



Ministry of Agriculture
and Forestry of Finland

Water Resources Management Strategy of Finland 2030

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Water Resources Management Strategy of Finland 2030

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Water Resources Management Strategy 2030

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Abstract

The Water Resources Management Strategy 2030 lays the foundation for the operations, finances and performance guidance of water resources management tasks in the administrative branch of the Ministry of Agriculture and Forestry. The strategy presents a brief description of the factors of change in the operating environment and the vision: clean water, security and wellbeing. Objectives, a mission and operating models are presented to fulfil this vision. The four objectives listed in the strategy are: 1. The objectives of water use, a good status and biodiversity are reconciled with each other in catchments and river basins, 2. Society adapts to changing climate and water conditions and climate change mitigation is promoted through water management, 3. Water resources management services create wellbeing and diverse economic activities and 4. Finland promotes a sustainable and water-secure world. Five more detailed policy approaches have been proposed to support each objective.

Keywords water resources management, strategies, water administration, water

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Vesitalousstrategia 2030 Puhdasta vettä, turvallisuutta ja hyvinvointia

Maa- ja metsätalousministeriön julkaisuja 2022:6**Julkaisija** Maa- ja metsätalousministeriö**Yhteisötekijä** Maa- ja metsätalousministeriö**Kieli** Suomi**Sivumäärä** 19**Tiivistelmä**

Vesitalousstrategia 2030 on maa- ja metsätalousministeriön toimialan vesitaloustehtävien toiminnan ja talouden sekä tulosohjauksen lähtökohta. Strategia esittelee lyhyesi keskeiset toimintaympäristön muutostekijät sekä vision: puhdasta vettä, turvallisuutta ja hyvinvointia. Tätä visiota pyritään päämäärien, toiminta-ajatuksen ja toimintatapojen avulla toteuttamaan. Strategia listaa neljä päämäärää: 1. Vesien käytön, hyvän tilan ja luonnon monimuotoisuuden tavoitteet sovitetaan yhteen valuma- ja vesistöalueilla, 2. Yhteiskunta sopeutuu muuttuviin ilmasto- ja vesioloihin, ja vesitalouden keinoin edistetään ilmastonmuutoksen hillintää, 3. Vesitalouspalvelut luovat hyvinvointia ja monipuolista taloudellista toimintaa ja 4. Suomi edistää kestävä ja vesiturvallista maailmaa. Jokaista päämäärää tukemaan on esitetty viisi tarkempaa toimintalinjaa.

Asiasanat vesitalous, strategiat, vesihallinto, vesi**ISBN PDF** 978-952-366-185-1**ISSN PDF** 1797-397X**Julkaisun osoite** <http://urn.fi/URN:ISBN:978-952-366-185-1>

Strategi för vattenhushållning 2030

Jord- och skogsbruksministeriets publikationer 2022:6

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Strategin för vattenhushållning 2030 utgör utgångspunkten för verksamheten och ekonomin samt resultatstyrningen när det gäller uppgifter i anslutning till vattenhushållningen inom jord- och skogsbruksministeriets ansvarsområde. Strategin innehåller en kort presentation av de centrala faktorerna för förändring i verksamhetsmiljön samt en vision: rent vatten, säkerhet och välfärd. Strävan är att förverkliga visionen med hjälp av olika mål, en verksamhetsidé och olika verksamhetsätt. Strategin innehåller fyra mål: 1. Målen för vattenanvändningen, god status och naturens mångfald samordnas i avrinningsområden och olika vattendrag. 2. Samhället anpassar sig till förändrade klimat- och vattenförhållanden, och bekämpningen av klimatförändringen främjas genom olika metoder inom vattenhushållning. 3. Tjänsterna inom vattenhushållning skapar välfärd och mångsidig ekonomisk verksamhet och 4. Finland främjar en hållbar värld med en tryggad vattenförsörjning. För att stödja varje mål har det föreslagits fem prioriteringar som är mera detaljerade.

Nyckelord vattenhushållning, strategier, vattenförvaltning, vatten

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PREFACE

The water resources management strategy guides related tasks in the field of activity of the Ministry of Agriculture and Forestry. The strategy lays the foundation for the operations, finances and performance guidance of water resources management tasks in the administrative branch of the Ministry. The strategy serves society and people extensively through the activities and cooperation of the administration. The strategy has been prepared in cooperation with the administrative branch, and the opinions and comments of stakeholders have been taken into account in the preparation.

Water resources management refers to water resources and the water cycle and, above all, the sustainable use and management of water resources. The sustainable use and management of water resources includes the objective of exploiting renewable water resources in the context of the renewal made possible by the water cycle taking into account other water users and the environment, and in coordination with their objectives.

Water resources management services are vital for the functioning of our society, for the safety and security of supply, and for wellbeing. They are produced in cooperation with the state, municipalities, companies and other actors. Water utilities produce domestic water for citizens and industries and handle waste water treatment without burdening the environment. The regulation of water bodies, dams and flood protection projects, as well as other water management measures, are used to manage flood and drought risks, create preconditions for economic activities such as agriculture, forestry, hydropower, industry and waterborne traffic, and promote recreational use of water bodies. The long-lasting infrastructure that enables these water resources management services requires continuous maintenance and renewal.

