

This country profile was compiled by the OECD Secretariat and reflects information available as of March 2015. Further information and analysis can be found in the publication: OECD (2015) [Water Resources Allocation: Sharing Risks and Opportunities](#), OECD Studies on Water, OECD Publishing. Country profiles for all of the 37 allocation regimes in 27 OECD and key partner countries surveyed for this project are available for download at: <http://www.oecd.org/fr/publications/water-resources-allocation-9789264229631-en.htm>.

## FRANCE

### Overview and highlights

In France, water is generally abundant, although water stress is increasing in some regions and there are periodic episodes of scarcity. Ground and surface water are designated as part of the “Common Heritage of the Nation”. Recent reforms include the changes in abstractable volumes to balance the available water with the needs of users as well as the creation of Single Collective Management Bodies (*Organismes Uniques de Gestion Collective, OUGC*) for irrigation. The Water Agencies’ subsidies are oriented to promote this balance.

Key characteristics of the recently reformed allocation regime for irrigation include:

- Recently created Single Collective Management Bodies (OUGC) provide an incentive for irrigators to allocate a set volume of water among themselves at catchment level;
- A thorough definition of abstractable volumes at catchment level (which does not account for return flows);
- Water entitlements are unbundled from land ownership and are granted either to individuals or to collective bodies;
- Before a new entitlement can be granted, an impact assessment and a public inquiry are required;
- All abstractions (above a certain threshold) are metered and charged, except in some exceptional circumstances. The abstraction tax varies according to type of water user and reflects scarcity to some extent, as the rate of the charge is higher when the abstraction takes place in a water scarce area.
- During episodes of scarcity, local representatives of the central government have the authority to ban partially or totally lower priority water uses.

### Legal and institutional setting for water allocation

Institution	Scale	Main Responsibilities
Ministry of Ecology, Sustainable Development and Energy (MEDDE)	National	Provision of legal framework/ guidelines for the internal rules of the recently created Single Collective Management Bodies ( <i>Organismes Uniques de Gestion Collective</i> , OUGCs). <sup>1</sup>
Local representatives of State administration	Provincial/ State/ Regional	Grants abstraction authorisations (after an impact assessment and often a public inquiry); issues entitlements in conformity with the River Basin Management Plans ( <i>Schémas Directeurs d'Aménagement et de Gestion des Eaux</i> , SDAGE) and the national framework (respect of minimum thresholds for the ecosystem use of water); water abstraction policy monitoring and enforcement ( <i>police de l'eau</i> – water police).
Water agencies and basin committees	Basin	Preparation and adoption of River Basin Management Plans (SDAGE) and Plan for Development and Water Management (SAGE), setting overall strategic water management guidelines and targets for the basin, including abstracted volumes. Moreover, water abstraction taxes are collected by water agencies through the OUGC, if one exists.
Single collective management bodies, OUGC (25 designated so far)	Other	Primarily the responsible institutions for water allocation for irrigation purposes. Main responsibilities include: allocate abstractable volume among irrigators and monitor their use, according to their internal rules. These rules have to follow nationally-defined principles, like equity between users.

**Legal context** for water allocation: Roman/ Statutory Law.  
**Legal definition of ownership of water resources:** Ground and surface water are defined as the "Common Heritage of the Nation" under the Environment Code Art. 110-1.

### Tracking water scarcity

A mapping exercise has been undertaken to identify ground and surface water stressed areas: "[European Working Group on Water Scarcity](#)", SDAGE (River Basin Management Plans) and SAGE (Plan for Development and Water Management), and the definition of water apportionment areas.

<sup>1</sup> For information on water allocation reforms in France, please refer to the 2006 Law on Water and Aquatic Environments: <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000649171>.

### Allocation Regime Example: Abstractable volumes reform and Single Collective Management Bodies (OUGC)

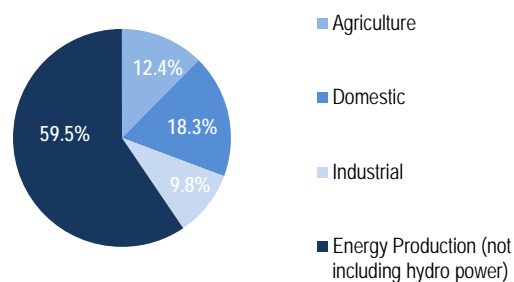
#### Physical features of the water resource

This example of an allocation regime applies to water apportionment areas or zones (ZRE), where the water deficit is structural. Water bodies are defined by local hydrological schemes.

