



Evaluating the demand for water for agricultural use for adaptation to climate change at the subbasin level (AGUAGRADA)

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Given the decrease in water availability for agriculture caused by climate change (CC) in Mediterranean environments, it is necessary to use water efficiently in food production. As stated in the PNACC (National Plan for Adaptation to Climate Change), knowing the water demand for agricultural use before and after adaptation to CC is essential. In turn, for this, it is necessary to optimize the monitoring of the basins. To this end, AGUAGRADA proposes a monitoring and modeling system at the sub-basin scale and scalable to higher order basins, capable of quantifying the water demand for agricultural use under different climate, management scenarios (compatible with the CAP), and socio-economic and economic conditions of policies. The results of present and future water demands are expressed in PNACC indicators since the project aims to contribute directly to its implementation.

The general objective of this project is to develop and apply a method for evaluating water demand for agricultural use applicable at the sub-basin and basin scale before and after adaptation to climate change (CC). To achieve this, the following specific objectives are defined:

- Design an optimal methodology for monitoring water demand for agricultural use applicable at the sub-basin and basin scale using PNACC indicators, replicable and scalable to other regions and even at the national level.
- Co-create with stakeholders/farmers the selection of agricultural practices and CC adaptation measures to optimize water demand for agricultural use at the sub-basin and basin scale and ensure environmental and socio-economic sustainability. Analyze possible incentives for their inclusion in eco-regimes or CAP agri-environmental programs and study the best implementation routes (multidisciplinary approach).
- Analyze water demand for agricultural use in the future without and with climate change adaptation.

The actions as the advances achieved in this project will be explained.

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