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## Questionnaire on Water law and sustainable trajectories – Avosetta Meeting on 31 May – 1 June in Rennes

## **REPORT FROM SWEDEN**

General information about water resources in Sweden

Sweden (europa.eu)

Drinking water in Sweden (Fresh water resources - Sweden - Climatechangepost.com)

# Water quality

Lakes dominate the landscape of Northern Europe: 65,000 lakes in Norway, 95,700 lakes in Sweden and 187,888 lakes in Finland.

Half of Sweden's local water supplies come from surface water, that is, from lakes and running watercourses. The other half come from groundwater. Good quality raw water from these water sources has made purification techniques in Sweden relatively simple. The consequences of climate change for drinking water supply, however, are considerable.

Increased precipitation in a changed climate, and mostly increased frequency of heavy downpours, can lead to more frequent and more widespread sewage overflow discharges. This can lead to increased microbiological burdens with accompanying health risks from raw water. Various studies have shown a correlation between heavy precipitation and waterborne disease outbreaks.

# River runoff and water supply

Simulations of the impact of climate change on river discharge suggest a decrease of both the frequency and the height of spring flood peaks, and an increase of autumn and winter runoff for Sweden as a whole. The frequency of high flow events in autumn is also projected to increase. The simulations suggest a decrease of summer runoff in southern Sweden. Annual runoff volumes are projected to decrease in southeastern Sweden and increase in northern Sweden. As an average for the whole of Sweden, temperature increases by 2.5 to 4.6°C, precipitation increases by 7 to

23%, and mean annual runoff increases by 5 to 24%, according to the scenario simulations.

Changes in Sweden's water resources vary in different climate models. A consistent result is, however, that the greatest increases in water supply occur in Northern Sweden, in the western part of Central Sweden and the western part of Southern Sweden. The circumstances are more varied in other parts of the country.

In the south-east, increasing evaporation contributes to the possibility of a decline in water supply. Overall the water supply increases on average by 5-25% for the whole country, but decreases occur locally.

Water resources may vary across the country due to increased precipitation in some areas and more drought in others. This will lead to differing conditions for agricultural production. There may be a great need for irrigation in some areas, while in others increased precipitation may make it difficult to grow crops.

#### Session 1 Water as commons & Right to water

#### Questions

1. Has the Water Framework Directive led to a broadening and/or modification of the legal definition of water in your domestic Law?

Sweden belongs to what we call the group of "private law systems" concerning water rights, see Storbekkrønning G: *Does ownership to water still matter? A peek into European models of groundwater resources ownership and some of their implications for public access to water and sustainable use.* Retfærd 3/4, 2018;

Does+ownership+to+water+rights+matter,+postprint+duo.pdf (uio.no)

Basically, this means that the landowner "owns" (controls) the water resource, irrespective of whether it is surface water or groundwater. According to law, other persons may obtain the control over a water resource for a specific purpose, for example developing hydropower. Thus, Swedish water law contains strong expropriative elements, introduced in the beginning of the 20<sup>th</sup> century in order to facilitate the industrialization of the country. The WFD has had little impact on this traditional perspective of ownership of water resources.

2. Have there been any recent legal debates on Water as Common(s) that could lead to a change in your domestic legal framework and/or be promoted at the European level?

No such debate has occurred in Sweden as the system has strong support in industry and among the landowners. There has been a political debate on groundwater extraction issues, but mostly concerning the possibility to introduce a stricter permit regime (see below).

#### Right to water & Ecosystem's water needs

### Questions

3. Does your legal system explicitly recognize the fundamental right to water and sanitation and how does it take account of the challenge of water poverty and insecurity, in particular to comply with the Drinking Water Directive 2020/2184/EU?

In Sweden, there is no specific recognition of a fundamental right to water and sanitation. The requirements in the Directive 2020/2184 are implemented in several pieces of administrative law, such as the Food Safety Act (2006:804), the Environmental Code (1998:808) and the Planning and Building Act (2010:900). It is for the Water District Authorities under WFD to undertake a risk assessment of the catchment areas according to Article 7 of Directive 2020/2184, which shall be reported to the drinking water producers. Here, it may be noted that Sweden's supply of drinking water comes of equal shares from surface waters and groundwaters.

