Focus on Upper Tiber Valley

I. C. Da Vinci, San Giustino, Italy.

Meeting in Poland, March, 26-30 2019

Waste

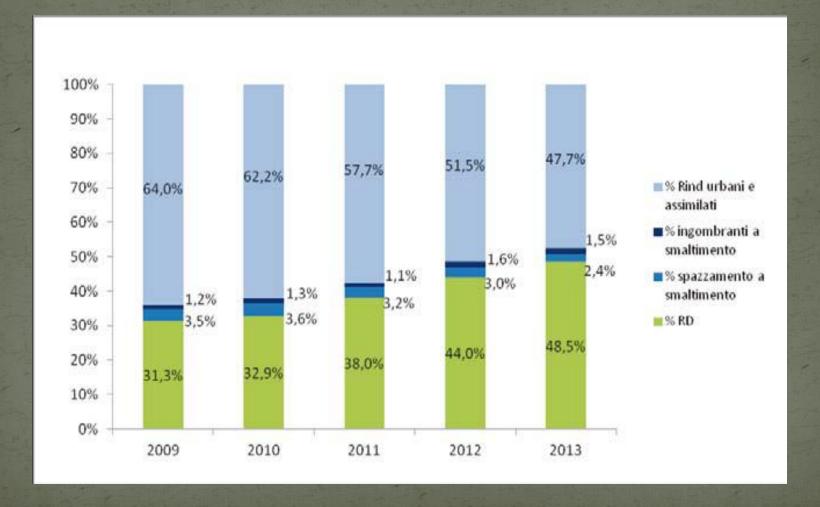
Separate Yeld:

The 2008 Separate Yield decreased by 2.1%, rising from 21.74 in 2007 to 19.68% in 2008, in 2013 we were 48.5% and now we have exceeded 50%

Citerna (3400 people) produces 3600 tons of waste per year, 25 tons of dangerous waste

• The most dangerous non-hazardous waste products are paper, glass and wet organic fraction, while for hazardous waste, electronic waste WEEE and Batteries

Separate yeld chart



Energy

Policy on Green Energy:

The Municipalities of the Upper Tiber Valley, Alto Tevere Umbro, have signed the Compensatory Energy Plan (PEC) Altotiberino have signed the Compensatory Energy Plan (PEC) Altotiberino which is an instrument of address in the context of the Program Agreement. Specifically, this Agreement is aimed at the implementation of the "SUSTAINABLE HIGH TEVERE ENERGY" Program, through which the parties "undertake to design and implement, in synergy between public and private entities, initiatives for the production of energy from sources renewable resources available on the territory Altotiberino, the rational use of energy and energy saving, support for cultural change in the field of sustainable development, through appropriate communication projects, and initiatives in the field of research and training in the energy / environmental field "As for residential energy consumption in 2005 there was a consumption of 3,083 MWh / year year

Green energy in Upper Tiber Valley

Interventions in favor of hydroelectric, solar and wind energy were encouraged. The large photovoltaic plants in operation are 68 for a total power of about 2000 kw.In our valley with wind farms, around 640 giga watt of energy is produced with a saving of about 650.000 tons of CO2 in one year.

Water

Municipal aqueduct:

The management of the local health system confirms that the water supplied by the Citerna aqueduct is regularly checked and is safe from the point of view of physical, chemical and bacteriological parameters. With a nitrate content well below the limit values, it is not dangerous for adults or children. "The water supplied by the public aqueduct - according to the health director of the public health department - for the organoleptic, chemical-physical and microbiological health department - for the organoleptic, chemical-physical and microbiological characteristics so far detected, does not raise any concern for the health of citizens or children. The company shares the actions taken by the municipal administration aimed at encouraging their use; in particular the choice to use it in schools that represent a privileged place for the development of conscious choices is in accordance with what is indicated in the national guidelines of the Ministry of Health for school catering ".Like all public aqueducts, the public aqueduct of Citerna is subjected to "internal" checks carried out by the managing body (Umbra Acque) and to "external" controls carried out by the health authorities to verify the requirements dictated by the legislation that specifies in detail which chemical, physical and microbiological characteristics must have water to be considered suitable for human food consumption.

Water analyses

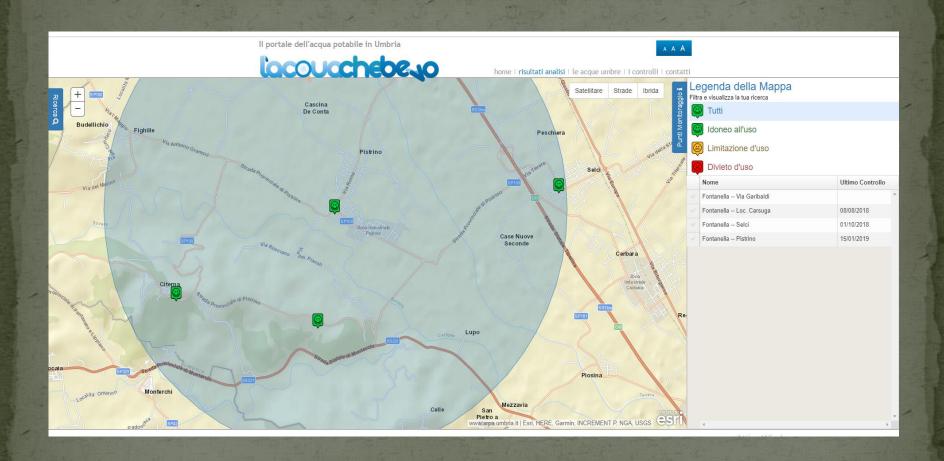
Drinkable water analyses:

