

# Assessment of the impact of climate changes on water resources



## Country

Algeria

## Client

Agence Nationale  
des Ressources Hydrauliques

## Date

2006-2008

## Sogreah's services

- ▶ Collection and processing of hydroclimatic data.
- ▶ Probabilistic and statistical analysis of hydroclimatic data series
- ▶ Compared cartography of the annual precipitations before and after the middle of the 1970s
- ▶ Regional analysis of the results of research programmes concerning climate change. Proposal of likely climate change scenarios
- ▶ Extrapolation of hydroclimatic data series according to likely climate change scenarios
- ▶ Determination of the impact of climate changes on water resources: rainfall-discharge transformation; determination of monthly inflow series to reservoirs; calculation of aquifer recharge
- ▶ Contribution to the introduction of a water resources planning and sustainable management scheme



## Description of project

There is less and less fresh water in Algeria whereas demand is growing. The North of Algeria experienced variations in annual rainfall throughout the 20<sup>th</sup> century. This variability, which followed a generally downward

trend, grew worse from the middle of the 1970<sup>s</sup> and had serious impacts on both surface water and groundwater.

The situation is now critical. The aim of the project is to determine the impact of climate changes on the water resources

in order to provide the Ministry with the means to manage them better for the purposes of sustainable development.

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