The **flow rate is managed or controlled** to some extent, as water systems are partially regulated. There are large dams on main rivers, such as Seine or Rhone. Water infrastructure is also used to facilitate the use of water bodies for transportation.

There is **significant non-consumptive use** in some basins. It mainly corresponds to energy production (nuclear plants).

Mean annual inflow/recharge consumed per use:



#### Defining the available resource pool

**Are limits on consumptive use defined?** Yes.

- The volume of water that can be abstracted is defined and linked to SDAGE and SAGE public planning documents, prepared by Water Agencies and the local representatives of the State. They are statutory instruments that must be followed.

**Are environmental flows clearly defined?** Yes.

- The minimum environmental flow is defined based on a statistical standard as the monthly flow with a probability of exceedence of 1 in 5. Other minimum flow requirements relating to freshwater include "the minimum biological flow" and the "reserved flow", defined based on observations of ecological needs (based on a habitats' methodology). Terrestrial biodiversity is not taken into account.

**Are there arrangements to deal with impacts of climate change?** Yes.

- Abstractable volumes have to be redefined after a few years to consider the latest available scientific data.

**What is the status of resource pool?** Over-allocated.

- Measures to address over-allocation include the requirement to define objectives to reduce water abstraction in the negotiation processes used to define abstractable volumes. In addition, in crisis situations when water flows are below a set threshold, measures to reduce water uses can be adopted, such as Drought Decrees.

#### Factors taken into account in the definition of the available resource pool

Factor	Taken into account?	If taken into account, how?
Non-consumptive uses (e.g. navigation, hydroelectricity)	✓	Treated in the same management plan as the consumptive uses, in order to find the correct balance. These uses would need a minimum flow.
Base flow requirements	✓	This base flow is mandatory and is not included in the volumes defined as abstractable.
Return flows (how much water should be returned to the resource pool, after use)		Not directly considered. The return flows upstream are considered as inflow downstream in the characterisation of the abstractable volumes at the water body level.

Inter-annual and inter-seasonal variability	✓	When there is a drought, decrees are sanctioned to decrease the right to abstract water and they have to be followed by the main users: households, irrigators, industries, etc.
Connectivity with other water bodies	✓	Taken into account in the hydrological models, when there is one locally.
Climate change	✓	The users are encouraged through water agencies' subsidies to reduce their water use to prevent decrease in water availability. Abstractable volumes have to be redefined after a few years.

### Entitlements to use water

Definition of entitlements	Characteristics of entitlements
<p><b>Are entitlements legally defined?</b> Yes.</p> <p><b>Are private entitlements defined?</b> Yes, as individual entitlements (to an individual person) or as a collective entitlement (to an institution representing water users (e.g. Water Users Associations)). In the latter case, allocating water among individual users within a group of users is done through a bargaining process.</p> <p><b>Nature of entitlement:</b> water entitlements are unbundled from property titles. Entitlements are defined through a process of impact assessment and public inquiry.</p> <p><b>Period granted for:</b> a term from a few years to several decades for permanent use like drinking water abstraction; 6 months entitlement for temporary uses (considered as uses without dramatic environmental impacts, such as seasonal uses and/ or irrigation if not in a ZRE (in this case there is no public inquiry)).</p> <p><b>Return flow obligations:</b> not specified.</p>	<p>If the <b>entitlement is not used in a given period</b>, the entitlement remains in place for the period it has been issued for.</p> <p><b>Are entitlements differentiated based on the level of security of supply (or risk of shortage)?</b> Yes. According to the abstracted volumes (above or under local thresholds), they can be submitted either to declaration or to authorisation (with a public inquiry) following the Environmental Code<sup>2</sup>. Furthermore, the ZRE (water deficit areas) thresholds are lower than in other areas. Hence, the authorization procedure is mandatory for lower abstracted volumes.</p> <p><b>Is there a possibility to trade, lease or transfer entitlements?</b> Yes. They can be transferred freely, to the new land owner in some cases (Beauce area).</p> <p><b>Are allocations (the amount that can be taken at any point in time) managed separately from entitlements?</b> Yes.</p> <p><b>Is allocation trading allowed?</b> No, but some users can exceptionally exchange their entitlements (during one year only).</p> <p><b>Can entitlements function as a financial instrument?</b> No.</p>
<p><b>Type of users not required to hold a water entitlement to abstract water:</b> small scale domestic water abstractions (under 1000 m<sup>3</sup>/year). If the increase in the use is above the threshold, the user needs a proper authorisation, within an impact assessment procedure.</p> <p><b>Requirements to obtain a new entitlement or to increase the size of an existing entitlement:</b> impact assessment and public inquiry.</p>	

<sup>2</sup> Article R. 214-1.

