

Finland's Ramsar Wetlands Action Plan 2016–2020

Eds. Juvonen Sanna-Kaisa, Kurikka Tuula



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PREFACE

Finland's Ramsar Wetlands Action Plan: Improving the condition of wetlands benefiting society through cooperation

The national Ramsar Wetlands Action Plan was drafted as part of the Strategy for the Conservation and Sustainable Use of Biodiversity in Finland for 2012–2020 and the related action plan for 2013–2020, approved by a government resolution on 20 December 2012. This strategy and action plan were updated to correspond to the goals specified in the Convention on Biological Diversity, CBD (78/1994), as well as the biodiversity strategy targets agreed upon in the EU.

The Ramsar Convention, i.e. the Convention on Wetlands of International Importance Especially as Waterfowl Habitat, entered into force internationally and in Finland, which was among the first parties, on 21 December 1975. The aim of the convention is to protect internationally valuable wetlands and, in a broader sense, to promote the sustainable use of all wetlands and water resources. The Ramsar Convention defines wetlands as all areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water, the depth of which at low tide does not exceed six metres. The Ramsar Convention makes it obligatory to designate wetlands in the so-called Ramsar list, which currently contains 49 identified Ramsar sites in Finland.

The international strategy for the years 2016–2024 was approved at the 12th meeting of the Conference of the Parties (2015). The Ramsar strategy emphasises the particularly poor condition of wetlands: of all the habitats in the world, wetlands are the most threatened. The loss of habitats is one of the key reasons behind the global decline of biodiversity. The Ramsar strategy implements the so-called Aichi Biodiversity Targets of the CBD and several of the goals set in the UN 2030 Agenda for Sustainable Development.

According to the latest assessment of the conservation status of habitat types in Finland, the state of wetlands is poor: roughly half of the wetland habitat types in the Baltic Sea, the coast and inland are classified as threatened. The evaluation reviewed 368 different habitat types, of which 40% were wetlands, i.e. there were a total of 150 wetland habitat types or habitat complexes. Finland has a particular international responsibility for 24 wetland habitat types, and approximately 70% of all the habitat types that Finland has a particular international responsibility for are wetland habitat types. These mainly include underwater and coastal habitats in and around the Baltic Sea as well as mires and coastal habitats in the post-glacial rebound area.

In 2015, the European Commission drafted the mid-term review of the EU biodiversity strategy to 2020 (European Commission 2015). The core message of the mid-term review is that the primary goal of the strategy has not been achieved: we have

not been able to stop the loss of biodiversity and the decline of ecosystem services, which are made possible by biodiversity. This has significant adverse impacts on nature's ability to meet the needs of future societies. Achieving the six sub-targets of the strategy by 2020 requires a significant increase in action.

Emphasis on action is exactly what wetland habitats need. Maintenance, rehabilitation and restoration are necessary for many wetland habitat types. Catchment-based land use planning is important for improving the condition of wetland habitat types. International cooperation is required to battle climate change and prevent the eutrophication of the Baltic Sea. Strong Finnish expertise in the multi-goal restoration of habitats could also be exported.

I would like to thank the members of the Ramsar Wetland Working Group, who have drafted the action plan as a tool for enhancing the protection and sustainable use of wetlands and promoting the implementation of the international Ramsar Convention. The Ramsar Wetland Working Group is a cooperation network of parties working with wetlands. The member organisations of the network are committed to promoting the protection and sustainable use of wetlands in their own operations.

This extensive cooperation has the potential to achieve the positive vision of the Ramsar Wetlands Action Plan:

"The inland waters, mires and the Baltic Sea, brimming with life, are healthy, maintain diversity, produce benefits and well-being as well as make up an important part of our society."

Thank you for the rewarding cooperation!

Kristiina Niikkonen
Environment Counsellor
Chair of the national Ramsar Wetland Working Group
Ministry of the Environment

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DEFINITIONS AND ABBREVIATIONS

The following table lists definitions found in the text, related to the Ramsar Convention and wetlands, as well as their explanations.

Definition	Explanation
The CEPA programme	The Ramsar Convention's Programme on Communication, Capacity Building, Education, Participation and Awareness (CEPA) for the years 2016–2024 (CEPA=Communication, Capacity Building, Education, Participation, Awareness)
Ecosystem services	Services and benefits used and appreciated by people, produced by ecosystem functions. Classification: regulation, support, production and cultural services. See http://www.biodiversity.fi/ecosystemservices/home
Restoration	Restoring an ecosystem to a state as close as possible to its natural state or initiating the restoration process, e.g. restoring mires. Multi-target restoration, see the ELITE group report (in Finnish): http://www.ym.fi/download/noname/%7BB9F54F49-11D7-4955-98E6-E36B9FC3956D%7D/I09588
Maintenance	Continuous action to maintain the desired state of a habitat, e.g. mowing
Sustainable use	The use of resources (especially natural resources) in a way that does not prevent or hamper future use or the environment and society in general. E.g. using renewable natural resources so that they do not decrease, but renew
Wetland	The Ramsar Convention's definition: areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water, the depth of which at low tide does not exceed six metres
Rehabilitation	Improving the state of the habitat type, not aimed at restoration to the original state, e.g. aquacultural rehabilitation of rapids
NorBalWet	A cooperation network of wetland actors in Nordic and Baltic countries that implement the Ramsar Convention (the Nordic-Baltic Wetlands Initiative)
STRP	The Scientific-Technical Review Panel of the Ramsar Convention, a national STRP contact person
Catchment area	An area where water builds up as surface runoff in a specific section of a water area, e.g. where a river exits to the sea or a tributary river joins a main riverbed

The explanations of the abbreviations used in the text are given in the table below.

Abbreviation	Explanation
BMOL	Association of Biology and Geography Teachers (Biologian ja maantieteen opettajien liitto)
The CBD agreement, Aichi Targets	The Convention on Biological Diversity (CBD), strategic plan for 2011–2020 and the so-called Aichi Biodiversity Targets
CEPA	1) The person in charge of implementing the CEPA programme of the Ramsar Convention in Finland, 2) The CEPA programme (see definitions)
ELY Centres	Centres for Economic Development, Transport and the Environment in Finland
HELCOM	Baltic Marine Environment Protection Commission (Helsinki Commission)
Kemera	The Temporary Act on the Financing of Sustainable Forestry
KKL	The Federation of Finnish Fisheries Associations (Kalatalouden Keskusliitto)
Luke	The Natural Resources Institute of Finland (Luonnonvarakeskus)
LYNET network	The Consortium for Research on Natural Resources and the Environment (Luonnonvara- ja ympäristötutkimuksen yhteenliittymä)
METSO	The Forest Biodiversity Programme for Southern Finland (Etelä-Suomen metsien monimuotoisuuden toimintaohjelma)
MMM	Ministry of Agriculture and Forestry (Maa- ja metsätalousministeriö)
MTK	The Central Union of Agricultural Producers and Forest Owners (Maa- ja metsätaloustuottajain Keskusliitto)
SLL	The Finnish Association for Nature Conservation (Suomen luonnonsuojeluliitto)
SYKE	Finnish Environment Institute (Suomen ympäristökeskus)
FEE Finland	Foundation for Environmental Education (previously the Finnish Association for Environmental Education, Suomen ympäristökasvatuksen seura ry)
UM	Ministry for Foreign Affairs for Finland (Ulkoasiainministeriö)
UN	The United Nations
YM	Ministry of the Environment (Ympäristöministeriö)
VELMU	The Finnish Inventory Programme for the Underwater Marine Environment (Vedenalaisen meriluonnon monimuotoisuuden inventointiohjelma)
WWF	World Wide Fund for Nature

PART I: BACKGROUND

The benefits produced by wetlands around the world are under threat due to the loss of wetlands

Wetlands are land areas saturated with water, either permanently or seasonally, located where water meets land. They are among the most productive areas in the world, and they play a key role in Earth's water cycle. Water is the basis of life.

The ecosystem services and natural resources provided by shallow coastal and inland waters around the world have been determined to account for over a third of the value of the entire planet's ecosystem services. The value assigned to wetlands is due to their role in supporting the Earth's biodiversity as well as the fact that they provide a great deal of benefits and services to people. They purify water, as slowly flowing water makes it possible for fine-grained soil, as well as nutrient and heavy metal particles, to sink to the bottom or be absorbed by vegetation. They have a great impact on the water cycle. They provide sources of fresh water, recycle nutrients and control floods, among other things. They also protect coasts from erosion damage caused by storms. Wetlands produce game and fish, wood and peat, in addition to providing recreational opportunities. They also contribute to slowing down climate change.

Wetlands have been assessed to be the most threatened habitats in the world. Their natural value has weakened, and their sizes have decreased around the world. It is estimated that Europe has lost two thirds of the wetlands that still existed at the beginning of the 20th century (Russi et al. 2013). Declining habitats also put many species at risk of extinction. The decline in the condition of fresh water bodies, changes in land use, as well as climate change, are the three largest factors threatening the world's biodiversity. Wetlands are habitats under constant change, but the eutrophication and overgrowth of water bodies resulting from human activity has decreased the heterogeneity of vegetation and other biodiversity in wetland populations.

Finland is a country of wet habitats due to its climate. In a broad sense, many of the habitats and commercially used areas in Finland constitute wetlands. In Finland, wetlands include shallow gulfs and archipelagos, lake habitats of waterfowl, other lakes, mires, peatland forests, ponds, alluvial meadows and forests, spring complexes as well as flowing waters.

Two thirds of the mires in Finland have been trenched and harnessed for other uses. Humans have also exploited wetlands by constructing on waterfronts, damming rivers and draining lakes. However, wetlands have recently gained more appreciation. Efforts have been made to restore former wetlands that have ended up as wasteland by blocking ditches, raising water levels and clearing overgrown areas to become meadows again. Without maintenance, a great many of our bird wetlands will become overgrown, and coastal and freshwater meadows will become overgrown with reeds and bushes.

Sustainable, innovative business operations related to wetland habitats, such as the utilisation of reeds, are still at an early stage in Finland. There are also many other business opportunities related to the bioeconomy of wetlands, the so-called "wetland economy", that have not yet been sufficiently utilised. Wetlands also have significant recreational value in Finland. Productisation and commercialisation related to hunting and recreational tourism, for example, are becoming more popular.

Ramsar is an international convention on wetland protection and sustainable use

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat (3-4/1976), i.e. the Ramsar Convention, primarily pertains to different wetland types. The goal is to prevent the loss of wetland areas now and in the future and recognise the ecological, economic, cultural, scientific and recreational value of wetlands. The original purpose of the convention was to protect waterfowl wetlands during migration and nesting and safeguard important wetland areas along the migration routes of birds. The Ramsar Convention has since then been expanded to cover many aspects of protection and land use as well as the promotion of the conservation and sustainable use of all wetlands, including artificial wetlands.

The convention was signed in 1971 in the city of Ramsar in Iran, and it took effect in 1975. At present (2016), the convention has been signed by 169 countries. The convention obligates the member states to promote the protection of wetlands and waterfowl by establishing conservation areas in wetlands. Site selection is based on an assessment of the birdlife, mammals, fish, flora and invertebrate in the area, i.e. an assessment of the entire value of the wetland's ecosystem. This list of internationally significant wetlands currently (2016) includes 2,225 wetlands. Their combined area covers approximately 215 million hectares.

The Ramsar Convention defines wetlands as all areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water, the depth of which at low tide does not exceed six metres (Figure 1). Of the seaside, coastal and forest habitat types and traditional biotopes specified in the EU Habitats Directive, those that also contain underwater habitat types (e.g. esker islands) or habitat types regularly affected by water (e.g. alluvial meadows and forests) can be included. Within the meaning of the Ramsar Convention's definition, Finland has a total of 36 wetlands that represent the habitat types of the Baltic Sea and its coast, inland water bodies and shores, mires, traditional biotopes and inland alluvial forests, as specified in the Habitats Directive (see Annex 1).

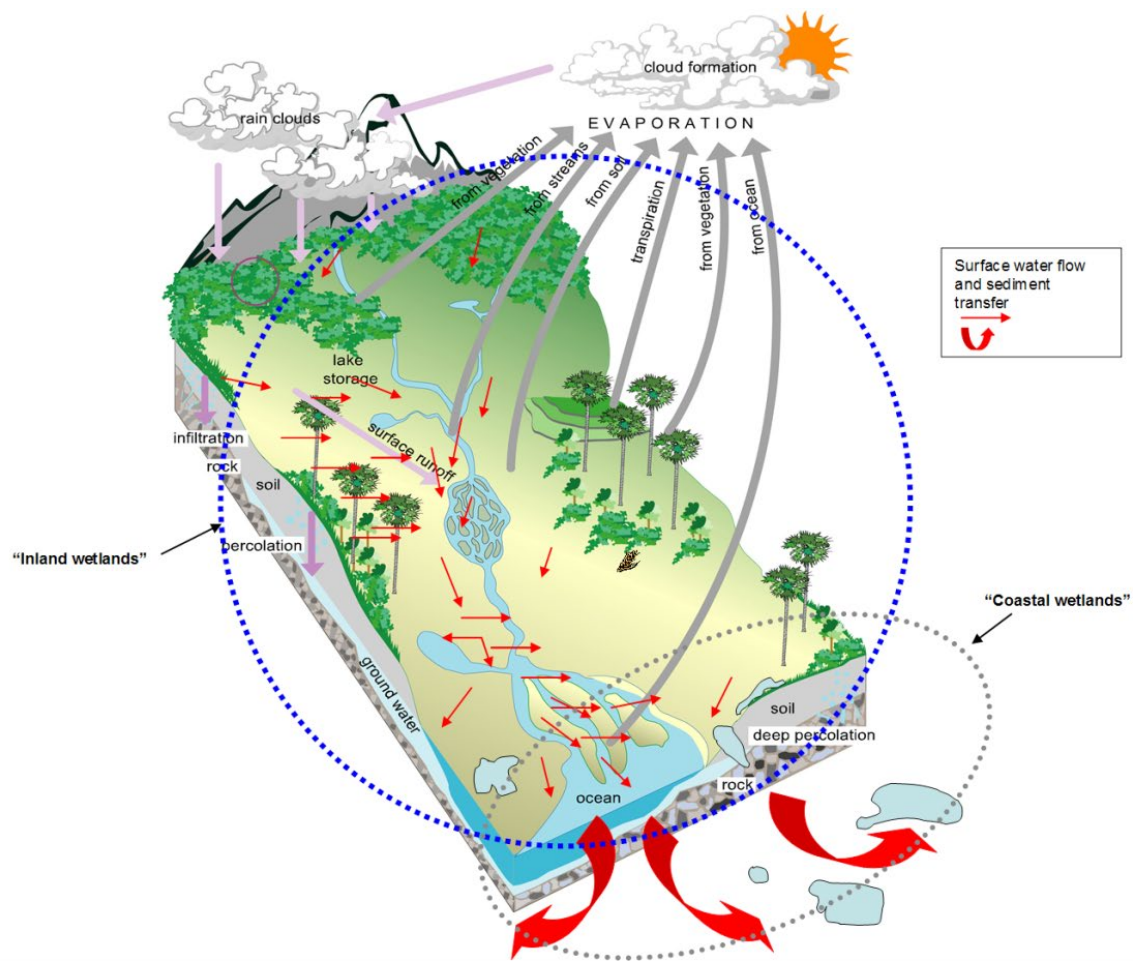


Figure 1. The central role of wetlands and their catchment areas as part of the water cycle. Image: Ramsar Secretariat

Finland was the second country in the world to sign the convention in 1975, at which time Finland added 11 sites to the list of Ramsar sites. In 2004, Finland added more areas to the list. Finland has a total of 49 Ramsar sites (see Annex 2) that are also included in the Natura 2000 network. Additionally, some of the Ramsar sites are also included in the network of the Baltic Marine Environment Protection Commission (HELCOM MPA). Combined, these sites cover approximately 785,000 hectares. The Parks & Wildlife Finland unit of Metsähallitus, ELY Centres and the Åland region are in charge of these areas. Half of the Ramsar sites in Finland are mires. Finland and the Nordic countries have a special role to play in conserving northern mire habitats, as 2.5% of the world's mires are located here.

The Ramsar Convention gathers wetland experts together. Research and monitoring results are readily available to all member countries to promote the conservation, maintenance and sustainable use of wetlands. If necessary, the assistance of the Ramsar Secretariat and its experts is also available when dealing with issues or conflicts related to the conservation, maintenance or use of individual areas.

The protection of waterfowl overwintering areas, as well as their resting areas during migration and nesting areas, should be coherent, otherwise the efforts may be wasted and species may decline. Within the framework of the Ramsar Convention, Finland cooperates with other countries in building a network of conservation areas and supports many countries in which the Ramsar Convention is almost the only way of implementing wetland conservation.

As the definition of a wetland under the Ramsar Convention is very broad, the convention is implemented based on many international and national agreements and laws. For example, in Finland the river basin and marine resources management plans, which are based on the Water Framework Directive and Marine Strategy Framework Directive, cover all wetlands in inland waters and coastal waters that meet the Ramsar criteria. They also indirectly cover the wetlands located in their catchment areas. The objective of the river basin and marine resources management plans is to improve the state of waters, which directly corresponds to the goals of improving the state of wetlands. The management of loading from catchment areas often requires that the state of wetlands is also improved in the catchment area. Improving the state of wetlands is also significantly promoted by the National Strategy for the Responsible Conservation and Use of Mires and Peatlands (2011) as well as the Finnish Government's decision-in-principle on 30 August 2012 that is based on the strategy. Additionally, the National Fish Passage Strategy and many other national strategies and goals that aim to improve the state of different types of wetlands also promote the implementation of the Ramsar Wetlands Convention in Finland. Wetlands are also covered in the Water Act, the Forest Act, the Environmental Protection Act and the Land Use and Building Act. The implementation of the convention on wetlands should therefore not be viewed as a separate additional measure, but more as an umbrella that covers a great many of the strategies and goals already being implemented nationally.

A new strategic plan was decided upon at the 12th Conference of the Ramsar Parties in June 2015. This plan will provide a framework for the implementation of the convention in the years 2016–2024 (Ramsar 2015b). A decision was also made regarding the programme on communication, capacity building, education, participation and awareness (CEPA) for the years 2016–2024 (Ramsar 2015a). The strategic plan of the Ramsar Convention observes the goals of the strategic plan for 2011–2020 under the UN Convention on Biological Diversity (CBD) as well as the Aichi Biodiversity Targets, which should be reached by 2020 (CBD 2010). By implementing the Ramsar Convention's strategic plan, states realise their Aichi Biodiversity Targets related to wetlands. The implementation of the plan also means that states realise the UN's Sustainable Development Goals (UN 2015), agreed upon in September 2015. Finland can realise these international commitments through the Finnish Ramsar Wetlands Action Plan.

Important Bird and Biodiversity Areas (IBA) is a project carried out by BirdLife International. In recent years, the project has focused on identifying marine IBA areas. There are a total of 100 IBA areas in Finland, many of which are also Ramsar sites.

The Finnish national Ramsar Wetland Working Group works for the good of wetlands

The Finnish national Ramsar Wetland Working Group operates as a cooperation network to promote wetland conservation and the promotion of sustainable use, bringing together organisations that represent various parties (see Annex 3). The role of the Wetland Working Group is to raise awareness about the Ramsar Convention and the benefits to be gained from wetlands as well as the needs concerning wetland protection and sustainable use.

The goal of the working group is to form a mutual understanding of the national implementation of the Ramsar Convention and how the different interest groups can contribute added value to the enhancing of the protection and sustainable use of wetlands. The national implementation of the Ramsar Convention's goals requires societal cooperation beyond the environmental sector. The working group also works towards influencing the international development of the Ramsar Convention.

The group has drafted this Ramsar Wetlands Action Plan as a tool for anyone working with wetlands, to strengthen the protection and sustainable use of wetlands in Finland and promote the international implementation of the Ramsar Convention.

There are several actors committed to wetlands in Finland. Table 1 below lists some of the most important wetland actors that are also members of the national Ramsar Wetland Working Group. Changes regarding actors and responsible parties will be implemented at the beginning of 2019, resulting from a reform in regional administration, particularly with regard to ELY Centres and on a regional level.

Table 1. Wetland actors

Actor	Actor's role in wetland efforts
Ministry of the Environment	The Ministry of the Environment is in charge of international treaties pertaining to the environment as well as the preparation of any issues related to communities, built environments, housing, biodiversity, the sustainable use of natural resources and environmental protection that are submitted to the Finnish Government and the Parliament. Finland is committed to promoting the conservation of biodiversity and the sustainable use of nature. The goal of the Ministry of the Environment is to stop the decline of biodiversity in Finland by 2020, reach and maintain a favourable conservation level with regard to species and habitat types, secure the functional prerequisites for ecosystems as well as ensure the good condition of rivers, lakes, groundwater reserves and the Baltic Sea.
Ministry of Agriculture and Forestry	The Ministry of Agriculture and Forestry is in charge of the policies pertaining to the sustainable use of renewable natural resources. The Ministry acts as part of the decision making of the Finnish Government and the European Union in legislative work. The administrative branch of the Ministry of Agriculture and Forestry covers agriculture and horticulture, rural development, forestry, veterinary care, the monitoring of food stuffs of animal origin and the fisheries industry. The Ministry also controls game husbandry and reindeer herding, the management of water resources and land surveying.
Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)	The Parks & Wildlife Finland unit of Metsähallitus is in charge of nature conservation, camping and wilderness services and managing cultural property on state land under the Ministry of the Environment and the Ministry of Agriculture and Forestry. Parks & Wildlife Finland manages such areas as national parks, nature reserves, national hiking areas, wilderness areas in Lapland and the majority of public waters, including the Ramsar sites on state land. The unit is responsible for roughly half of the Ramsar sites in Finland. The national contact person under the Ramsar Convention, the CEPA contact person and the STRP contact person have been appointed from Parks & Wildlife Finland. Additionally, Parks & Wildlife Finland is in charge of the operation of the Liminka Bay Wetland Centre.

