

Water and Environmental Legislation in Finland

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Water policy instruments

- Planning and long term target setting
 - National water protection programmes
 - River Basin Management Plans
- Legislation and enforcement
- Economic Instruments
 - Agri-environment subsidy
 - Water and waste water charges
- Information, education and research
- Financing
 - Rehabilitation of water bodies
 - Construction of wastewater and water supply networks
- International co operation
 - Baltic Sea co operation, transboundary waters, other activities
 - Financing water protection in the neighbouring areas

Water policy instruments

- EU and related national legislation provide framework water protection (WTD, Nitrate, Groundwater, EQS, MSD, UWWT etc.
- Long term Water Protection Policy Programmes since beginning of 1970`s
- Water Protection Policy Outlines to 2015 in 2006
- River Basin Management Plans 2010-2015 in 2009
- The implementation programme of the RBMP`s in 2010
- Action Plan for the Protection of the Baltic Sea and Inland Watercourses in 2005
- Finland's Programme for the Protection of the Baltic Sea in 2002
- Finnish Marine Strategy Plan under preparation

Additional policy instruments

- **Economic Instruments and Financing**
 - Agri-environment subsidy
 - Water and waste water charges
 - Rehabilitation of water bodies
 - Construction of connecting wastewater and water supply networks
 - Financing water protection in the neighbouring areas (eg. Russia)
- **Information, education and research**
- **International co-operation and agreements**
 - Baltic Sea Summit in 2010
 - HELCOM - governing body of the "Convention on the Protection of the Marine Environment of the Baltic Sea Area" or "Helsinki Convention"
 - Transboundary co-operation (EU ECE)
 - Bilateral agreements with Sweden, Norway and Russia

Water and Environmental legislation is sectoral

- Water Act , 1961, new reform 2012
- Environmental Protection Act, 2000
- River Basin Planning act (based on EU WFD), 2004
- Flood Risk Management Act, 2010
- Dam Safety Act, 2009
- Water Services Act, 2011
- Health Protection Act, 2002
- Nature Conservation Act, 1996
- The Government Decree on harmful substances, 2006
- The Government Decree agricultural nitrates, 2000
- The Government Decree on Urban waste water treatment, 2006
- The Government Decree on Treating Domestic Wastewater in Areas Outside Sewerage Networks, 2003

General principles in environmental permits

- Integrated approach
- Open permit procedure
- Polluter pays principle
- Best Available Techniques – EU and national BAT reference documents available
- Precautionary principle
- Prevention principle
- The operator must be aware of impacts, risks and mitigation methods



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Finland's environmental administration

Ministry of the Environment

Housing
Finance and
Development
Centre for
Finland (ARA)

Finnish
Environment
Institute
(SYKE) ²

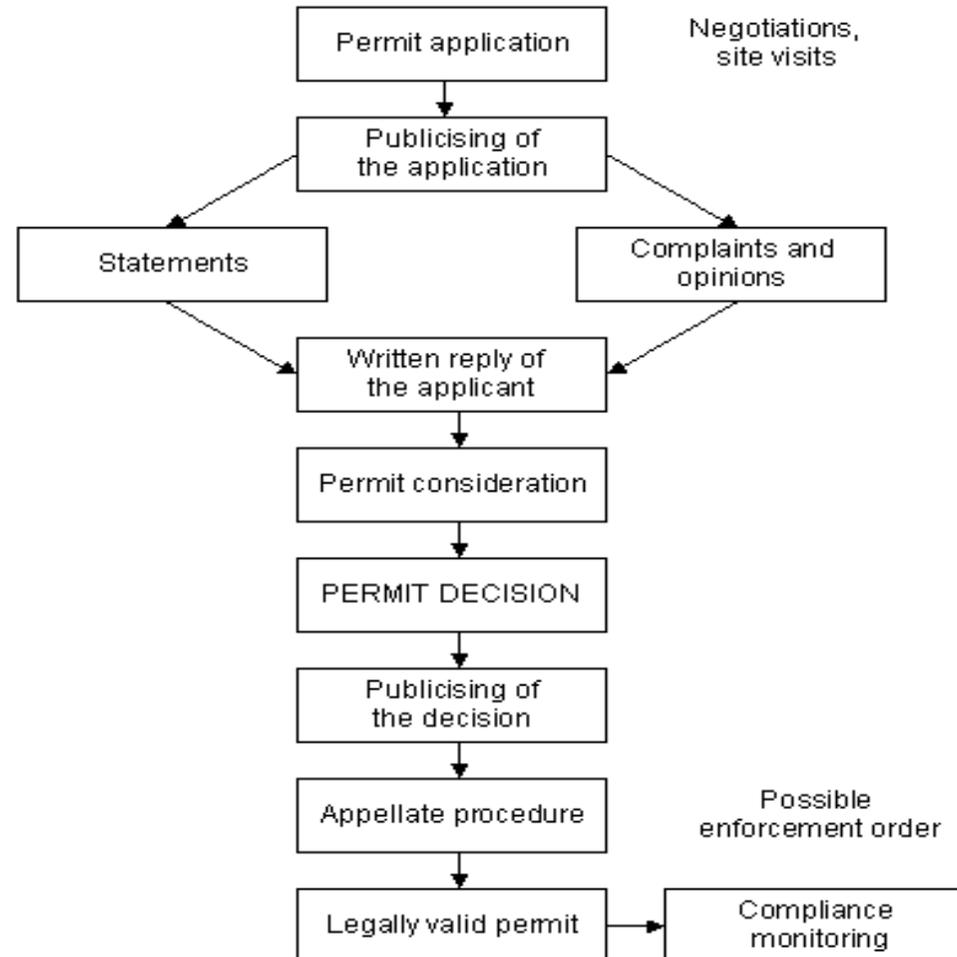
Regional
State
Administrative
Agencies
(AVI) ¹