### Abstraction charges

User category	Abstraction charge?	Basis for charge	Reflects water scarcity?
Agriculture	✓	volumetric (metered) and proxy for 9 % of the volumes	✓
Domestic	✓	volumetric (metered) (paid via the water bill)	✓
Industrial	✓	volumetric (metered)	✓
Energy production (not including hydro power)	✓	volumetric (metered)	✓
Hydro power	✓	volumetric (metered)* height of the drop (measured)	✓
Other. Specify:	✓	For channel water supply/volumetric (metered)	✓

**How pricing arrangements reflect scarcity:** The aim of this abstraction tax is to recover water scarcity related externalities. Each category of user has its own rate. The rate is higher when the abstraction takes place in a water scarce area (Water Apportionment Area / ZRE). The rate also depends on areas defined according to the hydrogeologic circumstances where the abstraction takes place. But the application of the rate is imperfect, as there are cost transfers between users.<sup>3</sup>

### Dealing with exceptional circumstances

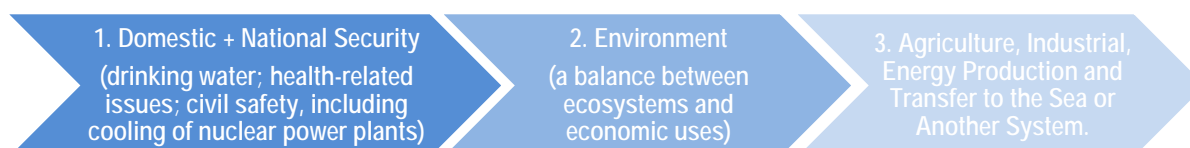
Is there a distinction between the allocation regimes used in “normal” and extreme/severe water shortage times? Yes.

**How is the amount of water made available for allocation adjusted:** in case of shortage, there are Drought Decrees that allow for a decrease in the abstraction volumes to be authorised.

**Definition of “exceptional” circumstances:** by local indicators, “low flow in rivers and the piezometric water level for aquifers”. When there is an OUGC, the decrease of abstractable volume is shared by the irrigators according to the internal rules defined when the OUGC was created.

**Legal bodies declaring the onset of “exceptional” circumstances:** The exceptional circumstances status is defined by a crisis unit, called the “Drought Unit”. This unit is convened by the *Prefect* (the local representative of the State) and involves stakeholders. It is mandated to suspend prevailing entitlements and to allocate water according to a set list of priority uses, as defined in the Decrees.

#### Pre-defined priority classes<sup>4</sup>



<sup>3</sup> Further information: <http://www.developpement-durable.gouv.fr/Tax-on-water-abstraction-how-can.html> + binomial water tariff for domestic use that is an incentive-based tariff aimed to cover water costs (included environmental costs), as required by the WFD. Fyi, points 2 and 3 are not that clearly apart. There is an interconnection between both.

<sup>4</sup> For the 2<sup>nd</sup> and 3<sup>rd</sup> priority classes, there is no clear distinction between them since there is a degree of interconnection.

### Monitoring and enforcement

**Responsible authority:** Water police via local representatives of central government administration.

**Types of withdrawals monitored:** agriculture, domestic, industrial, energy production, environment, transfers to the sea or another system and for uses related to national security (*e.g.* nuclear plants).

**Monitoring mechanisms:** metering plus monitoring by the water police, for all these categories of users.

**Sanctions:** Fines. There are two kinds of sanctions: administrative sanctions (from the formal notice to the suspension of the authorization) and penalties, with fines. It is a 5th class penalty (the fine can amount to EUR 1 500).

**Conflict resolution mechanisms?** Yes. For any kind of fine in France, it is possible to make an action for annulment before the administrative tribunal.