members, are responsible for the effective implementation of the activities listed in the Action Plan itself and undertake to take on the agreed roles and contribute to the realization of the activities that are within their competence. The majority of stakeholders declared that they do not see themselves as the holder of the activity, but they agree to be included as implementation in accordance with their competence.

The Contract in its nature is not legally binding but is an expression of the good will of the stakeholders to join the joint work and reflection on activities on Palud.

Results of the individual steps in the process of revising the Contract

The results of the steps in the revision process of the Contract are based on a combination of experiences from the implementation of activities in the period 2021-2026 and the participatory process carried out through the territorial laboratory in 2026. In relation to the initial drafting of the Contract, the revision had an operational character, with an emphasis on the evaluation of the activities carried out, their actual effectiveness and adaptation to new circumstances, especially in the context of climate change.

Implementation of activities

In the initial phase of the revision, the analysis of the situation was supplemented and updated, using the results of the conducted research and monitoring, as well as the experiences of stakeholders gained during the implementation of the Contract. This period was marked by several concrete activities in the field, including hydrological research, monitoring of the state of biodiversity and control of invasive species, and the installation of a barrier, which provided a better basis for decision-making. At the same time, it was recognized that some of the initially defined measures were not within the scope of control and work of the project partner JUNH, which would complicate the implementation itself, so the revision process was directed towards rationalization and clearer focus of previously defined measures.

The large number of initially defined measures makes their implementation more difficult, which has steered the review process towards the need to streamline and focus them more clearly.

Workshop 1 - Impact of tourism on the environment and sustainability

The first thematic unit of the territorial laboratory was focused on the analysis of the impact of tourism and recreational activities on the area and on recognizing the specific pressures arising from the use of space. The workshop was structured as a combination of an introductory presentation, work in small groups and a joint discussion.

In the introductory part, the participants were presented with the issue of waste in protected areas, with examples of good practice in managing similar challenges. This sets a framework for further discussion and focuses on specific pressures that are also present in the area of the reserve. Special emphasis was placed on the seasonality of tourist activities and their cumulative effect on the area.

After the introductory part, the participants were divided into smaller working groups, where one group had the task of identifying the main sources of waste, the second analyzing their impacts on the ecosystem and the third was supposed to propose possible measures to reduce them. The group work was structured, but open to enable the exchange of different perspectives, including the experiences of the public sector, the local community and the users of the space.

The results of the group's work showed a high level of congruence in the perception of the problem. The main sources of waste were identified as visitors during the tourist season, local residents in recreational activities, vessels in the coastal area and fishing activities. The most common types of waste include plastic bottles, bags, packaging and other lightweight materials that are easily transported and retained in space.

In the discussion, it was emphasized that the problem of waste has multiple consequences, not only in the sense of aesthetic, but also through long-term impacts on the ecosystem. The issue of microplastics and their potential impact on aquatic organisms, soil and vegetation, as well as the general experience of space by visitors, was particularly emphasized.

The participants also pointed to the broader context of the problem, pointing out that waste is only one of the indicators of space load. In this sense, the discussion expanded to the issues of unregulated parking, uncontrolled movement of visitors, lack of clearly defined zones of stay and generally insufficiently structured visitor management system. Thus, this workshop served as an important basis for understanding the need for an integrated approach to managing tourist pressures.

The proposed measures focused on a combination of infrastructural, management and educational solutions. The need to strengthen field supervision, the organization of waste collection systems, including the installation of appropriate infrastructure, and the implementation of educational activities aimed at visitors and the local community were highlighted. The importance of arranging access points and parking lots to reduce the pressure on the most sensitive parts of the area was also emphasized.

Workshop 2 - Climate change and revision of the Contract

The second thematic unit represented the central part of the territorial laboratory and was focused on the analysis and revision of the existing measures of the Contract, while strengthening the focus

on climate change as a key long-term challenge of the management of the area. The workshop was methodologically structured as a combination of individual evaluation, joint interpretation of results and group work.

In the first part of the workshop, the participants approached a systematic analysis of the existing measures defined by the Contract. Each measure was presented individually, after which the participants evaluated it according to two key criteria - importance and feasibility. The process was carried out through a digital tool, which enabled anonymous and independent expression of the views of all participants, without the influence of hierarchy or sectoral affiliation. The results were presented in real time, in the form of a matrix that clearly showed which measures had a high priority and which were less relevant or difficult to implement.

This approach enabled the transparent identification of common priorities, but also the rapid identification of measures that need to be reviewed or simplified. It is important to emphasize that the results of the evaluation showed a high level of Contract among the participants, which indicates a common understanding of the problems and real possibilities of management. In the discussion that followed, the participants further confirmed the results obtained, without significant disagreements, thus providing a solid basis for further revision of the Contract.

In the management segment, measures related to the regulation of access and movement within the area were singled out as priorities, including the arrangement of access roads and parking systems and the strengthening of supervision. It was emphasized that these elements have a direct impact on reducing pressures on the area, especially in the tourist season. In the ecological segment, the need for continuous and systematic monitoring of the state of biodiversity was emphasized, as well as for additional research that would enable the adoption of informed management decisions. In the socio-economic part, the importance of education and information of the local community was emphasized, as well as the need for more transparent and timely communication about activities in the reserve.

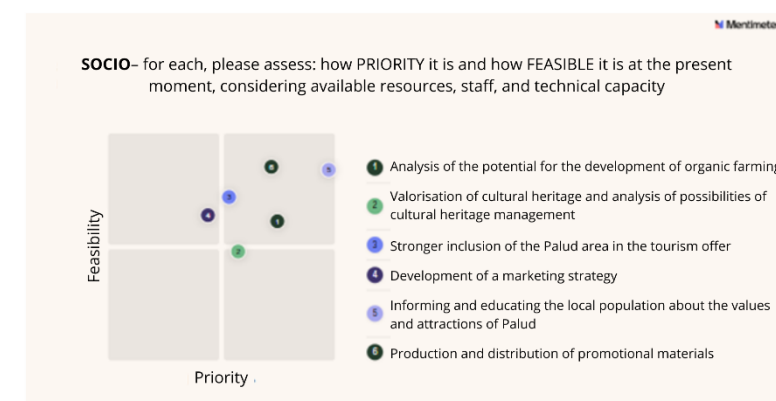
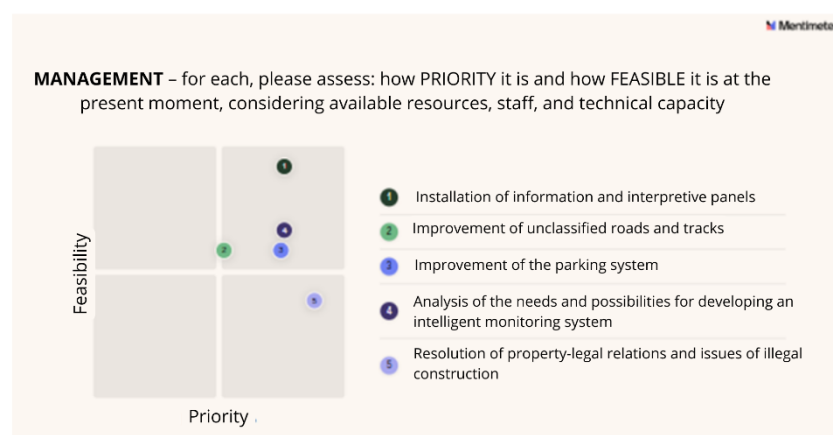


Figure 11 Results of the stakeholder vote on the priority and feasibility of management, environmental and socio-economic measures for the Palud-Palù (Mentimeter application)

The second part of the workshop focused on climate change and its integration into the management framework. Through working in small groups, participants analyzed specific climate threats affecting the area and discussed their possible consequences. Prolonged dry periods, rising temperatures and heat waves, as well as the risk of coastal flooding and changes in the water regime were identified as the most significant threats. Special emphasis was placed on understanding how these changes affect the hydrological dynamics of the area, salinity and habitat condition, and thus the overall resilience of ecosystems.