Centres for
Economic
Development,
Transport and the
Environment
(ELY) ^{1 and 2}

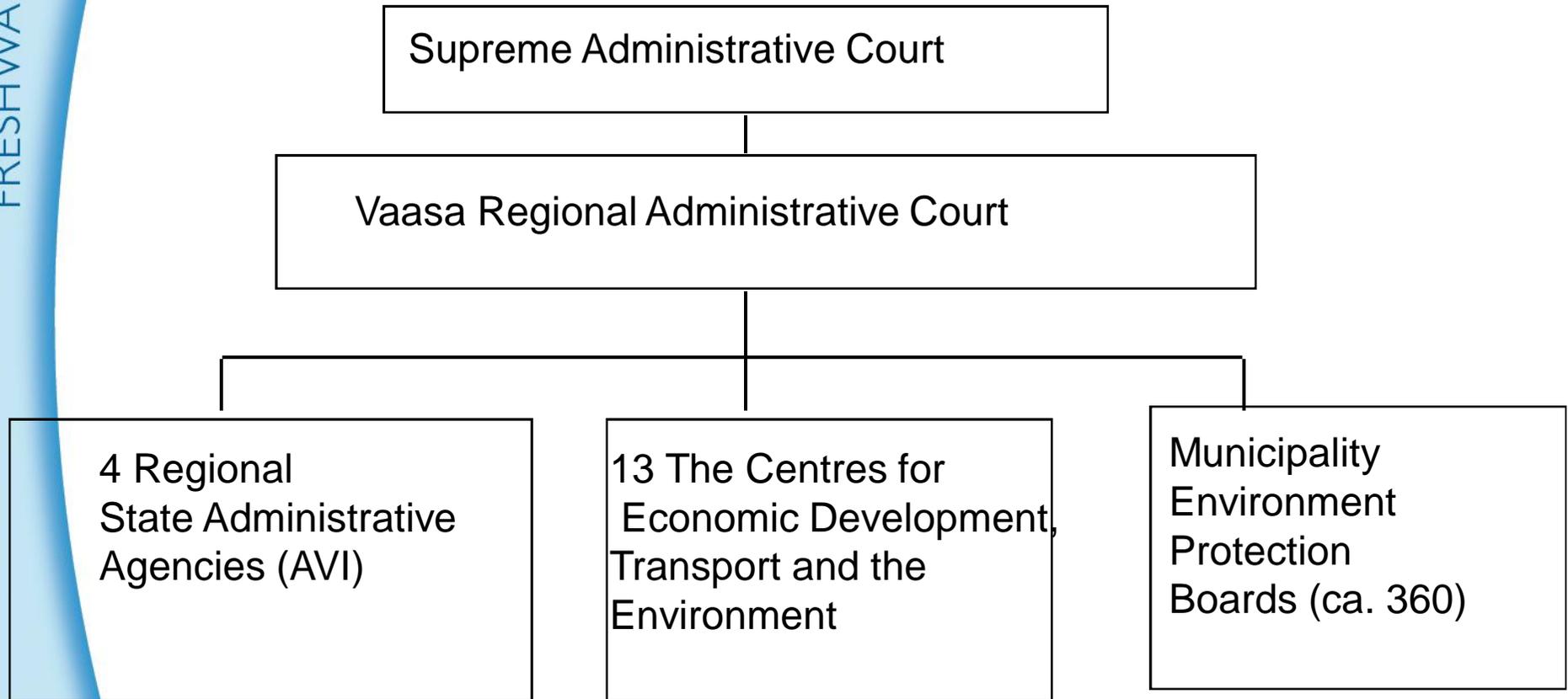
Metsähallitus
Natural
Heritage
Services ¹

