Project co-financed by the European Regional Development Fund

Coordinated management and networking of Mediterranean wetlands

Deliverable

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Towards a common methodology for implementing wetland contracts – principles, guidelines and best practices

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TOWARDS A COMMON METHODOLOGY FOR IMPLEMENTING WETLAND CONTRACTS

PRINCIPLES, GUIDELINES & BEST PRACTICES

(deliverable 4.1.1)

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TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

LIST OF TABLES

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The WETNET project (2016-2019), co-financed by the European Regional Development Fund though the Interreg Med Programme, aims at ensuring higher coordination between different levels of spatial planning and stakeholders engaged into wetland management processes, whilst limiting conflicts between conservation is-sues and economic activities. Furthermore the project aims at defining common priorities for Mediterranean wetlands and freshwater ecosystems conservation. In particular it focuses on building a common territorial strategy for the integrated wetlands' management and ensuring higher coordination between different levels of spatial planning and stakeholders engaged into wetland management processes, whilst limiting conflicts between conservation issues and economic activities. In order to achieve these goals, WETNET has tested in nine EU-Mediterranean wetlands (one in Portugal, three in Spain, one in France, two in Italy, one in Slovenia, one in Malta) a voluntary-based multi-stakeholder agreement ("Wetland Contract") as governance tools for the sustainable management of protected wetlands. WETNET was built on previous EU experiences mainly based on "River Contracts" (born in France in the early 80' and developed in Belgium and Italy later on) to face the challenge of improving wetlands governance and ecosystems conservation. The River Contract is an agreement that allows to adopt a set of regulations in which criteria of public utility, economic return, social value and environmental sustainability equally take part in the search for effective solutions for the river basin's recovery (World Water Forum - L'Aja, 2000).

Wetlands are naturally complex ecosystems that cannot be managed with sectorial approaches and policies. In such a context, single-objective measures normally gen-erates externalities that could affect other sectors than the ones addressed by the measure itself. Thus it is to be acknowledged the importance of adopting integrative and inclusive decision making processes, able to take into account different ecosys-tems features and place-based stakes. From the governance point of view, such a voluntary based negotiated agreement as the Wetland Contract tested in the WetNet project can represent a way for identifying common and shared responsibilities amongst relevant stakeholders for the sustainable management of Med wetlands.

WETNET tackles the issue of implementing a multilevel governance for MED wetlands in order to achieve overall and network effects on wetlands' ecosystems. Wetland Contracts can be defined as voluntary-based commitments undertaken by various public and private entities for the sustainable management of wetland sys-tems. Through the Wetland Contract a local community can identify responsibilities and implementation strategies for the governance and management of their own wetlands. Even before sharing decisions, this governance tool aims at sharing the way of taking decisions.

The Wetland Contract is based on a process of mutual listening amongst public and private stakeholders, aimed at (1) integrating expertise and perceptions, (2) sharing wishes and complaints and (3) agreeing proposals and commitments. The path toward the contractual agreement is inclusive and transparent, in order to facili-tate the legitimacy and practicability of the final decisions.

Two key issues of the participatory process are the stakeholder analysis and the consequent stakeholder engagement strategy. Under the umbrella of the European regulatory framework both public information and consultation should be anyway guaranteed (according to the recommendations of the Water

Framework Directive). Beside of this the design of active participatory and/or negotiation processes should match the expectations of the target groups as well as the specific features of the decision making problems. In any case the engagement process could be considered a pedagogical path in which each player may get to higher levels of knowledge and awareness, thus shaping the inclusiveness and empowerment degree of the Contract itself (fig. 1).

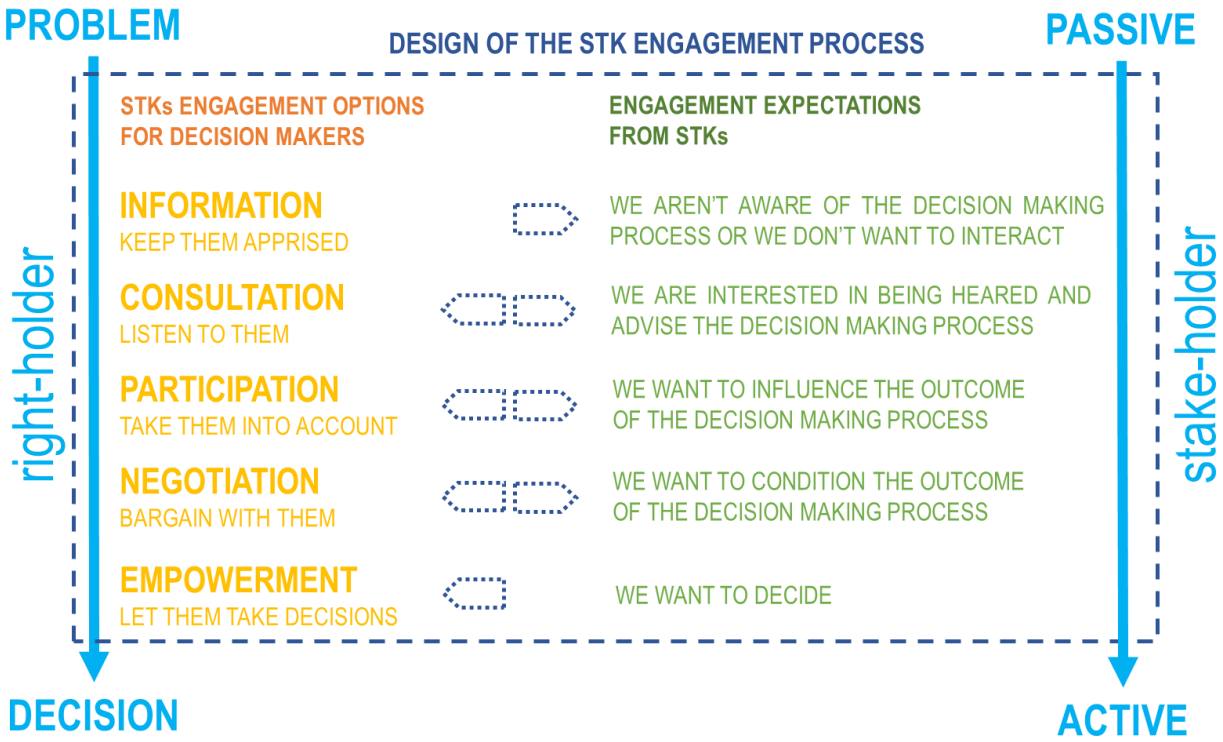

Figure 1 - Diagram of the stakeholder engagement process for a Wetland Contract (Gusmaroli et al., 2020-in press)

The outcoming action plan includes responsibilities for each activity to be im-plemented, specifying implementation deadlines, financial resources (already avail-able or to be retrieved) and implementing rules.

ACRONYMS

APA	Agencia Portuguesa do Ambiente
EEA	European Environment Agency
EIA	Environmental Impact Assessment
ERA	Environment and Resources Authority
ES	Ecosystem Services
EU	European Union
FAMP	Federación Andaluza de Municipios y Provincias
GRC	Gozo Regional Committee
ICNF	Instituto da Conservação da Natureza e das Florestas
ISPRA	Istituto Superiore per la Protezione e la Ricerca Ambientale
IUCN	International Union for Conservation of Nature
MATTM	Ministero dell'Ambiente della Tutela del Territorio e del Mare
MEA	Millennium Ecosystem Assessment
MEPA	Malta Environment and Planning Authority
MWO	Mediterranean Wetlands Observatory
NGO	Non-governmental organization
PA	Protected Area
PGRH	Planos de Gestão de Região Hidrográfica
PV	Province of Vercelli
RCDI	Rede de Competéncias para o Desenvolvimento e a Inovação
REN	Rede Ecológica Nacional
RNAP	Rede Nacional de Áreas Protegidas
SAC	Special Area of Conservation
SAGE	Schéme d'aménagement et de gestion de l'eau
SARGA	Sociedad Aragonesa de Gestión Agroambiental
SCI	Site of Community Importance
SDAGE	Schéma directeur d'aménagement et de gestion des eaux
SDG	Sustainable Development Goal

SEO	Spanish Ornithological Society
SPA	Special Protection Area
TDV	Tour Du Valat Foundation
UN	United Nation
VR	Veneto Region
WFD	Water Framework Directive
ZRC-SAZU	Research Centre of the Slovenian Academy of Sciences and Arts

1 MEDITERRANEAN WETLANDS: CHEST OF NATURAL CAPITAL, SOURCE OF ECOSYSTEM SERVICES

1.1 Wetlands in a nutshell

1.1.1 Wetlands' definition

The diverse zone between land and water is represented by wetlands which are among the most productive ecosystems in the world. Wetlands can be divided to different types according to their natural characteristics. Depending on the type of wetland, it may be overgrown mostly with trees, grasses, shrubs or moss. To classify an area as a wetland, it has to be filled or soaked with water at least part of the year. Some wetlands are dry at certain times of the year.

Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. Wetland environments play a major part in the water cycle and possess a unique mixture of environmental conditions, flora and fauna. Wetlands can be found all over the world, in all climatic conditions from the tundra to the tropics. The UNEP - World Conservation Monitoring Centre has suggested that roughly 6% of the Earth's land surface is made up of wetlands, 2% of which are lakes, 30% bogs, 26% fens, 20% swamps and 15% floodplains. However, these figures may not represent the true extent as they are based on estimates; other studies have found a higher percentage of wetland cover on Earth (MedWet, 2017).

Characteristics of wetland areas change through the seasons and years which makes these areas outstandingly dynamic and various. They are the interest of several scientific disciplines (biology, hydrology, palaeontology, archaeology, etc.) and also the tourism industry. However, due to their variability in time and space it is difficult to specify one single definition that would be agreeable to all the interested parties, scientifically and juridical. Despite the lack of agreement on a single and precise definition, there is a large consensus on three criteria for wetland definition: hydrology, pedology and botany (Mitsch et al, 2000).

The international definition of wetlands is the one of the Ramsar Convention (1971): "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres ". This definition creates obligations towards States but not private individuals (Cizel, 2006; Spyratos, 2008).

The Ramsar Classification (1971) of wetland types includes 42 types which can be broadly divided into three main groups:

- marine and coastal wetlands;
- inland wetlands;
- human-made wetlands.

This classification simplifies the characterization of wetlands by dividing it based on geographic location and human parameters, but one must

consider that overlaps occur since the categories are not always mutually exclusive. A more in depth classification divides wetlands into five major categories (MedWet, 2017):

- marine wetlands (coastal wetlands; coastal lagoons, rocky shores, coral reefs);
- estuarine wetlands (deltas, tidal marshes, mangrove swamps);
- lacustrine wetlands (wetlands associated with lakes);
- riverine wetlands (wetlands related to rivers and streams);
- palustrine wetlands (marshes, swamps, bogs).

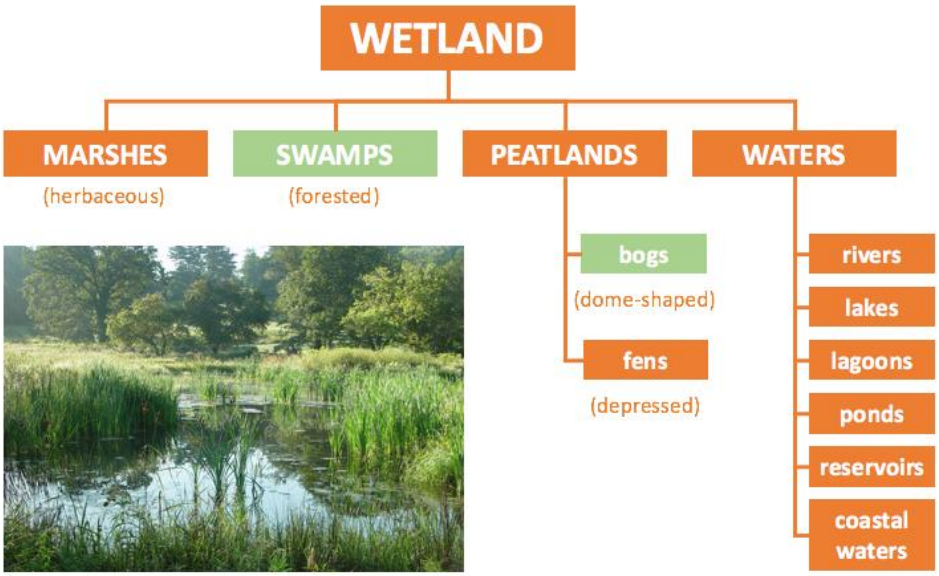

Figure 2 - Wetlands typologies (CIRF)

1.1.2 Wetlands' natural features and ecological behaviour

Ecosystems are complex systems, composed of numerous interacting components, and the scale change that is necessary to characterise ecosystems' water requirements. In addition, wetlands ecosystems are characterised by an important diversity in structure and hydro-ecological functioning. Every ecosystem is unique. Vital requirements of species and ecosystems (i.e. factors limiting their development and potentially their survival if they exceed some proportions), are numerous and complex. For instance, each plant has specific requirement towards environmental factors such as temperature, light, water availability, oxygen, nutrients, and the temporal variations of these parameters (Ramade, 1984; Fustec et al, 2000; Souchon et al, 2004, Witte et al, 2004; Spyratos, 2008).

The common denominator in all wetland types is the continuous or seasonal presence of water which creates a characteristic wetland soil – the hydric soil – and favours the growth of specially adapted plants. These conditions support high biodiversity in terms of amphibians and reptiles that need both wet and dry areas to breed and

resident and migratory birds that use wetlands as a breeding and resting place (MedWet, 2017).

Wetlands are very diverse and productive environments. They have high levels of biodiversity and are the primary habitat for many species; for example, freshwater wetlands hold more than 40 % of the world's species and 12 % of all animal species. Wetlands also store genetic material like rice, which is staple food for a large part of the population, while wetland fauna and flora has been extensively used in the medical industry. It is estimated that over 20.000 medicinal plant species are currently in use, some of them from wetlands, and over 80 % of the world's population depends on traditional medicine for their primary health care needs (MedWet, 2017).

Wetlands are transition zones between land and aquatic systems, where the water table is usually near or at the surface, or the land is covered by shallow water. They range in size forms less than one hectare to several square kilometres and can take many forms, some of which immediately recognizable as "wet", other more like "dry land", being wet only during certain seasons of the year or at several year intervals.

Some of the more commonly recognized types of wetlands are marshes, bogs and swap.

Marshes are low-lying wetlands with grassy vegetation. Bogs are wetlands that accumulate wet, spongy, acidic, dead plant material called peat. Shrubs, mosses, and stunted trees may also grow in bogs. Swamps are low-lying wetlands that are seasonally flooded, they have more woody plants than marshes and better drainage than bogs.

Wetlands are distributed unevenly and are found wherever climate and landscape cause water groundwater to discharge to the land surface or prevent rapid drainage from land surface so that soils are saturated for some time.

In wetlands, when the soil is flooded or saturated, the oxygen used by the microbes and other decomposers in the water is slowly replaced by oxygen in the air, because oxygen moves through water about ten thousand times slower than through air. Thus, all wetlands have one common trait: hydric (oxygen-poor) soils. As a result, plants that live in wetlands have genetic adaptations in which they are able to survive temporarily without oxygen in the roots, or they are able to transfer oxygen from the leaves or stem to the roots. This anaerobic (without oxygen) condition causes wetlands soils to have sulphurous odour.

Local hydrology is the primary determinant of wetlands; they can receive groundwater in-flow, recharge ground-water, or experience both inflow and out flow at different locations.

Land along the sides of streams or rivers receives a continuous water supply and is ideal for wetland growth. Riverine (areas along streams, rivers and irrigation canals) and coastal area wetlands are highly subject to periodic water level changes. Coastal area wetlands, for example, are affected by predictable tidal cycles. Other coastal ad riverine wetlands are highly dependent on flooding and seasonal water level changes.

The most common location of freshwater wetlands is the floodplains of rivers and streams, the margins of lakes and ponds, and isolated depressions surrounded by dry land. Wetlands are further divided by their vegetation. Emergent wetlands (marshes and wet meadows) are dominated by grasses, sedges, and other herbaceous (non woody) plants.

The various functions of wetlands give them unique importance for both the plant and animal kingdom but also for mankind. Wetlands are important for the people who live around them but also for the global freshwater supply. The overuse of finite freshwater resources which constitute 2,5 % of the total water volume of our planet, and the projected future increased use paint a bleak picture for wetlands, but also for humans. Water shortage has already started in many parts of the world and according to FAO by 2025 two-thirds of the world population could be under water stress conditions. Lack of freshwater and increased population growth present a real threat to humanity. However, the solution to this problem can't be found in a single response. Considering that wetlands store and purify water and replenish underground water sources, their conservation is vital for our future. Wetlands are also important as part of the cultural heritage. Their ecological functions have overshadowed this aspect of their importance but it is now increasingly getting more attention. Wetlands are inextricably linked with the cultural heritage of humanity and are a cradle for local knowledge and tradition, religious beliefs and aesthetic values. Effectively, the conservation of wetlands contributes to the conservation of human tradition (MedWet, 2017).

1.1.3 Wetlands' ecosystem functions and services

According to the Millennium Ecosystem Assessment (MEA) definition (2005), Ecosystem Services (ES) are the multiple benefits provided, directly or indirectly, from ecosystems to humankind and that contribute essentially to the wellbeing of populations. Ecosystem Services are also an essential component of economic processes. For this reason, over the last 20 years, the interest in them has progressively increased and, since the first studies of Costanza (1997), several research projects have been carried out to define methods for correct quantification of ES and, above all, to give them an appropriate economic assessment.

One of the most important - and the first in chronological order - international initiatives launched (in 2001, by the United Nations) for this purpose was the MEA, that has carried out an in-depth analysis of the health status of ecosystems worldwide and provided the addresses to rapidly reverse the degradation of many ecosystem services.

MEA has identified four classes of ecosystem services:

- supporting = e.g. nutrient cycling, soil formation, primary production;
- provisioning = e.g. food, fresh water, wood and fibre, raw materials;
- regulating = e.g. climate regulation, flood regulation, water and air purification;
- cultural services = e.g. aesthetic, spiritual, educational, recreational.

There are several factors that affect the conservation status of ecosystems and therefore the services they can provide. Some relationships are now well known. For example, numerous studies have shown that the increase in biodiversity has a positive effect on the conservation of ecosystem functions (a broad review is available in Science for Environment Policy, 2015).

On the other hand, the effects of climate change on ecosystem conservation are not yet adequately considered in ecosystem services assessment (EEA, 2016; this report includes an in-depth list of indicators that can be used to monitor the impacts of climate change on ecosystems).

Wetlands provide many ecosystem services and play a major role in maintaining well-being and economic activities. According to Mediterranean Wetlands Observatory (2012) "*Wetlands are the ecosystems that contribute the most to human subsistence and development. Although they only cover c. 1.5-3% of the Earth's surface (calculated after Finlayson & Davidson 1999), they represent 45% of evaluated ecosystem services (Coates, 2010)".*

Wetlands function like aquitards by delaying the runoff of excessive flood waters and consequently, prolong the charging of rivers which keeps the rivers at normal levels (i.e. reduction of discharge amplitudes). Additionally, wetlands filter and purify water as it flows through the wetland system and the plants help to protect the areas from erosion.

Wetlands are diverse areas with variable natural characteristics that can be very beneficiary for the society (MedWet, 2017):

- Flood protection: When water levels are high due to extensive rainfall and flooding, the vegetation slows the flow of water and stores part of it in the soil or in the surface which in turn reduces flooding and erosion downstream. Floodplain and wetland restoration as well as removal of manmade structures is providing a partial solution to flooding in many countries.
- Soil erosion: The vegetation of wetlands acts as a sediment source which holds together the banks of lakes, rivers and beaches. Increased soil loss and sedimentation is a common problem when wetlands are converted and the vegetation is removed.

Maintenance of water quality and pollution control: Wetlands are natural reservoirs and can be considered as a natural sewage system. The hydrophytes – specially adapted plants – not only slow the flow of water but also purify it. Any chemicals entering a wetland (from agricultural sources, human wastes and industrial discharge) and sediment are separated and settle on the bottom, they are then absorbed by the plants and converted into nutrients which are in turn passed on to the fauna. The sediment and chemical control, as well as the nutrient recycling, protects the blockage and eutrophication of downstream water bodies. Wetlands functions of filtering water and controlling pollution are the most unique and critical functions of wetlands. Some types of wetlands are also the source of replenishment to groundwater aquifers, which provide a large part of the drinking water worldwide.

- Storm and wind buffer: Coastal wetlands buffer the effects of storms and wind by absorbing enormous amounts of wave and wind energy and reducing the damage caused inland.
- Climate change mitigation and adaptation: Wetlands protect us from climate change in 2 important ways. Firstly, they are carbon sinks, meaning they store greenhouse gases, with estimates showing that they may store as much as 40 % of the global terrestrial carbon (especially peat and forested wetlands). Secondly, their water capturing and purifying functions as well as the storm and wind buffering can protect us from some of the effects of climate change, such as changing rainfall patterns, higher storm frequencies, rising sea level and general extreme weather phenomena.
- Wetland Products: The range of products that wetlands provide humans directly is immense and in fact well managed wetlands can be very productive. Some such products are

fruit, fish and shellfish, rice, timber, fuel wood, reed for thatching, meat like deer, crocodile and many others. Wetlands are exploited in many scales from subsistence, to cottage industries to commercial activities.

- Recreation and Tourism: Many wetlands are spots of amazing beauty and animal and plant diversity and some are protected areas or World Heritage sites. They can offer many activities from fishing, boating, to bird watching and hunting. They can also be very educational for school children but also for the general public.

The table below shows the main ecosystem services provided by the wetlands:

SUPPORTING	Agriculture, irrigation
	Livestock, grazing
	Transport
	Energy production
	Human habitation and settlements
PROVISIONING	Water
	Food
	Fuel wood
	Medicinal resources
	Genetic resources
	Raw materials
REGULATING	Storage and recycling of nutrients
	Storage and recycling of human waste
	Storage and recycling of organic waste
	Groundwater regulation
	Natural flood control and flow regulation
	Erosion control
	Salinity control
	Water treatment
	Climatic stabilization
	CO2 sequestration
	Habitat maintenance
	Maintenance of ecosystems integrity
	Maintenance of biological and genetic diversity
CULTURAL	Research, education and monitoring
	Cultural and spiritual role
	Tourism and recreation

Table 1 - Main ecosystem services provided by wetlands (D'Antoni et al., 2011)

Millions of people across the Mediterranean region benefit from ecosystem services provided by natural and human-made wetlands, that cover 0.15-0.22 million square kilometres, about 1.1-1.5 % of wetland area globally (Davidson et al., 2018).

In the Mediterranean region, characterized by peculiar climatic and socio-economic conditions, wetlands play a particularly important role for:

- food supply, as populations use them for agriculture, livestock, fishing;
- sustainable management of water resources;
- mitigation of the effects of extreme weather events;
- conservation of the aesthetic value of the territories, with positive consequences on the tourist attraction.

The economic value of these benefits and their strategic importance for the survival of the populations of the Mediterranean basin, however, remains little known and Mediterranean wetlands continue to be converted and lost (Mediterranean Wetlands Outlook 2, 2018).

Despite growing attention to this topic, also knowledge remains incomplete and uncommon. There are still a few studies that have described extensively the ecosystem services or have carried out an economic assessment of Mediterranean wetland. And also in Europe there are few examples where such evaluations have been carried out in the framework of a national strategy and were then truly integrated into processes, determining measurable effects, as demonstrated by the recent review carried out by the EU (Ling et al., 2018).

Most studies focus only on some services (especially habitat for biodiversity), while supporting services are generally neglected. Wetlands are often perceived to have little or no economic value compared to alternative use of its lands and water. It is necessary to increase knowledge about the economic values of wetlands and make this knowledge available to decision makers (Schuyt et al., 2004). Overall, the role played by the wetlands is not properly considered in territorial planning. Moreover, it is one of the main causes of the shortage of actions for wetlands protection and restoration (MedWet, 2016).

1.2 Facts and figures on wetlands

1.2.1 Worldwide outlook: wetlands' conservation status and main threats

Wetlands cover less than 1% of the earth's surface area, yet they harbour over 25% of vertebrate populations. In addition to the important biodiversity value, wetlands also provide a wide range of ecosystem services including food and water for domestic, agricultural and industrial uses, medicines, building materials, natural infrastructure protecting against flooding, erosion and storms, and suitable sites for development of tourism, culture and education (Mediterranean Wetland Observatory, 2012). These natural resources are used by local communities and are vital for the survival of humans. Despite the vital role that they play, wetlands are probably the type of ecosystem that has been the most severely affected by losses and damage (Mediterranean Wetland Observatory, 2012). In order to reduce these losses, the Ramsar Convention came into force in 1975. The convention has the goal to conserve and promote the wise use of all wetlands through local and national actions and international cooperation, as a contribution toward achieving sustainable development throughout the world. The Ramsar convention works in over 170 different countries to identify wetlands of international importance. These wetlands can be designated as "Ramsar Sites" and are recognized as being of significant value not only for the country or the countries in which

they are located, but for humanity as a whole. There are currently over 2,200 Ramsar sites around the world, making up over 2.1 million square kilometres of important wetlands.

Although the conservation status of wetlands is internationally recognized, they continue to be threatened by increased water extraction, pollution, drainage, the canalization of watercourses, construction of dams, deforestation of catchment areas, introduction of invasive species and overfishing, having a negative impact on the habitats and species living within the wetlands (IUCN red list). There is no complete set of data on the extent of wetlands in the world, but research has suggested that up to 50% of the worlds wetlands have been lost during the 20th century (Finlayson and Spiers, 1999).

1.2.2 European outlook: wetlands' conservation status and main threats

There are over 1,000 Ramsar Sites in Europe, making up 48% of the Ramsar Sites around the world. Wetlands are also important for the establishment of Natura 2000 sites (Čížková et al., 2013). At the end of 2015, 23 726 sites belonging to 28 European State Members and covering an area of 4 346 742 km2 were included in the Natura 2000 Network, representing 18% of the European territory. Additionally, the European Directive 2007/60/EC) on the assessment and management of flood risks was established to reduce adverse consequences associated with floods on human health, the environment, cultural heritage and economic activity. While the human aspects around the wetlands are considered, adequate integrated conservation of floodplains with their role as valuable natural ecosystems is not assured (Comin et al., 2008).

The Montreux record lists the Ramsar sites that are exposed to actual or potential unfavourable changes in the past, present or future times. In 2016, the list included 22 European Ramsar sites in 9 European countries (including 3 from the Mediterranean Region). The main threats to European wetlands include: extraction, land filling, building of navigation canals, accelerated water discharge caused by straightening of watercourses, permanent inundation by reservoirs, fragmentation of residual wetland biotopes, pollution and eutrophication (Čížková et al., 2013).

