

# Authion valley Collective irrigation in the Authion basin



Pumping station on the Loire  
Discharge: 7200 m<sup>3</sup>/h – Delivery height: 7.5 m



Loire – Authion feeder pipe  
3000 m long - 1200 mm dia. FRP

## Country

France

## Client

Entente  
Interdépartementale Maine  
et Loire et Indre et Loire pour  
l'aménagement de la vallée  
de l'Authion

## Date

2003-2007

## Cost of works

€13m

## Sogreah's services

- ▶ Design services and project supervision



Pressure network  
90 km long - 100 to 600 mm dia. - NP 25 bar



Pumping station on the Authion  
Discharge: 3600 m<sup>3</sup>/h  
Delivery height: 165 m



## Characteristics

The network delivers 3600 m<sup>3</sup>/h at a pressure of 17 bar on leaving the pumping station in order to have a minimum pressure of 8.5 bar at each turnout.

Water is pumped from the Loire at a rate of 7200 m<sup>3</sup>/h to supply the Authion.

- ◆ 8 lots
- ◆ 90 km of cast iron pipes with nominal pressure of 25 bar
- ◆ 732 plots crossed
- ◆ 3 km of 1200 mm dia. fibreglass-reinforced polyester (FRP) feeder pipe

- ◆ 2 pumping stations involving use of a micro-tunnel boring machine under the Loire embankment, sheet-piles and diaphragm wall
- ◆ 3 x 1600 kVA transformers
- ◆ 7 x 400 kW pumps

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