Actor	Actor's role in wetland efforts
Centres for Economic Development, Transport and the Environment in Finland	The Centres for Economic Development, Transport and the Environment have a wide-ranging responsibility for water resources management in their areas of operation and taking action to promote the good ecological status of waters on a catchment level. ELY Centres also manage conservation areas located on private land, which include Ramsar sites, bird wetlands, mire conservation areas and rivers, among other things. ELY Centres have funded a great many water body rehabilitation and maintenance projects. They also monitor the status of wetlands together with other actors. ELY Centres promote agricultural water protection measures through the Rural Development Programme, by making and funding various agri-environment agreements and granting non-production-oriented investment support to multifunctional wetlands, among other things. ELY Centres also do their part in monitoring compliance with the Water Act, the Environmental Protection Act, the Nature Conservation Act and the Land Use and Building Act.
Finnish Environment Institute	SYKE is in charge of coordinating conservation status assessments of Finnish species and habitats, the assessment of and reporting on the conservation status of habitat types specified in the EU Habitats Directive and species detailed in the Habitat and Birds Directives as well as reporting on the Water Framework Directive and Marine Strategy Framework Directive. SYKE also nationally provides advice and guidance on the protection and management of species and serves as an expert body in connection with the conservation of habitats and improving their state (e.g. restoration, water body rehabilitation and nature management). SYKE also produces research data on the operation and need for protection of ecosystems in natural and artificial wetlands, such as river estuaries, and the functionality and efficiency of artificial wetlands.
The Natural Resources Institute of Finland	The Natural Resources Institute of Finland (Luke) is a research and expert organisation that works to develop the sustainable use of natural resources and the bioeconomy. Luke was created by combining three state research institutions for different sectors (Agrifood Research Finland (MTT), the Finnish Forest Research Institute (Metla) and the Finnish Game and Fisheries Research Institute (RKTL)) with the statistical services of the Information Centre of the Ministry of Agriculture and Forestry (Tike). Luke brings experts on renewable natural resources and responsible food production together to form an entity that offers innovative solutions to promote new branches of business. Multidisciplinary research data and expert services are the basis for sustainable decisions, both in Finland and abroad. Research into natural resources serves citizens by providing information on health and well-being as well as promoting the purity and vitality of Finnish nature.
Regional councils	Regional councils are in charge of regional land use planning and the overall regional development in their area. These councils also initiate and lead cooperation in large-scale plans and development projects that pertain to natural resources and the environment.
The Finnish Forest Centre	The Finnish Forest Centre conducts general planning of catchment area-specific water protection, submits the implementation of the aforementioned plans to a targeted call for project proposals and makes the funding decisions pertaining to the implementation using Kemera nature management funds. The Finnish Forest Centre also promotes mire conservation on private land by making and funding fixed-term agri-environment agreements and by instructing forest owners in voluntary mire conservation efforts under the METSO programme.
The Finnish Wildlife Agency	The tasks of the Finnish Wildlife Agency include the following: promoting sustainable game husbandry and monitoring public interest in relation to game husbandry; monitoring the status, development, sustainability and vitality of game populations and developing related functions as well as research; promoting game management and the management of game habitats; and promoting sustainable, safe and ethically acceptable hunting. The Finnish Wildlife Agency's Life+ Return of Rural Wetlands project promoted the establishment, rehabilitation and maintenance of wetlands in agricultural and forestry areas in 2010–2015. The goal is to ensure the vitality of hunted waterfowl populations in accordance with the targets specified in the Wetland and Game Husbandry Strategy of the Ministry of Agriculture and Forestry.
The Finnish Peatland Society	The Finnish Peatland Society is a scientific society whose goal is to encourage the diverse study and research of mires and peatlands and promote their sustainable use. The Society also acts as the Finnish National Committee of the International Peat Society.

Actor	Actor's role in wetland efforts
Forestry Development Centre Tapio	Tapio Oy develops wetland structures in cooperation with other organisations and organises water protection training.
The Federation of Finnish Fisheries Associations	The Federation of Finnish Fisheries Associations (KKL) represents owners of wetland areas, i.e. lake and coastal water areas, in Ramsar efforts. KKL promotes responsible water area management by the owners. KKL also acts as a contact for people who fish (approximately 1 million recreational fishers) and for local level fisheries administration (fishing zones). Fishing zones are in charge of drafting use and management plans for fish populations. KKL promotes the quality of use and management plans as well as the dialogue between the plans and other planning instruments.
The Central Union of Agricultural Producers and Forest Owners (MTK)	MTK is a trade union and interest organisation for farmers, forest owners and rural entrepreneurs. MTK participates in the preparation of the Rural Development Programme, among other things. Wetland construction and maintenance are also supported as part of the programme. MTK conveys information to operators involved in agriculture and forestry regarding agricultural wetlands and opportunities for establishing shared multifunctional wetlands with interest groups.
BirdLife Finland	BirdLife Finland is an association for bird enthusiasts that promotes the protection of birds and the conservation of biodiversity. BirdLife monitors the status of wetland bird populations with the help of the Important Bird and Biodiversity Areas network, among other things, and works to develop the maintenance and restoration of wetlands. BirdLife Finland is part of BirdLife International, an organisation that forms the largest network of environmental groups in the world and operates in more than a hundred countries.
FEE Finland (previously the Finnish Association for Environmental Education)	The goal of FEE Finland (FEE – Foundation for Environmental Education) is to promote a sustainable way of life through the means of environmental education. The Foundation supports children and young people's relationship with nature and their opportunities to learn and move in nature with the help of a vast network of educators. FEE Finland monitors and comments on the content of curricula (OPS), seeking to promote children's opportunities to learn outdoors and encourage pupils to participate in activities beneficial to the environment. Wetlands are unique and experiential learning environments, and FEE Finland wants to contribute knowledge and skills to promote learning and recreation in wetlands.
WWF Finland	WWF Finland is part of the large, international WWF network that has offices in approximately 50 countries and operates in over one hundred countries. The environmental organisation's mission is to stop the decline of biodiversity and build a future where people and the environment can live in harmony by influencing political decision making, organising practical field projects and cooperating with companies, other organisations and volunteers. WWF Finland works in Finland for the Baltic Sea, forests, traditional environments, the Arctic environment, streams and threatened target species. WWF Finland cooperates with companies and other organisations to increase the utilisation of renewable energy sources and the sustainability of forestry raw materials and fish production in Finland.
The Finnish Association for Nature Conservation	The Finnish Association for Nature Conservation works for the Baltic Sea, inland waters and small water bodies, in addition to implementing a programme to protect rapids. The Association's objective is to make Finnish mires into appreciated sources of recreation and natural products. The Association's actors survey mire sites and defend their natural values. The Finnish Association for Nature Conservation organises aquatic environment and traditional landscape rehabilitation projects. The Association participates in the drafting of river basin and marine resources management plans as well as the work of river basin groups. It also defends wetlands in land use planning and various projects. The Association promotes the expansion of marine national parks. The CEPA contact person for non-governmental organisations under the Ramsar Convention has been appointed from the Finnish Association for Nature Conservation.

The versatile wetlands in Finland need protection, maintenance and restoration

Human activity has affected the decline of wetlands in Finland

During the last ice age, all of Finland and most of Northern Europe was covered by a continental glacier. The glaciers' movements created mounds and eskers as well as lakes and various kinds of wetlands between them. The impact of the ice age is also clearly visible on Finland's coasts. The isostatic uplift on the Ostrobothnian coast is up to 6–8 mm per year even now, and the coast line can move up to several metres per year (Kaakkuri 1992). This creates new wetlands. All the while, old wetlands dry up and gradually turn into thickets or coastal forests or become mires.

Over the last few centuries, human activity has had an increasing effect on wetland habitats. Up until the last few decades, wetlands were considered to be insignificant wasteland, which is why many of them were drained for the purposes of agriculture or forestry. The year 1743 is a milestone in Finnish wetland history, as it marks the first time a lake's surface level was lowered to create more farm land. This took place in North Karelia. Over 3,000 lakes have since then been drained in Finland, either completely or in part (Anttila 1967, Huttunen 1981).

Additionally, numerous projects have been carried out to clear vegetation from streams and rivers, which has had a significant impact on water surface levels in lakes and the flow of water in waterways. Today, water flows to the sea from land and inland waters significantly faster than it did before the impact of human activity. In addition to draining lakes and clearing vegetation from rivers, Finland has trenched nearly seven million hectares of mires for the purposes of forestry and agriculture (Working group that prepared the national strategy for mires and peatlands 2011).

The heyday of lake draining was in the middle of the 19th century. Active draining operations ended in the 1960s due to agricultural overproduction. The sites chosen for draining were mainly shallow, eutrophicated lakes, as this made it possible to gain a large area of new, fertile farmland with relatively little effort. These drainage operations did not, however, always drain the entire lake, but made deep lakes shallower (Waterfowl Habitat Working Group 1981).

The development of agriculture and forestry has also had a significant effect on the use of wetlands and the surrounding areas in other ways. After the mid-19th century, the number of cows in Finland increased rapidly. The trend peaked in the 1930s, with 1.2 million cows in Finland. The number of cows started to decrease in the 1960s, and there are currently approximately 400,000 cows in Finland. Nowadays, cattle are not kept out on the pasture as much as before. This has had a significant impact on wetland habitats and their range of species. There are an estimated 4,200 hectares of seashore meadows left on the entire Finnish coast, which is approximately 10% of the corresponding area in the 1950s (Niemelä 2012). The plants and birdlife in freshwater meadows have suffered as a result. In Finland, all freshwater meadows are currently classified as threatened habitats (Raunio et al. 2008). The increased efficiency and mechanisation of agriculture has affected farming methods as well as the use of shore areas (Von Limburg Stirum 2003). With the decrease of livestock, grazing and mowing on shores has ended almost completely. However, efforts have been made in recent years to promote grazing on shores with the help of various projects and

agri-environmental measures, among other things. The reduced openness of shores weakens the living conditions of low-growing plants and the amount of seeds and insects that are important sources of food for waterfowl and shorebirds.

As a result of human activity, most wetland habitat types have become threatened nationwide. The significance of the status of wetlands is emphasised in Finland, as many European wetland habitat types are primarily found in Finland. The status of wetlands has declined in Southern Finland in particular. A significant portion of the remaining inland wetlands in the southernmost parts of Finland has been created as a result of partial lake drainage. Due to accelerated overgrowth, they are in danger of disappearing if no restoration or maintenance measures are carried out.

The drainage and other treatment of wetlands has had a negative impact on the biodiversity of wetlands and nature. These effects have also impacted reindeer herding, and the restoration of wetlands to their natural state also improves the functional prerequisites for the reindeer industry.

The 2008 assessment of threatened habitat types in Finland examined the change in the quantity and/or quality of habitat types over the past 50 years, the likely change in the coming years as well as the early (prior to the 1950s) decline (Raunio et al. 2008). The assessment could be lowered based on the prevalence of a habitat type or, conversely, raised based on its rarity. The assessment included a total of approximately 150 wetland habitat types or wetland habitat complexes.

Of the underwater habitat types in the Baltic Sea, coastal wetland habitat types, streams and their shores, as well as mire habitat types, roughly half were classified as threatened (classes CR, EN, VU¹). The status of wetland habitat types in traditional biotopes is most dire, as over 80% of them were assessed to be threatened. Both spring habitat type complexes assessed were also assessed as being threatened. The status of lakes and ponds is somewhat better: a little over 20% of the types assessed are threatened. Only 31 wetland habitat types were assessed to be the least concern (class LC). Many of these habitats are the most barren and/or wet mire types or mire type complexes still considered to be common. Many wetland habitat types that can only be found in Northern Finland, or that are primarily found there, are considered to be the least concern.

Today, the most important reasons for being classified as threatened include the eutrophication and pollution of water bodies, especially as a result of land use in catchment areas (e.g. agriculture and forestry, peat extraction, settlement, industry) as well as hydraulic engineering, trenching and overgrowth that is due to the ending of traditional land use, especially in traditional wetland biotopes. Future threats are mainly the same as the reasons for the threatened status. Some wetland types, e.g. *palsa mires*, are estimated to benefit from the effects of climate change in the future.

The many mires in Finland have become more threatened

Finland is one of the countries with the most mires in the world. Up to one third, i.e. roughly 10.4 million hectares, of Finland's land area was originally mire. Over time, mires were aggressively adapted for various purposes, which has resulted in the fact that there is only approximately 4 million hectares of untrenched mire left. Most of the untrenched mire areas are located in Northern Ostrobothnia and Lapland. A total of 1.3 million hectares, i.e. 14% of the country's current mire area, is protected under the Nature Conservation Act and the Wilderness Act (Alanen & Aapala 2015).

¹ Conservation status categories of habitat types: RE = Regionally Extinct, CR = Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern

Quantitatively speaking, Finland's mires were altered the most by trenching that was carried out in the past for the purposes of forestry. Nearly 5.7 million hectares of our original mires has been trenched for the purposes of forestry. Most of this trenching was carried out in the 1970s. Today, new trenches for the purposes of forestry are almost never made anymore. Instead, some of the old trenches are restored, and the draining effect of this may even extend to untrenched mires (Lindholm & Heikkilä 2006).

The forests in trenched mires have, however, had a significant effect on Finnish forest management and forestry. Mire forests account for one quarter of the growth of Finnish forests and one fifth of the logging outturn. In miry regions, such as Northern Ostrobothnia, the significance of mire forests is even greater, as mire forests account for nearly half of all forest growth and a third of the logging outturn (The Natural Resources Institute of Finland 2015b).

In addition to the remote effects of rehabilitation trenching, the natural state of mires is now threatened by construction and hydraulic engineering, such as reservoirs, the removal of vegetation from streams, peat extraction, soil preparation, felling in untrenched wooded mires, clearing of mires for agricultural use, road networks and groundwater abstraction. As the mire is an entity in terms of the water economy, the natural state of the mire may also be affected through land use further away. In the long term, climate change may also affect mires. The first mires to be affected will be the *palsa* mires and frost bogs and mires in the North (Finnish Environment Institute 2013).

The poor status of mire habitats was revealed by the 2008 assessment of threatened habitat types in Finland. Roughly half of Finnish mire habitat types were classified as threatened. It was estimated that most threatened types could be found in spruce mires, pine fens and rich pine fens as well as fens. The situation in Southern Finland is especially alarming. Only two mire types, ridge-hollow pine bogs and *Sphagnum fuscum* bogs, are classified as being the least concern, while all others are estimated to be regionally threatened or near threatened. Of the mire complex types in Southern Finland, 80% have been assessed as being threatened and the rest as near threatened. The status of mires in Northern Finland is better than that of those in Southern Finland, albeit most of the fen-like and spruce-pine-like mire types have been assessed as being threatened or near threatened. Most of the mire complex types, i.e. 75%, have been assessed as being of the least concern, and only middle boreal flark-surfaced *aapa* mires and *palsa* mires are near threatened (Kaakinen et al. 2008).

Nearly one quarter of shallow sea areas are under some kind of protection

A GIS analysis conducted at the Finnish Environment Institute's Marine Research Centre in 2015 suggests that roughly 757,200 hectares of the Finnish marine area falls into the category of shallow marine area, which is specified to be up to 6 metres in depth in the Ramsar Convention. Of this area, approximately 10,800 hectares is located in the Åland Islands' marine area and 65 hectares in the exclusive economic zone (EEZ). In other words, approximately 13.7% of Finnish territorial waters (not including the Åland Islands) and 13.8% of the Åland Islands' marine area is classified as being an under 6-metre marine area. Of the Finnish exclusive economic zone located outside the territorial waters, only roughly 0.002% is classified as being shallow.

Of these shallow marine areas, 7.0% is located in Ramsar sites, and of the entire marine area, 23.5% is protected in some form (by Ramsar, Natura 2000, national parks, state and private nature reserves, HELCOM MPA, etc.). The protection percentage by region is 27% in the Finnish marine area (excluding the Åland Islands), 2.2% in the Åland Islands and 100% in the EEZ.

However, of the marine area located in Ramsar sites (182,800 ha), only 29% (52,800 ha) is categorized as a shallow marine area, up to six metres in depth, which is mainly due to the way the Ramsar sites are named. The Ramsar sites located in marine areas are outlined in accordance with existing conservation areas (Natura 2000, national parks, state and private nature reserves). This means that the shallow marine areas specified in the Ramsar Convention have not been separately taken into account when outlining these areas, as establishing conservation areas only in these shallow areas would not create any significant benefits in terms of the areas' ecological coherence or administration. Outlining areas in accordance with depth contour lines would not be functional either due to the fact that depth data is rough and the topography of the seabed tends to vary. Much like many other countries in the Baltic Sea region, Finland has also formed the Baltic Marine Environment Protection Commission's protection areas (HELCOM MPA, prev. BSPA) from existing conservation areas. HELCOM MPA also covers coastal areas. When conservation areas are formed in this manner, their significance in terms of the protection entity and the factors affecting it, such as regional connectivity, is not necessarily analysed, which may decrease the efficiency of the conservation area. A coherence analysis was conducted for HELCOM MPA in 2010 and more recently in 2015.

Shallow marine areas are versatile and often abundant in biodiversity, with habitat types ranging from underwater sandbanks in more open marine areas to *Zostera marina* meadows, shallow sandy beaches, *Fucus spp.* communities on rocky and stony bottoms, *Charophyte* meadows in sheltered bays and lush river estuaries. In addition to the last-mentioned habitat type, specified in the Habitats Directive, Ramsar sites also feature other habitat types, such as vast shallow bays and coastal lagoons which also include flada-lakes, i.e. certain types of shallow and isolated gulfs that are protected under the Water Act. Flada-lakes and other secluded gulfs are habitats to many birds, also serving as important breeding grounds for many species of fish, such as the northern pike, perch and many species from the Cyprinidae family. The flounder, which prefers saline water, and the powan, which spawns in the sea, require coastal, shallow and clean sandy bottoms as their breeding grounds, but these have diminished due to eutrophication. Flada-lakes and other shallow gulfs are susceptible to not only dredging and other procedures that physically change the habitat, but also to various kinds of emissions, such as nutrient loads that cause eutrophication. The effects of eutrophication are often particularly visible in the areas that are closest to the coast and whose volume and exchange of water is limited.

Shallow marine areas provide habitats for many threatened species, but it should be noted that the distribution of many underwater habitats and the status of their species remain insufficiently researched. The Finnish Inventory Programme for the Underwater Marine Environment (VELMU) has, however, produced plenty of new information on marine habitats. During its 12 years of operation, VELMU has collected information on aquatic vegetation, benthic invertebrate and fish as well as the geological characteristics of the seabed by surveying the marine area. The data comprises material collected from 96,500 video points and 23,200 diving points as well as thousands of benthic invertebrate and juvenile fish specimen sites. The new map service by VELMU (paikkatieto.ymparisto.fi/velmu), which went live in January 2016, contains information on the distribution of species and habitats, environmental variables, seabed geology and human activity at sea. The service also includes photographs and videos of species and underwater landscapes, and the content is updated continuously with new observations and research data.

Attempts to prevent the decline of wetland bird populations with maintenance measures

The living conditions of wetland bird populations have declined globally. The same trend can also be seen in Finland. The latest assessment of the conservation status of bird species in Finland was published in January 2016 (Tiainen et al. 2016). The number of threatened bird species increased greatly from the previous assessment carried out in 2010 (Mikkola-Roos et al. 2010). There were 59 threatened bird species in 2010, but as many as 87 in 2016. In the assessment carried out in 2000, the number of threatened species was 35. In other words, the number of threatened bird species has continuously increased.

The situation of aquatic and wetland bird populations is particularly worrying. A half of Finnish Anseriformes and almost half of the Charadriiformes are now assessed to be threatened species. Many of these species suffer from the eutrophication and overgrowth of water bodies in particular. Species that have severely declined during the current millennium include the tufted duck, common pochard, northern pintail, garganey and Eurasian coot, for example. Wetlands are also important for birds outside of their nesting time. They are essential resting and feeding areas along the migration routes of many waterfowl, Charadriiformes and Passeriformes, and they are also important for species and specimens that migrate through Finland. They are also the most popular bird watching sites, which gives them an important recreational value.

Bird species become threatened primarily as a result of the decline of their nesting environments. In inland waters and lush sea bays, excessive eutrophication has also been found to significantly contribute to bird species becoming threatened (Lehikoinen et al. 2016). In these areas, eutrophication has decreased waterfowl species' access to food as a result of the clouding of waters and increased competition from growing Cyprinidae populations (Sammalkorpi et al. 2014). Many of the species living in water bodies and wetlands are game species, but hunting is not considered to be the most significant reason for their threatened status (Pöysä et al. 2013, Väänänen & Pöysä 2015). Instead, the reasons for the decline are most likely connected to waterfowl species' choice of habitat and changes in the habitat, as waterfowl populations living in water bodies that suffer from eutrophication have declined more strongly in Finland than bird populations living in nutrient-low water bodies (Pöysä et al. 2012).

Mosaic-like vegetation provides a favourable living environment for bird species living in waterfowl habitats. The current trends of eutrophication and overgrowth reduce the diversity of vegetation and bird populations. Species that live in reed beds benefit from these trends, but most other species decline when their environment becomes unsuitable for them (Mikkola-Roos 1995, Mikkola-Roos & Väänänen 2005). The main reason for the decline in Finland's waterfowl populations is considered to be eutrophication, i.e. factors related to increased nutrient and solids loading, particularly overgrowth and shallowing – or the decline in submergent plants (Ellermaa & Linden 2011, Lehikoinen et al. 2013). The impact of small predators has also been significant locally, particularly in coastal areas (Nordström & Korpimäki 2004, Väänänen et al. 2007).

The rehabilitation of waterfowl habitats, started in accordance with the Waterfowl Habitats Conservation Programme confirmed by the Finnish Government in 1982, has been one of the most important national action plans of the environmental administration. The most important lake habitats of birds in Finland have been included in the Natura 2000 network, and their conservation values have been defined and their need for rehabilitation prioritised. The Waterfowl Habitats Conservation Programme comprises 289 areas (83,530 ha) that represent the different types of and variation in Finnish waterfowl lake habitats, lush sea bays, shallow shores and river estuaries.

Over 72% of the original privately owned area included in the Waterfowl Habitats Conservation Programme is now protected or has been procured by the state.

In 2007, the Finnish Environment Institute examined all the waterfowl sites included in the Natura proposal together with the regional environment centres. Of these sites, 163 require rehabilitation and maintenance. At the time, rehabilitation had been completed or was currently being carried out at 62 (38%) sites. Rehabilitation plans had been completed or were being prepared for 30 (19%) sites. There were no rehabilitation plans for almost half of the sites (43%), regardless of the fact that some of them are in urgent need of rehabilitation measures.

The bird population value of wetlands has also declined in Finland's conservation areas over the last decades. It is important to note that the decline in the conservation value of bird populations has been slower in wetlands in which more extensive restoration has been carried out. The aim of these restoration efforts has been to restore the areas to their prior state by preventing overgrowth, for example (Ellermaa & Lindén 2011). Studies indicate that maintenance efforts may improve the living conditions of declined wetland birds. The maintenance efforts are very important biologically, as the maintained sites include the best waterfowl habitats in Finland. The impacts are not limited to Finland either, as the restoration benefits all birds that migrate to the north – all the way to Siberia – via Finland. One of the most important observations is that the condition of wetlands worsens after the maintenance efforts have ended. The maintenance efforts should be continued in order to ensure that the gained benefits are not lost (Lehikoinen 2013). Ensuring the long-term continuation of maintenance efforts is also a key challenge in the maintenance of lakes that suffer from eutrophication (Sammalkorpi & Horppila 2005).