1.2.3 Euro Mediterranean outlook: wetlands' conservation status and main threats

Mediterranean wetlands include numerous and various ecosystems: large coastal lagoons, fresh, brackish or salt marshes, riverine forests and reed beds, flood plains and wet meadows, mountainous lakes and surrounding wetlands, salted lakes, oasis, temporary marshes and streams (Papayannis, 1999; CIEPP 1994; Fustec et al, 2000; Zalidis et al, 2002).

Hydrological and ecological characteristics of wetlands in the Mediterranean combine various factors: climate, topography and geology, biogeography, and the proximity of a very salted and calm sea. Mediterranean climate is characterised by mild and wet winters, long, hot and dry summers, and important hydrological intra annual and inter annual variability. Indeed, rain and temperature, evaporation, water flows, sediment transport, underground water recharge and water availability varies greatly amongst seasons and years. Floods and droughts are often severe (Acreman, 1999; Arnaud et al, 2007; Spyratos, 2008).

Some economic evaluations of Mediterranean wetlands showed high values, despite the small area they occupy. However, these ecosystems are continuously changed which lowers their beneficial functions and services (Zalidis et al, 2002; Davis et al, 2003).

Specific characteristics of the climate and the long history of human presence make the Mediterranean a unique region. For thousands of years, the wetlands around the Mediterranean basin have provided people not only with essential services like water, food, materials and transport, but have also played a major part in their social and cultural activities. Major civilizations were established in association with and depended on wetlands for resources like water; for example, the ancient Egyptians with the Nile, the Mesopotamians with the Tigris. Major cities like Venice and Tunis have been built in or very close to wetlands. Since major human settlements have been built in or around wetlands, significant archaeological remains can be found, like ancient ships in Marseille and Venice or even entire cities like Nikopolis in Greece. In the 20th century, with the advent of industrialization, intensive agriculture, urbanization, population pressures and legitimate health considerations, the bond between man and wetland was broken and hence many wetlands were destroyed. Wetlands were perceived as dangerous places filled with dangerous animals, evil spirits and disease-carrying insects that needed to be "sanitized" or seen as unimportant, fallow land to be drained or converted to other uses (MedWet, 2017).

For the Mediterranean wetlands three specific features are especially characteristic (Papayannis, Salathé 1998):

1. Mediterranean wetlands are very diverse, which is caused by the climatic variability of the region. In the North the wetlands are large river deltas and lagoons and in the South they are sebkhas and marshes that are seasonal and may appear every few years. Also, artificial wetlands range from oases and salinas to contemporary reservoirs created by hydroelectric and irrigation dams like in the Nile and the Neretva rivers.
2. There are strong ties between local inhabitants and wetlands. These ties are evident by the fact that Mediterranean people not only used them but lived and still live in them, like in the archaic lacustrine settlements, the Empurias in Spain. Also, Venice and Tunis, two large Mediterranean cities are built in wetlands. These choices in settlement demonstrate how local communities in the Mediterranean basin have developed strong cultural bonds with wetland sites.
3. Mediterranean wetlands are in degraded condition and they are under threat. The last century has seen the loss of more than half the wetlands, which has resulted in a dramatic degradation of their functions and loss of their values. Even though many attempts have been made to counteract this trend, the degradation and loss haven't yet been stopped or reversed.

There are 234 Ramsar Sites covering 4.521.934 ha in the Euro Mediterranean Region. The Euro Mediterranean countries have also dedicated over 1.711.000 square kilometres to the Natura 2000 network (8.541 Natura 2000 sites). Despite this conservation status, there are 3 countries that are identified on the Montreaux record as sites that are exposed to actual or potential unfavourable changes in the past, present or future times. Additionally, the Mediterranean Wetland Observatory (Mediterranean Wetland Observatory, 2014) calculated an overall decline

of 10% of Mediterranean wetlands since 1975. Most of these declines were in natural wetlands including marshes and wet meadows. At the same time, there was an increase in artificial wetland habitats with the creation of reservoirs and damming. According to the IUCN redlist, one third of species linked to Mediterranean wetlands are threatened with extinction, with Spain, Greece, France, Croatia, and Italy hosting a significant part of these threatened species Bird populations have increased by up to 70% in western Europe, but have declined in eastern Europe. Although the population dynamics for bird populations in western Europe can be consider positive, the increases are most commonly generalist species which are already common and widely distributed around the world (Galewski and Devictor, 2016). Fish, amphibian, reptile and mammal populations have declined by 40% in Mediterranean wetlands since 1970 (Mediterranean Wetland Observatory, 2012). The main threats to Mediterranean wetlands in order of importance are: pollution, water management, climate change, invasive species, urbanization, hunting/fishing and agriculture (Mediterranean Wetland Observatory, 2012).

Wetland habitats are among the most heavily impacted and degraded ecosystems. In the last hundred years alone, half of the world's wetlands have been lost mainly due to human interference and mismanagement. Considering water and land development and management issues, the Mediterranean is globally characterised by important pressures on soil and water resources, mainly due to the urbanisation of coastal zones, agricultural reclamation, important and increasing water use for irrigation, and many hydraulic works such as dams, dikes, river channelling, drainage and irrigation networks. Despite the common general characteristics, the Mediterranean wetlands are immensely diverse on the regional and local level with specific natural and anthropogenic challenges (Pearce et al, 1994; CIEPP, 1994; Acreman, 1999; Papayannis et al, 1999; Benoit et al, 2005; Spyratos, 2008).

The main reasons for the loss of wetlands are (MedWet, 2017):

- drainage and conversion for agriculture;
- pressures from settlements, urbanisation and tourist development;
- industrial activities;
- pollution from industrial, agricultural and urban sources;
- introduction of invasive species that compete with native ones;
- changes in the hydrological regime through building of dams, diking and flow diversions;
- sedimentation from removal of vegetation in catchment areas through grazing and deposition of fill material for development;
- hunting;
- mosquito control in order to combat Malaria and other related diseases.

The water requirements of wetlands are complex and diverse and all ecosystems and situations are unique. Still, drastic modifications in wetlands hydrological regimes can be observed that occurred in the last decades. The changes lead to severe and worsening degradation of many Mediterranean wetlands. The confrontation of observed environmental problems and collectively decided environmental objectives allows the identification of environmental issues (i.e. changes that are needed for a more ecological management of these ecosystems and of their water regimes). The environmental issues determine operational environmental objectives (Zalidis et al, 2002; Leroy, 2006; Spyratos, 2008).

Nevertheless, despite the national and international commitments, scientific and political recognition of the wetlands values and

functions and of the societal issues that depend on their conservation, despite the implementation of numerous management plans and interventions, the surface and ecological quality of Mediterranean wetlands' degradation continue.

Most Mediterranean wetlands have been historically drained for water-borne disease and agricultural uses. Remaining wetlands are currently heavily threatened by physical alteration and by drastic hydrological changes. An important challenge for the long term preservation of water resources in the Mediterranean lays in finding ways of securing appropriate allocation of water to wetlands. Around two thirds of Mediterranean wetlands have been drained in the last decades, mainly for water-borne diseases fighting and agricultural land reclamation reasons. The European Commission gives the following estimations of wetlands loss for Mediterranean EU countries (Zalidis et al, 2002; Spyratos, 2008):

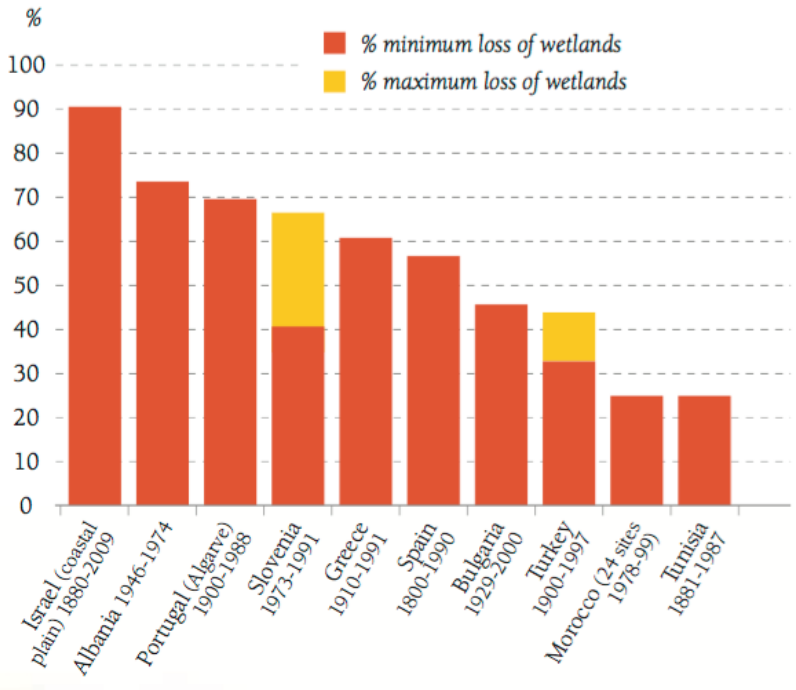

Figure 3 - Loss of natural wetlands in the Mediterranean Region (MedWet, 2014)

The majority of Mediterranean wetlands are being currently seriously threatened by intensive land and water uses. In France, the most important pressures concern riverine and coastal wetlands: between 1990 and 2000, more than half of flood plains and wet meadows are estimated to have undergone serious surface reduction (more than 10%), and 73% of important French coastal wetlands are currently suffering cumulative impacts of more than five human induced hydrological perturbations: (1) increased drought, (2) salinization, (3) eutrophication crisis sometimes leading to anoxia, (4) acidification, (5) increased chemical pollution concentration (Zalidis, 2002; Spyratos, 2008).

Climate change risks are worsening the pressures on water resources, due to possible evolutions of

mean precipitation and evapotranspiration levels, as well as possible increase of extreme events.

Specific ecological problems include (CIEPP, 1994; Spyratos, 2008):

- drought and salinization;
- physical alteration by urban, infrastructure and agricultural development;
- chemical pollution and eutrophication crisis;
- blocking of hydraulic and ecological connexions between connected systems (river beds and riverine wetlands, coastal lagoons, surrounding wetlands and the sea).

Public policies (agricultural, forest, urban) and publicly funded projects have been and still are responsible for many processes causing severe damage to wetlands. Projects affecting wetlands hydrology include surface and underground water abstraction, dams, irrigation and drainage networks, flood control works. Additionally, damage is done by all kinds of river restructuring and channelling, as well as linear and surface infrastructure building reducing permeability and the blocking of hydraulic connexions (CIEPP, 1994; Zalidis et al, 2002; Davis, 2003; Souchon et Wasson, 2007; Spyratos, 2008). Wetlands are extremely rare ecosystems in Mediterranean area and are often under environmental protection. As defined by Ramsar Convention (1971), wetlands are among the most productive environments of the world, the cradle of biological diversity providing the water and productivity upon which countless species of plants and animals depend. The need for a wise-use of wetlands is scientifically recognized in the high connection that they assure to species and energies in the Mediterranean area. The different types of Mediterranean wetlands, situated on the coast and in the hinterland, are vulnerable areas, heavily subjected to the various pressures.

Country	Date of ratification	Wetlands surface	Ramsar sites
France	1986	49	3,714,412 ha
Cyprus	2001	5	94,358 ha
Greece	1975	10	163,501 ha
Portugal	1981	31	132,487 ha
Italy	1977	56	73,308 ha
Slovenia	1991	3	8,205 ha
Spain	1982	75	304,564 ha
Malta	1989	2	117 ha
Croatia	1991	5	94,358 ha

Table 2 - Protected wetland in the Euro-Mediterranean Regions (source: www.ramsar.org)

1.3 Policy and legal framework for the protection of wetlands

1.3.1 International references

States and international funding agencies ratified several International Conventions regarding the wetlands. The most important ones are:

- Ramsar Convention (1971) is the oldest multilateral environmental agreement and the only one focusing specifically on wetlands.;
- Convention on Biological Diversity (1992) is the second most relevant international mechanism for the protection of wetland areas, adopting an action plan on ecosystem restoration, intended to be a flexible framework to promote the restoration of degraded natural and semi-natural ecosystems;
- Convention on Migratory Species (1983) is a treaty under the aegis of UN Environment with coordinated conservation measures for migratory species throughout their migratory range;
- UN Sustainable Development Goals (2015) targeting wetlands in SDG 6 on water resources, with the aim to ensure availability and sustainable management of water and sanitation for all;
- Convention to Combat Desertification (1996).

These conventions predict regulations and mechanisms that should be fulfilled to:

- preserve the wetlands;
- maintain the hydrological functions of wetland systems.

There are four main aspects of the commitments agreed on in the international conventions (Spyratos, 2008):

1. The commitment to preserve wetlands implies two fundamental issues: maintaining wetlands' surface and ecological quality in the long run. In addition, wetlands preservation is not possible without maintaining wetlands' water supply sources. The main way the water is attributed to wetlands is indirect, through the minimal regulation of river flow, known as the "environmental flow", whose value is often lower than one tenth of the mean inter-annual flow of the river. In addition, quantitative hydrological variability is a key factor for wetlands.
2. Another fundamental environmental issue is to increase the water quantities that are allocated to wetlands. In the Mediterranean, it means increasing environmental flows, reducing the impacts of hydropower dams on downstream hydrological regimes, and reducing irrigation water use. Riverine and estuarial wetlands are extremely dependent on flood regimes.
3. A fundamental environmental issue is also to restore regular flood regimes, synchronised with ecological rhythms, wherever possible, in order to maintain a pulsation in the hydrological and ecological rhythm.
4. Hydraulic compartmentalisation, due to many hydraulic works, induces perturbations of hydraulic exchanges between wetlands and their associated ecosystems, which degrades ecosystems' functioning. Thus, to preserve hydro-systems functioning channelization and other hydraulic works have to be limited to prevent the interruptions in lateral and vertical hydraulic exchanges, in particular between rivers and

their alluvial plains, and also between stagnant water bodies and their associated ecosystems – sea, peripheral marshes.

1.3.2 European references

Several policies and regulations targeted biodiversity conservation and Wetlands at EU level, and they are listed in the following paragraph.

Biodiversity Strategy 2020

The EU Biodiversity Strategy to 2020 aims to contribute to global biodiversity commitments under the Convention on Biological Diversity. All six areas of the EU strategy on biodiversity targets are relevant to wetlands: the full implementation of EU nature legislation (Nature Directives) (Target 1); maintaining and restoring ecosystems and their services (Target 2); enhancing sustainable agriculture (Target 3), forestry and fisheries (Target 4); tightening controls on invasive alien species (Target 5), and strengthening EU contribution to averting global biodiversity loss (Target 6). The EU strategy stressed the need to take full account of the economic and social benefits provided by nature and to integrate these into reporting and accounting systems. In the case of wetlands, the ecosystem services and benefits are well articulated and described, including water supply, water purification and flood protection, opportunities for recreation and tourism (because of the amenity value of wetland landscapes), biodiversity conservation and carbon sequestration. The strategy expresses concern at the increasing deterioration of wetlands and other habitats of special protection status, which should therefore be prioritised for urgent measures.

Birds Directive and Habitats Directives

Both the Birds Directive and Habitats Directives (EU Nature Directives) prescribe actions that support the conservation and restoration of wetlands. The Birds Directive requires EU Member States to preserve, maintain and re-establish sufficient extent and diversity of habitats for all wild birds (Article 3), whilst the Habitats Directive requires Member States to report on compensation measures taken for projects having a negative impact on Natura 2000 sites or on derogations they may have applied to the strict protection measures (Article 6.4). Wild bird species protected by the Birds Directive, and habitats of community importance and priority protected by the Habitats Directive, include many associated with wetlands. For the Habitats Directive, 47 of the 233 habitat types listed in its Annex I (20%) are wetland habitats, and about 290 species are linked to wetland ecosystems. The EU Biodiversity Baseline (based on Article 17 reporting) shows that 73% of those wetland habitats and 64% of wetland species have unfavourable status. Hence, measures to meet the goal of ensuring favourable conservation status of these species and habitats are urgent and will improve the extent and ecological condition of wetlands across Europe, including areas within the Natura 2000 network.

Water Framework Directive

The EU Water Framework Directive (EU WFD) combined all previous European legislative instruments on the management of water resources. Its overall goal is the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. It seeks to ensure that all aquatic ecosystems and, regarding their water needs, terrestrial ecosystems and wetlands, attain 'good status', initially by 2015. So far, it has proven to be a valuable policy instrument for maintaining

and restoring riverine wetlands. Central to the implementation of the EU WFD was the designation of River Basin Districts and their management plans. As a first step, countries defined and delineated the types of wetlands and open water bodies present within each district (i.e. catchment areas). A WFD cyclical management planning process then involves a characterisation and assessment of impacts on the districts, environmental monitoring, the setting of environmental objectives, and the design and implementation of protection and restoration measures. Close to the EU WFD policy the **EU Floods Directive** implementation plays a major role implementing measures for flood regulation that includes the consideration of wetlands as Natural Water Retention Measures.

Environmental Impact Assessment Directive

The Environmental Impact Assessment (EIA) Directive is in force since 1985 and applies to a wide range of defined public and private projects. The EIA procedure ensures that the environmental consequences of projects are identified and assessed before development consent is issued. The competent public authorities can give their opinion and the results of the consultations are taken into consideration in the development consent procedure of the project.

Green Infrastructure Strategy

The EU Green Infrastructure Strategy (a strategically planned network of natural and semi-natural areas) highlights the importance of maintaining and restoring functional ecosystems as a foundation for a sustainable Europe. The strategy promotes spatial land use planning and territorial development and nature-based solutions. With the Natura 2000 protected areas as its backbone, the strategy seeks to ensure the presence of patches of representative vegetation types, thus establishing ecological networks and flows that underpin the ecological integrity of the wider landscape.

1.3.3 National references

France

In France, the vast majority of national texts relevant to wetlands are included in the French Environmental Code (Book II, Title I on Aquatic Environments and Book III on Natural Areas). They are supplemented by the forest code, the urban planning code, the rural code, the general code of local and regional authorities. Water management in France is planned at different scales. The master water development and management plans (SDAGE) are projected on each of the 12 existing large basins. The water management plan (SAGE) is a planning tool, instituted by the 1992 Water Law, aimed at the balanced and sustainable management of water resources. In this context, an environment contract (usually a river contract, but also a lake, bay or aquifer) is a technical and financial agreement between the partners concerned for a global, concerted and sustainable management at the scale of a coherent hydrographic unit. With SAGE, the environmental contract is a relevant tool for the implementation of the SDAGE and the programs of measures approved in 2009 to take into account the objectives and provisions of the Water Framework Directive. It can be an operational version of a SAGE. It is a voluntary and concerted action program over 5 years with contractual financial commitment (designation of project owners, financing method, deadlines for works, etc.). The river contract, since its establishment in 1981, has evolved considerably to enrich itself and adapt to the new legislative and regulatory context. Until 2003, river or bay contracts were approved by a national

accreditation committee. At the end of 2003, the ministry responsible for sustainable development decentralized basin-level accreditation procedures under the responsibility of the basin committees. Thus, the procedure is different depending on the basins. In the actuality, the procedure of the firm is regulated in Ministerial Circular No. 3 of 30 of November of 2004 about contracts of rivers and bays (GESTEAU).

Italy

The Italian Environmental Code contains rules on soil protection, combating desertification, protection of water from pollution and management of water resources. In 2016 a specific article on river contracts was introduced, defining them as voluntary strategic planning and negotiated instruments that pursue the protection, the correct management of water resources and the valorisation of riverine territories together with the safeguard from the hydraulic risk, contributing to the local development of these areas (Part 3, Section 1, Title 2, Chapter 2, Article 68-bis). This code is complemented by hydrographical district planning at the catchment and sub-catchment level, by regional and provincial strategic planning instruments, by spatial planning instruments and by regional documents containing guidelines and base level requirements of river contracts.

Portugal

Portuguese wetlands are regulated by different national and regional planning and management tools, depending on each site protection status. As mentioned in section 1.1.3 above, the most relevant wetlands are either classified in the Ramsar List of Wetlands of International Importance and included in the National Network of Protected Areas (RNAP)[1], or classified as Natura 2000 sites. Every Protected Area (PA) in Portugal is managed by a Land Use Plan that is legally in forced. The Plan regulation is transposed to the Municipal Master Plans and harmonized with the regional/municipal development strategy. The preparation, implementation and supervision of the PA Plan are committed to the National Authority for Nature Conservation (ICNF) through the management units located in every PA. The Natura 2000 network is also regulated by a national management plan[2], which is under the responsibility of ICNF. However, the operationalisation of this plan is done at municipal level, through integration in the Municipal Master Plans, assuming a close cooperation between municipal authorities and ICNF. Not classified wetlands are strictly managed under the regulation of the Water Directive[3]. The major operational tools of the water policy are the Hydrographic Region Management Plans (PGRH), which include the drainage basin plus the adjacent coastal area. These plans are a responsibility of the National Environment Agency (APA). Every water region is provided with a management plan that is implemented by the Regional Water Authority (ARH). The regional authority has to coordinate its activities with other regional sectoral bodies, in particular with the regional nature conservation departments and the municipalities. Additional national legislation also contributes to the protection of the wetlands. The National

[1] As defined in the Decree-law 142/2008, 24 July.

[2] Approved by the Resolution of the Council of Ministers n. 115-A/2008, 21 July.

[3] Law 58/2005, 29 December, that transposes the European Directive to national legislation, and the National Water Plan approved by the Decree-Law76/2016, 9 November.

Ecological Network (REN)[4] is specifically focused on the water cycle. It is designed to guarantee the ecological functions of the most important territorial components of the water cycle, in the context of an ecological structure defined at regional level. REN is defined (mapped) and regulated in the Municipal Master Plans, being approved and supervised by the regional environment departments. In conclusion, the Portuguese framework for the protection of wetlands is quite developed, respecting the European directives on water and nature conservation. Operational matters are committed to the municipal authorities, but legal guidance and supervision are strong at regional level.

Slovenia

The Slovenian water act regulates the management of the sea, inland and ground waters and coastal water and land. According to it, the management main goal is to achieve good status of target waters and related ecosystems. Wetlands are not specified and described as a category. They are listed in Article 10 as types of water bodies (intermittent lakes, ponds, lakes, swamps and other natural water reservoirs) and in Article 11 as types of aquatic lands (flooded areas, abandoned river banks and gravel areas, which are occasionally flooded by the water…). In addition to water management and aquatic ecosystems, Articles 62 to 80 also define the management of riparian ecosystems. On the other hand, the Nature Conservation Act provides a basis for the overall conservation of biodiversity and protection of valuable natural features as part of Slovenia's natural heritage. One of key tasks is to protect and conserve plant and animal species, their habitats and valuable natural features. Wetlands as a specific habitat forms are not defined or more precisely defined. Article 4 of the Act lists among other natural values also lakes, marshes, streams and rivers with shores, sea coast, plant and animal species with their habitats, ecosystems and landscape. The levels of protected areas and their management are also defined in Articles 64 to 71.

Spain

In Spain some water legislation and nature protection legislation are particularly relevant, such as, the Royal legislative decree 1/2001, of 20 July, that approves the revised text of the Water Law with the aim to regulate the public hydraulic domain, the use of water and the exercise of the competences attributed to the State, embodying the master lines of the Water Framework Directive. It also regulates the public hydraulic domain and its protection, the uses of water and ecological flows, the protection of wetlands, the process of preparing hydrological plans and public participation in these processes, as well as the management, coordination and participation bodies in water matters. The Natural Heritage and Biodiversity law (Law 42/2007) embodies the guideline of both Habitats and Birds Directives. This Law classifies protected areas into three categories: areas derived from international agreements (such as, for example, Ramsar Zones and Biosphere Reserves); areas of the Natura 2000 Network; natural protected areas (Parks, Natural Reserves, Natural Monuments, Protected Landscapes and Marine Protected Areas). The law also includes two relevant instruments for wetlands: 1) The national inventory of wetlands with the purpose to know the evolution of wetlands and, where appropriate, to indicate the protection measures that should be included in the Hydrological Plans of Demarcation of the water law; 2) The State Strategy for Green Infrastructure and Green Connectivity and

[4] Decree-Law 166/2008, 22 August

Restoration. Finally, the law includes the figure of the custody of the territory (LAND STEWARDSHIP), defined as a set of strategies or legal techniques through which the owners and users of the territory are involved in the conservation and use of values and natural, cultural and landscape resources.

Malta

The L.N. 194 of 2004 Water Policy Framework Regulations (2004) establish a framework for the protection of Maltese inland surface waters, transitional waters, coastal waters and groundwater and transpose the provisions of Directive 2000/60/EC of the European Parliament and of the Council. The competent authority Environment and Resources Authority (ERA) ensures that a water catchment management plan is produced for each water catchment district and shall encourage the active involvement of all interested parties in the implementation of these regulations, in particular in the production, review and updating of the water catchment management plan.

In fact, the 2nd Water Catchment Management Plan (by Environment and Resources Authority – ERA) assesses the challenges that have been identified through implementation of the First Water Catchment Management Plan. Furthermore, the programme of measures includes initiatives such as the development of a national water conservation campaign, incentive schemes for operators in the agricultural sector to better manage their water use, the new water programme, the rehabilitation of water catchment areas in valleys and the introduction of new practices such as managed aquifer recharge schemes. Maltese protected wetlands are also regulated by Natura 2000 Management Plans (SAC / SPA) managed by Environment and Resources Authority (ERA).

1.4 Wetland Management in the Mediterranean Region: state of the art

1.4.1 Monitoring and planning

At the Mediterranean level, rangers, site managers and decentralized line Ministries staff are the key personnel involved in monitoring of wetlands. The proportion of rangers and site managers involved in monitoring is higher in countries with relatively centralized governance while the proportion of decentralized ministries and NGOs involved in monitoring increases with decentralized governance (Europe and some Balkans countries, Israel). In Balkan regions, some countries such as Slovenia, Croatia and partly in Bosnia and Herzegovina, a state institute acts as implementing and monitoring agency of the Ministry in charge of wetlands. At the country level, the ultimate responsible of the monitoring process of wetlands is most of the time the head of the department or Authority in charge of wetlands monitoring. In some countries this task is divided between sector ministries, without real integration and analysis of the entire monitoring results. Monitoring is also organized at the decentralized government level, with consolidation at the central level (e.g. Spain) or without central consolidation (e.g. Bosnia and Herzegovina). About 65 % of NGOs, universities, institutes, site managers and experts involved in wetlands programme perform monitoring, either on regular basis (43%) or occasionally (22%). The most monitored topics are water, animal species and birds. Fish, vegetation, conservation and biodiversity are less monitored. Clearly, monitoring of ecosystem, ecosystem services, pressures and socio-economic matters are very poorly covered (MEsurvey, 2011).

BOX - LAND STERWARDSHIP IN SPAIN

(text by Fundación Biodiversidad)

According to Law 42/2007, on Natural Heritage and Biodiversity, land stewardship is defined as "the set of legal strategies or techniques through which the owners and users of the territory are involved in the conservation and use of natural, cultural and landscape values and resources". This conservation tool is used on public or private lands, whose owners have previously signed a voluntary agreement with a land stewardship entity.