- 1) The Ministry of the Environment guides the work related to environmental issues of the Regional State Administrative Agencies and the Centres for Economic Development, Transport and the Environment. Additionally, the Ministry guides the nature conservation work of the Natural Heritage Services Unit for Metsähallitus.
- 2) The Ministry of Agriculture and Forestry is responsible for the work related to water resource management of the Finnish Environment Institute and the Centres for Economic Development Transport and the Environment.

Environmental permit procedure



Environmental legal procedure Appeal system



Legislation

Water Act 2011

Use of water resources

- Water abstraction
- Water regulation
- Hydropower
- Water related construction etc.

Water Services Act 2001

Water supply and sewerage

- Organization
- Management
- Network connection
- Charges and costs

Specific Acts on

- River basin management plans
- Flood risk management plans
- Dam safety
- Environmental protection
- Marine protection

EU Water Legislation

Water Abstraction (Water Act)



Water Abstraction (Water Act) 1/3

- Water Use
 - Sustainable use, minimization of infringements
 - Surface water and groundwater is governed, not owned, by the owner of the water or land area
- Permit is required in case the abstraction:
 - Serves a water utility,
 - Has negative impacts on water quantity or quality or other water use, or
 - Exceeds 250 m³ of groundwater per day

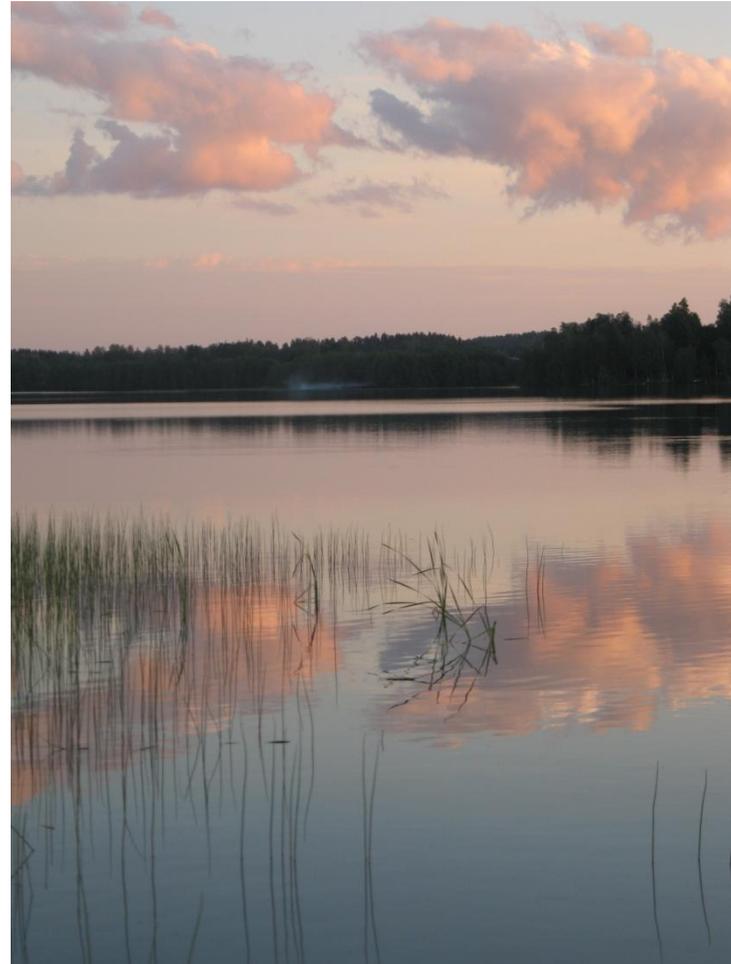
Water Abstraction (Water Act) 2/3

- Permit is granted if
 - The benefit gained from the project to public or private interests is considerable in comparison to the losses (weighing of interests)
 - Permit regulations
- Prioritisation of water abstraction
 1. Domestic use close to abstraction site
 2. Community water services in the region
 3. Industrial use in the region, or community water services outside of region
 4. Other water use purposes outside of region

