Irrigation associated to Béznar and Rules Dams in Granada, Spain

Project details

Country: Spain
Customer: AQUAMED
Date: in progress
Area of Activity: Water
Main Activity:
Basic project

Drafting of the pipelines project for the Béznar-Rules dam system in Granada.

The area of influence of this project is located in the Costa Tropical of Granada, determined by its exceptional climatic conditions for the production of subtropical fruits (avocado, mango, chirimoyo and medlar) and vegetables. In addition, there is a significant penetration of crops under plastic covering more than 80% of the watered surface.

In this context, the main objective of the work carried out by Prointec is to optimise the management of existing irrigation by drawing up the project for pipelines derived from the Béznar and Rules Dams, which contemplates the joint and optimum use of surface and groundwater on Costa Tropical. To this end, the project defines a new system of integral management, through the implementation of a network of pipelines, to cover the demand generated in the current irrigable area with a guarantee of greater efficiency and reduction of energy consumption improving water resources management and promoting the protection of associated ecosystems.

The proposed piping system will cover the irrigation needs foreseen in the Hydrological Plan. To this end, the project has promoted the role of single irrigation management, as part of the Lower Guadalfeo Irrigation Community.

The essential elements of the irrigation system shall be as follows:

- The Béznar reservoir, which will provide water to the system at level 400, through the Izbor Canal.
- The Rules reservoir on the Guadalfeo River, the operational start-up of which provides the opportunity to implement the new development strategy. This provides water to the system at level 200.

The planned infrastructure distributes water from the reservoirs, on both banks of the Guadalfeo River, through more than 200 km of pipelines, depending on the hydraulic head available.