The contribution of Regional Basin Authorities to water governance

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**Regional Basin Authority Features**

- Smaller territorial extent
- Strong connections with population and local institutions
- Integral basin unit preservation
- Widespread presence on regional territory
- Independence, easy management, operation effectiveness
- Different frameworks and organizations may lead to positive results when Authorities face each other in a collaborative process to evaluate planning and management tools efficiency

**Where do these features come from?**

Regional Basin Authority autonomy arises from the fact that Authorities are organized by Regional Laws, with different levels of independence. This legislative ability is therefore a strong tool to allow Authorities actions within the territorial jurisdiction.
Regional Basin Authorities autonomy

Regional Basin Authority of Friuli Venezia Giulia, particularly, in the framework of a Special Statute Region, works in a very autonomous way.

Because of the many features and different management needs encompassed into the boundaries of the territorial jurisdiction, it is necessary to differentiate activities and approaches to answer to main topics.

There is a demand for work in a strictly international co-operation, because of the presence of two across-the-border basins, as the Slizza basin, that is part of Danube international basin, and the Timavo river, along the border between Italy e Slovenia.

There is also great attention posed toward Grado and Marano lagoon ecosystem protection and restoration, the second in order of importance in Italy. This system is characterized by a complex and sensitive environment, hence it must be safeguarded and it represent a major goal of autonomous management.
The main tool for a good governance of territorial jurisdiction is the basin plan. The basin plan is the major planning act drawn up by Basin Authority for soil protection, water defence and natural and human environment preservation. This can therefore improve soil and water management, land use planning, constrains or features for future development, to achieve a high degree of safety for people and activities against flood events, and a good status for soil and water.

It is also important to work on efforts to preserve water resources, especially within the high variable scenario of climate change. This implies that Authorities direct actions and purposes toward water saving, and sustainable use of resources in every field, as civil consumption, agriculture and industry.
Public involvement and participation

Today, public acceptance on basin plans adoption and sharing of strategic goals about water and land use, are necessarily dependent on population, local institutions, industrial, business and agricultural associations participation in the decision process.

This represents also one of the major topics introduced by the Water Framework Directive 2000/60.

An active and positive participation in the decision processes can be obtained only if it is possible to create and spread appropriate knowledge, conscience and culture about water related issues.
Public involvement and participation

A strong effort in communication and awareness actions is then required. Often, a good starting point is represented by education activities in schools and with young people. One useful strategy can be based on use of public information campaigns in a way that could be effective and easy to deal with people activities.

Many Authorities are currently involved in projects, actions and programs to improve knowledge and participation both for single people, and for communities.

That’s why it is actual so important to face problems and issues both with technical tools and scientific methodologies and by using communication and education programs.
Urban development and hydrologic cycle consequences: What are Regional Basin Authorities doing?

Urban development, increasing in cities extent, construction activities and water resources consumption have many serious consequences on hydrologic cycle preservation and sustainability.

To demonstrate how urban development can alter natural processes and water cycle, we can consider the following example.

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<th>URBAN SOIL</th>
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- **AREA**: 1 km x 1 km = one million square meters
- **AVERAGE ANNUAL RAINFALL DEEP**: 1000 millimeters
- **AVERAGE EVAPOTRANSPIRATION RATE**: 50%
- **WATER INFILTRATION AVERAGE LOSSES**: 500 millimeters

**WATER DEFICIT IN GROUNDWATER BODIES**

**LOST VOLUME:**

1 million x 0,5 meters = 500,000 cubic meters/year
Urban development and hydrologic cycle consequences: What are Regional Basin Authorities doing?

This example illustrates which are the consequences of surface imperviousness and water infiltration losses due to urban development, and how much water hydrologic cycle can loose every year.

A shift toward a more rational use of water resources is then necessary especially in urban areas.

Many Basin Authorities are strongly committed to introduce and implement sustainability principles, experimental activities and best practice spreading among population and local institutions.

The most important problem is perhaps related to urban flooding events, urban water pollution and waste of rainwater.

All the world is now moving to give answers to these issues, with planning, regulation, implementation and education campaigns.

Themes like sustainable drainage, reuse of grey water, rainwater harvesting, rainwater infiltration to recharge groundwater in urban areas are to be assessed and implemented.
The framework of water and land governance in Italy

In Italy, organization and structure of water and soil policies and management had been outlined by Law 183/1989.

This law was formulated basically looking to the most advanced international policies and laws in force in other countries.

Taking inspiration from those different experiences led to organize a fundamental multi-level structure made up of three hierarchical Basin Authorities levels as:

• National
• Interregional
• Regional

This framework founds on two basic mainstays:

• a qualified body: the Authority
• a specialized tool: the Plan

This design was acknowledged and implemented in Italy and it demonstrated that this kind of structure has given excellent results.
The reorganization of soil and water protection policies in Italy

Rearrangement principles for soil and water regulation must be implemented in observance of EU Directives.

EU started working in water related issues in a systemic way from 2000, as resulting from the promulgation of the Water Framework Directive.

The WFD focuses two main subjects:

• water quality preservation and protection from water pollution in respect of the diverse water uses

• the introduction of the concept of hydrographic district, as made up by more hydrographic basins. The goal of this new administrative body is to achieve a good quality status for the water bodies of the different basins.

This Directive only represents a part of the more general purpose of water defence, because it actually doesn’t deal with some special water bodies that need particular attention for protection and preservation, as groundwater resources and aquifers.

It also doesn’t handle the issue of flood defence that currently represents one of the most source of damages and diseases in Europe.
The reorganization of soil and water protection policies in Italy

The importance of these topics and the need of a whole assessment of the related issues where subsequently proved by the promulgation of two other essential acts:

• the *Groundwater Directive 2006/118/CE*: to set groundwater quality standards and introduce measures to prevent or limit input of pollutants into aquifers

• the *Directive on Assessment and Management of Flood Risks* recently adopted by European Council.

It must be also consider that the Flood Risks Directive basically *looks more to flood impacts aid and mitigation than to prevention and preparation actions*, and this theme could result in an unsustainable management of floods in the next future.
The adoption of the WFD in Italy

In implementing WFD, Italy structures new organizations to work in soil defence and water protection: the District Basin Authority.

This proposal is currently strongly opposed because of the many changes in the framework it will involve.

The legislative proposal has been now stopped because it tend to twist the current organization that actually operate in a very good way.

Many stakeholders identify the main fault of this proposal in the intent to create a sole Basin Authority that will have territorial jurisdiction on a great unified land, characterized by many and very different situations, needs, and problems.

Instead, the District Basin Authority could have a main role of coordinator body among the diverse Authorities, to encourage and assist experience exchanges and cooperation, without loose and waste capacity and knowledges built up during last years.
The adoption of the WFD in Italy

This will enable to Basin Authorities to continue to work in their good way, to collaborate and to face each other to improve their activities and, as a result, to achieve the goals for soil and water protection and restoration according to the rules of the WFD.

Of course, this organization must deal with the WFD principles, and operate in an effective and modern way to benefit from experiences of the past and work for the future as EU outlined.

THANK YOU FOR YOUR ATTENTION!!!