If the conservation value of the waterfowl population of a lake or wetland that suffers from eutrophication has declined and Cyprinidae populations have increased, the waterfowl habitat and the conservation value of the bird population can be improved or supported by rehabilitating the food chain. However, this is not a patented medicine that only has to be administered once. Rather, it is only one part of long-term maintenance efforts that support the impact of other efforts carried out in catchment areas as well as other water bodies and shores (Sammalkorpi et al. 2014).

Many waterfowl habitats have been created as a result of human activity. The intentional lowering of lake levels, regulation, discharge of waste water, dredging of drainage ditches, mowing and grazing have all contributed to the creation and transformation of waterfowl habitats. In other words, these wetlands have for the most part not been fully in their natural state during the time that earned them their reputation as a waterfowl habitat; instead, they belong to habitats that require maintenance in order to be conserved. The rehabilitation of a waterfowl habitat may also involve the creation of an entirely new wetland, such as a water protection or game wetland, fish farm, reservoir or peatland released from production (Mikkola-Roos 1995).

Wetlands are a constantly changing environment type, and overgrowth will inevitably occur in all wetlands. Today, wetlands are not created in the same way as before, as areas have already been reserved for other land use. This is why it is necessary to protect and maintain the existing wetlands (Mikkola-Roos & Väänänen 2005).

Migratory fish species in Finnish waters require water with free access

There are 68 fish species permanently found in Finland. The conditions in Finland water bodies are difficult for fish, which is why the number of species in them is low. Due to the low salinity of the Baltic Sea, very few actual marine species live in it. Instead, it is mainly home to freshwater fish species.

The fish population can be maintained by safeguarding its reproductive ability and by regulating fishing. Supporting the reproduction of fish with fish stocking is a common way of maintaining the population. The new Fishing Act emphasises the natural reproduction of fish. To ensure the success of natural reproduction, it is important to conserve breeding grounds and make sure that they are left undisturbed. The spawning grounds of many species are located in shallow waters, which are also subject to a great deal of pressure due to other forms of use. For example, flada-lakes are important to many fish species, but they are also subject to dredging.

The threatened fish species in Finland are landlocked salmon, sea trout, Arctic char, marine populations of grayling, European eel, whitefish (*Coregonus maraena*, *Coregonus lavaretus pallasii*, *Coregonus lavaretus widegreni*), freshwater populations of brown trout south of the Arctic circle, spined loach, Baltic Sea salmon and salmon populations of the Arctic Ocean. The list of threatened species includes many migratory fish species. For these species, the key condition is flowing water and free access. Migration routes and habitats in flowing waters are currently inadequately protected. The National Fish Passage Strategy (the Finnish Government 2012) is a document that directs the construction of migration routes.

The most important measure for improving the populations of migratory fish is opening up migration routes (dismantling an obstacle blocking a route or natural bypass channels or constructed fish passages). In addition to obstacles that block migration routes, another reason for the decline in fish populations is the weakening state of their habitats and breeding grounds as a result of the clearing of streams for the needs of subsoil drainage and log driving, among other things. The state of the habitats of migratory fish species is also weakened by operations that affect water quality, such as extensive trenching operations in catchment areas, agriculture and several activities related to soil preparation in acid sulphate soils. The state of fish populations can be improved by applying methods of nature-friendly hydraulic engineering in subsoil drainage and by restoring habitats. Populations of migratory fish are also affected by fishing if it is implemented in an unsustainable way. In order to secure populations of migratory fish, several types of measures and persistent efforts are required in accordance with the National Fish Passage Strategy.

The lakes and coastal waters in Finland are for the most part common areas owned by their part owners. The ownership conditions mostly date back to the general parcelling out of land that started in the 18th century, in which any water bodies within a village's borders were for the most part left unparcelled and considered to be the village's common area. There are also some private water areas that were mainly created as a result of the parcelling out of common water areas.

The ownership of water areas is fragmented in places, particularly on the coast of Southern Finland. This fragmentation often makes rehabilitation projects and the efforts to maintain habitats and fish populations difficult. Additionally, there are a number of unorganised or declining property associations whose water areas have been left without systematic care. In order to eliminate these problems, society must allocate funding for clarifying cadastral registry units and expanding them in inland and coastal waters and seek to promote the creation of larger property associations with more efficient operational conditions.

Wetlands located in agricultural and forestry areas are local natural treasure troves and significant to game husbandry

In Finland, most of the wetlands that meet the definition of a wetland under the Ramsar Convention are located in agricultural and forestry areas, i.e. outside of the network of protected areas. Due to their large size and number, wetlands serve as important providers of many ecosystem services, even if the significance of a single wetland, for example in terms of its bird population, is often smaller than the significance of more valuable and protected waterfowl habitats and mires. Mires in agricultural and forestry areas provide not only wood and peat but also berries and game, which are the foundation of many businesses and recreational use. Wetlands with open water facilitate water protection, even out floods and provide a habitat for birds, fish and mammals, in addition to providing exploitable game, fish and crayfish populations. The main purpose of constructed wetlands in agricultural and forestry areas is to improve the quality of surface waters and biodiversity and create a habitat for game birds living in wetlands.

Founding, rehabilitating and maintaining wetlands in agricultural and forestry areas depends on the interest and will of the landowners. From the perspective of agriculture and forestry, low-yield areas have great potential for serving as locally significant natural, water protection and recreational sites. Mires are low-yield sites in terms of wood production, but their significant uses include berry picking and game hunting. Bird watching and hunting are popular activities in wetlands with open water, and many wetlands are also important breeding grounds for fish.

The conservation of wetlands that are located outside protected areas is strongly connected to the recreational value that the areas produce for landowners and the local people, either directly through hunting, for example, or indirectly through the water quality of the local lake. The founding, restoration and maintenance of wetlands in agricultural and forestry areas, as well as their sustainable use, are in part guided by the Wetland and Game Husbandry Strategy of the Ministry of Agriculture and Forestry (Ministry of Agriculture and Forestry 2015). The construction and maintenance of agricultural wetlands is steered by the terms of agri-environment payments and non-production-oriented investment support related to the Rural Development Programme.

Wetlands play a key role in mitigating climate change and adapting to it

The role of wetlands in the mitigation of climate change and adapting to it has been brought up in Conferences of the Parties of the Ramsar Convention since 2002. Wetlands provide natural solutions to climate change: they assist in mitigating climate change through carbon sequestration and in adapting to climate change through their role in the water cycle.

Wetlands have a versatile role in mitigating climate change and adapting to it: wetlands affect climate regulation, flood protection, the maintenance of water bodies and the protection of biodiversity. The Kyoto Protocol to the UN Framework Convention on Climate Change requires national greenhouse gas emissions to be reported annually for six different greenhouse gases. Wetlands are included in the so-called land use, land-use change and forestry sector (LULUCF). The methodological shortcomings related to the calculation were supplemented in 2013 with regard to wetlands (IPPC 2014).

Peatlands are an efficient carbon sink, considering their size, but peatland drainage releases carbon and nitrogen into the atmosphere and waters. The CO₂ emissions from peatland drainage account for approximately 5% of all emissions caused by human activity. However, emissions can be reduced by rewetting peatlands, which is also one of the objectives of the Ramsar Convention and an Aichi Target of the Convention on Biological Diversity (CBD) (Barthelmes et al. 2015).

Long-term observations of the bird populations of wetlands also make it possible to study the changes in species distribution that are due to climate change. In addition to climate change, the studies also take the species' habitat requirements and migratory behaviour into account. The study of the relocation of populations provides valuable information for the climate sustainability reviews of the network of wetland conservation areas. For example, the distribution of bird species is changing more slowly than Finland's climate. From the 1980s to the 2010s, the climate conditions have shifted by 186 kilometres, i.e. approximately 7.5 kilometres per year, but bird populations have only shifted in a north-northeast direction by 37 kilometres on average, i.e. approximately 1.5 kilometres per year. This relocation is limited by the presence of habitats suitable for the species. The situation is the most dire for birds living in northern habitats, such as fells. Species that live in Finland all year round are also more likely to be able to adapt to wintertime climate change than migratory birds, as changing climate conditions along the migration route make it more difficult for migratory birds to spread (Lehikoinen, A., Virkkala, R., 2016).

The Ramsar Convention also protects the cultural heritage of wetlands

All across the world, wetlands have been strongly affected by their use and exploitation. The original Ramsar Convention from 1971 focused particularly on the protection of migratory birds, but it also mentioned the cultural values of wetlands. The convention was later amended: The participation of local communities and indigenous peoples in the management of wetlands was emphasised in 1999 (Resolution VII.8). The values of the cultural heritage of wetlands were recognised more widely in the early 2000s (Resolutions VIII.19 and IX 21). The execution of the convention also supports other international conventions. In terms of cultural heritage, the most important of these are the UNESCO World Heritage Convention, the Council of Europe's European Landscape Convention and the Faro Framework Convention on the Value of Cultural Heritage for Society.

The goals of the Ramsar Convention are nowadays also promoted by the Ramsar Culture Network, a working group focused on the cultural heritage of wetlands (Papayannis ja Pritchard 2008). Today, the cultural heritage of wetlands is widely understood, as the working group addresses themes that range from agriculture to tourism and from food traditions to architecture. The working group has published a guide to the cultural heritage of wetlands. A light inventory of the cultural heritage of wetlands is being piloted since the beginning of 2016 (Pritchard et al. 2016).

The Agenda for Sustainable Development and Finland's development policy also support the Ramsar goals

The member states of the UN have recently agreed upon Sustainable Development Goals for the next 15 years. According to the Government report on Finland's development policy (4 February 2016), the 2030 Agenda for Sustainable Development, also known as Agenda 2030, is now more extensive and ambitious than before. Its goals include sustainable development with regard to people, the environment and the economy as well as peaceful societies worldwide. Agenda 2030 is expected to boost the development efforts of developing countries in the same manner as the UN's Millennium Development Goals: it paves the way for planning and political steering in developing countries, while developed countries undertake to support poorer countries in achieving the goals by means of cooperation and financing for development.

There are a total of 17 Sustainable Development Goals, and they are divided into sub-targets. The Ramsar Convention and its strategic goals implement the following Sustainable Development Goals in particular: 2. Zero hunger, 6. Clean water and sanitation, 11. Sustainable cities and communities, 12. Responsible consumption and production, 13. Climate action, 14. Life below water and 15. Life on land. Goals 14 and 15 are so-called biodiversity goals, though many of the other goals are also linked to biodiversity.

17 sustainable development goals
1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3. Ensure healthy lives and promote well-being for all at all ages.
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.
7. Ensure access to affordable, reliable, sustainable and modern energy for all.
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
10. Reduce inequality within and among countries.
11. Make cities and human settlements inclusive, safe, resilient and sustainable.
12. Ensure sustainable consumption and production patterns.
13. Take urgent action to combat climate change and its impacts.
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

The 17 goals for sustainable development. Image: The UN Association of Finland.

According to the Government report, the goals of Agenda 2030 pertain to all states, obligating them to promote sustainable development and prepare their own national action plans to achieve the goals. Society in its entirety can promote the agenda – not only the state, but also its citizens and civil society, businesses, municipalities and all other actors. The progress made by the member states will be evaluated regularly until 2030.

Finland must also adapt its own policies to conform to Agenda 2030. For instance, Finland's development policy, dated 4 February 2016, has been adapted to support the ability of developing countries to achieve the Sustainable Development Goals. One of the four main goals of Finland's development policy is 'to improve food security and the availability of water and energy and to use natural resources in a more sustainable manner'. Finland's development policy particularly supports the UN's Sustainable Development Goals 2, 6, 7, 13 and 15: End hunger, achieve food security, improve nutrition and promote sustainable agriculture; ensure access to and sustainable use of clean water and sanitation for all; ensure access to affordable, reliable, sustainable and modern energy for all; take urgent action to combat climate change and its impacts; conserve and restore terrestrial ecosystems, promote their sustainable use and halt land degradation and the loss of biodiversity.

Strengths, weaknesses, threats and opportunities for the protection and sustainable use of wetlands in Finland

Next page (Table 2) is the proposal of the Ramsar Wetland Working Group on what the strengths, weaknesses, threats and opportunities (SWOT) are in the protection and sustainable use of wetlands in Finland and what type of things should be taken into consideration when improving the protection and sustainable use of wetlands. This review was used as a basis for the preparation of the measures in the action plan.

Table 2. SWOT review of wetland protection

STRENGTHS	WEAKNESSES
<p>The most valuable wetlands are part of a network of conservation areas, and the biodiversity of wetlands is safeguarded in all land use</p> <ul style="list-style-type: none"> • The network of conservation areas includes a variety of wetlands • A total of 49 wetlands have been named as Ramsar sites (all of which are also Natura areas) and additions are planned • The Government's decision-in-principle on the sustainable and responsible use and conservation of mires and peatlands • The Government's decisions on river basin management plans and marine protection (for example, 2009 and 2015)² • Wetlands play a role in the response to climate change. Climate change has also been recognised as a politically significant matter • The importance of wetlands located in agricultural and forestry areas for water protection and as a habitat and local recreational area (hunting, fishing, nature watching) has been understood • The state does not support new wetland drainage, and it is rarely carried out nowadays <p>Wetlands provide many benefits to various parties and actors</p> <ul style="list-style-type: none"> • There is a great deal of expertise, networks and funding opportunities available • The protection and sustainable use of wetlands greatly benefits biodiversity and ecosystem services • Protection and sustainable use of catchment areas > protection and sustainable use of wetlands > water protection (Water Framework Directive) • The water theme is important to everyone • Water bodies, sea shores and mires are valued natural landscapes • Waterlogged organic materials are preserved > valuable archaeological artefacts • Mires are important to Finnish wood production (National Forest Strategy 2025) • The forests in drained low-yield mires do not have to be restored • The aim has been to direct peat production and any other use that alters mires away from mires that are still in their natural state • Wetlands store flood water • Water bodies, coastal waters and lakes are common areas that are maintained by their owners • National Fish Passage Strategy • Wetlands produce benefits that are already being utilised, but they may also contain opportunities that have not yet been utilised 	<p>The state of aquatic and wetland habitats and the species living in them has worsened</p> <ul style="list-style-type: none"> • Wetland habitats and the Ramsar Convention are not appreciated <p>Partly incomplete basic information and limited human and financial resources</p> <ul style="list-style-type: none"> • Our understanding of the natural and cultural heritage values of wetlands is lacking and there are not enough resources to determine them • The impacts of climate change are unknown • Inability to utilise existing financing opportunities • The parties carrying out the maintenance of wetlands grow fewer in number and there is no continuity plan or continuous funding • Lack of participation at a local level: The relationship of local goals and sustainable use with the environmental administration's goals decreases people's interest in taking action for the benefit of their local nature • Timber harvesting is problematic in some mire areas • Ownership of land is fragmented, decision making is decentralised to several landowners of the same site <p>Lack of coordination and common practices</p> <ul style="list-style-type: none"> • The assessment and monitoring of the combined effect of projects and land use is lacking • The adoption of common good practices is slow • A sector-oriented approach; common goals are not utilised effectively • Lack of general planning • The relationship between the conservation of habitats and the sustainable use of renewable natural resources (game, wood production) • The owner of a water area may be unaware of his or her property or may otherwise be passive with regard to maintaining the property • Insufficient knowledge of underwater habitats and the archaeological cultural heritage of water areas • The utilisation of potential methods and funding opportunities in water protection should be enhanced <ul style="list-style-type: none"> • actors in agriculture and forestry • others actors and operators

² The Government's decision on approving the river basin management plans for the Vuoksi River Basin District, the Kymijoki-Gulf of Finland River Basin District, the Kokemäenjoki-Archipelago Sea-Bothnian Sea River Basin District, the Oulujoki-Iijoki River Basin District, the Kemijoki River Basin District, the Tornionjoki River Basin District and the Teno-Näätämöjoki-Paatsjoki River Basin District for the period 2016–2021; The Government's decision on approving the action plan 2016–2021 related to the Finnish marine resources management plan.

UTILISATION OF STRENGTHS	TURNING WEAKNESSES INTO STRENGTHS
<p>A great deal of expertise and a variety of networks</p> <ul style="list-style-type: none"> • Permanent networking with various processes <p>The Government's existing decisions-in-principle</p> <ul style="list-style-type: none"> • Political approval at a fundamental level; a shared mindset exists for the protection, maintenance, restoration and founding of wetlands; utilisation of support • No new wetland drainage <p>Wetlands provide many benefits to various parties and actors</p> <ul style="list-style-type: none"> • Local nature and recreational opportunities are important to people • Emphasising societal importance • More efficient utilisation of existing financing opportunities • Involving the owners of water areas and committing them to common goals • Utilising the benefits provided by wetlands in communication; bringing the information to the people; benefits include <ul style="list-style-type: none"> • the state of the local lake • game, bird watching • fish, crayfish • landscape, nature in general • local recreational opportunities, hunting, fishing, nature watching, berry picking <ul style="list-style-type: none"> • wood production • peat production 	<p>Wetlands and the Ramsar Convention are not appreciated, and the natural and cultural values of wetlands are unknown</p> <ul style="list-style-type: none"> • Preparation of a communications plan (CEPA) and increasing communication; Ramsar image/brand <p>Lacking basic information</p> <ul style="list-style-type: none"> • Preparation of a wetland research and monitoring programme <p>Limited funding</p> <ul style="list-style-type: none"> • Mapping financing opportunities, influencing national financing frameworks and EU funding programmes, developing an agri-environmental support system <p>The parties carrying out the maintenance of wetlands grow fewer in number</p> <ul style="list-style-type: none"> • Identifying new cooperation partners and practices; networking • Supporting existing implementers and actors (landowners, hunters, local associations) <p>Lack of coordination and common practices</p> <ul style="list-style-type: none"> • Developing a catchment area-level planning system <p>Lack of knowledge about underwater habitats</p> <ul style="list-style-type: none"> • The VELMU programme collects information that must be utilised/integrated into planning systems together with other existing information

OPPORTUNITIES	THREATS
<p>The benefits provided by wetlands to people; stronger and more diverse recognition and highlighting of ecosystem services</p> <ul style="list-style-type: none"> • Nutrient and carbon sequestration; Finland is the model country of nutrient recycling • Storing water in catchment areas • Recreation and tourism • Natural products, such as game, fish, berries, bioenergy, vegetation waste, peat moss • Ensuring wood production • Ensuring peat production • Utilisation of wetlands as learning environments <p>Wetlands are a theme that gathers goals together</p> <p>Cross-sectoral cooperation networks</p> <ul style="list-style-type: none"> • Innovative utilisation of existing financing opportunities and identifying new opportunities • The same measures can be used to fulfil many obligations, such as those under the Ramsar Convention, Convention on Biological Diversity, climate change conventions, the Water Framework, Habitats, Birds and Floods Directives, blue-green infrastructure • The founding and restoration of wetlands is in line with the implementation of the compensation principle <p>The conservation of wetland habitats will be expanded</p> <ul style="list-style-type: none"> • Additions to the named national Ramsar sites • Supplemental proposal to the Mire Conservation Programme, 2015 • Traditional landscapes are part of the cultural landscape • Rehabilitation, founding, maintenance and conservation of wetlands for the sake of the renewable natural resources they provide (game, fish, berries, vegetation biomass) 	<p>The trend of species and habitats becoming threatened continues, the reasons for this trend increase</p> <ul style="list-style-type: none"> • Loss of biodiversity cannot be stopped by 2020 • The supplemental proposal to the Mire Conservation Programme will only be implemented on state-owned land, and the voluntary methods will not be carried out on private land <p>Continued lack of resources</p> <ul style="list-style-type: none"> • Investigations, maintenance and restoration, monitoring <p>Limited societal influence</p> <ul style="list-style-type: none"> • Using the wrong language with the wrong target groups • Inability to promote the goals in social decision making <p>Economic pressures to utilise wetlands grow and the detrimental effects of economic activities increase</p> <ul style="list-style-type: none"> • Other goals, such as mining operations, energy production, peat production, clearing of fields or forestry that are implemented in an unsustainable way, override the sustainable use of wetlands • The weight of nature conservation decreases • The weight of game husbandry and fishery decreases • The investments in wood production are not looked after by maintaining mire forests <p>Impacts of smaller-scale or random incidents</p> <ul style="list-style-type: none"> • Boating in shallow wetlands, oil spills, other unforeseen environmental accidents

UTILISATION OF OPPORTUNITIES	WARDING OFF THREATS
<p>Research into ecosystem services has been initiated</p> <ul style="list-style-type: none"> • Making wetlands a larger part of the study of ecosystem services • Local benefits and participation <p>Networking between actors who work for wetlands</p> <ul style="list-style-type: none"> • Influencing and developing the networking process, utilisation in communication • International networking, best practices • Taking care of the wood production in appropriate trenching areas by maintaining mire forests • Directing peat production to appropriate sites <p>Compensation principle</p> <ul style="list-style-type: none"> • Promoting legislation pertaining to compensation • Offsetting the biodiversity loss caused by other projects outside the network of conservation areas by founding or rehabilitating wetlands, for example 	<p>Society must take possession of wetlands</p> <ul style="list-style-type: none"> • CEPA plan, influencing through networks, utilising political commitments • Arousing people's interest, communication with the public, putting pressure on political decision making • Highlighting the benefits (grounds for why the protection and conservation of wetlands is important) and the need for the protection and sustainable use of wetlands as well as influencing the allocation of resources • All parties to whom wetlands are important need to form a united front against threats (hunters, bird and nature enthusiasts, fishermen, people living on shores) • Low-yield drainage areas in mire forests will be restored or be left to do so naturally • Maintaining and using mire forests in a sustainable manner

PART II: FINLAND'S RAMSAR WETLANDS ACTION PLAN 2016–2020

2020 vision for the protection and sustainable use of wetlands

The inland waters, mires and the Baltic Sea, brimming with life, are healthy, maintain diversity, produce benefits and well-being as well as make up an important part of our society.

Goals of the action plan

1. Stopping the trend of habitat types and species in wetlands becoming threatened by 2020.

Goal state:

- 1.1 Wetlands are protected, maintained, rehabilitated and restored to a sufficient degree.
- 1.2. Wetlands and their natural resources are utilised in a sustainable manner.
- 1.3. There is enough funding for the maintenance, rehabilitation and restoration of wetlands.

2. Planning that affects wetlands must be carried out comprehensively.

Goal state:

- 2.1. The needs and focus areas in the protection of wetland habitats are taken adequately into account in any planning that pertains to wetlands and in the execution of any measures that affect them.
- 2.2. Any planning pertaining to wetlands is carried out on the landscape and catchment area level.
- 2.3. The ecosystem services provided by wetlands are taken into account in the planning.
- 2.4. The planning of water construction projects/use is based on sufficient information on underwater cultural heritage.