Based on the identified challenges, the participants proposed concrete adaptation measures. As a key measure, the already implemented water level control barrier was highlighted, which is an important tool for managing the water regime in conditions of changing climate influences. In addition, additional measures were proposed, including the improvement of the water management system, the restoration and conservation of vegetation, the strengthening of the monitoring system and the development of additional technical solutions to increase the resilience of the area. Some of the participants also presented innovative proposals, such as the creation of new or adapted habitats for

birds in conditions of variable water levels, which indicates the openness of the process to longer-term and developmental ideas.

During the discussion, the importance of involving the local community in monitoring the situation on the ground was additionally emphasized, through an approach based on cooperation and exchange of information. Such an approach was recognized as an important element for timely detection of problems and increasing the efficiency of management.

The workshop concluded with guidelines for the further process of revision of the Contract. As one of the key conclusions, the need to reduce the total number of measures and focus them more clearly, in order to increase their operational feasibility, was highlighted. At the same time, it was confirmed that climate change should become one of the central elements of governance as a topic that is integrated into all segments of the Contract. In this way, this workshop represents a key link between the current experience of implementation and the future direction of the development of the governance framework.

Workshop 3

The third thematic unit was focused on the social dimension of area management, with an emphasis on understanding the attitudes, level of information and perception of the local community and the general public. The primary goal of the workshop was to test a survey instrument that was later used on the wider population of the Istrian County (a sample of 400 respondents) and at the same time to involve stakeholders in the process of shaping the research approach.

In the introductory part, the participants were presented with the purpose of the planned sociological research, which aims to collect data on the perception of the protected area, the level of information, habits of using space and attitudes towards nature management and protection. It was emphasized that such data are crucial for making quality management decisions, especially in the context of a participatory approach that implies the active involvement of the public.

After the introductory presentation, the participants proceeded to fill out a test questionnaire in paper form. The activity was designed as a practical test of the clarity of the questions, the logic of the questionnaire and the time needed to fill it out. During the completion of the questionnaire, participants had the opportunity to give comments and suggestions, thus actively participating in the improvement of the research tool.

In the discussion that followed, the importance of systematic collection of data on public attitudes was further emphasized, especially in the context of perceived challenges such as insufficient information and limited involvement of the local community in management processes. The participants pointed out that quality communication and timely information can significantly contribute to reducing conflicts, increasing trust and strengthening support for the implementation of measures.

Survey research

The survey was conducted with the aim of examining the level of information, attitudes and perception of the public about nature conservation, with a special emphasis on the area of Palud Special

Ornithological Reserve. The research included several key thematic units: knowledge of basic concepts such as biodiversity, climate change, the Natura 2000 network and protected areas, the level of information about protected areas in the Istrian County, attitudes and the level of support for nature protection, as well as the readiness of citizens to actively participate in such activities. Special attention was paid to the analysis of the attitudes of residents living in the immediate vicinity of the Palud area.

The research was conducted by a combination of face-to-face and telephone interviews (CATI method), which ensured the reliability and representativeness of the collected data. The questionnaire was structured in five thematic blocks of questions. The total sample included 400 respondents from the area of the Istrian County, with a separate subsample of 81 respondents (20.3%) related to the area of Palud. The research was conducted with a confidence level of 95% and a margin of error of $\pm 5\%$, with the size of the subsample for Palud exceeding the minimum statistical requirements and enabling a reliable more detailed analysis.

The structure of the sample shows several important features. The sample is relatively young, with a predominance of the age group of 15 to 24 years, which is particularly relevant in the context of climate change topics. More than half of the respondents have a higher or higher level of education, which allows for an understanding of more complex environmental topics and the potential for more advanced forms of communication. Also, about 80% of the respondents have lived in Istria all their lives, which indicates that their attitudes are based on many years of local experience. The geographical distribution of the sample covers a wider area of the county, from larger urban centers to smaller municipalities, while the representation of respondents from Rovinj is particularly significant, which allows a more detailed insight into the attitudes of the community most directly related to the area of Palud.

The results of the research indicate a relatively high level of general awareness about nature conservation but also pronounced gaps in specific knowledge. Although most respondents are familiar with the concept of climate change and are generally aware of the importance of nature protection, as many as 86.7% of respondents are not familiar with the concept of Natura 2000. Similarly, although 71.5% of respondents know that protected areas exist, most cannot give specific examples. In addition, 21.8% of respondents are not sure whether they live near a protected area, which indicates the problem of their visibility and recognizability in space.

Despite these gaps in knowledge, the results show an extremely high level of support for nature conservation. Respondents express a strong consensus on the importance of preserving natural values, with a high level of acceptance and concrete protection measures, including restrictive approaches such as stricter rules of conduct and restriction of tourist activities. At the same time, the perception of the conflict between economic development and nature protection is not expressed, which indicates an understanding of their interconnectedness.

In the segment of behavior and application of the rules, it is evident that respondents largely recognize acceptable and unacceptable activities in protected areas. However, at the same time, there is a significant lack of recognition of the institutions that manage these areas, which indicates

the need for a clearer link between the rules and their institutional source, as well as the development of available mechanisms for informing and reporting irregularities.

The survey also showed a high degree of readiness of citizens to actively participate in nature conservation. A significant share of respondents expressed willingness to volunteer (38.2%) and financial contribution to the protection of natural areas (71.5%), which indicates the existence of a strong social potential.

In doing so, it is important to point out that respondents emphasise the need for clear, transparent and understandable information on what the funds raised are invested in and what the concrete effects of such investments are. In other words, trust and willingness to contribute are directly related to the level of awareness and visibility of management results.

These data point to the need to develop transparent funding mechanisms, clear communication on the implementation of activities and the creation of concrete opportunities for citizen involvement, in order to transform the existing readiness into real participation in the management and conservation of the area.

