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**HELLENIC AGRICULTURAL ORGANISATION**

- *4 Departments (Athens-Thes/niki)*
- *63 staff members*
- *20 researchers*
- *22 specialised scientists*
- *21 admin & tech*



**SWRI**  
Soil and Water Resources Institute

# Soil and Water Resources Institute Land Reclamation Department Identity



**In 1960's:** Founded as Land Reclamation Extension Service of the Hellenic Ministry of Agriculture.

**In 1989:** Transformed to Institute under the umbrella of the National Agricultural Research Foundation (NAGREF) – its only water management related unit.

**In 2011:** Became part of the General Directorate of Agricultural Research – Hellenic Agricultural Organization, maintaining its integrity.

**In 2014:** Merged as Department in the Soil and Water Resources Institute



# Soil and Water Resources Institute Land Reclamation Department Identity

**Annual training and educational schemes in collaboration with Universities  
Attracts projects: EC, National (structural-R&D), GO's-NGO's, private sector  
Member of the National Water Council**

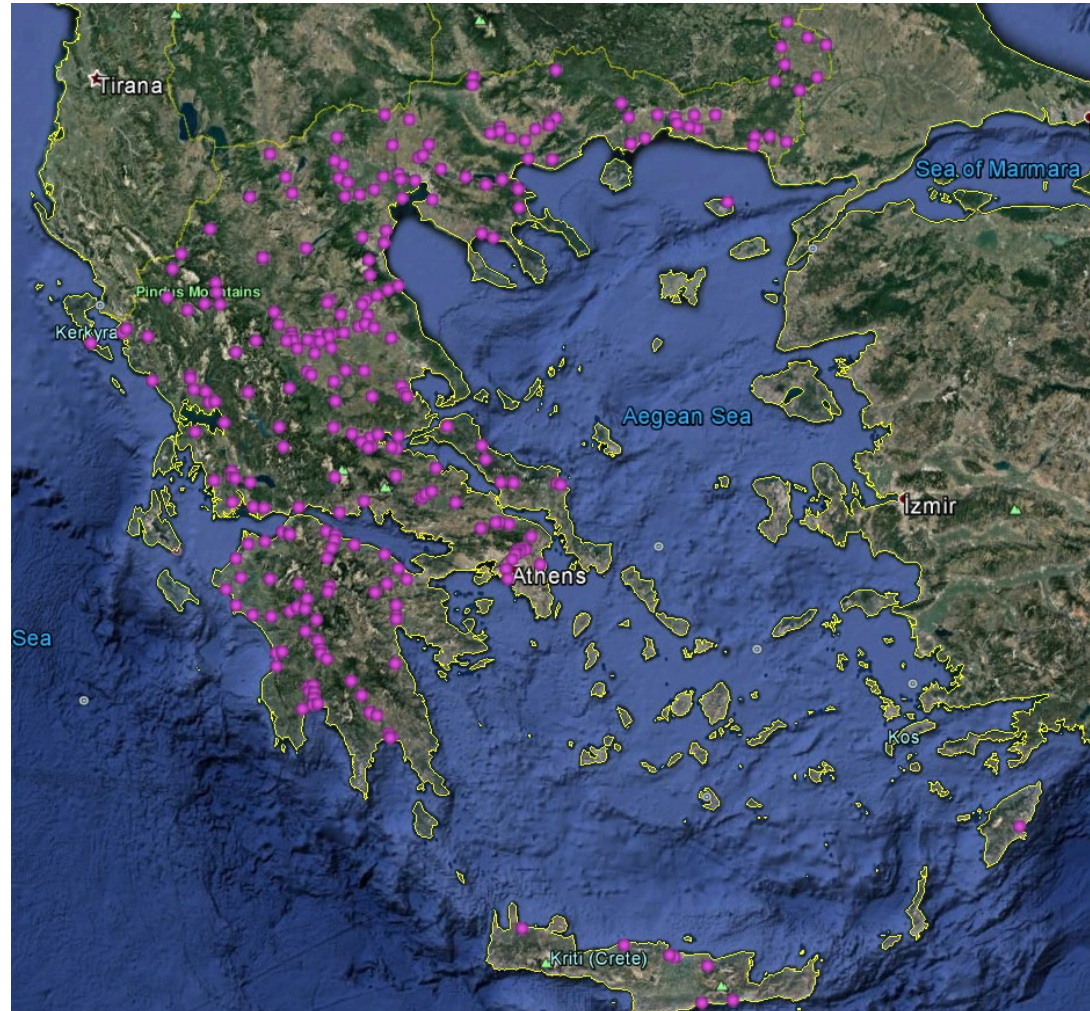
**Key partner for the operation of the National Water Resources Monitoring Grid  
Key advisor to the implementation of the Nitrates Directive in Greece and abroad  
Developer of industry standard & policy making methodologies  
(monitoring-assessment-characterisation-management of water resources)**

