



Union pour la Méditerranée  
Union for the Mediterranean  
الإتحاد من أجل المتوسط



INSTITUT MÉDITERRANÉEN  
DE L'EAU IME



SEMIDE  
EMWIS

## Mediterranean Water Knowledge Platform



# NATIONAL WATER INFORMATION SYSTEM

## (NWIS)

Presented by

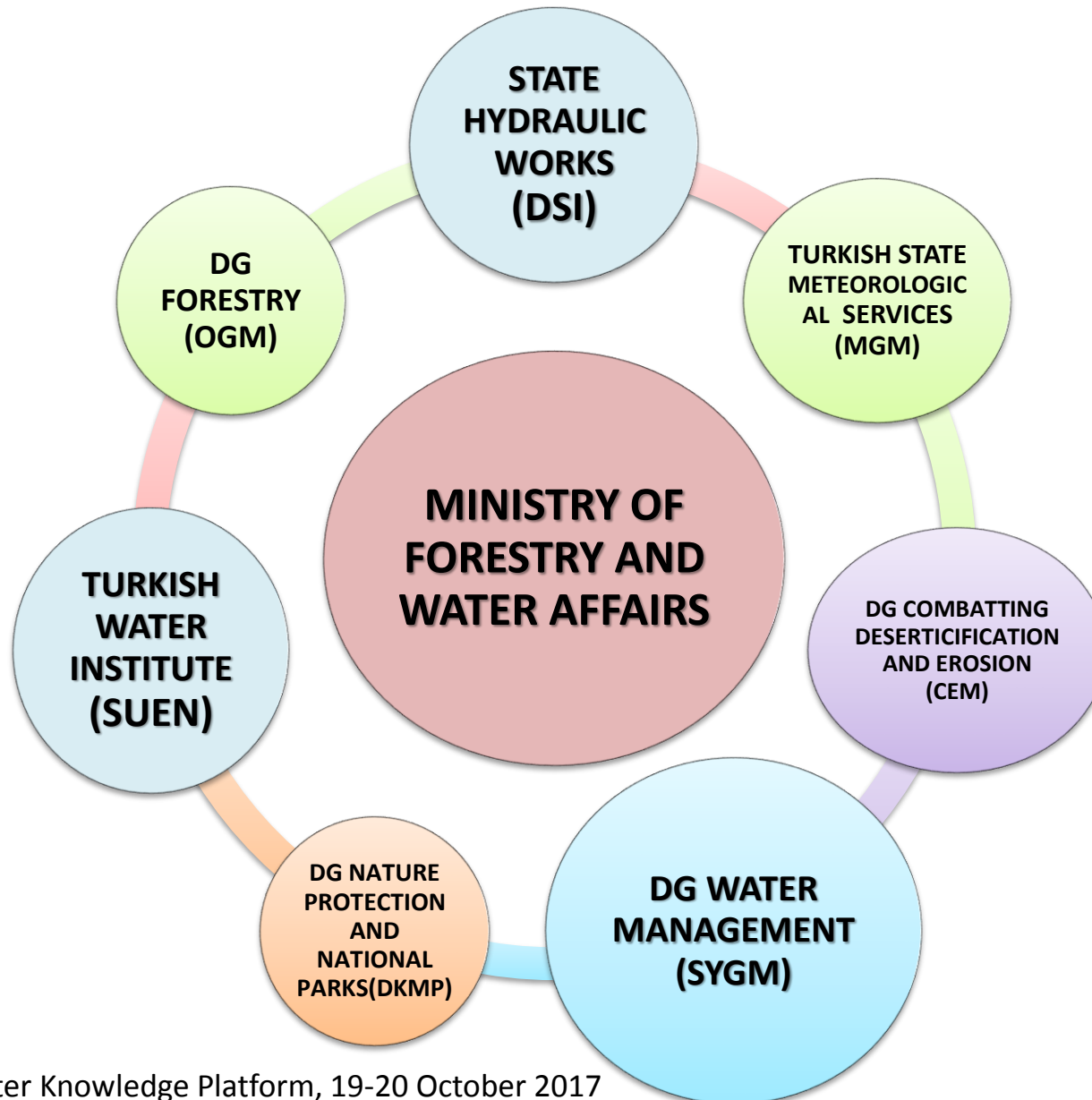
**Alper UĞURLUOĞLU,**  
**Water Affairs Expert,**