3 STAKEHOLDERS IN THE IMPLEMENTATION OF THE CONTRACT

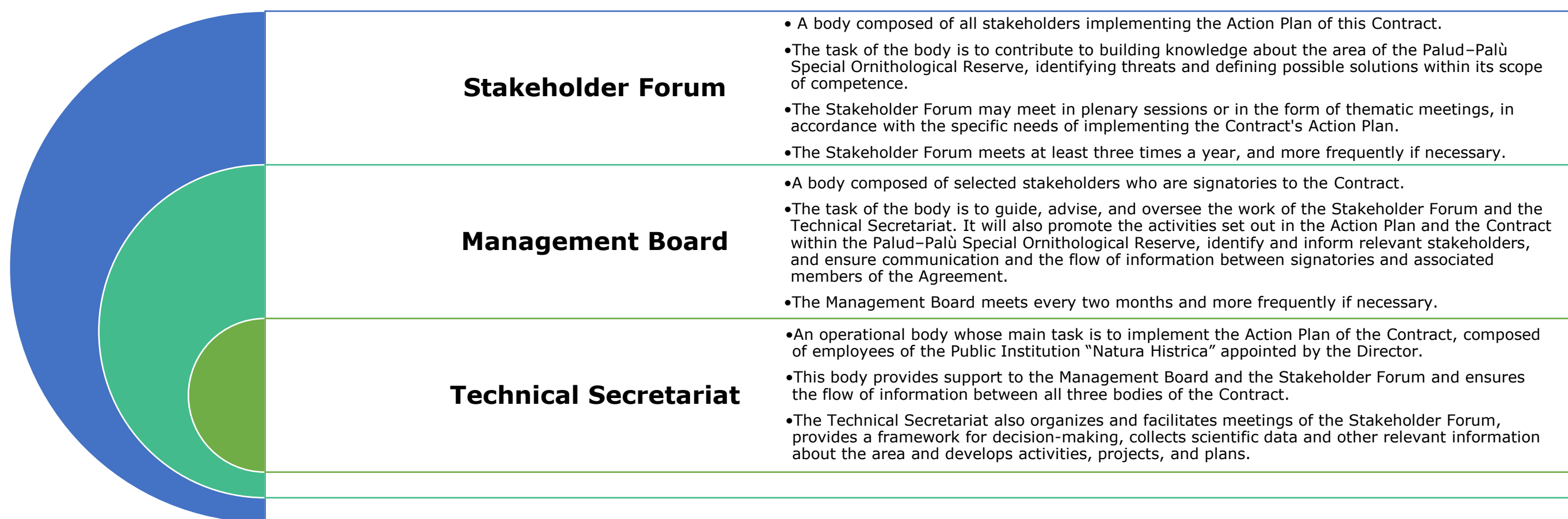
The following are the stakeholders who were involved in the drafting process of the *Contract* and who declared themselves 'signatories' or 'associate members', as well as the activities for which they have expressed an interest in participating in their implementation at this stage. However, as the *Contract* is intended as a flexible document, during its implementation, stakeholders may also be involved in those activities where they are not explicitly mentioned in this list and in the detailed description of the activities (see Chapter 9).

Stakeholder		Activity they are involved in	Status
State level			
Ministry of Economy and Sustainable Development	Directorate for Nature Protection, Sector for Protected Areas Institute for Environmental and Nature Protection	O1-1.; O2-2; 02-3. R1-1.	Associate Member
State Inspectorate of the Republic of Croatia	Sector for Supervision of Nature Conservation, Regional Office Rijeka	O1-2.	Associate Member
Croatian Waters	VGO for the basins of the northern Adriatic	02-1.; O2-2. ; 02-3.	Associate Member
County level			
Istria County	Administrative Department for Sustainable Development	R1-1.; R1-2.; R2-1.; R2-2.; R2-3.	Signatory
	Administrative Department for Agriculture, Forestry, Hunting, Fisheries and Water Management	R1-1.	
	Administrative Department for Tourism	03-1. R1-2.; R2-1.; R2-2.; R2-3.	
	It will be defined during the implementation of the <i>Contract</i>	U1-2.	
Teaching Institute of Public Health of the Istrian County		02-1. R2-3.	Signatory
Archaeological Museum of Istria		U1-1. 03-1. R1-2.; R2-3.	Signatory
Local level			
City of Rovinj–Rovigno		U1-1.; U1-2.; U1-3.; U2-2. 01-2. R1-1.; R2-1.; R2-2.; R2-3.; R2-4.	Signatory
Tourist Board of the City of Rovinj-Rovigno		U1-1.; U1-3. 03-1. R1-2.; R2-1.; R2-2.; R2-3.; R2-4.	Signatory
Tourist Board of the Municipality of Bale-Valle		R1-2.; R2-1.	Signatory
Tourist Board of the Municipality of Kanfanar		R1-2.; R2-1..	Signatory

Stakeholder	Activity they are involved in	Status
Rovinj-Rovigno City Museum	U1-1. O3-1. R1-2.; R2-3.	Signatory
Scientific and professional institutions		
Croatian Academy of Sciences and Arts – Department of Ornithology	U1-1. O1-1.; O1-2.; O2-3. R2-3.	Associate Member
Institute for Agriculture and Tourism Poreč	R1-1.; R2-3.	Associate Member
Faculty of Civil Engineering in Rijeka	U1-1. O2-1.; O2-2.; O2-3. R2-3.	Associate Member
Juraj Dobrila University of Pula	U1-1. O1-1.; O2-1.; O2-2.; O2-3. R2-3.	Signatory
Private sector		
/	/	/
Locals and interested individuals from the wider Palud area		
Margherita Body	It will be defined during the implementation of the <i>Contract</i>	PLetter
Olja Fazlović	O3-1.; R1-2.	PLetter
Ingrid Hrga	U2-1.	PLetter
Ernesto Tiani	It will be defined during the implementation of the <i>Contract</i>	PLetter
Louie Thomas Taylor	O1-1.	PLetter
Non-governmental sector		
Association BIOM	U1-1.; O1-1. R2-3.	Signatory
Hunting Society "Rovinj"	O1-2.	Signatory

4 GOVERNANCE STRUCTURE

The governance structure of the *Contract* consists of three governing bodies: the Stakeholder Forum, the Governing Board and the Technical Secretariat, whose tasks are described below.



5 SPECIFIC OBJECTIVES OF THE CONTRACT

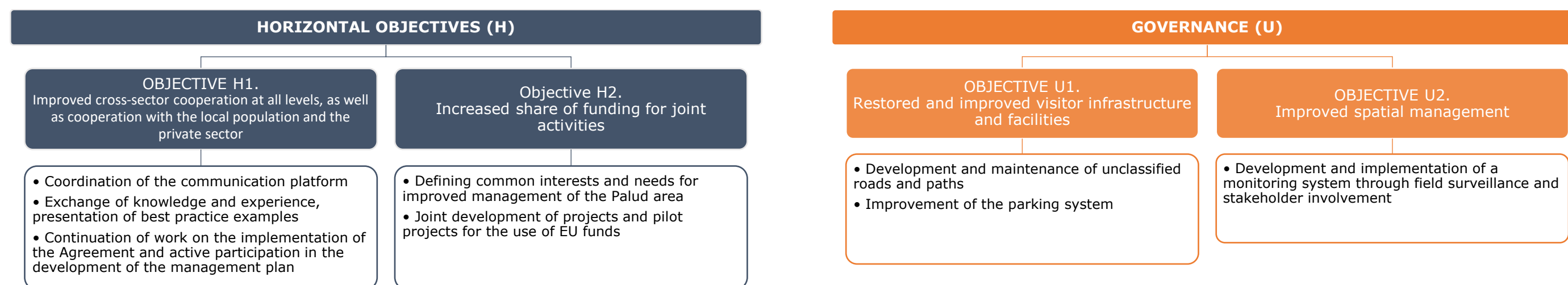
Based on the results of the workshops conducted for the purpose of revising the 2021 Contract, it was determined that certain measures have been implemented over the past period, some have been redefined and simplified, while certain new measures have been added, especially in the context of climate change adaptation and strengthening the resilience of the area.

