

Ramsar National Report to COP14

Section 1: Institutional Information

Important note: the responses below will be considered by the Ramsar Secretariat as the definitive list of your focal points, and will be used to update the information it holds. The Secretariat's current information about your focal points is available at <https://www.ramsar.org/search?f%5B0%5D=type%3Aperson#search-contacts>

Name of Contracting Party

The completed National Report **must be accompanied by a letter** in the name of the Head of Administrative Authority, confirming that this is the Contracting Party's official submission of its COP14 National Report. It can be attached to this question using the "Manage documents" function (blue symbol below)

> PORTUGAL

You have attached the following documents to this answer.

[letter_of_the_Head_of_Administrative_Authority.pdf](#) - Official letter in the name of the Head of Administrative Authority

Designated Ramsar Administrative Authority

Name of Administrative Authority

> Institute for Nature Conservation and Forests (ICNF)

Head of Administrative Authority - name and title

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Designated National Focal Point for Matters Relating to The Scientific and Technical Review Panel (STRP)

Name and title

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Name of organisation

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Designated Government National Focal Point for Matters Relating to The Programme on Communication, Education, Participation and Awareness (CEPA)

Name and title

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Designated Non-Government National Focal Point for Matters Relating to The Programme on Communication, Education, Participation and Awareness (CEPA)

Name and title

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Name of organisation

> (NGO) GEOTA: Grupo de Estudos de Ordenamento do Território e Ambiente

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Section 2: General summary of national implementation progress and challenges

In your country, in the past triennium (i.e., since COP13 reporting)

A. What have been the five most successful aspects of implementation of the Convention?

- 1)
 - › Increased awareness of the populations and local authorities on the value of wetlands and participation in its conservation
- 2)
 - › The ongoing effort to raise awareness among the school populations and the general population, including the celebration of World Wetlands Day every year with activities nationwide.
- 3)
 - › Update in progress of the Ramsar Information Sheet of all the national Ramsar Sites.
- 4)
 - › There was a clear effort to include appropriate restoration measures in the new cycle of Hydrographic Region Management Plans.
- 5)
 - › Significant increase of river restoration projects funded through the Public Environment Fund (4M€).

B. What have been the five greatest difficulties in implementing the Convention?

- 1)
 - › Increasing intensive agriculture in some areas seriously threatening specific wetland habitats and water supply
- 2)
 - › Nonexistence of effective management plans for most of the national Ramsar sites
- 3)
 - › Lack of capacity of conservation staff to survey wetlands and proceed the national wetland inventory.
- 4)
 - › Combating invasive alien species and impacts of climate change on wetland in general and Ramsar sites hydrology
- 5)
 - › Impact on several important native species especially by illegal fishing but also by tourism and recreation

C. What are the five priorities for future implementation of the Convention?

- 1)
 - › Preparation of management plans of Natura 2000 sites, over sites contain wetlands (namely Ramsar sites)
- 2)
 - › Control and management of the most harmful invasive species at least in the most sensitive areas of wetlands
- 3)
 - › Establishing a National Ramsar Wetland group of experts in order to increase awareness, education and interpretation about Ramsar sites
- 4)
 - › Designate new Ramsar sites, in particular on the Madeira archipelago
- 5)
 - › Strengthen the involvement and awareness of populations into wetland conservation

D. Do you (AA) have any recommendations concerning priorities for implementation assistance and requirements for such assistance from the Ramsar Secretariat?

> No recommendation.

E. Do you (AA) have any recommendations concerning implementation assistance from the Convention's International Organisation Partners (IOPs)? (including ongoing partnerships and partnerships to develop)

> No recommendation.

F. How can national implementation of the Ramsar Convention be better linked with implementation of other multilateral environmental agreements (MEAs), especially those in the 'biodiversity cluster' (Convention on Biological Diversity (CBD), Convention on Migratory Species (CMS), Convention on International Trade in Endangered Species (CITES), World Heritage Convention (WHC), and United Nations Convention to Combat Desertification (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC)?

> Through an effective implementation of a national wetland expert group that should have close relationship between it and the other conventions' committees in the country and bringing together the different focal points of each convention, and also with the focal point for the UNESCO Program "Man and Biosphere" (some of the Biosphere Reserves overlap with wetlands, including with Ramsar Sites) in order to share information.

G. How is the Ramsar Convention linked with the implementation of water policy/strategy and other strategies in the country (e.g., on sustainable development, energy, extractive industries, poverty reduction, sanitation, food security, biodiversity) and how this could be improved?

> Through an effective coordination of wetlands regulation with the major water policy and management instruments such as WFD (EU Water Framework Directive). WFD as it was implemented in Portugal does not yet consider all wetlands as continental waters, still showing to some extent disconnection between some wetlands and the hydrologic system.

Azores Region: although Ramsar areas do not integrate protected areas under the Water Framework Directive (WFD), 12 of the 13 designated areas for the Azores are included in the island's natural parks, so measures planned to maintain and improve the quality of water bodies, as a support for ecosystems, will have positive impacts on Ramsar areas. As such, the implementation of the Ramsar Convention and the water policy/strategy complement each other.

The WFD, transposed into national law by the Water Law, determines that the following protected areas must be registered and identified in the preparation of the PGRH (Article 4): areas designated for the abstraction of water intended for human consumption; areas designated for the protection of aquatic species of economic interest; bodies of water designated as recreational waters, including areas designated as Bathing Zones; sensitive areas in terms of nutrients, including vulnerable zones and areas designated as sensitive areas; areas requiring special protection for the conservation of habitats and species directly dependent on water; areas of maximum infiltration.

With regard to protected areas for the conservation of habitats and species directly dependent on water, the areas that make up the Natura 2000 and the areas covered by the Island Natural Parks are considered in Azores Hydrographic Region (RH9).

H. According to paragraph 21 of Resolution XIII.18 on Gender and wetlands, please provide a short description about the balance between men and women participating in wetland-related decisions, programmes and research.

> No general comments

I. Do you (AA) have any other general comments on the implementation of the Convention?

> No general comments

J. Please list the names of the organisations which have been consulted on or have contributed to the information provided in this report

> Institute for Nature Conservation and Forests (ICNF), Portuguese Environment Agency (APA), Regional Secretariat of Environment and Climate Change and Regional Directorate for Sea Affairs of the Azorean Regional Government, The Water and Waste Services Regulation Authority (ERSAR), The Water and Waste Services Regulation Authority of Azores (ERSARA), European Anti Poverty Network-Portugal (EAPN Portugal), University of Évora, Ramsar Sites, Centre for Geographical Studies, of the University of Lisbon, Municipality of Praia da Vitória.

Section 3: Indicator questions and further implementation information

Goal 1. Addressing the drivers of wetland loss and degradation

[Reference to Sustainable Development Goals 1, 2, 6, 8, 11, 13, 14, 15]

Target 1

Wetland benefits are featured in national/ local policy strategies and plans relating to key sectors such as water, energy, mining, agriculture, tourism, urban development, infrastructure, industry, forestry, aquaculture, fisheries at the national and local level.

[Reference to Aichi Target 2]

1.1 Have wetland conservation and the identification of wetlands benefits been integrated into sustainable approaches to the following national strategies and planning processes, including: {1.3.2} {1.3.3} KRA

1.3.i

Please select only one per square.

a) National Policy or strategy for wetland management	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
b) Poverty eradication strategies	<input type="checkbox"/> X=Unknown <input checked="" type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
c) Water resource management and water efficiency plans	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
d) Coastal and marine resource management plans	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
e) Integrated Coastal Zone Management Plan	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
f) National forest programmes	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
g) National policies or measures on agriculture	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
h) National Biodiversity Strategy and Action Plans drawn up under the CBD	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant

i) National policies on energy and mining	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
j) National policies on tourism	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
k) National policies on urban development	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
l) National policies on infrastructure	<input checked="" type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
m) National policies on industry	<input checked="" type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
n) National policies on aquaculture and fisheries {1.3.3} KRA 1.3.i	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
o) National plans of actions (NPAs) for pollution control and management	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant
p) National policies on wastewater management and water quality	<input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> Y=Not Relevant

1.1 Additional information

- > a) In Portugal there is no specific national policy or strategy for wetland management, nonetheless, various policy instruments are in place, such as the implementation of the EU Water Framework Directive, the National Water Plan and the River Basin Management Plans, with the aim to protect inland surface water bodies, coastal water bodies, transitional water bodies and groundwater bodies.
- b) There is still no Poverty eradication strategies in our country. The Government created a coordination commission to develop a strategy by the end of 2020 .
- c) There are several plans, namely Hydrographic Region Management Plans (PGRH), Management Plans of Public Water Reservoirs (POAAP), Estuary Management Plans (POE), Coastal Management Plans (POOC), National plan for efficient water use (PNUEA), among others.
- d) In the portuguese mainland there are the Coastal Planning Plans (POOC), the Management Plan of Marine space (POEM), the Situation Plan of the Marine Space Management (PSOEM). The answer to this question is partially concerning the Azores archipelago.
- f) Regional Programs of Forest Management (PROF)
- g) National Strategy for Agro-livestock and Agro-industrial Effluents (ENEAPAI); National Strategic Plan for Rural Development (PEN)
- i) National Program of High Hydroelectric Potential Dams (PNBEPH)
- j) Tourism Strategy 2017; National Nature Tourism Program (PNTN)
- k) Strategic Plan for Water Supply and Sanitation of Wastewater (PENSAAR); Sustainable Cities Strategy 2020
- n) The strategic plan for Portuguese aquaculture 2014-2020 - not individualized for wetlands; Law of Fishing in Inland Waters; Portuguese Management Plan of Eel; . On fisheries in estuaries does not exist exactly planning.

- o) Integrated Pollution Prevention and Control (IPPC)
- p) Strategic Plan for Water Supply and Wastewater Sanitation 2020 (PENSAAR 2020)

Target 2

Water use respects wetland ecosystem needs for them to fulfil their functions and provide services at the appropriate scale inter alia at the basin level or along a coastal zone.

[Reference to Aichi Targets 7 and 8], [Sustainable Development Goal 6, Indicator 6.3.1]

2.1 Has the quantity and quality of water available to, and required by, wetlands been assessed to support the implementation of the Guidelines for the allocation and management of water for maintaining the ecological functions of wetlands (Resolution VIII.1, VIII.2) ? 1.24.

A=Yes

2.1 Additional Information

> All wetlands in Portugal considered by the EU Water Framework Directive are legally protected. All activities in wetlands are licensed. Most wetlands are also formally protected places, forcing additional control in these areas. All wetlands are protected by National "Flod Bed" protection area, which ensures that no human activities that can harm the environment can be carried out.

C= Partially (for the Azores). In the case of underground waters, Azores only have qualitative monitoring data during the 2018-2020 three-year period.

2.2 Have assessments of environmental flow been undertaken in relation to mitigation of impacts on the ecological character of wetlands (Action r3.4.iv)

C=Partially

2.2 Additional Information

> In Portugal, wetlands that have been object of scientific research, are normally integrated into land plans. In this way the types of flows that occur, and other environmental issues, are taken into account in the management of these areas.

2.3 What, if any, initiatives been taken to improve the sustainability of water use (or allocation of water resources) in the context of ecosystem requirements across major river basins (Resolutions VIII.1 and XII.12)? (Action 3.4.6.)

C=Partially

2.3 Additional Information

> In Portugal the management of water for maintaining ecological functions of wetlands has been used/applied in decision-making processes, but not always following Ramsar Guidelines.

2.4 Have projects that promote and demonstrate good practice in water allocation and management for maintaining the ecological functions of wetlands been developed (Action r3.4.ix.)

A=Yes

2.4 Additional Information

> Good examples: (1) the "Habitat restoration for diadromous fish in River Mondego" project, funded by the Ministry of Agriculture and Sea, and cofunded by the European Fisheries Fund through PROMAR 2007-13 www.rhpdm.uevora.pt/rivermondego.html; (2) the "Charcas de Noé/Noah's Ponds" Project, funded by the Ministry for the Environment's Environmental Fund (Call no. 9451/2019) <http://www.charcasdenoe.pt/>, for reverting the native aquatic plant loss in major water bodies in the Lower Mondego Basin and Natura 2000 "Mira Dunes, Dunas de Mira, Gândara e Gafanha" Special Conservation Zone which are historically (based on herbaria data) the 'wet spot' for aquatic plant occurrence in Portuguese flora; (3) the "Rede Douro Vivo" Project <https://dourovivo.pt>, which aims at developing tools for the conservation of aquatic freshwater ecosystems. In this context, the objective is to propose management and impact mitigation measures that are applicable to large dams that may or may not be located in "Key Biodiversity Areas". For this approach, the Serra Serrada Dam, located in the Douro basin, close to the border with Spain, in the Montesinho Natural Park (PNM), was selected as a case study; (4) the "Paul Natura - Knowing to protect" Project (2020), financed by the Environmental Fund, whose goal is to create the future "Paul de Manique Local Nature Reserve", involving the community in this decision-making and in the process of appropriating the values of the cause. The Manique do Intendente marsh, Azambuja county, was artificially drained for agricultural production until the 1980s. In the 1990s it was once again a water mirror important for several bird species; (5) The "FloraReply project", financed by the Environmental Fund, aimed at implementing conservation and protection actions for species that are currently threatened, or in decline, in territories included in Special Conservation Zones

(Natura 2000 Network) of the Intermunicipal Community of the Region of Coimbra (namely Paul de Arzila Nature Reserve and Natura 2000 "Mira Dunes, Gândara and Gafanhas" Special Conservation Zone). Among the actions, the propagation of the threatened native species (*Nuphar luteum*), (*Nymphaea alba*), (*Lysimachia Ephemera*), (*Vallisneria spiralis*) and (*Stachys palustris*) is we highlighted, having the latter two been evaluated by the Red List of the Vascular Flora of Continental Portugal as critically endangered, with the sole occurrence throughout the country been registered in this region only. In the Azores, the lakes' river basins are covered by land use planning plans, each with a set of projects related to the improvement of water quality, while supporting ecosystems.