Water resources management projects have been carried out for centuries, always in accordance with the needs and values of society and the challenges of the time. Changes in society are reflected in the needs of water resources management services, and climate change affects the water cycle. Digitalisation and new technologies and operating models enable the renewal of water resources management and services. Water resources management plays an important role in adapting to climate change, as a large part of the impacts of climate change on society are transmitted through water resources, and a growing role in mitigating climate change. Water does not respect the boundaries between administrative branches or national borders. Therefore, the sustainable use and

management of water resources is an objective that we all share. Finland has the expertise to achieve this goal in our own and transboundary water bodies, as well as globally.

The vision of the Ministry of Agriculture and Forestry for 2030 is 'A responsible bioeconomy and circular economy are the foundation of our country's competitiveness and wellbeing.' The water resources management strategy describes how we implement the vision through water resources management and which of the UN's Sustainable Development Goals we promote in water resources management. Our operating environment is undergoing constant and accelerating change, which is why we act proactively and in cooperation with other states and actors in society.

Our vision is to produce *clean water, security and wellbeing for society now and in the future.*

March 2022

Jari Leppä, Minister of Agriculture and Forestry

Jaana Husu-Kallio, Permanent Secretary

1 Concepts



Photo: Unto Tapio

Water resources management and related tasks in the field of activity of the Ministry of Agriculture and Forestry

Water resources management, that is, water resources and their use and management. The water resources management tasks in the field of activity of the Ministry of Agriculture and Forestry are water services, regulation of water bodies, management of flood and drought risks, land drainage and irrigation, dam safety, maintenance of water structures, obligations of the state as a permit holder in accordance with the Water Act, and other use and management of water resources, including transboundary water matters.

Water resources management administration

Administration handling water resources management tasks at the Ministry of Agriculture and Forestry, Centres for Economic Development, Transport and the Environment, and the Finnish Environment Institute

Water resources management services

Tangible and intangible benefits for people, society and the environment from the water resources management sector

Flood and drought risk management

Information services, anticipation, protection and response to reduce the harm caused by exceptional quantities or scarcity of water in inland, marine and urban waters and groundwater

Water services

Channelling, treatment and supply of water for domestic use and the discharge and treatment of waste water

Water management in agriculture and forestry

Measures affecting the water cycle in agricultural and forestry areas, including drainage and irrigation

Water security

Ability to ensure sustainable access to an acceptable quantity of water for industries, human wellbeing and development, to prevent water pollution and water-related disasters and to protect ecosystems

Dam safety

Preventing accidents and disruptions of watercourse, mining and waste dams during the design, construction, operation and demolition of the dam

Construction of water projects

Construction activities in water bodies to promote the use, rehabilitation and/or protection of the water body

Regulation of water bodies

Control of water levels and flow rates in lakes, rivers and reservoirs through dam or hydroelectric power plant structures

Water vision

Common will of stakeholders representing different uses, rehabilitation and protection of the water body on the future of the water body

Water resources management in numbers

About 1,100 water utilities

About 300 water body regulation projects

About 450 dams classified according to the Dam Safety Act

Thousands of flood protection and other structures in water bodies

Water management in agriculture and on about 2 million hectares of arable land and about 5.7 million hectares of forest

Approximately 380 water industry companies, value of water business roughly EUR 4.6 billion

Reference: vesi.fi and the Finnish Water Forum

Water resources management in regulations

Water Act (587/2011)

Water Services Act (119/2001)

Flood Risk Management Act (620/2010)

Dam Safety Act (494/2009)

Act on the Organisation of River Basin Management and the Marine (1299/2004)

Agreement between Finland and Sweden Concerning Transboundary Rivers (91/2010)

Finnish-Russian Agreement on the utilization of transboundary watercourses (26/1965)

Reference: finlex.fi, most important regulations related to water management

2 Change factors in the operating environment and their impact on water resources management

The key change factors for the water resources management sector have been compiled from the [strategy of the Ministry of Agriculture and Forestry](#), the [Strategy for Public Governance Renewal](#), the Government Report on the Future in preparation, and the most important change factors identified in the preparation of the strategy.

Operational reliability of critical infrastructure and growing importance of security of supply

Risk management in water resources management is emphasised due to climate change and the challenges of the international operating environment. The growing importance of security of supply and self-sufficiency highlights the interdependence of water, food and energy. The importance of organising and securing water services is increasing in the context of demographic change and migration.



Photo: Elias af Hällström

Sustainable use of natural resources

Ensuring the overall sustainability of the use of water resources is emphasised as the needs for use and expectations and values change. The importance of conserving and reusing water and the responsible and intelligent use of natural resources is increasing in the global competition for natural resources. International and EU cooperation is emphasised in water resources management tasks.

Climate change and biodiversity

Adaptation to climate change and its mitigation are emphasised in the management of water resources. Changes in the water cycle also affect the state of water bodies. Safeguarding biodiversity and the importance of nature-based solutions in water resources management increase.