Even if there is no explicit fundamental right to water in the Swedish legal system, there has during the last year been a couple of very interesting liability cases concerning the quality of drinking water. In the first case, the Supreme Court declared that a municipality is responsible according to Product Liability Act (1992:18) for having delivered drinking water with high contents of PFAS to the consumers (HD 2023-12-05; T 586-23). As that contaminant originates from the Defence Forces' use of fire foam in adjacent areas, there will be a follow-up suit from the municipality against the polluter. In the other case, the Environmental Court of Appeal found the Defence Forces liable according to the Environmental Code for having contaminated the drinking water of Uppsala with PFAS from similar purposes (MÖD 2024-04-09; M 13145-21).

4. How are the Water needs of ecosystems (art 1 WFD) taken into account in your legal system and is the issue of Rights of Rivers & aquatic ecosystems debated in your country or has it given rise to citizen experiments or even legal recognition?

I am not sure what you are getting at with this question more precisely. The aim of the WFD is to "*establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater*". As in many Member States, Sweden has for this purpose introduced a special administrative structure with five separate water districts based on the borders of the major sea basins and catchment areas. In each water district one of the county administrative boards is appointed by the government to act as Water District Authority. Each such authority has an office which prepares cases for decision-making, coordinates the County Administrative Boards producing documentation, and collaborates with affected parties at all levels from local to international.

For every Water District Authority there is a special water district board – the Water Delegation. Their task is deciding on environmental quality standards, programme of measures and management plans. The delegation comprises expert members appointed by the government for a fixed term. The members each have a personal mandate based on their expertise in different areas, hence they are not representatives of the organisations by which they are employed. The delegation is chaired by the county governor at the County Administrative Board that constitutes the water district authority. The water authorities manage the quality of the aquatic environment within each water district. Among other things, this means that the water authorities:

- Prepares management plan and action program for the water district
- Decides on environmental quality standards...
- Coordinates water management work on County Administrative Boards and municipalities in the district...
- Collaborates nationally, regionally and locally with other interested parties who work in various ways on water issues...
- Monitors how other countries in the European Union work on different issues under the WFD and exchange knowledge and experience...
- Submits information to the Swedish Agency for Marine and Water Authority (HaV) for further reporting to the European Commission...

There have been some initiatives from the RoN community to declare major lakes to "have rights of their own", but these moves have been mostly symbolic and without any significance in the public debate on environmental issues (or in real life for that matter).

In contrast, we have had quite a lot of court cases brought by members of the public concerning water quality and the environmental status of the water bodies. In one such example, an ENGO unsuccessfully challenged the government's decisions to allow the Defence Forces to use the Lake Vänern – partly a Natura 2000 site – as a shooting range for heavy artillery practices. In the wake of becoming member of NATO, major relaxations on environmental requirements have been undertaken for all kinds of activities performed by the Swedish army, the navy, and the air forces. In fact, some of these relaxations will also apply to the US-american armed forces by way of the DCA agreement that will be decided by the Parliament in June. In addition, all decisions concerning activities by the Defence Forces are made by the government and may only by challenged by way of judicial review in the Supreme Administrative Court (thus, not in the ordinary line of appeal, that is to the land and environmental courts). Without any real tradition of an intense review in such cases –not even in relation to binding EU law – the playing field is left rather open for the government to decide rather freely on those matters.

#### Integrated water management

#### **Questions**

5. What are the most acute water quality problems your country faces in achieving the objective of good status of water bodies (including the obligation of non-deterioration) and what are the current main legal responses in particular to reduce reliance on WFD exemptions? We invite you to focus on the most relevant topic in your country.