2.5 Percentage of households linked to sewage system?

SDG 6 Target 6.3.1.

> 85

2.5 Additional Information

> Data from 2018 by National Water and Waste Services Regulation Authority (ERSAR) and Statistics Portugal (INE).

For the Azores Region - 99,20%. Data collected by ERSARA (The Water and Waste Services Regulation Authority of Azores) in 2018-2019, in accordance with the ERSARA Performance Indicators. For the year 2020, data are not available yet.

2.6 What is the percentage of sewerage coverage in the country?

SDG 6 Target 6.3.1.

E=Exact number (percentage)

> 85

2.6 Additional Information

> Data on sewerage are calculated based on access by the population: 67,3 m³/hab of wastewater sewerage per capita (2018).

Azores Region - G= more than 95%: data collected by ERSARA (2018-2019), in accordance with the ERSARA Performance Indicators. For the year 2020, data are not available yet.

2.7 What is the percentage of users of septic tank/pit latrine if relevant to your country?

SDG 6 Target 6.3.1.

X=Unknown

2.7 Additional Information

> In mainland Portugal, c.a. 500 000 households are not connected to the sanitation network. There is, therefore, a significant number of users of individual septic tanks.

In 2018-2019, Azores had ca. 41.795 septic tanks (collective and private). Data collected by ERSARA (2018-2019), in accordance with the ERSARA Performance Indicators. Information based on the data dS24 - Number of collective and dS25 - Private septic tank. For the year 2020, data are not available yet.

2.8 Does the country use constructed wetlands/ponds as wastewater treatment technology?

SDG 6 Target 6.3.1.

A=Yes

2.8 Additional Information

> Examples: (1) "Constructed wetlands an eco-technology applied to the treatment of waste water: hydraulic behaviour analysis" <https://www.repository.utl.pt/bitstream/10400.5/3352/1/FITO-ETAR%20UMA%20ECO-TECNOLOGIA%20APLICADA%20AO%20TRATAMENTO%20DE%20%C3%81GUAS%20RESIDUAIS.pdf>; or (2) the

"Life Pateiras - Natural Adapt 4 Rural Areas" Project (2020), aimed to recover a large tank in the Agra Wastewater Treatment Plant, with the waters of the Ave River, and to transform into a "constructed wetland". Submitted by the City council of Famalicão, in partnership with Águas do Norte, was one of about 15 European projects approved for climate change in 2020. Thus, another of the actions planned is the recovery of natural habitats that have the capacity to retain water and enable infiltration into the groundwater aquifers, thus avoiding the effect of upstream floods and increasing the groundwater supply for use during the summer drought periods. This action essentially concerns the recovery of two ecosystems, one in the Ribeira de Fradelos and the other in the Charcas /Pateiras. <https://www.vilanovadefamalicao.org/european-union-approves-famalicaos-application-to-mitigate-the-effects-of-climate-change>

You have attached the following Web links/URLs to this answer.

[Project "Life Pateiras - Natural Adapt 4 Rural Areas" \(2020\)](#) - to recover of a large tank in the Agra Wastewater Treatment Plant, in the waters of the River Ave, and to transform into a "constructed wetland". Submitted by the City council of Famalicão, in partnership with Águas do Norte, was one of about 15 European projects approved for climate change in 2020. Thus, another of the actions planned is the recovery of natural habitats that have the capacity to

retain water and infiltrate it into the groundwater, thus avoiding the effect of upstream floods and increasing the amount of water in the groundwater for use during the summer in periods of drought. This action essentially concerns the recovery of two ecosystems, one in the Ribeira de Fradelos and the other in the Charcas /Pateiras.

“Constructed wetlands an eco-technology applied to the treatment of waste water: hydraulic behaviour analysis”

2.9 Number of wastewater treatment plants (or volume treated exist at national level)?

SDG 6 Target 6.3.1.

E=Exact number (plants)

> 4385

2.9 Additional Information

> E= 4369 - ERSAR data for 2019 (mainland Portugal), for urban wastewater systems, of which 2768 (63%) correspond to WWTP and 1601 (37%) to collective septic tanks The percentage of water classified as safe for consumption is 98,60% in 2018 (ERSAR, INE).

E= 16 in Azores Region. Data collected by ERSARA (2018-2019) for urban wastewater systems, in accordance with the ERSARA Performance Indicators. Information based on the data dS23 - Number of wastewater treatment plants. For the year 2020, data are not available yet.

2.10 How is the functional status of the wastewater treatment plants? If relevant to your country

SDG 6 Target 6.3.1.

C=Functioning

2.10 Additional Information

> Data for 2016 (mainland Portugal), for urban wastewater systems. Information based on ERSAR indicator AR13 - Compliance with the discharge parameters (%). It is defined as the percentage of the equivalent of the population that is served with treatment plants that ensure compliance with the discharge licence. Data collected by ERSARA (2018-2019), for urban wastewater systems. Information based on the performance indicator number ERSARA_S10 - Compliance with the discharge parameters (%). It is defined as the percentage of the equivalent of the population that is served with treatment plants that ensure compliance with the discharge licence. For the year 2020, data are not available yet.

In order to comply with the requirements of European Community legislation, the Portuguese state is compelled not to exceed, in the receiving compartments (in this case the wetlands), concentrations of certain indicative parameters of pollution. In this way, in the last 25 years the country has made an intense investment effort in this type of infrastructure, which has progressively improved, reaching a very good state in terms of overall performance.

2.11 The percentage of decentralized wastewater treatment technology, including constructed wetlands/ponds is?

SDG 6 Target 6.3.1.

X=Unknown

2.12 Additional Information

> In some areas the decentralized wastewater treatment technology are good (Alentejo region) and others (Algarve region) is fair (it is functioning). In this region when sewage is not connected to collective treatment systems, the technique used to this end is mainly the septic tank.

Azores Region 0 m3. Data collected by ERSARA (2018-2019), in accordance with the ERSARA Performance Indicators. Information based on the data dS14B - Volume re-used of wastewater.

For the year 2020, data are not available yet.

2.13 What is the purpose of the wastewater reuse system if relevant to your country ?

SDG 6 Target 6.3.1.

R=Agriculture

2.13 Additional Information

Please indicate if the wastewater reuse system is for free or taxed or add any additional information.

> Not only Agriculture, also Landscape and Industrial. These systems are not widely used, but in certain sectors and in some areas they are already well developed, as for example their use in the irrigation of golf courses and watering of gardens. In Agriculture the wastewater reuse system is for free.

Data from ARH and from ERSAR. The date from ERSAR is for 2016 (mainland Portugal), for urban wastewater systems: 86 % of the aforementioned (2.14) reused wastewater is mainly used by water and wastewater

services or operators for their own uses (eg. Cleaning of infrastructure and stree cleaning, irrigation of urban gardening areas). The remaining 14 % is sold to other users (eg. Irrigation of golf courses).

2.14 Does your country use a wastewater treatment process that utilizes wetlands as a natural filter while preserving the wetland ecosystem?

A=Yes

2.14 Additional information: If Yes, please provide an example

> In Portugal, the implementation of macrophyte beds for the treatment of effluents started with the construction of a system in the town of Viseu, in the mid-1970s, followed by another system in the Algarve region, at the premises of the former Polytechnic Institute of Faro.

Target 3

Public and private sectors have increased their efforts to apply guidelines and good practices for the wise use of water and wetlands. {1.10}

[Reference to Aichi Targets 3, 4, 7 and 8]

3.1 Is the private sector encouraged to apply the Ramsar wise use principle and guidance (Ramsar handbooks for the wise use of wetlands) in its activities and investments concerning wetlands? {1.10.1} KRA 1.10.i

D=Planned

3.1 Additional Information

> We have not yet translated Ramsar handbooks.

3.2 Has the private sector undertaken activities or actions for the conservation, wise use and management of {1.10.2} KRA 1.10.ii

Please select only one per square.

a) Ramsar Sites	<input type="checkbox"/> Y=Not relevant <input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes
b) Wetlands in general	<input type="checkbox"/> Y=Not relevant <input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes

3.2 Additional information

> Both on Ramsar Sites and Wetlands in general there are some cases of private sector having undertaken activities or actions for the conservation, wise use and management, but it is not generalized. Furthermore, since 2000 all important private projects have been subjected to environmental impact assessments, which always require the care of associated wetlands. Legislation establishing good environmental practice.

3.3 Have actions been taken to implement incentive measures which encourage the conservation and wise use of wetlands? {1.11.1} KRA 1.11.i

A=Yes

3.3 Additional information

> A number of projects undertaken by universities and public administration with the aim of conserving and managing wetland biodiversity are public or EU funded (e.g. projects on habitat rehabilitation for migratory species and fishing activity). Furthermore there are financing mechanisms for certain activities with environmental concerns (e.g. Mar2020).

The conservation and wise use of wetlands is encourage, through policies promoting good practice, licensing and environmental impact assessment processes. There are national strategies that define goals and objectives that aim to promote the rational use of water, such as the Efficient Water Use Plan, the National Strategy for Agro-livestock and Agro-industrial Effluents Strategy and the Action Plan for the Circular Economy. In the Autonomous Region of the Azores in the scope of PRORURAL + Program (Program for Rural Development in the Azores Autonomous Region) there is a measure for financial support to conserve several types of habitats in Natura 2000 Network areas, where it includes Peats habitats. The Regional Water Plan, as

well as River Basin Management Plans, have as objectives and measures the efficient use for water-using sectors.

3.4 Have actions been taken to remove perverse incentive measures which discourage conservation and wise use of wetlands? {1.11.2} KRA 1.11.i

B=No

3.4 Additional Information

> Portugal applies the EU directives, which consider good practices in sectoral activities such as agriculture, fisheries and ports.

Target 4

Invasive alien species and pathways of introduction and expansion are identified and prioritized, priority invasive alien species are controlled or eradicated, and management responses are prepared and implemented to prevent their introduction and establishment.

{Reference to Aichi Target 9}

4.1 Does your country have a comprehensive national inventory of invasive alien species that currently or potentially impact the ecological character of wetlands? {1.9.1} KRA 1.9.i

A=Yes

4.1 Additional information

> National legislation (Decree-Law no. 565/99, 21st December) includes a list of invasive alien species (IAS) already present in the country. Since then, some other species were identified as occurring in the Portuguese territory, some of which were already included in the List of IAS of European Union concern established under the provisions of article 4 of Regulation (EU) no. 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species. In 2019, the Portuguese Decree-Law from 1999 was finally replaced by new legislation, the Decree-Law 92/2019, 10 st July. The new legislation is still not specific to wetlands, but now includes species with invasive behaviour that are new or likely to arrive in the next years in Portuguese wetlands, such as the , the Carolina fanwort (*Cabomba caroliniana* Gray), the Nuttall's waterweed (*Elodea nuttallii* (Planch.) H.St.John), the large-flowered waterweed (*Egeria densa* Planch.), the water thyme (*Hydrilla verticillata* (L. f.) Royle), the floating pennywort (*Hydrocotyle ranunculoides* L. f.), the Himalayan balsam (*Impatiens glandulifera* Royle), the African elodea (*Lagarosiphon major* (Ridley) Moss), the water primroses (*Ludwigia grandiflora* (Michx.) Greuter & Burdet, *Ludwigia peploides* (Kunth) Raven, and *Ludwigia uruguayensis* (Cambess.) H.Hara; the yellow skunk cabbage (*Lysichiton americanus* Hultén & St. John), the two-leaf watermilfoil (*Myriophyllum heterophyllum* Michaux); the mexican waterlily (*Nymphaea mexicana* Zucc.), the water lettuce (*Pistia stratiotes* L.), and the broadleaf arrowhead (*Sagittaria latifolia* Willd).

There is a collaborative platform (environmental citizenship) for the inventory of alien plants throughout the national territory, which includes aquatic plants: <https://invasoras.pt/>, carried out through co-financed projects INVADER, INVADER II, INVADER-B, INVADER IV, and Regional legislation for Madeira (Regional Legislative Decree no. 27/99/M, 28th August 1999), which states that the possession, import to the region and introduction into the wild of any alien species is forbidden (with the exception referred to in point 4.2) and includes a short list of animal species not covered by the regulation. Regional legislation for Azores (Regional Legislative Decree no. 15/2012/A, of 2nd April 2012, which establishes the legal regime of nature conservation and biodiversity) also has a list of fauna and flora invasive alien species or with known ecological risk. None of the lists referred above is specific for wetlands despite including some species occurring in wetlands. (Source: ICNF and Regional Secretariat for Environment and Climate Change of the Azorean Regional Government). An inventory of the marine alien and potentially invasive species is compiled and regularly updated by the Azores Sea Affairs Regional Directorate, under a number of tasks that have been developed in several projects, such as PEAMA-PIMA (PO Açores 2020), RAGES (EMFF) and LIFE-IP Azores Natura. Also, the Azores marine environmental authority participates actively in a number of working groups of OPSPAR convention as well as MSFD (ICG COBAM Nis Non-Indigenous Species). Form marine and coastal areas, the issues related to NIS are specifically approached by MSFD, which holds the environmental Descriptor 2. The Azores region has evaluated the environmental status of this descriptor in 2014 as well as in 2020, which task is accomplished based on an inventory of species and specific targets are currently established.

