REGIONE DEL VENETO

YEAR 2015 – SEPTEMBER 2015

STATISTICHE Flash

Figures and graphs to understand Veneto

THE WATER RESOURCES IN VENETO: A GOOD TO PRESERVE

This edition of Flash Statistics is focused on water and especially on the development of works in relation with the commitments undertaken in Europe as much as safeguarding water resources is concerned. We will analyse the two topics of bathing waters and use of drinkable water on a regional scale, trying to understand if the health status of the water bodies is regular and if the exploitation of water resources has been limited in the last years or not.

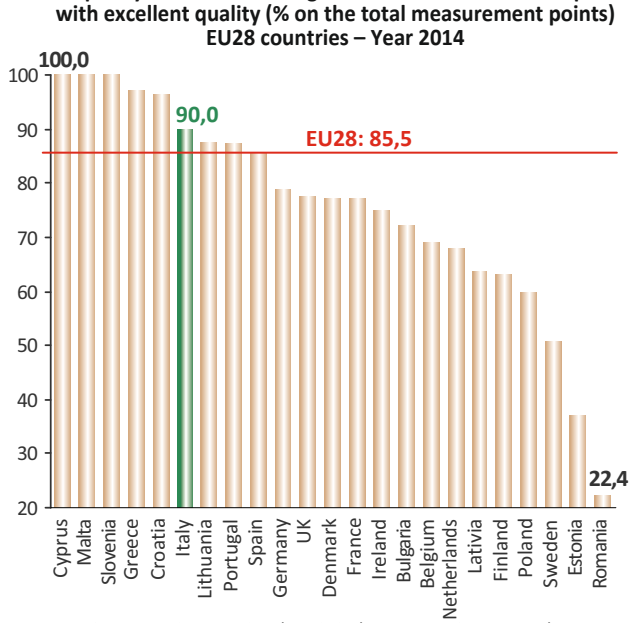
In the EU, the water policy has been a point of discussion already since the 90s: in this context the water is considered as a natural resource to be preserved in a good ecological status (quality of the water) against the processes of overexploitation of the resource and contamination from pollution. In 2000, the European Parliament and the Council approved the Water Framework Directive (Directive 2000/60/EC of 23 October 2000). The Directive aims to achieve by 2015 a good ecological status of water resources in every Union Member State. To this purpose, the Directive has introduced the obligation for every State to present by 2009 their "river basin management plans".

In order to face the rarefaction of the "resource", the Commission suggests two series of answers/measures to adopt. This happens because, not applying a price to a limited resource like water, can be considered as a grant which is harmful for the environment. Moreover, we need to promote technologies and practice that lead to an effective use of water, in line with the general objective of water efficiency established in the framework of the "2020 European Strategy".

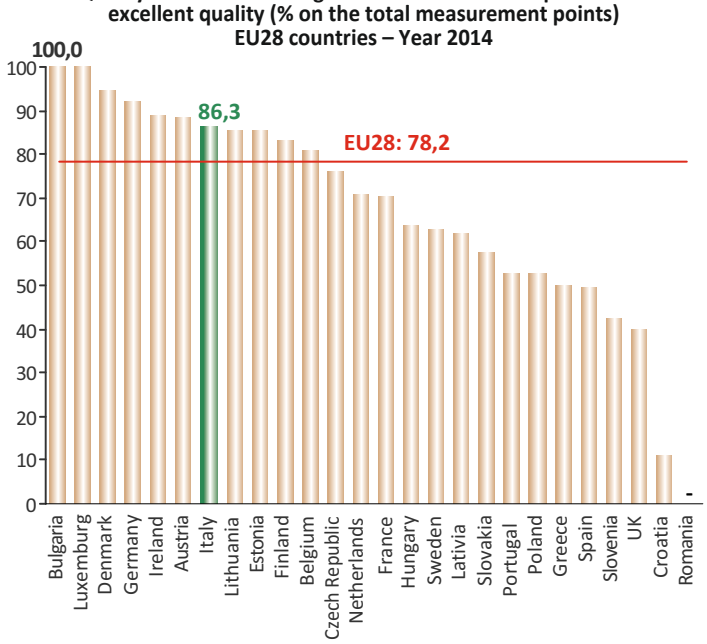
In March 2015 the European Commission published the fourth assessment report on the implementation of the Water Framework Directive 2000/60/EC in 2012. According to the report, the objective to reach a water "good status" seems still to be far away, especially due to the rather poor quality of the starting ecological status and to heterogeneous situations among the various Member States, which are often complicated to control and to handle in the most correct way. However, a positive result concerns the bathing waters. In general, the situation in the EU is positive: as a whole, over 83% of controlled bathing waters present an excellent ecological status, which reaches over 85% if we consider the coastal waters only. Italy is above the European average, with a percentage of about 90%, reaching the full percentage as for coastal waters.