**MINISTRY OF FORESTRY & WATER AFFAIRS**  
**GENERAL DIRECTORATE OF WATER MANAGEMENT**

19-20 October 2017, Barcelona, Spain

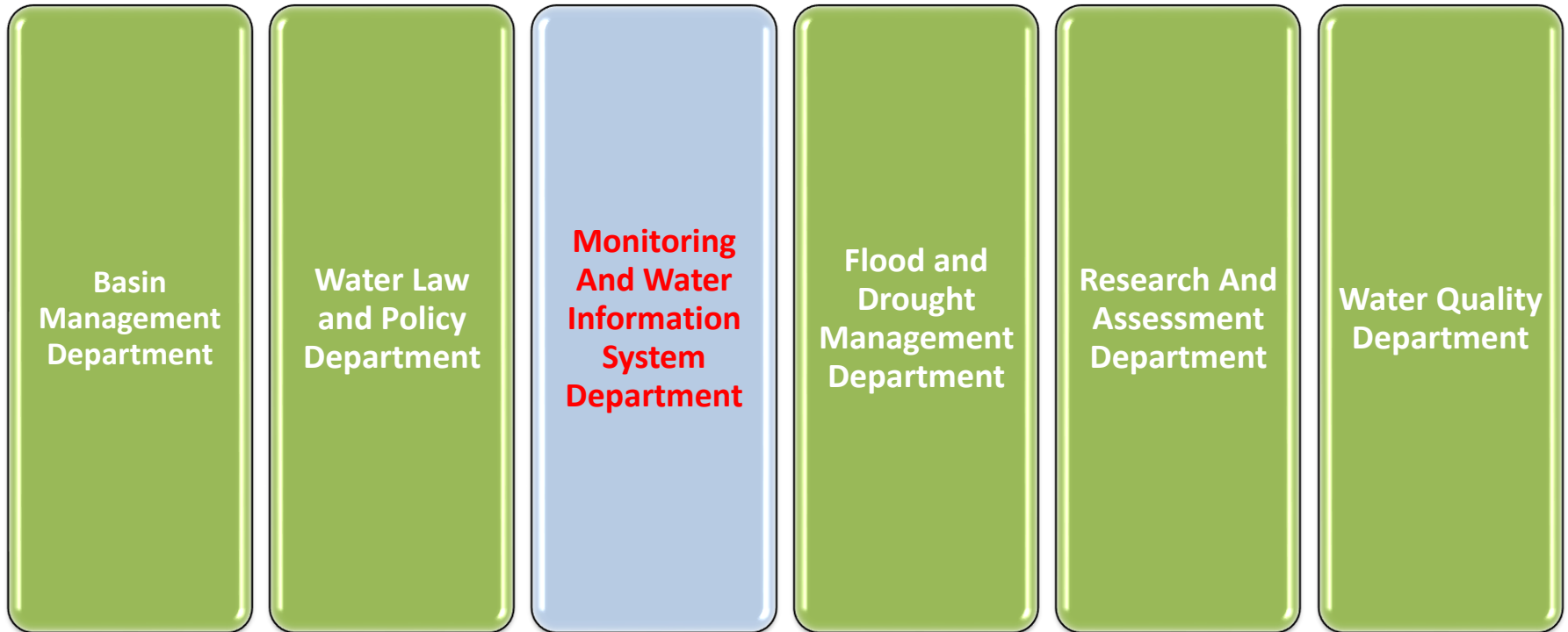


# Organization Schema of Ministry



# Organization Schema of DG of Water Management

## General Directorate of Water Management

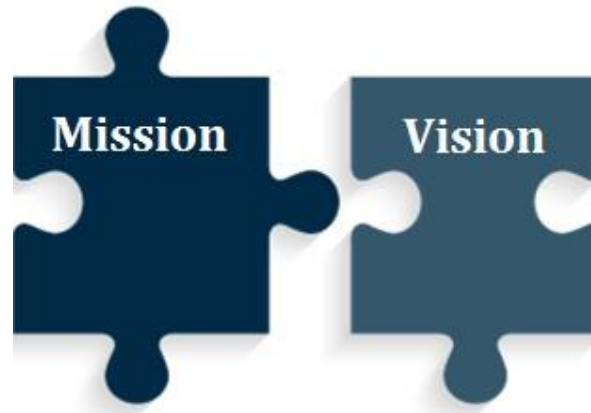


# National Water Information System (NWIS) Vision and Mission

Integrated Assessment of water  
on the basin basis by  
considering all components  
(quantity, quality use, flood,  
drought)

To provide decision support  
in the establishment of the  
National Water Policy,

Ensure safe and effective  
sharing of content and  
standards that will meet the  
needs of all users on both  