4.2 Have national policies or guidelines on invasive species control and management been established or reviewed for wetlands? {1.9.2} KRA 1.9.iii

C=Partially

4.2 Additional information

> There are no national policies or guidelines specific for wetlands concerning invasive species control and management. However, national and regional legislation establish precautionary measures at a general level, namely prohibition of dissemination or release of alien species' specimens for the purpose of establishing populations of these species in the wild. There may be exceptions to this rule only if: i) there are unequivocal

benefits for man and/or for ecosystems; ii) there are no native species considered suitable for the purpose for which the introduction is being made; iii) it will be preceded by a comprehensive and carefully planned impact assessment, which has reached a favourable conclusion. Controlled trials and quarantine are also previewed. (Source: ICNF, IP)

According to the current Decree-Law 92/2019 of 10 July, it provides that “the ICNF, IP, identifies in an updated way on the respective website, up to six months after the first occurrence in the national territory, the species of annex II to this decree-law, respectively, subject to control, containment or eradication plans, as well as indication of the competent entities and the deadline for the respective elaboration”.

Additionally, the Management Plans of the Hydrographic Region consider some measures of invasive species control and management on Ramsar sites and wetlands in general.

Lastly, the Ministry of Environment and Climate Action through Order No. 2269-A / 2020, of February 14, of February 17, issued a notice for projects in the scope of Nature Conservation and Biodiversity- Environmental Fund, namely projects to combat exotic aquatic invasive species such as the water hyacinths (*Eichhornia crassipes*). The general objective of this Notice was to support projects aimed at the control, containment or eradication of the exotic invasive water hyacinth species (*Eichhornia crassipes*), in association or not with other aquatic invasive exotic species, such as pine-tree herbs (*Myriophyllum aquaticum*, *M. brasiliensis* and *M. heterophyllum*), African elodea (*Lagarosiphon major*) and azola (*Azolla filiculoides*), at the basin scale or hydrographic sub-basin. Nine projects were financed, 85% for a total of € 479,797.98. The projects were scheduled for execution until the last quarter of 2020.

The Azores “Regional Plan of Erradication and Control of Invasive Flora Species in Sensitive Areas” includes works done in wetlands. The Regional Legislative Decree n.15/2012/A, of 2nd April, establishes guidelines for the import, detention and introduction of alien species in the Azores Autonomous Region. For marine non-indigenous species, specific campaigns to eradicate were driven to *Caulerpa webbiana* (a species detected in 2002 off the Horta harbour) during 2009-2013.

4.3. Has your country successfully controlled through management actions invasive species of high risk to wetland ecosystems?

A=Yes

4.3 Additional Information

If ‘Yes’, please provide examples, including the species name and the successful management action

> The managements actions to control invasive species either regional or local, occasionally are included in a long term projects and plans, such as the EU financial supported projects: (1) “INVASEP - Combating invasive species within the Tagus and Guadiana river basins in the Iberian peninsula” (Project LIFE NAT/ES/000582); (2) “ Conservation of the Saramugo (*Anaocypris hispanica*) in the Guadiana River Basin (Portugal) ” (Project LIFE+13 NAT/PT/000786); (3) “Aquatic Invasive Alien Species of Freshwater and Estuarine Systems: Awareness and Prevention in the Iberian Peninsula” (Project LIFE INVASAQUA LIFE17 GIE/ES/000515). This program has recently made available a very useful output, a trilingual guide available for download entitled “Guide to the alien and invasive species of rivers, lakes and estuaries in the Iberian Peninsula (<http://www.lifeinvasaqua.com/main-files/uploads/2020/11/LIBRO-ESPECIES-INVASORAS-INGLES-FINAL.pdf>); (4) “Biodiscoveries - Invasive species control through public participation” (LIFE13 BIO/PT/000386), the projet focus also the surrounding marsh, of the woods of the Machada, to controle the ice plant (*Carpobrotus edulis*); (5) “Control of Aquatic Invasive Species in the Lima River” (Project Portugal 2020 - POSEUR) to operate in an area of 86.34 ha of the Lima River. There are also other projects, not co-financed by the EU, such as the “FloraRepley project” (financed by the Environmental Fund), which proposes also to act on two invasive plants, recently detected, in the region of Coimbra, the water primrose (*Ludwigia grandiflora*) and the floating primrose -willow (*Ludwigia peploides*). And the “Charcas de Noé” project (also funded by the Environmental Fund) in which plant alien invasive species like *Eichhornia crassipes*, *Arundo donax*, *Eryngium pandanifolium*, *Ludwigia peploides*, *Acacia longifolia*, *Acacia dealbata*, *Cortaderia selloana*, as well as the eastern mosquitofish (*Gambusia holbrooki*) and red-swamp crayfish (*Procambarus clarkii*) were, among other species, detected and controlled on priority conservation spots on the lower Mondego basin and on the “Dunas de Mira, Gândara e Gafanhas” Special Conservation Zone; (6) “Prevention, control and eradication of invasive alien species in the territory”, a project financed by POSEUR, coordinated by the Intermunicipal Community of the Coimbra Region, for the implementation of prevention, control and eradication of invasive alien species, in Natura 2000 Network areas, in nationally protected areas and in areas from which, in the absence of intervention, the direct propagation of invasive alien species to these areas is evidenced. The project’s target species are *Eichhornia crassipes*, *Myriophyllum aquaticum*, *Lagarosiphon major* and three species of the genus *Acacia* sp.: *Acacia longifolia*, *Acacia dealbata*, and *Acacia melanoxylon*; (7) the “LIFE Ilhas Barreira” Project (LIFE18 NAT/PT/000927), coordinated py Sociedade Portuguesa para o Estudo das Aves (SPEA), focusing on the Barrier Islands in Algarve, protecting priority species and habitats, also has actions to control invasive species.

On Azores islands the Azores Island’s Natural Parks have done control of invasive alien species on sensitive areas, wich include wetlands. In 2019 also within the LIFE Vidalia for Islands of Faial, Pico and São Jorge. In addition, it is in preparation a continuous monitoring data system on freshwater fish invasive species of the mainland Portugal an important instrument for future to management and control actions.

4.4 Are there invasive species of high risk to wetland ecosystems that have not been successfully controlled through management actions?

A=Yes

4.4 Additional Information

If 'Yes', please provide examples, including the species name and the challenges to management

> Eichhornia crassipes, Carpobrotus edulis, Dicksonia antarctica, Hydrangea macrophylla, Hedychium gardnerianum, Arundo donax, Ipomoea indica, Pittosporum undulatum, Phalaris aquatica, Lagarosiphon major, Gunnera tinctoria, Drosanthemum floribundum, Ipomoea imperati, Rubus ulmifolius, Pteridium aquilinum, Metrosideros excelsa, Canna indica, Phormium tenax, Ageratina adenophora, Tamarix africana, Crinum moorei, Zantedeschia aethiopica, Tetragonia tetragonoides, Azolla filiculoides, Lemna minor, Lagarosiphon major, Ludwigia grandiflora, and Ludwigia peploides (plants), Trachemys scripta (reptile), Oxyura jamaicensis (bird), Xenopus laevis (amphibian), Lepomis gibbosus, Australoheros facetus, Micropterus salmoides, Gambusia holbrooki (fish), Procambarus clarkii, Pacifastacus leniusculus (crustaceans), Corbicula fluminea (bivalve).

4.5 Have the effectiveness of wetland invasive alien species control programmes been assessed?

C=Partially

4.5 Additional Information

> Several of the ongoing control programmes include its assessment processes. For instance, there are some results from a LIFE project on the combat of invasive fish species in southern parts of Portugal, and from the control programmes on Eichhornia crassipes in the of Pateira de Fermentelos Ramsar site (and Ludwigia peploides in the tributary Cértima River). On the other hand the control programmes on Eichhornia crassipes in the Guadiana and Mondego bassins are being assessed for a subsequent control plan. In addition, some universities and other entities (e.g. DGRM) have developed monitoring studies to know the status, apart from control programmes (e.g. INSPECT program;

http://projectos.lpn.pt/index2.php?id_projecto=17&layout=1&lang=1).

Recently a study on the assessemnt of the effectiveness of wetland invasive alien species control programmes has been published: Morais, M., Marchante, E., & Marchante, H. (2017). Big troubles are already here: risk assessment protocol shows high risk of many alien plants present in Portugal. Journal for Nature Conservation, 35, 1-12 (<https://www.sciencedirect.com/science/article/pii/S1617138116301753>;

<http://invasoras.pt/en/>)

In Azores Region, all inland relevant water bodies are monitored according to the WFD methodology.

Monitoring programs, measures and environmental targets are defined for marine NIS, under the MSFD framework, specifically for descriptor 2 (marine non indigenous species).

Goal 2. Effectively conserving and managing the Ramsar Site network

[Reference to Sustainable Development Goals 6, 11, 13, 14, 15]

Target 5

The ecological character of Ramsar Sites is maintained or restored through effective, planning and integrated management {2.1.}

[Reference to Aichi Targets 6,11, 12]

5.1 Have a national strategy and priorities been established for the further designation of Ramsar Sites, using the Strategic Framework for the Ramsar List? {2.1.1} KRA 2.1.i

D=Planned

5.2 Are the Ramsar Sites Information Service and its tools being used in national identification of further Ramsar Sites to designate? {2.2.1} KRA 2.2.ii

A=Yes

5.3 How many Ramsar Sites have a formal management plan? {2.4.1} KRA 2.4.i

E=Exact number (sites)

> 9

5.4 Of the Ramsar Sites with a formal management plan, for how many of these is the plan being implemented? {2.4.2} KRA 2.4.i

E=Exact number (sites)

> 8

5.5 Of the Ramsar sites without a formal management plan, for how many is there effective management planning currently being implemented through other relevant means e.g. through existing actions for

appropriate wetland management? {2.4.3} KRA 2.4.i

F=Less than (sites)

> 20

5.3 – 5.5 Additional information

> 5 Ramsar Sites with an effective implemented management plan: (1) Bertandos Lagoons, (2) Albufeira Lagoon, (3) Tornada Marsh, (4) Praia da Vitória Marsh (this Ramsar site has a management plan in the scope of a LIFE Project), and (5) Caldeira do Faial, (6) Planalto Central do Pico (Achada), (7) Complexo Vulcânico das Furnas, (8) Complexo Vulcânico das Sete Cidades and (9) Complexo Vulcânico do Fogo (these Ramsar Sites – from 5 to 9 – have management plans in the scope of the Island Natural Park Management Plans of Faial Island, of Pico Island and of São Miguel Island). The Management Plans for the Ramsar Sites Caldeirão do Corvo, Planalto Central das Flores, Planalto Central de São Jorge, Fajãs of Caldeira and Cubres Lagoons, Caldeira da Graciosa, Planalto Central da Terceira and Ilhéus das Formigas e Recife Dollabarat are included in the Islands Natural Park's Management Plans, which are currently being finalised and will soon be submitted to the public participation phase, provision of all being published in 2021). Some of the Ramsar Sites are also managed in the scope of the Management Plan of Hydrographic Bassins.

5.4 Ramsar Sites with a management plan being implemented: Boquilobo Marsh, Albufeira lagoon, Fajãs of Caldeira and Cubres Lagoons (both sites have management plans in the scope of Unesco Biosphere Reserves), Caldeira do Faial, Planalto Central do Pico (Achada), Complexo Vulcânico das Furnas, Complexo Vulcânico das Sete Cidades and Complexo Vulcânico do Fogo.

5.5. Ramsar Sites in which they carry out management measures, outside of formal management plan: Sado Estuary (in the scope of the Action Plan of Common Bottlenose Dolphin *Tursiops truncatus*), Vascão River (in the scope of the Action Plan of the freshwater fish *Anaocypris hispanica*), Mondego Estuary, Pateira Fermentelos Lake, Ria de Alvor, Santo André Lagoon, Castro Marim saltmarshes, Tejo Estuary.

5.6 Have all Ramsar sites been assessed regarding the effectiveness of their management (i.e. sites with either a formal management plan or management via other relevant means where they exist e.g through existing actions for appropriate wetland management)? {1.6.2} KRA 1.6.ii

C=Partially

5.6 Additional information

> In mainland Portugal only few management plans of the Ramsar sites (three planes of eighteen – Tornada Marsh, Bertandos and São Pedro de Arcos Lagoons, Albufeira Lagoon) have been or are being assessed regarding the effectiveness of their management. For the Azores Ramsar sites within the framework of the LIFE CWR Project, a monitoring plan for water quality and biodiversity (fauna and flora) was created for Paul da Praia da Vitória. The other Azorean Sites Management Plans started being implemented only in 2020.