Water Abstraction (Water Act) 3/3

- Permit authority, applicant and courts of appeal
 - The regional state administrative agency (permit authority)
 - Party responsible for the project has to apply for a permit
 - Permit decisions may be appealed
- Impact assessment
 - General impact assessment is always required
 - Environmental impact assessment is required for the large scale groundwater abstraction
- Hearing and the right of appeal
 - Hearing of authorities and stakeholders
 - A permit decision may be appealed by stakeholders, NGOs, municipalities, authorities and the Sami Parliament

Water Services Act



Water Services Act 1/3

Municipal responsibilities

- Development and organization of water services
 - Need of a relatively large number of inhabitants or health considerations or environmental protection
==> A municipality must make sure that appropriate measures are taken to secure water and wastewater services
- Approval of the area of operation of a water utility
 - Water and sewerage network areas

Water Services Act 2/3

Obligations of water utilities

- Management of water services in the area of operation
 - Properties located in the area of operation must be connected to the water main and sewer of the utility
- Water quality requirements, inspection obligations
- Charges of water services
 - Recovery of the costs, a minimum return on the capital
 - Charges must be reasonable and equitable
 - Charges for the use of services, connection charge and basic charge
 - The need to regulate the consumption of water may be taken into account in the charges

Water Services Act 3/3

Customer rights and obligations

- Control authorities
 - Regional centres, municipal health protection authority and municipal environmental protection authority
 - Penalty payment, threat to order measures taken at the defaulter's expense
- Organisation of water services
 - Right to institute proceedings
- Price reduction
 - Corresponding an error in water services
- Discontinuation of water services
 - Essential breach of the obligations
 - Notification 5-10 weeks earlier

Dam Safety Act



The Act and Decree on Dam Safety

- Some 500 of Finland's dams are covered by the legislation. Of these, 85% are waterbody dams and 15% waste dams.
- In the event of an accident, about 40 of the dams would endanger human life or health or cause considerable damage to the environment or property.
- Most of the dams are embankment dams, and a few are massive concrete dams.
- Dams in Finland are constructed mainly for
 - Flood control
 - Hydroelectric power production
 - Water supply
 - Fish culture
 - Storing waste detrimental to health or the environment

Damsafety authorities

- The supreme authority of supervision and guidance:
The Ministry of Agriculture and Forestry
- The local authorities:
The regional environment centres
- The rescue services:
The regional rescue departments

Dam safety act 1/4

Scope of application

- The Act applies the building and use of a dam.
- A dam is a construction intended for permanent use with the associated structures and facilities regardless of the construction materials or methods or the type of substance impounded in the basin.
- This Act shall be applied to a dam not less than three meters high. The Act shall, however, also be applied to a lower dam, if the volume of the substance in the basin impounded by the dam is so large or if the substance in the basin is of such a type that in the event of an accident it manifestly endangers human life or health or manifestly seriously endangers the environment or property.

Dam safety act 3/4 Monitoring

- To reduce the risk of damage from a dam a safety monitoring programme shall be drafted for each dam
- The dam safety monitoring programme shall be drafted by the dam owner or holder. The programme may include rules concerning the monitoring proper and the inspections made at regular intervals.
- The approval of the safety monitoring programme or its amendments shall be decided by the regional environment centre.

Dam safety act 4/4

Hazard risk assessment

- To determine and assess the risk arising from a dam the regional environment centre may order, whenever so required, the dam owner or holder to acquire an assessment of the risk posed by the dam to the downstream population and property in particular (hazard risk assessment) and to communicate the findings of the assessment to the regional environment centre and the municipal rescue authority.
- A dam referred to in this Act that in the event of an accident may manifestly endanger human life or health or manifestly seriously endanger the environment or property shall be included as a risk site in the coordination plan. The dam owner or holder shall be obliged to assist the rescue authorities in drawing up the plan.

