

## 4. HYDRAULIC HERITAGE

### Introduction

The high water variability and the lack of resources in the Júcar River Basin District has led, during the second half of the 20<sup>th</sup> century, to the construction of a great number of hydraulic infrastructure. This infrastructure expansion was designed to meet the demands for irrigation water as well as regulating resources and distribution to the end consumer and it constitutes an important hydraulic heritage. Examples of this infrastructure include water treatment and reuse facilities, desalination plants, flood prevention or river basin adjustments.

### Reservoirs and small dams

The 27 most important reservoirs of the Júcar River Basin District add a total capacity of water storage of 3,300 hm<sup>3</sup>, with Alarcón, Contreras and Tous in the Júcar River, and Benagéber in the Turia River, being the biggest reservoirs. In addition, there are nearly 1,200 deviation small dams, 850 of which are located in water bodies, which allow the use of surface water resources.

### Main channels and pipelines

In the District there is a total of 95 relevant channels and pipelines in operation which underpin the different distribution systems in order to meet the different existing demands, adding a total of 1,172 kilometres.

### Other infrastructures

In addition, there are several other relevant infrastructures in the District to be considered in the hydrological planning, such as Waste Water Treatment Plants (WWTP) or the desalination plants.

In the scope of the District, the total number of WWTP corresponding to the equivalent agglomerations of over 2,000 inhabitants is 291. Besides, there are 3 desalination plants in operation in Javea, Alicante and Mutxamel, and other 3 under construction in Oropesa, Moncofa and Sagunto.



Main pipelines in the Júcar River Basin District



Image: Tous dam in the Júcar river

The Alarcón dam, built in the 1950's and with a maximum capacity of approximately 1,100 hm<sup>3</sup>, constitutes the biggest dam of the Júcar River Basin District.