3. Enough information is available on the state, benefits and sustainable use of wetlands, and this information is used to develop new methods for the benefit of wetlands.

Goal state:

- 3.1. We are aware of the state of our wetlands.
- 3.2. We know the benefits provided by wetlands (ecosystem services) and their significance, particularly in the mitigation of climate change.
- 3.3. The definition of the sustainable use of wetlands is commonly accepted.
- 3.4. Any information on wetlands is open and available for all.
- 3.5. This information is utilised in the protection of wetlands, the expansion of the network of conservation areas as well as sustainable use.
- 3.6. Research and the development of methods create new solutions that benefit wetlands.

4. The significance of wetlands is widely understood.

Goal state:

- 4.1. Wetland-related communications support the understanding of decision-makers of the benefits provided by wetlands, and these benefits are known and appreciated and they direct the actions of decision-makers and other actors.
- 4.2. The national CEPA programme is implemented in cooperation with partners, and there are enough resources for this implementation.

- 4.3. There is positive awareness of the Ramsar Convention, Ramsar sites, Wetland Centre and the objectives of the action plan.
- 4.4. Actors involved with wetlands possess sufficient knowledge and skills.
- 4.5. Decision-makers, citizens, pupils and other actors have an increased knowledge of wetlands.

5. Finland actively participates in international cooperation to promote the protection and sustainable use of wetlands.

Goal state:

- 5.1. Finland is an active participant in the Ramsar Convention and the NorBalWet network.
- 5.2. The Ramsar sites in Finland form a network of model areas in terms of the good maintenance and sustainable use of wetlands.
- 5.3. Finland also utilises the best practices of the protection and sustainable use of wetlands in international cooperation, particularly in the cooperation with other environmental agreements.
- 5.4. Finland promotes cooperation with regard to wetlands shared with Sweden, Norway and Russia.

The Wetland Working Group's goal for its own work is:

6. The protection and sustainable use of wetlands is realised in accordance with common goals.

Goal state:

- 6.1. The Wetland Working Group's background organisations are committed to achieving the common goals.
- 6.2. Efforts are made to take the goals in the protection and sustainable use of wetlands into consideration in the work and operations of all actors who affect wetlands.
- 6.3. Cooperation and the implementation of the founding, maintenance, rehabilitation and restoration of wetlands becomes easier.

Measures of the action plan

The table below shows the following: the measures of the action plan, broken down by goal; the parties with the main responsibility for implementing the measure (if one has been named) and other partners involved in the implementation; an assessment of the required resources; the year by which the measure should be completed; and which goal of the Ramsar Convention's strategic plan for 2016–2024 the measure implements. The table also shows which goal of the CEPA programme the measures for goal 5, as well as some other measures, implement.³ Additionally, the synergies with CBD's so-called Aichi Biodiversity Targets are specified in Annex 4.

The goal is for the measures to be sufficiently extensive, efficient and implemented over the long term. The efficiency of the planning, funding and implementation requires cooperation between actors from different sectors.

Changes regarding actors and responsible parties will be implemented from the beginning of 2019, resulting from a reform in regional administration, particularly with regard to ELY Centres and on a regional level.

³ Goal 10 of the strategic plan, which relates to the traditional knowledge, innovations and practices of the Sami in Finland, will be implemented through the various measures of the action plan when they are connected to the home region of the Sami. Goal 10: 'The traditional knowledge, innovations and practices of indigenous peoples, insofar as they are significant to the sustainable use of wetlands, as well as the traditional use of the natural resources of wetlands will be documented, taken into consideration in accordance with national legislation and international obligations and incorporated in full in the execution of the agreement. In this work, the full and efficient participation of the indigenous peoples and local communities, as well as a respectful attitude towards their traditional knowledge, innovations and practices, will be taken into consideration on all relevant levels.'

Goal I. Stopping the trend of habitat types and species in wetlands becoming threatened by 2020

Goal state:

- 1.1 Wetlands are protected, maintained, rehabilitated and restored to a sufficient degree.
- 1.2 Wetlands and their natural resources are utilised in a sustainable manner.
- 1.3. There is enough funding for the maintenance, rehabilitation and restoration of wetlands.

Measure	Main responsible parties and other partners	
1. A workshop will be implemented in order to form an overall picture of the state of wetland habitats, possible information gaps and the prioritisation of the measures required for improving wetland habitats based on existing information.	<u>Wetland Working Group</u>	
2. Based on the overall picture formed and prioritisations decided in measure 1, the financing needs and opportunities in the maintenance, rehabilitation and restoration of wetlands will be determined, in addition to the wetland habitats most urgently in need of action. The actors' responsibilities will also be specified more closely.	<u>Wetland Working Group</u>	
3. Based on the overall picture formed in measure 1, promoting the implementation of maintenance, rehabilitation and restoration projects related to the most diverse and threatened wetland habitat types as well as the implementation of protection and management plans for species.	<u>YM</u> MMM, Metsähallitus, ELY Centres, SYKE, Luke, the National Board of Antiquities	
4. Determining which factors affect the development of threatened game and other wetland bird populations in Finland and along migration routes, where possible.	<u>Luke</u> The Finnish Museum of Natural History (LUOMUS), SYKE, BirdLife Finland	
5. Promoting the obtaining of project funding, agri-environment payments and non-production-oriented investment support for the maintenance, rehabilitation and restoration of existing wetlands and the founding of new wetlands, taking the principles of the Ramsar Convention into account.	Background organisations of the Wetland Working Group, ELY Centres, agricultural counselling agencies	
6. Ensuring that every Ramsar site has a named responsible person and an up-to-date maintenance and use plan, which is also implemented, as well as up-to-date information in the Ramsar database.	<u>YM</u> Metsähallitus, ELY Centres	
7. Conducting an evaluation of the sufficiency of the Ramsar sites in Finland and proposing additional sites.	<u>Wetland Working Group</u> SYKE	
8. Ensuring that the agri-environmental support system and its implementation also take the maintenance of the most threatened natural wetland habitats into account and that wetland-related matters are included in the agri-environment programme that will start in 2021.	<u>MMM</u> ELY Centres, counselling agencies, foundations, environmental organisations, landowners, entrepreneurs	
9. Founding multifunctional wetlands in agricultural and forestry areas and urban environments and making sure that the state of existing wetlands does not worsen.	ELY Centres, Metsähallitus, the Finnish Wildlife Agency, municipalities, cities, landowners, entrepreneurs, the Finnish Forest Centre	
10. Promoting the sharing and adoption of the best and most cost-effective practices in the rehabilitation of wetlands and supporting wetland-related counselling.	<u>Wetland Working Group</u> Metsähallitus, ELY Centres, SYKE, the Finnish Wildlife Agency, the Finnish Forest Centre	
11. Influencing the development of the new Metso financing system and the increasing of Kemera funds as well as directing Kemera funds towards the establishment of wetlands and alluvial meadows as appropriately as possible.	YM, MMM	

	Need for resources (E= with existing resources / R= by reallocating existing resources / A= additional resources needed) L= resurssilisäys tarpeen)	To be completed by	The international Ramsar goal being implemented
	E	2016	5, 7, 8, 12, 13
	E	2016	5, 7, 12, 13
	R/A	2020	5, 7, 12, 13, 17
	A	2020	7, 18
	E	2020	5, 7, 12, 13, 17
	E	2016	5, 7 Myös CEPA 4.1
	R	2017	6
	E	2020	1, 5, 7, 13, 16, 17
	E	2020	13
	E	2020	3, 14, 16, 19
	R/A	2020	1, 13, 16, 17

Goal 2.Planning that affects wetlands must be carried out comprehensively

Goal state:

- 2.1. The needs and focus areas in the protection of wetland habitats are taken adequately into account in any planning that pertains to wetlands and in the execution of any measures that affect them.
- 2.2. Any planning pertaining to wetlands is carried out on the landscape and catchment area level.
- 2.3. The ecosystem services provided by wetlands are taken into account in the planning.
- 2.4. The planning of water construction projects/use is based on sufficient information on underwater cultural heritage.

Measure	Main responsible parties and other partners	
12.Influencing the action plans for river basin management during the planning cycle that started in 2016, as well as the flood risk management plans and planning guidelines, in such a way that the principles of the Ramsar Convention and the needs of the protection of aquatic habitats are taken into account sufficiently.	YM ELY Centres, regions, SYKE, the National Board of Antiquities, Luke	
13.Promoting the execution of general plans for multifunctional wetlands.	YM, Ely Centres, the Finnish Forest Centre, regions, counselling agencies, the National Board of Antiquities, Luke	
14.Recognising the importance of natural wetlands for water protection and directing funding to their maintenance while simultaneously enabling their sustainable use.	MMM, YM ELY Centres, regions, Metsähallitus	
15.Expanding the general purpose planning pertaining to the restoration and maintenance of the wetland habitats of shores into a nationwide activity that ensures the planning of the main shore areas, the implementation of the primary restoration measures defined in the plans and that there are enough resources for planning, rehabilitation and continuous maintenance.	YM, MMM, ELY Centres, regions, Metsähallitus, Luke	
16.Producing information on the ecosystem services of Ramsar sites in cooperation with other actors.	SYKE ⁴ Metsähallitus, ELY Centres	

⁴ For example, cooperation with participants in the Finnish Inventory Programme for the Underwater Marine Environment (VELMU).

	Need for resources (E= with existing resources / R= by reallocating existing resources / A= additional resources needed) L= resurssilisäys tarpeen)	To be completed by	The international Ramsar goal being implemented
	E	2018	I, 2, 3, 5, 9, 13, 16 Also CEPA 2.3, 4.6
	E/R	Continuous	I, 9, 13, 16 Also CEPA 2.3, 4.6
	E/R	2020	I, 2, 9, 11, 16, 17
	E	2020	I, 3, 7, 12,13, 17
	E	2017	II

Goal 3. Enough information is available on the state, benefits and sustainable use of wetlands, and this information is used to develop new methods for the benefit of wetlands

Goal state:

- 3.1. We are aware of the state of our wetlands.
- 3.2. We know the benefits provided by wetlands (ecosystem services) and their significance, particularly in the mitigation of climate change.
- 3.3. The definition of the sustainable use of wetlands is commonly accepted.
- 3.4. Any information on wetlands is open and available for all.
- 3.5. This information is utilised in the protection of wetlands, the expansion of the network of conservation areas as well as sustainable use.
- 3.6. Research and the development of methods create new solutions that benefit wetlands.

Measure	Main responsible parties and other partners	
17. Determining the sources of the natural and cultural heritage information pertaining to wetlands and the current status of the availability of information as well as determining and reporting the main information gaps.	YM SYKE, Metsähallitus, the Finnish Forest Centre ⁵ , the National Board of Antiquities	
18. Determining the research needs related to wetlands that are required for decision making.	Wetland Working Group	
19. Mapping and defining the ownership and processes of research and monitoring related to wetlands.	<u>Wetland Working Group</u> SYKE, LYNET network, actors of the VELMU 2 project	
20. Preparing a research and monitoring programme related to wetlands.	SYKE LYNET network	
21. Ensuring sufficient funding for the implementation of the wetland research and monitoring programme.	Wetland Working Group	
22. Defining the sustainable use of wetlands for each habitat.	<u>Wetland Working Group</u> SYKE, Luke, the Finnish Forest Centre, the Federation of Finnish Fisheries Associations, the Finnish Wildlife Agency	
23. Utilising results from projects related to wetlands.	Metsähallitus, SYKE	
24. Utilising the results of inventories of national traditional landscapes in the protection of traditional biotopes in wetlands.	YM, Wetland Working Group, Metsähallitus, ELY Centres, the Finnish Forest Centre	
25. Developing new, cost-effective solutions and methods for wetland construction, the maintenance of wetlands and the monitoring of effectiveness.	Wetland Working Group, research institutes, projects, private actors, companies	
26. Developing the sustainable use of wetlands as an attraction factor for tourism and recreation, while also taking the cultural value of wetlands into account.	Metsähallitus, other actors, such as regional councils, municipalities, private actors, companies	

⁵ For example, cooperation with participants in the Finnish Inventory Programme for the Underwater Marine Environment (VELMU).

	Need for resources (E= with existing resources / R= by reallocating existing resources / A= additional resources needed) L= resurssilisäys tarpeen)	To be completed by	The international Ramsar goal being implemented
	E	2017	4, 8, 11, 14, 18
	E	2017	8, 11, 14
	E	2017	
	E	2020	8, 11, 14, 18
	A	2020	17
	A	2017	2, 9, 13, 18
	E	Continuous	11, 18 Also CEPA 4.6, 6.2
	E	2020	8
	E	2020	14, 18, 19 Also CEPA 4.6
	E/R/A	2020	3, 13, 16

Goal 4. The significance of wetlands is widely understood

Goal state:

- 4.1. Wetland-related communications support the understanding of decision-makers of the benefits provided by wetlands, and these benefits are known and appreciated and they direct the actions of decision-makers and other actors.
- 4.2. The national CEPA programme is implemented in cooperation with partners, and there are enough resources for this implementation.
- 4.3. There is positive awareness of the Ramsar Convention, Ramsar sites, Wetland Centre and the objectives of the action plan.
- 4.4. Actors involved with wetlands possess sufficient knowledge and skills.
- 4.5. Decision-makers, citizens, pupils and other actors have an increased knowledge of wetlands.

Measure	Main responsible parties and other partners	
27. Naming responsible persons for CEPA and contact persons for the Wetland Centre, and training and committing them to Ramsar communication and tools.	<u>Metsähallitus</u>	
28. Setting up a communications team for the Wetland Working Group to prepare a communications plan and an annual communications schedule.	<u>Wetland Working Group</u> , CEPA	
29. Developing tools and channels suitable for wetland-related communication in accordance with the communications plan.	Metsähallitus, the Finnish Association for Nature Conservation, CEPA, the Federation of Finnish Fisheries Associations	
30. Developing, organising and coordinating an annual Wetland Day and other wetland-related events across Finland.	Wetland Working Group, Metsähallitus, Parks & Wildlife Finland, CEPA, Wetland Centre, SLL, SYKE, Finnish Peatland Society, Baltic Sea Communication Network, the Finnish Wildlife Agency, MTK, the Finnish Forest Centre, the Federation of Finnish Fisheries Associations	
31. Developing the operations, materials and content of the Liminka Bay Wetland Centre and its role in the network of nature centres; developing wetland-related communications in other nature centres too.	<u>Metsähallitus</u> , <u>CEPA</u> , <u>Wetland Centre</u> The Finnish Wildlife Agency, ELY Centre, BMOL, the Finnish Forest Centre, the Federation of Finnish Fisheries Associations, the National Board of Antiquities	
32. Strengthening the visibility of Ramsar sites and their role in ecotourism by means of information boards, brochures and other information channels.	Metsähallitus, project actors	
33. Founding model areas for wetlands (Ramsar sites, natural wetlands, artificial wetlands, including former peat production areas) and sharing information about them.	Metsähallitus, the Finnish Wildlife Agency, ELY Centres, hunting associations, land and water owners, the Finnish Forest Centre, the Federation of Finnish Fisheries Associations	
34. Conducting a training need survey on wetland-related actors and tailoring the necessary training based on the survey.	<u>Wetland Working Group</u> Metsähallitus	
35. Ensuring that wetlands are also included in school curricula in the future and promoting the importance of wetlands as learning environments.	FEE Finland, Metsähallitus, vocational education	
36. Supporting wetland-related counselling; increasing knowledge about wetlands, their natural and cultural heritage values and wetland networks; and developing materials for this purpose.	Counselling agencies for agriculture, forestry and fishery, the Finnish Forest Centre, MMM, the Finnish Wildlife Agency, the National Board of Antiquities	

	Need for resources (E= with existing resources / R= by reallocating existing resources / A= additional resources needed)	To be completed by	The international Ramsar goal being implemented	The CEPA goal being implemented
	E	2016	16, 19	1.1
	E	Annual	16	2.2
	E	2016	16	1.4, 3.3, 6.3
	E	Annual	16	1.5, 6.1, 8.1
	R/A	From 2016	16	3.2, 4.4, 7.2, 7.4, 8.1, 8.3
	E	2020	16	(3.4)
	R/A	2020	16, 19	3.4, 5.1
	E	2020	16, 19	4.2, 4.3
	E	2020	16, 19	4.5, 8.1
	E	Continuous	16, 19	CEPA 4.3, 4.6

Goal 5. Finland actively participates in international cooperation to promote the protection and sustainable use of wetlands

Goal state:

- 5.1. Finland is an active participant in the Ramsar Convention and the NorBalWet network.
- 5.2. The Ramsar sites in Finland form a network of model areas in terms of the good maintenance and sustainable use of wetlands.
- 5.3. Finland also utilises the best practices of the protection and sustainable use of wetlands in international cooperation, particularly in the cooperation with other environmental agreements.
- 5.4. Finland promotes cooperation with regard to wetlands shared with Sweden, Norway and Russia.

Measure	<u>Main responsible parties</u> and other partners	
37. Reserving enough resources for the implementation of national and international Ramsar wetland work.	<u>YM</u> Metsähallitus, the Finnish Forest Centre, UM	
38. Participating actively in the operations of the NorBalWet network, the European team of the Ramsar Convention and the Ramsar Culture Network; the Wetland Centre will network with international networks of wetland centres, such as Wetland Link International.	National Ramsar contact persons, Wetland Working Group, experts, Wetland Centre	
39. Seeking funding with the NorBalWet network for the development of wetland centres.	<u>Metsähallitus</u> NorBalWet	
40. Seeking funding for the development of volunteer work and cooperation with counselling agencies.	Wetland Working Group NorBalWet, UM	
41. Preparing carefully for each Conference of the Parties and contractual reporting. Supporting the participation of developing countries in Conferences of the Parties and in the execution of the Ramsar Convention.	<u>YM</u> Wetland Working Group, UM	
42. Participating in expert cooperation between the biogeographic regions of the European Union.	<u>YM</u> Wetland Working Group	
43. Where possible, supporting wetland efforts in the Baltic States, Russia, developing and other countries, such as countries located along the migration route of birds, with the help of cooperation projects.	NGOs, UM, SLL, WWF, Metsähallitus, SYKE, HELCOM State & Conservation Working Group	
44. Looking into opportunities for establishing cross-border Ramsar sites.	<u>YM</u> Wetland Working Group	
45. Establishing a national network of contact persons for environmental agreements.	<u>YM</u>	
46. Networking with contact persons for other environmental agreements as well as international wetland networks.	<u>YM</u> Wetland Working Group, HELCOM State & Conservation Working Group, UM	

	Need for resources (E= with existing resources / R= by reallocating existing resources / A= additional resources needed)	To be completed by	The goal being implemented
	K	Vuosittain	15, 17, 18, 19
	K	Euroopan ryhmä 2017 NorBalWet vuosittain	15, 16, 18, 19 Myös CEPA 3.3, 7.3
	N	2017	15, 16, 17, 18, 19 Myös CEPA 7.3
	N	2017	16, 17, 18 Myös CEPA 5.4
	N	Raportointi 2017 Osapuolikonkous 2018	18, 19
	N	2020	6, 18, 19
	N/K/L	2020	6, 15, 16, 17, 18, 19
	N	2020	6, 15, 18
	N	2016	16, 19 Myös CEPA 3.6
	N	2020	15, 16, 18, 19 Myös CEPA 3.6

The Wetland Working Group's action plan for its own work

Goal 6. The protection and sustainable use of wetlands is realised in accordance with common goals

Goal state:

- 6.1. The Wetland Working Group's background organisations are committed to achieving the common goals.
- 6.2. Efforts are made to take the goals in the protection and sustainable use of wetlands into consideration in the work and operations of all actors who affect wetlands.
- 6.3. Cooperation and the implementation of the founding, maintenance, rehabilitation and restoration of wetlands becomes easier.

Measure	Main responsible parties and other partners	
47. Creating a review tool for background organisations for the implementation of the Ramsar Convention and preparing national guidelines for applying the principles of the Ramsar Convention in Finland.	<u>Wetland Working Group, STRP, the National Board of Antiquities, university experts in cultural heritage</u>	
48. Identifying the common goals in the sustainable use of constructed and natural wetlands.	<u>Wetland Working Group</u>	
49. The principles of the Ramsar Convention will be taken into account in the planning of the maintenance and use of conservation areas, the development of regional recreational services as well as maintenance, rehabilitation and restoration projects, particularly at named Ramsar sites.	<u>Metsähallitus, ELY Centres</u>	
50. The principles of the Ramsar Convention will be taken into account in all projects involving the maintenance, rehabilitation or restoration of water bodies, the construction of water protection wetlands, the restoration of mires or the maintenance of shore areas, both within and outside of conservation areas.	<u>SYKE</u> YM, MMM, ELY Centres, the Finnish Wildlife Agency, the Finnish Forest Centre, landowners, owners of water areas	
51. The Wetland Working Group's background organisations will incorporate the results of the action plan and the tool referred to above, as well as any potential development measures, into their own operations.	The Wetland Working Group's background organisations, YM, MMM, regional state administration	
52. Preparing a network and process analysis of the protection and sustainable use of wetlands; identifying the key parties and processes which must be influenced.	Wetland Working Group, Metsähallitus, Parks & Wildlife Finland	
53. Compiling an annual work programme based on the Ramsar action plan.	Wetland Working Group	
54. Planning and implementing a wetland network/forum in cooperation with the water body rehabilitation network coordinated by SYKE. The purpose of the network/forum will be to support actors at a practical level.	Wetland Working Group	
55. Monitoring the effectiveness of legislation that affects the protection and rehabilitation of wetlands and influencing legislation.	<u>Wetland Working Group</u>	

	Need for resources (E= with existing resources / R= by reallocating existing resources / A= additional resources needed)	To be completed by	The goal being implemented
	N	2017	19
	N	2016	2, 9 Also CEPA 4.3
	N	2020	12, 14, 19 Also CEPA 2.3, 4.1, 5.1, 5.2.
	N	2020	1, 2, 3, 5, 7, 12, 13, 14, 19 Also CEPA 5.1, 5.2, 5.3.
	N	2017	1, 3, 5, 7, 13, 14, 19
	N	2017	16 Also CEPA 5.5
	N	Annual	17
	N	2016	1, 3, 9, 13, 14, 19
	N	2020	1, 2, 3, 13, 17

Funding the Ramsar Wetlands Action Plan

The Ramsar Wetlands Action Plan was drafted as part of the Strategy for the Conservation and Sustainable Use of Biodiversity in Finland for the years 2013–2020 and its measure 53, which requires the development and implementation of an action plan for the wetlands in Finland. The main responsibility for the implementation of the plan lies with the Finnish Ministry of the Environment, but the Ministry of Agriculture and Forestry, as well as the Ministry of Employment and the Economy, are also designated as responsible parties.