5.7 How many Ramsar Sites have a cross-sectoral management committee? {2.4.4} {2.4.6} KRA 2.4.iv

E=Exact number (sites)

> 11

5.7 Additional information

If at least 1 site, please give the name and official number of the site or sites

> Ramsar sites that are Protected Areas benefit from a cross-sectoral management committee that assesses the annual activity plan/report - Bertandos and São Pedro de Arcos Lagoons, Tejo Estuary, Ria Formosa, Arzila Marsh, Boquilobo Marsh, Sado Estuary, Santo André Lagoons, Castro Marim Saltmarshes, Tornada Marsh, Estrela Mountain upper Plateau and upper Zêzere River, and Mira Minde Polje and related Springs.

Target 7

Sites that are at risk of change of ecological character have threats addressed {2.6.}.

[Reference to Aichi Targets 5, 7, 11, 12]

7.1 Are mechanisms in place for the Administrative Authority to be informed of negative human-induced changes or likely changes in the ecological character of Ramsar Sites, pursuant to Article 3.2? {2.6.1} KRA 2.6.i

A=Yes

7.1 Additional information

If 'Yes' or 'Some sites', please summarise the mechanism or mechanisms established

> In the mainland Portugal there is the SOS environment and territory service (telephone and internet line) to collect and channel the environmental complaints generally including wetlands. This line (SOS ambiente e território) is of the responsibility of the republican national guard (GNR; www.gnr.pt) and the General Inspection of agriculture, the sea, the environment and land use planning (IGAMAOT; www.igamaot.pt). In Azores, the Regional Directorate of the Environment (AA in the Azores Autonomous Region) has an online

service for registration of environmental incidents “Na minha ilha”. It has also the SOS Environment Line, fully operational since January 1st of 2018. These 2 instruments are for all negative changes in environmental aspects in the Azores, not only for Ramsar Sites.

7.2 Have all cases of negative human-induced change or likely change in the ecological character of Ramsar Sites been reported to the Ramsar Secretariat, pursuant to Article 3.2? {2.6.2} KRA 2.6.i

B=No

7.3 If applicable, have actions been taken to address the issues for which Ramsar Sites have been listed on the Montreux Record, such as requesting a Ramsar Advisory Mission? {2.6.3} KRA 2.6.ii

Z=Not Applicable

Goal 3. Wisely Using All Wetlands

[Reference to Sustainable Development Goals 1, 2, 5, 6, 8, 11, 12, 13, 14, 15]

Target 8

National wetland inventories have been either initiated, completed or updated and disseminated and used for promoting the conservation and effective management of all wetlands {1.1.1} KRA 1.1.i

[Reference to Aichi Targets 12, 14, 18, 19]

8.1 Does your country have a complete National Wetland Inventory? {1.1.1} KRA 1.1.i

D=Planned

8.1 Additional information

> A complete national wetland inventory has not yet been finished, albeit planned. However there is available information on the internet with complete national inventories of specific wetlands (e.g. rivers, reservoirs, coastal areas, transitional waters, aquifers and irrigation channels – wetlands within the framework of the obligations of the Water Framework Directive) in mainland Portugal. Some typologies are still missing (e.g. marshes, peatlands, temporary ponds and some artificial wetlands). The existing inventory, made by APA (<http://snirh.apambiente.pt/>) identified more than 2,000 wetlands and 93 aquifers. In the Autonomous Region of the Azores, the Regional Water Information System (SRIA - Sistema Regional de Informação sobre a Água; <http://sig-sraa.azores.gov.pt/SRAM/site/SRIA/>) is a platform that the Regional Government provides to all entities and citizens, with reference information on water resources in the Azores, including basic data, networks for monitoring the quantity and quality of water, titles of use, bathing areas.

8.2 Has your country updated a National Wetland Inventory in the last decade?

C1=Partially

8.2 Additional information

> The existing inventory is updated (rivers, reservoirs, coastal areas, transitional waters, aquifers and irrigation channels), but does not include all types of wetlands (e.g. marshes, peatlands, temporary ponds and some artificial wetlands). Work is being prepared to carry out a national inventory of peatlands and organic soils.

8.3 Is wetland inventory data and information maintained? {1.1.2} KRA 1.1.ii

C=Partially

8.4 Is wetland inventory data and information made accessible to all stakeholders? {1.1.2} KRA 1.1.ii

C=Partially

8.4 Additional information

> The existing inventory, which does not include all typologies of wetlands as mentioned above, is accessible on the APA website (<http://snirh.apambiente.pt/>).

For the Azores, the updating and availability of information in the field of water to the general public has been maintained on following websites: <http://sig-sraa.azores.gov.pt/SRAM/site/SRIA/>
<http://www.azores.gov.pt/grasrrn-drotrh/> <http://portal-sraa.azores.gov.pt/rhma/>
<http://www.azores.gov.pt/Gra/srrn-drotrh/menus/principal/Monitoriza%C3%A7%C3%A3o/>

8.5 Has the condition* of wetlands in your country, overall, changed during the last triennium? {1.1.3}

Please describe on the sources of the information on which your answer is based in the free- text box below. If there is a difference between inland and coastal wetland situations, please describe. If you are able to, please describe the principal driver(s) of the change(s).

* ‘Condition’ corresponds to ecological character, as defined by the Convention

Please select only one per square.

--	--

a) Ramsar Sites	<input type="checkbox"/> P=Status Improved <input checked="" type="checkbox"/> O=No Change <input type="checkbox"/> N=Status Deteriorated
b) Wetlands generally	<input type="checkbox"/> P=Status Improved <input checked="" type="checkbox"/> O=No Change <input type="checkbox"/> N=Status Deteriorated

8.5 Additional information on a) and/or b)

> a) In general the conditions were maintained. But in some places there was an improvement in ecological conditions. For instance, in the Azores Ramsar Sites to improve and maintain the ecological conditions several actions were taken, such as the livestock management/exclusion, the control of invasive alien species, improvement of the water circulation and restoring vegetation. (Source: The Island Natural Parks Services and Praia da Vitória Municipality).

b) In the last two decades there has been a trend for successive improvements in wetlands in general (e.g. in the estuaries there are more species than in the past, because ecosystems have recovered), but for the last three years there is not yet complete information. A national assessment was carried out in 2018 on the water quality for rivers, reservoirs, coastal areas, transitional waters, aquifers and irrigation channels within the framework of the obligations of the Water Framework Directive. The published results (2015) showed that there was improvement in groundwater, in the superficial not so much (Source APA).

The improvement in the last decades is due to the continuous implementation of European Commission water quality policies that encouraged the overall quality of the wetlands in some regions and the decrease of pollution (for instance due to the control of effluents and dangerous and priority substances).

The situation is less favorable concerning lowland peatlands and ponds in mainland Portugal, as fens appear to be shrinking due to lack of knowledge, land-cover and land-use mismanagement, and some growing threats such as nitrification from poorly planned intensive agriculture, pulp forestry and the impact of widespread invasive species introduction. Not so on mountain peatlands, where their ecological status has not greatly changed since the last report.

There is also another important factor currently considered to be climate change that affects the wetlands generally, triggering water scarcity or droughts, in a more serious way in the south of the country.

In the Azores wetlands in general, to improve and maintain the ecological conditions several actions were undertaken, such as control of invasive alien species and plantation of native species to restore the natural conditions. The recovery of the status of the identified water bodies is expected to be gradual and prolonged, verifying the extension of compliance with environmental objectives for reasons of technical feasibility and in some cases of natural conditions (volcanic origin), since in particular in the lakes the low resilience of these ecosystems leads to an increase response time to the recovery measures applied. This reason is justified either by reasons of technical unfeasibility resulting from the lack of knowledge of some specific pressures associated with the state of the water body, or to practical constraints associated with the implementation of the measures (such as the impossibility of carrying out the necessary measures and being able to revert the state of the water body in a timeframe until 2015 (in most cases there was only time for the application of the measures without time for the water bodies to have answers in order to improve their state).

8.6 Based upon the National Wetland Inventory if available please provide a figure in square kilometres for the extent of wetlands (according to the Ramsar definition) for the year 2020 and provide the relevant disaggregated information in the box below. This Information will also be used to report on SDG 6, Target 6.6, Indicator 6.6.1, for which the Ramsar Convention is a co-custodian.

G=More than (km²)

> 1275,16

8.6 Marine/Coastal Wetlands total (km²)

> 591,91

8.6 Inland Wetlands

	Square kilometers (km ²)
L -- Permanent inland deltas.	
M -- Permanent rivers/streams/creeks; includes waterfalls.	
N -- Seasonal/intermittent/irregular rivers/streams/creeks.	

O -- Permanent freshwater lakes (over 8 ha); includes large oxbow lakes.	
P -- Seasonal/intermittent freshwater lakes (over 8 ha); includes floodplain lakes.	
Q -- Permanent saline/brackish/alkaline lakes.	
R -- Seasonal/intermittent saline/brackish/alkaline lakes and flats.	
Sp -- Permanent saline/brackish/alkaline marshes/pools.	
Ss -- Seasonal/intermittent saline/brackish/alkaline marshes/pools.	
Tp -- Permanent freshwater marshes/pools; ponds (below 8 ha), marshes and swamps on inorganic soils; with emergent vegetation water-logged for at least most of the growing season.	
Ts -- Seasonal/intermittent freshwater marshes/pools on inorganic soils; includes sloughs, potholes, seasonally flooded meadows, sedge marshes.	
U -- Non-forested peatlands; includes shrub or open bogs, swamps, fens.	27,1
Va -- Alpine wetlands; includes alpine meadows, temporary waters from snowmelt.	
Vt -- Tundra wetlands; includes tundra pools, temporary waters from snowmelt.	
W -- Shrub-dominated wetlands; shrub swamps, shrub-dominated freshwater marshes, shrub carr, alder thicket on inorganic soils.	
Xf -- Freshwater, tree-dominated wetlands; includes freshwater swamp forests, seasonally flooded forests, wooded swamps on inorganic soils.	
Xp -- Forested peatlands; peat swamp forests.	
Y -- Freshwater springs; oases.	

Zg -- Geothermal wetlands.	
Zk(b) - Karst and other subterranean hydrological systems, inland.	

8.6 Inland Wetlands total (km2)

> 601,71

8.6 Human-made wetlands total (km2)

> 81,53

8.6 Additional information

Additional information: If the information is available please indicate the % of change in the extent of wetlands over the last three years. Please note: For the % of change in the extent of wetlands, if the period of data covers more than three years, provide the available information, and indicate the period of the change.

> Date of the inventory: COS2015, Land Use Land Cover Map (Mainland Portugal) - Directorate General for the Territory

Reference or link:

<https://www.dgterritorio.gov.pt/cartografia/cartografia-tematica/COS-CLC-COPERNICUS>

Non-forested peatlands:

Christensen TR, Friborg T (lead authors) with Byrne KA, Chojnicki B, Drösler M, Freibauer A, Frohling, S., Lindroth, A., Mailhammer, J., Malmer, N., Selin, S., Turunen, J., Valentini, R., Zetterberg, L., Vandewalle, M. (2004) EU peatlands: Current carbon stocks and trace gas fluxes, Report 4/2004 to 'Concerted action: Synthesis of the European Greenhouse Gas Budget'. Geosphere-Biosphere Centre, Univ.of Lund, Sweden.

Dias, E., Mendes, C. et al (2017) Guia das Turfeiras dos Açores. Classificação, Ecologia e Conservação. Edição GEVA, Angra do Heroísmo.

Mateus, J., Queiroz, P. & Joosten, H. (2017) Portugal. In: Joosten, H., Tanneberger, F. & Moen, A. (Eds.) (2017) Mires and peatlands of Europe. Status, distribution and conservation. Stuttgart, Schweizerbart Science.

Montanarella, L., Jones, R.J.A., & Hiederer, R. (2006) The distribution of peatland in Europe. Mires and Peatland, 1, Article 01: 1-10.

* Estimated.

** Estimated. Ongoing PhD Thesis, IGOT, University of Lisbon. The differences between swobs and true peatlands (wether bogs or fens) is being assessed.

You have attached the following Web links/URLs to this answer.

[COS2015, Land Use Land Cover](#)

Target 9

The wise use of wetlands is strengthened through integrated resource management at the appropriate scale, inter alia, within a river basin or along a coastal zone {1.3.}.

[Reference to Aichi Targets 4, 6, 7]

9.1 Is a Wetland Policy (or equivalent instrument) that promotes the wise use of wetlands in place? {1.3.1} KRA 1.3.i

If 'Yes', please give the title and date of the policy in the green text box

A=Yes

9.1 Additional information

> In Portugal there is no specific wetland policy, nonetheless, various policy instruments are in place, such as the implementation of the EU Water Framework Directive, the National Water Plan and the River Basin Management Plans, and the others mentioned above (issue 1.1;

<https://www.apambiente.pt/index.php?ref=16&subref=7&sub2ref=9>). In addition, the wetlands are considered in the strategies of nature conservation at national level, there being a significant percentage of in wetlands included in Natura 2000 network.

In Autonomous Region of the Azores there is no specific wetland policy, nonetheless, the Water Framework Directive (WFD) is implemented through the Regional Plan for Water (Regional Legislative Decree n. 19/2003/A) and the River Basin Management Plans (since 2012), in which most of the watersheds and river basins coincide with Ramsar Sites.

9.2 Have any amendments to existing legislation been made to reflect Ramsar commitments? {1.3.5}{1.3.6}

B=No

9.2 Additional information

> Only through EU directives transposition into national law.

9.3 Are wetlands treated as natural water infrastructure integral to water resource management at the scale of river basins? {1.7.1} {1.7.2} KRA 1.7.ii

A=Yes

9.3 Additional information

> It is mandatory to be included in River Basin Management Plans, however difficult and sometimes conflicting interests may not always consider wetlands.

