

World Water Day

Istat water statistics

Upon occasion of the 2015 World Water Day, established by United Nations and celebrated every March 22 all over the world, Istat provides a summary of the main statistics on water resources.

Istat calculates for the first time hydrological indicators (precipitation, evapotraspiration, total outflow, recharge into the aquifers), as part of the "Meteo-climatic and hydrological indicators" project, necessary for a quantitative, spatial and temporal assessment of natural water resources. These indicators refer to each year of the period 2001-2010 and to the average for the period 1971-2000. The data collected were processed at the river basin level.

The average precipitation occurred in the decade 2001-2010 corresponds to a volume of water equal to 245,457 millions of cubic meters (+1.8% compared to the average for the period 1971-2000), almost in line with the average value for 1971-2000. The most droughty year was 2001 with 190,839 millions of cubic meters (20.8% less than the reference period average value), on the contrary 2010 was the wettest year with 306,883 millions of cubic meters (+27.3%).

In 2012 the municipalities served by a drinking water supply network were 8,067. Those totally devoid of a drinking water supply network were 25 (corresponding to 114,561 inhabitants, 0.2% of the Italian population). An urban wastewater treatment was active in 7,550 municipalities, by working plants fully or partially treating wastewater. Municipalities without wastewater treatment services were 542, covering 2.3 millions of resident population (3.8% of the total population).

In 2012, the management of urban water services was entrusted to 3,161 companies in Italy, 82.8% of which are municipalities. The number of operators decreased by 190 units compared to 2008, due to the overall concentration of management activities observed since 1999, that is, the year when the Italian reform of the water services management started. The national water abstraction for drinkable use amounted to 9.5 billions of cubic meters.

In particular water coming from groundwater represented 84.8% (47.9% spring, 37.0% well), surface water accounted for 15.1% (10.4% natural lake or reservoir, 4.7% surface water courses) and sea water or brackish water for the remaining 0.1%. Compared to 1999 an increase in abstraction occurred, it was equal to 6.6% (585 millions of cubic meters). Treatments aimed to make water drinkable were made on 30.6% of water abstraction, for an annual total of 2.9 billions of cubic meters.

In 2012 in Italy 22.9 millions of cubic meters of water were daily placed in municipal water supply networks, for a total annual amount of 8.4 billions of cubic meters, equivalent to 385 liters per capita a day. This volume was higher by 2.6% compared to 2008. Not all the water input into the network came to final users. Although the need to improve the efficiency of the water supply infrastructure represents a widespread and urgent pressure, losses continued to be persistent and severe. In 2012, in fact, network losses - calculated as the percentage difference between the volumes placed and supplied - amounted to 37.4%, an increase compared with 2008 (32.1%).

Water supplied by the public water supply system amounted to 5.23 billions of cubic meters, a decrease of 5.4% compared to 2008. Therefore, the daily supply of water for drinking purposes was equal to 14.3 millions of cubic meters, equivalent to 241 liters per inhabitant. Drinking water invoiced in 2012 amounted to less than 5 billions of cubic meters (228 liters per capita per day), accounting for 94.9% of the total supplied.

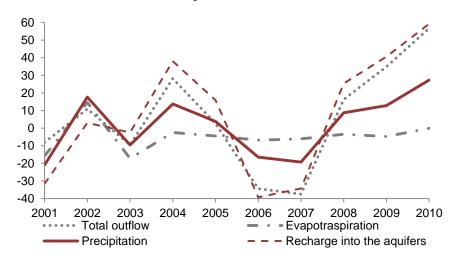
The judgment of Italian households on the provision of water in their home registered an improvement. The share of households that complained irregularities in the service decreased from 14.7% in 2002 to 8.6% in 2014. The share of households with nearly one person who does not trust drinking tap water was relevant, and accounted for 28% in 2014. This lack of confidence was very high in Sardegna (53.4%), Calabria (48.5%), Sicilia (46.2%) and Toscana (38.3%).

In 2013 the monthly average expenditure of households for mineral water purchase amounted to 11.42 euro. This expenditure was almost half of that incurred by families in water services in the primary house. The monthly average expenditure of households for water services in the primary house showed a relevant increase in the last five years (+74%), going from 12.16 euro in 2008 to 21.18 euro in 2013.

In 2012 the share of urban pollution loads treated in secondary and advanced urban waste water treatment plants, compared with the potential urban pollutant loads generated was equal to 57.6% (in terms of population equivalent), with a slight increase (56.5%) in comparison to the value of 2008.

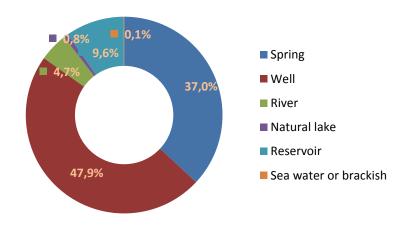
Sicilia is the region with the highest number of agglomerates (territorial basis for sewage and urban wastewater treatment) subject to law infringement proceedings (in 2014, 175 agglomerates). Calabria followed with 130 agglomerates. Comparing the agglomerates subject to infringement proceedings to the total number of agglomerates for each region, Campania was characterized by the highest percentage (76.2%) followed by Calabria (54.4%), Sicilia (52.1%), Marche (23.1%) and Basilicata (23.0%).

FIGURE 1. VARIATIONS IN PRECIPITATIONS, EVAPOTRANSPIRATION, TOTAL OUTFLOW AND RECHARGE INTO THE AQUIFERS FROM 2001 TO 2010 COMPARED TO THE PERIOD 1971-2000 AVERAGE VALUES. Percentage values



Source: Istat, Meteo-climatic and hydrologic project

FIGURE 2. WATER ABSTRACTION FOR DRINKABLE USE BY SOURCE. Year 2012, percentage composition



Source: Istat, Urban Water Census

For more details please refer to the Italian version

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