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Sustainable management and governance of water: the Ridracoli dam and interaction with the Casentino National Forest Park.

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ABOUT US





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We have managed the water in the Romagna region for more than 50 years, making an allencompassing commitment to guarantee the drinking water with efficiency and continuity, promoting quality of life and the conservation of our natural heritage.

With our activity, which we carry out as a limited company with wholly public capital and in synergy with all the subjects involved in the Integrated Water System, we cover nearly the entire residential requirement of water for the region of Romagna.

Within the Integrated Water System, we are the producer and wholesale supplier of water resources, Hera S.p.A. is the distributor to the end user, while other subjects regulate, plan and control the entire service across the region.

THE WELL-BEING OF THE GEN-ERAL PUBLIC IS THE HORIZON OF OUR ACTIVITY, IT IS THE FO-CUS OF OUR MAIN OPERATING TARGETS, WHICH ARE THE CON-SERVATION OF NATURAL CAPI-TAL AND ACCESS TO WATER.

Our main commitment is to safeguard and make available water resources, guaranteeing safety and continuity for residential and industrial uses; a high-quality service for a high quality of life. All of this with an awareness of the scarcity of resources, the continuous progress of climate change, the essential protection of the environment from which water is taken, the need to guarantee limited impacts on rates and, with a particular focus on the future, the importance of **combining** research, innovation, and technical and scientific skills to guarantee water in suitable qualities and quantities in every condition.

ETHICS AND TRANSPARENCY

In carrying out our activities, we have always conducted ourselves in accordance with rigorous ethical principles ratified in specific documents, particularly the **Code of Ethics**. Over time, we have also implemented the appropriate tools in line with the most recent regulatory obligations on anti-corruption and transparency, such as the **Organisation and Management Model** integrated with the **Three-Year Anti-Corruption and Transparency Prevention Plan**.

1976 - 1985 Ridracoli

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WHAT WE DO

Optimally managing sources and the network of infrastructures present in all three provinces of Romagna, we produce and supply wholesale drinking water to the area under our responsibility.

The most important source is the artificial reservoir of the Ridracoli Dam, the most significant and symbolic structure of the entire Romagna water mains network, which covers roughly half of the total requirement

Alongside the Ridracoli reservoir, there are many other local sources, including surface water and groundwater, all across the region.

More than 50% of the water that we distribute also comes from sources located in protected areas: a guarantee at the source of water quality, in addition to the more than 300,000 analyses we perform every year

SOURCE OF THE DISTRIBUTED WATER

Source / Year	From Ridracoli	From ground- water	From surface and river-bed underflows	Total m³ of water abstracted	Total m ³ of water consumed in purification processes	Total m ³ of water supplied
2020	55%	21%	24%	109,365,809	1,732,639	107,633,170
2021	53%	22%	25%	111,401,093	2,153,876	109,247,217
2022"	46%	27%	27%	110,196,395	2,196,875	107,999,520

"In 2022 the reduced inflows to the Ridracoli dam led to a decrease in its production, with the need for greater use of groundwater and surface sources (from the Po). Note that there was a major shortage of surface water during the summer of that year, which led to the proclamation of a water emergency first at the regional level and subsequently for the whole country, with limits on withdrawals and minimum vital outflows,

Canale Emiliano Romagnolo:

Second degree reclamation & irrigation board

Longest irrigation canal in Italy:

- Po river is the main water source ٠
- 135 Km concrete lined canal ٠
- 350 Mln m³/ha average water volumes distributed ٠

Multipurpose water uses

AGRICULTURE

CIVIL AND POTABLE

ENVIRONMENT

INDUSTRY

397 km in operation, plus approximately 207 km of pipelines serving local sources: the infrastructural system we manage, represented primarily by the Romagna Water Mains, is a total of roughly 604 km long.

The water mains system is formed offacilities for water collection (catchment), the subsequent treatment (purification or other intermediate processes) and therefore the delivery.

The modern Standiana purification plant in Ravenna is particularly strategic, as it enables us to better diversify sources and more easily handle many of the drought events that have been impacting our region with greater frequency.

ANALYSES AND CONTROLS: WATER QUALITY

The water quality checks carried out by the Romagna Acque laboratories are based on careful selection of the control points and sampling frequencies. They aim to ensure that the water which is abstracted, treated and supplied from the mains does not contain any substances or micro-organisms harmful to human health.