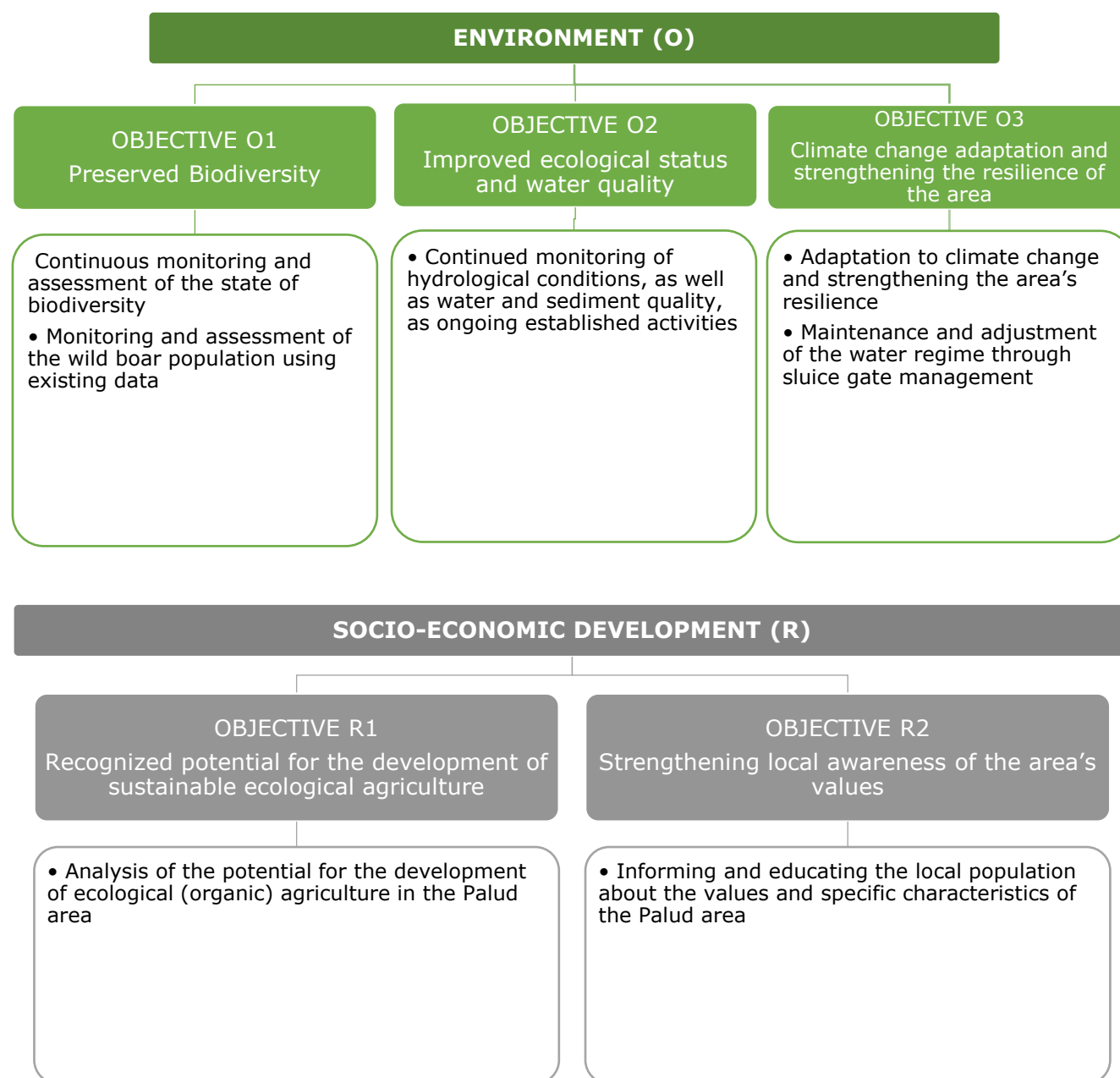
On the basis of these results, the objectives to be achieved were determined to improve the situation and enable the sustainable development of the area while preserving the natural values of the Palud-Palù Special Ornithological Reserve.

Two horizontal goals have been retained, which are a prerequisite for the successful achievement of all other goals, and they refer to the improvement of cross-sectoral cooperation at all levels, as well as cooperation with the local population and the private sector, and the increase in the share of financing of joint activities through EU funds, given the limited financial capacities of individual stakeholders.

Below is an overview of the specific objectives of *the Contract*, which is planned to be achieved in the period from 2027 to 2031.

For each specific goal, in cooperation with stakeholders, activities that need to be implemented in the coming period are agreed in order to achieve the set goals.





6 ACTIVITIES OF THE CONTRACT

Typology of activities

Below is an overview of activities according to their typology, according to which activities are divided into:

- Concrete activities – refer to activities with a concrete result
- Communication activities – refer to communication, public awareness raising and organization of trainings/workshops
- Monitoring activities – refer to the activities of monitoring the state of individual components of the environment
- Other activities – refer to activities that cannot be classified in any of the previous groups

Activities	Concrete activities	Communication activities	Activity monitoring	Management activities	Other activities
Strategic area: GOVERNANCE (U)					
Specific objective U1. Renovated and arranged infrastructure and equipment for visitors					
U1-1. Arrangement and maintenance of unclassified roads and paths					
U1-2. Improvement of the parking system					
U2 Specific Objective. Improved and Improved Space Management					
U2-1. Development and implementation of the surveillance system through field supervision and stakeholder involvement					
Strategic area: ENVIRONMENT (O)					
Specific objective O1. Biodiversity conservation					
O1-1. Continuous monitoring and assessment of the state of biodiversity					
O1-2. Monitoring and assessing the state of the wild boar population using existing data through cooperation					
Specific objective O2. Improved ecological status and water quality					
O2-1. Continued monitoring of hydrological conditions and water and sediment quality as continuously established activities					
Specific objective O3. Adapting to climate change and strengthening the resilience of territories					
O3-1. Planning and implementation of measures to strengthen Palud's resilience to climate change					
O3-2 Maintenance and adjustment of the water regime through sluice control					
Strategic area: SOCIO-ECONOMIC DEVELOPMENT (R)					
Specific objective R1. Recognized potential for the development of sustainable organic agriculture					

Activities	Concrete activities	Communication activities	Activity monitoring	Management activities	Other activities
R1-1. Analysis of the potential for the development of organic agriculture in the area of Palud					
Specific objective R2. Strengthening local awareness of the values of the area					
R2-1. Informing and educating the local population about the values and specifics of the area of Palud Special Ornithological Reserve					

The dynamics of execution

The activities will be carried out in the period from 2027 to 2031, with 2026 partly referring to the final implementation of activities within the GREW project and the transition to the regular implementation of the Contract's measures and continuous area management activities.