For integrated manage water resources management, the WFD defines the river basin as the main unit of water planning and management, based on the hydrographic basin, which in the Autonomous Region of the Azores corresponds to the Azores Hydrographic Region [RH9], and comprises all the river basins of the nine islands of the archipelago, including their respective groundwater and adjacent coastal waters.

9.4 Have Communication, Education, Participation and Awareness (CEPA) expertise and tools been incorporated into catchment/river basin planning and management (see Resolution X.19)? {1.7.2} {1.7.3}

A=Yes

9.4 Additional information

> According to the River Basin Management Plans, it is mandatory to hold public plan and public consultation sessions, as well as other communication actions, and the River Basin Stakeholders Councils are working. Also, since 2009, the Portuguese Environment Agency has developed an environmental education project based on volunteering in practical actions in aquatic ecosystems with around 2000 participants a year ("Voluntariado Ambiental para a Água"). It aims involvement of the population in the shared management of water resources.

In the Azores watershed/river basin management plans are included actions of public participation and also several educational and awareness measures. Presently, there are 2 centres of environmental interpretation located in catchment basins: "Centro de Monitorização e Investigação das Furnas", located in the catchment basin of Furnas Lagoon, in the Ramsar Site of Complexo Vulcânico das Furnas; "Loja do Parque da Lagoa das Sete Cidades", located in the catchment basin of Sete Cidades Lagoon, in the Ramsar Site Complexo Vulcânico das Sete Cidades.

9.5 Has your country established policies or guidelines for enhancing the role of wetlands in mitigating or adapting to climate change? {1.7.3} {1.7.5} KRA 1.7.iii

A=Yes

9.5 Additional information

> The Strategic Framework for Climate Policy includes, in Annex 3, the National Adaptation Strategy for Climate Change (prepared by APA and involving several entities), in force until 2020, within which ENAAC for the Biodiversity sector arises (elaborated by the ICNF). There are also sectoral plans, such as the flood risk management plan (PGR1) containing measures to guard against the possible impacts of climate change. In the Azores the Regional Program for Climate Change was approved by the Regional Legislative Decree nº. 30/2019/A of 28th November. This program establishes measures that contribute directly and indirectly to the role of wetlands in mitigation and adaptation to climate change.

9.6 Has your country formulated plans or projects to sustain and enhance the role of wetlands in supporting and maintaining viable farming systems? {1.7.4} {1.7.6} KRA 1.7.v

C=Partially

9.6 Additional information

> Occasionally, through the support of a LIFE Environment project dedicated to pond conservation, viable farming strategies are being considered as in the afterlife of the LIFE Chacos project (<http://lifecharcos.lpn.pt/en/pagina.php?id=835>). After the end of this project, o produce guidelines for the sustainable management of the temporary ponds/vernal pools were published.

9.7 Has research to inform wetland policies and plans been undertaken in your country on:

{1.6.1} KRA 1.6.i

Please select only one per square.

a) agriculture-wetland interactions	<input type="checkbox"/> C=Planned <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes
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b) climate change	<input type="checkbox"/> C=Planned <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes
c) valuation of ecosystem services	<input type="checkbox"/> C=Planned <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes

9.7 Additional information

> a) Specially for the development of agri-environmental measures included in the Funding Mechanisms of Portugal 2020.

As an example for research on agriculture-wetland interactions done addressing to inform wetland policies there is the study:

- Rodríguez-González, P.M., Albuquerque, A., Martínez-Almarza, M., & Díaz-Delgado, R. (2017). Long-term monitoring for conservation management: Lessons from a case study integrating remote sensing and field approaches in floodplain forests. *Journal of Environmental Management*, 202, 392-402; <https://www.sciencedirect.com/science/article/pii/S0301479717300853?via%3Dihub>

Concerning agriculture-peatland interactions on the Azores islands, there is the paper:

- Mendes, C., Dias, E., Rochefort L., & Azevedo J (2020) Regenerative succession of Azorean peatlands after grazing: vegetation path to self-recovery. *Wetlands Ecol Manage* 28: 177-190. <https://doi.org/10.1007/s11273-019-09701-3>

- Mendes C. (2018). Estudo dos Processos Ecológicos Promotores de Sucessão Regenerativa de Turfeiras dos Açores, após Pressão Antropogénica, como Modelo de Restauro Ecológico. PhD Dissertation. Azores University.

- Mendes, C., Dias, E., Ponte, M., Mendes, A. & Rochefort, L. (2019) The distribution and naturalness of peatland on Terceira Island (Azores): instruments to define priority areas for conservation and restoration. *Mires and Peat*, 24(35), 1-16. (Online: <http://www.mires-and-peat.net/pages/volumes/map24/map2435.php>); doi: 10.19189/MaP.2018.OMB.371

- Mendes C., Dias E., Rochefort L. & Azevedo J. (2020). Regenerative Succession of Azorean Peatlands after Grazing: Vegetation path to self-recovery. *Wetlands Ecology and Management* <https://doi.org/10.1007/s11273-019-09701-3>

- Dias E., Mendes C. & Pereira D. (2019). Dynamics of regenerative succession of Azorean pastured peatlands. The 28th European Vegetation Survey Meeting in Madrid (Spain), from Monday 2 to Friday 6 September 2019 in Ciudad Universitaria (Moncloa Campus), Spain.

- Mendes C., Dias E. e Rochefort L. (2019). Sucessão Regenerativa de Turfeiras Pastoreadas. Apresentação oral no VIII FIPED Portugal. Fórum Internacional de Pedagogia Campus Universitários de Angra do Heroísmo de 9 a 11 de maio de 2019.

b) As an example for research on climate change done addressing to inform wetland policies there are the following studies:

- the project dedicated to “Riparian forest Values and Ecosystem services in uncertain freshwater futures and Altered Landscapes” - <https://riveal.pt/>;

- the “Alnus Project” (2018-2021): is an European project that aims to develop an alternative strategy of Mediterranean alder forest. <https://isa.ulisboa.pt/proj/alnus>. This project is funded by FCT (Portuguese national funding agency for science, research and technology). The aim is to evaluate the current status of alder decline in the leading-edge of *Phytophthora* spread in Portugal and screening *Alnus glutinosa* resistance to an emerging disease under climatic stressors: predicting alder forest resilience across river networks;

- Rodríguez-González P.R., García, C., Albuquerque, A., Monteiro-Henriques, T., Faria, C., Guimarães, J.B., Mendonça, D., Simões, F., Ferreira, M.T., Mendes, A., Matos, J. & Almeida, M.H. (2019) A spatial stream-network approach assists in managing the remnant genetic diversity of riparian forests. A spatial stream-network approach assists in managing the remnant genetic diversity of riparian forests. *Scientific Reports* 9, 6741 (2019) doi:10.1038/s41598-019-43132-7;

- Mendes, A., Li, J., Zhang, A., Xu, F., Baiyinbaoligao, Fabião, A., Ferreira, T., Goulão, T., Chen, X., Verdonschot, P., Rabaça, J. (2019). Comparing Policy Mixes and Freshwater Ecosystem Restoration Practices Results in Europe and China. *Proceedings of the European Ecological Federation (EEF)*. Lisbon, Portugal.

- Pereira D., Mendes C. & E. Dias (2019). The importance of land cover planning on climatic events: evaluation of peatlands’ buffer impact on 2 Terceira and Flores islands (Azores, Portugal). Poster presented at International Workshop on NATURAL HAZARDS - NatHaz19 - Hydrological Risks. Pico Island 9 and 19 may 2019.

c) There is some few researches being developed under ecosystem services in wetland areas. As an example for research done on valuation of ecosystem services addressing to inform wetland policies there several studies:

- Fabião, A.M. 2019. Restoring the ecological quality of riparian ecosystems – a multi-level approach. PhD Thesis, Instituto Superior de Agronomia, Universidade de Lisboa, Portugal;

- the “Life fluvial” (2017-2020): is a European project to improve and sustainably manage fluvial corridors in the Iberian Atlantic Region. Its partnership is made up of 8 entities, including universities, public bodies, public companies and non-profit entities in Portugal and Spain, and it is being led by University of Oviedo and coordinated in Portugal by the Instituto Superior de Agronomia (University of Lisbon) www.lifefluvial.eu.pt;

- CERES Project (2018-2021), “Connectivity of forest and riparian ecosystems of the Interreg SUDOE”

(European Regional Development Funding). The CERES project aims to develop actions to maintain and/or improve ecological continuity networks to enhance biodiversity and ecological functions allowing the free movement of animal and plant species. Partner in Portugal: Higher Institute of Agronomy (ISA); - Pereira D, Mendes C, Dias E (2019) The importance of land cover planning on climatic events: evaluation of peatlands' buffer impact on the mountains of Terceira and Flores Islands (Azores, Portugal). Pages 91-95 In: Fernandes F, Malheiro A, Chaminé H (eds.) Advances in Natural Hazards and Hydrological Risks: Meeting the Challenge, Proceedings of the 2nd International Workshop on Natural Hazards (NATHAZ'19) Pico Island-Azores, Springer Nature Switzerland.

9.8 Has your country submitted a request for Wetland City Accreditation of the Ramsar Convention, Resolution XII.10 ?

B=No

9.9 Has your country made efforts to conserve small wetlands in line with Resolution XIII. 21?

A=Yes

9.9 Additional information: (If 'Yes', please indicate what actions have been implemented)

If 'Yes', please indicate what actions have been implemented

> The projects "Charcos com Vida" (environmental education) www.charcoscomvida.ciimar.up.pt and "Charcas de Noé/Noah's Ponds", funded by the Ministry for the Environment's Environmental Fund (Call no. 9451/2019) <http://www.charcasdenoe.pt/> are directed to small wetland conservation and restoration.

Target 10

The traditional knowledge innovations and practices of indigenous peoples and local communities relevant for the wise use of wetlands and their customary use of wetland resources, are documented, respected, subject to national legislation and relevant international obligations and fully integrated and reflected in the implementation of the Convention with a full and effective participation of indigenous and local communities at all relevant levels.

[Reference to Aichi Target 18]

10.1 Have case studies, participation in projects or successful experiences on cultural aspects of wetlands been compiled. Resolution VIII.19 and Resolution IX.21? (Action 6.1.6)

A=Yes

10.1 Additional information

If yes please indicate the case studies or projects documenting information and experiences concerning culture and wetlands

> There is an ongoing project (Aesthetic perception by society in riparian ecosystems passive restoration) through a bilateral program between Portugal and France to understand society perception changes across restoration process in riparian areas - Good and beautiful? Associated changes in ecological quality and social perception of passively restored river reaches in Portugal and France. To be presented by Rodríguez-González, P.M., Arsénio, P., Bernez, I., Dias, F.S., Bugalho, M.N., Dufour, S. (2018). ISRivers Conference Lyon, France. There is also the "ID-Natura: Património Natural é Património de Identidade" project about nature and identity (University of Évora).

The CILO project (Óbidos Lagoon Interpretation Centre, Portugal's Participative Budget Project ref. 268) has built one visiting centre and dynamic centers around Lagoa de Óbidos (municipalities of Caldas da Rainha and Óbidos) where, in addition to gathering, researching, and providing information on several branches of knowledge such as ecology, biology, history, sociology and ethnology of the Lagoon (<https://www.lpn.pt/pt/cidadania-ambiental/projetos/centro-de-interpretacao-para-a-lagoa-de-obidos>) Furthermore, in the field of archeology and ethnography, museums and projects for the collection and dissemination of cultural aspects associated with wetlands, promoted in particular by municipalities (e.g. the museum of the tidal mill of Corroios-Seixal, archaeological and ethnographic museum of the district of Setúbal; Minho River - Vila Nova de Cerveira Aquamuseu and traditional river boats of Seixal, Moita, Ria Formosa, Sado river and Guadiana river).

10.2 Have the guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands been used or applied such as (Resolution VII. 8) (Action 6.1.5)

Please select only one per square.

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a) stakeholders, including local communities and indigenous people are represented on National Ramsar Committees or similar bodies	<input type="checkbox"/> D=Planned <input type="checkbox"/> C=In Preparation <input checked="" type="checkbox"/> B=No <input type="checkbox"/> A=Yes
b) involvement and assistance of indigenous people's and community-based groups, wetland education centres and non-governmental organizations with the necessary expertise to facilitate the establishment of participatory approaches	<input checked="" type="checkbox"/> D=Planned <input type="checkbox"/> C=In Preparation <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes

10.2 Additional information

If the answer is “yes” please indicate the use or application of the guidelines

> b) The CILO project (Óbidos Lagoon Interpretation Centre, Portugal’s Participative Budget Project ref. 268) is precisely focused on the involvement and assistance of community-based groups (namely fishermen and shellfishers), including a wetland education centre run by a national non-governmental organization (LPN) with the necessary expertise to facilitate the establishment of participatory approaches, enhancing local dynamics and networking, improving the quality of living of local populations and the sustainable economic and social development of this territory (<https://www.lpn.pt/pt/cidadania-ambiental/projetos/centro-de-interpretacao-para-a-lagoa-de-obidos>).