national and international  
platforms



Contributing to the e-  
transformation studies of our  
country

Having a water information  
system that can be proper for  
technological developments  
shown as an example in the  
world

# NWIS Project Plan



**2013 - 2017**

## Advanced Development

- Maintenance and Guaranty
- Sustainability

**2018**

## II phase (planning)

- Dissemination
- Sustainability of system
- 2018-2019

**2015**

**2017**

## Feasibility Study

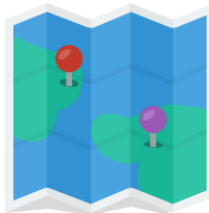
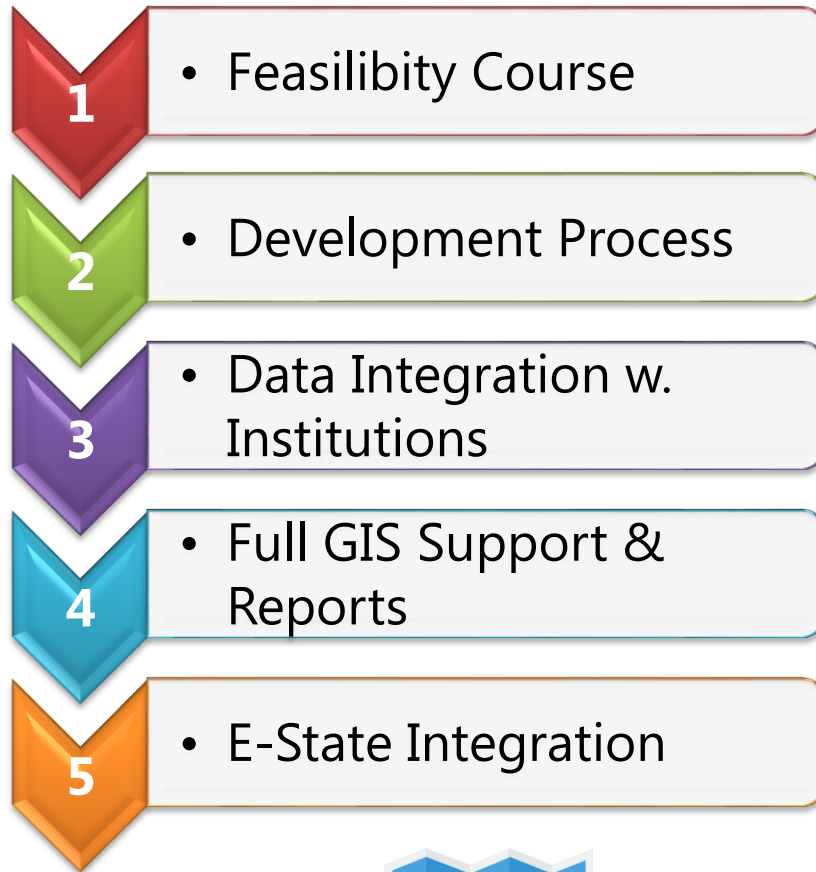
- Legislation
- Strategy and route map

## I Phase (development)

- Analysis and Preliminary Design Phase
- Design and Development
- Integration with other institution