Land stewardship entities are public or private, non-profit organizations that actively participate in the conservation of natural heritage and biodiversity throughout this tool. Organizations, as diverse as, a neighbourhood association, a conservation organization, a foundation, a city council, a consortium, or other types of public or private institutions, can act as land stewardship entities.

The origin of land stewardship goes back to the late 19th century in the United States. Since then, this movement has spread mainly through Canada, Latin America and Europe, although there are documented experiences of land stewardship in many countries in the rest of the continents.

In Spain, the first land stewardship experience arose in 1975 with the creation of the “Montejo de la Vega *Raptor Refuge*” in Segovia, promoted by Félix Rodríguez de la Fuente and WWF/Adena (now WWF-España). This pioneering experience was followed by many other actions that have not ceased to increase thanks to a growing number of land stewardship entities.

The “Land Stewardship Platform” (whose Spanish acronym is PCT), created in 2007, led by the Spanish Ministry for Ecological Transition, through Fundación Biodiversidad (Biodiversity Foundation), is a project whose main objective is to promote much of the work associated with the land stewardship in Spain, in addition to collaborating with numerous projects and initiatives with social agents linked to land stewardship.

Among other actions, the PCT regularly carries out the “Inventory of Territory Custody Initiatives”, the only source of information at national level referring to the entities and land stewardship agreements that provide an image of the implementation and evolution of this tool. It is a collection of documents and a directory that promotes the exchange of initiatives and experiences and the dissemination of the actions that have been carried out and that are being carried out.

These entities have been, as well, organizing themselves, creating territorial networks in different regions in Spain. These territorial networks and entities are the main basis of the “State Forum of Networks and

Entities of Land Stewardship", created in 2011, as a space for collaboration and debate to strengthen land stewardship, both at regional and national level.

The data from the last inventory in Spain, carried out in 2018, show a total land area under this kind of protection of the territory of 370.272 ha and 166 land stewardship entities involved in almost 2.500 agreements with both private and public owners.

Spain is a country with a large number of wetlands, which because of its ecological richness and for the diversity of species they contain, the uses they sustain and the functions they fulfil, are precious jewels of biodiversity to conserve. Many of these wetlands are under land stewardship agreements, reaching a total of 231 in the typology *Fluvial Systems/River banks/Wetlands* whose sum is 6.569,5657 ha in custody and 9.6% with respect to all agreements. There are 95 agreements of these wetlands and river banks, which are located in the Natura 2000 Network, in which the recovery, restoration and conservation of habitats are the main objectives pursued.

There are two good examples of these agreements in *Fluvial Systems/River banks/Wetlands* signed by river public organizations (River Basin Authorities). First, the agreement signed in 2013 for the protection of ecosystems between Confederación Hidrográfica del Duero, and a private entity, Fundación Tormes-EB, with the aim of achieving an improvement in the quality of the water in the lagoons, while at the same time, reducing administrative burdens. This initiative shows that land stewardship has become a key cooperation tool between the administration and landowners, in order to ensure the conservation of the territory. Second, the agreement signed in 2016 between Confederación Hidrográfica del Júcar and two NGOs, SEO/BirdLife and Acció Ecologista-Agró, for the management and promotion of biodiversity in Tancat de la Pipa (Albufera Natural Park). This land stewardship agreement have successfully involved local people and integrated science and public bodies in the decision-making process for the conservation of the site.

MORE INFO AT:

https://custodia-territorio.es/

A majority of representatives from the Government influencing decision-making and involved in wetlands monitoring are also involved in national or subnational planning process. Their involvement may cover the national planning exercise while in some cases, they only influence within the protected area planning. This connection between monitoring and planning is seen as very favourable to incorporate lessons learned in subsequent wetland planning process. However, the sector Ministries or Authorities in charge of wetlands protection are usually not the final authorities for land use planning and management decisions. Higher authorities are Prime Minister Office, Ministry of Interior, Council of Ministers, Planning Ministry, and Commission or Ministry of physical planning. However, in about one third of Mediterranean countries, governmental representatives can be part of the decision-making process through the inter-ministry committees. This indicates a potential discrepancy between the recommendations shared vertically within the Ministry in charge of Wetlands and their incorporation in subsequent land use and management planning of other sectors or in local planning process (MEsurvey, 2011).

In protected areas, sector management plans (including wetlands management plans) are a practical tool to implement conservation activities. This tool concerns only a small portion of the protected areas (i.e. protected areas cover about 7 % of the national territories in average in the Mediterranean, ranging from 0.3 % in Bosnia and Herzegovina to almost 30 % in France and Italy) (MEsurvey, 2011).

About 82 % of stakeholders (other than Ministries) involved in wetlands monitoring reported to influence national policy, either directly at the broad wetland scale or specific component such as water, birds, etc., or indirectly through training, capacity building, seminar, etc. Since planning and monitoring of wetlands takes place mostly in protected areas, wetlands management plans are usually not incorporated into the broader national and local development planning processes. This leads to frequent cases of artificial segmentation in land use, social conflicts with local communities over access to natural resources, and opportunistic attitudes between the different planning processes, in which nature is usually the short-term looser. Environmental monitoring systems that are in place are mostly attached to protected areas and not to specific ecosystems such as wetlands. Consequently, wetlands-specific monitoring is mainly found in protected areas were wetlands are dominant or of special interest. In line with the early bird-watching interest and the signing of Ramsar Convention, major wetlands have benefitted of some monitoring for the last 30-60 years. Although usually patchy and irregular, this contributed to an increasing awareness on wetlands, and paying greater attention to them. Monitoring wetlands takes place in protected areas, which represent 0.3 % to 22 % of each country surface. There is almost no institutionalized monitoring of wetlands outside nationally protected areas, except, in Europe, in areas that are designated or earmarked for the Natura 2000 and Emerald Networks. In the Maghreb and Middle-East countries, water quantity /quality and land tenure are regularly monitored because of the political, social and economically sensitive dimension of water and land use in these water-poor countries. At the International level, Ramsar is the key convention that encourages regular reporting and analysis of wetlands status and trends at national level. National reports for the Ramsar Convention are organized through the

National Ramsar Focal Points, assigned in each country (MEsurvey, 2011).

1.4.2 Stakeholders involvement and influence

At the very local (area) level some actors defend vigorously their own interests, and professional organisations their sectorial interests. For instance, the dam managers and irrigators actively resist to environmental measures implementation that would induce a redistribution of the benefits they get from dams. Negotiations and conflicts about public works are often inter-sectorial and imply important distributional issues, concerning territories, resources, and public funds sharing. Accepting the intrinsic strategic dimension of environmental management situations means that environmental problems cannot be solved without efficient intervention. Thus, it is important to enlighten precisely the responsibilities on environmental degradation, with clarified environmental issues and objectives based on public commitments. Because they are not explicitly assumed in management systems and by decision-makers, it is important for environmental action to clearly express these objectives. The stakeholders of infrastructure project (e.g. roads, bridges, dams…) are linked by inter-dependency and by several interests. To reach final decisions multiple negotiations, of various forms, in various places, playing different roles can be identified. However, public negotiations can play insignificant role in the final decision, and discrete informal negotiations can be decisive (Mermet et al, 2003; 2005; Leroy, 2006; Spyratos, 2008).

In order to protect wetlands from threats they are facing it is important to involve stakeholders in all levels of governance and change the destructive practices that have been implemented until now. Wetland loss to a large extent is due to ignorance and misunderstanding of their role, so an important step in effective wetland conservation is informing public policy officials, decision makers and the general public about the true values and functions of wetlands (MedWet, 2017).

Representatives of government report several types of institutions and stakeholders which are most influential for wetlands protection. Most of the time, there is more than one influential institution by country. The Ministry of Agriculture and the Ministry of Environment are the key actors for wetlands-related issues in half of the Mediterranean countries. However, coordination between the two ministries is not always efficient when responsibility on wetlands is shared between these two ministries. In most countries, the Ministry of Interior, the local governments, the Ministry of planning, the Ministry of finance, the Prime Minister office are the key actors with a horizontal mandate over the sector Ministries on land, planning and budgeting issues. In decentralized countries, municipalities and local government have their own authority in land use and distribution. NGOs specialized in wetlands are either few or not strong and not perceived influential by governments except in some countries like France, Spain, Italy, Jordan, Israel, Croatia and Tunisia. In other countries with political transition with laws poorly enforced such as in Bosnia and Herzegovina and Lebanon, few motivated NGOs maintain, with international support, conservation, development and monitoring activities in some wetlands. In conclusion, there are reported institutional and coordination discrepancy within the decision making process between sector ministries and their decentralized offices (vertical) in charge of wetlands, and horizontal ministries in charge of land, planning and finance. This discrepancy may

reduce the efficiency of monitoring in the sense that the lessons learned and shared vertically may not influence the horizontal decision making process (MEsurvey, 2011).

Ministries and NGOs work trustfully together only in sufficiently decentralized governance situations, while in other countries, NGOs are left aside of the national programs and strategic discussions and are mostly active through internationally funded projects. In less decentralized countries, there are also less human and financial resources as well as complementarities to perform wetlands monitoring and analysis. Central and local governments are the key institutions that manage and maintain monitoring systems in wetlands, while universities, public and private institutes, NGOs, site-managers, rangers and volunteers are the key players in operational monitoring activities. International funding agencies and conventions, through projects, studies, training and reporting requirements, are influential in supporting and encouraging monitoring activities, especially in non EU countries (MEsurvey, 2011).

Because of the vulnerability, the active protection of wetlands biodiversity requires to overcome the sectorial approach implemented until now and to tackle the problem from the ecosystem point of view. Wetlands are often challenged by the overlapping of different levels of spatial planning and authorities in charge for their preservation and management and by the scarce coordination and capabilities of administrative authorities to handle complex territorial dynamics. Potential pressures are normally treated and regulated individually and wetlands are often interpreted only as ecosystems to protect. Their management is delegated to conservation-oriented regulatory and planning tools, failing to guarantee their real preservation. Rarely wetlands are taken into account in territorial development strategies, unveiling their potential and acceptability to local environments. It is necessary to implement multilevel governance that integrates the territorial scale into the structure of the decision-making, in order to achieve overall effects on wetlands ecosystems and socio-economic related systems.

2 VOLUNTARY-BASED TOOLS FOR WETLANDS SUSTAINABLE GOVERNANCE

2.1 Wetland Contract: references

2.1.1 Definition and legal framework[5]

The World Water Forum (World Water Forum - The Hague, 2000) defined the river contracts as forms of agreement that allows to adopt a set of regulations in which criteria of public utility, economic return, social value and environmental sustainability equally take part in the search for effective solutions for the river basin's recovery.

The basin's communities are therefore called to elaborate a shared vision, showing conflicts, interests, but also territorial values and the ability to create a system by promoting dialogue between stakeholders and integrating different territorial and environmental protection planning tools. The river contract definition concerns also lake, coast, wetland contracts, if the tool described above is used paying attention to water body categories other than the river.

Formally Wetland Contracts can be defined as shared commitment acts by different public and private subjects, in various capacities interested in water bodies, for environmental restoration and socio-economic regeneration of water systems. The agreement develops and is formalized within a decision-making process of participation and negotiation, thanks to which the programming act (Action Program) is identified which composes and integrates the various interests present around a water body, defining responsibilities and implementation tools for the governance and sustainable management of the wetland system. The process remains active even after the signing of the Contract and constitutes the prerequisite for the successful implementation of shared decisions.

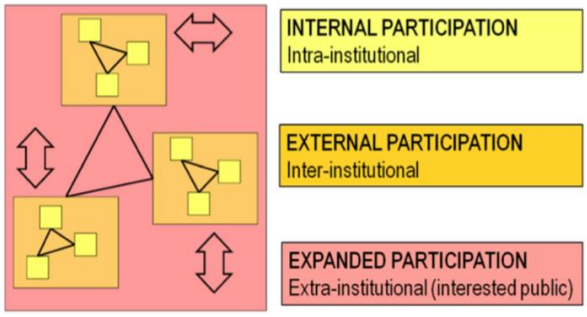

Figure 4 - Wetland Contract participation system (CIRF)

It should be emphasized that the Wetland Contract does not constitute a new planning act or a new decision-making level, but rather brings the specific strategies and competences of the stakeholders involved towards a governance process, respecting the specificities and autonomies, with a flexible approach. updatable, inter-sectoral and inter-scalar. At the same time, the Wetland Contract should not be understood as a mere inter-institutional agreement aimed at sharing government objectives, but rather as a decision-making and operational process that makes up the environmental and socio-economic

[5] Since the River/Wetland contract is an experimental tool, but already in use in France and Italy, in this text reference is made to the Italian experience that is already advanced in terms of recognition and regulation by national and regional authorities. Indeed the Italian Ministry for environment and for the safeguard of the territory and sea (MATTM) recently made a study about the tools for managing and conversing the water bodies and about the criteria for setting the River contracts. Part of the definitions used in this section are taken from that study with the aim of presenting the most complete framework.

interests of a water system, implementing the superordinate provisions (territorial and sectorial). In this sense, the Wetland Contract shall be understood as a continuous process of governance based on shared knowledge and a synergic interaction between stakeholders, aimed, before sharing decisions, at sharing decision-making ways. Among the specific aspects that distinguished these negotiated programming tools from other governance experiences is the contextual presence of voluntariness, inclusion, collaboration and obligation (Pineschi, Gusmaroli 2015).

These four attributes make up the peculiar approach of the Wetland Contract, which constitutes a decision-making process with voluntary entry (no subject is obliged to adhere to it) and open (anyone with various interests can join it), but with a negotiated exit (all members are called to collaborate actively in the formulation and implementation of the joint decision) and binding (contractual commitments are regulated by obligations, also subject to the negotiation process).

In other words, the Wetland Contract is a tool whose adoption is not mandatory, but once the outcome of the contract has been identified as a working tool, it must establish commitments. The binding regime of these commitments must be established in a shared manner within the inclusive process, like all the elements that make up the decision.

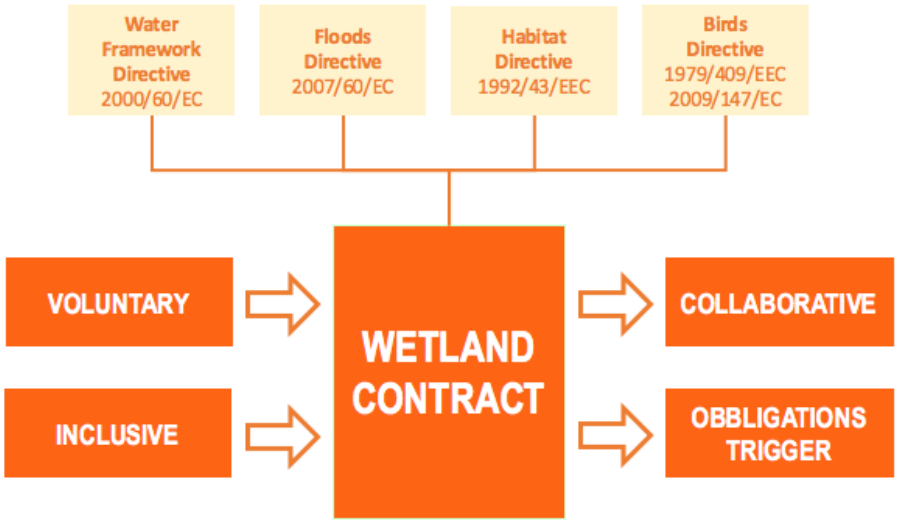

Figure 5 - Wetland Contract characteristics and regulatory framework (CIRF)

At EU level, no legislative instruments reflect the figure of the Wetland Contract tool. However, the Wetland Contract pursues the main objectives of the following European environmental directives:

- Habitat Directive 1992/43 / EC
- Water Framework Directive 2000/60 / EC
- Floods Directive 2007/60 / EC
- Birds Directive 2009/147 / EC

Moreover, both the European Water Framework Directive (2000/60/EC) and daughter Directives (Habitat Directive, Floods Directive, etc.) require Member States to foster an integrated approach for the management of all water bodies, through a collaborative governance able to combine multi-objective, multi-level and multi-stakeholder decision-making processes and to simultaneously pursue environmental

enhancement, risk management and local development. In particular, a participative approach to decisions making is promoted as a prerequisite for defining integrated, sustainable and viable strategies.

In particular, Wetland Contracts are included in the Water Framework Directive as "Complementary measures" that shall be adopted additionally to the basic measures in order to achieve the environmental objectives. In fact, Part B of Annex VI contains a non-exhaustive list of possible measures of this nature. In this list we find the possibility of carrying out “negotiated agreements in environmental matters”, together with other types of measures such as legislative and administrative tools, codes of good practice, new creation and restoration of wetlands, extraction controls, emission controls, or demand management measures such as the promotion of adapted agricultural production; or research, development and demonstration projects.

2.1.2 Wetland Contract background: from 80’s to today

The expression *contrat de rivière* (River Contract) has been used in France since 1981, when an institutive law foresees for this contractual tool in order to respond to the gradual degradation of water bodies, with the aim of organizing a coordinated maintenance of the river banks. The first *contrat de rivière* concerning the La Thur river was signed in 1983. From that moment, and thanks to its success, this tool was soon expanded and adopted in the entire country. More than 150 River Contracts are now operational in France and cover approximately 10% of the national territory. The River Contract, since its establishment in 1981, has evolved considerably to enrich itself and adapt to the new legislative and regulatory context. Until 2003, river or bay contracts were approved by a national accreditation committee. At the end of 2003, the ministry responsible for sustainable development decentralized basin-level accreditation procedures under the responsibility of the basin committees (*comités de bassin*).

A *contrat de milieu* (Environmental Contract) (usually a *contrat de rivière*, but also a lake, bay or aquifer) is a technical and financial agreement between the partners concerned for a global, concerted and sustainable management at the scale of a coherent hydrographic unit. With SAGE, the environmental contract is a relevant tool for the implementation of the SDAGE and programs of measures to take into account the objectives and provisions of the Water Framework Directive. It can be an operational version of a SAGE. It is a voluntary and concerted action program over 5 years with contractual financial commitment (designation of project owners, financing method, deadlines for works, etc.). These contracts are signed between the partners concerned: prefect of department, water agency and local communities (general council, regional council, municipalities, inter-municipal unions, etc.). The river (or bay) committee is instituted by prefectural decree to steer the development of the contract that it runs and follows. The circular of January 30, 2004 specifies the conditions of its constitution and operation.

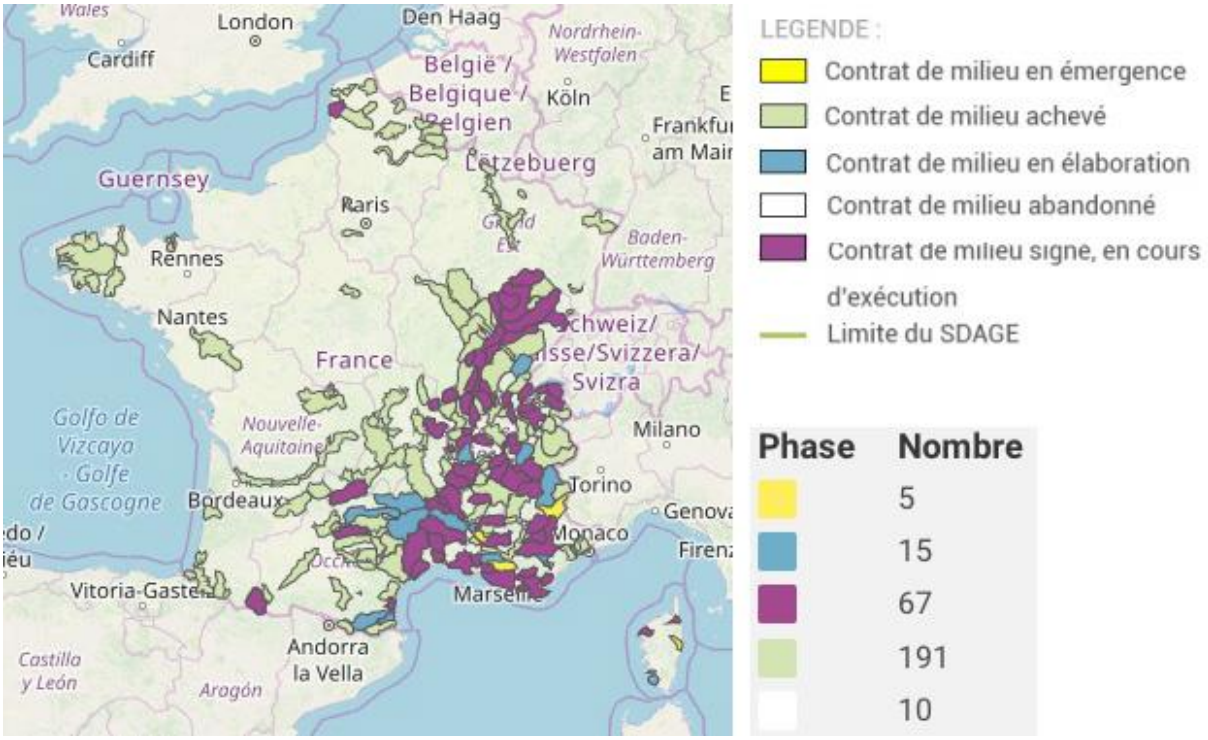

Figure 6 - Map of the contracts de milieu implementation in France (GESTEAU, 2019)

The river contracts then have been developed in Belgium in the region of Wallonia[6] since 1988. In 1993 a ministerial circular indicated the criteria of acceptability of the contracts and defined the methods of execution, giving to these initiatives a homogenous legal framework. The Walloon experience is considered to be a reference point because of the Region's strategy to the river contract to its entire territory, thus creating a considerable impact on the local water and river management. 16 River Contract Management Committees were established to ensure strong participation of local environmental, cultural, and sports associations, as well as involving local authorities and government bodies. These associations promote the participation of the actors in the river banks management and recovery, resources inventories, the elimination of invasive plants, the cleaning of the environment and all those initiatives in the contract.

In the Italian context, river contracts have spread since the early 2000s (Bastiani, 2011). The first Italian river contracts are implemented in Lombardy and Piedmont by developing various processes also within European programs (INTERREG IIIB CADSES 2000-2006). From this first phase of implementation, initially limited to some Northern regions, starting from 2007 a second phase - thanks to the birth of the National River Contracts Table - allows this tool to extend and take root also in the rest of Italy. The National Table acts in terms of cultural transformation, helping to change the way in which local communities stand with respect to the management of rivers, lakes and coasts. This new approach finds its first programmatic synthesis in the drafting of the National Charter of River Contracts in 2010, presented in the 5th

[6] http://environnement.wallonie.be/contrat_riviere/

meeting of the National Table held in Milan. The Charter is a guideline about river contracts and is now officially signed and adopted by the majority of Italian regions. The Charter reports: "*River contracts can be identified as negotiated and participatory planning processes aimed at containing eco-landscape degradation and redevelopment of river basins/sub-basins. These processes are differentiated in singular administrative and geographical contexts in line with the related regulatory systems, according with the peculiarities of the basins, in correlation with the needs of the territories, in response to the needs and expectations of citizenship. In a multilevel governance system, therefore, the river contracts are configured as continuous processes of negotiation between the Public Administrations and the private subjects involved at different territorial levels and consist in multi-sectoral and multi-scale agreements characterized by the voluntariness and flexibility typical of such processes decision-making".* The fundamental step for the validation of the river contract tool in Italy is the insertion of article 68 bis in the *Testo Unico Ambientale* (Environmental Law) in 2015. This articles communicates right from the first lines of the text the mission of the Italian river contracts: "*The river contracts contribute to the definition and implementation of the district planning instruments at the basin and sub-basin level , as voluntary tools of strategic and negotiated planning that pursue the protection, the correct management of water resources and the enhancement of the fluid territories, together with the safeguard from the hydraulic risk, contributing to the local development of these areas".* In 2015, while the legislative process of the article was being concluded, the National Table was in charge of drawing up - with a work group composed of 35 experts of different disciplinary backgrounds coordinated by the MATTM and ISPRA - the document "Definitions and Basic Qualitative Requirements for River Contracts". The document presented on March 12th 2015 is the main methodological reference to which the Italian river contracts refer. The document aims to provide the elements for a correct interpretation on a national scale of the principles and the process that distinguishes the river contracts, avoiding that the individual regions produce their own guidelines. The river contracts according to the practice highlighted in the document, is divided into six progressive phases, all characterized by a wide participation of institutions and municipalities local authorities.

Figure 7 - River Contracts in Belgium (B. Nicolas, CR Semole)

River Contracts characteristics	France	Belgium (Wallon)	Italy
Legal framework	Ministerial Circulars 1981, 1993, 1994, 2004	Ministerial Circular 1993, 2001	Law December 28th 2015, n. 221, article 68-bis Legislative Decree 152/2006
Management scope	Sub-catchment, coast	Sub-catchment	Sub-catchment, coast
Principles	Intervention tools: Set of actions in favour of a global management of the river and its catchment	Tool of orientation and of intervention: protocol agreement on goals integrated into an action program	Tool of orientation and of Intervention implemented through an action program
Themes	- Waters quality - Fruition - Water bodies restoration - Fight against floods and hydraulic improvement - Enhancement of the hydro-ecosystem	Acknowledgement of water bodies criticalities	- Protection and management of water resources - Enhancement of river territories - Protection against hydraulic risk - Local development
Procedures	- Decentralized since 2004 - agreement under the responsibility of the basin committee of a water agency (formerly of a river committee) - signature by the local, regional authorities and the prefect involved (previously prefectural resolution)	- Approval by the river committee; - signature of the partnership public and private involved in action program and of the minister for the Wallon region.	- Approval by the River/Basin Assembly - signature of the partnership public and private involved in action program
Management structure	River Committee (Consultation and representation of local stakeholders)	River Committee (Consultation and representation of local stakeholders)	- River/Basin Assembly (deliberative function) - Institutional- technical committees (technical and executive functions)
Management methodology	Coordinated management between several public managers	Concerted management between all users and administrators	Participatory management through the River/Basin Assembly
Duration	- Processing: 2-3 years - Implementation: 5 years (Renewable)	- Processing: 3 years - Implementation: 3 years (Renewable -maximum: 12 years)	- Processing: 1-2 years - Implementation: 3 years (Renewable)
Financial resources	Program of public co-financing: financial support of the State and Water Agencies	Each signatory partner of the contract accepts a financial commitment on the foreseen actions included in the action programme	Each signatory partner of the contract accepts a financial commitment on the foreseen actions included in the action programme
Integration with other management instruments	SAGE, SDAGE	Sub-catchment Plan	Catchment management Plan
Local communities' involvement	Generally strong thanks to the inter-municipalities structure	Variable according to their degree of commitment foreseen in the contract	Generally strong thanks to information, communication and participation actions
State of art	282 River Contracts and 160 of them completed (2017)	16 River Contracts and 13 of them completed (2011)	93 activated, 82 started and 101 announced (2017)

Table 3 - River Contracts in France, Belgium and Italy (RETRALGS project – modified by CIRF)

2.1.3 European ongoing experiences

In these past years, several European funded projects are investigating and implementing - as Wetnet - multilevel governance tools for wetland integrated management. In particular the following projects' approaches and goals can be highlighted:

COASTING (Interreg Med Programme): a capitalisation project based on the ICZM principles application, aiming at enhancing the effectiveness of the multilevel governance tool *Contract de Baie* (Coast Contract), transferring a shared methodology mostly centred on the stakeholders' involvement and focusing the tool deeply on the tourism sector sustainability and qualification.