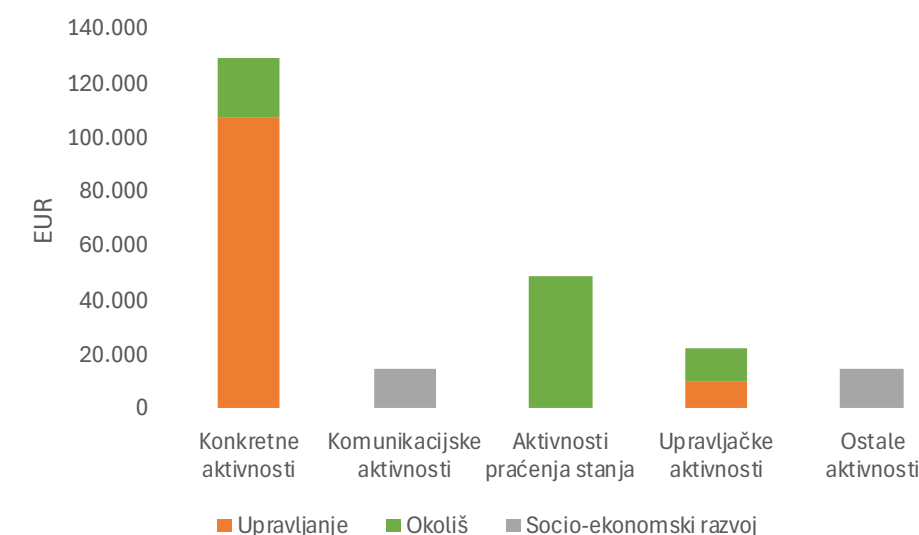
	2027	2028	2029	2030	2031
Activity U1-1.					
Activity U1-2.					
Activity U2-1.					
Activity O1-1.					
Activity O1-2.					
Activity O2-1.					
Activity O3-1					
Activity O3-2					
Activity R1-1.					
Activity R2-1					

Financial resources for the implementation of the activities

For the implementation of the activities planned by this Action Plan in the period 2027-2031, a total of approximately € 230,500.00 needs to be allocated.

The largest share of funds refers to specific activities (infrastructure and water regime management), which account for about 56% of the total budget. These activities include the arrangement and maintenance of infrastructure (roads and parking) and the operational management of the barrier in the function of adaptation to climate change. Monitoring activities account for about 21% of the total funds and relate to the continuous monitoring of biodiversity, hydrological conditions and wild boar populations and the state of water and sediment. Communication and educational activities account for about 6% and are aimed at strengthening the awareness and involvement of the local community. Management activities (about 10%) relate to strengthening the monitoring system and involving stakeholders in spatial management. Other activities account for about 6% of the total budget and relate to strategic analyses, including the potential for the development of organic agriculture.

Type of activity	Estimated resources			TOTAL / €	
	Management / €	Environment / €	Socio-economic development / €		
Concrete activities	107.500,00	22.000,00	-	129.500,00	56,2 %
Communication activities	-	-	15.000,00	15.000,00	6,5 %
Activity monitoring	-	49.000,00	-	49.000,00	21,2 %
Management activities	10.000,00	12.000,00	-	22.000,00	9,5 %
Other activities	-	-	15.000,00	15.000,00	6,5 %
TOTAL	117.500,00	83.000,00	30.000,00	230.500,00	100 %



Stakeholder involvement in the implementation of activities

A total of 22 stakeholders have been involved in the process of drafting and future implementation of the *Contract*, namely public authorities at all levels (state, county and local), scientific and professional institutions, local population and interested individuals in the wider area, and the non-governmental sector. The private sector (caterers, tourism workers and farmers from the Paludi area) has not decided to get involved in the implementation of the Contract at this stage. Most stakeholders are involved in communication activities (tourist boards predominate), but also in concrete and other activities. The fewest stakeholders are involved in management activities, since these are mainly carried out by the Public Institution "Natura Histrica". Public bodies at the county and local level are mostly involved in the activities of the strategic area of Socio-economic development.

The table below shows the interest of individual stakeholders in getting involved in the implementation of one or more activities envisaged *by the Contract*. It should be noted that the County of Istria participates with 3 administrative departments that will be jointly or individually involved in individual activities, and therefore in this context the total number of stakeholders is 25.

Type of activity	State level			County level			Local level			Scientific and professional institutions			Private sector			Local state.*			Non-governmental sector			UK
	U	O	R	U	O	R	U	O	R	U	O	R	U	O	R	U	O	R	U	O	R	
Concrete activities		2		2	2		6	2		3	3					1		1				22
Communication activities						8			11			4									1	24
Activity monitoring		5			1			1			7					1			2			17
Management activities							1									1						2
Other activities			1			5			5			1					1					13
TOTAL		7	1	2	3	13	7	3	16	3	10	5				1	2	1	1	2	1	

* the local population also includes interested individuals from the wider area of Palud

7 CONCLUSION

This *Contract* is a **voluntary agreement** between the Public Institution "Natura Histrica" and interested stakeholders. It defines the common goals and conservation activities of the Palud wetland.

The revision of *the Contract builds* on the previous *Contract*, which defined a total of 17 measures. At the time of its revision, it was found that some of the measures had been implemented in the meantime, some had been adapted and reformulated in accordance with new knowledge and management needs, while the implementation of certain measures had been abandoned. These measures were primarily related to the development of the tourist offer, which is not planned to be further encouraged given the need to preserve the biodiversity of the area, especially in sensitive periods such as bird nesting.

The revision of the *Contract* determined **10 activities** that the Public Institution "Natura Histrica", together with stakeholders, will implement in the period from 2027 to 2031. The activities are divided into 3 strategic areas: Management (U), Environment (O) and Socioeconomic Development (R), and **the estimated funds** for their implementation amount to EUR 230,500.00, of which the largest part refers to the strategic area "Management", i.e. 51% of the total estimated financial resources. 36% is foreseen for the strategic area "Environment" and 13% for "Socio-economic development".

In *addition to the Public Institution "Natura Histrica"*, 22 stakeholders are included in the **Contract**, of which 16 are "signatories" and 6 are "associate members". "Signatories" are all those stakeholders who do not have any major administrative or other obstacles to signing, while "Associate Members" are those who have such administrative problems because they are mostly larger systems with a large number of organizational units. The participation of various stakeholders has contributed to a common understanding of the goals and activities that will be *implemented by this Contract*.

The governance structure of the *Contract* consists of three governing bodies: (1) the Stakeholder Forum consists of all stakeholders involved in the implementation of the *Contract*, (2) the Steering Board is a body composed of selected stakeholders representing a uniform composition of the Stakeholder Forum, and (3) the Technical Secretariat, whose main task is the implementation of the Action Plan, and consists of the Public Institution "Natura Histrica".

This *Contract* will achieve **better cooperation between** the Public Institution "Natura Histrica", which implements management plans with other public bodies and the community of users of the narrower and wider area of Palud (stakeholders), all in order to limit and mitigate potential conflicts between economic activities and other ways of using the area on the one hand, and the conservation of the Palud wetland on the other. Special emphasis is placed on the integration of climate change into management, i.e. on the development and implementation of adaptation measures that will ensure long-term resilience and preservation of this sensitive ecosystem.

8 DETAILED OVERVIEW OF THE ACTIVITIES OF THE ACTION PLAN

ACTIVITY U1-1. Arrangement and maintenance of unclassified roads and paths		
Specific objective	U1. Renovated and arranged infrastructure and equipment for visitors	
Typology of activities	☒ Concrete activities	
	☐ Communication activities	
	☐ Monitoring activities	
	☐ Management activities	
	☐ Other activities	
Brief description	Inadequate infrastructure has been identified as one of the problems in the area of Palud, which refers to the network of roads and unclassified roads within the POR as well as the roads outside the boundaries of the Palud POR that lead to it. The roads and roads are mostly macadam and are also used by cars, cyclists and pedestrians. Intersections are not clear and potentially dangerous situations have been recorded in which vehicles almost ran into pedestrians and cyclists. Parts of some roads are exposed to the extreme erosive action of rainwater, and after heavy rains, they need to be continuously repaired. Roads are also used by the local population to get to their agricultural plots, which is sometimes not possible due to the condition of the roads. During the tourist season, the problem is further accentuated because a large number of cars cause dust to rise, which has a negative impact on the surrounding agricultural areas. In addition, only a part of the roads is entered in the cadastre, while the status of the other roads is undefined. In order to enable the local population and visitors, as well as all other users of the area, to safely use the road network, it is necessary to establish their regular maintenance, as well as their registration in the cadastre. It is necessary to jointly define and formalize the exact competencies related to the repair and maintenance of roads. Also, it is necessary to establish regulation and the manner of road traffic.	
Activity Implementation lead	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Contract:	Associate members:
	City of Rovinj-Rovigno Istria County	
Implementation period	2027.-2029.	
Estimated resources	43.800,00 €	
Existing sources of funding	- Public Institution "Natura Histrica" - City of Rovinj-Rovigno	
Potential sources of funding	- Istria County - EU Funds	