The Water poduekd and distributed by Romagna Acque puriufication plants has excellent characteristics and can be classified as **LOW MINERAL**₂ (Capaccio and Standiana) and **MINERAL**₃ (Bassette).

Our work embraces several aspects: valuable natural capital to be safeguarded and shared, financial capital to be leveraged, and human, social and relational capital to be nurtured, in keeping with the UN 2030 sustainable development goals.

FINANCIAL capital

UN 2030 AGENDA Sustainable Development Goals

NATURAL capital

A HARMONY TO BE CHERISHED, A BALANCE TO BE RESPECTED: THERE IS A DEEP CONNECTION BETWEEN WATER AND THE LAND. THIS IS WHY WE TAKE CARE OF WATER WITH SENSITIVITY AND RESPONSIBILITY VIS-À-VIS THE ECOSYSTEMS IT IS TAKEN FROM.

HUMAN, SOCIAL AND RELATIONAL capital

KNOWING HOW TO ENGAGE, BEING OPEN TO DIALOGUE, GENERATING SYNERGISTIC EXCHANGES: WE CULTIVATE TRANSPARENT, CONSTRUCTIVE RELATIONS WITH ALL OUR STAKEHOLDERS IN ORDER TO BEST PERFORM A PUBLIC SERVICE THAT IS ESSENTIAL TO LIFE.

Idro - Tourism

When Romagna Acque built its infrastructure of primary distribution pipelines, it cabled the networks with optical fiber to remotely control and govern them. This represented an opportunity to bring fiber to mountain areas. Fiber that would otherwise never have been laid or arrived.

Romagna Acqua and the climate change

To address climate variability and the consequent risks, Romagna Acque has relied on IPCC (Intergovernmental Panel on Climate Change) risk scenario studies.

In order to address these risks, it is continuing its actions along the following lines:

- expansion and diversification of water withdrawal sources with the need to generate new accumulations;

- maintenance and strengthening of networks and systems in order to have greater redundancy and safety in terms of continuity of water distribution for civil uses;

- protection of the environment and the mountains and its management and maintenance, with an ecosystem approach, to safeguard risks and extreme flood events.

Toumoumba Barrage - Mali

In 2018, thanks to the collaboration between Romagna Acque and the non-profit organization 'Gente d'Africa', with the architecture department of the University of Rome 3, we reconstituted a barrage in Toumumba in Mali to retain water during the rainy season of July and August. Water for the twenty-three villages with a total of twenty-five thousand inhabitants represents their safety and guarantee of survival. Thanks to water, the quality of life of villagers has improved.

INSTITUTION OF PARKS EEWT

Since 2022, Romagna Acqua and European entities performing a public function in Italy and Greece have signed an agreement.

This agreement develops a programmatic and planning strategy in the context of issues related to the following topics:

- European National Parks,
- Biodiversity, Ecotourism,
- Agricultural Sustainability,
- Sustainable Mountain Development,
- Water and Environment,
- Energy,
- Digitalization.

This agreement falls within the recently adopted EU strategies on the topics of: the European Green Deal, Fit for 55,

the new EU Biodiversity Strategy for 2030.

OBJECTIVES

- Create a European Agency, the "INSTITUTION OF PARKS EEWT"
- Introduce and prepare joint projects within the framework of recovery and resilience funds (Italian and Greek) as well as within other EU structural funds
- Enhancement of reservoirs/water basins
- Design innovative systems for the management and safety of (National) Parks
- Address climate change water/renewable energy/biodiversity conservation; environmentall friendly food systems and safety
- Promote (sustainable) tourism (i.e., intermodal slow mobility systems)
- Climate adaptation and resilient infrastructures
- Creation of digital tools to support these objectives (e.g., an integrated applicatio platform to protect and promote cultural and tourist sites)
- Establish a European Center for Environmental and Digital Education (innovative training and capacity building).

HABI.LAND.WATER - MOLDAVIA

2023 collaborated the In we on HABI.LAND.WATER project ("Habitat and landscape, water and forests, mirror management between Italy and Moldova"), by the CEI, Central Europe financed Initiative of Trieste, the regional cooperation forum in Central Europe and eastern.

The project involves institutions of the Republic of Moldova and Italian associations and bodies, which operate in the field of environmental protection, natural heritage, protect and enhance the water resource and forests.

The aim of the project is to promote connectivity and diversity through some of the areas of intervention that belong to the CEI: good governance, economic growth, environmental protection, intercultural cooperation and scientific cooperation/education and training.

Thank you