

Knowledge and governance of the management of phreatic water in El Baix Fluvià

Summary

El Baix Fluvià is the fluvio-deltaic area of the River Fluvià after the strait between Sant Mori and Sant Miquel de Fluvià. This area is made up almost exclusively of alluvial plains: it presents various free aquifers and some superficial confined aquifers, which have led to its agriculture being based on intensive irrigation from wells that mainly exploit the surface aquifer.

The project combines various studies and available information on water problems in L'Armentera, Sant Pere Pescador, Torroella de Fluvià, Ventalló, Viladamat and Vilamacolum, which are the municipalities that make up El Baix Fluvià. These problems are both qualitative and quantitative and are manifested by decreases in both the phreatic level of the water in the area and the quality of the water, mainly due to the intrusion of seawater in the aquifer.

The proposal is to work on redirecting the situation in four aspects:

1. The creation of a Baix Fluvià Water Users Community.
2. The establishment of a stable network to qualitatively and quantitatively control the aquifer.
3. The development of proposals for the collective management of agricultural water from the aquifer.
4. The establishment of a mechanism to inform the public and the users by explaining in real time the qualitative and quantitative state of the water resources in El Baix Fluvià.

Objectives

The project is structured into the following specific objectives:

1. Quantify the decrease in quantity and quality of the aquifer's water resource in the area of El Baix Fluvià.
2. Determine the impact that this loss of quality (especially salinisation) and quantity (reduction of phreatic levels) has on agriculture in El Baix Fluvià.
3. Define a strategy to redress this decrease in quality and quantity by means of water management mechanisms with all the agents that use this resource in the territory.

Conclusions

A decrease in water resources, in terms of both quality and quantity, is one of the outcomes predicted by various studies on climate change throughout the 21st century. A reduction in water resources, along with rising temperatures and rising sea levels (facilitating the salinisation of coastal aquifers), will be the future scenario in the coming decades. To tackle this situation, raising awareness among the public/water users and agreeing a plan of action to combat the deterioration of water as a resource and at the same time work on improving the efficiency of its management are the paths to be followed.

The creation of a new body made up of all the water users to develop actions to combat it, in collaboration with the water authority, is the best means of minimising and reverting the situation. Knowledge of the implications that water has for the development of the economy of El Baix Fluvià, along with the economic and logistic resources at the disposal of the water authority, should enable the development of effective actions to meet the objectives.

Task force leader

Entity: **Fructícola Empordà SL**

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Typology of entity:

Agricultural company

Subject area(s) of application

Landscape/land management

Water management

Geographical area(s) of application

Province(s)

Girona

Region(s)

Alt Empordà

Dissemination of the project (publications, conferences, multimedia...)

Conferences

Project website

More information on the project

Project dates

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