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- **Multi-national agrochemical product companies (field studies-assessments)**
  - **Water Utility companies (management of sludge & treated domestic effluent)**
  - **Greek, European, Turkish consultancy companies (environmental management)**
  - **Metals-metalloids/phosphate fertiliser producing companies (by-product management)**
  - **Ministry of the Environment-Regional Authorities (legislative acts compilation: treated domestic effluent, geothermal energy use)**
  - **Irrigation Organisations-farmers cooperatives (water-soil management, disputes' auditing on water and crop yield claims)**

# River Water Quality Monitoring

## Network and Measurements

- The monitoring network consists of **227 monitoring stations**.
- Monitoring time intervals are variable depending on monitoring station type:
  - 1. Operational monitoring stations:** 4 samples per year both for priority and dangerous substances
  - 2. Surveillance monitoring stations:** 4 samples for priority substances and 2 samples for dangerous substances for the period 2017-2013
  - 3. Non-programmed sampling on demand (pollution incidents)**



# River Water Quantity Monitoring

## Network and Measurements

- The monitoring network consists of **54 monitoring stations**.
- Monitoring is conducted in **monthly basis**.
- On average **648 river discharge measurements** are conducted **annually**.
- **More than 5500 river discharge measurements** are expected to have been made **till 2023**.
- Calibrated river **discharge/stage curves** are expected to have been produced for all rivers
- Initial phase of **automated telemetric monitoring stations** will commence



# Greek Implementation of WFD

## WFD and water resources monitoring

- **Greece incorporated the WFD** in the national legislation **at 2003** (Law 3199/2003).
- The **implementation was slow and troublesome** for the Greek government **until 2011** because of **implementation delays and gaps**.
- The **Water Resources Monitoring Network** was established at **2011**, according to which **Soil & Water Resources Institute** had the responsibility of **river water monitoring** (quantitative and qualitative) in support of the **RBMPs**.
- The network started its operation at **2012** and projected to operate under the current funding scheme until **2023 (almost 7,500,000 €)**.
- **The WFD RBMPs not fully applied**, yet already the 1<sup>st</sup> revision almost ends. The Greek State is preparing to reach 2<sup>nd</sup> revision of RBMPs without any managements results. Only horizontal measures applied (administrative)
- Monitoring network still suffers from lack of data, many WB status is characterized as “unknown”.

## Problems and Reviews

- **The Monitoring Subcontracted Institutions have started the last year to roll with monitoring actions for the second period, not having the ability to expand or change the network stations according to the real needs.**
- **Monitoring stations that need to be changed, is very difficult to get a new legal document for the revision of monitoring network**
- **At the moment, the few implemented management measures are not connected with their impact to the ecological status or to their impact to the water quantity of WBs.**
- **Still there are different authorities that manage the water quantity and/or the river quality in each river basin**
- **All monitoring data are still not available online**



## Expected Results

- **Compliance** with the requirements of **WFD implementation**.
- **Development** of a **database** with quantitative and qualitative data, collected in a well-organized framework in order to **support the assessment of chemical, quantity and ecological status** of river waters and **identify relevant problems** for the next reporting period.
- **Support** for the **design and implementation of** measures and actions that will contribute to **maintaining or achieving “good status”** and ultimately **surface water management sustainability**. Also evaluate the efficacy of the measures and their implementation.
- **Update and optimization** of the existing **monitoring network** based on hydrologic/hydromorphic characteristics and pressure analysis at **river basin level**.
- Introducing of **state-of-the-art methodologies** in **river flow monitoring**.



**Kiitos huomiostasi!!!**  
**Thank you for your attention...**  
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