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## Audit preview

Information on an upcoming audit



# Sustainable use of water in agriculture

July 2020

Freshwater is a vital resource. The pressures of economic activity and climate change influence the availability of freshwater. In the EU, the 2000 Water Framework Directive introduced an ecosystem-based approach to water management, with the objective of protecting and improving the status of all freshwater bodies by the end of 2015.

Agriculture is responsible for at least one quarter of freshwater use in the EU, mainly for irrigating crops.

With a view to the new common agricultural policy (CAP) period, the European Court of Auditors has launched an audit of the impact of EU agricultural policy on the sustainable use of water. We will focus on the extent to which the CAP promotes the principles of sustainable water use, looking at whether Commission and Member State action to apply and enforce those principles in agriculture is both suitable and effective.

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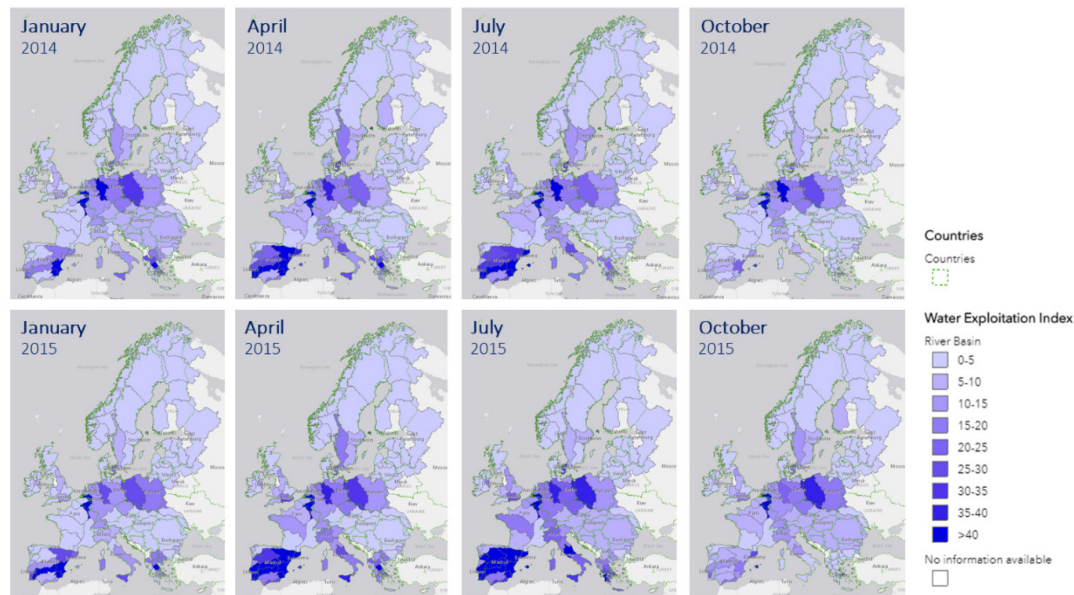
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## Freshwater in the EU

Freshwater is a cornerstone of human life, society and economic activity. 19 % of the world's freshwater is located in Europe, compared with 10 % of the population<sup>1</sup>, although it is unevenly distributed by region.

The availability of freshwater is influenced by the pressures of both economic activity and climate change (which is increasing the frequency of drought). Much of Europe suffers either seasonal or year-round water scarcity. The most vulnerable areas are the Mediterranean region, due to low availability and high demand, and some populated river basins in the Atlantic region, due to high demand<sup>2</sup>. The European Environment Agency (EEA) calculates a water exploitation index (WEI) to show the level of water abstraction as a percentage of long-term reserves. Between 2013 and 2017, using the latest version of the WEI, five EU Member States (Czech Republic, Greece, Spain, Cyprus and Malta) scored above 20 % – the threshold for defining water scarcity – in at least one year<sup>3</sup>.