Financial incentives and securing financial resources are important for the promotion of matters related to wetlands and the implementation of the action plan. The objective is to enhance the realisation of the projects and the full utilisation of the available sources of funding. The action plan is implemented within the framework of the general government fiscal plan and government budgets by utilising, combining and reallocating various sources of funding. The purpose of this is to direct current funding to the measures defined in the strategy which improve the state of wetlands. In the future, the financing and support systems for wetlands should be developed to make the rehabilitation and maintenance of wetlands, as well as the promotion of the sustainable use of wetlands, easier for the various actors implementing the action plan.

The European Union requires member states to have national Prioritized Action Frameworks (PAFs) for Natura 2000 in place as part of the realisation of the objectives of the EU Biodiversity Strategy and the funding of the Natura 2000 network. The objective of the national PAFs is to enhance the allocation of the EU funding programmes for investments in national natural capital. Wetlands are included on the list of nationally prioritised measures. The objective of the action plan is to influence the allocation of EU funding and other project funding in such a way that they promote the targets of the action plan. The implementation and the allocation of funding to the prioritised measures can be developed, for instance, by creating a strategic project portfolio for wetlands, which contains project descriptions and the responsible parties.

In addition to the implementation of the wetland projects, there are several other strategies and programmes in place which contribute to the realisation of the goals set in the action plan. Attention must be paid to the coordination, interfaces and compatibility of the Wetlands Action Plan and other strategies and programmes. These include the bioeconomy, energy and climate strategies, river basin management plans, marine resources management plans, the strategy for the protection and restoration of small water bodies, the strategies for mire conservation and peatlands and flood risk management plans, among other things. The most appropriate sites to be allocated public funds are conservation areas in particular, in addition to sites that are the most valuable in terms of biodiversity and where the long-term maintenance of wetlands by local actors is ensured and game populations are managed in a prudent and systematic way.

The Ramsar Wetlands Action Plan aims to guide the operations of the state's administrative bodies, such as the Centres for Economic Development, Transport and the Environment, Metsähallitus, the Finnish Forest Centre, the Finnish Environment Institute, and the Natural Resources Institute Finland. The preparation of the action plan also involved other key operators that affect the state of wetlands, such as the Council of Oulu Region, Tapio Oy, the Central Union of Agricultural Producers and Forest Owners (MTK), the Finnish Wildlife Agency, the Federation of Finnish Fisheries Associations, the Finnish Peatland Society, BirdLife Finland, FEE Finland and WWF Finland. As part of this cooperative effort, these operators also contribute to the implementation of the action plan.

In connection with the 55 measures presented in the Ramsar Wetlands Action Plan, the plan indicates the following for each measure: the main implementer and the other organisations with a key role in the measure's implementation; the time span

reserved for the implementation; and which goal of the international Ramsar strategy the measure implements. The cost impacts of the measures are estimated more closely in the action plan, which is prepared and updated annually. In addition to the designated operators, we hope that other parties will also partake in the implementation of these measures (Table 3).

Table 3. Funding the Ramsar Wetlands Action Plan

The required sources of funding	Object of funding	Responsible party	Implemented by	Schedule
State funding, performance management, METSO	Goals of the action plan	YM	SYKE, Metsähallitus, ELY Centres	Continuous
State funding, performance management	Goals of the action plan	MMM	The Finnish Forest Centre, Forestry Development Centre Tapio, the Finnish Wildlife Agency	Continuous
State funding, performance management, The Finnish Funding Agency TEKES	Goals of the action plan	Ministry of Employment and the Economy (TEM)	ELY Centres	Continuous
The Development Fund for Agriculture and Forestry (Makera)	Goals of the action plan	MMM	based on applications	2015-2020
Temporary Act on the Financing of Sustainable Forestry (Kemera)	Particularly: nature management projects, wetland construction, sustainable use of mire forests	MMM	based on tendering processes	until 2020
Employment appropriations, pay subsidy	Goals of the action plan	Government agencies and institutions, other employers		
State funding and project funding	General project planning, water protection guidance	MMM, YM, EU	The Finnish Forest Centre	Continuous
EU funding programmes: Rural Development Programme for Mainland Finland, European Maritime and Fisheries Fund (EMFF), Structural funds, Interreg programmes, ENI-CBC programmes, LIFE funding, ESR funding, Horizon 2020	The objectives of the funding programmes enable the funding of the goals of the action plan	MMM, YM, TEM, all operators	Depends on the projects	unding period 2014–2020, preparing for a new funding period
Private funding	Goals of the action plan	Companies		
Foundations	Goals of the action plan	All operators		
Development cooperation funding by UM	Goals of the action plan, increasing the impact of international cooperation	UM	Depends on the projects	
Other innovative sources of funding	Goals of the action plan	All operators		

Monitoring and assessment of the implementation of the action plan

The Finnish national Ramsar Wetland Working Group evaluates the implementation of the action plan by monitoring the realisation status of the measures in the action plan. The implementation of the strategic plan of the Ramsar Convention is assessed every three years through national reports, and the next report for Finland will be drafted in 2018. The realisation status of the action plan will also be reported on in 2019 to the national biodiversity monitoring group which monitors the realisation of the Finnish National Biodiversity Strategy and Action Plan.

The reaching of goals is illustrated with impact indicators. These indicators illustrate the development of the state of the wetlands at a more general level than can be directly influenced with the measures of the action plan. In addition to these indicators, qualitative analyses can also be used in monitoring how the goals set in the action plan are realised. The effectiveness of the action plan can be assessed with the help of national assessments and monitoring. These include conservation status assessments of species and habitats and monitoring of wetlands and bird populations of archipelagos, among other things.

Example:

Goal 1: Stopping the trend of habitat types and species in wetlands becoming threatened by 2020.

Indicator: Status assessments of wetland habitat types and threatened species (2015–2018)

Initial data: Assessment of threatened habitat types 2008, latest threatened wetland habitat types

1. Stopping the trend of habitat types and species in wetlands becoming threatened by 2020.

Goal state:

- 1.1 Wetlands are protected, maintained, rehabilitated and restored to a sufficient degree.
- 1.2. Wetlands and their natural resources are utilised in a sustainable manner.
- 1.3. There is enough funding for the maintenance, rehabilitation and restoration of wetlands.

2. Planning that affects wetlands must be carried out comprehensively.

Goal state:

- 2.1. The needs and focus areas in the protection of wetland habitats are taken adequately into account in any planning that pertains to wetlands and in the execution of any measures that affect them.
- 2.2. Any planning pertaining to wetlands is carried out on the landscape and catchment area level.
- 2.3. The ecosystem services provided by wetlands are taken into account in the planning.
- 2.4. The planning of water construction projects/use is based on sufficient information on underwater cultural heritage.

3. Enough information is available on the state, benefits and sustainable use of wetlands, and this information is used to develop new methods for the benefit of wetlands.

Goal state:

- 3.1. We are aware of the state of our wetlands.
- 3.2. We know the benefits provided by wetlands (ecosystem services) and their significance, particularly in the mitigation of climate change.
- 3.3. The definition of the sustainable use of wetlands is commonly accepted.
- 3.4. Any information on wetlands is open and available for all.
- 3.5. This information is utilised in the protection of wetlands, the expansion of the network of conservation areas as well as sustainable use.
- 3.6. Research and the development of methods create new solutions that benefit wetlands.

4. The significance of wetlands is widely understood.

Goal state:

- 4.1. Wetland-related communications support the understanding of decision-makers of the benefits provided by wetlands, and these benefits are known and appreciated and they direct the actions of decision-makers and other actors.
- 4.2. The national CEPA programme is implemented in cooperation with partners, and there are enough resources for this implementation.
- 4.3. There is positive awareness of the Ramsar Convention, Ramsar sites, Wetland Centre and the objectives of the action plan.
- 4.4. Actors involved with wetlands possess sufficient knowledge and skills.
- 4.5. Decision-makers, citizens, pupils and other actors have an increased knowledge of wetlands.

5. Finland actively participates in international cooperation to promote the protection and sustainable use of wetlands.

Goal state:

- 5.1. Finland is an active participant in the Ramsar Convention and the NorBalWet network.
- 5.2. The Ramsar sites in Finland form a network of model areas in terms of the good maintenance and sustainable use of wetlands.
- 5.3. Finland also utilises the best practices of the protection and sustainable use of wetlands in international cooperation, particularly in the cooperation with other environmental agreements.
- 5.4. Finland promotes cooperation with regard to wetlands shared with Sweden, Norway and Russia.

The Wetland Working Group's goal for its own work is:

6. The protection and sustainable use of wetlands is realised in accordance with common goals.

Goal state:

- 6.1. The Wetland Working Group's background organisations are committed to achieving the common goals.
- 6.2. Efforts are made to take the goals in the protection and sustainable use of wetlands into consideration in the work and operations of all actors who affect wetlands.
- 6.3. Cooperation and the implementation of the founding, maintenance, rehabilitation and restoration of wetlands becomes easier.

The environmental impacts of the implementation of the Ramsar Wetlands Action Plan

The Finnish Act on the Assessment of the Environmental Impact of Authorities' Plans and Programmes (200/2005) sets an obligation to determine and assess, to a sufficient degree, the environmental impacts of plans and programmes in the planning phase if the implementation may have a significant impact on the environment.

For the Ramsar Wetlands Action Plan, the working group assessed the desirable and undesirable, positive and negative impacts on people (social), the environment and the economy. In addition to this, the potential impacts of the action plan were also examined from the perspective of ecosystem services provided by biodiversity. This assessment was qualitative, and the quantity, extent and significance of the impacts could only be assessed on a general level. In conclusion, it can be stated that the Wetlands Action Plan has social, environmental and economic impacts.

Table 4. Impacts of the Ramsar Wetlands Action Plan

	Assessment of impacts *)	Verbal description
I Social impacts Human health, living conditions and comfort	+++	The development of wetlands as recreational sites
	+++	Wetlands as learning environments
	++	Understanding the significance of wetlands
	+	Increasing the participation of the parties concerned
II Environmental impacts Biodiversity and ecosystem services (maintaining and regulating services) Urban form, built environment, the townscape, cultural heritage The landscape	+++	The status of wetland habitats and species
	+++	Ecosystem services
	++	Water protection
	++	The water cycle and water resources
	++	Flood protection, prevention of erosion damage
	++	Adapting to climate change
+	Urban form, improving the townscape	
+	Maintenance of cultural heritage	
++	Natural and cultural landscapes	
III Economic impacts Ecosystem services (production and cultural services)	++	Promotion of sustainable use
	++	Solutions based on nature and natural processes
	+	The development of ecotourism that is based on wetlands
	+	Utilising natural resources
	+	agriculture
	+	forestry
	+	fishing
-	Energy and peat production, reducing the negative effects of peat production and improving its acceptability	
+	Developing the wetland economy	
+		

*) Explanations of the markings

Negative effect: -, no effect: 0, positive effect: +, significant positive effect: ++

very significant positive effect: +++

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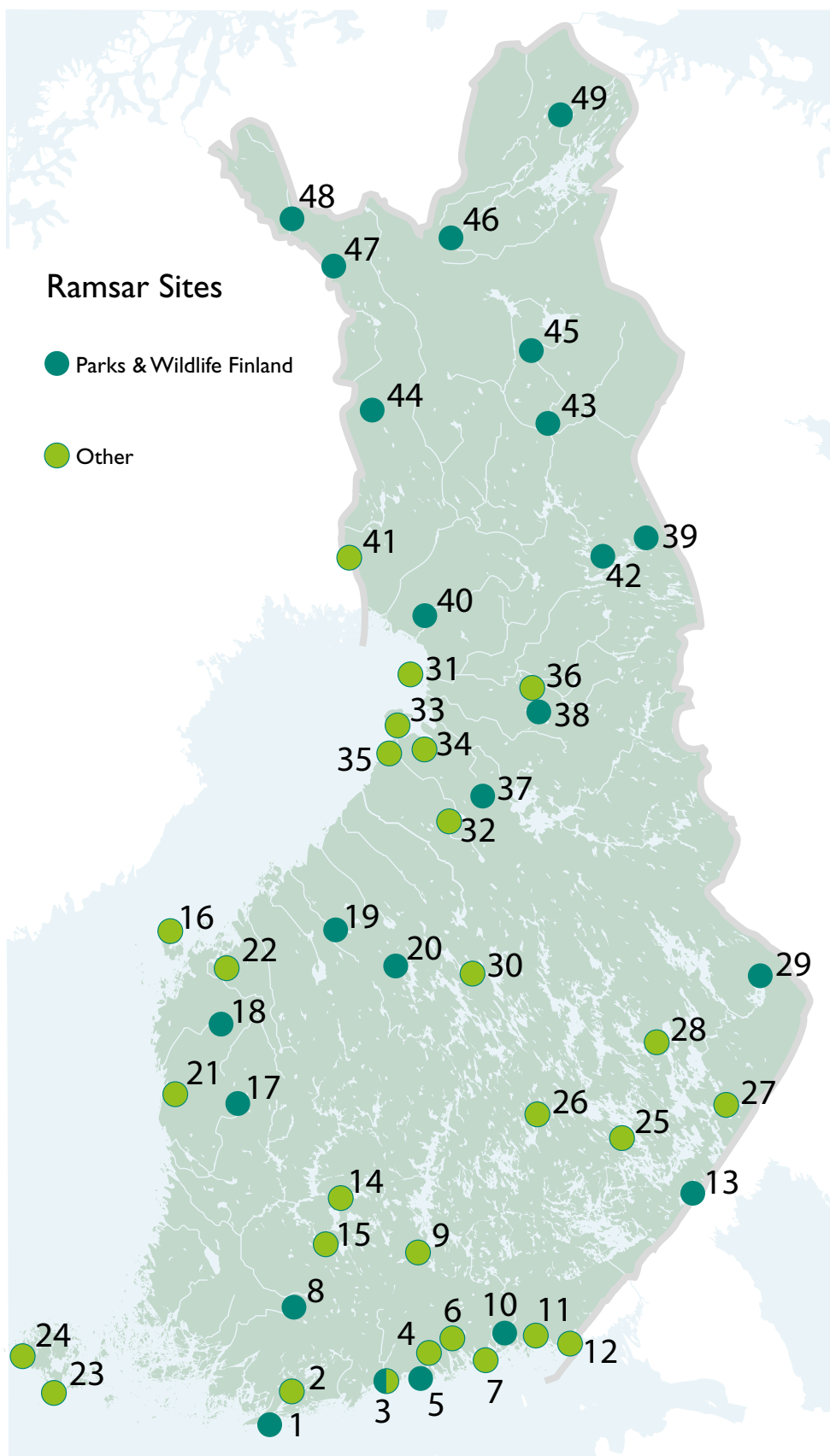
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ANNEXES

Annex I. Finland's wetlands as Natura habitat types

This annex presents all of the Natura habitats under the EU Habitats Directive which can be categorised as wetland habitats, either fully or to a significant extent (such as the underwater parts of esker islands in the Baltic Sea).

Code	Description
1110	Sandbanks which are slightly covered by sea water all the time
1130	Estuaries
1150	Coastal lagoons
1160	Large shallow inlets and bays
1170	Reefs
1610	Baltic esker islands with sandy, rocky and shingle beach vegetation and sublittoral vegetation
1630	Boreal Baltic coastal meadows
1640	Boreal Baltic sandy beaches with perennial vegetation
1650	Boreal Baltic narrow inlets
2190	Humid dune slacks
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation
3160	Natural dystrophic lakes and ponds
3210	Fennoscandian natural rivers
3220	Alpine rivers and the herbaceous vegetation along their banks
3230	Alpine rivers and their ligneous vegetation with Myricaria germanica
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
4080	Sub-Arctic Salix spp. scrub
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
6450	Northern boreal alluvial meadows
7110	Active raised bogs
7120	Degraded raised bogs still capable of natural regeneration
7140	Transition mires and quaking bogs
7160	Fennoscandian mineral-rich springs and springfens
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae
7220	Petrifying springs with tufa formation (Cratoneurion)
7230	Alkaline fens
7240	Alpine pioneer formations of Caricion bicoloris-atrofuscae
7310	Aapa mires
7320	Palsa mires
9080	Fennoscandian deciduous swamp woods
91D0	Bog woodland
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)



Site	Site manager
1. Waterfowl habitats of Hanko and Tammisaari	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
2. Lake Läppträsket	Centre for Economic Development, Transport and the Environment for Uusimaa
3. Vanhankaupunginlahti and Laajalahti	City of Helsinki and Metsähallitus, Parks & Wildlife Finland
4. Porvoonjoki Estuary – Stensböle	Centre for Economic Development, Transport and the Environment for Uusimaa
5. Söderskär and Långören Archipelago	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
6. Pernajanlahti Bay	Centre for Economic Development, Transport and the Environment for Uusimaa
7. Aspskär Islands	Centre for Economic Development, Transport and the Environment for Uusimaa
8. Torronsuo National Park	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
9. Lake Kutajärvi Area	Centre for Economic Development, Transport and the Environment for Häme
10. Valkmusa National Park	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
11. Lake Kirkkojärvi and Lupinlahti Bay	Centre for Economic Development, Transport and the Environment for Southeast Finland
12. Kirkon-Vilkkiläntura Bay	Centre for Economic Development, Transport and the Environment for Southeast Finland
13. Siikalahti Bay Area	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
14. Lake Kirkkojärvi Area	Centre for Economic Development, Transport and the Environment for Pirkanmaa
15. Bird Wetlands of Vanajavesi Area	Centres for Economic Development, Transport and the Environment for Häme and Pirkanmaa
16. Quark Archipelago	Centre for Economic Development, Transport and the Environment for South Ostrobothnia
17. Kauhaneva-Pohjankangas National Park	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
18. Levaneva Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
19. Pilvineva Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
20. Salamajärvi National Park	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
21. Bird Wetlands of Lapväärtti	Centre for Economic Development, Transport and the Environment for South Ostrobothnia
22. Vassorfjärden Bay	Centre for Economic Development, Transport and the Environment for South Ostrobothnia
23. Lågskär and Björkör Archipelago	The Government of Åland
24. Signiskär-Märket Archipelago	The Government of Åland
25. Bird-lakes of Rantasalmi	Centre for Economic Development, Transport and the Environment for South Savo
26. Suurenaukeansuo-Isosuo Mires and Lake Pohjalampi	Centre for Economic Development, Transport and the Environment for South Savo
27. Bird-lakes of Rääkkylä and Kitee	Centre for Economic Development, Transport and the Environment for North Karelia
28. Lake Sysmäjärvi	Centre for Economic Development, Transport and the Environment for North Karelia
29. Patvinsuo National Park	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
30. Lakes Heinä-Suvanto and Hetejärvi	Centre for Economic Development, Transport and the Environment for Central Finland

Site	Site manager
31. Krunnit Islands	Centre for Economic Development, Transport and the Environment for North Ostrobothnia
32. Bird Wetlands of Haapavesi	Centre for Economic Development, Transport and the Environment for North Ostrobothnia
33. Bird Wetlands of Hailuoto Island	Centre for Economic Development, Transport and the Environment for North Ostrobothnia
34. Liminganlahti Bay Area	Centre for Economic Development, Transport and the Environment for North Ostrobothnia
35. Bird Wetlands of Siikajoki	Centre for Economic Development, Transport and the Environment for North Ostrobothnia
36. Lakes Aittojärvi and Kongasjärvi	Centre for Economic Development, Transport and the Environment for North Ostrobothnia
37. Veneneva-Pelso Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
38. Olvassuo Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
39. Oulanka National Park	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
40. Martimoaapa - Lumiaapa - Penikat Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
41. Kainuunkylä Islands	Centre for Economic Development, Transport and the Environment for Lapland
42. Riisitunturi National Park	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
43. River Luiro Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
44. Teuravuoma - Kivijärvenvuoma Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
45. Koitelainen Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
46. Lemmenjoki National Park	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
47. Sotkavuoma Mire	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
48. Lätäseno - Hietajoki Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)
49. Sammuttijänkä - Vaijoenjäkä Mires	Metsähallitus, Parks & Wildlife Finland (previously Natural Heritage Services)

Annex 3. Member organisations of the Finnish national Ramsar Wetland Working Group⁶

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*Uudet jäsenet 2016 lähtien

Organisation	Role in the working group (selection criteria)
Ministry of the Environment	Chair (appointed representative of the administrative authority; represents Finland in all matters pertaining to the Ramsar Convention)
Metsähallitus, Parks & Wildlife Finland	Secretary (appointed national contact person for the Ramsar Convention)
Ministry of the Environment	Member
Centre for Economic Development, Transport and the Environment for North Ostrobothnia	Member
Metsähallitus, Parks & Wildlife Finland	Member
Finnish Environment Institute	Member
Council of Oulu Region	Member
The Finnish Forest Centre	Member
The Finnish Wildlife Agency	Member
The Finnish Peatland Society	Member
Forestry Development Centre Tapio	Deputy member
The Federation of Finnish Fisheries Associations	Member
The Central Union of Agricultural Producers and Forest Owners (MTK)	Member
BirdLife Finland	Member
FEE Finland (previously the Finnish Association for Environmental Education)	Member
WWF Finland	Member
The Finnish Nature League	Member
VAPO	Member
Metsähallitus, Parks & Wildlife Finland	Member (appointed Ramsar CEPA expert and national CEPA contact person)
The Finnish Association for Nature Conservation	Member (appointed Ramsar CEPA expert and national CEPA contact person for non-governmental organisations)
Metsähallitus, Parks & Wildlife Finland	Member (appointed Ramsar STRP expert and national STRP contact person)
*Ministry of Agriculture and Forestry	Member
*Centre for Economic Development, Transport and the Environment for Central Finland	Member
*Centre for Economic Development, Transport and the Environment for South Ostrobothnia	Member
*Centre for Economic Development, Transport and the Environment for Uusimaa	Member
*The Bioenergy Association of Finland	Member
The Natural Resources Institute of Finland	Permanent expert, game, fish
Metsähallitus, Parks & Wildlife Finland	Permanent expert, traditional biotypes
Metsähallitus, Parks & Wildlife Finland	Permanent expert, cultural heritage

Organisation	Role in the working group (selection criteria)
Finnish Environment Institute, Natural Environment Centre	Permanent expert, mires
Finnish Environment Institute, Marine Research Centre	Permanent expert, sea
Finnish Environment Institute, Freshwater Centre	Permanent expert, water
Ministry of the Environment	Permanent expert, communications
*The Natural Resources Institute of Finland	Permanent expert, wetlands and climate change
*Geological Survey of Finland	Permanent expert, geological natural resources
*Ministry for Foreign Affairs for Finland	Available as an expert when necessary

⁶ The first term of the Wetland Working Group was in 2013–2015, and the continued term will be in 2016–2020.