THE QUALITY OF BATHING WATERS

The quality of coastal bathing waters: the measurement points with excellent quality (% on the total measurement points) EU28 countries – Year 2014



Quality of inshore bathing waters: measurement points with excellent quality (% on the total measurement points) EU28 countries – Year 2014



Source: Veneto Region Processing – Regional Statistical System Section on EEA data

WEB Flash

HERE ARE AVAILABLE:
- 2020 European strategy: national and European indices and targets
- Foreign trade 2014 figures (temporary)
- Tourism year 2014

http://www.regione.veneto.it/web/statistica

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Veneto is rich in waters: from lakes to rivers and from underground water sources to the Adriatic Sea. We will try to give even a partial picture of the current status of waters in Veneto with particular reference to bathing waters and the exploitation of water resources for drinking use and their management.

THE BATHING WATERS

From the monitoring of bathing waters emerges a certainly positive situation, as most of the measurement points are found in the excellent class. In detail, the data are based on the years 2010, 2011 and 2012 and are calculated from to the mean values of the last 4 years before the considered year, including the current year as required from the Legislative decree no.116 of 30 May 2008, which has implemented the Directive 2006/7/EC. According to the same legislative decree, bathing waters must reach by 2015 at least a sufficient quality, that is the minimum condition for waters to be considered adequate for bathing.

As regards the nautical waters in Albarella, the lakes of Garda, Santa Croce, Mis, Lago and Santa Maria, they all belong to the "excellent" class for bathing quality. Moving our attention on the Adriatic Sea, some measurement points do not always reach the best class values. On average, the Adriatic Sea has an "excellent" bathing quality with almost 83% of cases in all the five years of monitoring. The excellent class has slightly worsened during the last year and the good class has registered an increase by 3.2% in 2013 up to 5.4%. This trend is influenced by Chioggia, the only area with some criticality, where the percentage points for "non excellent" quality varied over the years and then stabilised to 45.5% in 2014 (however. all the cases belong to the "good" class). In 2014, as well as 2013, there have not been any more cases of “sufficient” quality in all the measurement points in the Adriatic Sea, as all the points reach at least a “good” quality. This comforting data show a further improvement in relation with the achievement of the objective for the full bathing quality of waters in Veneto (at least a “sufficient” quality) which has been foreseen by the current year but already achieved in 2010.

The quality of bathing waters (% points in a specific quality class) in the Adriatic Sea*. Veneto – Years 2010:2014**

(*) The data are based only on measurement points with a quality which did not reach the excellent class in the 100% of cases. The areas of S. Michele al Tagliamento, Caorle, Eraclea, Jesolo, Cavallino-Treporti, Venice and Porto Viro are excluded from the evaluation.

(**) The classifications have been carried out every year, considering the data collected in the last 4 years of monitoring.

