

What is water legislation about?

Illustration activities possibly impacting water quality and quantity which the WFD wants to address

river basin district

water body



Slide 1

Why is there a need for water framework legislation?

This slide is to show how different (human) activities can have effects on water, both surface waters and ground waters (and why there are different legal instruments dealing with these effects).

Water quality may be affected by point and by diffuse pollution. Point pollution: discharge of waste water by industry. Diffuse pollution by agriculture (spreading of manure, excess running off to surface water) or households which are not connected to an urban waste water collection and treatment system.

The amounts of surface water / ground water can also be affected by water abstraction, such as for preparing drinking water, producing hydropower and irrigation.

Changes of water quality (level of pollution) and quantity (actual amount left) can have impacts on the animals and plants living in the waters (which therefore present a link to the Habitats and Birds directives).

All rivers end up in the sea and this is where pollution ends up as well.

Moreover, human activities can also affect the flood risk, where they prevent rain water to slowly penetrate the soil but are in stead evacuated as quickly a possible.

Pressures on water bodies are manifold. What farmers spread as fertilizer on the land may affect water quality. Lowering water levels for agricultural purposes may negatively affect flora and fauna. What households and industry discharge equally so. Using hydro power changes rivers and dredging of rivers and coastal areas does so as well. Even air pollution levels affect water quality, because when it rains. Although it may be relatively easy finding the problems it is very difficult finding the right balance as regards the solution. We still need to eat and still rather use hydro power instead of coal, so how to reconcile it all?

The idea of the WFD is to address water issues at a level where the different types of water are linked: in their catchment area. That allows for effective coordination of policy measures (avoid that activities allowed for upstream have negative effects downstream). Avoid surprises !

Therefore Art 3 WFD explicitly provides for coordination.

Mind that objectives of Art 4 WFD are to be met at the level of the water bodies, as we will see later on.

The next slide will show how solutions are to come about from different angles.



Overview legal instruments

- Water Framework Directive (2000/60/EC)
- Completing key notions:
 - Groundwater (2006/118/EC)
 - EQS / Priority Substances (2013/39/EU)
- Completing the scope:
 - Floods Directive (2007/60/EC)
 - Marine Strategy Directive (2008/56/EC)
- Urban waste water treatment Directive (91/271/EEC)
- Nitrates Directive (91/676/EEC)
- Drinking water Directive (98/83/EEC)
- Bathing water Directive (2006/7/EC)
- Environmental Impact Assessment (2011/92/EU)
- Habitats (92/43/EEC)
- Waste (2008/98/EC)
- Industrial emissions (2010/75/EU)
- Liability (2004/35/EC)

This slide shows the EU legal instruments which are directly related to water quality or quantity.

There are many other instruments which are indirectly about water, such as the impact assessment directives (SEA – 2001/42/EC and EIA – 2011/92/EU), nature directive (Birds Directive 2009/147/EC and Habitats Directive 92/43/EEC), waste directives and the directive on industrial emissions (IED 2010/75/EU). There are separate training modules on these Directives on the website of DG ENV.

The EU legal framework on water management was not put in place overnight. As is often the case, specific problems led to specific solutions and only over time, when the patchwork of solutions started raising issues of coordination the idea was born to streamline the solutions as much as possible. This is what happened also with EU water management.

The framework for water management in the EU today is made up of the Water Framework Directive 2000/60/EU (WFD), the Directives which are part of the family and older Directives predating the entry into force of the WFD. Although the WFD provides for an overall framework it did not replace all existing legal instruments because the Directives listed on the right side of the slide remain in force. These Directives address specific water related concerns (such as the pollution by nitrates) in a specific manner.

So, the WFD has not made the Directives already existing before 2000 redundant. It did set however a kind of overall framework for water management and provided a format for more recent Directives, such as the Marine Strategy Framework Directive, which is very similar to the WFD as regards its approach.

The WFD added to the existing patchwork a general framework allowing all related concerns over water quality and water quantity to be taken into account when making (long-term) policies. A good illustration of this is the fact that the Nitrates Directive doesn't set a deadline for achieving good status for a water body. Such a deadline is however set by Article 4 of the WFD. The same is true for the objective of the Habitats Directive (achieving good conservation status but no deadline in that Directive). The WFD may set the deadline where the good status for a habitat or species depends on water quality or water quantity.

This overview illustrates that the legal basis for a case put to the national judge related to water can be the WFD itself or one of the other Directives, or even a combination of legal basis (such as a case based on both the WFD and the Nitrates Directive or the Habitats Directive).