Sweden has a huge number of hydropower installations with (very) old permits, issued long before the introduction of modern environmental law. In fact, most permits date back to the Water Act of 1918 and have never been updated. The most pressing environmental effects of these installations are the drastically impoverished conditions for the watercourses' original species composition and biological diversity, erosion, and sedimentation. Because of the inflexibility of the Swedish permit system, the EU Commission in 2007 initiated an

infringement case about the poor implementation of the WFD. In order to deal with this and to modernize the water permits, Sweden undertook an ambitious scheme for the updating of all permits issued before the introduction of the 1999 Environmental Code. The hydropower installations were classified in different review groups and time limits were set for the renewal of the conditions in their permits. Even so, the procedure involves many thousands of hydropower installations and dams and is expected to take more than 20 years. However, this scheme was met with strong opposition from industry, and it was put on hold with the arrival the European energy crises in 2022. Since then, the updating scheme has been "paused" three times and is not expected to be restarted until June 2025. In addition, the government has announced that new legislation is on its in order to make wider use of the derogation possibilities in the WFD and to the streamline the procedure for evaluating the status of the water bodies. So far, no reaction has come from Brussels.

Another major water quality problem is the existence of chemicals (heavy metals such as mercury, cadmium, etc) and other environmental toxins (such as brominated flame retardents, PBDE) in the groundwater. In most water bodies, the chemical status therefore is classified as poor.

6. What are the main difficulties and/or the main success stories in your country related to quantitative water management? Please focus on the most illustrative example either in relation to the Floods Directive or the Water Reuse Regulation or national/local measures concerning water stress and/or droughts which could inspire a future EU Law framework.

Drought and water scarcity is a rather new phenomenon in Sweden. Major problems in this respect have occurred in the Southeastern parts of the country and on the Baltic islands only during the last 10-15 years. As the landowners control the groundwater resources, the level of conflict is consequently raised – there is no limit to the amounts that may be extracted from a well, and overextraction effects the neighbours' possibilities in using the resource. Against this background, there has been a political debate to strengthen the permit regime for extraction, so far with little progress. We also have a debate on how to use "grey water" – that is wastewater generated in households or office buildings from streams without fecal contamination – for irrigation and the introduction of "two pipe systems" for waste waters (one for grey water and another for toilet water), but little has come out of this in practical use. However, as the drought situation develops in these regions, this debate will continue, and experiments will be undertaken.

It may also be mentioned that one region – the Baltic island Gotland – has invested in a desalination plant for the production of drinking water. Although the profitability is questionable, we will see more such examples in the years to come.

Finally, Mörbylånga, one of the municipalities on Öland – the other big island in the Baltic Sea – organised a rain dance in the summer of 2016. The effects thereof however remain uncertain.

7. What are the main difficulties in your country to comply with the principle of recovery of the costs of water services and are there (or at least discussions of) legal mechanisms related to social water pricing?

Commonly, drinking water is produced and delivered by municipal companies. Thus, the pricing is regulated in the Municipal Act (2917:725) and set at the "cost price" level. Further, as the water is "privately owned" there is no price setting for water services such as extraction of groundwater. Some years ago, the Commission brought up this issue in an EU Pilot, but it was closed after the government's response on the matter.

## Water biodiversity

#### Questions

8. Has EU Law (WFD, Birds & Habitats Directive, Regulation on Invasive Alien Species (...)) helped in strengthening the integration of water law and ecosystems and species protection law in your country? Please provide examples of success / failure of integration in particular cases if relevant.

In my view, EU law on the environmental is today the safeguard against the strong national tendencies of deregulation and the "lessening of administrative burdens" in this field of law. The efforts in Sweden to combat climate change is strongly focusing on the introduction of nuclear power and "green industrialization". Energy saving in line with the requirements of EU law is not on the political agenda. In addition, great efforts are made to make EU understand that Swedish forestry must be allowed to operate in its traditional form with clear cuttings of large areas of land and a national understanding of the requirements under the EU nature directives. The governmental initiatives on this field will probably focus on barring the public concerned from challenging the decision-making (or omissions rather) of the Forestry Agency in court, as the ENGOs have had a success rate on over 75% in such cases recent years. Biodiversity simply is not on the table at the political level, not even among the liberals in the government who traditionally have been advocating nature conservation and species protection. To put it mildly, nature conservation and environmental protection in Sweden today faces a dire situation...

9. Is there any legislation or provisions in your domestic law concerning the restoration of water ecosystems and/or nature-based solutions in favor of freshwater ecosystems? What would be changed in your law in the light of the future regulation on nature restoration?