### Picture 1 – Water abstraction across Europe by river basin district



Source: European Environment Agency; <https://www.eea.europa.eu/data-and-maps/explore-interactive-maps/water-exploitation-index-for-river-2>

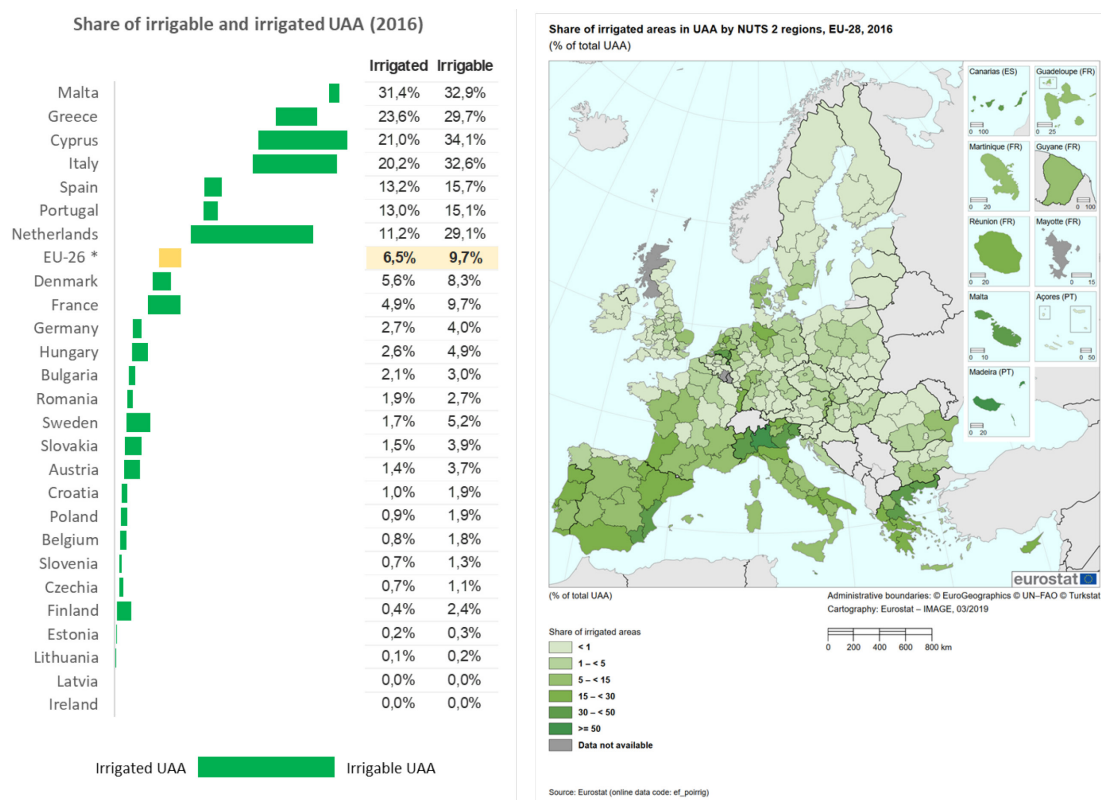
With climate change, arid regions in southern Europe are projected to become even drier, and areas further to the north will be affected as well<sup>4</sup>.

## The impact of agriculture on freshwater resources

Agriculture is a major user of freshwater; farming affects both the quantity (through irrigation) and quality (e.g. through fertiliser/pesticide pollution) of freshwater resources. At the same time, agriculture is one of the first sectors to be affected in times of water scarcity.

At least one quarter of all freshwater abstracted in the EU is used on farmland, with some data indicating up to 40 %<sup>5</sup>. Although both these percentages are well below the worldwide figure of 70 %<sup>6</sup>, agriculture still represents the single largest share of total freshwater abstraction in the EU. In 2016, 9.7 % of the EU's active farmland was equipped for irrigation (irrigable) and 6.5 % was actually irrigated (*Picture 2*).

### Picture 2 – Share of irrigable and irrigated farmland



Source: Eurostat.