Annex 4. Synergies between the goals of the Ramsar international strategy and CBD Aichi Biodiversity Targets

Ramsar Goals and Targets 2016–2024		Aichi Biodiversity Targets 2010–2020	
Ramsar Strategic Goals			
Goal 1: Addressing the drivers of wetland loss and degradation		Aichi Target # 5	By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
Target 1	Wetlands benefits are features 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	Aichi Target # 2	By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.
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.	Aichi Target # 7	By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.
		Aichi Target # 8	By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.
Target 3	The public and private sectors have increased their efforts to apply guidelines and good practices for the wise use of water and wetlands.	Aichi Target # 4	By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.
		Aichi Target # 3	By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.
		Aichi Target # 7	same as above
		Aichi Target # 8	same as above
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.	Aichi Target # 9	By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.
Goal 2: Effectively conserving and managing the Ramsar Site network		Aichi Target # 11	same as above
Target 5	The ecological character of Ramsar sites is maintained or restored, through effective planning and integrated management	Aichi Target # 11	By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Ramsar Goals and Targets 2016–2024		Aichi Biodiversity Targets 2010–2020	
Target 5		Aichi Target # 12	By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.
		Aichi Target # 6	By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.
Target 6	There is a significant increase in area, numbers and ecological connectivity in the Ramsar Site network in particular underrepresented types of wetlands including in underrepresented ecoregions and transboundary sites	Aichi Target # 11	same as above
		Aichi Target # 10	By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.
Target 7	Sites that are at risk of change of ecological character have threats addressed.	Aichi Target # 12	Same as above
		Aichi Target # 5	By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
		Aichi Target # 7	same as above
		Aichi Target # 11	same as above
Goal 3: Wisely using all wetlands			
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.	Aichi Target # 14	same as above
		Aichi Target # 18	By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.
		Aichi Target # 19	By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.
		Aichi Target # 12	same as above

Ramsar Goals and Targets 2016–2024		Aichi Biodiversity Targets 2010–2020	
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.	Aichi Target # 4	same as above
		Aichi Target # 6	By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.
		Aichi Target # 7	same as above
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.	Aichi Target # 18	By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.
Target 11	Wetland functions, services and benefits are widely demonstrated, documented and disseminated.	Aichi Target # 13	By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.
		Aichi Target # 1	By 2020, at the latest, people are aware of the values of biodiversity and the steps taken to conserve and use it sustainably.
		Aichi Target # 2	same as above
		Aichi Target # 14	By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.
		Aichi Target # 15	By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.
		Aichi Target # 14	same as above
Target 13	Enhanced sustainability of key sectors such as water, energy, mining, agriculture, tourism, urban development, infrastructure, industry, forestry, aquaculture and fisheries fisheries, agriculture and ecotourism practices when they affect wetlands, contributing to biodiversity conservation and human livelihoods	Aichi Target # 6	By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.
		Aichi Target # 7	By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Ramsar Goals and Targets 2016–2024		Aichi Biodiversity Targets 2010–2020	
Operational Goal			
Goal 4: Enhancing Implementation			
Target 14	Scientific and technical guidance at global and regional levels is developed on relevant topics and is available to policy makers and practitioners in an appropriate format and language	Aichi Target # 19	same as above
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.		
Target 16	Wetlands conservation and wise use are mainstreamed through communication, capacity development, education, participation and awareness.	Aichi Target # 1	same as above
		Aichi Target # 18	same as above
Target 17	Financial and other resources for effectively implementing the fourth Ramsar Strategic Plan 2016 – 2024 from all sources are made available	Aichi Target # 20	By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.
Target 18	International cooperation is strengthened at all levels		
Target 19	Capacity building for implementation of the Convention and the 4th Ramsar Strategic Plan 2016 – 2024 is enhanced.	Aichi Target # 17	By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.
		Aichi Target # 1	same as above

The Ministry of the Environment requested statements to be submitted regarding the national Wetlands Action Plan under the Ramsar Convention between 18 March and 15 April 2016. The request for statements was sent separately to certain key operators, but everyone interested in the matter also had the opportunity to provide a statement.

A total of 37 statements were submitted regarding the Wetlands Action Plan. These statements were submitted by the Ministry of Agriculture and Forestry; the Ministry of Transport and Communications; the Ministry of the Interior; the Ministry of Social Affairs and Health; the Regional Councils of South Karelia, Häme, Tampere Region, Kymenlaakso, Lapland, Ostrobothnia, Oulu Region, Southwest Finland, Satakunta and North Karelia; the Regional State Administrative Agency for Southern Finland; the National Land Survey; the National Board of Antiquities; the Centres for Economic Development, Transport and the Environment for South Savo, Central Finland, North Ostrobothnia and Pirkanmaa; the Finnish Environment Institute; Metsähallitus; the Natural Resources Institute Finland; the Finnish Wildlife Agency; the Finnish Forest Centre; the Reindeer Herders' Association; the Finnish Association for Nature Conservation; the Central Union of Agricultural Producers and Forest Owners (MTK); the Finnish Hunters' Association; the Finnish Sámi Parliament; the Bioenergy Association of Finland; the Association of Finnish Local and Regional Authorities; BirdLife Finland; the Finnish Peatland Society and Fingrid Oyj.

Of these, the following had nothing to comment regarding the draft government proposal: the Ministry of Transport and Communications; the Ministry of the Interior; the Ministry of Social Affairs and Health; the Ministry of Finance; the Regional Councils of Tampere Region, Häme, Kymenlaakso, Southwest Finland and North Karelia; and the Association of Finnish Local and Regional Authorities.

Conclusions drawn based on the statements

The parties that submitted a statement generally considered the action plan to be a good and necessary tool that compiles the needs of various measures related to the conservation and sustainable use of wetlands. The need for and urgent nature of the rehabilitation of wetlands was mentioned in many of the statements, in addition to the need to improve the status of wetland habitat types. The statements highlighted the need for extensive cross-sectoral cooperation in the implementation of the Wetlands Action Plan with regard to the planning, funding and implementation of the measures. Several of those that submitted a statement raised the issue of securing financial resources in the implementation of the Wetlands Action Plan, though they also noted the challenges involved in securing the resources. Several statements proposed that the measures already taken or currently being carried out for the conservation and sustainable use of wetlands should be described.

The number of measures was considered to be large in many of the statements, and the need to prioritise measures was also mentioned. The Ramsar Convention's broad definition of a wetland was considered to be problematic with regard to prioritisation. The providers of the statements considered it to be important that the cultural and historical values of wetlands, as well as their tourism potential, recreational opportunities and the protection of threatened fish species, be highlighted more clearly. The assessment of the action plan's impacts was considered to be too general in nature, and a more detailed description of it was requested.

Based on the statements' assessment of resource needs in particular, the Wetland Working Group revised the table of measures in the action plan and added some suggested additional text and changes. A new measure was added based on the statements: 'Developing the sustainable use of wetlands as an attraction factor for tourism and recreation, while also taking the cultural value of wetlands into account.'

I. Ministries

The Ministry of Agriculture and Forestry considers it to be a good thing that a national action plan has been prepared for improving the status of wetlands in Finland. The Ministry points out that mires should of course be considered to be wetlands, but the same cannot be categorically said for mire forests. In the Ministry's view, the broad definition of a wetland covers such a large area of Finland that it may endanger the realistic feasibility of the entire action plan. The practical benefits provided by the action plan would increase if the definition of a wetland was narrowed down: how added value could be created for the conservation of biodiversity through the maintenance of existing natural wetlands. An important aspect of this would be determining the measures to be prioritised. In the Ministry of Agriculture and Forestry's opinion, the reasons that led to trenching, i.e. the promotion of the business sector, could be elaborated more on. On the other hand, drainage projects have increased wetlands that cannot be restored to their state prior to the drainage without varied impacts on nature and its use in game husbandry, for instance.

In the Ministry of Agriculture and Forestry's opinion, it would be useful to prioritise the most important measures of the action plan and incorporate a more detailed assessment of the cost impacts of the implementation into the action plan. In addition to prioritisation, the overlap between the measures could be reduced. For example, measures 5, 8, 9, 14 and 15 are one and the same from the point of view of the Rural Development Programme. If a system similar to the Rural Development Programme will continue in 2021, the Ministry of Agriculture and Forestry will be able to take the nationally recognised needs and the responsibilities assigned to the Ministry with regard to the maintenance and establishment of wetlands into account in the preparation of the programme.

In cases where the responsibility for implementing a measure is assigned to an ELY Centre, it should be specified which of the three areas of responsibility (Economic Development, Transport or the Environment) is the intended responsible party and which appropriation is proposed as the source of funding for the measures.

With regard to measure 13, which pertains to general planning, the Ministry of Agriculture and Forestry proposes that the Ministry of the Environment be assigned as the main responsible party, rather than an ELY Centre, if the measure in question is retained in the action plan, as the Ministry of Agriculture and Forestry no longer has funding available for this purpose. The Ministry also points out that no funding has been allocated to the Finnish Forest Centre for the execution of general plans pertaining to wetlands in particular.

The following changes should be made to the text with regard to measure 11: *'Influencing the allocation of Kemera funds to cost-efficient measures that promote nature management.'* OR *'Influencing the development of the new Metso financing system so as to enable measures that increase wetlands and alluvial meadows, and directing Kemera funds towards the establishment of wetlands and alluvial meadows as appropriately as possible.'*

With regard to funding and Table 3, the Ministry of Agriculture and Forestry points out that the name mentioned should be the Development Fund for Agriculture and Forestry (Makera), as the Development Subsidy for Agriculture and Forestry no longer exists. Makera supports investments and research related to agriculture and forestry. Wetlands cannot be funded as a Makera investment, except through Makera's research budget. Therefore, ELY Centres can also not serve as the implementer with regard to Makera. Wetlands are funded as non-production-oriented investments through the Rural Development Programme.

General project planning and water protection guidance should be removed from Table 3 in relation to the development subsidy for sustainable forestry (Kamera), as they can only be implemented with the help of government assistance granted through the Finnish Forest Centre. Under the Temporary Act on the Financing of Sustainable Forestry (Kamera), funding can only be granted for the planning and implementation of individual projects by private forest owners, and the Finnish Forest Centre can therefore not be granted the funding.

The Ministry of Agriculture and Forestry proposes the following detailed changes to the action plan:

- Kamera should be replaced with '*the Temporary Act on the Financing of Sustainable Forestry*' (p. 5)
- the reference to forestry should be removed from the text (p. 13)
- we propose that the section 'the main factor that has contributed to the alteration of our mires is forestry operations' (p. 13, paragraph 5) be revised as follows: '*Quantitatively speaking, Finland's mires were altered the most by trenching that was carried out in the past for the purposes of forestry.*'
- an addition to the text, for example: '*The conservation status of trenched mires and forested former trenched mires has not been assessed separately, though the mire complex types include trenched peatlands. In other words, the assessment mainly pertains to mires in their natural state.*' (p.14 Assessment of the conservation status of Finnish habitats)
- an addition to the text: 'maintaining and using wetland forests in a sustainable manner' (p. 21)
- establishing compensation in legislation is not suitable for agriculture and forestry; instead, a voluntary system would be the most suitable solution (p. 22)
- Changing the name Forestry Development Centre Tapio to Tapio Oy (p. 34) in the text

The Ministry of Social Affairs and Health No comments.

The Ministry of the Interior: No comments.

In the opinion of the Ministry of Transport and Communications, the Ramsar Wetlands Action Plan for 2016–2020 seems to have been prepared thoroughly, and the Ministry has no comments regarding the matter.

The Ministry of Finance: No comments.

2. Authorities

The section of the Regional State Administrative Agency for Southern Finland that is in charge of environmental permits considers the proposal for the action plan and its goals to be necessary and on the right tracks. Many wetland types are in need of maintenance, rehabilitation and restoration, and the objective must be to aim to prepare more extensive plans with regard to improving the status of wetland habitat types. To achieve results, the measures must be sufficiently extensive, efficient and long lasting. The planning, funding and implementation must involve cross-sectoral cooperation between various actors.

The Regional State Administrative Agency proposes that operators and the environmental administration should have more knowledge of wetland networks (such as overwintering areas, resting areas along migration routes, feeding areas and nesting areas). If a project or a statement pertaining to a project concerns a part

of the Ramsar wetland network, this should be mentioned. The connection of the measures proposed in a permit application to the Ramsar Wetlands Action Plan should be pointed out in the plans and statements, including when the connection is not obvious (such as the management of fish stocks and other measures aimed at mitigating eutrophication).

The status of the conservation of biotopes and species must be secured through legislation. Various interest groups, such as landowners, non-profit organisations and companies, are a resource that should not be forgotten in the implementation and funding of the measures.

The National Board of Antiquities considers it to be a positive matter that the recognition of cultural value is mentioned in the goals, but sees it as a weakness that cultural value has not been more closely defined. From the perspective of cultural heritage and the cultural environment, cultural value includes material remains of human activity, structures, landscapes as well as the values of intangible cultural heritage. In the opinion of the National Board of Antiquities, the cultural heritage of wetlands should have a more visible presence in the action plan, as it provides historical, ethnological and archaeological research with scientific source material that is not available elsewhere. Wetlands are also significant as landscapes and historic hunting areas, which humans have been active in since prehistoric times. The conservation of wetlands also promotes the conservation of their historical dimension and their use as an environment for recreation, experiences and research. The National Board of Antiquities points out that cultural heritage and sufficient and timely cooperation with experts in the field of cultural heritage should be taken into account in river basin management plans, marine protection and flood protection.

The statement of the National Board of Antiquities particularly highlights the cultural heritage of shores, water bodies, mires and other wetland areas, providing a reminder that the wetlands in Finland that meet the Ramsar Convention's definition developed as a result of post-glacial changes in the bedrock, soil and climate. The changes in the environment can be observed in the sediments of wetlands, and wetlands also conceal various cultural remnants and other cultural heritage sites and artefacts that have often been preserved deep beneath the thick peat, sludge or flood sediments. The particularly high research and informational value of these remnants is based on their excellent level of preservation in wet, oxygen-poor conditions or fully immersed under water. Key locations include ancient islands, estuaries, lakesides, coasts and particularly areas that have been subject to strong post-glacial rebound, formation of flood sediment layers, water level fluctuations, mire formation and overgrowth of water bodies. The shore areas, water bodies and wetlands surrounding settlements were an important part of the territory and hunting grounds of prehistoric humans. As potential sites for preserved remains, the National Board of Antiquities particularly mentions the estuaries in the Gulf of Bothnia, the land uplift coast, the lake basins exposed to water level fluctuation (such as Saimaa) and mires that formed as a result of the overgrowth of water bodies. The National Board of Antiquities points out that very little archaeological exploration has been carried out in wetlands, and land use and restoration projects that affect wetlands usually do not assess the projects' impact on cultural heritage. The National Board of Antiquities also points out that archaeological sites in wetlands are ancient monuments protected under the Antiquities Act (295/1963), which stipulates that it is forbidden to excavate, cover, alter, damage or remove ancient monuments or to disturb them in any other way. Other sites may be protected in relation to zoning under the Land Use and Building Act (132/1999), but a great number of wetlands are outside the scope of land use planning.

The National Board of Antiquities proposes the following changes to the Ramsar Wetlands Action Plan:

- The SWOT analysis: weaknesses include insufficient knowledge of the archaeological cultural heritage of wetlands and water areas, a lack of general planning and a sector-focused approach (p. 20)
- The cultural environment can be taken into account in the preparation of a wetland research and monitoring programme, identification of new cooperation partners and operational methods and the study of ecosystem services, among other things (p. 21 and 22)
- Project work would guarantee opportunities and new capabilities for taking cultural heritage into account in the conservation of wetlands (p. 21 mapping financing opportunities)
- Goal 1: The impact of rehabilitation measures on the cultural heritage of wetlands must be determined and taken into account in all rehabilitation efforts.
- Goal 2: The National Board of Antiquities considers it important that a timely and sufficient process for taking cultural heritage into account is included in the best practices for wetland conservation and rehabilitation. The National Board of Antiquities proposes the following in a suitable section: 'When planning the maintenance, rehabilitation or restoration of wetlands, the relevant parties must determine, in sufficient time, the potential impacts of the measures on the cultural heritage of water, shore and wetland areas and the cultural landscape. Determining the impacts may require the party responsible for the wetland project's implementation to conduct or assign another party to conduct cultural heritage investigations/inventories in the terrain. The investigations/inventories can be used as a basis for assessing the area's potential cultural heritage and identifying areas and goals that may require further investigation. The project's impacts will be assessed by a museum authority (statements by a regional museum/the National Board of Antiquities) based on the inventory.'
- Goal 3: The National Board of Antiquities also proposes that information on the cultural environment be incorporated into the knowledge base (the Cultural Environment Register portal: <http://kulttuuriymparisto.nba.fi/netsovel-lus/rekisteriportaali/portti/default.aspx>). However, the National Board of Antiquities points out that the registers only include the currently known ancient monuments and cultural heritage sites, and they do not provide a comprehensive picture. The National Board of Antiquities proposes that, if possible, the preparation of the research and monitoring programme should also incorporate research into cultural heritage. A better understanding of the cultural heritage and landscape of wetlands and mires would also contribute to the ecosystem service considerations.
- Goal 4: The National Board of Antiquities proposes that cultural heritage be taken into account in the extensive understanding of the significance of wetlands. The National Board of Antiquities is happy to provide assistance in the drafting of cultural heritage materials and guidelines (e.g. communication, training, counselling, programme for Wetland Days, content for the Liminka Bay Wetland Centre, wetland model areas).
- Goal 5: It would be preferable if Finland were to act as a pioneer in the research, maintenance and consideration of cultural heritage in relation to the conservation of wetlands. This is a particular cause for concern in Europe with regard to the rehabilitation of fishery and water bodies, and cultural heritage has also not been taken sufficiently into account in peatlands. The matter has been noted in particular in Sweden, Estonia and the UK (e.g. the National Heritage Protection plan regarding waterlogged heritage, Strategy for Water and Wetland Heritage).

- Goal 6: The National Board of Antiquities proposes that a functional cultural heritage process (tool) be added to the common goals and adopted in the planning and implementation of wetland rehabilitation. The National Board of Antiquities proposes that in addition to Metsähallitus (cultural heritage), the Wetland Working Group and Wetland network/forum (p. 33) should also include experts on cultural heritage from the National Board of Antiquities and universities as interest group members who can bring additional value. These parties should also be included in the list of participants.

According to the ELY Centre for Central Finland, the successful maintenance of wetlands comprises an operational entity that includes a wide variety of one-time and continuous long-term measures. In the opinion of the ELY Centre for Central Finland, it would be reasonable to develop the sites as pilot sites that pertained to the entire catchment area and encouraged broad participation. These pilot sites could also produce operational models for the maintenance and sustainable use of other wetlands.

The ELY Centre for Central Finland points out that whether the impact of hunting leans more towards the offspring of game populations (yield) or, in more negative cases, towards the adult population (assets) is largely dependent on how well comprehensive management has been carried out in the wetland site. The principles of sustainable hunting are not met if the number of offspring produced is low due to the neglect of long-term management. In this case, it is highly likely that the adult population, i.e. the population's assets, will be subject to hunting.

For the environmental administration, it may be important to allocate public funds to sites at which wetland maintenance is being carried out consistently by local operators and in which game populations are managed in a prudent and systematic manner.

The ELY Centre for Central Finland finds that the implementation of the Ramsar Wetlands Action Plan requires the environmental administration to provide considerable resources, but the recent policies by the state administration and the reduction of human resources and appropriations available for rehabilitation projects also make it difficult to use project funding from the EU.

The ELY Centre for Central Finland considers the preparation and execution of a research and monitoring programme to be important. It would be sensible to create a monitoring standard for wetlands in order to receive comparable data regarding the impacts of the rehabilitation and maintenance efforts. Sufficiently extensive monitoring would allow the relevant parties to develop more cost-effective maintenance measures. The capabilities of the state's environmental administration regarding the implementation of the monitoring should be improved.

The ELY Centre for South Savo states that the measures are necessary and justified as a whole. The ELY Centre states that according to the current division of duties the maintenance of nature reserves on private land falls to Metsähallitus. The division of duties between ELY Centres and Metsähallitus regarding the maintenance of waterfowl habitats is still unspecified. For the time being, at least some ELY Centres have planned maintenance measures for waterfowl habitats and organised their implementation. Before the measures of the Ramsar Wetlands Action Plan are carried out with regard to waterfowl habitats, the division of duties between Metsähallitus and the ELY Centres should be resolved regarding this matter. The upcoming reform in regional administration should also be taken into account with regard to its impact on the division of duties, the definition of operational methods and the achievement of goals. The responsible party should also be clarified before the responsible persons are named for the Ramsar sites.

The organisation of resources and funding play a key role in the implementation of the measures of the Ramsar Wetlands Action Plan. There must be a clear under-

standing of the funding and the responsibilities of each party before the additional Ramsar sites are chosen, for example.

Environmental agreements allow shore areas to be used as pastures, but the shortcoming is that grazing is only supported in shore areas above the average water level.

There is a clear need for national guidelines on the application of the principles of the Ramsar Convention as specified in goal 6. These guidelines should be as practical as possible and the means should be very concrete to ensure that the principles can also be applied as comprehensively as possible outside the protection areas.

One risk in the proposed compensation approach is that operators may consider existing valuable wetland sites to be replaceable, which is not expedient from the perspective of biodiversity.

The ELY Centre for Pirkanmaa considers the conservation and maintenance of wetlands to be very important to secure the preservation of biodiversity. The proposed measures are appropriate and versatile. The ELY Centre for Pirkanmaa is happy to participate actively in the implementation of the measures within its area of operation and within the scope of the available resources. The ELY Centre proposes some clarifications to the SWOT analysis. The ensuring of peat production, listed in the opportunities section of the analysis, conflicts with the conservation and sustainable use of wetlands. The opportunities and threats sections of the SWOT analysis mention the supplemental proposal to the Mire Conservation Programme, which ultimately only comprised mire areas owned by the state. The opportunities and threats sections should also mention the implementation of voluntary protection efforts for mire areas classified as nationally valuable mire areas by the Mire Conservation Group.