Source: Veneto Region Processing – Regional Statistics System Section on Arpav data

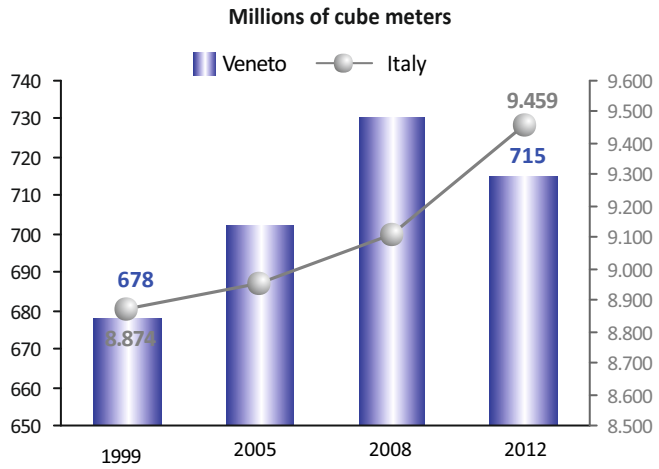
DRINKING WATER: EXTRACTION AND PURIFICATION

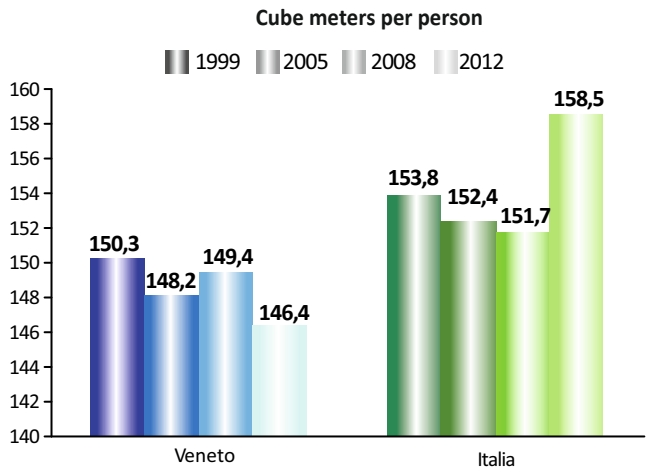
Going back to the topic of water as a common resource and good to preserve, the aspects regarding the water management resources play also a significant role: from the extraction to the supply of water, up to the treatment and purification of waste water. Regarding the two first aspects, extraction and supply, the process consists in four different phases: the extraction, the possible purification, the feeding into the distribution system and finally, the supply to the final user. The data concerning the management of the water system are periodically collected through specific surveys and censuses by Istat (National Institute for Statistics) at the water services managing authorities. Today, the census data concerning water resources are available for the years 1999, 2008 and 2012 in addition to the sample survey of 2005. The extraction of drinking water in Italy has reached 9.4 billion cubic metres in 2012, showing a growing trend over time compared to both 1999 and 2005, and more stable in comparison with 2008. The same trend has been noted also in Veneto until 2008, where the quantity of extracted water grows from 678 million cubic metres in 1999 to 730 in 2008 and then it changed direction with a slight decrease in 2012, bringing the extractions to 715 million cubic metres in this last year of measurement.

If necessary, the extracted water, before being fed into the distribution system, must undergo treatments in order to become drinkable. Among the various available sources, underground waters are preferred to the surface ones for their average better quality and do not require further purification treatments. The low need of purification of water represents a greater richness of good quality waters in the underground. Veneto has a quite favourable hydrogeological structure: 108 million cubic metres of purified water in 2012 only represent 15.1% of the total extracted quantity, which is placed under the national average of 30.6% and has registered a decrease in comparison to the last census on waters in 2008. Considering this value, Veneto is placed at the 8th place among the regions of the peninsula for the lowest recourse to water purification.