EAU CONCERT 2 (Interreg Alcotra Programme): a project aiming at restoring and protecting transboundary aquatic ecosystems and strengthening their ecosystem services by implementing cooperation on participatory governance of river ecosystems based on the River Contract tool which is a working method for the negotiated and participatory management of water resources on the scale of the hydrographic basin, to which one voluntarily adheres.

CREW (Interreg Italy-Croatia Programme): a cooperation project aiming at implementing a multilevel governance tool (Wetland Contract) in order to achieve overall effects on coastal wetlands ecosystems and socio-economic related systems by overcoming fragmentations that are often jeopardizing the sustainable development and preservation of these fragile areas.

RETRALAGS (Interreg Maritime IT-FR Programme): a cooperation project aiming at developing innovative models of integrated governance for the natural and cultural sites in the cooperation area, creating a cross-border sustainable management system. The joint action plan will be implemented starting from the already existing wetland management models, in line with national regulations. A joint implementation phase will follow, by sharing experiences and knowledge with the aim of creating a cross-border management model. Finally, the process of integrated management of the natural and cultural heritage of the related lagoons, lakes and ponds will develop.

LIFE GREENCHANGE (LIFE Programme): a LIFE project that intends to contribute to halting the loss of biodiversity and to enhance the ecological value of the agricultural systems of the Agro Pontino and of the northern region of Malta, by planning and implementing Green Infrastructures and multifunctional actions in rural, semi-natural and natural areas. Among the actions foreseen by the project there is the definition of a governance tool: The Biodiversity Pact that activates an open and permanent workgroup, engaging key stakeholders (farmers, environmental associations, decision makers, etc.) in order to share procedures for the management of rural areas able to enhance the mapped and evaluated ecosystem services and to increase the level of functionality and ecological connection.

LIFE RISORGIVE (LIFE Programme): a LIFE project that aims at re-establishing and stabilising the green infrastructure made up by the network of springs, water courses and their environment and restore their function and the ecosystem services they provide. Among the actions foreseen by the project there is the implementation of a Spring Contract.

MARISTANIS (MAVA Foundation): an international cooperation project for the definition of an integrated management model for the wet and coastal areas of the Gulf of

Oristano; co-financed by the MAVA Foundation and coordinated by the MEDSEA Foundation in collaboration with the Marine Protected Area "Penisola del Sinis - Isola di Mal di Ventre".

Funding programme	Project	Partners	Pilot areas	Budget
Interreg Med Programme	2 (COASTING, WETNET)	19	19	3.306.612
Interreg ALCOTRA	1 (EAU CONCERT 2)	3	3	2.049.884
Interreg Maritime IT-FR Programme	2 (RETRALAGS, PROTERINA-3EVOLUTION)	22	6	8.743.145
Interreg Italy-Croatia Programme	1 (CREW)	8	7	1.836.947
LIFE Programme	3 (GREENCHANGE, RISORGIVE, REWAT)	14	3	6.636.497
Central European Initiative	1 (SMARIGO)	6	2	100.000
MAVA Foundation	1 (MARISTANIS)	1	4	4.637.499
TOTAL	**11**	**73**	**44**	**27.310.584**

Table 4 - Ongoing European projects on wetland integrated management

2.2 Wetland Contract: WETNET methodology implementation steps

2.2.1 Multistage process: a flow chart

This section explains the methodology in use by WETNET for developing the Wetland Contracts. This methodology is here detailed in order to guide the project partners along the process of testing the tool in pilot areas. Although the methodology is tailored for the present Interreg Med Project in its timeframe and activities, in some parts it draws on the methodology described by the MATTM's research for Italian River Contracts implementation and definition. In reason of the operational purpose of this section, aimed at regulating the implementation process of WETNET project partners, the focused tool will be hereafter mentioned as Wetland Contract.

The objective of the Wetland Contract is to openly consider the various objectives and find solutions to make them coexist, assuming environmental sustainability simultaneously as a priority objective and an implementation strategy.

As part of the decision-making process, different development scenarios have to be evaluated, specifying the one shared by the stakeholders and in line with an overall environmental requalification strategy. This path leads to the preparation of a shared Action Plan aimed at improving the overall ecological status of the water body, in a negotiated manner with the other main objectives at stake: reduction of the hydrogeological risk, enhancement of the water resource for anthropic uses and the other environmental and territorial objectives that may emerge during the process.

The signing of the Wetland Contract constitutes the commitment, on the part of the stakeholders on the river basins in question, to the implementation of shared actions aimed at the set objectives.

The following key steps can be identified in the process:

1. a participatory and inclusive decision-making process, able to last over time and oriented to the empowerment of the actors involved;
2. a structured and integrated knowledge base, shared and updatable, on the state of the target area (strengths / weaknesses from the environmental and socio-economic point of

view) and the risks / opportunities connected to it, as well as the framework of the programmatic tools (existing plans, programs, projects);

3. a concerted definition of future scenarios, a strategic vision to be adopted, capable of coordinating various planning tools and adopting the principles of sustainable development, shared through a protocol of Understanding;
4. an Action Plan that establishes the priority actions, the roles and the methods for implementing the strategy and a plan to monitor its actual implementation;
5. a Wetland Contract as a formal commitment document to carry out the actions developed and shared in the participated path.

In this framework, WETNET developed a multistage methodology able to guide the partners along the above described process through seven templates codifying the minimum requirements to be included in the key documents of the Wetland contract process, which are:

- Regulatory framework
- Scientific description
- Stakeholders' analysis
- Alternative scenarios
- Sharing and assessing scenarios
- Territorial Lab experience
- Wetland Contract

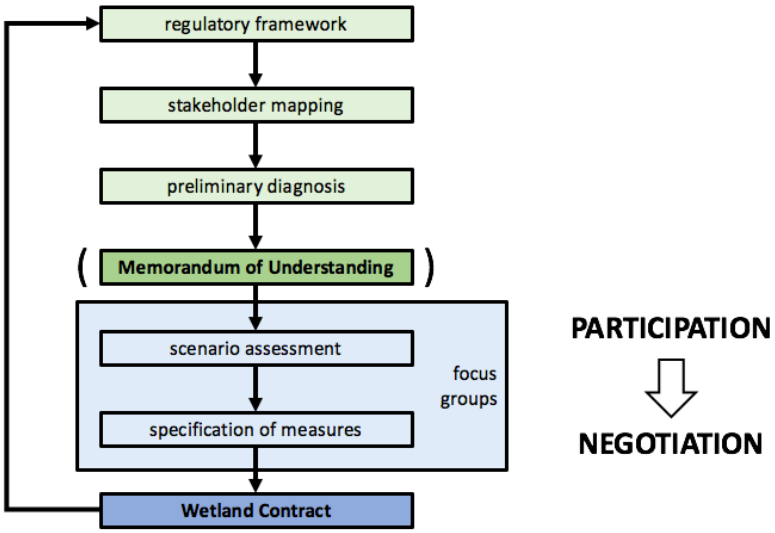

Figure 8 - Wetland Contract: WETNET methodology flow chart (CIRF)

2.2.2 Implementation steps

Preparatory stage

The first stage of the process is the context analysis collection; it aims at preparing the subsequent pilot activities related to the actual implementation of the Wetland Contract. This stage investigates the regulatory framework in local wetlands management, concerning territorial and landscape planning and policies; it collects the existing knowledge about the

criticalities and the environmental and territorial values to base the strategic scenario; finally, the stakeholders mapping identifies and lists the actors to be involved in the Territorial labs among civil society and key groups.

[related attached templates: 3.2.1 "Regulatory framework", 3.2.2 "Scientific description", 3.2.3 "Stakeholders' analysis"]

Context analysis I. Regulatory framework

The regulatory framework analysis contains the regulation background related to water management within each target wetland explaining laws, rules, procedures, plans, policies, and levels of jurisdiction in the field of wetlands management. It is detailed in two levels.

National level:

- management plans of wetlands foreseen at national level;
- relevant strategies and governance tools at regional/local level concerning protected wetlands management.

Pilot area level:

- international/European/national protection levels and rules are applicable for the pilot wetland;
- regional/local regulatory framework relevant for the management of the pilot wetland.

Context analysis II. Stakeholders' analysis

The Stakeholders analysis identifies all the key stakeholders to be involved in the Wetland Contract participatory process (those who will participate in the Territorial Labs and those who will eventually subscribe the Contract) by framing them in different categories related to: (i) the stakeholders' territorial level of reference (National, Regional, Local, civil society, key groups); (ii) their engagement degree (effective or potential); (iii) their priority area of interest.

Stakeholder mapping is a collaborative process of research, debate, and discussion that draws from multiple perspectives to determine a key list of stakeholders across the entire stakeholder spectrum. It can be developed as follows:

- Identifying. Listing relevant groups, organizations, and people classifying them in 3 macro categories: (i) Public institutions; (ii) Structured organizations and interest groups (chamber of commerce, trade unions, environmental groups on a national or regional non-governmental organizations, professional associations, resident associations, groups of fishermen, farmers, canoeists, associations and consortiums category local and industry consortia); (iii) Unstructured local actors (landowners, individual residents, people who may be interested by the implementation of some actions resulting from the process, and opinion leaders, usually belong to the local level).
- Analysing. Understanding stakeholders' perspectives and interests by observing: (i) Contribution (value): Does the stakeholder have information, counsel, or expertise on the issue that could be helpful to the project?; (ii) Impact / Legitimacy: How legitimate is the stakeholder's claim for engagement?; (iii) Willingness to engage: How willing is the stakeholder to engage?; (iv) Influence: How much influence does the stakeholder have? (You will need to clarify "who" they influence, e.g., other companies, NGOs, consumers, investors, etc.); (v) Necessity of involvement: Is this someone who could derail or delegitimize the process if they were not included in the engagement?

- Mapping and Prioritizing. Visualizing relationships to objectives and other stakeholders and ranking stakeholder's relevance for identified issues. Matrix or grids can help classifying stakeholders in relation to: power and influence; influence and impact; power and legitimacy; power and interest – to indicate the nature of the relationship which should be adopted with each group; power and dynamism – to indicate where political effort should be made before instigating change.

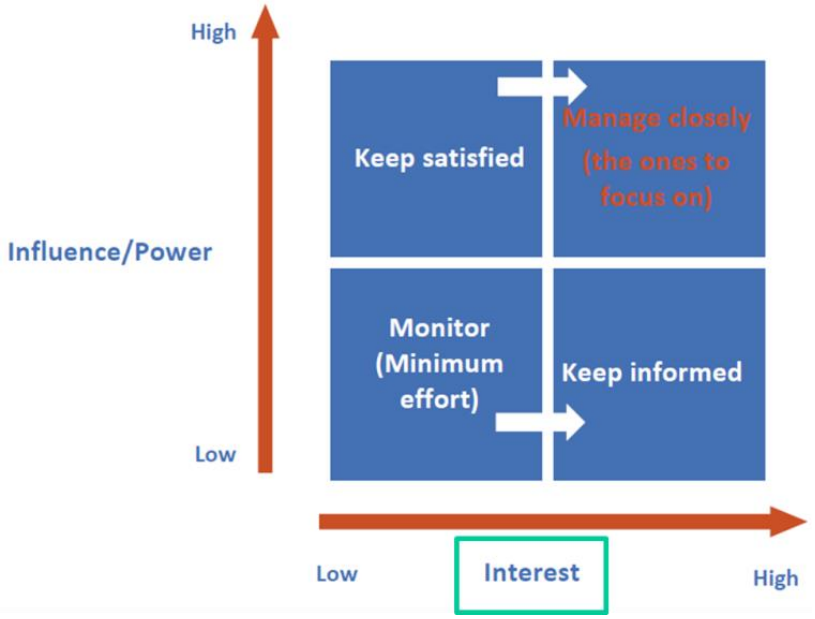

Figure 9 - Stakeholders engagement process: Stakeholders matrix "Power and Interest" (CIRF)

The list needs to be constantly updated during the process in order to ensure a coherent involvement of key stakeholders. It can be drafted by using several online and offline tools exploiting social and professional networks of the Wetland Contract coordinator/promoter, such as:

- brainstorming process which enables the project team to collect a list of people/groups/institutions
- studying documents, initiatives, and expertise related to wetlands, protected areas, vulnerable environments
- conversations with individuals and representatives of various organizations
- browsing websites
- filed works and interviews.

A careful selection of the stakeholders to be involved is the fundamental basis for further steps of the Wetland Contract. In fact, the process of stakeholders mapping is important since the results, quality and effectiveness of the Wetland Contract process depend heavily on the knowledge of the people participating.

Context analysis III. Scientific description of the pilot wetland

The scientific description collects the available information and diagnosis about the target wetland related to environmental, socio-economic and territorial development aspects. It aims to better focus the objectives to be developed in the Wetland Contract

implementation stage to the local challenges and priorities.

The analysis consists in the description of the target wetlands including:

- organizations responsible for their management
- role of the partner in relation to the pilot area
- wetland typology
- values of the pilot wetland including: Environmental heritage, Archaeological heritage, Historical heritage, Architectonical heritage, Ethnological heritage, Landscape heritage
- main threats and impacts for the biodiversity of the pilot wetland and relevance of the impact
- main drivers for promoting a voluntary governance process like a Wetland Contract in the pilot area
- specific objectives and expected results from the Wetland Contract of the pilot area.

Implementation stage

The second stage of the process aims at implementing the Wetland Contract in the target wetland through the following progressive steps:

- establishing the Territorial Labs for the participated governance
- defining mid-long term strategic scenarios
- sharing and assessing the strategic scenarios with the target groups through 4 focus groups
- drafting and subscribing the Wetland Contract which includes activities and responsibilities to be carried out

[related attached templates: 3.3.1 "Alternative scenarios", 3.3.2 "Sharing and assessing scenarios", 3.3.3 "Territorial Lab experience", 3.3.4 "Wetland Contract"]

Implementation stage I. Participatory process: territorial labs

The inclusive and collaborative nature of the decision-making process of the Wetland Contract requires particular attention in defining the elements of the participatory process. In this sense, the effectiveness of the process is based on the actual involvement of the key stakeholders of the system considered and on their collaboration. The active participation is therefore pivotal for the success of the negotiated programming, since it allows for a constructive dialogue to be opened between the parties and build a chain of responsibility oriented towards the achievement of common objectives. Active participation means involving different stakeholders (selected with the Stakeholders' analysis), giving them the possibility not just to listen and watch, but giving them the power to interact with the processes, accepting the possibility that things could be changed by them.

In this framework, WETNET methodology formalizes the participatory process of the Wetland Contract with the establishment of the Territorial Labs (at least four). The Territorial Labs are a series of public meetings aimed at establishing a participated governance. By involving key stakeholders and interest actors both public and private operating in the target wetland and allowing them to interact and cooperate with one another, the main specific objectives of the Territorial Labs are:

(i) to collect data on the target wetland
(ii) to elicit stakeholder needs, expectations, motivations and conflicts

(iii) to develop, share and assess the scenarios

The participatory approach of the Territorial Labs is based on informality and active listening "to be able to set aside one´s own ideas and perspective and be willing to give a chance to the other participants to convince one of their ideas".

The Territorial Labs can be public events such as:

- general assemblies and forums;
- thematic focus groups and roundtables (dividing participants basing on different themes. Examples of topics to be addressed: Hydraulic safety and lagoon dynamics; Fruition and tourism; Productive activities; Socio-economic development; Territorial planning; Environmental protection and enhancement; Hunting and fishing; Agriculture; Green and blue infrastructures; Enhancement of the historic and cultural heritage; Wetlands and Climate Change; Nature and Biodiversity; Water quality; Governance, management and participation);
- sectorial focus groups and roundtables (dividing participants basing on their sector/interest. Examples of types of stakeholders to be engaged: farmers; fishermen, public institutions and local administrations; associations and NGOs);
- interviews, questionnaires collection and bilateral meetings.

Therefore, since the Wetland Contract is a flexible tool that can be adapted to different contexts in order to develope a well rooted process and achieve local objectives, the right methodology to be used for establishing the Territorial Labs depends on the target wetlands and the stakeholders' features.

Here is a (not exhaustive) list of participatory techniques and tool that can be used for implementing the participatory process for (i) identifying and localizing criticality and values of the target area, (ii) planning and assessing scenarios, (iii) specifying measures and actions.

1. Participative SWOT Analysis: is a tool for supporting decision-making processes. Since the 1980s it has been used as a support to public intervention choices to analyse alternative development scenarios. The benefits of the SWOT analysis are: the in-depth analysis of the context is oriented towards the definition of the strategies; the verification of the correspondence between strategy and needs allows to improve the effectiveness in its realization, since they contribute to the analysis all the involved parts of the process. The last element is the flexibility of the instrument. The model consists of a matrix divided into 4 quadrants: strengths, weaknesses of the analysis context; opportunities and threats that derive from the external context.
2. Community's map: is a technique that allows to geographically localize the critical issues and values related to the territorial context on a map of the target area and give assessments on the presence of areas with greater risk and value. Through the use of post-it, participants indicate on the map: (i) vulnerable sites, (ii) Sites with particular relevance, (iii) Problematic sites, (iv) Sites with particular value.
3. Open Space Technology (OST): is a method for organizing and running a meeting or multi-day conference, where participants have been invited in order to focus on a specific, important task or purpose. In contrast with pre-planned

conferences where who will speak at which time is scheduled often months in advance, and therefore subject to many changes, OST sources participants once they are physically present at the live event venue. In this sense OST is participant-driven and less organizer-convener-driven. Pre-planning remains essential; you simply need much less pre-planning. The actual agenda-schedule of presentations is partly or mostly unknown until people begin arriving. The scheduling of which talk, on which topic in which room is created by people attending, once they arrive. At the end of each OST meeting, a debriefing doc is created summarizing what worked and what did not work so the process can go more smoothly the following time.

Figure 10 - OST methodology (openspaceworld.org)

4. World Café: is a structured conversational process for knowledge sharing in which groups of people discuss a topic at several tables, with individuals switching tables periodically and getting introduced to the previous discussion at their new table by a "table host". World Café events tend to have at least 12 participants, but there is theoretically no upper limit. Groups of about four to six participants sit around tables, together with a "table host", and discuss questions which have been agreed upon at the beginning of the event or defined by the organisers in advance. Each table has a different set of questions belonging to a comprehensive theme. After approximately 20 minutes, participants move to a next table where another topic - which ideally is built upon the previous one - is discussed. Discussion results are directly noted down on a makeshift paper table-cloth or a nearby flip chart. The "table host" welcomes new participants and informs them about the results of the previous discussion at the table. Finally, the results of all groups will be reflected on in a common plenum session. Strategies for further actions and

opportunities for further cooperation of participants are identified.

Figure 11 - World Café methodology (www.theworldcafecommunity.org)

5. <u>European Awareness Scenario Workshop (EASW®):</u> is a scenario planning method developed by the European Commission in the 1990s. The workshop is attended by 24-28 people selected according to their origin (city, district, company, territorial pact, etc.). Generally, they are chosen among four different social groups (interest groups): (i) citizens, (ii) technology experts, (iii) public administrators, (iv) private sector representatives.

   The participants meet to exchange opinions, develop a shared vision on the future of a territory and propose ideas on how to achieve it, answering the following fundamental questions: (i) *HOW is it possible to solve the identified problems? Will you have to focus more on technology or organizational solutions?* (ii) *WHO is mainly responsible for their solution? Local authorities, citizens or both?*

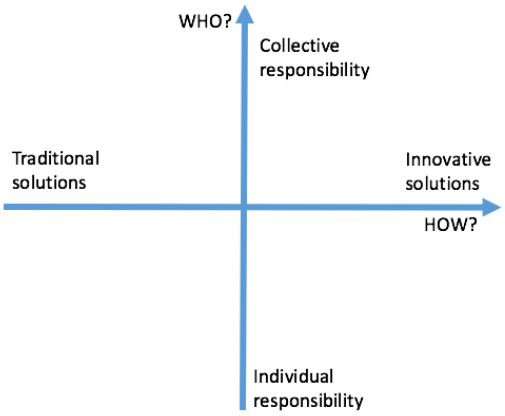

Figure 12 - EASW methodology

An EASW® is built on two main activities: the development of visions and the proposal of ideas.

In the development of visions, the participants, after a brief introductory session, work divided into role groups,

because of belonging to the same social category (citizens, administrators, etc.). During the group work, the participants are invited to project themselves into the future to imagine how, with respect to the topics of the discussion, they will solve the problems of the territory in which they live and work. They must do so by taking the scenarios as a reference point, which envisage possible alternative solutions (based on different combinations in the use of technologies and in the organization of solutions). To facilitate this activity, the methodology includes a series of techniques for managing the discussion and achieving the expected results. The visions elaborated by each group are presented in a subsequent plenary session. This vision must accurately envisage the solutions adopted, underlining for each of them the role played by technology and that of the organization of the community. The vision emerged at the end of the first working session - perfected by the facilitator and by the group leaders in a small meeting at the end of the set of activities - will be the basis for the next one. In the proposal of ideas, the participants are called upon to work for thematic groups. After a brief introduction to the work, in which the facilitator presents the common vision that emerged from the first session, a new group work step begins. This time the groups are formed by mixing the participants together, depending on the topic under discussion (water, energy, etc.). Each group, while thus representing various interests within it, will have to deal with, starting from the common vision, to propose ideas on how to achieve it. Also in this second set of activities, the discussion will have to be guided, with the aid of a series of techniques, to formulate, to each group, concrete ideas that propose how to realize the common vision and who will have to take responsibility for its realization respect to the assigned theme. Each group can usually formulate a limited number of ideas (usually 5). The ideas are presented in a subsequent plenary session to be discussed and voted on. The most voted ideas will eventually be the basis of the local action program, developed by the participants to address the issues under discussion.

6. Let's M.O.V.E.: is a scenario planning methodology based on organizing thematic events for developing possible scenarios in the shorter term (target 2025) and the longer term (target 2050). The participants (10 for each table) are grouped in 3 sub-themes and then start an itinerant process in which they move every 40 minutes from one theme table to another. Starting from four simple questions (i) *"what to Maintain?"* (What is there and goes good), (ii) *"what to Organize?"* (what is not there and should be developed), (iii) *"what to Valorize?"* (What is there and needs to be improved), (iv) *"what to Evade?"* (what should not be done), the participants write on coloured post-it their ideas and develop the two scenarios identifying preliminary strategies and needs with reference to 3 sub-themes relating to the target area.

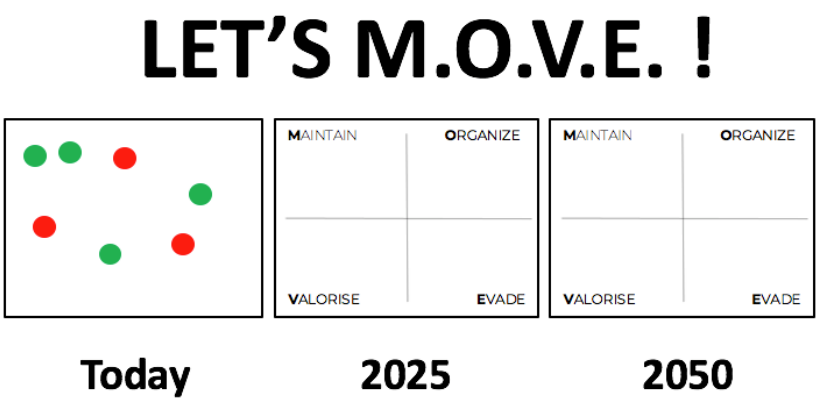

Figure 13 - Let's M.O.V.E. methodology (CIRF)

Implementation stage II. Scenario planning

Scenario planning is a technique that in the framework of WETNET will be based on the integration of the studies and scientific diagnosis realized during the first stage of the process with the results of the participatory process carried out through the Territorial Labs. It aims at identifying a shared mid-term strategy that combines the general planning objectives with the local development policies and needs. In WETNET it will be developed by desk activities carried out by the technical team (partner staff or external expertise) and by participative sessions (see Implementation stage II).

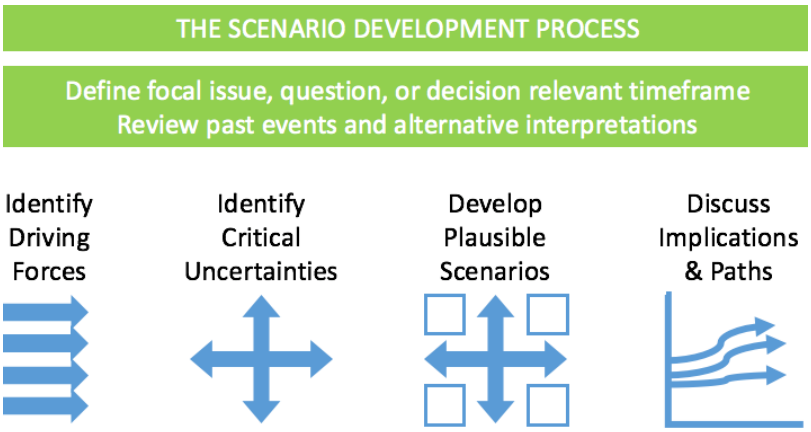

Figure 14 - The scenario development process (CIRF)

This process consists of the gradual drafting of three different scenarios, as follows:

- Trend scenario. This scenario seeks to reproduce the continuity of current trends in three strategic areas: governance, environment and economic and social development. In this scenario the involvement of citizens is limited, management and the conservation policies do not encourage the involvement of all territorial stakeholders. Therefore, it represents the continuation of the present

development pattern, and it is not considered as the optimal framework for the achievement of the objectives, against the degradation of natural spaces.

- Oriented scenario. The scenario considers all possible corrective actions, which are prioritized in order to contain and improve the trend scenario and control the unsustainable tendencies of the present process. It addressed the same strategic areas of the trend scenario: governance, environment and economic and social development. The aim of the scenario is to maximize both the environment protection area and the economic and social development. Thus, it has to be considered as a comprehensive scenario which draws protection oriented measures and development oriented ones.
- Preferred scenario. It combines aspects of the trend scenario and the oriented scenario that are considered as most important to the members of the community and engaged stakeholders. It will balance the potential reality of the future while on one side providing opportunities to adjust to changing development patterns, and the other side addressing the desired objectives of environmental protection and economic development.

Implementation stage III. Action plan drafting and formal commitment

The final phase of the Wetland Contract process is the drafting of the Contract itself and its subscription by the key stakeholders involved in the participatory process developed during the Territorial Labs.