The analytical checks carried out by the health office, from the activation of the aqueduct in 1998 to the present, have shown good quality water, in fact the concentration of all the parameters sought has always been based on values that fall well within the limits dictated by the legislation current. It is specified that the annual monitoring consists of the detection of over 390 parameters for chemical, physical and bacteriological assessments. In reference to the carcinogenic risk linked to nitrates, it is underlined, moreover, that epidemiological studies agree in stating that water is not significantly contaminated

Chart analyses Citerna and San Giustino

Municipal aqueduct:

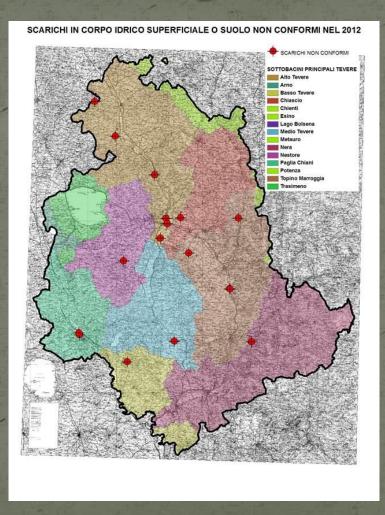
Parametro	ottimale	San Giustino	Citerna
Cloruro mg/L	<250	13.4	12.8
PH	7	7.5	7.2
Durezza °f	15	33.9	32.5
Nitrato NO2 m	g/L <50	26.4	30.5
Residuo Fisso mg/L 150		325	294
Solfato mg/L	<250	38.3	15.7



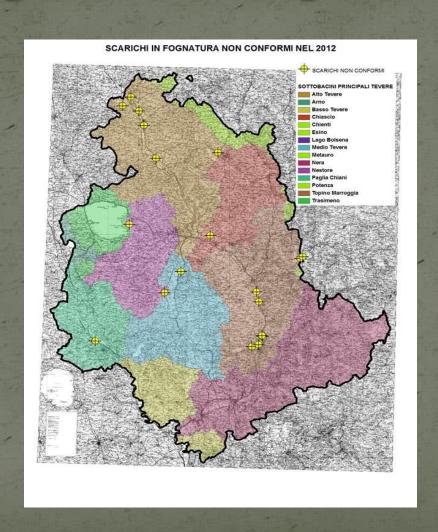
Surface water, groundwater and wastewater

The analyzes carried out over the years have shown an excellent general state of groundwater and a good state of surface and discharge waters. Isolated problems have been highlighted in the presence of discharges into irregular sewers

Surface drainage not suitable



Irregular discharges into sewers



Soil

The quality of the soil in our valley, as in the entire Umbria region, is generally very good. Umbria is considered the green heart of Italy and, despite a rather intense use of the land for agriculture, there are no particular problems, not even for the levels of nitrates derived from the use of pesticides. Fortunately, in recent years agriculture has increasingly gone towards quality and sustainability awards instead of focusing on productivity alone

Land consumption

Soil consumption" means a phenomenon associated with the loss of a fundamental environmental resource, due to the occupation of an originally agricultural, natural or semi-natural area. The phenomenon is therefore due to the increase in the artificial ground cover, a consequence of the settlement dynamics: construction of new buildings, warehouses and settlements, expansion of cities, infrastructure of the territory. The concept of soil consumption must, therefore, be defined as a variation from a non-artificial roof (land not consumed) to an artificial ground cover (soil consumed). Arpa takes care of the monitoring of soil consumption in Umbria and contributes to the production of soil consumption maps of the National System for Environmental Protection

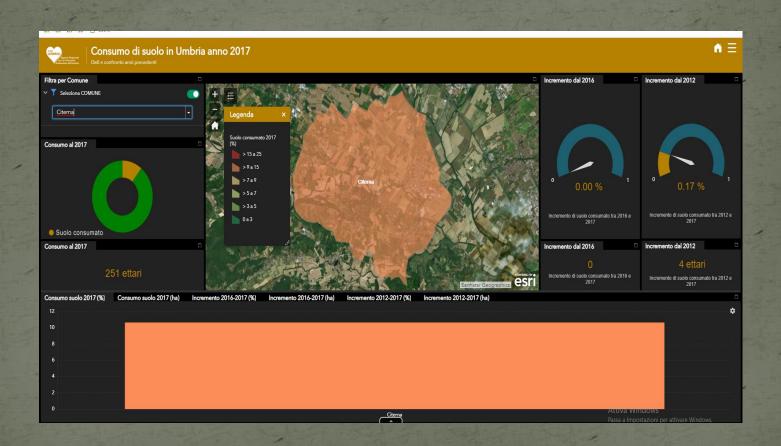
Soil consumption Umbria 2012-17



Soil consumption San Giustino 2012-17



Soil consumption Citerna 2012-17





Co-funded by the Erasmus+ Programme of the European Union