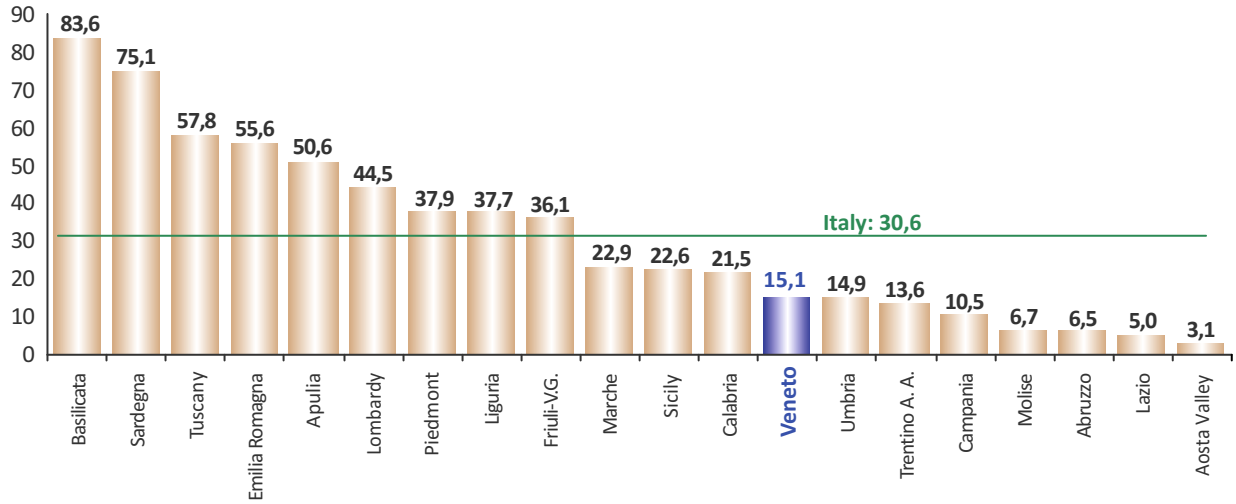
[1]According to the regulatory framework regarding the organization of the Integrated urban water service, the services must be supplied by operators on behalf of the entrusting bodies: according to the 2012 regional law no. 17 the entrusting bodies are identified in the Basin councils (Consigli di bacino) and each operates in one of the Optimal Territorial Areas (ATOs) into which the regional territory is divided.

The water extraction for drinking use (millions of cubic metres and cubic metres per person). Veneto and Italy – Years 1999, 2005, 2008 and 2012





Purification of extracted water by region (% compared to the total of extractions) – Year 2012



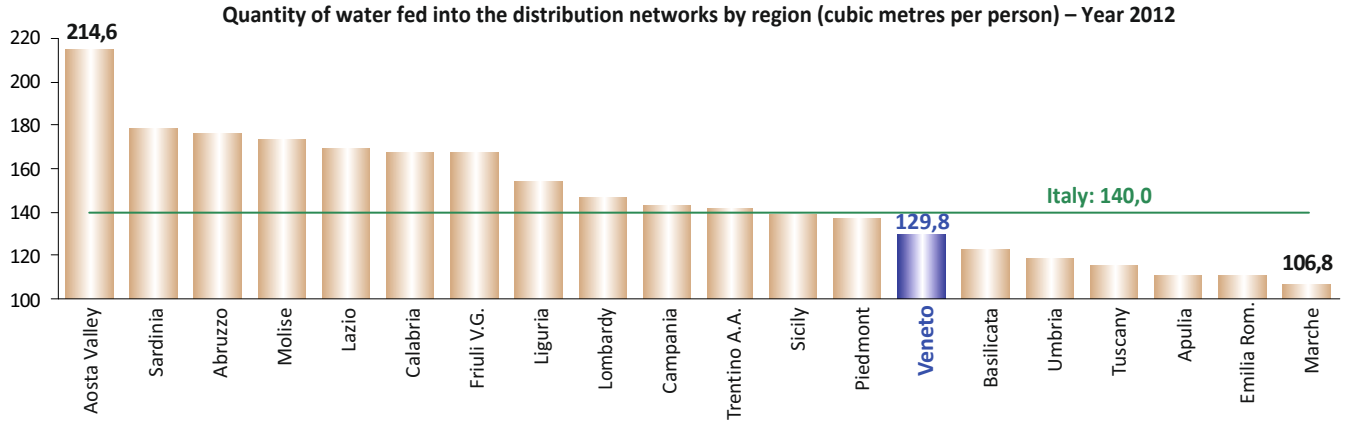
Source: Veneto Region Processing – Regional Statistical System Section on Istat data (National Institute of Statistics)