The Contract represents a formal act through which public and private actors as well as associations commit to carry out all the activities detailed in the attached Action Plan for the achievement of the overall planned wetland management objectives. The actors subscribing the Contract will commit to: (i) act in the frame of valorising of the subsidiarity principle, in respect of every actor's competences; (ii) activate all the partnership tools.

In this framework, the Wetland Contract tool can be formally defined as a "negotiated environmental agreements" mentioned in Part B of Annex VI of the Water Framework Directive (Directive 2000/60/EC of 23 October 2000). Each partner has to identify the accurate legal solution to formalize the Contract according to its national and local regulation.

The main annex to the Contract is the Action Plan. The Plan may include both structural actions and non-structural actions (actions necessary for the optimization of process management, training, environmental education, the definition of both funded and non-funded protocols), provided that they are consistent with the objectives of the Preferred Scenario developed during the Territorial Labs and that can be effectively implemented in the medium term.

For each foreseen action included in the Plan, the partner shall identify:

- Typology: Concrete Actions, Communication Actions, Monitoring Actions, Governance Actions
- actors / actuators involved and the respective obligations and commitments
- implementation times and procedures
- necessary human and economic resources, as well as the related financial coverage
- any planning tools / programming to which the action belongs

Finally, it is necessary to identify a coordinator/promotor of the Wetland Contract that will have the task of coordinating the overall implementation of the process. The coordinator can be either the partner itself or a key local entity (both public or private) to be empowered by the partner in order to properly manage the process.

3 WETLAND GOVERNANCE CASE STUDIES

3.1 Best practices across Europe

CASE STUDY N°1 Camargue Delta Contract	
Period	2002 - ongoing
Status	Ongoing
Subscription	November 16, 2012
Location	Camargue, Rhone-Mediterranée, France
Summary description	The Camargue Delta Contract was signed on November 16, 2012 by the partners and the 22 project owners of the action program representing all the uses of water in the Camargue. The signing of phase 2 of the Contract took place on November 23, 2017, nearly 80 actions are scheduled from 2017 to 2019. The Delta Contract is a process of defining and implementing a program of actions for a balanced and sustainable management of water and aquatic environments. It is a technical and financial commitment between owners and financial partners, based on a desire to act collectively. The duration of the program is 6 years organized in 2 phases, with a mid-term review. Signed at the end of 2012, the final file of the Delta Contract formalized: - a diagnosis highlighting the state of play of the Camargue with regard to water and its management, - guidelines for the management of water and aquatic environments defined in consultation, - the program of actions of the first phase of a duration of 3 years (2012-2015). During phase 1 (2012 to 2016), 51 actions were carried out, representing a total of more than 16 million euros. The mid-term review, approved by the delta committee in 2016, highlights progress on some important issues, demonstrating the mobilization of stakeholders. This dynamic continues during the second phase of the Contract (2017 to 2019), which covers a perimeter extended to the territories on the left bank of the Grand Rhône and which includes a maritime part (3 nautical miles). Administratively, the municipalities of Stes-Maries-de-la-Mer (in full), Arles and Port-St-Louis-du-Rhone (in part) are concerned.

	The action program for phase 2 includes 78 operations, around the 7 main orientations listed below, for a total of nearly 22 million euros: - Improve the knowledge and the monitoring of the environment - Manage the water resource - Fight against domestic pollution - Fight against agricultural pollution - Act to preserve and restore aquatic environments - Support integrated coastal and marine management - Educate the public about water and strengthen local governance The signing by the project owners and financial partners took place on November 23, 2017.
Management	Comité de delta
Website	http://www.parc-camargue.fr/index.php?pagendx=1703 http://www.gesteau.fr/contrat/delta-de-la-camargue

CASE STUDY N°2 Olona-Bozzente-Lura-Lambro meridionale River Contract	
Period	2004 - ongoing
Status	Ongoing
Subscription	July 22, 2004
Location	Province of Milan, Varese and Como, Lombardy, Italy
Summary description	The Olona-Bozzente-Lura River Contract is the first agreement signed in the Lombardy Region on 22nd July 2004, by the Lombardy Region, 3 Provinces and 78 Municipalities interested by the three river basins, Arpa Lombardia, the Po River Basin Authority, the Interregional Agency for the Po and the Regional Scholastic Office, in the form of a *Accordo Quadro di Sviluppo Territoriale* (Territorial Development Framework Agreement). The process started in the framework of the EU project NETWET 2: WATER TELEMATIC PLATFORM "Networking Perspectives of Transnational Co-operation and Participatory Planning for Integrated Water Resources Management through the promotion of new forms of Spatial Governance", co-financed by the INTERREG IIIB CADSES 2000-2006 Programme. The Contract was adopted in a basin with high environmental risk, such as the Lambro-Seveso-Olona basin, where it was necessary to act in an integrated and synergistic way on the causes of degradation and environmental criticalities. It covers an area of 970 square kilometres making the 37% of the Lambro-Olona sub-basin and a population of just over one million people living in the valley, excluding Milan. The main purpose of the River Contract is the territorial, environmental and landscape redevelopment through interventions identified by participatory planning and shared by all those involved. In particular, the Contract has four strategic objectives: - reduction of surface and underground water pollution; - hydraulic risk mitigation; - environmental and landscape redevelopment of river corridors; - development of communication, training and education activities on the culture of water towards the communities that inhabit the area affected by the project. The River Contract identifies its area of intervention in multifunctional river corridors, variable geometry territorial areas not delimited by rigid boundaries, intermediate between the territory of the entire basin and the "fluvial pertaining areas" where defined by the PAI (Hydrogeological Structure Plan), and, in the

	province of Milan, by the PTCP. An intense work on the territory for the involvement of the local community has allowed over the years to carry out studies, research, interventions and initiatives of various kind throughout the territorial area. In summer 2015, the Strategic Project for the Sub-catchment of Torrente Lura, a prototype tool that constitutes the most advanced processing of the River Contract in Lombardy, was adopted by the Regional Council. In 2016 the area of the River Contract was extended to include the portion of the Lambro Meridionale sub- catchment (South of Milan). The participative planning process involves over a hundred subjects including local authorities, Parks, associations, sectoral agencies and managers of the integrated water service. The actions of the River Contract Action Programme contributing to achieving its objectives consist in particular on river restoration interventions and hydraulic risk mitigation.
Management	- "Comitato di Coordinamento" (Coordination Committee) - "Comitato tecnico" (Technical Committee)
Website	http://www.contrattidifiume.it/it/azioni/olona_bozzente/

CASE STUDY N°3 Matarraña River Contract	
	
Period	2011 - ongoing
Status	Ongoing
Subscription	N/A
Location	Matarraña, Aragon, Spain
Summary description	The River Contract for the Matarraña Basin, is the first to be implemented in Spain and covers three autonomous communities and 36 municipalities framed in the Ebro Hydrographic Demarcation. Although the political framework is complex, the inhabitants of Matarraña are unique examples in the dialogue and resolution of conflicts related to water uses, which makes it an ideal basin for the realization of a process of participation for the improvement and sustainable development around a river. In this sense, the River Contract is a management and participation tool, as a means to restore, improve or conserve a river through a series of actions arranged by all users and by the corresponding public administrations. It is a tool that has been shown to be effective in the management and improvement of rivers and / or watersheds and that is maintained after the implementation of the Water Framework Directive. In this way, the River Contract supposes a reinforcement of the Matarraña Basin Plan, respecting its provisions and establishing a short and medium term action plan to guarantee the environmental sustainability of the river. In this framework the process has developed a Matarraña River Contract Volunteer Program, including the following specific objectives according to the National River Restoration Strategy: - To facilitate the knowledge of the river, both from its environmental component as well as socio-cultural and economic. - To strengthen a broad participation process, which involves all users of the basin and public entities linked to water management. - To improve the environmental quality and enhancement of the river, ensuring its management and use with sustainability criteria, based on a program of activities From the documentation, the field work, the environmental analysis and the contributions of the agents of the territory, the River Contract strategy has identified the following keys of opportunity linked to the special environmental values of the irrigation of Matarraña:

	- Green infrastructure - Longitudinal and transversal connectivity - Land stewardship actions - Green employment promotion actions - Public awareness
Management	- Comité del río - Junta directiva - Grupos de trabajo - Comité asesor técnico - Secretaría técnica
Website	http://contratoderiomatarranya.org

3.2 WETNET project testing governance processes

Figure 15 - WetNet pilot areas map

3.2.1 An overlook on WETNET case studies

- CASE STUDY N° 1: CAORLE LAGOON SYSTEM
  (VENETO REGION - IT)
- CASE STUDY N° 2: VERDIER MARSHES
  (TOUR DU VALAT FOUNDATION - FR)
- CASE STUDY N° 3: VERCELLI LOWPLAIN
  (PROVINCE OF VERCELLI - IT)
- CASE STUDY N° 4: LJUBLJANSKO BARJE NATURE PARK
  (RESEARCH CENTRE OF THE SLOVENIAN ACADEMY OF SCIENCES AND ARTS - SL)
- CASE STUDY N° 5: ODIEL MARSHES
  (ANDALUSIAN FEDERATION OF TOWNS AND PROVINCES - ES)

- CASE STUDY N° 6: ALBUFERA DE VALENCIA
  (SPANISH ORNITHOLOGICAL SOCIETY - ES)
- CASE STUDY N° 7: CAÑIZAR LAGOON
  (SARGA GOVERNMENT OF ARAGON - ES)
- CASE STUDY N° 8: MELIDES LAGOON
  (DEVELOPMENT AND INNOVATION NETWORK - PT)
- CASE STUDY N° 9: GOZO ISLAND
  (GOZO REGIONAL COMMITTEE - MT)

CASE STUDY N°1 CAORLE LAGOON SYSTEM

LOCATION: VENETO (ITALY)

PARTNER: VENETO REGION (VR)

PROTECTED WETLAND SURFACE: 5.119 ha

PILOT AREA INFLUENCE SURFACE: about 33.358 ha (entire territorial system)

TYPE: Rivers and channels with fresh water, coastal lagoons with brackish water

ENVIRONMENTAL SCHEMES: Most of the area is part of the Natura 2000 network. It is also an area of natural-environmental protection identified by the Regional Territorial Coordination Plan and subject to environmental constraints.

MAIN FEATURES: The area is characterized by a wide range of natural and artificial waterways (the latter linked to reclamation activities). The most important rivers are the Tagliamento, Livenza and Lemene. The Nicesolo and Lovi lagoon-channels cross and collect in the lagoons of Caorle and Bibione. As regards the settlement system, two distinct areas are distinguished: the densely urbanized coastline with large seaside resorts and the extensive reclaimed territory behind it, characterized by highly developed agriculture and fishery ponds toward the coast. One of them – Valle Vecchia (Old Valley) – is one of the few non-urbanized stretches of the Venetian coast, hosting a precious natural capital.

CASE STUDY N°2 VERDIER MARSHES

LOCATION: RHONE DELTA (FRANCE)

PARTNER: TOUR DU VALAT FOUNDATION (TDV)

PROTECTED WETLAND SURFACE: 120 ha

PILOT AREA INFLUENCE SURFACE: 120 ha

TYPE: Coastal marshes with a mosaic of fresh water and salty step habitats

ENVIRONMENTAL SCHEMES: Included in Natura 2000 and part of the Natural Regional Park of the Camargue.

MAIN FEATURES: The Verdier Marshes were fish ponds that were restored to natural wetlands in 2004 as part of a community based wetland project. Today the site is managed between the local association “les Marais du Verdier” in collaboration with the Tour du Valat Research Institute. The site is open to the public and hosts a variety of socio-cultural activities including livestock grazing, hunting, fishing and bird watching.

CASE STUDY N°3 VERCELLI LOWPLAIN

LOCATION: PIEDMONT (ITALY)

PARTNER: PROVINCE OF VERCELLI (PV)

PROTECTED WETLAND: 7.192,73 ha

INFLUENCE AREA: 70.736,38 ha

TYPE: Paddy fields with fresh water

ENVIRONMENTAL SCHEMES: The pilot area includes 28 municipalities of the Province of Vercelli and corresponds to a portion of the “ambito 24” (ambit 24) defined by the Regional Landscape Plan and the thematic area “rural landscape systems of significant homogeneity and characterization of the crops”.

MAIN FEATURES: The area includes part of the Western floodplain of the river Sesia and part of the Northern floodplain of Dora Baltea and Po rivers. It is also characterized by a complex system of irrigation canals and artificial waterways guaranteeing crops irrigation and rice cultivation. Today the agricultural system is industrialized and mainly dominated by rice paddies (submerged culture). The project area is also interested by three Natura 2000 sites, such as the Po River Park (riverine wetland), the “Bosco delle Sorti della Partecipanza di Trino” (forest wetland), the “Risaie vercellesi”, “Fontana Gigante”, “Palude di San Genuario”, “Paludi di San Genuario e San Silvestro” (artificial wetlands).

CASE STUDY N°4 LJUBLJANSKO BARJE NATURE PARK

LOCATION: CENTRAL SLOVENIA

PARTNER: RESEARCH CENTRE OF THE SLOVENIAN ACADEMY OF SCIENCES AND ARTS (ZRC-SAZU)

PROTECTED WETLAND SURFACE: 13.505 ha

PILOT AREA INFLUENCE SURFACE: 13.505 ha

TYPE: Floodplain with fresh water

ENVIRONMENTAL SCHEMES: Extended protected area – Protected Landscape (IUCN Category V), 2 Ecologically Important Areas, Natura 2000 site.

MAIN FEATURES: The Ljubljansko barje Nature Park is the Slovenia's largest complex of wet grasslands with hedges and forests, shrubs and watercourses located in the area of Ljubljana Marsh, in Central Slovenia. The area is well-known for its rich biodiversity, which is the result of specific cultivation practices (extensively-mowed meadows). Most of the protected, classified animals, plant species and habitat types are vitally dependent on the preservation of the wetland character of the Ljubljana Marsh ecosystem and on the maintenance of extensively-managed meadows (rational fertilization, late mowing).

CASE STUDY N°5 ODIEL MARSHES

LOCATION: HUELVA (SPAIN)

PARTNER: ANDALUSIAN FEDERATION OF TOWNS AND PROVINCES (FAMP)

PROTECTED WETLAND SURFACE: 7.158 ha

PILOT AREA INFLUENCE SURFACE: 55.115 ha

TYPE: Coastal marshes

MAIN FEATURES: In the south of Huelva (Spain), the confluence of Tinto and Odiel rivers has given rise to a complex of marshes influenced by the tides, known as the Odiel Marshes. A great variety of landscapes makes up this area. One of its main enclaves is the island of Enmedio, declared a Natural Reserve for housing one of the largest colonies of European breeding spatulas, a species in danger of extinction. A walk along this natural site will allow you to observe cormorants, flamingos, various species of seagulls and waders. Salt production is one of the most interesting natural resources in the area. Activities traditionally carried out in this natural setting include pine gathering, beekeeping, livestock, fishing and shellfish.

CASE STUDY N°6 ALBUFERA DE VALENCIA

LOCATION: COMUNITAT VALENCIANA (SPAIN)

PARTNER: SPANISH ORNITHOLOGICAL SOCIETY (SEO/BirdLife)

PROTECTED WETLAND SURFACE: 21.120 ha

PILOT AREA INFLUENCE SURFACE: 21.120 ha

DEPTH: 1,5 - 0,5 m

TYPE: Coastal wetland with brackish and freshwater

ENVIRONMENTAL SCHEMES: Natura 2000 site (SCI and SPA), RAMSAR site and Natural Park.

MAIN FEATURES: L'Albufera is one of the most important coastal wetlands for birds in the Mediterranean. Their main habitats are the coastal lagoon (30 km2), rice fields (140 km2 with different uses throughout the year-cycle), coastal pine forest, dunes and brackish, permanent lagoons. The pressures on biodiversity are related mainly to water management, volume and quality of the water entering the wetland system. The main activities carried out are agriculture (specifically linked to biodiversity conservation), fishing, gastronomy and tourism.

CASE STUDY N°7 CAÑIZAR LAGOON

LOCATION: ARAGON (SPAIN)

PARTNER: SARGA - GOVERNMENT OF ARAGON

PROTECTED WETLAND SURFACE: 1.130 ha (before drying)

PILOT AREA INFLUENCE SURFACE: 22.500 ha

DEPTH: 2,8 m

TYPE: Inland lagoon with fresh water

ENVIRONMENTAL SCHEMES: Included in “Inventory of unique wetlands of Aragon”, in the typology of seasonal freshwater lagoon.

MAIN FEATURES: Is the fifth most extensive wetland in the interior of Spain and the second most important for fresh water habitats. In XVIII century the site was drained. Restoration activities were implemented in the site between 2008 and 2012. The area dedicated to the lagoon now exceeds 524 ha with 411 ha of flooded areas and the rest are wet meadows of great ecological value.

CASE STUDY N°8 MELIDES LAGOON

LOCATION: ALENTEJO (PORTUGAL)

PARTNER: DEVELOPMENT AND INNOVATION NETWORK (RCDI)

PROTECTED WETLAND SURFACE: 400 ha

PILOT AREA INFLUENCE SURFACE: 6.500 ha

DEPTH: average 2 meters and a 6 metres tidal channel along the lagoon south bank

TYPE: Coastal lagoon system with brackish water

ENVIRONMENTAL SCHEMES: classified as part of the Comporta/Galé Site (PTCON0034) included in the Natura 2000 network.

MAIN FEATURES: A coastal lagoon with 40 hectares of permanent water bodies and an adjacent dune system on the Alentejo ocean coast. The lagoon is periodically opened to the ocean, either naturally or artificially, for water and sediments renewal. Tourism and agriculture (rice fields) are the main economic activities.

CASE STUDY N°9 GOZO ISLAND

LOCATION: GOZO (MALTA)

PARTNER: GOZO REGIONAL COMMITTEE (GRC)

PROTECTED WETLAND SURFACE: 1.207,42 ha

PILOT AREA INFLUENCE SURFACE: 6.915,82 ha

TYPE: Inland lagoons

ENVIRONMENTAL SCHEMES: The water catchment district was established by the Malta Environment and Planning Authority (MEPA) under Article 3 of the WFD for the purposes of the implementation of the WFD (see sub regulation 3 (1) of LN 194/2004). This water catchment district consists of all hydrological sub-catchments, coastal waters up to one nautical mile from the baseline and all ground waters.

MAIN FEATURES: The Gozo part of the Maltese water catchment district includes: (i) three coastal water bodies, whose boundaries were determined on the basis of the predominant physical and ecological characteristics, as well as on the nature and magnitude of pressures on the coastal water environment; (ii) small inland surface waters systems linked to the dynamics of dry river valleys and their associated catchments, and transitional waters linked to coastal processes: they are small streams, water courses or standing waters that flow or receive water flow for limited periods of time during the year; (iii) three protected Natura 2000 sites related to water-dependent habitats, for a total extension of 1.207,42 ha. In particular, the project pilot areas are: Wied tal-Lunzjata, Il-Qattara, Għadira ta' Sarraflu.

3.2.2 VENETO REGION case study

The lagoons of Caorle and Bibione are composed of a series of fishing valleys of great environmental and ecological value. Their environment is generally formed by an alternation of water bodies, intended for the extensive breeding of fish, of different salinity and extension, reed beds or other halophytes, banks with arboreal and shrubby vegetation typical of brackish wetlands, and wooded islands partly cultivated. There are also small and special biotopes of peat bog and pure and indigenous holm oak formations, the northernmost of Italy, placed on the fossil dune, and mixed pinewoods of artificial origin and Mediterranean-Illyrian scrubland. The presence of complex natural habitats, with a good degree of naturalness and a good extension, have favoured the permanent and temporary establishment of numerous species of fauna, also in relation to open spaces with a large surface and low anthropogenic pressure. The nesting sites of many species are well located both in the fluvial areas and in the lagoon areas, in the coastal dunes and in the agricultural areas.

Within the valley system coexist areas with the highest degree of naturalness, typical of a humid environment, and areas where man's intrusion is noticed. The first are characterized by large bodies of water, areas of salt marshes and "velme" with a rich plant structure both emerged and submerged, capable of hosting a good fauna system. The second ones are constituted from the fishing valleys. The relationship that has been created over the decades between the natural environment and human presence is therefore of particular interest, for which the anthropic elements are clearly perceptible, but do not clash in a relevant way, visually integrating with the context. It is also important to represent the historical value determined by this relationship, documented by the presence of the "casoni" – typical example of vernacular architecture - located within the fishing valleys.

The Regional Territorial Coordination Plan (PTRC) responds to the obligation to safeguard areas of particular environmental interest, through the identification and protection of a wide range of cultural and environmental heritage categories. The Plan is a reference framework for local and sector planning. The update of the Regional Territorial Coordination Plan has to be consistent with the regional development program (an economic strategic document). It indicates the objectives and the main lines of organization for territorial planning, as well as the regional strategies and actions aimed at their realization; it must be implemented by the territorial and spatial plans of lower level. The new PTRC also provides for the identification of the regional ecological network and its protection and enhancement. In the 2013 update of the Plan, a specific article on River Contracts has been added in the implementing rules, stating that Veneto Region promotes concertation and integration of policies at the basin and sub-basin level, with the participation of the public and private stakeholders involved, with the aim of pursuing the objective of integrating the management of hydraulic safety with the structure and use of soil and the protection and enhancement of water resources and related environments. The "River Contract" (CdF) is the negotiated programming tool that pursues these aims. This tool is related to the regional strategic planning / planning processes concerning the redevelopment of river basins and water resources; it incorporates the indications contained in the superordinate planning and contributes to the development of synergies between the different policies related to water. It also provides multifunctional programs and action plans where possible.

The Provincial Territorial Coordination Plan (PTCP) outlines the objectives and the fundamental elements of the structure of the provincial territory in coherence with the provincial socioeconomic development programs, considering the main vocations and its geological, geomorphological, hydrogeological, landscape and environmental characteristics. It constitutes a deepening of the PTRC to the provincial territorial scale and therefore it has the same contents developed in more detail, especially on the subjects of land-use, environment, biodiversity, energy, water protection, soil protection and landscape protection. Specific rules on river contracts have not been included yet. The PTCP pays particular attention to the issue of hydraulic safety.

The partner mapped 49 stakeholders that have authority, influence or interests in the pilot area. They appear to be equally distributed within the categories of environmental associations, cultural associations and cooperative societies, fishermen and fish farmers, associations, hunting associations, local authorities and consortium, farmers' associations, tourists' boards, commerce and hoteliers associations. This distribution unveils the multi vocation of the area, where farming, fishing and tourism appears to be equally important. The participatory process started in 2017, involved more than 50 participants including delegates and individual, representing organizations of the public and private sectors, stakeholders and citizens, and was divided into information meetings and thematic tables.

The following priority elements emerged from the trend and preferred scenario and were then included into the Wetland Contract: (i) definition of a "representative institutional model" for the management of the lagoon; (ii) assuring the hydraulic protection of the area from the risk of flooding (avoid landfill with sediments; manage the amount of river sediments of the *Cavrato* canal and the *Tagliamento* river); (ii) creating a monitoring network of all the data needed to define and learn about the current lagoon dynamics, in order to be able to plan interventions on a real knowledge base; (iii) drafting an operational program that takes into consideration all the components of the system, through an integrated approach able to restore the lagoon dynamics, to guarantee and consolidate the protection, promotion and development of the territory related to the wetland; (iv) consolidating and / or promoting tools and actions for the protection and enhancement of the territory, as well as for the protection of habitats.

3.2.3 TDV case study

The landscape in the Verdier marshes is a mosaic representing the typical wetlands in the Camargue. The mosaic ranges from salty step to permanent fresh water marshes, including flood plains, salt plains, ponds and woods, and reed beds. These natural spaces are microcosms in themselves, with thousands of birds, a herd of Camargue bulls and horses.

The French Environmental Code is the reference tool defining the objective of balanced management of water resources and giving way to the conservation of wetlands. It affirms that conservation and sustainable management of wetlands are of general interest. It stresses the importance of conservation, exploitation and sustainable management of wetlands, which are at the heart of policies to conserve biological diversity, landscape management, water resources management and flood prevention. The pilot area, being listed as Ramsar site, Important Bird Area, Unesco Man and Biosphere reserve, SIC and SPA is inserted in the Camargue Regional Natural Park, regulating the sectors of water management,

biodiversity/nature conservation, land use, public participation, land/water/wetland stewardship and wetland contracts. Its main scope is to use participative methods to put in place a sustainable management framework balancing economic activities taking place in the area with biodiversity conservation and socio-cultural activities.

The site is owned by Tour du Valat, but it is managed in collaboration with a local association composed by volunteers. The association has tested different participative tools to decrease conflict associated with the site management.

The partner mapped 11 stakeholders that have authority, influence or interests in the pilot area, with a large majority of public bodies - 64% - and a good representation of private profit organization - 18%.

The vision that finally shaped the Wetland Contract foresees: (i) a well-managed community wetland that is maintained, shared and used by a wide-range of local stakeholders; (ii) a gentle and respectful of natural cycles management of the mosaic of Camargue wetlands rich in biodiversity; (iii) a collective management supportive for multi-use and promotion of social links.

3.2.4 VERCELLI PROVINCE case study

The Province of Vercelli is the body in charge for the pilot area administration in all its extension. The Urbanism and Regional Planning Department is the body engaged in WETNET, undertaking responsibilities in the fields of environment protection, sustainable development and regional planning. The Department is competent for the Provincial Coordination Plan (PCTP) that defines the ecological network for the whole territory of the province. The Province, through this plan intends to develop a tool for implementing a homogenous vision for the Province sustainable development.

The hydrogeological origin of Vercelli lowland concurred in creating such a homogeneous territory, surrounded by the Morainic Amphitheatre of Ivrea and the Dora Baltea confluence (W), the Vercelli high plains, the Po River (S) and Sesia River, delimiting the eastern boundary with Novara province. The rice fields, as a whole, constitute a naturalistic and landscape value. The whole area hosts 9 sites protected as Special Nature Reserve, 7 SIC and 6 SPA.

After the introduction of rice cultivation in Italy, at the end of the Middle Ages, the rice fields gradually spread throughout most of the lower Po Valley, making lands, otherwise barren or partly marshy, cultivable as they were not yet reached by major land reclamation. In 1870, Italian rice production exceeded 48 million quintals. The operations of “monad” were performed entirely by hand by hundreds of workers (more often women) who seasonally reached the rice field from every corner of northern Italy. The paddy-fields are fixed in the collective historical memory, testifying the human efforts that have followed over the centuries and adding a cultural qualification to the rice fields. The popular songs of the “Mondine” - most of which protest and denounce the extremely difficult working conditions of those times - identify in a very effective way this area.