The ELY Centre for North Ostrobothnia (POPELY) considers it to be a shortcoming that the action plan does not specify the relationship of the implementation of the proposed measures to the wetlands in designated Ramsar sites. Instead, the action plan also applies to all other wetlands. The paragraph on improving the populations of migratory fish should emphasise the fact that the definition of a fish passage also includes natural bypass channels. It should also mention all functions that weaken the state of waters and, consequently, populations of migratory fish, instead of only mentioning the physical alteration of streams (extensive trenching in catchment areas, agriculture, many functions related to soil preparation in areas with acid sulphate soil). Having built up over decades, this very significant nutrient, solids and acidic loading has for its part played a key role in the decline of living conditions and thereby the decline of migratory fish populations. In POPELY's opinion, the impact of fishing should also be mentioned and it should be specified in accordance with the National Fish Passage Strategy that several types of measures and long-term work are required. According to POPELY, the changing situation of ELY Centres and regional councils as of the beginning of 2019 should be added to the table of actors and the parties responsible for measures, for example, by adding a general mention of it at the beginning and noting that the responsibility will be transferred forward with the reform of the regional administration.

- The wording of measure 12 should be clarified: 'Influencing the action plans for river basin management during the planning cycle that started in 2016...'
- The decline of migratory populations and the relevant responsible parties should be included in the measures, for example, as a new measure number 12 under goal 2. Luke should be added to the list of collaborators.
- The section on funding should be amended to clarify that there is only one marine resources management plan, and it would be clearer to speak of river basin management plans, not using the word 'regional'.
- The marking of Ramsar sites in the terrain, as mentioned in measure 32, conflicts with the new Decree of the Ministry of the Environment on Marking Nature Reserves, which abandons the marking of nature reserves for cost reasons.

POPELY considers the description of the environmental impacts of the action plan to be far too vague and considers it to be a shortcoming that the plan's implementation costs have not been indicated and compared to the state's realistic budgetary means in the current situation. POPELY would consider it to be informative if the current funding level was described and it was indicated what could be achieved with these funds. POPELY proposes that the role of the ELY Centre in Table 1 is amended to include the preparation of agri-environment agreements, as North Ostrobothnia, among other regions, uses considerable sums of money on promoting the conservation and maintenance of Finland's key Ramsar sites through the agri-environment system (the funding in question is used to maintain an area of over 1,000 ha in Liminka Bay, for example).

The Finnish Wildlife Agency has no objections regarding the content of the action plan or the proposed measures. The plan supports the objectives of the game administration, and wetlands located in agricultural and forestry areas have been given due emphasis. The materials of the Life+ Return of Rural Wetlands project can be utilised in Ramsar work (www.kosteikko.fi, <http://kosteikko.fi/2015/12/03/kosteikko-opas-taytta-asiaa-kosteikon-perustamisesta-hoitoon/>). A national network of model wetlands was also established in the project. The agency has currently applied to launch the Game Forest - Taiga Grouse Life project, which, when implemented, would add a significant resource to the rehabilitation of trenched low-yield mires as game habitats in 2016–2023.

The Finnish Wildlife Agency will begin implementing an action plan for the management of declining waterfowl populations in 2016. The key aspects of the action plan are rehabilitation and management, including the hunting of small predators. Key measures include implementing a project to rehabilitate and maintain wetland habitats (under the working name Rannikon lintulaitumet Life+ (Shore Habitats of Waterfowl Life+)) in 2017–2019, developing a network of undisturbed resting and feeding areas in 2017–2019 (and rehabilitating and founding replacement hunting wetlands) as well as communication and training regarding the maintenance of wetland habitats as of 2016.

The Finnish Forest Centre considers the action plan to be good and deems that it meets the goals set for both national and international work. The Finnish Forest Centre considers it to be a good thing that the action plan includes not only the conservation and maintenance but also the utilisation of wetlands and wetland forests. In the opinion of the Finnish Forest Centre, the greatest challenge in increasing the maintenance and construction of wetlands in private forests is the scarcity of Kemera funds for nature management. There is a great demand for water protection and construction of wetlands in forestry areas, as forest owners feel that their implementation is easy and comes with smaller risks with Kemera funds than wetland rehabilitation efforts carried out with the help of agri-environmental support. Based on this, the Finnish Forest Centre considers measure 11 to be particularly important. The Finnish Forest Centre is able to commit to the goals of the action plan within the scope of its resources.

Metsähallitus considers it to be a good thing that a national action plan has been drafted for wetlands and that it executes the international Ramsar Convention. Metsähallitus points out that the environmental administration is currently overseeing two assessment processes related to the Natura network (general planning and a so-called NATA assessment) and that the perspectives related to the execution of the Ramsar Convention should be taken into account in these processes. Metsähallitus reminds the relevant parties of its central role as the party responsible for the conservation and maintenance of the designated Ramsar sites and of the need to secure sufficient funding for this work. Metsähallitus emphasises the significance

of wetlands as a producer of diverse ecosystem services, for example, in relation to the water cycle, mitigation of climate change and adapting to it, and as producer of various cultural services (recreational use, tourism). These positive roles should be emphasised in wetland-related communication and work with interest groups. The Parks & Wildlife Finland unit of Metsähallitus considers it to be important that the tourism and recreational values and opportunities (and more extensively those that benefit from them indirectly) should be emphasised more in the Ramsar Wetlands Action Plan. Metsähallitus emphasises the cultural dimension of the action plan, which was only briefly touched upon, and states that measures related to cultural heritage and the cultural value of wetlands should be added to the action plan. Metsähallitus proposes that a measure be added under goal 2 regarding the targeting of inventories of underwater and water-related cultural heritage and the cultural heritage of mire-like lakesides to Ramsar sites.

Metsähallitus points out that several Ramsar sites are located in proposed new and nationally valuable landscape areas and that the natural and cultural heritage values of wetlands should be given emphasis in their maintenance and use. Metsähallitus proposes the following change to measure 32: The status of Ramsar sites is indicated in the related information boards, brochures and other communications channels.

3. Regional councils

The Regional Council of South Karelia generally considers the action plan to be a thoroughly prepared document and its goals to be endorsable. The Regional Council mentions Siikalahti, Finland's most representative waterfowl habitat among inland lakes, whose current conservation value is based on active rehabilitation. The Regional Council considers it to be unfortunate that the numbers of many species and pairs have declined rapidly in sites protected under the national Waterfowl Habitats Conservation Programme that lack active maintenance measures. In the Regional Council's opinion, the methods for maintaining the biodiversity of waterfowl wetlands requires them to be restored to a phase in their development in which their biodiversity is at its highest and for this state to be maintained or for new wetlands to be created in former peat production areas. The Regional Council mentions the increase in the importance of the waterfowl habitats in the Parikkala region in recent decades (Honkakylänlahti, Tarassiinlahti, Pohjanranta and Jyrkilänliete in Pien Rautjärvi, Rautalahti in Simpelejärvi and Suuri Rautjärvi), particularly as internationally significant resting places along the migration routes of swans, barnacle geese and bean geese, in addition to the feeding and resting areas along the migration routes of large waterfowl in Southeast Finland (Konnunsuo fields in Joutseno, Lappeenranta).

The Regional Council of South Karelia proposes the following:

- The waterfowl habitats in the Parikkala region should be added to the Ramsar Convention as one entity.
- Artificial wetlands should be constructed on state-owned land that was previously used for peat production, and state-owned trenched mire areas should be restored.

The Regional Council of Lapland states that the region includes ten Ramsar sites, of which Oulanka National Park is partly located in the region of North Ostrobothnia. These sites have been marked as nature reserves (SL) or conservation areas (S) in Lapland's regional plans, and the criteria for their land use reservations and descriptions of the areas are indicated in the annex documents to the plan. The proposal for a regional plan for Rovaniemi and Eastern Lapland, currently being drafted, includes three Ramsar sites that will be designated with the SL label and the following planning

provision: 'The natural values that form the basis for the area's conservation shall not be significantly weakened.' The process to update the regional plan of Northern Lapland will commence after this. The regional plans for Lapland also include provisions that pertain to the entire area covered by the regional plans.

In the regional plans, some of the Ramsar sites are included in tourist attraction areas, target areas for the development of tourism and recreation as well as target areas for rural development in accordance with the development principle. Some of the Ramsar sites are also located in mining development zones or probable mineral resource areas if the markings are only informative and do not designate concrete land use reservations. Ramsar sites have also been designated with other markings (snowmobile routes, hiking trails or land use reservations for reindeer herding). The markings for required rights-of-way and for areas used in the development of railroads at some Ramsar sites are of a general nature, and their location will be specified more closely in lower level planning. Parts of the Ramsar sites are located in areas that are important in terms of the protection of the cultural environment or landscape.

A nature and landscape report prepared as a background document for the regional plan for Rovaniemi and Eastern Lapland examined the matter from the perspective of ecosystem services and considered the significance of wetlands as producers of cultural, support, regulation and production services. The ecological rights-of-way that are designated in the regional plan based on the report support the conservation of biodiversity in Ramsar sites and other nature reserves.

The Regional Council of Lapland points out that some Ramsar sites are situated in the native region of the Sami, while the eastern part of the Sammutijänkä - Vajoenjäkä area is also situated in the Skolt area. This has been taken into account in the action plan as the native region of the Sami.

The Regional Council of Lapland proposes the following:

- An addition to the measures, for example, under goal 2: Planning that affects wetlands must be carried out comprehensively, taking the important role of regional councils into account. The Regional Council also proposes that the responsible parties be checked from the perspective of the upcoming reform in regional administration, as the majority of the duties of ELY Centres will be transferred to the future regions.
- It should also be mentioned regarding ongoing marine spatial planning that the responsibility for it will be transferred to regional councils in conjunction with the amending of the Land Use and Building Act.
- The land use designations in regional plans should, where possible, be taken into account in the assessment of the sufficiency of Ramsar sites and in proposals for supplementary sites.
- The action plan and its implementation should be planned in cooperation with regions.

The Regional Council of Ostrobothnia notes that there are four Ramsar sites in the region of Ostrobothnia, designated as SL3 in regional plans, i.e. nature reserves established or planned to be established in accordance with the Waterfowl Habitats Conservation Programme. A building restriction is also in force in these areas in accordance with Section 33 of the Land Use and Building Act. According to the protection regulation, special attention must be paid to the conservation and safeguarding of the area's natural values. Additionally, measures that would endanger the values that served as the basis for establishing the nature reserve or based on which a nature reserve is planned to be established must be avoided. The Ramsar sites located in the region will be taken into account in the drafting of regional plan 2040.

Measure 9 under goal 1, 'Founding multifunctional wetlands in agricultural and forestry areas and urban environments and making sure that the state of existing wetlands does not worsen', could also cover the construction of wetlands that serve risk management purposes in flood-prone areas and that are intended for treating drainage water. According to the Regional Council of Ostrobothnia, the action plan should indicate how the national flood risk management plans have been taken into consideration in the action plan's preparation.

With regard to measure 24 under goal 3, 'Utilising the results of inventories of national traditional landscapes in the protection of traditional biotopes in wetlands', the Regional Council of Ostrobothnia states that it will wait for the results of the national update inventories of traditional biotopes before making any changes to the regional plan.

According to the Council of Oulu Region, the regional programme for the Oulu region for 2014–2017 states that one of the region's goals is to profile itself as a well-known wetland region. This goal will be reached through the conservation and responsible use of mires and other wetlands. With regard to use that alters mires, it is also important to pay attention to the after-use of mires used for production purposes. According to the Council of Oulu Region, the action plan forms a clear entity. The Council of Oulu Region proposes that the following perspectives be strengthened in the action plan:

- The role of actors other than government actors should be emphasised more. These actors include regional councils, future autonomous regions, municipalities, companies and local actors in the third sector, among others. In the future, companies may also play a major role in the financing of projects, for example.
- It would be beneficial if the measures were implemented in cooperation between actors from different sectors and the safeguarding of wetlands was taken into account in land use planning, among other things.
- The action plan should indicate which measures have already been carried out in Finland for wetlands and how the Ramsar goals have already been met (such as the Government's decision-in-principle on the sustainable use of mires and peatlands, the Land Use and Building Act, the Environmental Protection Act, the Mire Conservation Programme and the related supplemental proposal).
- One method for increasing appreciation for wetlands is to utilise them sustainably as an attraction factor for tourism and recreation. The relevant goal could be, for example, the good accessibility of wetland habitats and the development of their general use.
- The Ramsar status is relatively unknown to the general public, which is why the status of a national park or world heritage site, for example, would be important for the areas' visibility and significance. One goal of the action plan could be proposing a Finnish wetland or wetland entity to be added to UNESCO's World Heritage List.

The Council of Oulu Region considers measure 30 to be very important.

The Regional Council of Kymenlaakso has nothing to comment regarding the action plan.

The Regional Council of Häme: No comments.

The Regional Council of Tampere Region: No comments.

The Regional Council of Satakunta states that a significant part of the Kauhaneva-Pohjankangas National Park is located in Satakunta. The goals, goal states and measures proposed in the action plan are well thought out and funding should be allocated to the measures. Particular attention should be paid to ensuring that measures carried out outside of wetlands do not weaken the state of wetlands (for example, water abstraction projects).

The Regional Council of Southwest Finland: No comments

4. Research and expert agencies

The National Land Survey points out that the landowner's right to protection of law requires any restriction of the use of private property to only place minimal limitations on the right of ownership, for example, with regard to traditional biotopes, which require continuous maintenance measures. The National Land Survey considers it to be a positive thing that questions of ownership in relation to water areas have been taken into account in the content of the action plan. Ownership arrangements, particularly with regard to property associations that have become passive, would require society to take action in order to assign the administration of inactive common areas to neighbouring property associations. This should be promoted through legislative means, by rearranging existing ownership of water areas and reliction areas. If the site to which the Ramsar Convention is applied is a reliction area, as referred to above, and if the area is designated as a conservation area under a conservation programme, the ownership of the area must also be taken into account. According to the National Land Survey, it is not specified in the Real Estate Formation Act whether the right to claim a reliction area, specified in Section 60 of the Act, applies to conservation areas. For example, for areas used for recreational purposes, another type of restriction on the area's use is likely a better option than claiming the area.

In general, the National Land Survey wishes to emphasise considerations related to the clarity and reliability of the real estate system in the implementation of conservation programmes. Voluntary transactions pertaining to conservation sites only mean that an agreement under the law of obligations is established between the conservation authority and the party that handed over the land. In order to extend the effect of the transaction to all citizens in accordance with the law of property, the conservation areas must be made into a property.

The Natural Resources Institute Finland (Luke) states that the general poor condition of waterfowl wetlands is evidenced by the strong decline of the bird populations nesting in them, the main reason for which is considered to be the decline of habitats. Many of the fish species or populations in Finnish waters are also threatened. Many of these species are migratory fish, and they are threatened by the construction of obstacles that block their migration routes as well as the decline of their habitats. Wetlands provide versatile ecosystem services, and there are also a great number of bioeconomic business opportunities related to wetlands that have not yet been fully utilised. Against this background and taking the threats to wetlands into account, the conservation and sustainable use of wetlands urgently needs to be enhanced. The conservation of wetlands and improving their ecological status require cooperation that extends across sectoral boundaries. Luke states that goal 1 of the action plan, 'Stopping the trend of habitat types and species in wetlands becoming threatened by 2020', is the most important of the goals, but it is also extremely challenging. Luke has been proposed as the main responsible party for the measure 'Determining which factors affect the development of threatened game and other wetland bird populations in Finland and along migration routes, where possible'. The measure is clearly connected with Luke and MMM's area of responsibility. Research that supports the

safeguarding of the vitality of waterfowl populations is in line with Luke's strategic goals for effectiveness and the general policy goals of MMM's administrative branch. Conserving the vitality of waterfowl populations is important for the ecosystem services provided by wetland habitats and also from the perspective of hunting and tourism. Together with the Finnish Museum of Natural History, Luke has studied the reasons behind the decline of waterfowl populations and continues these studies within the scope of its diminishing resources. Without additional financing or funds allocated through performance management, Luke's capability to fund research is very limited. One option is to continue research as an official duty.

Luke is involved in many other measures of the Wetlands Action Plan and also seeks to facilitate the implementation of these proposed measures, within the scope of its resources, in order to enhance the conservation and sustainable use of wetlands. Luke states that it would be challenging to secure financial resources for the implementation of the Wetlands Action Plan. The key role is played by the ministries in charge of different administrative branches and the research institutes and organisations operating under them. Luke hopes that all actors will consider the implementation of the Wetlands Action Plan to be important and that cooperation can be strengthened beyond the boundaries of the environmental sector.

The Finnish Environment Institute (SYKE) considers the action plan to be a necessary tool that compiles the needs of measures pertaining to different types of wetlands and the arguments for them into a compact package. SYKE considers wetlands to be essential habitats with regard to biodiversity, and they are also some of the most productive areas on the planet, maintaining the water cycle and producing many important ecosystem services. SYKE states that there are a great number of natural wetlands in Finland, but their state has declined and the conservation and restoration of their values requires rehabilitation and restoration, for which SYKE has the necessary knowledge base. In SYKE's opinion, the action plan lays a good foundation for taking various types of wetlands comprehensively into account in land use planning and the promotion of their sustainable use. Cooperation and sharing of information is necessary between actors working for wetlands, as land use in catchment areas affects the state of wetlands and, in turn, measures carried out in wetlands affect the environment downstream. The cornerstone of the sustainable use of wetlands is the examination of the catchment level and water resource entities. The Wetland Working Group provides a good opportunity for various actors to cooperate and share information.

SYKE is concerned about the implementation of the action plan, as state funding is declining and no new forms of funding have been clearly proposed for the rehabilitation of wetlands, for example. As such, the successful implementation of the action plan depends on the commitment of several parties. These include the Ministry of the Environment as well as the other ministries proposed as responsible parties, MMM and TEM, which were not represented in the Wetland Working Group. More private actors should also be involved in the action plan's implementation. This requires explaining how they can benefit from their participation. SYKE proposes one option that could be looked into in the future: any alterations caused by construction projects that cannot be prevented could be compensated through wetland rehabilitation.

SYKE considers the six goals and the proposed 55 measures to be endorsable, and many of them are naturally connected to the operations of SYKE's Freshwater Centre, Natural Environment Centre and Marine Research Centre. SYKE has been proposed as the main or jointly responsible party for 15 measures, in addition to which SYKE participates in the Wetland Working Group, which is a responsible party for several measures. Some of the proposed measures are closely linked to SYKE's operations, and their implementation often only requires being aware of the wetland perspective,

taking it into account and emphasising it. This applies to measures that are related to promoting the maintenance, rehabilitation and restoration of different wetland types, improving practices, developing and providing advice in wetland construction, preparing action plans and other plans for river basin management and communications (measures 3, 10, 12, 23, 50). SYKE proposes that measure 54 be revised to state that the wetland network/forum will be implemented in cooperation with the water body rehabilitation network coordinated by SYKE. Some of the measures require clear coordination and project-based work that cannot be carried out as part of existing work duties. Instead, they require a separate agreement and funding. This applies to the following measures in particular:

- 4. Determining which factors affect the development of threatened game and other wetland bird populations in Finland and along migration routes, where possible.
- 7. Conducting an evaluation of the sufficiency of the Ramsar sites in Finland and proposing additional sites.
- 16. Producing information on the ecosystem services of Ramsar sites in cooperation with other actors.
- 20. Preparing a research and monitoring programme related to wetlands.
- 22. Defining the sustainable use of wetlands for each habitat.

Particularly the implementation of measure 22, 'Defining the sustainable use of wetlands for each habitat', is a demanding task, and the proposal that it be completed in 2016 seems unrealistic. The measure is important, but it requires that SYKE is allocated the resources needed for the work and given enough time. In SYKE's opinion, the preparation of a rehabilitation and monitoring programme for wetlands, for which SYKE has been proposed as the main responsible party, should first be examined by the Wetland Working Group in order to identify potential sources of funding and then the key areas of study and monitoring that can be implemented should be planned.

SYKE considers it to be important that awareness is raised regarding the work for wetlands and its goals and that attention is paid to communication and responsibilities in relation to Ramsar wetlands, as the Ramsar Convention is not yet well known in Finland. However, SYKE does not consider annual media training and media events to be sensible. Similarly to what has been done in the Baltic Sea Communication Network, the relevant parties should consider suitable annual events. SYKE proposes that measure 31 be worded 'organising annual media events with actors related to the theme of the Wetland Day'. This naturally includes the utilisation of social media and visibility.

5. Associations

The Bioenergy Association of Finland states that the definition of a wetland under the Ramsar Convention is very broad, which contributes to the need for national clarifications and application. The Bioenergy Association of Finland raises the issue of whether the Ramsar Convention has already meandered too much, as the action plan includes a total of 55 measures.

To ensure that the action plan is as efficient a tool as possible in also committing other government actors to the cause, it would be sensible to assess the strategies and programmes that contribute to the implementation of the goals of the Wetlands Action Plan and to prioritise other operations.

For example, with regard to mires the action plan should pay more attention to the national strategy for the responsible conservation and use of mires and peatlands (2011), as well as the Government's decision-in-principle on 30 August 2012 that is based on the strategy. The mire strategy is a unique achievement, even on a global scale; it ap-

plies the concept of ecosystem services in practical planning, following the principle of wise use. This principle has been at the core of the Ramsar Convention since the very beginning, and it was further clarified by the International Mire Conservation Group, International Peatland Society and Wetlands International in the early 2000s. The Wetlands Action Plan currently only includes one reference to all this work, on page 34. Finland's Ramsar Wetlands Action Plan can be expected to include clear prioritisation, particularly from the perspective of social benefits, in line with the original goal of the convention. In its current form, the Wetlands Action Plan assigns almost the same value to all wetlands and does not, for example, consider mires to be of a different nature to many open water wetlands. As the national mire strategy includes many measures that bind all parties, the Wetlands Action Plan could utilise this ongoing work and focus more on other wetland habitat types than just mires and peatlands. The action plan should be narrowed down to entities that are the most important with regard to the goals. If it is too broad and overlaps with other strategies, the Wetlands Action Plan cannot steer operations and policies to a sufficient degree. This is also due to the scarcity of public funds.

It would be beneficial for the action plan if it were to also describe the situation of similar Ramsar action plans in other countries. Examples could also be provided from the perspective of ecosystem services to concretise the social benefits that have been gained elsewhere.

The Bioenergy Association of Finland asks where the resources for the active maintenance, conservation and restoration of wetlands will come from. In the future, multifunctional wetlands that will essentially be 'free of charge' to society will be constructed in conjunction with agriculture and peat production, for example. These could be used to reach some of the original goals of the Ramsar Convention, and it would only require the relevant parties to recognise and utilise the opportunities provided by these wetlands. The needs of landowners and businesses must not be excessively limited in restoration efforts; rather, they should be able to implement the goals of the Wetlands Action Plan as part of their sensible and responsible operations.

Forestry operations and the collection of energy wood must continue to be possible in peatlands in the future.