STATISTICHE Flash

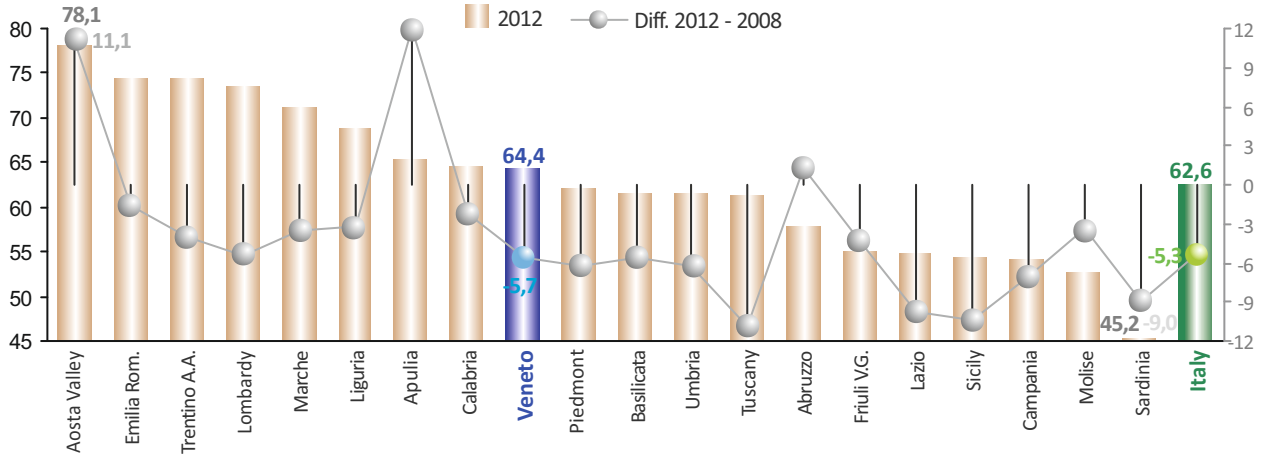
DRINKING WATER

Once the water has been purified, if necessary, it is fed into the supply system. Out of the 9.4 billion cubic metres (m3) of extracted water in 2012 in Italy, the real quantity fed into the distribution network totals 8.4 billion, that is 88.9%. Veneto reaches almost the same percentage (89.1% which equals to 637 million cubic metres fed out of 715 million of extracted water). Moving our attention to the data per person, the quantity of water fed into the distribution networks in 2012 equals 140 m3 per inhabitant on a national scale, but the situation seems to be quite heterogeneous among the regions. Data vary from 214.6 m3 in Aosta Valley to 106.8 in Marche. In Veneto this index barely totals 103 m3 per inhabitant.
After being fed into the distribution networks, the next step is the water supply to the final user. Only a part of the water that has been fed into the distribution networks is actually supplied. The reasons are multiple: some quotas are destined to a public use and are not recorded, water dispersion from the container when in some period of the year the quantity of available water exceeds the containment capacity, potential theft and/or abusive extraction from the network and, finally, due to loss from the pipes. Higher is the percentage of the quantity of water supplied over the fed water and higher will be the efficiency of the whole water system. In 2012 the efficiency of the distribution networks of drinking water in Italy, that is the percentage of supplied water compared to that of fed water, almost totals 63%, a lower value compared to the previous measurement in 2008, when it barely reached 68%. The situation among the regions is quite homogeneous: the values vary between 45.2% in Sardinia and 78.1% in Aosta Valley. Veneto was the ninth region in 2012 in terms of efficiency with 64.4%, 5.7 percentage points lower compared to 2008.

Quantity of water fed into the distribution networks by region (cubic metres per person) – Year 2012



Efficiency of the distribution networks (% of water actually supplied to the final user compared to the total water fed into the network) by region – Years 2008 and 2012



Source: Veneto Region Processing – Regional Statistics System Section on Istat data (National Institute for Statistics)

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