The Safety Plan

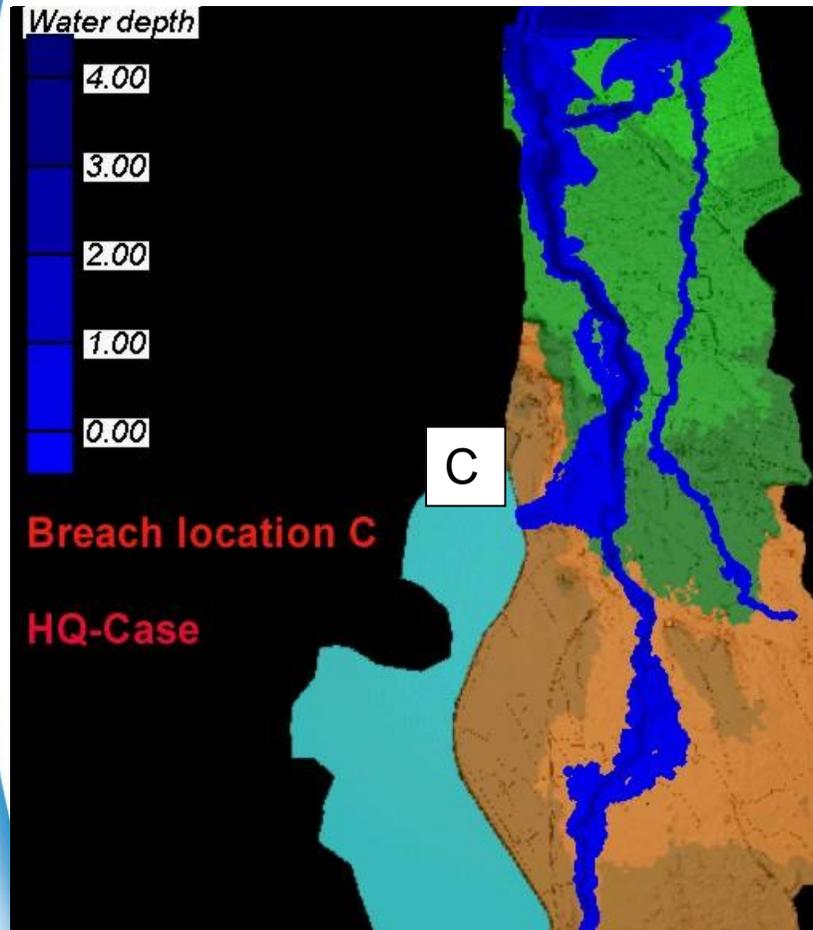
- The Safety Plans shall contain:
 1. a plan of measures to be taken with regard to the waterbody and hydraulic structures in the event of an accident;
 2. an account of the materials to be reserved in advance to forestall an accident;
 3. a description of the manner in which the regional alarm will be given and communication will be maintained with the regional alarm centre;
 4. information about the personnel of the dam owner or holder available to prevent the damage in the event of an accident;
 5. an account of other measures of the dam owner or holder necessary to protect people and property in the event of an accident caused by the damming; and
 6. in respect of waste dams, a description of the type and quantity of the impounded substance.

Dam safety code of practice

Contents

- Application of legislation
- Dam requirements
 - Hydrological design
 - Structures (earth and rock, concrete, steel)
 - Machinery
 - Electrical facilities
 - Monitoring and control facilities
- The content of dam safety file
- Commissioning inspection
- Safety monitoring and inspections
- Hazard risk assessment
- Prevention of and precautions against a dam accident

Dam safety: Hazard risk assesment Dam Break Hazard Analysis



- To be analysed:
 - different breach locations and scenarios
 - different hydrological conditions
 - people in risk
 - economical and environmental damages

Inspections

Annual inspection

- In the annual inspection special attention shall be paid to checking the condition, performance and alarm systems of the dam spillways and sills and power plant discharge facilities. The operation of the facilities must be checked with test runs. In flood years in particular, the flood preventive measures taken are reviewed, so that even in abnormal flood years the operating personnel have the correct instructions for handling the situation.

Regular inspection

- A regular inspection is made at intervals not exceeding five years. The date of the first regular inspection is counted from the date of the commissioning inspection.
- A representative of the dam owner or holder and a competent person participate in the regular inspection.
- The regional environment centre and, for a P dam, the provincial government, the rescue authorities shall be informed about the date of the inspection so that the authorities can participate in the inspection.

The reports of disturbances

- Structural and operational disturbances affecting dam safety and observed during monitoring must be reported.