**2013**

# NWIS Phases & GIS Standards



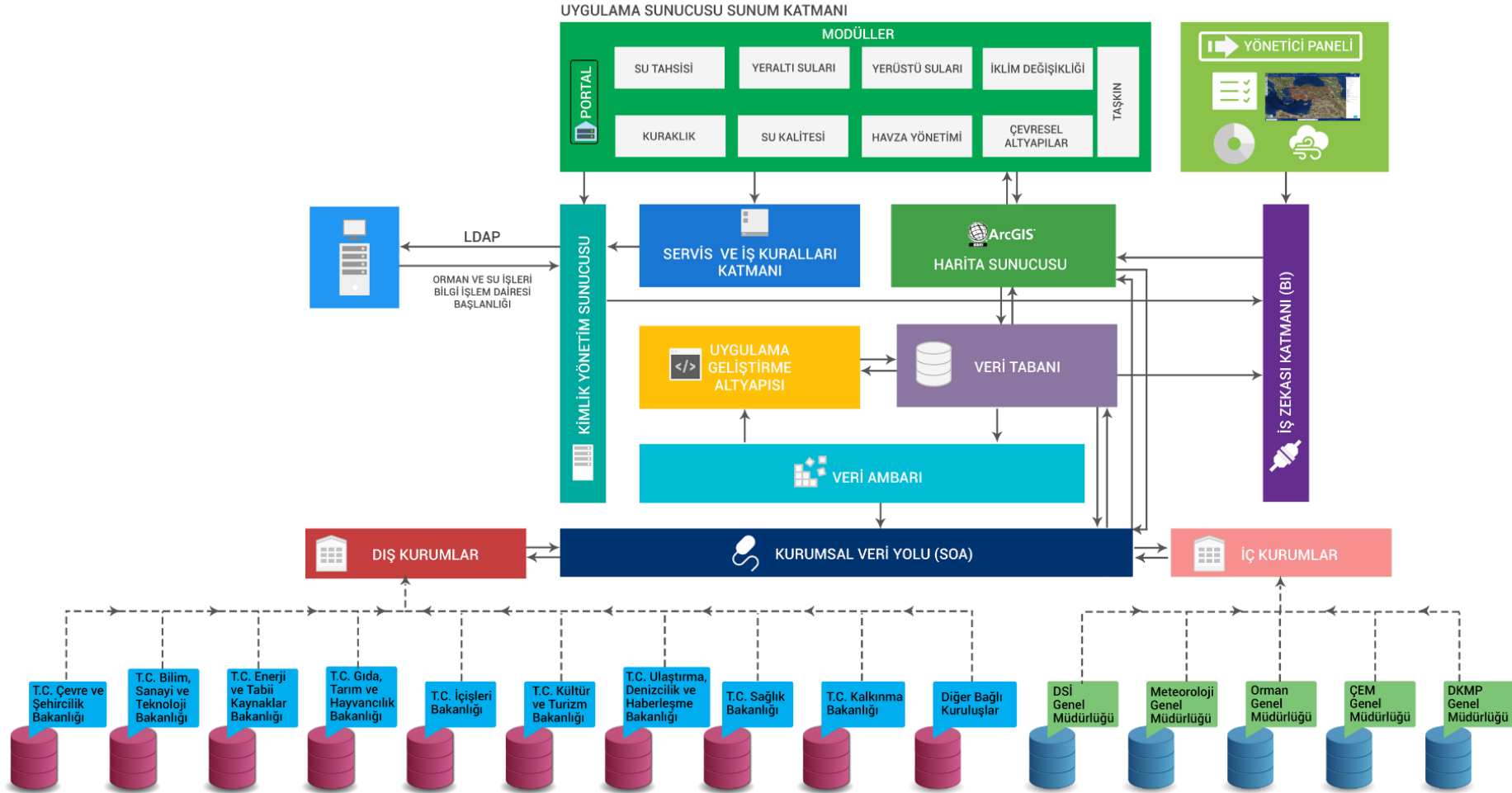
✓ National Water Information System will be established in line with the OGC (WMS, WFS, etc.) and INSPIRE Standards → **TUNGIS**

✓ "Environment Chapter" opened for negotiations on 21.12.2009 in the **harmonization of the EU Water Framework Directive (WFD)**.