At supra regional level the Management Plan of the Po river basin district is mentioned as a most important coordination tool, aimed at implementing a coherent and sustainable water protection policy, through an integrated approach of the various management and ecological aspects at the river basin scale. The tool in

charge for achieving the quality objectives of the water bodies at regional level is the Piedmont Regional Plan for water protection, which also mentions the possibility of activating negotiated participation tools such as River/Wetland contract to achieve that goals. Piedmont Region also developed the Regional Guidelines for River and Lake contract, listing all the procedures to be developed in order to implement such tools.

The trend and oriented scenarios addressed the most important issues to be solved and included in the Wetland Contract. Therefore it can be summarized that the Contract focuses on actions aimed at: (i) improving the environment of the entire area, according to various aspects (biodiversity, landscape, water quality, etc.), through actions related to planning and dialogue between local authorities (eg. compensation plan); (ii) mitigating the impacts of rice fields on environmental quality (water quality, air quality, biodiversity, ...), strengthening their role as a habitat for wildlife, improving their landscape quality; (iii) enhancing the sustainable socio-economic development of the area; (iv) promoting communication and information actions for farmers, organizations, schools, other citizens, etc., in order to achieve specific results and raise awareness of environmental issues.

In terms of stakeholder involvement the partner mapped 41 stakeholders that have authority, influence or interests in the pilot area, the 29% of which are public bodies, the 20% are private profit entities and the 12% are private no-profit entities. The stakeholders' majority is active in the field of agriculture, at the local scale, only one fifth of them have a solid experience in negotiated governance processes, while less than one eight have specific experience in river contract processes. The MoU preliminary to the final subscription of the Contract (the procedure is required by the regional guidelines) is signed by the province, 28 municipalities, 3 parks, the region, the Po basin authority.

3.2.5 ZRC-SAZU case study

Ljubljansko barje Nature Park is managed by the park authority. It is considered a Protected Landscape (IUCN Category V). The cohabitation of people and nature created a unique and highly diverse cultural landscape, an endless mosaic of meadows, litter woodlands, fields, ditches, hedges, areas of forest and watercourses. The area includes two Ecologically Important Areas and has been proclaimed a Natura 2000 site. It is a Special Protection Area (SPA) for 25 bird species according to the EU Birds Directive. The area contains a large number of valuable natural features (59), natural monuments (9), nature reserves (6), numerous endangered wildlife plant (1) and animal (27) species with an international protection status, their habitats (7).

The Park has been influenced by thousands of years of human presence, which is proved by numerous archaeological findings. Important settlement era extends to the late Neolithic, when the inhabitants lived in pile dwellings. The area contains two groups of prehistoric pile dwellings, which are listed as UNESCO World Heritage Sites. These are well-preserved and culturally rich archaeological sites, which constitute one of the most important sources for the study of early agrarian societies in the region.

At National level the Nature Conservation Act provides a basis for the overall conservation of biodiversity and protection of valuable natural features as part of Slovenia's natural heritage. One of key tasks is to protect and conserve plant and animal species, their habitats and valuable natural features. For what

concerns water management, Slovenian Water Act regulates the management of the sea, inland and ground waters and on the other hand water and coastal land, with the aim to achieve good status of water and other water-related ecosystems.

The Wetland Contract was finally signed in the shape of a Memorandum of Understanding, a voluntary document signed by project partners and various stakeholders from public authorities, education and research institutions, civil society, the economic sector and others related to the wetland, with the aim to achieving the objectives of restoring the environmental, social and economic aspects of the wetland.

The bodies responsible for implementing the Memorandum are the Assembly and the Supervisory Board. The first is composed of all signatories and is open to those who wish to join the Memorandum at a later stage. The Monitoring Committee consists of representatives of three experts (in the field of nature: Center for Cartography of Flora and Fauna, agriculture: Biotechnical Faculty of the University of Ljubljana and water management: Faculty of Civil and Geodetic Engineering of the University of Ljubljana). All signatories to the Memorandum undertake to include the appropriate resources available for active participation in the activities.

In the field of Governance, the Memorandum focused on enhancing the coordinated management of ditches (maintenance, control of drainage, awareness of stakeholders) and the control of fertilizers and preservatives on agricultural land. In the field of environment the themes addressed concern regulations for meadows and agriculture in order to enhance the conservation of species and habitat types and the preservation of the NATURA 2000 area. Finally tourism was seen as a field capable of enhancing economic and social development.

3.2.6 FAMP case study

The Biosphere Reserve of Odiel's Marshes is managed by the Consejería de Medio Ambiente y Ordenación del Territorio. The jurisdiction of some municipalities such as Aljaraque, Punta Umbría and Gibraleón, together with the Board of the Natural Place Odiel's Marshes, the National Committee of Biosphere Reserves, the Andalusian Committee of Biosphere Reserves, the Andalusian Committee of Wetlands and the National Commission of Protection of Nature are also involved in its management for different aspects.

For what concerns the area's natural value, it is possible to highlight that despite the low number of vegetal species – around 165 – there are many ecosystems. The marshy vegetation develops along streams, estuaries and in the sandy area. About the fauna, there are more than 200 species. It's important to highlight the 'Espátula', which in Spain only nests in the Odiel's Marshes and Doñana and accounts the 30% of the European population.

The partner reported a wide set of National and Regional lows and decrees aiming at establishing the guiding principles for biodiversity conservation and nature protection as well as the authorities in charge for its management. As an integration to all those regulation the Andalusian Wetlands Plan (2002) defines the environmental policy on wetlands acting as the instrument that integrates, under a same framework, all the action programs that are carried out by all Provincial Delegations and General Directions. It intends

to establish an administrative coordination to integrate other policies that have an incidence about its conservation.

In terms of stakeholder involvement FAMP mapped 11 stakeholders that have authority, influence or interests in the pilot area, the 64% of which are public bodies, the 18% are private profit entities. The stakeholders' majority is active in the field of local development and public administration.

The priority elements emerged from the scenario planning phase and included in the Wetland Contract in the field of governance were related to strengthening the levels of protection that Odiel Marshes Biosphere Reserve, promoting the implementation of the Master Plan for Use and Management of the Odiel Marshes Natural Park and the Enmedio Island and Burro Wetlands and enhancing the role of the Natural Park Board, applying a vertical-horizontal governance in a complementary manner. In the field of conservation and environment, the objectives were to increase the contribution to the conservation of the ecosystems and biodiversity of the Odiel Marshes Biosphere Reserve also by increasing the awareness of the citizenship regarding the natural spaces and by reducing the industry pollution. In terms of economic and social development, the Action plan focuses on promoting innovation in SME and on promoting the territory through local branding.

3.2.7 SEO case study

L'Albufera de València is managed by the Reginal government-Generalitat Valenciana. Department of agriculture, environment, climate change and rural development. Being such a large wetland, the area falls under the jurisdiction of twelve municipalities, the Spanish Ministry of environmental- Hydrological Jucar Basin office and three Irrigante communities.

L'Albufera is one of the largest and most valuable coastal wetlands in Mediterranean basin. The whole system formed by main lagoon, the surrounding wetland, rice corps and the restinga adjacent was declared Natural Park in 1986, it is also a Special Protection Area (SPA – 1994) and was incorporated in 1990 in the Ramsar list. It is one of the most important wetlands for waterfowl in the Iberian, European and Mediterranean context. l'Albufera represents 2% of the coastal lagoons habitat and more than 15% of the "calcareous oligo-mesotrophic ponds". In this sense, it is a key wetland for waterfowl throughout the annual cycle. It hosts important and representative populations of waterfowl both during the breeding season, during migration and wintering. The importance of this space from the conservationist perspective is closely linked to the interaction of traditional uses such as agriculture, especially rice cultivation, and hunting.

L'Albufera hosts several endemic plants populations (such us Limonium dufourii, Limonium albuferae, Thalictrum maritimum, etc.) and threatened plants (Juniperus oxycedrus subsp. macrocarpa, Kosteletzkya pentacarpos, etc.). Several, little springs host endemic, threatened samaruc (Valencia hispanica) populations. From the birds listed in Bird Directive Annex I. 20 species have regular breeding grounds 13 regular wintering populations. Albufera host best populations of bird in Valencian Region as Sandwich Tern (99,6%), Gull-billed Tern (96,4%) or Little Egrett (96,5%).

The natural and ecological interest of the coastal front extends and complements inland waters from the coastline along its continental shelf. The marine strip is located in the Gulf of Valencia, just south of the platform of the Ebro-Columbretes delta, whose high productivity benefits. The contributions of the Turia River and the lagoon itself also contribute to the enrichment of the waters in the coastal strip by implementing an ecological continuity of vital importance and that make up the funds are composed mainly of gravels and support posidonia (Posidonia oceanica) grasslands in some places. This marine area hosts important colonies of seagulls and terns of l'Albufera de València.

L'Albufera has evolved in parallel with the human being, posing heritage values of enormous wealth. This natural system is associated with uses and traditions from ancient times, providing information about the remote past and serving as wildlife refuges and settlement of human communities. Among those values, the material structures, the artifacts and, in general, the traditional practices, of exploitation and exploitation of the resources provided by the wetlands emerges.

The area is also the largest lake on the Iberian Peninsula placed at 15 kilometers from the city of Valencia. Around the laggon, an old marine gulf closed by a restinga or littoral cord and fed by the fresh waters of ravines, canals and springs called ullals. In addition a large area of rice field is surrounding the lagoon makes this wetland one of the most interesting traditional humanized landscapes of the Spanish Mediterranean.

The regulations for water bodies and wetlands at National level are included into the Water Low – aiming at regulating the public hydraulic domain, the use of water and the exercise of the competences attributed to the State – and the National Hydrological Plan law establishing the coordination measures for the basin's Hydrological Plans. The Natural Heritage and Biodiversity law is also relevant for the case study because it incorporates the master lines of the both Habitats and Birds Directives. The Júcar Hydrological Plan for the 2015-2021 cycle establishes the Water requirements of humid zones and in particular of the Albufera de Valencia, which is included in its basin. At regional level the Law of Protected Natural Areas (LENP) of the Generalitat Valenciana aims to establish the regime applicable to protected natural areas of the Natura 2000 Network. Finally the Low establishing the Legal Regime of the Albufera Natural Park addresses the conservation of natural ecosystems and their ecological, aesthetic, educational and scientific values, promoting the teaching and enjoyment of the park due to its heritage and cultural interest, as well as the maintenance of economic activities traditional, compatible with the degree of protection of space.

The Wetland Contract focuses its set of actions and measures on (i) improving the management and the coordination within stakeholders also by defining regulatory & management tools; (ii) improving water quality and its contributions to the wetland; (iii) preserving agriculture production in the fight against salinization, promoting cultural heritage and leisure and tourism.

In terms of stakeholder involvement the partner mapped 77 stakeholders that have authority, influence or interests in the pilot area, the 27% of which are public bodies, the 21% are private no-profit entities, the 8% are business support organization, the 4% are SMEs and the last 4% are research institutions. The stakeholders' majority is active in the field of agriculture, then local authorities and entities active in the field of navigation are also well represented. The majority of them have a solid experience in negotiated governance processes, while none of them have specific experience in river contract processes. The

Memorandum of Cooperation constituting the local solution of the Wetland Contract is signed by 20 stakeholders.

3.2.8 SARGA case study

Cañizar Lagoon is managed by the Department of Rural Development and Sustainability, while WETNET partner, Sarga, is a public company belonging to the Government of Aragon specialized in environment and sustainable development. Sarga is in charge of the management and maintenance of Aragonese natural spaces.

The Cañizar lagoon was drained between 1729 and 1732, but the area never ceased to be flooded due to the high level of groundwater. At the beginning of the XXI century, the ASALCA association, Ministry of Environment and Rural environment and Marine and private entities began to restore the wetland by recovering autochthonous vegetation, removing of flecks and infrastructure that prevented the entry of water. In 2010, 360 hectares of flooded land were reached and Cañizar lagoon became the largest freshwater wetland in Aragon and one of the largest inland in Spain.

For what concerns its natural heritage, birds are undoubtedly the most outstanding group in the area. More of 200 species have already been observed. The Cañizar is located strategically in the north-south corridor of the Jiloca Valley and is used during migration. The nesting of mallard duck, gadwall, northern pintail, northern shoveler, red- crested pochard has been verified. Among the mammals, the presence of the otter stands out, classified as sensitive to habitat alteration. Other species such as the weasel, badger, water rat, fox, roe deer or wild boar are common in the lagoon or its surroundings. In addition, micro-mammals feed diurnal or nocturnal birds of prey such as the common owl. In the lagoon, the eight species of amphibians present in the Teruel province are represented, and the typical reptiles of the lagoon are the water snakes, viperine snake and grass snake. Native fishes are represented by the Bermejuelas, little fish from 4 to 12 centimetres. This Iberian endemism is listed as Sensitive to Habitat Disruption.

The implementation of a wetland contract falls into the opening of a process of dialogue and mediation to improve coexistence in the territory related to the Laguna del Cañizar, promoted by the Government of Aragon. The participative process has been requested due to the existing problems in the area that has led to the drainage of the lagoon. This situation has led to a polarization of supporters and opponents of the lagoon that needs to be addressed. The main objective of the proposed wetland contract would be the recovery of the wetland through the social consensus achieved through the wetland contract.

Cañizar Wetland presents a very peculiar situation, since it is a wetland with high conflict, where the absence of dialogue and forms of governance has triggered a dangerous situation for its survival. A management plan is essential to re-establish the dialogue. The Cañizar lagoon was a wetland recovered after 3 centuries desiccated and that it worked for 6 years without any difficulty until various interests were close to leading to its disappearance. Before the start of WETNET, the channels of communication between the actors involved did not exist and the competent administrations had chosen to try to resolve the conflict by letting it on hands of the mayors. With the project communication channels have been restored and there is a greater awareness among stakeholders. It has been possible to introduce into the collective consciousness the idea that it is necessary to end with the conflict and get an agreement between the

actors involved to manage the lagoon . Priority elements of preferred scenario, on which to base the following management tools are: (i) to create a stable participation forum with the stakeholders also by achieving a greater involvement of the competent administrations and by promoting citizen representative: this in the framework of the approval of a new management plan; (ii) to promote collective awareness of the wetland through educational activities, unifying reports, developing innovative projects; (iii) to create new economic activities compatible with the environment and to make the traditional activities of the area compatible with new business models based on the sustainable exploitation of the wetland.

In terms of stakeholder' involvement the partner mapped 29 stakeholders that have authority, influence or interests in the pilot area, the 48% of which are public bodies, the 38% are private SMEs, the 14% are research institutions. The stakeholders' majority is active in the field of local development, while economic activities such as agriculture, fisheries and hunting are well represented. The stakeholders' majority is active at the local scale.

3.2.9 RDCI case study

Melides Lagoon is managed by Grandola Municipality although the Portuguese Environment Agency and the Institute for the Conservation of Nature and Forests are also involved in the management. WETNET partner, RCDI, as a local development NGO, took the role of facilitator of the whole process.

The coastal lagoon is a priority habitat under Directive 92/43/EC - Habitats Directive. It presents 11 additional habitats with importance for nature conservation, particularly those related to the coastal dune and its endemic flora, including Community protected species. It is also included in the Natura 2000 network as part of the Comporta/Galé Site (PTCON0034).

Landscape is one of the most important values of the pilot area, which is still quite natural and unspoiled. The landscape system is characterized by the association of a large beach, the coastal dune and the Lagoon. Around the Lagoon, to the east, the valley is occupied by rice fields which are an important part of the wetland ecosystem. Surrounding the wetland area there is the green border of the Alentejo pine forest. The Lagoon is opened to the sea once or twice a year for sediments and nutrients renovation. In the area surrounding the lagoon there are also two historical monuments, S. Pedro Church and Ruins of the Santa Marinha Church, at the upper part of the wetland valley and associated to the archaeological site from the Mesolithic period. Architectural heritage linked to traditional activities such as milling and pottery also characterize the area.

The Lagoon is a natural value that has been showing problems related to water quality, a growing process of biodiversity deterioration and affecting tourism, which is the main economic activity. Although the process is, to a large extent, caused by natural factors, local population and economic operators converge on the need to restore water quality, while public authorities agree on efforts to slow down the natural negative evolution of the wetland.

Two main Portuguese laws Transposed the European Directives into nation law. Low n.58/2005 defines objectives and principles for the management of water resources: determines that River Basin Plans are the main planning instrument regarding the preservation and utilization of water resources; determines the

institutional framework for the management of the Portuguese River Basins. The decree-low 142/2008 establishes the legal framework for nature and biodiversity conservation. Creates the Fundamental Network for Nature Conservation, defining its components and institutional framework. Creates the National Network of Protected Areas. The National Water Plan defines the major strategic options of the Water Policy, setting the guidelines for the development of the new cycle of Hydrographic Region Management Plans and their associated actions programmes. It sets the prospective political guidelines for water resources management for the 2022 -2027 period, corresponding to the 3rd planning cycle of the Water Directive. It is implemented at regional level through the Hidrographic Alentejo Management Plan, which includes the Melides Lagoon, being identified a highly modified water body, with alluviation problems causing water quality problems. At the local level the Grandola Municipal Master Plan establishes protection statutes for the target area according to the national and regional regulation, including land use regulations. The Lagoon area is classified as Natural and Landscape Area and is included in the Municipal Ecological Structure. The valley adjacent to the Lagoon is dedicated to intensive agriculture and the surrounding area is for forest production. Urbanization is not allowed and tourism accommodation is restricted to country lodges built over existing constructions.

The priority elements deriving from the scenario panning process are based both on the stakeholders' interest on each measure and on a preliminary assessment of the implementation feasibility for the sustainable use of the wetland. The measures to be included in the action plan for a successful implementation than focus on: (i) empowering local actors and joining efforts to profit from synergies; (ii) mitigating adverse natural processes; (iii) strengthening local identity; (iv) upgrading economic activities.

In terms of stakeholder' involvement the partner mapped 28 stakeholders that have authority, influence or interests in the pilot area, the 39% of which are NGOs, the 29% are private profit entities, the 29% are public bodies. The stakeholders' majority is active in the field of tourism. 28 of them are active at the international scale, then 19 are active at the local scale, 7 at the regional scale, only 2 at the national scale. The Melides Lagoon Environmental Agreement constituting the local solution of the Wetland Contract has been signed by 27 stakeholders.

3.2.10 GRC-GDA case study

The inland and surface waters of Gozo Island are landscapes with highly valuable environmental and ecosystemic features. At the meantime they are very limited areas, subject to high pressures due to urbanization, tourism and agriculture. For this reason, within WETNET they are focused as pilot areas as a whole. They are managed by the Environment and Resources Authority (ERA) and Gozo Regional Committee (WETNET partner).

Wied tal-Lunzjata forms the upper part of Wied Xlendi and its diverse habitats attract a large and diverse avifauna, serving as a staging post for migratory birds. This is one of the few remaining valleys with a permanent freshwater supply. Various species that are associated with this freshwater habitat are found in the valley bed, and these are very rare and/or endemic and/or found only in a few other localities or are restricted to Wied ix-Xlendi valley system. *Il-Qattara* is a tiny permanent freshwater pool located on the west coast of Gozo, near the Dwejra inland sea. As a result of the perennial supply of water, the habitats,

flora and fauna of the area are quite atypical from the rest of the larger SAC. The edges of the pool lying just below the linear seepage of the freshwater that percolates the Lower Coralline Limestone formation support an assemblage of species which are typical of shady, humid habitats, such as the maidenhair fern; the brooklime; the moss; and the endemic Żigland t'Għawdex Hyoseris frutescens, which is usually found in more xeric habitats. The freshwater pool is dominated by the endemic Maltese horned pond-weed, Zannichellia melitensis; and the charophyte, Chara globularis; and a number of vascular plants which are only partially submerged. The banks are characterised by various wetland species. The perennial supply of water also houses an array of threatened species, including a number of species confined to this locality. The availability of freshwater during the summer months also attracts birds. *Għadira ta' Sarraflu* is a freshwater pool located on the cliffs located along the southwestern coast of Gozo. It does not fall within the NATURA 2000 network but has been designated as a Special Area of Conservation of National Importance and an area of Ecological and Scientific Importance by GN 112 of 2007 and GN 288 of 1995. The habitat that depends on the water environment at Għadira ta' Sarraflu is the Southern Riparian galleries and thickets. The pool is inhabited by the native painted frog. However similar to Il-Qattara, a number of introduced alien species can be found competing with the native species. The margins of the pool are dominated by the African Tamarisk which has self-regenerated since its plantation.

Maltese Water Policy Framework Regulation (L.N. 194 of 2004) aims at establishing a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater and to transpose the provisions of Directive 2000/60/EC of the European Parliament and of the Council. The 2nd Water Catchment Management Plan assesses the challenges that have been identified during the implementation of the First Water Catchment Management Plan. Furthermore, an increase in knowledge on the state of surface waters due to better monitoring results have enabled additional water management issues to be identified. Policy responses towards integration of WFD principles at a strategic level have been implemented. In July 2015, the Strategic Plan for Environment and Development (SPED) replaced the 1990 Structure Plan for the Maltese Islands, by providing an integrated planning system that regulates the sustainable use and management of land and sea resources. The Plan is a strategic spatial policy framework for both the environment and development up to 2020, complimenting Government's social, economic and environmental objectives direction. It takes on board the WFD objectives and administrative units in its spatial policies.

Gozo's three wetlands are affected by different trends. The Wied il-Lunzjata is situated in one of the valley systems on the island, as is Il-Qattara. L-Ghadira ta' Sarraflu, on the other hand, being man-made, stands on relatively high ground and definitely not where one would expect to encounter a freshwater body. Wied il-Lunzjata is predominantly surrounded by Agriculture, whilst the latter is not present close to the other freshwater bodies. Il-Qattara and l-Ghadira ta' Sarraflu are probably more influenced by Tourism and leisure activities. Il-Qattara stands at the coastal extremity of a valley system which is highly impacted by mineral extraction (due to the presence of numerous quarries extracting globigerina limestone for the building industry) along the valley system. In the current trend the water bodies continue to exist, although under substantial pressure and presumably, being significantly influenced by anthropogenic influence and presence. In the context of a changing climate, the continued existence of these water bodies in the long-term is rather doubtful.

The scenarios informed some strategies for the final Action Plan drafting as follows. In terms of governance the importance of stakeholders was highlighted and the necessity to appoint a management committee for each site and to ensure stakeholders participate actively in the management of the site and in decisions that affect them or their property. Concerning the environment, the main goals are to restore the wetland environment, ensure local site-specific chemical monitoring is ongoing and that it is effective and to valorize the local landscape. The strategic area of tourism was addressed, highlighting the necessity to ensure quality tourism focused on the specific and special attributes of the sites and avoid general tourism. Finally, the in the field of agriculture the necessity to shift to organic farming emerged as pivotal.

The Memorandum of Cooperation towards a Wetlands Contract for Gozo has been signed by 4 stakeholders.

3.3 Remarks and recommendations

3.3.1 Outcomes from monitoring protocol of WETNET case studies

Wetlands' typology, dimension and protection

Except the three wetlands of Gozo in Malta and the Laguna del Cañizar in Spain, the sites targeted by WETNET are wide areas of thousands of hectares that include a large diversity of environments and complex systems for water management. Small or medium populations surround these areas, except for l'Albufera, which has the greatest number of inhabitants, reaching almost one million, because of the proximity of the city of Valencia.

Except for the Laguna de Cañizar, all spaces are in areas of Natura 2000. The pilot areas' richness of species of flora and fauna make them very relevant. They also offer excellent refuge and breeding environments for hundreds of bird species. Therefore, the similarities found within the Natura 2000 Network sites deal both the SCI figures for the protection of habitats in Annex I and species in Annex II of the Habitats Directive, and they are also declared as SPAs as designated spaces for the protection of birds. Only four wetlands (Odiel Marshes, Vercelli Lowlands, Ljubljansko Barje and Xlendi Wiedtal-Kantra Area) have management instruments approved. As a complement to the Natura 2000 Network, all the pilot areas have other protection figures. These figures range from natural parks such as Marismas del Odiel, L'Albufera de Valencia, Ljubljansko Barje to other figures oriented to environmental protection and natural and cultural heritage. Marshes de Odiel also has the figure of Reserve of the Biosphere and l'Albufera has started the process for its declaration. These three wetlands, like the rest, also have other types of protection, such as protected landscapes, territorial protection plans, water quality control areas, etc. In addition, there are three wetlands included in the Ramsar Convention list (l'Albufera de València, Marismas del Odiel and Marais du Verdier – being part of the Camargue wetland network).

The main impacts that affect these wetlands depend on the activities carried on there. In the agricultural areas of Albufera de València, Ljubljansko barje and Verdiel lowlands, agriculture and water management are identified as high pressure. Likewise, pollution is an aspect that is repeated as a relevant impact in practically all areas of the project. Other relevant pressures are those derived from mining exploitation

activities such as the extraction of peat in Caorle, or derived from the generation of energy and development of new infrastructures in Vercelli lowlands. The presence of invasive alien species turns out to be an important impact on Marais du Verdier.

Stakeholder typology

The whole set of stakeholders identified by the partnership to be involved in the Wetland Contract processes is dominated by public bodies and private, no-profit entities. Also private profit entities are relevant in the set of pilot areas of WETNET. These three typologies summed up to 74 % of the stakeholders. Business support organizations were less frequent as these typology of entities usually act as an umbrella for the organization and coordination of the activities of other stakeholder (i.e. agriculture, tourism, gastronomy).

Agriculture, local development (by means of being included here the local municipalities) and biodiversity were the main fields of work of the stakeholders involved in the project, being up to 60% of the stakeholders mapped in the context analysis. This establishes a good starting point for the project as these fields of activity are aligned with the three main pillars in which the Wetland Contract are concerned: empowering people for biodiversity protection in wetlands coping with sustainable socio-economic development. Stakeholders whose main activities are related with fisheries, recreation and tourism were less frequently mapped, as their occurrence is more dependent on the wetland typology than the three main fields of activity.

Among the pilot areas, the public bodies were the most relevant stakeholder typology in terms of number, being more relevant in the stakeholder map in Albufera de Valencia and Ljubljansko Barje. However, in Albufera de Valencia the most relevant typology of stakeholders is the private profit sector, with the involvement of 31 entities (mainly dedicated to agriculture and tourism activities). This situation is similar in Risaie vercellesi, according to the similar socioeconomic strongly linked with rice production, and thus increasing together the concrete percentage of private profit organizations. On the other hand, Laguna del Cañizar and Ljubljansko Barje included a minor number of private profit entities in the stakeholder map. Marais du Verdier Wetland Contract started with the involvement of a small number of stakeholders but diverse in typology and field of activities. In this case, although the small number of stakeholders mapped, there are represented all the fields of activity in a homogenous, balanced way.

Stakeholder's diversity of fields of activity are well represented in the stakeholder map developed for each pilot area, as there are few cases in which a field of activity is not represented in a pilot area. However, some fields of activity especially linked to the landscape and territorial structure are not present in a concrete pilot area, as occurs in Risaei vercellesi (fisheries not well represented in the stakeholder map), Marismas del Odiel (agriculture). Complementarily, stakeholders whose main field of activity is recreation are well represented only in coastal, brackish water bodies or inland marshes.