In the Azores watershed/river basin management plans are included actions of public participation and also several educational and awareness measures. Presently, there are 2 centres of environmental interpretation located in catchment basins: “Centro de Monitorização e Investigação das Furnas”, located in the catchment basin of Furnas Lagoon, in the Ramsar Site of Complexo Vulcânico das Furnas; “Loja do Parque da Lagoa das Sete Cidades”, located in the catchment basin of Sete Cidades Lagoon, in the Ramsar Site Complexo Vulcânico das Sete Cidades.

10.3 Traditional knowledge and management practices relevant for the wise use of wetlands have been documented and their application encouraged (Action 6.1.2)

A=Yes

10.3 Additional information

> There are some cases. For instance, in some Ramsar sites traditional practices of salt production - very important for the maintenance of ecosystem services and biodiversity in the areas - has been documented and encouraged.

The Application process for the Biosphere Reserve “Fajãs de São Jorge” (Azores) has documented traditional knowledge and practices, in both wetlands and non-wetlands areas. When the Biosphere Reserve classification took place in 2016, those practices were encouraged in those territories.

The CILO project (Óbidos Lagoon Interpretation Centre, Portugal’s Participative Budget Project ref. 268) has documented the traditional knowledge and practices for the wise use of the Óbidos Lagoon, organizing learning sessions for the fishermen and shell fishers communities to foster those practices, which include playing videos of other traditional sustainable shell fishing communities in Europe.

Target 11

Wetland functions, services and benefits are widely demonstrated, documented and disseminated. {1.4.} [Reference to Aichi Targets 1, 2, 13, 14]

11.1 Have ecosystem benefits/services provided by wetlands been researched in your country, recorded in documents like State of the Environment reporting, and the results promoted? {1.4.1} KRA 1.4.ii

C1=Partially

11.1 Additional information

If ‘Yes’ or ‘Partially’, please indicate, how many wetlands and their names

> For example, Ria Formosa coastal lagoon, through the following two projects: “RIAValue - Valuation of the ecosystem services delivered by Ria Formosa lagoon” and “SCORE - Sustainability of using Ria Formosa Currents On Renewable Energy production”, both coordinated by CCMAR/ UALG.

In Azores, some studies related to wetland ecosystems are done, namely in Azores University - GEVA (Applied Plant Ecology Group). For example, the study of Pereira, D.M.T. 2015, evaluated the ecosystem value of peats in Azores, specifically for carbon and hydrological cycles through SIG modeling (published in Wetlands Magazine).

11.2 Have wetland programmes or projects that contribute to poverty alleviation objectives or food and water security plans been implemented? {1.4.2} KRA 1.4.i

X=Unknown

11.3 Have socio-economic values of wetlands been included in the management planning for Ramsar Sites and other wetlands? {1.4.3}{1.4.4} KRA 1.4.iii

C=Partially

11.3 Additional information

If 'Yes' or 'Partially', please indicate, if known, how many Ramsar Sites and their names

> Socio-economic aspects are included in the description of the Ramsar sites and their important aspects to be taken into account, however, the socio-economic valuation made in a systematic and methodologic manner is not yet done.

In the mainland Portugal the Ramsar sites of Bertandos and São Pedro de Arcos Lagoons and the Albufeira Lagoon are examples of implemented management sites plans considering the socio-economic values.

Concerning other wetlands, the River Basin Management Plans include management measures that consider the socio-economic component.

Azores Region: The management plans of the Azores Natural Parks, where most of the Ramsar Sites are included, contain actions that ensure socio-economic values of wetlands.

In Praia da Vitória marsh, the socio-economic values were important arguments for the implementation of certain actions, namely the increase of the wet area and to improve water quality. Birdwatching activities are also an indicator of socio-economic interest. The preservation of the lakes has a special relevance, since, in addition to the environmental value as support for aquatic life and strategic freshwater reserves, they have a high landscape value of great sociocultural and tourist importance. Its exceptional importance is also revealed in the functions of regularization and stabilization of the dominant hydrological regime, as well as the recharge of aquifers, springs and water courses. The lakes'recovery strategy was based on changing land uses in its river basin whose results are expected in the medium and long term. The measures that are being implemented will certainly bring significant improvements in the quality of water bodies, which will translate into priceless environmental and landscape benefits.

11.4 Have cultural values of wetlands been included in the management planning for Ramsar Sites and other wetlands including traditional knowledge for the effective management of sites (Resolution VIII.19)? {1.4.3}{1.4.4} KRA 1.4.iii

C=Partially

11.4 Additional information

If 'Yes' or 'Partially', please indicate, if known, how many Ramsar Sites and their names

> In some Ramsar sites, the cultural values are promoted and disseminated through projects, studies, events (e.g. Arzila marsh - mats; Sado estuary - archeology and traditional architecture; Castro Marim saltmarshes and Mondego estuary - traditional salinas).

Also in other wetlands the cultural values are included in the management planning, in particular through the creation of museums and other dissemination projects, as mentioned above (issue 10.2).

The management plans in Ramsar sites, classified as protected areas, have normally inventories of archeological sites and other patrimonial values and clauses protecting them. For example, the management plan of the Ramsar Site "Fajãs of Caldeira and Cubres Lagoons", suggests management actions and measures that guarantee sustainable economic activities, the preservation of natural resources and meet the social, cultural and economic expectations of local population.

Target 12

Restoration is in progress in degraded wetlands, with priority to wetlands that are relevant for biodiversity conservation, disaster risk reduction, livelihoods and/or climate change mitigation and adaptation. {1.8.} [Reference to Aichi Targets 14 and 15].

12.1 Have priority sites for wetland restoration been identified? {1.8.1} KRA 1.8.i

A=Yes

12.1 Additional information

> Priority sites for wetland restoration were identified (and the measures implemented), but not in a systematic manner. For example there are some projects: 1) on river habitat restoration aimed the reestablishment of the longitudinal continuity interrupt due to infrastructures/obstacles for migratory fish and endangered freshwater fish (e.g. "Habitat restoration for diadromous fish in Mondego river" - <http://www.rhpdm.uevora.pt/>; 2) "Restoration of fluvial continuity in Vascão river"; "LIFE Águeda - Conservation and management actions for migratory fish in the Vouga river basin"-

http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=6264&docType=pdf); 3) the recently launched LIFE Fluvial (LIFE16 NAT/ES/000771) project will be carried out in the Ramsar site of Bertandos and São Pedro de Arcos lagoons, in Northern Portugal (coord. in Portugal by Rodríguez-González P.M., Instituto Superior de Agronomia). The main goal of the project is the development of conservation and sustainable management approaches for wetland forests in the Atlantic region of the Iberian Peninsula. (<https://www.facebook.com/lifefluvial/>); 4) the “Charcas de Noé/Noah’s Ponds” project, funded by the Ministry for the Environment’s Environmental Fund (Call no. 9451/2019) <http://www.charcasdenoe.pt/> has identified, mapped and selected priority sites for small wetland restoration in the Low Mondego basin and the nearby “Dunas de Mira, Gândara e Gafanhas” Special Conservation Zone; 5) in the Ria Formosa coastal lagoon, an inventory of abandoned aquaculture and saline tanks was carried out with potential to be restored as areas for nature conservation.

In the framework of a LIFE project under construction by the Regional Directorate of the Environment of Azores, there were identified several habitats and sites as priority for wetland restoration.

12.2 Have wetland restoration/rehabilitation programmes, plans or projects been effectively implemented? {1.8.2} KRA 1.8.i

A=Yes

12.2 Additional information

If ‘Yes’ or ‘Partially’, please indicate, if available the extent of wetlands restored

> There are several examples of wetland restoration/rehabilitation projects and plans implemented, as mentioned above (issue 12.1).

12.3 Have the Guidelines for Global Action on Peatlands and on Peatlands, climate change and wise use (Resolutions VIII.1 and XII.11) been implemented including?

Please select only one per square.

a) Knowledge of global resources	<input type="checkbox"/> Y=Not relevant <input type="checkbox"/> X=Unknown <input checked="" type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes
b) Education and public awareness on peatlands	<input type="checkbox"/> Y=Not relevant <input type="checkbox"/> X=Unknown <input checked="" type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes
c) Policy and legislative instruments	<input type="checkbox"/> Y=Not relevant <input type="checkbox"/> X=Unknown <input checked="" type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes
d) Wise use of peatlands	<input type="checkbox"/> Y=Not relevant <input type="checkbox"/> X=Unknown <input checked="" type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes
e) Research networks, regional centres of expertise, and institutional capacity	<input type="checkbox"/> Y=Not relevant <input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes
f) International cooperation	<input type="checkbox"/> Y=Not relevant <input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes

g) Implementation and support	<input type="checkbox"/> Y=Not relevant <input type="checkbox"/> X=Unknown <input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input checked="" type="checkbox"/> B=No <input type="checkbox"/> A=Yes
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12.3 Additional Information

If 'Yes' or 'Partially', please indicate, the progress in implementation

> A Research network on peatlands has started working between research centres of the Universities of Lisbon - CEG/IGOT, University of Coimbra - Centre for Functional Ecology, and Greifswald (Germany), encompassing its Greifswald Mire Centre, Michael Succow Foundation and Duene e.V. (or Institute Duene, scientific non-profit association for sustainable development of landscapes of the earth), to apply for research projects and transfer knowledge on the wise use of peatlands and apply it in Portugal, including economy and society involvement. One PhD thesis on portuguese peatlands is being supervised under this cooperation. The IUCN UK Peatland Programme is also being invited to join the project.

Target 13

Enhanced sustainability of key sectors such as water, energy, mining, agriculture, tourism, urban development, infrastructure, industry, forestry, aquaculture and fisheries when they affect wetlands, contributing to biodiversity conservation and human livelihoods

[Reference to Aichi Targets 6 and 7]

13.1 Are Strategic Environmental Assessment practices applied when reviewing policies, programmes and plans that may impact upon wetlands? {1.3.3} {1.3.4} KRA 1.3.ii

A=Yes

13.1 Additional information

> The European Directive 2001/42/EC on the assessment of the effects of certain plans and programs on the environment, applied in Portugal through specific environmental regulations, combined with regulations that determine wetlands as sensitive areas (most of them designated as Sites of Community Importance or Special Protection Areas, under the Habitats or Birds Directives respectively), requires Strategic Environmental Assessment (SEA) as mandatory for a variety of plans and programs (i.e. prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use).

In the Azores Autonomous Region the assessment of the effects of certain public and private projects on the environment is applied through the Regional Legislative Decree N.30/2010/A of 15th November, that supports the Strategic Environmental Assessment (SEA).

Thus, most development plans/programmes have been subject to proper SEA procedures.

13.2 Are Environmental Impact Assessments made for any development projects (such as new buildings, new roads, extractive industry) from key sectors such as water, energy, mining, agriculture, tourism, urban development, infrastructure, industry, forestry, aquaculture and fisheries that may affect wetlands?

{1.3.4} {1.3.5} KRA 1.3.iii

A=Yes

13.2 Additional information

> The actions carried out in wetlands are controlled by the public authorities. Also, environmental impact assessments identify these situations and they are completed by the end of the project implementation phase as a result of compensation or mitigation measures.

As far as aquaculture and fisheries are concerned, legislative measures consider the resources sustainability issue. Environmental considerations in the licensing process is an important part. A new legal framework on inland fisheries was created in 2017 that updates the previous legislation, with more than half a century, that makes an ecosystem approach to management, assuming the conservation of nature and biodiversity and the state of the water bodies as principles to achieve the sustainable management of resources. Regarding aquaculture, there was an integrated reflection that resulted in the strategic plan for aquaculture in 2014, which promotes good practices for the conservation of biodiversity.

In the Azores Autonomous Region, the Environmental Impact Assessments of projects is applied through the Regional Legislative Decree N.30/2010/A of 15th November.

Goal 4. Enhancing implementation

[Reference to Sustainable Development Goals 1, 2, 6, 9, 10, 11, 13, 14, 15, 17]

Target 15

Ramsar Regional Initiatives with the active involvement and support of the Parties in each region are reinforced and developed into effective tools to assist in the full implementation of the Convention. {3.2.}

15.1 Have you (AA) been involved in the development and implementation of a Regional Initiative under the framework of the Convention? {3.2.1} KRA 3.2.i

A=Yes

15.1 Additional information

If 'Yes' or 'Planned', please indicate the regional initiative(s) and the collaborating countries of each initiative
 > Portugal have been involved since the very beginning in the MedWet initiative for the Mediterranean, participating in the MedWet Committee and other meetings of the initiative whenever possible.

15.2 Has your country supported or participated in the development of other regional (i.e., covering more than one country) wetland training and research centres? {3.2.2}

A=Yes

15.2 Additional information

If 'Yes', please indicate the name(s) of the centre(s)

> The University of Lisbon participates in the ERASMUS+ Program LANDCARE; ERASMUS + KA203 - Strategic Partnerships for Higher Education, addressing restoration of several degraded ecosystems including freshwater wetlands and coastal systems in the Mediterranean region. The project aims to enhance training capacities in ecological restoration of degraded ecosystems. The partnership is composed by eight members, one academic and one professional partner from each participant country (Spain, Portugal, Greece and Italy). The project activities include Intensive courses, workshops, conferences and development of innovative tools to improve training in ecological restoration. <http://landcare.es/>

Furthermore, there is a direct participation (CEF/ISA/ULisboa) in the development of Long-Term monitoring of wetland forests in Doñana National Park, Spain: Rodríguez-González, P.M., Albuquerque, A., Martínez-Almarza, M., & Díaz-Delgado, R. (2017). Long-term monitoring for conservation management: Lessons from a case study integrating remote sensing and field approaches in floodplain forests. *Journal of Environmental Management*, 202, 392-402

<https://www.sciencedirect.com/science/article/pii/S0301479717300853?via%3Dihub>

The CEG/IGOT has started a direct participation in the Greifswald Mire Centre world activity toward research on the mires and peatlands of the world.