ACTIVITY U1-2. Improvement of the parking system		
Specific objective	U1. Renovated and arranged infrastructure and equipment for visitors	
Typology of activities	☒ Concrete activities	
	☐ Communication activities	
	☐ Monitoring activities	
	☐ Management activities	
	☐ Other activities	
Brief description	Inadequate infrastructure has been identified as one of the problems in the area of Palud, which also refers to the fact that parking locations are not defined in this area. The area is crisscrossed by a large number of roads, which results in parking and camping along the beach and in places of historical and cultural importance. This problem is especially pronounced during the summer months when the population of the surrounding area, as well as tourists, come here for swimming. Therefore, this activity is carried out in order to jointly plan several smaller parking lots on cadastral plots owned by the Republic of Croatia and the City of Rovinj-Rovigno and then, when the conditions are created, regulate the parking of visitors and swimmers and prevent parking on a narrower strip along the coast. Specifically, in this phase, it is planned to jointly find a solution and prepare project documentation.	
Coordinator of the implementation of the activity	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Contract:	Associate members:
	City of Rovinj-Rovigno Tourist Board of the City of Rovinj-Rovigno	
Implementation period	2027.-2031.	
Estimated resources	63.700,00 €	
Existing sources of funding	- Public Institution "Natura Histrica" - City of Rovinj-Rovigno	
Potential sources of funding	- Istria County - EU funds	

ACTIVITY U2-1. Development and implementation of the monitoring system through field supervision and stakeholder involvement		
Specific objective	U2. Improved and improved space management	
Typology of activities	☐ Concrete activities	
	☐ Communication activities	
	☐ Monitoring activities	
	☒ Management activities	
	☐ Other activities	
Brief description	Insufficient monitoring of the area has been identified as one of the problems in the area of Palud, which leads to several other problems such as unregulated camping, parking, lighting fires, noise, poaching, damage to existing infrastructure. Therefore, there is also dissatisfaction and distrust of the local population and other users of the area and landowners. On the other hand, it should be borne in mind that JUNH, which manages all protected areas of nature in the Istrian County, has four nature rangers who cover 28 protected areas and 56 areas of the ecological network. It is evident that there are too few nature rangers and, in the future, they will work to change the existing situation. Given the situation, the workshops confirmed the confirmation for strengthening the control and conservation of the Palud area through a combination of field supervision and active participation of the local community. Given the insufficient number of nature rangers and the present problems, the measure envisages the establishment of a system in which, in addition to the competent services, local residents, land users and landowners participate as additional "eyes in the field". This includes the development of simple mechanisms for reporting and information exchange, strengthening cooperation and trust among stakeholders, and organising targeted field visits. In parallel, the possibility of introducing technological solutions (e.g. pilot surveillance projects) where justified and feasible is being considered, while exploring funding opportunities, including EU funds.	
Coordinator of the implementation of the activity	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Contract:	Associate members:
	Ingrid Hrga	
Implementation period	2027.-2029.	
Estimated resources	€10,000.00	
Existing sources of funding	/	
Potential sources of funding	- Public Institution "Natura Histrica" - EU funds	

ACTIVITY O1-1. Continuous monitoring and assessment of the state of biodiversity		
Specific objective	A1. Biodiversity conservation	
Typology of activities	☐ Concrete activities	
	☐ Communication activities	
	☒ Monitoring activities	
	☐ Management activities	
	☐ Other activities	
Brief description	The area of Palud was declared a special ornithological reserve in 2001. Its basic phenomenon is the diversity and richness of ornithofauna, especially waterfowl during nesting, wintering and migration. However, one of the problems in Palud is the inadequate protection of natural resources and the overgrowth of the wetland. JUNH conducts research and monitoring of the state of biodiversity, primarily birds. In the previous period, various research and professional activities have already been carried out, which have enabled a better insight into the state of habitats, hydrological conditions and the presence of individual species, which has laid the foundations for the further development of the monitoring system. In the coming period, the emphasis will be on the continuity of these activities, their improvement and better coordination, with a more active involvement of experts, institutions and other interested stakeholders. The goal is to provide quality and comparable data over time, to recognize changes in the ecosystem in a timely manner and, based on this, to adopt effective measures for the management and conservation of the area. The development of research projects and the use of available sources of funding, including EU funds, will also be encouraged.	
Activity Implementation lead	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Contract:	Associate members:
	Association BIOM Juraj Dobrila University of Pula Louie Thomas Talyor	Ministry of Economy and Sustainable Development – Institute for Environmental and Nature Protection HAZU – Department of Ornithology
Implementation period	2027.-2031.	
Estimated resources	11.500,00 €	
Existing sources of funding	Public Institution "Natura Histrica"	
Potential sources of funding	- City of Rovinj-Rovigno - Istria County	

ACTIVITY 01-2. Monitoring and assessment of the state of the wild boar population using existing data in cooperation with the Hunting Society "Rovinj"		
Specific objective	A1. Biodiversity conservation	
Typology of activities	☐ Concrete activities	
	☐ Communication activities	
	☒ Monitoring activities	
	☐ Management activities	
	☐ Other activities	
Brief description	In the area of Palud, the problem of wild boars that cause damage to the users of the area has been identified and there is a need to establish a balance of the wild boar population in this area, which is also one of the goals of the Annual Programs for the Protection, Maintenance, Conservation, Promotion and Use of Protected Areas (for the area of Palud). For the area of Palud, the Wildlife Protection Program for the period from 2017 to 2027 was adopted, in which an assessment of the number of games within the PED area was made, which amounts to 12 heads for wild boar (reduced to 2017). Game that permanently, seasonally or occasionally inhabits the special ornithological reserve Palud, or passes through it, is part of the wider population of game that inhabits the common open hunting ground number: XVIII/132 - "ROVINJ". Hunting of wild boars in the area of Palud Special Ornithological Reserve is prohibited except in case of illness; however, it is allowed in the surrounding area within the boundaries of the hunting grounds. The activity is aimed at obtaining the most accurate insight into the number and movement of wild boars in the area of Palud and the wider hunting ground. In addition to the current knowledge and existing programs, emphasis is placed on the implementation of specific monitoring activities (e.g. systematic recording of tracks, observations and other indicators of presence) in order to obtain more reliable and up-to-date data. A key element of the measure is cooperation with the Hunting Society "Rovinj", which already has relevant data and experience from the field, which enables a more efficient exchange of information and a better interpretation of the results. By integrating existing and newly collected data, a more realistic assessment of the state of the population and its impact on the area will be obtained. Based on this knowledge, specific management measures will be proposed with the aim of reducing damage and preserving the fundamental values of Palud.	
Activity Implementation lead	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Contract:	Associate members:
	City of Rovinj-Rovigno Hunting Society Rovinj	DIRH - Nature Protection Inspection HAZU - Department of Ornithology
Implementation period	2027.-2028.	
Estimated resources	7.500,00 €	