One effect of the procedure to update old water permits recent years is that quite a few owners to hydropower stations have been willing to sell their installations. This way, it has been possible for specialized ENGOs such as the "Älvräddarna" (the River Keepers) to buy and demolish these installations in order to arrange for a free fauna passage in the streams and waterways; <u>New agreement brings large-scale dam removal a step closer in Sweden |</u> <u>Rewilding Europe</u>

### 10. ...

11. Has the implementation of existing Law been sufficient to maintain or restore green infrastructure and free-flowing rivers, and more generally what lessons can be drawn ? Please feel free to answer this question only if you have a concrete example (successful or not) to share.

Today, the implementation of "existing law" is entirely dependent on whether the Commission will take action or not. From the dominant parties of the government, there is little interest in environmental law, the focus is strongly on "green industrialization" at any cost. As already noted, biodiversity is not on the political agenda in today's Sweden and almost no efforts are made in order to deal with those issues. In contrast, the budget for the Environmental Protection Agency (NV) has been cut quite drastically recent years with important effects for the work, for example combating invasive alien species in our waters.

## Water conflicts & Adaptive water governance

## Questions

12. What kind of expertise, criteria, [notions] [concepts] and techniques (including the hierarchy of uses, carrying capacity of aquatic ecosystems, imperative reasons of overriding public interest...) are used to resolve these conflicts, conciliate and balance interests at stake ? Depending on your national context, you may illustrate these conflicts with Agriculture (agricultural irrigation - the controversial case of metabasins for agriculture) or Energy (hydroelectricity - cooling nuclear power stations) or Tourism (increased tourist numbers - development of new tourism infrastructures) or extension of urban areas.

There are of course many pressing conflicts in relation to water, out of which many concern hydropower. One example is the conflict between the regulatory permit regime for such installations and the need for water extraction downstream. The main problem here is the old water permits and the meagre possibilities to undertake a balancing of interests in the updating procedure. The "legal force" of traditional permits are very strong and alternative uses have little weight in that competition. In some of these situations, this strong prioritization of hydropower is also a barrier to the green transition. Many of these conflicts are dealt with by the Land and Environmental Courts or the Administrative Courts, but of course they are bound by the legislation and, as we all know, "the courts cannot run the country".

13. In your country, are there any debates and experimentations on new forms of water governance (adaptive, participative, inclusive, territorialized (...) with multiple stakeholders (including those representing/translating the voice of natural entities) that could inspire the EU and other countries?

Not to my knowledge, apart from the water delegations mentioned above. In these advisory bodies, the public concerned and their organisations are represented by different associations; local, cultural, environmental...

14. Has your country implemented the public participation provisions of the WFD and has it gone further in implementing the right to public participation ?

The PP provisions of WFD are implemented in line with a strong tradition of openness in Swedish administrative procedure, also present in environmental law. Political attempts to weaken these possibilities have been ongoing for some years, but have become serious only with the conservative government since 2022. Several governmental commissions have been assigned with this task and their proposals will be presented late this year or in the first half of 2025.

15. Have the rights and freedoms of water defenders been violated in the course of such mobilizations, and if so, how have public authorities and/or the courts dealt with the issue?

No such cases to my knowledge, but as I don't take part in social media I may be unaware of what comes out from the troll factories. However, what seems more problematic in a Swedish perspective is the strong drive against suggested "activist authorities", namely those which represent environmental protection and biodiversity (Environmental Protection Agency, the Water Authorities, the County Administrative Boards, the Land and Environmental Courts, etc.). This populistic drive has an impact on some sectors of the society, such as the farmers and foresters, the owner of small hydro power plants, etc.

#### Academic works on Swedish water law in a wide sense

Langlet, D: *Legal Preconditions for an Environmentally Sustainable European Union*. In Routes to a Resilient European Union. Eds Antonina Bakardjieva Engelbrekt, Per Ekman, Anna Michalski, Lars Oxelheim, Cham: Palgrave Macmillan, 2022, pp. 63-88

Josefsson, H: *Groundwater*. In The Routledge Handbook on Water and Development. Eds. Sofie Hellberg, Fredrik Söderbaum, Ashok Swain, Joakim Öjendal, London: Routledge, 2023

Westholm, A: Scaling Marine and Water Management. Dissertation, University of Gothenburg, 2021