The WFD, urban waste water and nitrates directives will be presented more in detail during the workshop. The present presentation is therefore meant to provide only a short introduction to the Groundwater, Floods and EQS Directives as well as the environmental Liability Directive. However, it is useful to explain very briefly first some key provisions of the WFD.



Urban Waste Water Treatment Directive (91/271/EEC)

- **Collection and treatment** of waste water in all agglomerations of >2000 population equivalents (p.e.);
- **Secondary treatment** of all discharges from agglomerations of > 2000 p.e., and more **advanced treatment** for agglomerations >10 000 population equivalents in designated sensitive areas and their catchments;
- **Authorisation** of all discharges of urban wastewater, of discharges from the food-processing industry and of industrial discharges into urban wastewater collection systems;
- **Monitoring** of the performance of treatment plants and receiving waters; and
- Controls of sewage sludge disposal and re-use, and treated waste water re-use whenever it is appropriate.

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The key objective of the MSFD, which is also a framework Directive, is to achieve or maintain good environmental status (GES) in the marine environment by 2020.

The good status takes into account a variety of environmental aspects, including ecosystem functions, hydro-morphological, physical and chemical properties, as well as the protection of marine species and habitats. Again, overlaps can be found with the Habitats Directive (also applicable on the sea the EEZ) and where species and habitats protected by the nature directives are concerned.

The WFD and the MSFD take a “strategic approach” to environmental protection, starting from an assessment of the characteristics, pressures, impacts and current status of the relevant waters within the basic units of management of the two Directives (river basin districts under the WFD, marine regions or sub-regions under the MSFD) and resulting in the preparation of strategies or plans (river basin management plans under the WFD, marine strategies under the MSFD) detailing the measures envisaged to achieve the objectives thus identified.

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Nitrates Directive 91/676/EEC

Objective:

- *reduce water pollution caused or induced by nitrates from agricultural sources*
- *prevent further such pollution*

Important definitions:

- *Fertilizer*
- *Pollution*
- *Vulnerable zone*

Case C-197/18 citizens and NGOs can require taking action



Drinking Water Directive 98/83/EC

*Water intended for human consumption is wholesome and clean
(free from any micro-organisms, parasites and other substances
constituting a potential danger to human health)*

*Points of compliance: if water is supplied from a distribution
network : at the tap.*

*Regular monitoring through sampling, investigation, restrictions or
prohibitions.*

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**Directive 2006/7/EC of the European Parliament and
of the Council of 15 February 2006 concerning the
management of bathing water quality**

Repealed Directive 76/160/EEC

Bathing site: where bathing is expected

Classification: poor, sufficient, good or excellent

Inform public about status

Bathing site is a protected area under the WFD

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Industrial Emissions Directive 2010/75/EU

Aims at reducing harmful industrial emissions across the EU, in particular through better application of Best Available Techniques (BAT).

Requires setting emission levels in permits also for water abstraction and discharge. Such permit conditions must be set in reference to the BAT conclusions.

Introduces minimum requirements as regards the environmental inspections of installations, the review and update of permits, and reporting on compliance.

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WATER FRAMEWORK DIRECTIVE

Protects all water bodies (against all pressures)

- *No deterioration of status for surface and groundwater (Art 4)*
- *Reduce /limit/prevent input of pollutants (such as chemicals)*
- *Achievement of good ecological and chemical status by 2015 (or 2021 or 2027)*
- *How? Plans and programme of measures*
- *Art 10(3) WFD: going beyond requirements Nitrates, Urban waste water, Industrial emission Directives, if needed*

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Ground Water Directive

Complements the WFD as regards quality status

The authorities must:

- *prevent or limit inputs of pollutants*
- *assess chemical status of groundwater bodies - identify and reverse significant and sustained upward trends in pollutant concentrations*
- *establish groundwater quality standards set out in Annex I and set threshold values for pollutants triggering action curbing this upward trend*

This Directive establishes groundwater quality standards ('how clean/free of pollutants water must be') and introduces measures to prevent or limit inputs of pollutants into groundwater. It builds upon the WFD.

The WFD applies to all water bodies, meaning all bodies of surface waters and ground water. The overall objective of the WFD is that all water bodies achieve good status.

Good status is defined slightly differently for surface waters and for ground waters. For **groundwater bodies** good status means good chemical status (absence of pollution by chemicals) and good quantitative status (as in contrast to depletion of ground water reserves).

Achieving good **quantitative status** for ground water addresses issues such as ground water abstraction surpassing the replenishment of ground water reserves. Achieving good quantitative status means aiming at ensuring a balance between abstraction and recharge of groundwater. This aspect is fully dealt with by the WFD itself.