Stakeholders involved in agriculture are mainly private profit associations (close to the 50 % of stakeholders), represented in the process by farmers and irrigators associations, but also enterprises and local producers. Recreation and tourism activities in the pilot areas are linked mainly to private profit organizations, especially local, small enterprises. Biodiversity protection, as well as culture, is represented significantly by private non-profit entities, such as local, regional or national NGO devoted to nature

protection or local cultural associations. Local development activities are carried out in the pilot areas by public bodies, as it has been considered that municipalities are included in this category.

The stakeholders identified in the pilot areas context mapping mainly act at the local scale in the pilot areas, with also relevance of stakeholder acting at a regional level. This is a positive scenario, as the main targets groups addressed with the Wetland Contract process are specifically those more intensively involved in the wetland, and this occurs more frequently at the local and regional level. Some other stakeholders that should be involved in the process act a wider territorial level (i.e. national public bodies or entities with a wider territorial scope), which are very important for implementing those strategic actions defined at the Action Plan (i.e. infrastructures). This structure of the stakeholder community is consistent within pilot areas and to the typology of the stakeholders.

Concerning the authorities competent for the wetland management it is possible to draw some conclusions as well. Almost all of the target wetlands are managed by public entities, mainly regional or provincial administrations, and have among their competences the management of natural resources and the protection of the territory, exceptional case is that of the Mariais de Verdier in France that is managed by a private entity (Foundation Tour du Valat, although with a part of public representation) together with a non-governmental association. If regional governments have the competence in most cases, also local entities play a relevant role in the decision-making process. In the case of l'Albufera in Valencia and the Adige River in the Veneto Region, these organizations are the river basin authorities. In almost all areas public bodies are the stakeholders with the greatest authority on wetlands management, while the private entities have less influence and little specific weight. Nevertheless, this condition is inverted in the agrarian systems, especially in the rice fields, where the private entities with competences in water management and the agrarian unions acquire more weight.

Scenario planning and assessing

The trend scenario has been drafted in all processes with the aim of reporting current trends and development patterns. Interestingly, the trends affecting the target wetlands present similar problems and homogeneous characteristics. This may demonstrate that, despite the local and environmental specificities, the target wetlands' problems reflect a condition that is not adequately supported and managed by planning and where private interest linked to profit, and collective interests linked to environmental concerns, overlap and conflict.

In relation to local stakeholders' participation in territorial governance – economic operators, environmental organizations, interest groups defending their rights - a low level of commitment and interaction with public authorities have been reported. Study cases have not highlighted a specific will to create a place for consultation with stakeholders, even more so that the composed framework is characterize by administrative fragmentation, lack of coordination and strategy. On the contrary, the Wetland Contract can produce positive outcomes in facing the lack of a place to convey the different interests and find a shared solution. Indeed, the absence of management model/tools makes stakeholders lose the feeling of being in a natural area of great ecological value.

Planning is the other component of governance that emerged as critical on more than one level. At local level it emerged that it is not always consistent with higher planning level or sector planning and in some

cases a complete lack of locally-specific policies and planning has been reported. Concerning landscape and biodiversity the lack of specific protection for elements of naturalistic and landscape interest and the lack of clear conservation objectives for water and of regulations emerged as critical. The different scenarios denounced a general low effectiveness of planning.

The availability of resources emerged as pivotal for enhancing the nature conservation status of the target field, mainly in relation to agriculture. In that concern, a general inadequate knowledge of farmers about funding availability and mechanisms has been reported, in some areas exacerbated by limited institutional interest for agriculture. Those two issues reflect in a low rate of inclusion in voluntary agro-enviro-climate measures and low effectiveness of CAP's and RDF's environmental objectives.

If communication is a field that can potentially contribute to bring benefits to the target field in terms of public and farmers awareness and self-responsibility, it is not very enhanced. Therefore, not very deep public awareness about wetland have been reported, as well as limited research, in situ observation and monitoring.

In the field of environment, the trend scenarios reported a general change of the wetlands' system natural dynamics, due to urban, agriculture and industrial pressure. Biodiversity reduction was conducted to the change in_rice cultivation methods - for instance in the last few decades, dry cultivation has substituted more and more cultivation by submersion, which play an important role in the conservation of species linked to wetlands. In addition, the introduction of laser field levelling techniques drains completely the water during the dry phases, with negative consequences for the survival of the species (VERCELLI); to the loss of hedgerows (trees/shrubs) and of loss or degradation of lowland springs; to inappropriate management of channels and ditches; to the low monitoring of aquatic plants and animal communities and the diffusion of invasive alien species. The fragmentation of the ecological network itself is a cause of the biodiversity loss as well as the landscape degradation. Concerning the landscape, the invasive presence of roads and urban sprawl are other critical elements. The low water quality is a problem shared by all pilot experiences that also reported: risk of eutrophication; high levels of pollution due to agriculture, insufficient water treatment. Other issue affecting the wetlands water regimes are the deposit of sediments conducting to alluviation, the lack of consideration of soil water regime leading to terrain sinking and a general risk of summer droughts. The scenarios also reported criticalities for the productive sector, which is increasingly affected by climate change. Also some protection measures od attitudes – for instance of environmental NGOs putting pressures on farmers – have been spotted as harmful to the economy (SARGA).

The thematic area of economic and social development was focused though the subthemes of agriculture, pasture and fishing, and tourism. In agriculture the problems reported concern a generally weak production sector, a poor ability of farms and other subjects to make a network and create a supply chain and a limited ability to promote sustainable food. Those problems are inserted in the framework of a shrinking sector, where the number of agriculture farms decreases, as well as the grazing areas. Moreover, agriculture appears as producing increasingly critical impacts on the wetlands, because of the increase in non-local crops and of the overexploitation of the aquifer. For what concerns tourism, in the target areas it appears to be characterized by a seasonal and fragmented offer. More specifically a poor development of sustainable tourism and a non-appropriate exploitation of the cultural heritage or of park's capacity and

accessibility (when present) was reported. Finally, some protection measures or attitudes – for instance of environmental NGOs putting pressures on farmers – have been spotted as harmful to the economy (SARGA).

Following the discussion of the problems emerged in the trend scenarios, the pilot processes produces the oriented scenario and finally the preferred scenario, on one side providing opportunities to adjust to changing development patterns, and the other side addressing the desired objectives of environmental protection and economic development. In the field of governance, the commonly prioritized elements are: the definition of an institutional - management structure empowered through vertical/horizontal governance mechanisms; the enhancement of planning and regulatory tools in order to strengthen the protection on the area biodiversity. In the field of environment and through slightly different measures, the scenarios outline the necessity to develop an operational program that takes into consideration all the components of the natural wetland system (biodiversity, landscape, water quality, etc.), through an integrated approach capable of restoring its dynamics, guaranteeing and consolidating nature protection, developing the territory in a sustainable way (i.e. actions aimed at mitigating the impacts of rice fields on environmental quality strengthening their role as a habitat for wildlife, improving their landscape quality). Communication and information actions addressed to farmers, organizations, schools, other citizens, etc., were considered important in order to achieve specific results and raise awareness of environmental issues. Concerning economic and social development, the scenarios collectively aimed at promoting new sustainable practices by creating new economic activities compatible with the environment or by promoting the conversion to sustainable practices in farming or fishery and finally by promoting sustainable tourism. Finally the necessity to develop an effective territorial marketing and branding has been reported by all processes.

Territorial lab participative process

For what concerns the methodology used to develop the participatory process, considerable differences can be found in the processes carried out by project partners, although the general framework was homogeneous. Indeed, Territorial labs were foreseen with the objective of involving local key stakeholders and develop a shared vision for the sustainable development of the target wetlands. By developing their own detailed methodology, WETNET partners confirmed that the Wetland Contract is a flexible tool that can be adapted to different context in order to developed a well rooted process and achieve local objectives.

First of all, it is important to highlight the work carried out by the technical team composed by the project partner team or by the Wetland Contract technical secretariat. This group of people firstly developed the context analysis, including the regulatory framework and the stakeholder mapping based on political, economic, environmental criteria including the associative and social structure of the area, which was pivotal for getting to know the actors to be engaged in the process. Afterwards, they designed the whole participatory process. In some experiences, as for instance in VERCELLI, the technical team also developed some preparatory documents, as the SWOT analysis, the trend and oriented scenario in order to collectively discuss them during the focus groups and develop the preferred scenario. As mentioned before this was possible also because the technical team met as Technical secretariat, which is one of the three bodies composing the Wetland Contract management structure. More specifically in VERCELLI the

Technical Secretariat met 12 times, the Management Board 2 times and the Basin Assembly 2 times as well (see the following paragraph for the bodies' function). Also other partners prepared some initial materials useful for launching the group work: SEO BIRDLIFE used a matrix containing the mail issue and sent it to participants as a pre-reflection document.

The Territorial labs methodology in some cases have followed precise techniques already in use for environment and sustainability scenario planning. This is the case of VENETO Region that used the CE registered European Awareness Scenario Workshop (EASW®), which allows participants to exchange information, discuss the issues and processes that govern local development, the impact of choices on the natural and social environment, stimulating their ability to identify and plan concrete solutions to existing problems. In EASW® the participants meet to exchange opinions, develop a shared vision on the future of a territory and propose ideas on how to achieve it, answering the following questions: (i) HOW is it possible to solve the identified problems? Will you have to focus more on technology or organizational solutions? (ii) WHO is mainly responsible for their solution? Local authorities, citizens or both? The method elicits reasoning development models and it does so in an inductive way, making people compare the issues that potentially are distant from everyday life. By applying this technique, the participants act as "experts", because, operating locally, they know the opportunities for change and their limits and can promote change by modifying their behavioural patterns.

Concerning the engagement of stakeholders, the Territorial labs resulted more successful when the meetings were anticipated by individual interviews. For instance, TOUR DE VALAT conducted a first focus group in order to collect information to structure subsequent individual interviews and then a second focus group based on the interviews results. RCDI used a similar approach, firstly recruiting stakeholders by personalised email, followed by telephone contact, secondly conducting preparatory individual interviews with one or two persons and finally developing group meetings. SEO BIRDLFE held bilateral meetings with farmers' and irrigators' associations (which also were the most difficult type of stakeholder to engage) and its general method combined individual reflection and group interaction.

In most of the processes the focus groups were planned in order to focus each one a specific theme. According to the focused themes, some partners divided the actors by affinity and invited them to participate in specifics sessions, for instance SEO BIRDLIFE grouped them as follows: fishermen and environmental associations; neighbourhood associations and stakeholders linked to tourism; public administrations. On the other side some experiences had the necessity to hold separate meetings with interest group in order to avoid conflict. In this respect, meaningful is the case of SARGA that performed a first participatory phase (5 meetings) which failed because of the different pressure groups acting in the area. This situation made the partner decide to carry out a second phase with structural and operational changes: 6 separate meetings of maximum of 7-8 people per meeting were organized with the following groups: Local administrations; Pro lagoon Associations; Associations against lagoon; Business network; Irrigation community; associative network.

The themes mostly focused by the focus groups are: sustainable development, water quality and management, environment and biodiversity (Agro-environmental practices, hydraulic safety and wetland dynamics), territorial planning, economic and social development (agriculture, fishing, tourism, hunting),

protection of the landscape and naturalistic values (springs and natural water network), Upgrading of green and blue infrastructures (and Land Stewardship), communication and awareness rising.

Finally, the roles played by the project partners have been analysed in order to review if a peculiar situation turned supporting or obstructing the process development. Since project partners acted as the promoters of the Wetland Contract, their role in terms of authority and neutrality was crucial. Also the Wetland Contract leadership has been analysed with the objective to understand if the project partners remains the responsible actor or if it has empowered another subject to do so. Veneto Region promoted the Wetland Contract as project partner and will subscribe it, but as Regional Authority it has never signed any of the River/Wetlands Contracts activated in its territory. The case of the WETNET wetland contract is than an exception, and the Region cannot be the responsible actor once the Contract will be signed (before the end of October 2019). The solution resides in transferring the reasonability to the Eastern Veneto reclamation consortium (already part of the Technical secretariat), as already approved by the Basin Assembly. In case of private promoters, the scenarios were diverse. SEO BIRDLIFE, being an environmental NGO whose work is very rooted in the Albufera wetland system, was identified as a non-neutral stakeholder. Several meetings with the regional government and national agencies (River Basin Authority) have been necessary to accept the persistence and importance of the Wetland Contract promoted by SEO. By inserting the developed process into other governance process (River Basin Plan, Natura 2000 Plan) in agreement with the competent authorities, allowed SEO to lead the territorial labs focusing on bigger goals and to overcome the perception of their impartiality. Moreover the partner is currently (October 2019) in the process of transferring the responsibility for the Wetland Contract to the Regional authority. In this view SEO started a bottom-up process that will finally institutionalize. ZRC SAZU, as a Research centre, took a more neutral role, being in charge of the technical and scientific support necessary to define actions and interventions to be included in the Wetland contract. Being a research centre, ZRC SAZU find no interest or coherence in keeping the responsibility of the Wetland Contract, therefore they also are currently (October 2019) in the process of empowering the Park authority to make them the promoter/responsible of the contract. In the case of RCDI, a not-for-profit association based on a competence network of experts, neutrality was ensured by the experts invited in each meeting to present the technical vision of the most controversial issues. Supporting the discussion with scientific or technical arguments introduced a new dimension and eased the pressure on the facilitators. At the same time the engagement of the promoter/facilitator has been ensured by their commitment to be frequently present in the area: talking to local actors helped to build the idea that the facilitator is genuinely involved and is “one of us”.

Wetland Contract implementation

In the definition adopted by WETNET, the Wetland Contract is an agreement that allows to adopt a set of regulations in which criteria of public utility, economic return, social value and environmental sustainability equally take part in the search for effective solutions for the river basin’s recovery (World Water Forum - L’Aja, 2000). Pivotal is its operational component aimed at implementing the superordinate regulations (territorial and sectorial) and at establishing the commitments for the subscribing parties. It is than essential to understand whether the tested processes achieved this goals or produced instruments with a low level of commitment. This would mean that there is work to do in low and regulations so that the advantages of the tool are accepted at regional and national level.

Most of the processes created a management structure which was generally composed of three bodies acting as follows:

- the Management board (or Director's cabin) with political-decision-making and coordination functions;
- the Technical Secretariat, which is a technical body with operational functions in support of the Management board;
- the Basin Assembly, which represents the Contract negotiating table through which the participation of local interests present in the river basin is implemented.

For what concerns the actions, in order to reflect the most recurring themes, they can be grouped into some greater categories as follows:

- defining territorial planning tools and legal regulations;
- protecting biodiversity and water quality and quantity;
- restoring habitats and wetlands natural dynamics;
- developing green infrastructures;
- promoting sustainable tourism (de-seasoning tourism, proving new infrastructures, …);
- promoting joint monitoring (database, water quality);
- developing territorial branding and marketing;
- environmental education;
- sustainable development (economic activities, farming, eco innovation).

The type of stakeholders involved in the process vary from case to case, but notably there is a prevalence of public bodies over private entities. Public bodies are: Municipalities, Environmental agencies, Ministries or national departments and regional authorities competent on rural development, agriculture, livestock, environment, infrastructure, territorial planning, cultural heritage and research centres/universities. Private entities have been engaged in the process by all partners, following an exhaustive mapping based on political, economic, environmental criteria including the associative and social structure of the area. The engaged private parties always cover a strategic importance in the target territory as well as in the thematic field. They are: land reclamation/irrigation consortium, farmers' associations, sectorial associations, Local Action Groups for rural development, tourism institutes.

The Action Plan timeframe and necessary resources have not been established by all partners yet, because of the lack of time to complete the process or because of the difficulties to detail such aspects. When defined, the timeframe covered a period of three years in agreement with the operative purpose of the Wetland Contract's Action Plan. The resources spanned from an amount of 40.000€ to 1.000.000€ and were provided mainly by public authorities. In most of the action plans they are resources potentially available within national and EU funding programme such as RDF or Cohesion Policy funds. Planning the resources is described as a common criticality that have been overcame in some cases by focusing only on a set of more feasible measures (ZRC SAZU), in some other cases by detailing both the actions and the budget associated, but subscribing only the actions. The latter is the case of Veneto Region where the signatories commit to the implementation of the actions within a specific timeframe, but do not commit with defined resources.

Some common criticalities have emerged along the process of drafting and signing the Wetland contract while some processes showed peculiar aspects.

First of all, the difficulty to engage the stakeholders was common to most of the processes, especially in relation to private stakeholders. In some cases, getting the private actors signing the Wetland Contract was a real challenge (FAMP). Some experimentations showed that adding individual interviews to group dynamics was useful to understand that some opinions or perceptions were not reflected in the group dynamics, which could not appear in focus groups due to the influence of certain agents with greater leadership. Some categories of stakeholders ended up to be under represented in more than one process. It is the case of farmers in VERCELLI where, in addition, the Contract appeared to be a tool drafter to "help" or "legitimize" only the type of farm “multi-purpose, dedicated to protecting the environment, interested in attracting tourism, specializing in niche productions”, leaving aside those concentrated on production and conventional market. Also SEO BIRDLIFE highlighted the absence of farmers and irrigators, showing their low confidence-level in participating in participatory process.

The long duration of the whole process has been pointed as a criticality, mostly in relation to the political implications of the operation, which arouse conflicting interests (profit, environmental preservation). On the other side, some partners as FAMP, pointed out that the four conducted territorial labs (meeting with the stakeholders) were not enough for both elaborating the scenarios and drafting the Action Plan. In order to overcome the mentioned criticalities, RCDI adopted a successful approach based on keeping a frequent presence in the area (talking to local actors helped to build the idea that the facilitator is genuinely involved and is “one of us”); maintaining a reasonable rhythm in the process, without letting too much time in between meetings, keeping in touch frequently (email or telephone) with stakeholders in order to maintain the collaboration dynamics; showing results along the process, in order to help the stakeholders to create an idea of achievement and “getting somewhere”, keeping them motivated.

Within the most critical aspects of the actual action plan drafting, VERCELLI pointed out that the economic quantification was the most complex point on which to reach a general consensus and that it is not feasible to intervene in regulation and control because of the lack of means and resources. SEO BIRDLIFE highlighted the complexity of the issues focused by the Contract, which concerns various fields of expertise, in many cases unknown to some of the parties (Example. Management instruments -PRUG, PORN, etc.), and are difficult to communicate with understandable language. The development of informative and explanatory materials helped to better communicate the process. Moreover, some issues required observation, understanding and listening ability to weave trusting relationships with the actors. Finally the partner highlighted the difficulty to manage the heterogeneity of the actors and the multiplicity of positions linked to the territorial complexity (rice system, fishing, orchard, natural, etc.), often conflicting and that not concerned with the wetland management (straw, water level, floodgates, lack of regulation).

Concerning the general understanding and feeling about the Wetland Contracts, the partners highlighted the following: VERCELLI noticed no strong expectation towards the Contract as a preferential instrument and the difficulty to engage environmental associations which are weak and not organized to support a framework agreement and need to be supported by public authorities.

3.3.2 DO's and DON'Ts when implementing wetland governance

The Wetland Contract is first and foremost a process of sharing knowledge, interests, goals and commitments around a water body. In this sense, its decision-making process must explicitly resort to the involvement of the actors of the considered water system. The participatory approach is therefore crucial for the success of the negotiated programming, since it allows to open a constructive dialogue between the parties and build a chain of responsibility oriented towards the achievement of common objectives. The only action of information and consultation, although useful or necessary to ensure the efficiency and effectiveness of the process, cannot determine the satisfactory conditions to ensure that the Wetland Contract can have a concrete effect on territorial dynamics. On the other hand, active participation is a prerequisite for making decisions really feasible, by finding an entire community as a key actor (with different title and level of involvement) and by acting directly on the strategic elements for the overall rebalancing of the water system.

Participation must not be understood only as involving the public, but must be articulated on several levels, starting within all the actors participating in the process. The first level is that of internal (or intra-institutional) participation, in which each actor configures his own organizational and decision-making structure to act together, involving all sectors, departments and / or managers who can contribute in various ways to wetland issues. The second level is that of external (or inter-institutional) participation, in which the actors interact with each other according to representative delegation mechanisms. The third and final level is that of extended participation, in which the debate is opened to all the interested public or to anyone, in any capacity (as long as explicit) can express their contribution. Conducting the process involved through simultaneous attention to the three levels maximizes the effectiveness of the sharing and negotiation action and constitutes the precondition for the actual implementation of the Wetland Contract.

A further consideration that must be taken for the design of the participatory process of the Wetland Contract concerns the decision-making dynamics of the negotiation. If the negotiation is limited to taking note of the existing interests around a wetland system and composing them looking for an optimal combination, the process can hardly be concluded positively. The typical problems that can emerge with an approach of this type are:

(1) the failure to adhere to the agreement by one or more actors that are not reflected in the decisions taken by the Wetland Contract;

(2) the failure of the strategy in phase implementation in the face of the emergence of the imbalance between the socio-economic consequences of the decisions taken;

(3) the implementation of actions that do not meet the specific objectives adopted by the Wetland Contract.

To overcome the separation between recognition of interests and negotiation of decisions, it is necessary to integrate the decision-making process with a socio-economic analysis of the territory (able to highlight the backgrounds that underlie the interests present and the interaction between them) and with a negotiation process that does not misunderstand the positions of the actors (which may be unprepared or part of the policy with which the actor enters the negotiation process) with the relative interests (true

motives for the mission of each actor). It is a matter of developing a creative decision-making process, in which tug-of-war with the positions is not played but mutually advantageous solutions are identified for real interests. Such a structured decision-making process can aim at achieving a win-win strategy, in which each actor accepts a certain degree of compromise but overall all the actors are satisfied with the final result.

3.3.1 Needs for further steps

The issue of formalizing the Wetland Contract at a regulative level is crucial and fragile. As already highlighted, at EU level the Wetland Contract tool can be listed among the “supplementary measures with the aim of achieving the environmental objectives” established by the Water Framework Directive (Directive 2000/60/EC of 23 October 2000), as a “negotiated environmental agreement” for "the active participation of all interested parties in the implementation of River Basin Management Plans" (ANNEX VI PART B). Indeed, the development of the Wetland Contract required, in each WETNET pilot experience, to inscribe the tool into the local regulations and available tools. In all pilot experiences the tool is defined (or is going to be defined) as an agreement within more parties, public and private and not in every Country the Negotiated Programming exists. Nevertheless, the River/Wetland Contract tool is not always considered by the national regulations, although participation is always present as a key component of territorial planning and related governance processes.

In some Nations, as for instance in Italy, the regulatory framework on River/Wetland Contracts is advanced and well defined thanks to numerous consolidated planning experiences; the tool identified as the most appropriate to formalize the River/Wetland Contract is the Negotiated Programme. According to the national law L.662/96 it is “the regulation agreed between public subjects or between the competent public entity and the public or private party or parties for the implementation of different interventions, referring to a single development purpose, which requires an overall assessment of the activities of competence”. Moreover, in some cases the River/Wetland Contract is regulated at regional level, as happens in Piedmont Region (VERCELLI PROVINCE pilot experience) that released the River Contract guidelines detailing all the steps to be followed by River/Wetland contracts processes in the region.

On the other side, Spain represents the case where no specific tool exists in national or local regulations. Probably because there are no remarkable previous River Contract experiences which made the process towards the national recognition of the tool advance, the WETNET Contracts are set as simple Environmental Agreements, in agreement with the Water Framework Directive. Moreover, as emerges from SEO BIRDLIFE work, the new law of contracts of Spanish public administrations greatly restricts the ability to sign public/private agreements or agreements with a forecast of economic content. The partner conducted a legal study and a series of meetings with regional government (Generalitat Valenciana) and national agencies (River Basin Authority), which were necessary to communicate both the scope of the participatory process and the legal acquisition of commitments and responsibilities with the Wetland Contract signing, and to make the public administration accept the persistence and importance of the new tool. Also, the lack of specific regulatory framework for Wetland Contracts needed to be overcome to give legal coverage to the new governance structures, define obligations and responsibilities, and establish

standardized procedures that have been shown to be successful. In this sense, strategic contacts have been made to work on this issue in the last project's period. The solution was to finally include the Wetland Contract process in other governance process (River Basin Plan, Natura 2000 Plan).

Nevertheless, the complexity of integrating this tool into the local regulatory framework is confirmed by the Portuguese case where the Water Management Regional Authority did not confirm the integration of the Agreement in the Hydrographic Region Management Plan, concluded in 2016 and now under implementation.

The difficulties partners have encountered in incorporating the Wetland Contract into national and regional legal frameworks derived by two crucial factors: firstly by the innovative character of the tool that is new for almost all regional contexts except for Italy and France; secondly by the lack – within WETNET project - of a deep study aimed at understanding how to include it in local policies.

To overcome this difficulty it is necessary to accomplish an adequate and complete study also through bilateral meetings and concertation with the national and regional concerned authorities. This in depth analysis must produce the basis for future the successful implementation of the Contracts in European Countries other than Italy and France. Indeed, concertation and bilateral meetings are necessary to make local regional authorities understand and accept the new tool and to then make them find the appropriate location into their regulative system.

Another aspect to be fixed in following implementation of the Contracts is the proper identification and involvement of the final coordinating body for the Contract/process. WETNET partners indeed, having committed with the EU for the successful implementation of the project, have often been the promoter of the Contract, even without having the power or authority to do so. In some cases, partners have empowered, to the end of the process, another subject aiming at coordinating the Contract from that moment on. For the future implementation of the Wetland Contract it is advisable to identify promptly the coordinating subject and start as soon as possible the capacity building and empowering actions in order to act in a coordinated manner since the beginning of the process.

Last but not least as already highlighted the planning of financial resources was a difficult issue to solve. In this respect good results can be achieved by opening the concertation table with the authority in charge of managing the Rural Development Programme and/or Regional operational Programme Funds, generally the Regions. By doing this the Region can choose to address their funding in order to meet the Wetland Contract's objctives and consequently implement its measures. This has been reported in the literature as a successful approach to ensure the financial resources for the implementation of River/Wetland Contracts it Italy.

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ANNEXES

Template 3.2.1 - REPORT OF REGULATORY FRAMEWORK ANALYSIS

Template 3.2.2 - REPORT OF SCIENTIFIC DESCRIPTION OF THE WETLAND

Template 3.2.3 - REPORT OF STAKEHOLDER ANALYSIS

Template 3.3.1 - REPORT OF ALTERNATIVE SCENARIOS

Template 3.3.2 - REPORT OF SHARING AND ASSESSING SCENARIOS

Template 3.3.3 - REPORT OF TERRITORIAL LAB EXPERIENCES

Template 3.3.4 - REPORT OF WETLAND CONTRACT

REGULATORY FRAMEWORK ANALYSIS

(deliverable 3.2.1 – English summary)

Notes:
1) *partners from the same country should collaborate for a single contribution for the National regulatory framework (section A);*
2) *please respect the maximum number of characters for each chapter: this is important in order to ensure the homogeneity of the partners' contributions;*
3) *please when relevant thick boxes with "X"*

A. NATIONAL LEVEL

This section scope is to describe the national regulatory framework for protected wetland management and governance.