## State of play – EU water policy

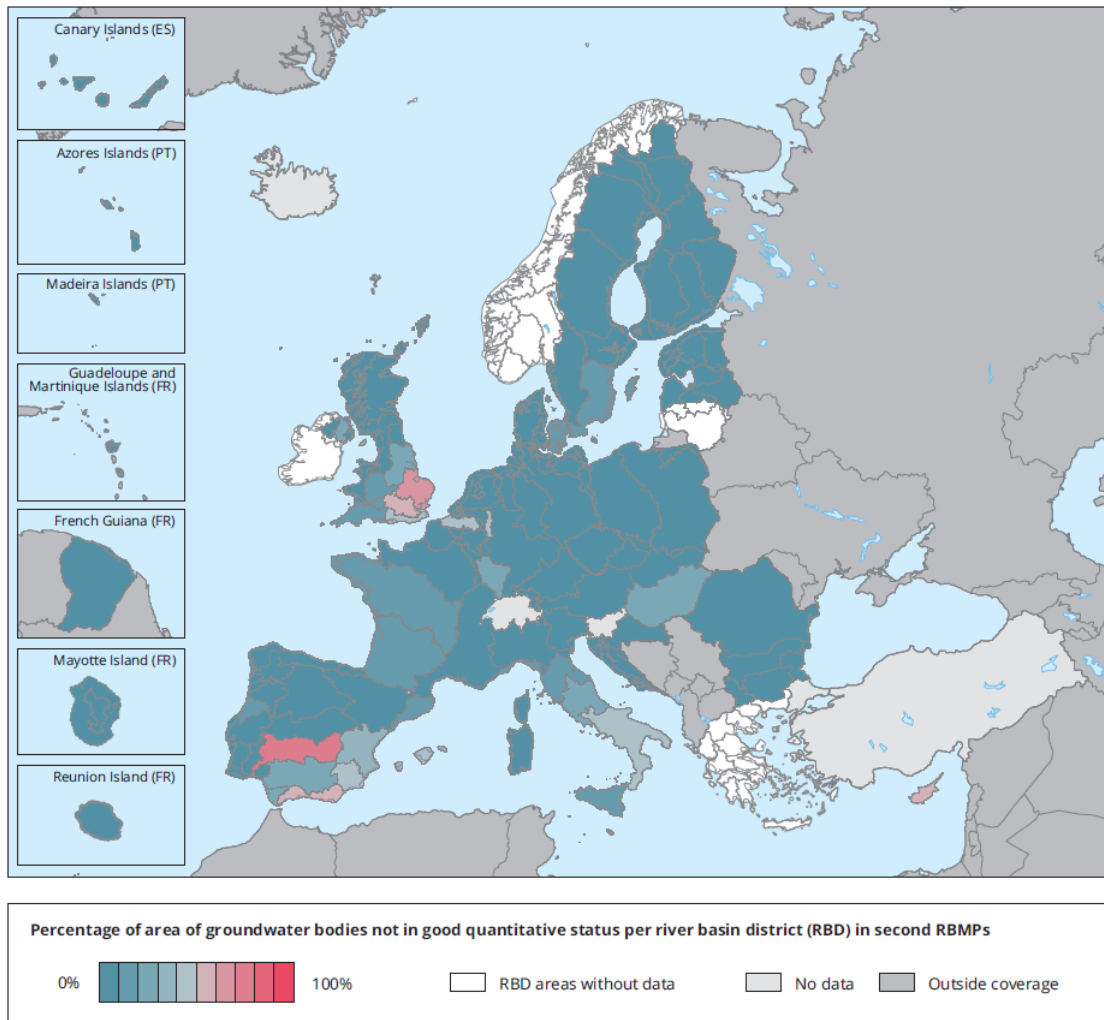
### The Water Framework Directive

The EU has had legislation on improving water quality since 1991. Its current approach to managing water goes back to the 2000 Water Framework Directive (WFD), which introduced principles such as water management at the scale of river basins, public participation and the need to consider the impact on water resources of all human activity. Water is also the subject of UN Sustainable Development Goal 6 (on clean water and sanitation), which has targets relating to water efficiency and integrated water resource management.

The environmental objectives of the WFD were to prevent deterioration of water bodies and achieve good qualitative and quantitative status of all water bodies by the end of 2015. This deadline could be extended until 2027.

The core instrument for implementing the WFD are river basin management plans (RBMPs). The Commission assesses Member States' progress towards the WFD objectives every three years. Its latest report<sup>7</sup>, published in early 2019, shows that 89 % of the EU's groundwater bodies had achieved good quantitative status (a small improvement since the previous report). However, the report also highlights that a significant number of groundwater bodies are not adequately monitored, water abstraction measures are implemented unevenly across the EU, and around half of all water bodies are still covered by exemptions from the WFD requirements and deadlines. The Commission's report states that increased investment is essential to meet the WFD objectives. A separate fitness check of the WFD<sup>8</sup>, also in 2019, confirmed this view: the WFD itself is fit-for-purpose, but problems lie in the way it is funded and implemented.

### Picture 3 – RBMPs show that the quantitative status of most river basins is “good”



Source: European waters – Assessment of status and pressures 2018 – European Environment Agency.