Chemical status criteria were more complex to be defined at the time of the adoption of the WFD. The Groundwater Directive introduced for the first time quality objectives which oblige Member States to **monitor and assess groundwater quality** on the basis of **common criteria** and **identify and reverse trends** in groundwater pollution.

The directive establishes quality criteria that takes account local characteristics and allows for further improvements to be made based on monitoring data and new scientific knowledge. Member States should establish standards at the most appropriate level (flexibility) and take into account local or regional conditions.

Two slides to illustrate what the Groundwater Directive is after.

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Background

Article 1 on purpose:

1. This Directive establishes specific measures as provided for in Article 17(1) and (2) of Directive 2000/60/EC in order to prevent and control groundwater pollution. These measures include in particular:
 - (a) criteria for the assessment of good groundwater chemical status; and
 - (b) criteria for the identification and reversal of significant and sustained upward trends and for the definition of starting points for trend reversals.
2. This Directive also complements the provisions preventing or limiting inputs of pollutants into groundwater already contained in Directive 2000/60/EC, and aims to prevent the deterioration of the status of all bodies of groundwater.

The Groundwater Directive complements the Water Framework Directive (WFD). It requires:

- groundwater quality standards (to be established by the end of 2008);
- pollution trend studies to be carried out by using existing data and data which is mandatory by the WFD (referred to as "baseline level" data obtained in 2007-2008);
- pollution trends to be **reversed** so that environmental objectives are achieved by 2015 by using the measures set out in the WFD;
- measures to **prevent or limit inputs of pollutants** into groundwater to be operational so that WFD environmental objectives can be achieved
- reviews of technical provisions of the directive to be carried out in 2013 and every six years thereafter;
- compliance with good chemical status criteria (based on EU standards of nitrates and pesticides and on threshold values established by Member States).

Annexes I and II of the Groundwater Directive 2006/118/EC were reviewed in 2013 and are reflected under the Commission Directive 2014/80/EU of 20 June 2014.



Environmental Quality Standards Directive 2008/105/EC amended by 2013/39/EU

WFD general objective: achieve good status

Surface waters: good chemical status + good ecological status

Good chemical status for surface waters means meeting all environmental quality standards for chemicals set at EU level

Currently listing 45 priority substances + 8 other substances

Monitoring + review every 4 years

The Groundwater Directive refers to hazardous substances which cannot be discharged into groundwater. The Environmental Quality Standards Directive, EQS) does something similar but for surface waters. The environmental quality standards set at EU level determine whether or not a surface water body has achieved good chemical status (required by Art 4 WFD).

Directive 2013/39/EU amended the WFD and the 2008/105 EQS Directive as regards priority substances. There are now standards in surface waters for 45 substances + 8 "certain other pollutants" (from Directive 76/464/EEC). This update was based on the latest scientific research.

The EQS is about – putting it simplified – concentrations of pollutants in water (or the sediment or the biota). That Directive itself does not limit the input of such pollutants into water. Such limits may be imposed via the WFD. The WFD requires the MS to take measures needed for the progressive reduction of pollution from priority substances and the cessation or phasing-out of discharges, emissions and losses of priority hazardous substances into water.

By when have these (revised or new) quality standards to be met?

The revised EQS for existing priority substances should be taken into account for the first time in river basin management plans covering the period 2015 to 2021. The newly identified priority substances and their EQS should be taken into account in the establishment of supplementary monitoring programmes and in preliminary programmes of measures to be submitted by the end of 2018. With the aim of achieving good surface water chemical status, the revised EQS for existing priority substances should be met by the end of 2021 and the EQS for newly identified priority substances by the end of 2027.

There are many other EU instruments dealing with putting on the market of chemicals / pollutants (think of the REACH regulation on risk assessments of chemicals, the plant protection regulations (pesticides) and biocides, medicines).

It remains to be seen whether / how under the WFD or EQS Directives Member States can be required to take measures limiting the input of the identified priority (hazardous) substances into water. (= bridge to next slide)

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Background

Article 16 of the Water Framework Directive (2000/60/EC) (WFD) sets out "Strategies against pollution of water", outlining the steps to be taken.

The first step was to establish a first list of priority substances to become Annex X of the WFD. These substances were selected from amongst those presenting a significant risk to or via the aquatic environment, using the approaches outlined in Article 16 of the WFD.

This first list was replaced by Annex II of the Directive on Environmental Quality Standards (Directive 2008/105/EC) (EQSD), also known as the Priority Substances Directive, which set environmental quality standards (EQS) for the substances in surface waters (river, lake, transitional and coastal) and confirmed their designation as priority or priority hazardous substances, the latter being a subset of particular concern.

