



WATER ACCOUNTS

What is SEEAW?

Water is critical and intimately linked with socio-economic development, so it is necessary for countries to move away from sectorial development and management of water resources and to adopt an integrated overall approach to water management.

System of Environmental – Economic Accounting for Water (SEEAW) provides a conceptual framework for organizing the hydrological and economical information in a coherent and consistent manner.

SEEAW was developed with the objective of standardizing concepts and methods in water accounting for organizing economic and hydrological information permitting a consistent analysis of the contribution of water to the economy and the impact of the economy on water resources.

SEEAW consist on a set of standard tables, and it also includes a set of supplementary tables covering information on social aspects.

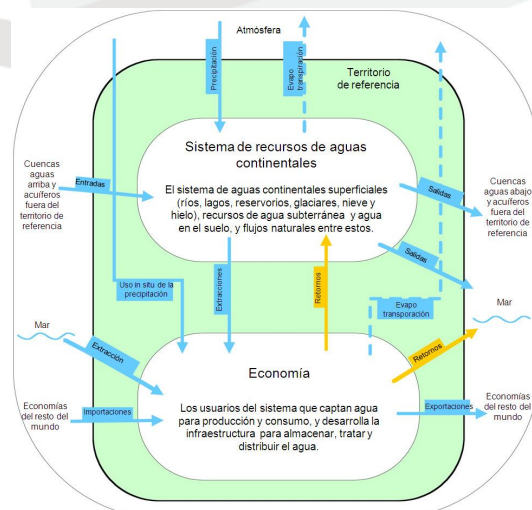
Water resources and their management are closely linked to spatial considerations. Therefore SEEAW takes into account the recommendation that river basin is the internationally recognized unit of reference for *Integrated Water Resource Management* as called for by *Agenda 21* (United Nations, 1992), and that river basin district is the mandatory management unit of the European Water Framework Directive (WFD) (European Parliament and Council, 2000).

SEEAW is an information system that feeds knowledge into decision-making process, assisting policy makers in taking informed decisions on:

- a) *Allocating water resources efficiently.*
- b) *Improving water efficiency.*
- c) *Understanding the impacts of water management on all users.*
- d) *Getting the most value for money from investment in infrastructure.*
- e) *Linking water availability and use.*
- f) *Providing a standardized information system which harmonizes information from different sources, is accepted by the stakeholders and it's used for the derivation of indicators.*
- g) *Getting stakeholders involved in decision-making.*

SEEAW comprises five categories of accounts:

1. **Physical supply and use tables and emission accounts.**
2. **Hybrid and economic accounts.**
3. **Assets accounts.**
4. **Quality accounts.**
5. **Valuation of water resources.**



What is GuaSEEAW?

GuaSEEAW (*System of Economic and Environmental Accounts for Water in Guadiana River Basin*) is a project funded by DG Environment of EC, for SEEAW implementation in Guadiana river basin.

The project has been carried out by a consortium led by SM GEODIM, together with IMIDA and Zeta Amaltea. It counted on Guadiana River Authority's collaboration as final user and Duero River Authority as external observer.

GuaSEEAW had identified the existing data sources both economic and hydrological to complete the water accounts.

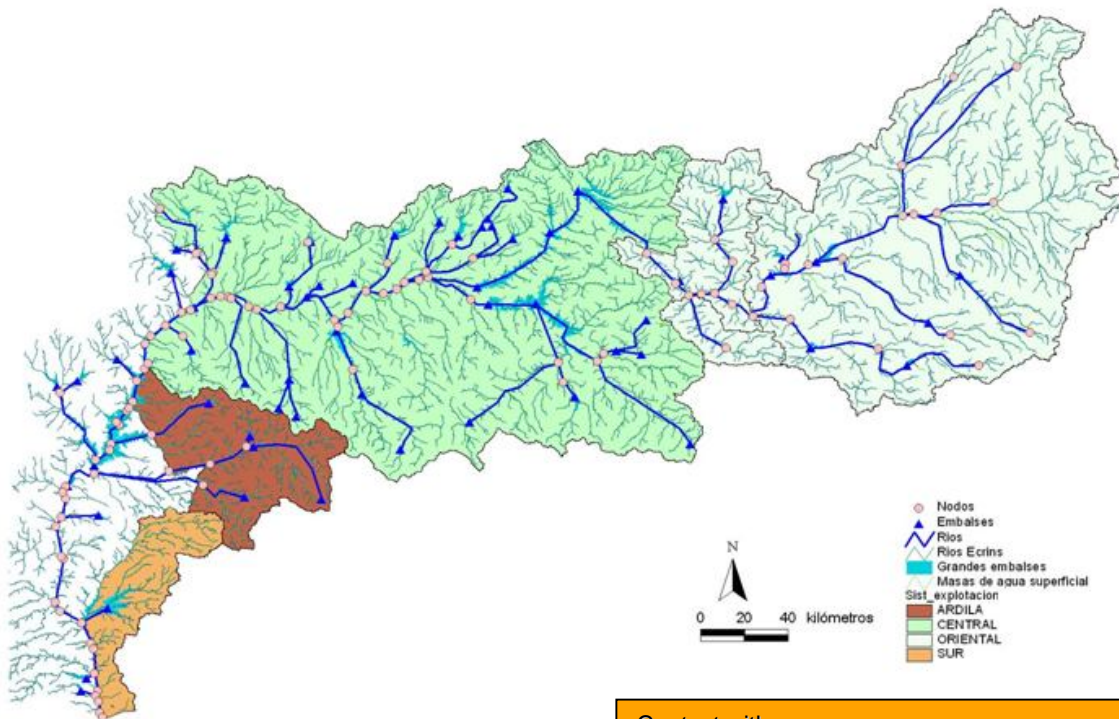
The project has developed a data model allowing the semiautomatic incorporation of economical and hydrographical data into water accounts according to the formats in which data are gathered in Spain and Portugal.

For the integration of economical data from administrative units to hydrographical units, a WebGIS has been developed.

Hydrological data were obtained with the level of temporal (monthly) and spatial (ECRINS segment) disaggregation required, according users needs, by means of a hydrological management model (AQUATOOL).

GuaSEEAW has implemented most of SEEAW tables throughout Guadiana basin, both Spanish and Portuguese areas, facilitating its visualization through the integration into WebGIS www.guaseeaw.eu.

Water accounts allows the estimation of indicators to improve the knowledge and management of the basin, like: water productivity ratios, water reused, relative water stress, importance of groundwater in irrigation, industrial water productivity or water sector share in total public spending.



Hydrological management model based on ECRINS units and exploitation units of the Guadiana river basin.

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