Target 16

Wetlands conservation and wise use are mainstreamed through communication, capacity development, education, participation and awareness {4.1}
 [Reference to Aichi Targets 1 and 18]

16.1 Has an action plan (or plans) for wetland CEPA been established? {4.1.1} KRA 4.1.i

Even if no CEPA plans have been developed, if broad CEPA objectives for CEPA actions have been established, please indicate this in the Additional information section below

Please select only one per square.

a) At the national level	<input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input checked="" type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> C=In Progress
b) Sub-national level	<input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input checked="" type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> C=In Progress
c) Catchment/basin level	<input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input checked="" type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> C=In Progress

d) Local/site level	<input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes <input type="checkbox"/> C=In Progress
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16.1 Additional information

If 'Yes' or 'In progress' to one or more of the four questions above, for each please describe the mechanism, who is responsible and identify if it has involved CEPA NFPs

> a) There are no national action plan (or plans) for wetland CEPA, however the national strategy and environmental education addresses the issue of water and natural values.

c) Some Hydrographic Region Management Plans presents CEPA measures.

The "PEIXES NATIVOS Project", about native fish, financed by the Environmental Fund, results from a partnership between the Institute of Applied Psychology (ISPA) and Águas do Tejo Atlântico, SA. Its main objectives are: 1) Scientific monitoring of endangered species of native Cyprinid fish, in summer and 2) sensitization of the school community and its involvement in monitoring actions. The hydrographic network targeted by the project is the streams of the littoral Centro and Oeste de Portugal. <https://peixesnativos.pt> In the Azores Autonomous Region there are no CEPA plans specifically for wetlands, but the Regional Plan for Environmental Education and Public Awareness of Azores includes the promotion of the World Wetlands Day, annually. The Island Natural Parks and the Praia da Vitória Municipality have annual plans that include CEPA actions throughout the year, but it is not a Wetland CEPA plan exclusively.

d) Most projects on wetlands conservation considers the CEPA component whether or not there is a plan (e.g. Habitat restoration for diadromous fish in river Mondego" - <http://www.rhpdm.uevora.pt/> and LIFE Saramugo - Conservation of the Saramugo (*Anaocypris hispanica*) in the Guadiana basin (LIFE13 NAT/PT/000786) - http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=4992); or "Lousada Charcos" (charcos=ponds) project, within the scope of the IMPRINT + project, co-financed by the Erasmus + program, is coordinated by the Municipality of Lousada. Its objective is to define a network of aquatic habitats for the conservation of biodiversity, the management of water resources and environmental education and awareness in the municipality. The project is based on three lines of action: i) mapping and characterizing aquatic environments; ii) construction and restoration of ponds and other habitats; iii) environmental education and community involvement. To date, 15 new ponds have been built, involving more than 350 volunteers from schools and other institutions in the municipality. www.cm-lousada.pt/lousadacharcos

and Project "Lagoons and ponds of Rio Ave" (2019), financed by the Environmental Fund, and coordinated by the municipality of Guimarães. It aims to educate all ages, for general characteristics of the wetlands and riparian gallery, for their functions and threats. www.labpaisagem.pt/12524-2/

16.2 How many centres (visitor centres, interpretation centres, education centres) have been established?

{4.1.2} KRA 4.1.ii

a) at Ramsar Sites

E=Exact Number (centres)

> 0

16.2 How many centres (visitor centres, interpretation centres, education centres) have been established?

{4.1.2} KRA 4.1.ii

b) at other wetlands

E=Exact Number (centres)

> 1

16.2 Additional information

If centres are part of national or international networks, please describe the networks

> a) In the triennium 2018/2019/2020, no new centre was inaugurated in a Ramsar Site. However, there are currently 18 environmental interpretation centers operating at Ramsar sites: Centro de Interpretação Ambiental das Lagoas de Bertandos (Ramsar site of Bertandos and S. Pedro of Arcos Lagoons), Núcleo Museológico do Sal (Ramsar site of Mondego Estuary), Centro de interpretação da Reserva Natural do Paul de Arzila (Ramsar site of Arzila Marsh), Centro de interpretação da Reserva Natural do Paul do Boquilobo (Ramsar site of Boquilobo Marsh), Centro Ecológico Educativo do Paul de Tornada - Professor João Evangelista (Ramsar site of Tornada Marsh), CISE-Centro de Interpretação da Serra da Estrela (Ramsar site of Estrela Mountain upper Plateau and upper), Centro de Ciência Viva do Alviela-Carsoscópio (Ramsar site of Mira Minde Polje and related Springs), EVOA - Espaço de Visitação e Observação de Aves (Ramsar site of Tejo Estuary), Centro Interpretativo da Lagoa Pequena (Ramsar site of Albufeira Lagoon), Moinho de Maré da Mourica (Ramsar site of Sado Estuary), Centro de Interpretação do Monte do Paio (Ramsar site of Santo André and Sancha Lagoons), Centro de Educação Ambiental de Marim and Centros de Ciência Viva de Faro e de Tavira (Ramsar site of Ria Formosa), Centro de Informação e Interpretação da Reserva Natural do Sapal de Castro Marim and

Centro de Interpretação do Território (Ramsar site of Castro Marim saltmarshes), Centro de Interpretação da Fajã da Caldeira de Santo Cristo (Ramsar Site of Fajãs of Caldeira and Cubres Lagoons; Centro de Visitantes da Furna do Enxofre (Ramsar Site of Caldeira da Graciosa); Centro de Monitorização e Investigação das Furnas (Ramsar Site of Complexo Vulcânico das Furnas); Loja do Parque da Lagoa das Sete Cidades (Ramsar Site Complexo Vulcânico das Sete Cidades);

b) In the triennium 2018/2019/2020, a new centre was established in Óbidos Lagoon, financed by a Participatory Budget Project ref. 268. CILO - Centro de Interpretação para a Lagoa de Óbidos, is managed by the Portuguese NGO - Liga para a Proteção da Natureza (LPN) and Paul da Goucha funded by Aliparça City Hall.

16.3 Does the Contracting Party {4.1.3} KRA 4.1.iii

Please select only one per square.

a) promote stakeholder participation in decision-making on wetland planning and management	<input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes
b) specifically involve local stakeholders in the selection of new Ramsar Sites and in Ramsar Site management?	<input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes

16.3 Additional information

If 'Yes' or 'Partially', please provide information about the ways in which stakeholders are involved

> a) e b) In Portugal, all planning and spatial planning actions related to water resources involve the population in a formal way through public consultation processes (e.g. environmental impact assessment, planning of protected areas, hydrographic region management plans), not specifically for wetlands.

In general stakeholder engagement is more and more taken into account, but the way people are called to participate influences the success of these actions. In general, participation is lower according to the formal methods (due to Portuguese cultural aspects participatory processes are not easy and difficult to gather interest parties) and with more results in co-management models.

In the Azores Autonomous Region the stakeholders are invited to participate in public consultation sessions of all types of management political instruments. In accordance with the current legal framework, the preparation of water resources planning instruments is accompanied by the Regional Council for the Environment and Sustainable Development, by an advisory committee with representatives from different sectors, and all citizens have the right to participate, from the beginning of the process of the plans. Also, each management unit of the classified areas in each island of the Azores, namely the Island Natural Parks, has an Advisory Council, which meets annually, where all the stakeholders are represented. There is the exception of the Paul da Praia da Vitória Ramsar Site, which is managed by the Praia da Vitória municipality, and where the stakeholder opinion was taken into account for the implementation of some of the concrete actions developed under the LIFE CWR Project.

16.4 Do you have an operational cross-sectoral National Ramsar/Wetlands Committee? {4.1.6} KRA 4.3.v

B=No

16.5 Do you have an operational cross-sectoral body equivalent to a National Ramsar/Wetlands Committee? {4.1.6} KRA 4.3.v

C=Partially

16.5 Additional information

If 'Yes', indicate a) its membership; b) number of meetings since COP13; and c) what responsibilities the Committee has

> There are river basin councils that span the whole country which is planned to meet periodically.

16.6 Are other communication mechanisms (apart from a national committee) in place to share Ramsar implementation guidelines and other information between the Administrative Authority and a), b) or c) below? {4.1.7} KRA 4.1.vi:

Please select only one per square.

a) Ramsar Site managers	<input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input checked="" type="checkbox"/> A=Yes
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b) other MEA national focal points	<input type="checkbox"/> D=Planned <input type="checkbox"/> C=Partially <input checked="" type="checkbox"/> B=No <input type="checkbox"/> A=Yes
c) other ministries, departments and agencies	<input type="checkbox"/> D=Planned <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> B=No <input type="checkbox"/> A=Yes

16.6 Additional information

If 'Yes' or 'Partially', please describe what mechanisms are in place

> a) The ICNF maintains close contact with Ramsar site managers, in particular with regard to the commemoration of World Wetlands Day, the updating of the Ramsar Information Sheet on the Ramsar Sites (RIS) and the elaboration of the Ramsar National Report.

16.7 Have Ramsar-branded World Wetlands Day activities (whether on 2 February or at another time of year), either government and NGO-led or both, been carried out in the country since COP13? {4.1.8}

A=Yes

16.7 Additional information

> The WWD has been celebrated annually all over the country at Ramsar Sites and other wetlands, through a diverse set of activities (e.g. workshops, guided tours and educational activities) and promoted by several entities (the administration, non-governmental organizations, universities, municipalities, among others). The program consists of events organized by both government and non-governmental organizations.

16.8 Have campaigns, programmes, and projects (other than for World Wetlands Day-related activities) been carried out since COP13 to raise awareness of the importance of wetlands to people and wildlife and the ecosystem benefits/services provided by wetlands? {4.1.9}

A=Yes

16.8 Additional information

If these and other CEPA activities have been undertaken by other organizations, please indicate this
> Ramsar sites and elsewhere, there are educational programs throughout the year, promoted in particular by the administration, municipalities and NGOs. There has been an increase in CEPA projects and actions. During this three-year period Portugal has suffered a period of drought and therefore campaigns have been developed to raise awareness of water saving.

Some national projects aimed engage people in monitoring and conservation of wetlands, such as the Volunteer for Water (Voluntariado Ambiental para a Água, of the APA/ARH-Algarve), the River Project (Projecto Rios, of the NGO's ASPEA, LPN, APG and FEUP), Bandeira Azul project (of the NGO ABAE) and CoastWach Portugal (of the NGO GEOTA).

Ria Formosa Natural Park, since 2017 celebrates the natural and cultural values of Ria Formosa. The project "A Semana da Ria Formosa" (week of ria formosa) is dedicated to environmental awareness and directed to the Schools in the five municipalities covered by the Ria Formosa-PNRF Natural Park. Aiming to promote the pedagogical sharing of experiences and, simultaneously, the natural values of this territory the program offer great diversity of activities. The launch of the Semana da Ria Formosa Project was made in celebration of World Wetlands Day - February 2. (2017) with the signing of a protocol/agreement between 17 entities: today more than 21 entities participate in this projet.

In the Ramsar Site Paul da Praia da Vitória (Azores) there is a new Interpretation Centre (Centro de Interpretação Ambiental da Pedreira do Cabo da Praia), that focus on the promotion of the Green Wetland Coastal Infrastructure of Praia da Vitória. On all Ramsar Sites of the Azores Authonomous Region the World Wetland Day is officialy celebrated vy the Azorean Government, and also included in the educational programas "School Park Program", "Open Park Program" and " Junior Nature Ranger Program".

NGO's like LPN, Geota, and Tagis have started officialy celebrating the World Wetland Day (February 2nd) with educational iniatiaves.

Target 17

Financial and other resources for effectively implementing the fourth Ramsar Strategic Plan 2016 – 2024 from all sources are made available. {4.2.}

[Reference to Aichi Target 20]

17.1a Have Ramsar contributions been paid in full for 2018, 2019 and 2020? {4.2.1} KRA 4.2.i

A=Yes

17.2 Has any additional financial support been provided through voluntary contributions to non-core

funded Convention activities? {4.2.2} KRA 4.2.i

B=No

17.3 [For Contracting Parties with a development assistance agency only ('donor countries')]: Has the agency provided funding to support wetland conservation and management in other countries? {3.3.1} KRA 3.3.i

A=Yes

17.3 Additional information

If 'Yes', please indicate the countries supported since COP12

> Portugal has some intervention as a donor in Portuguese-speaking countries (Cabo Verde, Guiné-Bissau, São Tomé e Príncipe, Angola, Mozambique and Timor-Leste), through CPLP (the Portuguese Speaking Countries Community), IPAD (the Portuguese Institute for Development Support) and Camões Institute. Within the scope of the financial and technology support to developing countries some actions related to the water and sewerage sectors were developed (e.g. in Guinea-Bissau and Cabo Verde), however no specific action for wetlands and Ramsar Convention has been undertaken through these mechanisms (2016 report, by Portuguese Environment Agency/Climate Change Department - https://www.apambiente.pt/_zdata/Alteracoes_Climaticas_Relatorios/Art16MMR/ResubArt16MMR_PT2015final.pdf).