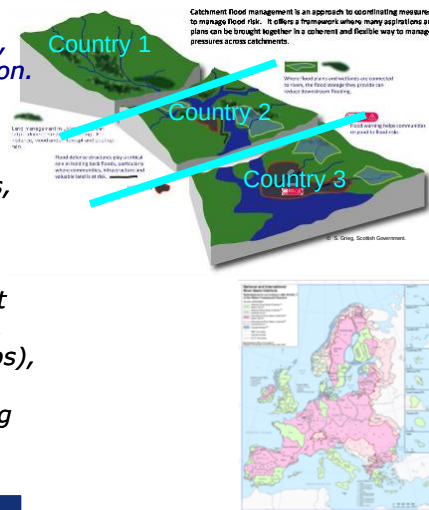
The Commission subsequently reviewed the list and adopted Directive 2013/39/EU for a Directive amending the WFD and the EQSD as regards priority substances. After the 2013 directive there are now standards in surface waters for 45 substances + 8 "certain other pollutants" (from Directive 76/464/EEC). The revised EQS for existing priority substances should be taken into account for the first time in river basin management plans covering the period 2015 to 2021.

Directive 2013/39/EU also contains specifications regarding the monitoring and reporting to be carried out by Member States in relation to the Watch List. The first Watch List was adopted in March 2015 (Commission Implementing Decision (EU) 2015/495); monitoring should be taking place in the year from September 2015.

Directive 2013/39/EU amended the Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy. Newly identified priority substances were added (45 now listed) and environmental quality standards (EQS) set for them, while the EQS of some existing priority substances were revised.

What is the Floods Directive ?

- *Integration: land use, civil protection, dam management, strategic and environmental impact assessments, nature legislation, public consultation.*
- *Coordination across the river basin*
- *Preliminary flood risk assessment (maps, experience from past floods, predictions of future floods, identification areas of potential significant flood risk)*
- *Flood mapping (= knowing areas at risk of flooding, different scenarios, flood hazard maps & flood risk maps),*
- *Flood Risk Management Plans (= plans to reduce flood risks, covering all elements of the flood risk management cycle)*



Directive 2007/60/EC on the assessment and management of flood risks entered into force on 26 November 2007.

This Directive requires Member States to assess which water courses and coast lines are at risk from flooding (preliminary flood risk assessment), to map the flood extent and assets and humans at risk in these areas (2013) and to take adequate and coordinated measures to reduce this flood risk. Such measures concern prevention, protection, damage control and recovery. They are described in the first flood risk management plans (2015).

The Directive allows the public to access information on flood risks and to have a say in the planning process leading to the adoption of flood risk maps and the first flood risk management plans by the end of 2015.

The Floods Directive is much about ensuring coordination.

- With the WFD: Flood risk management is an integral part of integrated river basin management, and the Floods Directive shall therefore be coordinated with the Water Framework Directive. The flood risk management plans and river basin management plans will be coordinated with the river basin management plans under the WFD , and through coordination of the public participation procedures in the preparation of these plans. All assessments, maps and plans prepared shall be made available to the public.

- With other MS and third countries: Member States shall furthermore coordinate their flood risk management practices in shared river basins, including with third countries. They shall not undertake measures that would increase the flood risk in neighboring countries. Member States shall in take into consideration long term developments, including climate change, as well as sustainable land use practices in the flood risk management cycle addressed in this Directive.

Background

Flood risk management aims to reduce the likelihood and/or the impact of floods. Experience has shown that the most effective approach is through the development of flood risk management programmes incorporating the following elements:

Prevention: preventing damage caused by floods by avoiding construction of houses and industries in present and future flood-prone areas; by adapting future developments to the risk of flooding; and by promoting appropriate land-use, agricultural and forestry practices;

Protection: taking measures, both structural and non-structural, to reduce the likelihood of floods and/or the impact of floods in a specific location;

Preparedness: informing the population about flood risks and what to do in the event of a flood;

Emergency response: developing emergency response plans in the case of a flood;

Recovery and lessons learned: returning to normal conditions as soon as possible and mitigating both the social and economic impacts on the affected population.

Flood risk management is an integral part of integrated river basin management, and the Floods Directive shall therefore be coordinated with the Water Framework Directive.

Civil protection is also a crucial component of flood risk management.



Marine Strategy Framework Directive 2008/56/EC (MSFD)

Protecting the marine environment across Europe while enabling the sustainable use of marine goods and services upon which marine-related economic and social activities depend.

Ecosystems based approach aiming at the protection of the full range of marine biodiversity.

Objective: ensure good environmental status in the marine environment by 2020 = obligation of result

Adoption of plans + measures comparable to the WFD

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