### Agricultural policy and sustainable water management in the EU

The EU’s common agricultural policy (CAP) contains possibilities for addressing water challenges in agriculture<sup>9</sup>. The Commission has recently published an evaluation of the impact of the CAP on water resources<sup>10</sup>. This shows that the sustainable management of water is strongly dependent on the way the Member States use the CAP budget, which is often allocated without regard to the impact on water use, and that far more attention needs to be paid to water savings. The evaluation also identifies some incoherence in the CAP. For instance, it is difficult to guarantee that funding for irrigation projects will not aggravate the pressure on water resources, especially where the irrigated area increases.

In 2020 the Commission published a regulation that recognises the environmental, social and economic benefits of re-using treated wastewater and sets minimum requirements in this regard<sup>11</sup>.

## The CAP after 2020

On 1 June 2018, the Commission published legislative proposals<sup>12</sup> to reform the functioning of the CAP for the new policy period. The proposed reform would include a number of changes with implications for water sustainability. For example, 'conditionality' (the successor to cross-compliance) and greening would be extended to include the WFD requirements relating to freshwater management.

## Legal framework

The Water Framework Directive is Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. Various articles of the WFD have led to other EU legal acts, notably:

- o Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration (applying Article 17 of the WFD);
- o Commission Directive 2009/90/EC on technical specifications for chemical analysis and monitoring of water status (applying Article 16 of the WFD).

The relevant CAP regulations for 2014-2020 are:

- o Regulation (EU) No 1305/2013 of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD);
- o Regulation (EU) No 1306/2013 of 17 December 2013 on the financing, management and monitoring of the common agricultural policy;
- o Regulation (EU) No 1307/2013 of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the CAP;
- o Regulation (EU) No 1308/2013 of 17 December 2013 establishing a common organisation of markets (CMO) in agricultural products.



## **Roles and responsibilities**

The Commission designs and oversees the implementation of the CAP and monitors the implementation of the WFD. Implementation itself is the responsibility of Member States.

## **Focus of the audit**

This audit will focus on the impact of EU agricultural policy on sustainable use of water. We will examine whether the principles of sustainable water use were included in the rules for the 2014-2020 CAP, whether Member States apply those rules in a way that provides incentives for sustainable water use in agriculture and, lastly, how Member States apply the WFD principles of sustainable water use in the agricultural sector.

Since we identified the issues underlying these areas of enquiry before the audit work commenced, they should not be regarded as audit observations, conclusions or recommendations.

## **ABOUT ECA SPECIAL REPORTS AND AUDIT PREVIEWS**

The ECA's special reports set out the results of its audits of EU policies and programmes or management topics related to specific budgetary areas.

Audit previews provide information in relation to an ongoing audit task. They are based on preparatory work undertaken before the start of the audit and are intended as a source of information for those interested in the policy and/or programme being audited.

If you wish to contact the team in charge of this audit, please do so through the following e-mail address: [ECA-Wateruse-audit@eca.europa.eu](mailto:ECA-Wateruse-audit@eca.europa.eu)

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- <sup>1</sup> Commission, World Atlas of Desertification 2018.
  - <sup>2</sup> Commission staff working document, Agriculture and sustainable water management in the EU, SWD(2017) 153.
  - <sup>3</sup> Eurostat, Data browser, Water exploitation index plus (WEI+).
  - <sup>4</sup> European Environmental Agency report No 04/2019: Climate change adaptation in the agriculture sector in Europe.
  - <sup>5</sup> EEA – The European environment — State and outlook 2020.
  - <sup>6</sup> Water for Sustainable Food and Agriculture – A report produced for the G20 Presidency of Germany – Food and Agriculture Organisation, 2017, Rome.
  - <sup>7</sup> Report from the Commission to the European Parliament and the Council on the implementation of the Water Framework Directive (2000/60/EC) and the Floods Directive (2007/60/EC).
  - <sup>8</sup> Commission staff working document – Fitness check Water Framework Directive, Groundwater Directive, Environmental Quality Standards Directive and Floods Directive, SWD(2019) 439.
  - <sup>9</sup> Commission staff working document, Agriculture and sustainable water management in the EU, SWD(2017) 153.
  - <sup>10</sup> Evaluation of the Impact of the CAP on Water, November 2019.
  - <sup>11</sup> Regulation (EU) 2020/741 of the European Parliament and of the Council of 25 May 2020 on minimum requirements for water reuse.
  - <sup>12</sup> Interinstitutional file numbers: 2018/0216 (COD); 2018/0217 (COD); 2018/0218 (COD).

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