Digitalisation and technological change

Digitalisation and new technologies enable improved efficiency and effectiveness in water resources management tasks. Innovations also create new business.

Economic transformation and the financing of the welfare society

Water resources management and adequate and up-to-date expertise must be ensured by concentrating tasks on river basin entities and nationally, and by ensuring adequate and continuous training.

3 Vision: Clean water, security and wellbeing

The vision of the water resources management strategy is 'Clean water, security and wellbeing'. The vision and its implementation are complemented by an operating concept and operating method.



Photo: Image archive of the Ministry of Agriculture and Forestry

Operating concept

- We make sure that there is enough clean water to meet the needs of people, society and nature.
- We ensure the management of risks in water resources management, as well as the safety and reliability of water resources management structures and services.
- We create social and ecological wellbeing, as well as the preconditions for industries and business.

Operating method

- We act responsibly, effectively and proactively in cooperation with public and private sectors and organisations at local, regional, national and international level.
- We constantly improve our water expertise and operations to meet changing needs and opportunities. We raise public awareness about the sustainable use of water resources.

4 Objectives

In order to implement the vision of the water resources management strategy, four objectives and their more detailed policy approaches have been identified. The objectives and policy approaches guide water resources management tasks in the field of activity of the Ministry of Agriculture and Forestry.



Photo: Lauri Ahopelto

1. The objectives of water use, a good status and biodiversity are reconciled with each other in catchments and river basins.
2. Society adapts to changing climate and water conditions and climate change mitigation is promoted through water management.
3. Water resources management services create wellbeing and diverse economic activities.
4. Finland promotes a sustainable and water-secure world.

Objective 1. The objectives of water use, a good status and biodiversity are coordinated in catchments and river basins

1. The sustainable use of water resources, management of flood and drought risks, rehabilitation of water bodies and water management, and safeguarding of biodiversity are coordinated taking into account different interests in the implementation of water resources management tasks, such as water visions.
2. Water management in agriculture and forestry is implemented by promoting sustainable production, flood and drought risk management, water management and biodiversity, taking into account catchment areas.
3. In water construction and the rehabilitation of water bodies, natural solutions are utilised taking into account the needs of water use, environmental flow and water quality, fish migration and habitats.
4. The risks of water services are identified and controlled from the raw water source to the effects of waste water.
5. The sustainable use of surface waters and groundwater is based on comprehensive and up-to-date data and on catchment and river basin assessments.

Objective 2. Society adapts to changing climate and water conditions, and climate change mitigation is promoted through water management

1. Risks to health, safety, water supplies, the economy and the environment from floods and droughts, as well as dam safety, are managed and taken into account in land use planning and construction.
2. Flood and drought risks are anticipated, prepared for and coordinated by river basin in both regulated and natural water bodies.
3. Water services are developed to be carbon-neutral and dependable in a changing climate.
4. Water management in agriculture and forestry adapts to changing water conditions and promotes carbon sequestration.
5. Renewable energy and regulating power are produced in a sustainable manner taking into account the overall impacts, enabling the natural life cycle of migratory fish.

Objective 3. Water resources management services create wellbeing and diverse economic activities

1. Water resources management structures and services that are important for the functioning of society and for security of supply are safe and reliable.
2. The information production, information management and knowledge-based management in water resources management is cyber secure, enables new business and meets local, regional and national information needs.
3. Regional cooperation and structural change in water services are promoted towards a more operational plant structure.
4. Ownership and control of water services are maintained in municipalities and customer-owned cooperatives, and water services are developed as part of community development.
5. Water resources management administration responds to the challenges of a changing operating environment, and the expertise and resources necessary for the good management of the tasks are secured in advance.

Objective 4. Finland promotes a sustainable and water-secure world

1. Public procurement in the water sector produces new methods, solutions and operating methods for sustainable water resources management in Finland and internationally.
2. Research, development and innovation in water resources management are carried out in international cooperation between research institutes, educational institutions and companies.
3. Our transboundary water cooperation is active and proactive, and benefits the implementation of international transboundary water agreements globally.
4. In order to reduce tensions related to the use of water resources, water resources management promotes cooperation and circular economy solutions between different actors and takes into account the interdependencies between the management of water resources, food and energy production and ecosystems.
5. Water resources management administration contributes to the growth and internationalisation of sustainable water business

5 The water resources management strategy and the UN's Sustainable Development Goals

The water resources management strategy and its objectives and policy approaches contribute to achieving and maintaining the UN's Sustainable Development Goal 6, Clean water and sanitation, in Finland and in our operations internationally. In addition, the strategy contributes to achieving a number of other Sustainable Development Goals.

At the heart of the action

Ensure access to and sustainable use of water and sanitation for all

- 6.1 Safe and affordable drinking water for all
- 6.2 Sanitation and hygiene for all
- 6.3 Improve water quality
- 6.4 Water-use efficiency, sustainable withdrawals and supply of freshwater
- 6.5 Integrated management of water resources
- 6.6 Protect and restore water-related ecosystems
 - 6.a International cooperation and support to developing countries
 - 6.b Participation of local communities in improving the management of water bodies and sanitation



Strong participation





Ministry of Agriculture and Forestry

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