Existing sources of funding	• Public Institution "Natura Histrica"
Potential sources of funding	/

ACTIVITY 02-1. Continued monitoring of hydrological conditions and water and sediment quality as continuously established activities		
Specific objective	O2. Improved ecological status and water quality	
Typology of activities	☐ Concrete activities	
	☐ Communication activities	
	☒ Monitoring activities	
	☐ Management activities	
	☐ Other activities	
Brief description	The activity is focused on the continuity and further improvement of the already established research and monitoring activities in the area of Palud. In the previous period, professional and scientific activities were carried out, which enabled the first comprehensive insight into hydrological processes, physicochemical and biological characteristics of waters and sediments, and the functioning of the wetland ecosystem. In the coming period, the emphasis is on regular and systematic monitoring of these parameters in order to provide comparable data over time, better understand changes in the ecosystem and respond in a timely manner to possible negative impacts. Continuous monitoring (link to U2-1) represents a key basis for the planning and implementation of conservation and restoration measures, including water regime management, and will be carried out in cooperation with professional institutions and with the possibility of further development through research projects and available sources of funding.	
Activity Implementation lead	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Contract:	Associate members:
	Juraj Dobrila University of Pula Teaching Institute of Public Health of the Istrian County	Faculty of Civil Engineering in Rijeka Croatian Waters
Implementation period	2027.-2031.	
Estimated resources	30.000,00 €	
Existing sources of funding	Public Institution "Natura Histrica"	
Potential sources of funding	- Istria County - Croatian Waters - EU funds - Other sources (FZOEU, etc.)	

ACTIVITY 03-1. Planning and implementation of measures to strengthen Palud's resilience to climate change		
Specific objective	A3. Adapting to climate change and strengthening the resilience of territories	
Typology of activities	☒ Concrete activities	
	☐ Communication activities	
	☐ Monitoring activities	
	☐ Management activities	
	☐ Other activities	
Brief description	The activity is aimed at reducing the vulnerability of the Palud area to climate change. In the initial phase, a vulnerability analysis and risk assessment are envisaged, which will identify key pressures (e.g. changes in water regime, droughts, extreme precipitation, temperature increase) and the most sensitive parts of the ecosystem. Based on the results of the analysis, concrete measures will be implemented, including water regime adaptation (e.g. water level management, inflow and retention – link to activity 03-2) to mitigate the effects of droughts and extreme precipitation, as well as the conservation and restoration of wetland habitats to increase their natural resilience. The measure also includes systematic monitoring of key climatic and ecological indicators, including hydrological parameters (water level and dynamics), physico-chemical characteristics of water (temperature, salinity, oxygen, nutrients), climatic conditions (air temperature, precipitation, extreme events), habitat condition (overgrowth and vegetation), biological indicators (especially waterfowl and invasive species) and sediment quality (link to activities 01-1 and 02-1). As part of strengthening the resilience of the area, special attention is paid to invasive species as a factor that further increases the vulnerability of ecosystems to climate change, and their monitoring and control are integrated into the management and adaptation system. Implementation is based on cooperation with experts and stakeholders, and the aim is to increase the resilience of ecosystems in the long term and preserve their key functions in the face of climate change.	
Activity Implementation lead	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Agreement:	Associate members:
	Istria County – Administrative Department for Sustainable Development City of Rovinj–Rovigno Juraj Dobrila University of Pula Teaching Institute of Public Health of the Istrian County BIOM Association	Croatian Waters Ministry of Economy and Sustainable Development – Institute for Environmental and Nature Protection Faculty of Civil Engineering in Rijeka HAZU – Department of Ornithology
Implementation period	2027.-2030.	
Estimated resources	22.000,00 €	
Existing sources of funding	Public Institution "Natura Histrica"	

Potential sources of funding	• City of Rovinj-Rovigno • Other sources (FZOEU, etc.)
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ACTIVITY 03-3. Maintenance and adjustment of the water regime through sluice control		
Specific objective	A3. Adapting to climate change and strengthening the resilience of territories	
Typology of activities	☐ Concrete activities	
	☐ Communication activities	
	☐ Monitoring activities	
	☒ Management activities	
	☐ Other activities	
Brief description	One of the problems in the area of Palud is the overgrowth of the marsh, which has led to changes in the quality and composition of water. In order to preserve the habitat conditions, and thus the fundamental phenomenon of protection of the Palud POR area, a dam was built, which will enable the regulation of the water level. Subsequent activities are focused on the operational management of the already established infrastructure of the dam in the function of preserving and adapting the Palud ecosystem to climate change. Given the increasingly pronounced changes in the water regime, this measure enables the active regulation of the water level in the wetland in order to mitigate the effects of droughts, extreme precipitation and saltwater intrusion and preserve the stability of habitat conditions. The management of the barrier will be based on the results of continuous monitoring of hydrological and ecological indicators (connection with 01-1 and 02-1) and the adaptation of the operating regime to the real conditions on the ground. This ensures a flexible approach that enables the preservation of a favourable water regime, the prevention of further overgrowth and the maintenance of key natural values of the area. The activity also includes cooperation with the competent institutions in water management, while operational responsibility is under the jurisdiction of JUNH.	
Coordinator of the implementation of the activity	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Contract: Istria County – Administrative Department for Sustainable Development City of Rovinj–Rovigno Juraj Dobrila University of Pula Teaching Institute of Public Health of the Istrian County BIOM Association	Associate members: Croatian Waters Ministry of Economy and Sustainable Development – Institute for Environmental and Nature Protection Faculty of Civil Engineering in Rijeka HAZU – Department of Ornithology
Implementation period	2027.-2031.	
Estimated resources	€12,000.00	
Existing sources of funding	• Public Institution "Natura Histrica"	

Potential sources of funding	• Croatian Waters • Other sources (FZOEU, etc.)
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ACTIVITY R1-1. Analysis of the potential for the development of organic agriculture in the area of Paludo

Specific objective	R1. Recognized potential for the development of sustainable organic agriculture	
Typology of activities	☐ Concrete activities ☐ Communication activities ☐ Monitoring activities ☐ Management activities ☒ Other activities	
Brief description	Due to the large number of land owners, non-use of agricultural plots and unresolved property and legal relations, agricultural land is neglected and degraded. On the other hand, there is an interest of the local population in performing agricultural activities, which cannot be realized for the above reasons. This <i>Contract</i> plans infrastructure development activities (activity U1-1) that should create preconditions for the performance of agriculture. In addition, there is an interest in performing organic agriculture, for which the conditions cannot be fully met due to the conventional way of cultivation on neighboring plots. The City of Rovinj-Rovigno adopts the Program for the Disposal of Agricultural Land Owned by the Republic of Croatia, as well as the Program for the Disposal of Agricultural Land Owned by the City of Rovinj-Rovigno. Also, it adopts the Program of Support for Agriculture and Rural Development of the City of Rovinj-Rovigno. Through these programs, as well as through the development of the Management Plan, it could be ensured that the criteria for performing agricultural activities for the area of Palud are determined and crops that are suitable for cultivation are defined. In doing so, input data (analyses, soil, water...) should also be planned, in which the Institute of Agriculture in Poreč can provide support. This would also open the way to product branding and awarding eco-labels and raise the value of products grown in the area of Paludo, while ensuring the protection of natural values and sustainable development in this area.	
Activity Implementation lead	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Contract: City of Rovinj-Rovigno Istria County – Administrative Department for Agriculture, Forestry, Hunting, Fisheries and Water Management, and Administrative Department for Sustainable Development	Associate members: Institute for Agriculture and Tourism Poreč Ministry of Economy and Sustainable Development
Implementation period	2027.-2030.	