The prerequisites for peat production must be retained in peatlands whose natural state has been significantly altered. The sections claiming that peat production continues to threaten the natural state of mires should be removed from the action plan. Annex 2 should be similarly revised, as it mentions peat production as a threat to many mire habitat types. This may have been the case ten years ago, when the conservation status of habitat types was assessed, but it is no longer the case. Peat production was removed from the list of operations that threaten the natural state of mire habitat types at the latest when the new Environmental Protection Act and its Section 13 came into force. Peat production is subject to an environmental permit, and it has been limited fully to peatlands that have been significantly altered. Furthermore, a new assessment of the conservation status of wetland habitats has recently been launched, which is why the table in Annex 2 should be updated immediately upon the assessment's completion.

The action plan also states an opinion regarding mire greenhouse gas emissions, claiming that they can be reduced through the restoration of wetlands (p. 18). Based on Finnish and international studies, this claim oversimplifies the matter. Restoration can, of course, be used as a measure for influencing greenhouse gas emissions, but the relevant parties must then be aware of the time span required for the measure and choose the sites to be restored carefully. If not carried out correctly, restoration efforts may even cause greater emissions of methane and nitrous oxide and weaken the cost efficiency of the promotion of biodiversity. It should also be noted that while some

mires were being restored, drainage operations could possibly be continued in other sectors. Finland's Ramsar Wetlands Action Plan presents rewetting of peatlands as a 'patented solution' to climate change mitigation, but this oversimplifies the matter and is therefore a questionable strategy.

The following is stated on page 8: 'The national implementation of the Ramsar Convention's goals requires societal cooperation beyond the environmental sector.' Taking this into consideration, the business sector has only been represented to a limited extent. This is visible in the limited nature of the action plan's business policy considerations, and it even comes across as wishful thinking (e.g. last paragraph on page 6). The action plan's structure could have been clarified further and its effectiveness increased if the ecosystem services produced by wetlands had been used as the premises for the plan, i.e. the content had been divided functionally from the perspective of regulation, support, production and cultural services.

Measure 23 on page 29 mentions 'a project by the NorBalWet network which studied the carbon sequestration of peatlands'. What is this project, who are the implementers and how is it connected to Finland's Wetlands Action Plan?

The impacts of the Ramsar Wetlands Action Plan are assessed to be solely positive in Table 4 on page 38. The table does not indicate how, for example, the financial impacts have been assessed.

BirdLife Finland states that the action plan is very general in nature and lacks clear, concrete measures, although it considers them important. A significant shortcoming is the lack of an assessment of the funding required for wetland work and the channels through which the funding can be allocated. According to BirdLife Finland's assessment, the action plan could have been more concrete if it had been divided into entities according to the various Ramsar definitions (marine areas, waterfowl habitats, mires).

Detailed comments about the action plan:

- We propose the following addition to the measures under goal 1: 'Significantly increasing public funding for the maintenance of nature reserves.'
- What is meant by underwater cultural heritage?
- We propose the following addition to the measures under goal 3: 'Creating a portal of wetland-related publications. The purpose of the portal is to compile research information and reports pertaining to wetlands in one place and share research information regarding good practices related to the maintenance and management of wetlands.'
- Communication intended for decision-makers is missing from the measures under goal 4.
- Goal 4, measure 30: Is Liminka Bay Wetland Centre the only one considered to require development? A wetland centre should be established in Helsinki Metropolitan Area, for example near the Ramsar site in Viikki.
- Funding the action plan: BirdLife considers it to be impossible to reach the goals by reallocating existing funding, as proposed in the action plan (p. 34)
- The definitions and abbreviations section should be revised to include at least the Wetland Working Group and underwater cultural heritage.
- P. 10, addition to the description of BirdLife Finland: BirdLife Finland is part of BirdLife International, an organisation that forms the largest network of environmental groups in the world and operates in more than a hundred countries.
- The SWOT analysis could be made into an annex of the action plan, with only the key results and conclusions of the analysis described in the plan itself.

The Central Union of Agricultural Producers and Forest Owners (MTK) points out that wetlands have long been utilised in traditional business operations and that it must be possible for this utilisation to continue in the future in accordance with the principles of sustainable use and without excessive restrictions. MTK considers it to be a good thing that the action plan also examines wetlands from the perspective of the business sector, but unfortunately this perspective is not given much attention.

We request that the sentence 'MTK conveys information to farmers regarding agricultural wetlands in particular' in Table 1 be changed to: 'MTK conveys information to operators involved in agriculture and forestry regarding agricultural wetlands and opportunities for establishing shared multifunctional wetlands with interest groups.'

P. 12, proposed addition relating to grazing on shores: 'However, efforts have been made in recent years to promote grazing on shores with the help of various projects and agri-environmental measures, among other things. On the other hand, stricter environmental requirements and opposition by people living on shores have decreased farmers' interest and the opportunities for grazing on shores.'

MTK points out, for example, that arable land is cleared on many expanding domestic animal farms to create enough space for spreading manure. This is due to stricter regulations regarding the spreading of manure. MTK additionally points out that economically viable forestry must also continue to be possible in more humid environments in order to meet the goals of bioeconomy. Peat production should continue to be possible in mires and peatlands whose natural state has been altered, in accordance with the Environmental Protection Act. MTK also points out that mire conservation should be carried out through voluntary means.

Diverse bird populations are a valuable thing, but parties involved in bird population management should keep in mind that the populations must not grow to be too large, or they may begin feeding on cultivated land. At present, agri-environment payments are often negligible in comparison to losses.

It should be added to the text that the construction and maintenance of agricultural wetlands is steered by the terms of agri-environment payments and non-production-oriented investment support related to the Rural Development Programme, in addition to MMM's Wetland and Game Husbandry Strategy for Finland.

With regard to CO₂ emissions resulting from peatland drainage, it should be mentioned that CO₂ emissions from peat fields can also be mitigated by choosing suitable crops and with suitable technical means used in cultivation.

Instead of restoration efforts, other measures that safeguard wetland habitats should primarily be considered, also taking the opinions and needs of landowners and businesses into account. If restoration is chosen as the measure, its implementation must be based on voluntary efforts, and landowners must be provided with sufficient compensation. MTK does not consider it to be necessary to expand the general purpose planning of shore areas. This general purpose planning must not pertain to private land and must not subject landowners to legal effects.

MTK reminds the relevant parties that when combined with properties and their ownership information, exact topographic data changes this information into personal data, which means that the provisions of the Personal Data Act must be observed; this must be taken into account in the public sharing of information.

Table 4 is difficult to understand. Restoration is assessed as having a positive impact on the utilisation of natural resources, but it also reduces the opportunities for using natural resources. MTK proposes that a more detailed description be added to the action plan regarding how the effectiveness assessments have been determined, what the time span used is and what underlying assumptions were made.

MTK emphasises that the perspective of landowners must also be taken into account in wetland-related operations, and the relevant parties must look for solu-

tions that make it possible to combine business operations with the management of wetlands. The action plan should give more visibility to work that has already been carried out for wetlands.

The Finnish Hunters' Association states that hunting is one of the most significant forms of recreational use of wetlands. Removing non-native predators is one of the essential forms of wetland management. The Association requires that hunting must in principle be allowed in Ramsar wetlands. The Association strongly supports the subgoal that states: 'The financing and support systems for wetlands should be developed to make the rehabilitation and maintenance of wetlands, as well as the promotion of the sustainable use of wetlands, easier for the various actors implementing the action plan.' The Association strongly favours active nature management in the conservation of habitats, rather than traditional protection. In the association's opinion, management plans drafted for different game species increasingly highlight the need for the rehabilitation of wetland habitats (for example, for the taiga bean goose and grouse). The Wetland and Game Husbandry Strategy for Finland, completed in 2014, also indicates the need for maintaining and restoring wetland habitats. Game-related needs to maintain and restore wetland habitats will be significant and extensive in the future.

The Finnish Hunters' Association would be happy to contribute to the implementation of the Wetlands Action Plan and provide its own expertise for solving any special issues that pertain to the ethical and sustainable hunting of game species.

The Reindeer Herders' Association states that 13 of the 49 Ramsar sites in Finland are located in reindeer herding areas, with six of them located in special reindeer herding sites, and that reindeer herding is a traditional trade that depends on nature that is as diverse and close to its natural state as possible. Reindeer feed on more than 300 food plants, and some wetlands are also important grazing areas for reindeer. Reindeer were a natural part of nature long before the development of reindeer herding, and the functional prerequisites for reindeer herding should not be weakened in the future with any new regulations. The Association states that rather than the term 'overgrazing', the action plan should use the more descriptive term 'grazing pressure', as the maximum number of reindeer is determined by MMM and AVI monitors that this number is not exceeded. The Association states that wetland drainage and other treatment has weakened the biodiversity of wetlands and nature, thereby weakening reindeer herding. As such, the restoration of wetlands to their natural state will also improve the functional prerequisites of reindeer herding.

The Finnish Association for Nature Conservation proposes that the national Wetland Working Group be expanded to include foundations involved in water and marine protection, producer and environmental associations operating in Swedish-speaking regions, tourism enterprises and larger water protection associations, for example. The Association considers it to be important that discussion is continued regarding the methods for maintaining and rehabilitating wetlands, their relationship with land use planning, the monitoring of the results of maintenance efforts, motivation of actors, funding, inclusion of parties, flood protection plans, river basin management plans, marine resources management plan and the plans for the maintenance and use of wetlands.

The Association points out that the Ramsar network should be supplemented, as the sites in Southwest Finland are currently not included at all, and that all sites should be marked in the terrain and included in spatial data. It would also be good to keep BirdLife International's Important Bird and Biodiversity Areas (IBA) project in mind, as the project has recently focused on identifying marine IBA areas. There are a total of 100 IBA areas in Finland, some of which are also Ramsar sites.

In the opinion of the Finnish Association for Nature Conservation, the Ramsar goals and awareness of Ramsar should be increased (e.g. the term 'Wetland Convention' is used in European discussion rather than the name Ramsar), in addition to cooperation with CCC and HELCOM. World Wetlands Day could be promoted more on Finnish Nature Day, 27 August. It is important that international cooperation is continued, in addition to continuing the discussion about responsibilities, opportunities, funding and committing actors to the cause. Contributions are also needed from researchers. On a general level, the action plan requires stronger prioritisation, clarification of the division of responsibilities, resourcing and appropriate targeting and implementation of maintenance measures by authorities. The Association considers the promotion of the wetland economy to be important. The most valuable waterfowl wetlands in Finland would serve as suitable pilot sites. The introduction of ecosystem services and payments for ecosystem services, which form the basis for the wetland economy, should be promoted.

The Association mentions the worrying results of the most recent assessment of the conservation status of Finnish birds with regard to the bird populations of waters and wetlands. In the association's opinion, one of the goals should be to draft a detailed management plan for each site. The Association believes that the efforts to identify and monitor non-native species and stop them from spreading should be connected to the action plan, and it proposes that dialogue be strengthened between the Finnish Alien Species Advisory Committee and the Ramsar Wetland Working Group. The Association considers it to be important that dialogue is continued with hunters and that cooperation with them is developed. It also considers it to be important to establish a network of waterfowl habitats that are protected from hunting. The Finnish Association for Nature Conservation considers one of the most important maintenance methods to be the rehabilitation and maintenance of traditional waterfowl habitats as well as the construction of new wetlands.

The Finnish Peatland Society considers the goals of the action plan to be good and justified and finds that the action plan was prepared through extensive collaboration, which improves the conditions for reaching the action plan's goals. The Finnish Peatland Society has profiled itself as a promoter of the sustainable use of mires and peatlands based on research data. For its part, the Society offers to support the goals of the action plan by sharing information about the significance of wetlands (mires in particular) at various events and sharing national and international mire-related research data through seminars and excursions, for example, as part of its normal operations. The following measures in particular are closely linked to the society's goals:

- 3. Based on the overall picture formed in measure 1, promoting the implementation of maintenance, rehabilitation and restoration projects related to the most threatened wetland habitat types as well as the implementation of protection and management plans for species.
- 4. Determining which factors affect the development of threatened game and other wetland bird populations in Finland and along migration routes, where possible.
- 5. Promoting the obtaining of project funding, agri-environment payments and non-production-oriented investment support for the maintenance, rehabilitation and restoration of existing wetlands and the founding of new wetlands, taking the principles of the Ramsar Convention into account.

The Finnish Peatland Society is also considering closer cooperation with the Ramsar Wetland Working Group, for example through the Peatland Day, which is organised as a collaborative effort. The Society proposes that the event be added to the annual communications plan referred to in measure 27 and that a link to the event's website be added on the Wetland Working Group's website.

The Association of Finnish Local and Regional Authorities: No comments.

The Finnish Sámi Parliament notes that there are four Ramsar sites located in the native region of the Sami: Lemmenjoki National Park, Sotkavuoma Mire, Lätäseno - Hietajoki Mires and Sammuttjäänkä - Vaijoenjänkä Mires. The Finnish Sámi Parliament wants to draw attention to the significance of Articles 8(j) and 10 of the CBD, as they apply to operations carried out in the native region of the Sami. Based on these articles, the Sustainable Development Programme for the Sami, which was approved by the Finnish Sámi Parliament in 2006, must be taken into account. The Finnish Sámi Parliament considers the assessment of the conservation status of wetland habitat types to be outdated, as the action plan ignores the river basin management plans confirmed in 2015 for the Tenojoki-Näätämöjoki, Paatsjoki and Tornionjoki River Basin Districts for 2016–2021. The Finnish Sámi Parliament notes that mechanical gold mining will still continue at a high rate for several years in Lemmenjoki National Park and that the operations are likely to intensify until the ban on mechanical gold mining, set out in the Mining Act, enters into force. There are several mining projects planned for the catchment area of the Ramsar site of Lätäseno - Hietajoki Mires. If implemented, these projects may strongly alter the state of the water bodies in the catchment area. In the opinion of the Finnish Sámi Parliament, the aforementioned risks to the Ramsar sites in question should be recognised in the Ramsar Wetlands Action Plan. The risks have also been noted in the river basin management plans. The reduction of these risks should be included in the action plan's measure, monitoring and assessment sections.

6. Companies

Fingrid Oyj's statement on the action plan is given from the perspective of the maintenance and upkeep of the national high-voltage grid. With the decision of the Finnish Government, Fingrid Oyj has claimed a permanent right of use to the power line area, which limits the rights of the landowner in the said area (the power line field and the edge zone in which construction is restricted). Fingrid Oyj points out that ensuring the reliability and maintenance of the national grid must be taken into account when locating wetlands in the vicinity of power lines that are part of the national grid. The statement included several subparagraphs to ensure this point. When projects and operations are planned to take place in the vicinity of power lines, Fingrid Oyj requests that it be contacted at risteamalausunnot@fingrid.fi.

DOCUMENTATION PAGE

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<i>Theme of publication</i>				
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<i>Abstract</i>	<p>Finland's National Ramsar Wetlands Action Plan 2016–2020 was prepared as part of the Strategy for the Conservation and Sustainable Use of Biodiversity in Finland for 2012–2020 and the related action plan for 2013–2020, adopted by a Government resolution on 20 December 2012. This strategy and action plan were updated to correspond to the goals specified in the Convention on Biological Diversity, CBD (78/1994), as well as the biodiversity strategy targets agreed upon in the EU.</p> <p>The aim of the Ramsar Convention (Convention on Wetlands of International Importance Especially as Waterfowl Habitat) is to protect internationally valuable wetlands and, in a broader sense, to promote the sustainable use of all wetlands and water resources. The international strategy for the years 2016–2024 was approved at the 12th meeting of the Conference of the Parties (2015). This action plan is part of the contribution of Finland to its implementation.</p> <p>The Ramsar strategy emphasises the particularly poor condition of wetlands: of all the habitats in the world, wetlands are the most threatened. The loss of habitats is one of the key reasons behind the global decline of biodiversity. The Ramsar strategy implements the so-called Aichi Biodiversity Targets of the CBD and several of the goals set in the UN 2030 Agenda for Sustainable Development. According to the latest assessment of the conservation status of habitat types in Finland, the state of wetlands is poor: roughly half of the wetland habitat types in the Baltic Sea, the coast and inland are classified as threatened.</p> <p>The action plan includes a review of the current state of wetlands and presents an analysis of the strengths, weaknesses, threats and opportunities in the protection and sustainable use of wetlands. Based on these a total of 55 measures aimed to improve the state of wetlands have been established. The action plan also presents an estimate of the economic and environmental impacts of the plan. The action plan was circulated for comment in spring 2015. The preparation of the action plan was the responsibility of the broadly-based national Ramsar Wetland Working Group. The composition of the group is given at the end of the publication.</p>			
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Tiivistelmä	<p>Suomen Ramsar -kosteikkotoimintaohjelma 2016–2020</p> <p>Kansallinen Ramsar -kosteikkotoimintaohjelma on laadittu osana Valtioneuvoston päättämää (20.12.2012) Suomen luonnon monimuotoisuuden suojelun ja kestävä käytön strategiaa vuosiksi 2012–2020 ja toimintaohjelmaa 2013–2020. Kyseinen strategia ja toimintaohjelma on päivitetty vastaamaan biologista monimuotoisuutta koskevan yleissopimuksen (SopS 78/1994) (Convention on Biological Diversity, CBD) mukaisia ja EU:ssa sovittuja biodiversiteettistrategian tavoitteita.</p> <p>Ramsarin sopimuksen (vesilintujen elinympäristönä kansainvälisesti merkittäviä vesiperäisiä maita koskeva yleissopimus) tavoitteena on kansainvälisesti arvokkaiden kosteikkojen suojelu ja laajemmin kaikkien kosteikkojen ja vesivarojen kestävä käytön edistäminen. Ramsarin sopimuksen 12. osapuolikokouksessa (2015) hyväksyttiin kansainvälinen strategia vuosille 2016-2024, jota tämä toimintaohjelma osaltaan käytännössä toteuttaa.</p> <p>Ramsar -strategia korostaa kosteikkojen erityisen huonoa tilaa: maailman kaikista elinympäristöistä kosteikot ovat uhanalaisimpia. Elinympäristöjen häviäminen on keskeisimpiä syitä luonnon monimuotoisuuden vähentymiseen maailmanlaajuisesti. Ramsar -strategia toteuttaa CBD - sopimuksen ns. Aichi -biodiversiteettitavoitteita ja lukuisia YK:n kestävä kehityksen toimintaohjelman tavoitteita 2030. Suomen luontotyyppien viimeisimmän uhanalaisarvioinnin mukaan kosteikkojen tila on huono: noin puolet Itämeren, rannikon ja sisämaan kosteikkoluontotyypeistä on luokiteltu uhanalaisiksi.</p> <p>Toimintaohjelma sisältää katsauksen kosteikkojen nykytilaan. Toimintaohjelmassa on analysoitu kosteikkojen suojelun ja kestävä käytön vahvuuksia, heikkouksia, uhkia ja mahdollisuuksia, joiden perusteella on määritelty 55 kosteikkojen tilan parantamiseen tähtävää toimenpidettä. Toimintaohjelma sisältää myös arvion toimintaohjelman taloudellisista ja ympäristövaikutuksista. Toimenpideohjelmasta pyydettiin lausuntoja keväällä 2015. Toimenpideohjelman valmistelusta vastasi ympäristöministeriön vuonna 2013 asettama laaja-alainen kansallinen Ramsar -kosteikkotyöryhmä. Työryhmän kokoonpano on esitetty julkaisun lopussa.</p>			
Asiasanat	Ramsarin sopimus, kansainväliset sopimukset, kosteikot, suojelu, kestävä käyttö, luonnon monimuotoisuus			
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Publikationens tema			
Publikationens delar/ andra publikationer inom samma projekt			
Sammandrag	<p>Det nationella åtgärdsprogrammet för våtmarksområden som omfattas av Ramsarkonventionen har utarbetats som en del av Finlands strategi för bevarande och hållbart nyttjande av den biologiska mångfalden för åren 2012–2020 och det till strategin anknyttande åtgärdsprogrammet för åren 2013–2020. Statsrådet beslutade om strategin den 20 december 2012. Strategin och det anknyttande åtgärdsprogrammet har uppdaterats så att de överensstämmer med målen i konventionen om biologisk mångfald (FördrS 78/1994) (Convention on Biological Diversity, CBD) och i EU:s strategi för biologisk mångfald.</p> <p>Ramsarkonventionen (konventionen om våtmarker av internationell betydelse, i synnerhet såsom livsmiljö för våtmarksfåglar) syftar till att skydda internationellt betydelsefulla våtmarker och mer allmänt till att främja ett hållbart nyttjande av alla våtmarker och vattentillgångar. Vid Ramsarkonventionens tolfte partskonferens (2015) antogs en internationell strategi för perioden 2016–2024, som detta åtgärdsprogram bidrar till att genomföra i praktiken.</p> <p>Ramsarstrategin betonar våtmarkernas särskilt svaga tillstånd: bland alla världens livsmiljöer hör våtmarkerna till de mest hotade. Att livsmiljöer försvinner är en av de viktigaste orsakerna till att naturens mångfald minskar globalt. Ramsarstrategin genomför de s.k. Aichimålen för biologisk mångfald som ingår i CBD-konventionen, liksom ett flertal av målen i FN:s åtgärdsprogram för hållbar utveckling fram till 2030. Enligt den senast bedömningen av hotade biotoper i Finland är våtmarkerna i dåligt skick: cirka hälften av våtmarksbiotoperna i Östersjöområdet, vid kusten och i inlandet har klassificerats som hotade.</p> <p>I åtgärdsprogrammet ingår en översikt av våtmarkernas ekologiska status just nu. I åtgärdsprogrammet har man analyserat de starka och svaga sidorna samt hoten och möjligheterna när det gäller skydd och hållbart nyttjande av våtmarker. Utifrån analysen har man fastställt 55 åtgärder som syftar till att förbättra våtmarkernas status. Åtgärdsprogrammet innefattar också en bedömning av åtgärdsprogrammets konsekvenser för ekonomin och miljön. Utlåtanden om åtgärdsprogrammet begärdes våren 2015. En nationell arbetsgrupp på bred bas som miljöministeriet tillsatte 2013 för arbetet enligt Ramsarkonventionen ansvarade för beredningen av åtgärdsprogrammet. Arbetsgruppens sammansättning presenteras i slutet av publikationen.</p>		
Nyckelord	Ramsarkonventionen, internationella avtal, våtmarker, naturvård, hållbart nyttjande, naturens mångfald		
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The aim of the Ramsar Convention (Convention on Wetlands of International Importance Especially as Waterfowl Habitat) is to protect internationally valuable wetlands and, more broadly, to promote the sustainable use of all wetlands and water resources. The international strategy for the years 2016–2024 was approved at the 12th meeting of the Conference of the Parties (2015). Finland's National Ramsar Wetlands Action Plan is part of the Finnish contribution to its implementation. The action plan includes a review of the current state of wetlands and presents an analysis of the strengths, weaknesses, threats and opportunities in the protection and sustainable use of wetlands. Based on these a total of 55 measures aimed to improve the state of wetlands have been established.



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