<table>
<tr><th colspan="2">Chapter number and name</th><th>Contents</th></tr>
<tr><td>A.1</td><td>National regulatory framework for the protection, management and governance of wetlands (including specific regulation on wetland contracts, if any)</td><td>
Please copy the whole text that follows as many times as it may be necessary.

Main administrative references
<table>
<tr><td>WetNet code</td><td>RF_MALTA_01</td></tr>
<tr><td>typology</td><td>National Legislation</td></tr>
<tr><td>number</td><td>L.N. 194 of 2004 Water Policy Framework Regulations, 2004</td></tr>
<tr><td>date of approval</td><td></td></tr>
<tr><td>web-link</td><td>http://justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=17756&l=1</td></tr>
</table>

Specify in which sector of legal regulation it is framed
<table>
<tr><td>x</td><td>water management</td></tr>
<tr><td></td><td>biodiversity/nature conservation/management</td></tr>
<tr><td></td><td>land uses management</td></tr>
<tr><td></td><td>land/water/wetland stewardship</td></tr>
<tr><td></td><td>public participation</td></tr>
<tr><td></td><td>river/wetland contracts</td></tr>
<tr><td></td><td>other (please specify):</td></tr>
</table>

Main scope
<table>
<tr><td>(max 300 characters)</td></tr>
</table>

If relevant, please specify what specific aspects this regulation contemplates and what protection figures it provides to accomplish the goal of sustainable management of wetlands
<table>
<tr><td>(max 500 characters)</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>A.2</td><td>Management plans of wetlands foreseen at national level</td><td>Please copy the whole text that follows as many times as it may be necessary.

Main administrative references
<table><tr><td>WetNet code</td><td>MP_COUNTRY_XX (i.e. MP_SPAIN_01, MP_SPAIN_02,…)</td></tr><tr><td>name of the plan</td><td></td></tr></table>
Specify in what sector of legal regulation the plan is framed
☐ water management
☐ biodiversity/nature conservation/management
☐ land uses management
☐ other (please specify):

Main scope
(max 300 characters)

Which is/are the Administration(s)/Authority(ies) in charge of the
<table><tr><td>preparation</td><td></td></tr><tr><td>approval</td><td></td></tr><tr><td>implementation</td><td></td></tr><tr><td>monitoring</td><td></td></tr><tr><td>evaluation/update</td><td></td></tr></table>
Please provide a synthetic and general assessment of the planning tool
<table><tr><td>effectiveness in terms of</td><td>low</td><td>medium</td><td>high</td></tr><tr><td>- public participation</td><td></td><td></td><td></td></tr><tr><td>- biodiversity protection</td><td></td><td></td><td></td></tr><tr><td>- integrated management</td><td></td><td></td><td></td></tr><tr><td colspan="4">(comment with max 500 characters)</td></tr></table></td></tr>
<tr><td>A.3</td><td>Other strategies and governance tools at national level</td><td>Description of relevant strategies and governance tools at regional/local level concerning protected wetlands management (please copy the box that follows as many times as it may be necessary)
(max 500 characters)</td></tr>
</table>

B. PILOT AREA LEVEL

This section scopes are:

- **to specify which international/European/national protection levels and rules are applicable for the pilot wetland;**
- **to describe the regional/local regulatory framework relevant for the management of the pilot wetland.**

<table>
<tr><th colspan="2">Chapter number and name</th><th>Contents</th></tr>
<tr><td>B.1</td><td>Regulatory framework for the protection and management of the pilot wetland

<u>INTERNATIONAL LEVEL</u></td><td>Which are the main international regulatory references for the protection of the pilot wetland? (multiple selections possible, add new lines when necessary)

☐ Ramsar site (insert code)
☐ Important Bird Area (insert code)
☐ other (please specify)
☐ none</td></tr>
</table>

<table>
<tr><td>B.2</td><td>Regulatory framework for the protection and management of the pilot wetland

EUROPEAN LEVEL</td><td>Which are the main European regulatory references for the protection of the pilot wetland? (multiple selections possible, add new lines when necessary)

<table>
<tr><td></td><td>Site of Community Importance (insert code)</td><td>XX 00 000 00</td></tr>
<tr><td></td><td>Special Protection Area (insert code)</td><td>XX 00 000 00</td></tr>
<tr><td></td><td>other (please specify)</td><td></td></tr>
<tr><td></td><td>none</td><td></td></tr>
</table>

If relevant, please attach the English version of the Standard Data Form of Natura 2000 sites.</td></tr>
<tr><td>B.3</td><td>Regulatory framework for the protection and management of the pilot wetland

NATIONAL LEVEL</td><td>Which are the main national regulatory references for the protection of the pilot wetland? (please add WetNet codes used in section A.1, add new lines when necessary)

<table>
<tr><th>country</th><th>number</th></tr>
<tr><td>i.e. SPAIN</td><td>i.e. 01</td></tr>
<tr><td></td><td></td></tr>
</table></td></tr>
<tr><td>B.4</td><td>Regulatory framework for the protection and management of the pilot wetland

REGIONAL LEVEL</td><td>Please copy the text that follows as many times as it may be necessary.

Main administrative references
<table>
<tr><td>WetNet code</td><td>RF_COUNTRY_REGION_XX (i.e. RF_SPAIN_ARAGON_01,…)</td></tr>
<tr><td>typology</td><td>(i.e. Presidential Decree, Regional Council Regulation,…)</td></tr>
<tr><td>number</td><td></td></tr>
<tr><td>date of approval</td><td></td></tr>
<tr><td>web-link</td><td></td></tr>
</table>

Specify in what block of legal regulation are they framed
<table>
<tr><td></td><td>water regulation/management</td></tr>
<tr><td></td><td>biodiversity/nature conservation/management</td></tr>
<tr><td></td><td>land uses regulation/management</td></tr>
<tr><td></td><td>land/water/wetland stewardship</td></tr>
<tr><td></td><td>public participation</td></tr>
<tr><td></td><td>river/wetland contracts</td></tr>
<tr><td></td><td>other (please specify):</td></tr>
</table>

Main scope
<table>
<tr><td>(max 300 characters)</td></tr>
</table>

If applicable, please specify what specific aspects this regulation contemplates and what protection figures it provides to accomplish the goal of environmental protection of wetlands
<table>
<tr><td>(max 500 characters)</td></tr>
</table></td></tr>
<tr><td>B.5</td><td>Planning and management of the pilot wetland foreseen at regional/local level</td><td>Please copy the text that follows as many times as it may be necessary.

Main administrative references
<table>
<tr><td>WetNet code</td><td>MP_COUNTRY_REGION_XX (i.e. MP_SPAIN_ARAGON_01,…)</td></tr>
<tr><td>name of the plan</td><td></td></tr>
<tr><td>date of approval</td><td></td></tr>
<tr><td>web-link</td><td></td></tr>
</table></td></tr>
</table>

<table>
<tr><td></td><td></td><td>
Specify in what block of legal regulation the plan is framed
☐ water regulation/management
☐ biodiversity/nature conservation/management
☐ land uses regulation/management
☐ other (please specify):

Main scope
(max 300 characters)

Within the planning process, which is the Administration/Authority in charge of the
preparation
approval
implementation
monitoring
evaluation/update

Please provide a synthetic and specific assessment of the planning tool
<table>
<tr><td>effectiveness in terms of</td><td>low</td><td>medium</td><td>high</td></tr>
<tr><td>- public participation</td><td></td><td></td><td></td></tr>
<tr><td>- biodiversity protection</td><td></td><td></td><td></td></tr>
<tr><td>- integrated management</td><td></td><td></td><td></td></tr>
<tr><td colspan="4">(if relevant, comment with max 500 characters)</td></tr>
</table>
</td></tr>
<tr><td>B.6</td><td>Other strategies and governance tools at regional/local level</td><td>Description of relevant strategies and governance tools at regional/local level concerning protected wetlands management (please copy the box that follows as many times as it may be necessary)
(max 500 characters)</td></tr>
</table>

SCIENTIFIC DESCRIPTION OF PILOT WETLANDS

(deliverable 3.2.2 – English summary)

Notes:
1) please respect the maximum number of characters for each chapter: this is important in order to ensure the homogeneity of the partners' contributions.

Chapter number and name		Contents
A.1	Pilot wetland ID	

Name of the pilot wetland
Country
Region/s

Municipality/ies (*)	Number of inhabitants

(*) just those one that include (part of) the protected wetland

Organization/s responsible for the management of the pilot wetland

Other entities (Administrations, NGO, etc.) directly involved in the management of the pilot wetland

Role of the partner in relation to the pilot area (i.e. development agency, research centre, …)

Wetland management plan
- ☐ foreseen
- ☐ under preparation
- ☐ in force
- ☐ under implementation
- ☐ none

Wetland typology
- ☐ marine/coastal (**)
- ☐ inland (***)
- ☐ artificial (****)

(**) including estuaries, deltas and costal lagoons
(***) including rivers, marshes and peatlands
(****) including ponds, wastewater treatment areas, salt exploration sites and aquacultures

Dominant salinity
- ☐ fresh water
- ☐ brackish water
- ☐ salt water

Presence of water
- ☐ permanent
- ☐ seasonal
- ☐ temporary
- ☐ intermittent

<table>
<tr><td>A.2</td><td>Values of the pilot wetland</td><td>☐ Environmental heritage
If yes, please describe the main features of this value (*****)
(max 1000 characters)

(*****) please provide a short description of the most emblematic habitat and species

☐ Archaeological heritage
If yes, please describe the main features of this value
(max 500 characters)

☐ Historical heritage
If yes, please describe the main features of this value
(max 500 characters)

☐ Architectonical heritage
If yes, please describe the main features of this value
(max 500 characters)

☐ Ethnological heritage
If yes, please describe the main features of this value
(max 500 characters)

☐ Landscape heritage
If yes, please describe the main features of this value
(max 500 characters)</td></tr>
<tr><td>A.3</td><td>Main threats and impacts for the biodiversity of the pilot wetland</td><td>
<table>
<tr><th colspan="2" rowspan="2">description of the threat</th><th colspan="3">relevance of the impact</th></tr>
<tr><th>low</th><th>medium</th><th>high</th></tr>
<tr><td>Agriculture</td><td>agricultural expansion and intensification, including farming and ranching, silviculture, mariculture, aquaculture, wood and pulp plantations, game farming and ranching and forest grazing, etc.</td><td></td><td></td><td></td></tr>
<tr><td>Residential & commercial development</td><td>construction of human settlements, expanding urbanization, industrial development including recreation facilities, etc.</td><td></td><td></td><td></td></tr>
<tr><td>Energy production & mining</td><td>oil and gas drilling, mining, quarrying, wind farms, etc.</td><td></td><td></td><td></td></tr>
<tr><td>Transportation & service corridors</td><td>roads and railways and vehicles that use them, shipping lanes, flight paths; power lines, etc.</td><td></td><td></td><td></td></tr>
<tr><td>Over-exploitation, persecution & control</td><td>consumptive use of wild biological resources including both deliberate and unintentional harvesting; hunting and egg-collection, fishing, logging, trapping, charcoal production, etc.</td><td></td><td></td><td></td></tr>
<tr><td>Human intrusions & disturbance</td><td>human activities that alter, destroy and disturb habitats and species associated with non-consumptive uses of biological</td><td></td><td></td><td></td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td>resources (includes tourism, war, military activities, civil unrest, etc.)</td><td></td><td></td><td></td></tr>
<tr><td>Natural system modifications</td><td>actions that convert or degrade habitat in natural or semi-natural systems, including fire, dams, canals, dykes, siltation, etc.</td><td></td><td></td><td></td></tr>
<tr><td>Invasive & other problematic species & genes</td><td>alien invasive and problematic native plants, animals, pathogens and other microbes, or genetic materials that have or are predicted to have harmful effects on biodiversity following their introduction, spread and/or increase in abundance</td><td></td><td></td><td></td></tr>
<tr><td>Pollution</td><td>domestic and industrial waste, agricultural and forestry effluents, garbage and solid waste, noise and thermal pollution, nutrient loads, soil erosion, sedimentation, high fertiliser input, excessive use of chemicals and salinization; and air-borne pollutants</td><td></td><td></td><td></td></tr>
<tr><td>Geological events</td><td>catastrophic geological events that have the potential to cause severe damage to habitats and species (include volcanic eruptions, earthquakes, Tsunamis, landslides, etc.)</td><td></td><td></td><td></td></tr>
<tr><td>Climate change & severe weather</td><td>long-term climatic changes which may be linked to global warming and other severe climatic/weather patterns, e.g. droughts, storms and floods</td><td></td><td></td><td></td></tr>
<tr><td>Other</td><td>Please specify:</td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>A.4</td><td>Main reasons and expectations that underpin the governance process for the pilot area</td><td>What are the main drivers for promoting a voluntary governance process like a Wetland Contract in the pilot area (i.e. why to implement a governance process? why to adopt such kind of tool?)
(max 500 characters)

What are the specific objectives and expected results from the Wetland Contract of the pilot area.
(max 500 characters)</td></tr>
</table>

STAKEHOLDER ANALYSIS FOR PILOT WETLAND CONTRACTS

(deliverable 3.2.3 – English summary)

Notes:

1) *Please respect the maximum number of characters for each chapter: this is important in order to ensure the homogeneity of the partners' contributions.*

STAKEHOLDER DESCRIPTION	
Organisation's name	
Website	
Type of stakeholder	☐ Public body / authority ☐ Business Support Organisation (i.e. chamber of commerce, etc.) ☐ Private business (i.e. SME) ☐ Private non-profit (i.e. NGO) ☐ Training centre (i.e. school) ☐ Research centre (i.e. university) ☐ Other, please specify:
Field of activity	☐ Agriculture ☐ Local development ☐ Fisheries ☐ Tourism ☐ Navigation ☐ Recreation ☐ Energy ☐ Culture ☐ Biodiversity ☐ Other, please specify:
Area of activity	The Stakeholder acts at ☐ local ☐ regional ☐ national ☐ international scale The Pilot Area is ☐ fully included ☐ partially included ☐ not included in the stakeholder reference area (i.e. administrative borders)
Goals	Please specify what are the main objectives of the organisation for the Pilot Area (max 300 characters

GOVERNANCE EXPERIENCE				
Confidence and experience in inclusive governance processes	Please tick one box for each phrase:	low	medium	high
	the organisation knows what they are			
	the organisation knows how they work			
	the organisation has previous experience			
Confidence and experience in Wetland Contract processes	Please tick one box for each phrase:	low	medium	high
	the organisation knows what they are			
	the organisation knows how they work			
	the organisation has previous experience			

RELATIONSHIP WITH THE DECISION MAKING PROCESS OF THE WETLAND CONTRACT	
Interest	What aspects of the Pilot Area management are of interest for the organisation? (max 500 characters)
Engagement	In the Wetland Contract engagement process the organisation wants to: ☐ be informed ☐ be consulted ☐ be actively involved
Influence	In the Wetland Contract process the influence of the organisation could be: ☐ high ☐ medium ☐ low

CONTACT PERSON (*)	
Name and surname	
Role within the organisation	
Mandated to represent the organization	yes ☐ no ☐
e-mail	
Telephone	

(*) this section is applicable only when the template is used at local scale within the governance process

REPORT OF ALTERNATIVE SCENARIOS

(deliverable 3.3.1 – English summary)

TABLE OF CONTENTS

A. TREND SCENARIO

This scenario seeks to reproduce the continuity of current trends in three strategic areas: governance, environment and economic and social development. In this scenario the involvement of citizens is limited, management and the conservation policies do not encourage the involvement of all territorial stakeholders. Therefore it represents the continuation of the present development pattern, and it is not considered as the optimal framework for the achievement of the objectives, against the degradation of natural spaces.

[Please provide a sort description]

TREND SCENARIO			
Strategic area	**Problem**	**Effects**	**Trends and critical issues**
G. GOVERNANCE	PG1. [insert name and description]	[List effects and merge cells if needed]	[List criticalities and merge cells if needed]
	PG2. [insert name and description]	[List effects and merge cells if needed]	[List criticalities and merge cells if needed]
E. ENVIRONMENT	PE1. [insert name and description]	[List effects and merge cells if needed]	[List criticalities and merge cells if needed]
	PE2. [insert name and description]	[List effects and merge cells if needed]	[List criticalities and merge cells if needed]
D. ECONOMIC AND SOCIAL DEVELOPMENT	PD1. [insert name and description]	[List effects and merge cells if needed]	[List criticalities and merge cells if needed]
	PD2. [insert name and description]	[List effects and merge cells if needed]	[List criticalities and merge cells if needed]

[Please add as many rows as needed]

B. ORIENTED SCENARIO

The scenario considers all possible corrective actions, which are prioritized in order to contain and improve the trend scenario and control the unsustainable tendencies of the present process. It addressed the same strategic areas of the trend scenario: governance, environment and economic and social development. The aim of the scenario is to maximize both the environment protection area and the economic and social development. Thus, it has to be considered as a comprehensive scenario which draws protection oriented measures and development oriented ones.

[Please provide a sort description]

ORIENTED SCENARIO				
Strategic area	**Objectives**	**Measure**	**Action/Initiatives**	**Risks**
G. GOVERNANCE	OG1. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[List risks that could prevent from the implementation and merge cells if needed]
	OG2. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]
E. ENVIRONMENT	OE1. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]
	OE2. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]
D. ECONOMIC AND SOCIAL DEVELOPMENT	OD1. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]
	OD2. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]

[Please add as many rows as needed]

C. PREFERRED SCENARIO

The preferred scenario is developed basing on the participation activities of the territorial labs and of the focus groups open to the public. It combines aspects of the trend scenario and the oriented scenario that are considered as most important to the members of the community and engaged stakeholders. It will balance the potential reality of the future while on one side providing opportunities to adjust to changing development patterns, and the other side addressing the desired objectives of environmental protection and economic development.
Priority elements of preferred scenario are listed below:
- [Please list and explain the priority elements considered]

[Please provide a sort description]

PREFERRED SCENARIO				
Strategic area	**Objectives**	**Measure**	**Action/Initiatives**	**Risks**
G. GOVERNANCE	OG1. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[List risks that could prevent from the implementation and merge cells if needed]
	OG2. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]
E. ENVIRONMENT	OE1. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]
	OE2. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]
D. ECONOMIC AND SOCIAL DEVELOPMENT	OD1. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]
	OD2. [insert name and description]	[List measures and merge cells if needed]	[List actions or initiatives to be foreseen. Merge cells if needed]	[Please list risks that could prevent from the implementation and merge cells if needed]

[Please add as many rows as needed]

REPORT OF SHARING AND ASSESSING SCENARIOS

(deliverable 3.3.2 – English summary)

TABLE OF CONTENTS

A. EXECUTIVE SUMMARY

This section scope is to introduce the project, explain what were the territorial labs and focus groups aimed to accomplish and to list the key findings.

Chapter number and name		Contents
A. EXECUTIVE SUMMARY	I. Overview	[Partner/Department/Unit] held a series of focus groups in [month and year] involving various stakeholders, including:_____, _____, _____, and _____. The project described here is qualitative in nature and is part of an overall process that began _____ and aims at establishing a participated governance for _____. The purpose of the survey was to gather information concerning _____, and to gain a better understanding of the benefits that _____. Through the focus groups, the partner gathered information to _____. [Please complete as needed]
	II. Key findings	What follows is a brief summary of the relevant findings and scenarios assessment from data generated in the focus group interviews. Details about the methodology and an expanded explanation and discussion of the findings of this study can be found in the report. Examples of the focus group questions, informed consent documents, and demographics can be found in the appendices. [List outcomes from the discussion group.]

B. REPORT

This section scopes are:

- **to describe the focus groups process and methodology**
- **to explain the scenarios' assessment**

Chapter number and name		Contents
B. REPORT	I. Introduction	This report focused on _____ [Include a background discussing the needs for a wetland contract in the target area]. The report is divided into two major sections: a detailed description of the methodology, and an explanation of Key Findings along with excerpts from focus group interviews that reflect and elucidate these findings. The Methodology describes the rationale and design of the focus group project as well as a more detailed explanation of participants and the questions asked of participants during focus groups. The Key Findings summarizes and synthesizes data gleaned from the focus groups. [Please complete as needed]
	II. Methodology	This section explains the methods used to elicit stakeholder needs, expectations, motivations and conflicts. Focus groups also tap into subjective experiences and are an efficient way to collect large amounts of data that describes, compares, or explains a social phenomenon because they allow participants to interact with one another and build on one another's comments, and they allow the facilitators to probe for details.) [Please complete as needed]

		II.a Focus groups [Describe how many focus group you held, the date and location of meetings. Mention the ways that you obtained the input, such as audio or video recording or note taking. List the questions that the facilitators asked to participants.]
		II.b Participants profile [Describe how many people participated, what was their profile, how they were recruited, and ant relevant information.]
		II.c Data analysis [Describe how you analysed data from across all focus groups, so it could be organized into categories. Then explain how these categories were analysed to determine the interconnectedness of issues and conditions that have given motivated the scenarios assessment.]
	III. Results	This section reports on the results of the analysis conducted on the focus groups, which revealed a number of key findings useful for assessing the scenarios. [List and summarize the information obtained with the focus groups. Organize by topic, identify any key findings under each outcome than summarize the discussion under each outcome, including representative quotes, results of yes or no questions, and quantitative data. Please copy the box that follows as many times as it may be necessary] **Topic 1** [describe the topic] **1.** Question asked during focus group Summarize responses Generalize Overall Viewpoint **2.** Question asked during focus group Summarize responses Generalize Overall Viewpoint
	IV. Conclusion	This section contains the conclusions of the process and explains what has been learned from the focus groups. Finally the motivations that lead to the choice of the final scenarios are summarized and defended.
C. APPENDICES	Please include the documents associated by this focus group. These documents may include, but are not limited to: - Focus group discussion guide - Participant profile form (blank copy) - Participant profile form (completed) - Pictures - Communication materials	

REPORT OF TERRITORIAL LAB EXPERIENCES

(deliverable 3.3.3 – English summary)

TABLE OF CONTENTS

A. EXECUTIVE SUMMARY

This section scope is to introduce the methodology used for the participatory process and to report about the meetings held.

Chapter number and name		Contents
A. EXECUTIVE SUMMARY	I. Overview	[Partner/Department/Unit] held a series of participatory events in [month and year] involving various stakeholders, including:_____, _____, _____, and _____. The methodology uses is called_____ and consisted in_____. [Please complete as needed]

B. REPORT

Chapter number and name		Contents
B. REPORT	I. Meeting 1	Date Coordinator Topics addressed [describe the topic] Number of participants Short description of the event Signature form Pictures
	II. Meeting 2	Date Coordinator Topics addressed [describe the topic] Number of participants Short description of the event Signature form Pictures
	III. Meeting 3	[add as many rows as needed]
C. ASSESSMENT	I. Considerations about the methodology used	Please provide a brief evaluation of the methodology you chose to use to develop the Territorial Labs

WETLAND CONTRACT TEMPLATE

(deliverable 3.3.4 – English summary)

TABLE OF CONTENTS

REPORT OF WETLAND CONTRACT

This section scopes are:

- **to describe the local regulatory and legal framework of the Wetland Contract**
- **to identify the stakeholders who signed the Wetland Contract**
- **to identify the coordinator and the management system of the Wetland Contract**
- **to describe the foreseen actions: typology, actors involved in the implementation, financial resources, timing**
- **to evaluate the process listing success factors and criticality**

<table>
<tr><th colspan="2">Chapter number and name</th><th>Contents</th></tr>
<tr><td rowspan="7">A. REPORT</td><td>I. Introduction:</td><td>[Describe if and by who the Wetland Contract has been signed, include the local regulatory and legal framework in which the tool has been integrated.]</td></tr>
<tr><td>II. Management system</td><td>[Identify the actor in charge of the coordination of the Wetland Contract and describe the management system, including the stakeholders involved in each management structure (e.g. “Management Board”, “Basin Forum”, “Technical Secretariat”).]</td></tr>
<tr><td rowspan="4">III. Actions: Typology</td><td>III.a Concrete Actions (Topics: e.g. biodiversity, water, air, landscape, …)
[Brief description of the concrete actions included in the Wetland Contract.]</td></tr>
<tr><td>III.b Communication Actions
[Brief description of the communication, awareness raising and training actions included in the Wetland Contract.]</td></tr>
<tr><td>III.c Monitoring Actions
[Brief description of the monitoring actions included in the Wetland Contract.]</td></tr>
<tr><td>III.d Governance Actions
[Brief description of the management and governance actions included in the Wetland Contract.]</td></tr>
<tr><td>III. Actions: Stakeholders involved in the implementation</td><td>How may private and public stakeholders have been engaged in the implementation of the actions?
<table>
<tr><th>Action</th><th>Private</th><th>Public</th></tr>
<tr><td>Concrete Actions</td><td></td><td></td></tr>
<tr><td>Communication Actions</td><td></td><td></td></tr>
<tr><td>Monitoring Actions</td><td></td><td></td></tr>
<tr><td>Governance Actions</td><td></td><td></td></tr>
<tr><td>Other…</td><td></td><td></td></tr>
</table>
</td></tr>
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<table>
<tr><td></td><td>IV. Actions: Financial resources</td><td>
<table>
<tr><th>Action</th><th>Budget</th><th>Financial resources</th></tr>
<tr><td>Concrete Actions</td><td></td><td></td></tr>
<tr><td>Communication Actions</td><td></td><td></td></tr>
<tr><td>Monitoring Actions</td><td></td><td></td></tr>
<tr><td>Governance Actions</td><td></td><td></td></tr>
<tr><td>Other…</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td></td><td>V. Actions: Workplan</td><td>
<table>
<tr><th>Action</th><th>Start</th><th>End</th></tr>
<tr><td>Concrete Actions</td><td></td><td></td></tr>
<tr><td>Communication Actions</td><td></td><td></td></tr>
<tr><td>Monitoring Actions</td><td></td><td></td></tr>
<tr><td>Governance Actions</td><td></td><td></td></tr>
<tr><td>Other…</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td colspan="2">B. EVALUATION</td><td>[This section contains the conclusions of the process and explains describe any problems and obstacles encountered and what elements concurred to the success of the process.]</td></tr>
<tr><td colspan="2">C. ANNEX</td><td>- Annex 1: Description of Action 1, n*
- Please include the documents associated to the Wetland Contract. These documents may include, but are not limited to: Wetland Contract signed by key actors, Action Plan, …</td></tr>
</table>

ANNEX 1 – DESCRIPTION Action 1*

Action 1*	
Title	
Typology	☐ Concrete Action ☐ Communication action ☐ Monitoring action ☐ Governance action ☐ Other action
Brief description	[500 characters]
Coordinator	
Other actors involved	
Budget	
Financial resources	

[*Duplicate the table as needed]