Estimated resources	€15,000.00
Existing funding source	• Public Institution "Natura Histrica"
Potential sources of funding	• City of Rovinj-Rovigno • Istria County • Institute for Agriculture and Tourism Poreč

R2-1 ACTIVITY. Informing and educating the local population about the values and specifics of the area of Palud Special Ornithological Reserve

Specific objective	Objective R2. Strengthening local awareness of the values of the area	
Typology of activities	☐ Concrete activities ☒ Communication activities ☐ Monitoring activities ☐ Management activities ☐ Other activities	
Brief description	At the workshops, the need of the local community to be timely and clearly informed about the activities carried out in the Palud area and their progress was expressed. Local stakeholders emphasized their interest in better involvement in management processes and regular monitoring of changes in the field, as well as in understanding the goals and results of the measures that are being implemented, so the activity is aimed at strengthening the information, awareness and active involvement of the local community in the conservation and management of the Palud area. Given the insufficient level of familiarity of the local population with the natural and cultural values of the area and the activities that are carried out, emphasis is placed on systematic and continuous communication with local stakeholders. This includes the organization of educational activities, workshops and field meetings and the use of communication platforms (such as stakeholder forums) to ensure the exchange of information, knowledge and experience between professional institutions, area managers and the local community. Special attention is paid to strengthening the role of the local population as an active participant in the conservation of the area, and not only as users of space. The goal is to increase understanding of the values of Palude, improve cooperation with the local community and encourage long-term responsible behavior and joint care for the preservation of the natural and cultural values of the area.	
Coordinator of the implementation of the activity	Public Institution "Natura Histrica"	
Other stakeholders involved in implementation	Signatories to the Contract: Archaeological Museum of Istria Museum of the City of Rovinj-Rovigno Istria County – Administrative Department for Tourism and Administrative Department for Sustainable Development Tourist Board of the City of	Associate members: BIOM Association Juraj Dobrila University in Pula Teaching Institute of Public Health of the Istrian County HAZU – Institute of Ornithology

	Rovinj-Rovigno Tourist Board of the Municipality of Kanfanar Tourist Board of the Municipality of Bale-Valle	
Implementation period	2027.-2031.	
Estimated resources	€15,000.00	
Existing sources of funding	- Public Institution "Natura Histrica" - City of Rovinj-Rovigno	
Potential sources of funding	- Istria County - EU funds	

9 ANNEX 1 OVERVIEW OF THE IMPLEMENTATION OF THE ACTIVITIES OF THE INITIAL CONTRACT FOR THE PALUD-PALÙ WETLAND

Label	Activity under the initial Contract	Implementation status	Related activities carried out and clarification
U1-1	Installation of information and educational boards and signage	Done	Information and education activities were carried out through the creation of promotional and educational materials (infographics, posters, roll-ups) and the organization of guided tours for visitors and schools. The activity is partially redirected to education and raise awareness of local stakeholders.
U1-2	Arrangement and maintenance of unclassified roads and paths	Ongoing	The activity is maintained in the revised Contract and is carried out continuously through regular maintenance of access roads for the purpose of area management and controlled access.
U1-3	Improvement of the parking system	Ongoing	The activity has been maintained, but it is carried out with restrictions with the aim of reducing pressure on the area and preserving the habitat.
U2-1	Analysis of the needs and possibilities of developing an intelligent monitoring system	Implemented / Reformatted	The activity was realized through the establishment of a surveillance system that includes the installation of a "wildlife" camera to monitor the situation in the field and the implementation of regular monitoring of the area, especially intensified during the summer period. In the revised Contract, the activity was redefined as a continuous system of field surveillance.
U2-2	Dealing with property and legal relations and illegal activities	Not implemented / outside the scope of the Contract	The activity was not realized because it exceeds the operational and institutional capacities of the project and is not within the direct competence of the Contract. The resolution of property relations and illegal activities is a complex process that requires the involvement of the competent

			authorities outside the framework of this management mechanism, which is why it was not included in the revised Contract.
O1-1	Defining research activities to assess the state of biodiversity	Implemented / in progress	The activity has been significantly expanded through the implementation of systematic research that includes:– monitoring ichthyofauna and marine macrofauna– recording the presence of invasive species– analyses of biological communities (prokaryotes, eukaryotes, microorganisms)– analyses of organic matter and ecological processes in the wetlandIn addition, fishing and control of populations of invasive species (blue crayfish and nutria) are carried out using traps and viviparous traps, which is a direct measure of biodiversity conservation.
O1-2	Wild boar population research	Ongoing	The activity is carried out through the collection and analysis of data in cooperation with relevant stakeholders (hunting society), in accordance with the revised Contract.
O2-1	Defining research on the ecological status of waters and sediments	Implemented / integrated into continuous monitoring	The activity was implemented through the establishment of systematic monitoring that includes seasonal analyses of water and sediment (physico-chemical and biological parameters), sediment sampling and analysis (granulometric and mineralogical composition) and monitoring of organic matter and the structure of biological communities. In the revised Contract, it was integrated into the integrated activity of continuous monitoring of hydrological conditions and water and sediment quality (O2-2).
O2-2	Analysis of hydrological conditions	Implemented / integrated into	The activity is carried out through continuous hydrological monitoring, geodetic and bathymetric measurements (recording the profile of the wetland and

		continuous monitoring	drainage channel, production of isobaths, determination of volume and area), as well as modeling of water circulation within the wetland. The data obtained are used as an expert basis for hydrological-hydraulic analyses and water regime management. In the revised Contract, it is combined with the activity of defining the ecological status of waters and sediments (O2-1).
O2-3	Preparation of project documentation for the sluice gate	Implemented / transformed into a management activity	The activity of drafting project documentation has been realized, and in the meantime the sluice has been built and put into operation. In the revised Contract, the focus is shifted to the management of the water regime through regular maintenance and operational management of the dam, as part of measures to adapt to climate change and preserve the ecological status of the area.
O3-1	Identification and assessment of the state of cultural and historical heritage	Partially implemented / reduced priority	Activities have been partially implemented through valorization, but in the revised Contract, the focus has been shifted to climate change and environmental resilience.
R1-1	Analysis of the potential for the development of organic agriculture	Ongoing	The activity has been maintained and represents part of future development opportunities with an emphasis on sustainability.
R1-2	Valorization of cultural heritage	Partially implemented	Some analyses were carried out, but the activity was not further developed within the revised framework.
R2-1	Stronger inclusion of the area in the tourist offers	It will not be implemented	The activities were abandoned due to the need to preserve biodiversity and reduce anthropogenic pressure.
R2-2	Creating a marketing strategy	It will not be implemented	The activity was abandoned in accordance with the abandonment of more intensive tourist development.

R2-3	Informing and educating the local population	Implemented / in progress	The activity is carried out through the organization of guided tours for visitors and schools, with the aim of educating students about the values of the area and promoting the concept of citizen science.
R2-4	Production of promotional materials	Done	Promotional and educational materials (infographics, posters, roll-up materials) were created that contribute to informing the public and raising awareness of the importance of preserving the area.