17.4 [For Contracting Parties with a development assistance agency only ('donor countries')]: Have environmental safeguards and assessments been included in development proposals proposed by the agency? {3.3.2} KRA 3.3.ii

X=Unknown

17.5 [For Contracting Parties that have received development assistance only ('recipient countries')]: Has funding support been received from development assistance agencies specifically for in-country wetland conservation and management? {3.3.3}

Z=Not Applicable

17.6 Has any financial support been provided by your country to the implementation of the Strategic Plan?

B=No

Target 18

International cooperation is strengthened at all levels {3.1}

18.1 Are the national focal points of other MEAs invited to participate in the National Ramsar/Wetland Committee? {3.1.1} {3.1.2} KRAs 3.1.i & 3.1.iv

D=Planned

18.2 Are mechanisms in place at the national level for collaboration between the Ramsar Administrative Authority and the focal points of UN and other global and regional bodies and agencies (e.g. UNEP, UNDP, WHO, FAO, UNECE, ITTO)? {3.1.2} {3.1.3} KRA 3.1.iv

B=No

18.3 Has your country received assistance from one or more UN and other global and regional bodies and agencies (e.g. UNEP, UNDP, WHO, FAO, UNECE, ITTO) or the Convention's IOPs in its implementation of the Convention? {4.4.1} KRA 4.4.ii.

The IOPs are: BirdLife International, the International Water Management Institute (IWMI), IUCN (International Union for Conservation of Nature), Wetlands International, WWF and Wildfowl & Wetland Trust (WWT).

A=Yes

18.3 Additional information

If 'Yes' please name the agency (es) or IOP (s) and the type of assistance received

> Some organizations in the country are partners of the mentioned IOPs (e.g. BirdLife International -NGO SPEA; Wetlands International -ICNF/CEMPA; WWF - NGO WWF Portugal).

18.4 Have networks, including twinning arrangements, been established, nationally or internationally, for knowledge sharing and training for wetlands that share common features? {3.4.1}

A=Yes

18.4 Additional information

If 'Yes' or 'Partially', please indicate the networks and wetlands involved

> Some of the projects / networks nationally and internationally about wetlands:

1) "VALAGUA - Valorização ambiental e gestão integrada da água e dos habitats no Baixo Guadiana transfronteiriço (Interreg Espanha-Portugal project 2015-2019; <http://www.poctep.eu/pt-pt/2014-2020/valoriza%C3%A7%C3%A3o-ambiental-e-gest%C3%A3o-integrada-da-%C3%A1gua-e-dos-habitats-no-baixo-guadiana>); 2) "Sistema de Gestión y control para la mejora de la eficiencia en la depuración y la calidad ambiental de aguas a nivel transfronterizo" (Interreg Espanha-Portugal project , 2017; <http://www.poctep.eu/pt-pt/2014-2020/sistema-de-gesti%C3%B3n-y-control-para-la-mejora-de-la-eficiencia-en-la-depuraci%C3%B3n-y-la-calidad>); 3) LIFE Saramugo - Conservation of the Saramugo (*Anaocypris hispanica*) in the Guadiana basin-Portugal (LIFE13 NAT / PT / 000786, 2014-2018, coordinated by NGO LPN with the partnership of public institutions-University of Évora and ICNF- and private; <http://www.lifesaramugo.lpn.pt/pt>); 4) Aqua & AMBI project - Support to the management of the wetlands of the Iberian Southwest coast: interactions between Aquaculture and the environment in the cross-border region Alentejo-Algarve-Andalusia (INTERREG-POCTEP project; <http://www.europapress.es/esandalucia/huelva/noticia-ifapa-participa-proyecto-transfronterizo-aquaambi-mejorar-populaciones-natural-moluscos-bivalvos-20170625144114.html>"); 5) MIGRA MIÑO-MINHO project (Interreg Espanha-Portugal; <http://migraminho.org/>), which aims to improve the protection and sustainable management of the international hydrographic region of the Minho River, through an improvement of fluvial habitat and the conservation status of the migrating fish populations; 6) RISC MINHO-LIMA project (POCTEP; <http://www.apambiente.pt/ajaxpages/destaque.php?id=670>) which aims the prevention and training of the international watersheds of the Minho and Lima rivers against extreme events and contemplates as main actions the elaboration of a new inventory of water resources in the international hydrographic region, taking into account the effect of climate change on the Portuguese territory and Spanish; 7) Portugal is involved in MEDWET platform and others that frequently share ideas, information, knowledge and aggregates partnerships to address common problems on Mediterranean wetland management; 8) A large network (27 countries) has been established through a new COST ACTION (Converges (CA16208): Knowledge conversion for enhancing management of European riparian ecosystems and services" approved in June 2017, where Portugal is leading (Vice Chair- Patricia M. Rodríguez González, CEF/ISA/Ulisboa). This action aims to establish a baseline in the state of knowledge regarding riparian vegetation, coordinate research efforts, and contribute to knowledge conversion from science to practitioners and to promote practitioners research interests in the scientific community. CONVERGES is promoting effective communication and sharing of knowledge among scientists from different disciplines and from different countries, who formerly worked in relative isolation, in order to build a new synthesis from an essential interdisciplinary baseline to bridge effectively among research approaches across Europe.

WEBPAGE http://www.cost.eu/COST_Actions/ca/CA16208; 9) A network of EU partners is developing a cooperation project on Water Management and Ecological security with China to develop restoration plans in river basins (Haihe and Nanxi) and a lake (Taihu) sharing EU knowledge on restoration of freshwater habitats. This project is funded through Partnership Instrument and the Portuguese Ministry of Environment is a key partner.

In the Azores, in 2020, within the scope of INTERREG V - MITIMAC project, 2 projects of cooperation in the Macaronesian region were established: (1) HIDROBAL - Evaluation and spatialization of the water balance and characterization of the interaction between surface and groundwater; (2) ECOAGUA - Methodological definition and applications for characterizing the interaction between groundwater and ecosystems on volcanic islands.

18.5 Has information about your country's wetlands and/or Ramsar Sites and their status been made public (e.g., through publications or a website)? {3.4.2} KRA 3.4.iv

A=Yes

18.5 Additional information

> In Portugal the dissemination of wetlands and / or Ramsar Sites is done through the website, but also through publications, lectures and other events. This dissemination is promoted by national institutions with responsibility for the management of wetlands and their natural heritage (e.g. APA* and ICNF*), but also by entities coordinating national and international wetland projects (eg NGOs, universities) and municipalities. (*websites <https://www.apambiente.pt/index.php?ref=16&subref=7> - APA website -Information about Wetlands namely Water River Basin Management Plans and Water resources; www.icnf.pt)

The Autonomous Region of the Azores publishes a Ramsar page in the official website

<http://www.azores.gov.pt/Gra/srrn-natureza/menus/secundario/Áreas+RAMSAR/> and more general contents in Water Resources in the official website <http://www.azores.gov.pt/Gra/srrn-drotrh/>. Also in the SIARAM project website there is content on Wetlands: http://siaram.azores.gov.pt/vegetacao/zonas-humidas/_intro.html .

Within the scope of the LIFE CWR Project an official website was created which contains updated information on the wetlands of the Praia da Vitória municipality, namely Paul da Praia da Vitória (Ramsar Site) and information on the actions developed under this project. The website can be consulted at:

<http://www.lifecwr.com>.

18.6 Have all transboundary wetland systems been identified? {3.5.1} KRA 3.5.i

A=Yes

18.6 Additional information

> All transboundary wetland systems are well known and include both riverine and estuarine systems on the border with Spain. Most of these systems are designated as Natura 2000 according to the Birds and Habitats Directives of the European Union, although just one of them (Castro Marim Saltmarshes) is designated as a Ramsar site.

The Water Framework Directive (Directive 2000/60 / EC) stipulates that in the case of international river basin districts located entirely on EU territory, such as those shared between Portugal and Spain, Member States must ensure coordination of the Hydrologic Region Management Plans developed by each party at national level to achieve the objectives of the Directive.

In this regard, the Portuguese and Spanish authorities agreed to carry out this coordination using the Albufeira Convention (on cooperation for the protection and sustainable use of waters of the Portuguese-Spanish watersheds of 1998) and ensuring the coordination of the 2016-2021 plans of the two countries for the international hydrographic regions of Minho and Lima, Douro, Tejo and Guadiana, and having been elaborated an Coordination Document

(<https://www.apambiente.pt/index.php?ref=16&subref=7&sub2ref=9&sub3ref=1458>).

18.7 Is effective cooperative management in place for shared wetland systems (for example, in shared river basins and coastal zones)? {3.5.2} KRA 3.5.ii

A=Yes

18.7 Additional information

If 'Yes' or 'Partially', please indicate for which wetland systems such management is in place

> A management of the river flows, in the rivers with large hydroelectric dams, is done jointly by Portugal and Spain, especially important for the prevention of large floods and the shared use of the electricity capacity.

Also, on Natura 2000 areas and transboundary protected areas, contacts are regularly done between the administrations of the Protected Areas of both sides, e.g. Douro Internacional and Tejo Internacional.

There are a number of agreements and partnerships with Spain for joint management of shared river basins (e.g. under the Albufeira Conventio; POCTEP - Operational Program for Cross-Border Cooperation between Spain and Portugal and SUDOE projects; Permanent Commission of the Minho River/border agreement of the Ministry of Foreign Affairs).

A number of projects have been developed between the Azores and the other Macaronesia regions (Madeira, Portugal; Canaries, Espanha - Mistic Seas I, II, EMFF) with a particular focus in coastal areas, namely the nesting areas of seabirds. The Regional Directorate for Sea Affairs is responsible for the monitoring report of seabirds on those areas (namely islets) under the MSFD framework (descriptor 1). Other projects dealing with seabirds and designed to mitigate human pressures on its colonies are LUMINAVES (Interreg MAC, FEDER) also run by a consortium composed of macaronesia partners from the Azores (DRAM; SPEA Azores) as well as partners in Madeira and in Canaries.

18.8 Does your country participate in regional networks or initiatives for wetland-dependent migratory species? {3.5.3} KRA 3.5.iii

A=Yes

18.8 Additional information

> Many wetlands are part of the Natura 2000 network for their value for the conservation of migratory species. Also, the monitoring data of those sites (collected namely by ICNF/CEMPA and SPEA) is included in regional or international schemes, e.g. African-Eurasian Migratory Waterbird Agreement (AEWA) and International Waterfowl Counts (IWC).

Target 19

Capacity building for implementation of the Convention and the 4th Ramsar Strategic Plan 2016 - 2024 is enhanced.

[Reference to Aichi Targets 1 and 17]

19.1 Has an assessment of national and local training needs for the implementation of the Convention been made? {4.1.4} KRAs 4.1.iv & 4.1.viii

B=No

19.2 Are wetland conservation and wise-use issues included in formal education programmes?

A=Yes

19.2 Additional information

If you answer yes to the above please provide information on which mechanisms and materials

> The national school curriculum addresses the issue of wetlands in some disciplines and grades, but does not in a systematic and planned way.

In the The Azores Regional Curriculum for Basic Education we find this issue in the school curricula in several

disciplines, for several grades. The Azores Regional Curriculum for Basic Education (Basic Education comprises the 1st Cycle (4 years, from 6 to 9 years of age), 2nd Cycle (2 years, from 10 to 12 years of age) and 3rd Cycle (3 years, from 13 to 15 years of age), defines two Transversal Themes: Sustainable Development and "Açorianaity" - together they address the local dimension of wise use of resources as tool for sustainable development education. At each discipline level, we find several subjects related, in the school manuals: In the discipline of Natural Sciences: 5th Grade - the importance of water for living organisms; biodiversity and living organisms interaction with their environment; 8th Grade - the chapter "Sustainability on Earth": ecosystems; sustainable use of natural resources.

In the discipline of Geography: 5th Grade - Location of the Iberian Peninsula and its natural framework (climate, rivers, vegetation, geology); 6th Grade - Understanding protected areas and nature conservation measures; 7th Grade - Understanding the relations between different climates and plant formations in hot, temperate and cold regions on the planet; dynamics of a catchment basin; dynamics of a coastal line; 8th Grade - World population distribution and migrations; world cultural diversity; natural resources; 9th Grade - Risks, environment & society (natural risks; environmental management for sustainable development; individual role and international cooperation).

In the discipline of Biology (High School Level): 10th Grade - Life and living organisms; what happens to an ecosystem dynamics when it is subject to changes; 11th Grade - biodiversity, science and society.

In the discipline of Geology (High School Level): 11th Grade - Anthropic occupation and problems in territorial planning and management: case study of catchment basins and case study of coastal zones.

There is a Common Frame of Reference for Education in Sustainability, promoted by the Ministry of Education, that addresses several themes related to wetland and conservation such as: landscape and territory, climate change, water, biodiversity conservation. These themes cover all the school grades, from Pre-school to the High School.

Also the National Curriculum for Citizenship and Development addresses areas such as Environmental Education and Sustainable Development, for all grades.

19.3 How many opportunities for wetland site manager training have been provided since COP13? {4.1.5}
KRA 4.1.iv

a) at Ramsar Sites

X=Unknown

19.3 How many opportunities for wetland site manager training have been provided since COP13? {4.1.5}
KRA 4.1.iv

b) at other wetlands

X=Unknown

19.4 Have you (AA) used your previous Ramsar National Reports in monitoring implementation of the Convention? {4.3.1} KRA 4.3.ii

D=Planned