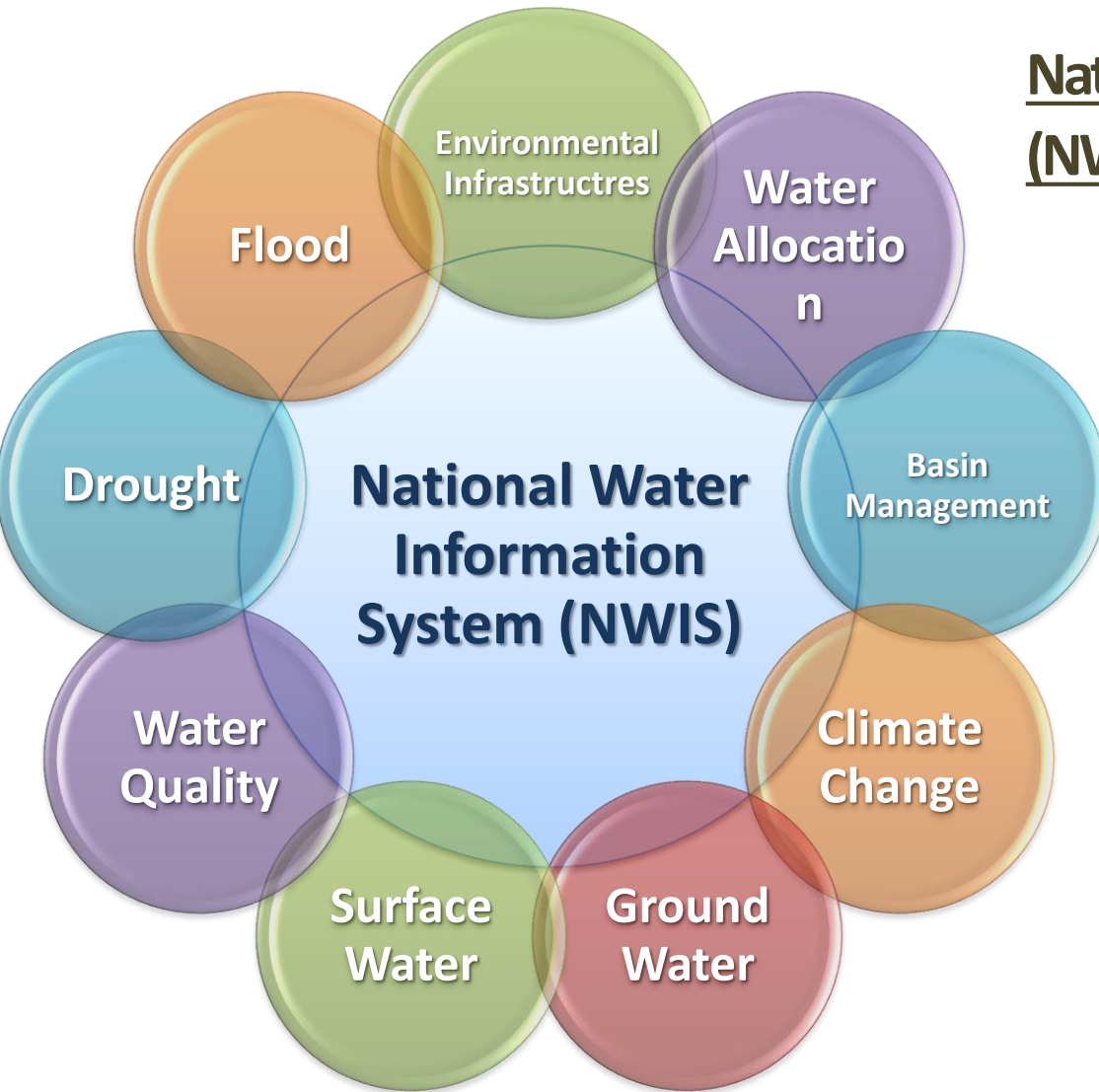
✓ According to WFD, member states/countries have to achieve the goal of reaching a good situation for all waters and provide the legal framework for a number of actions.

➤ WFD requests most of the information in a Geographical Information System (GIS) format

# NWIS Architecture



# NWIS Module Plan



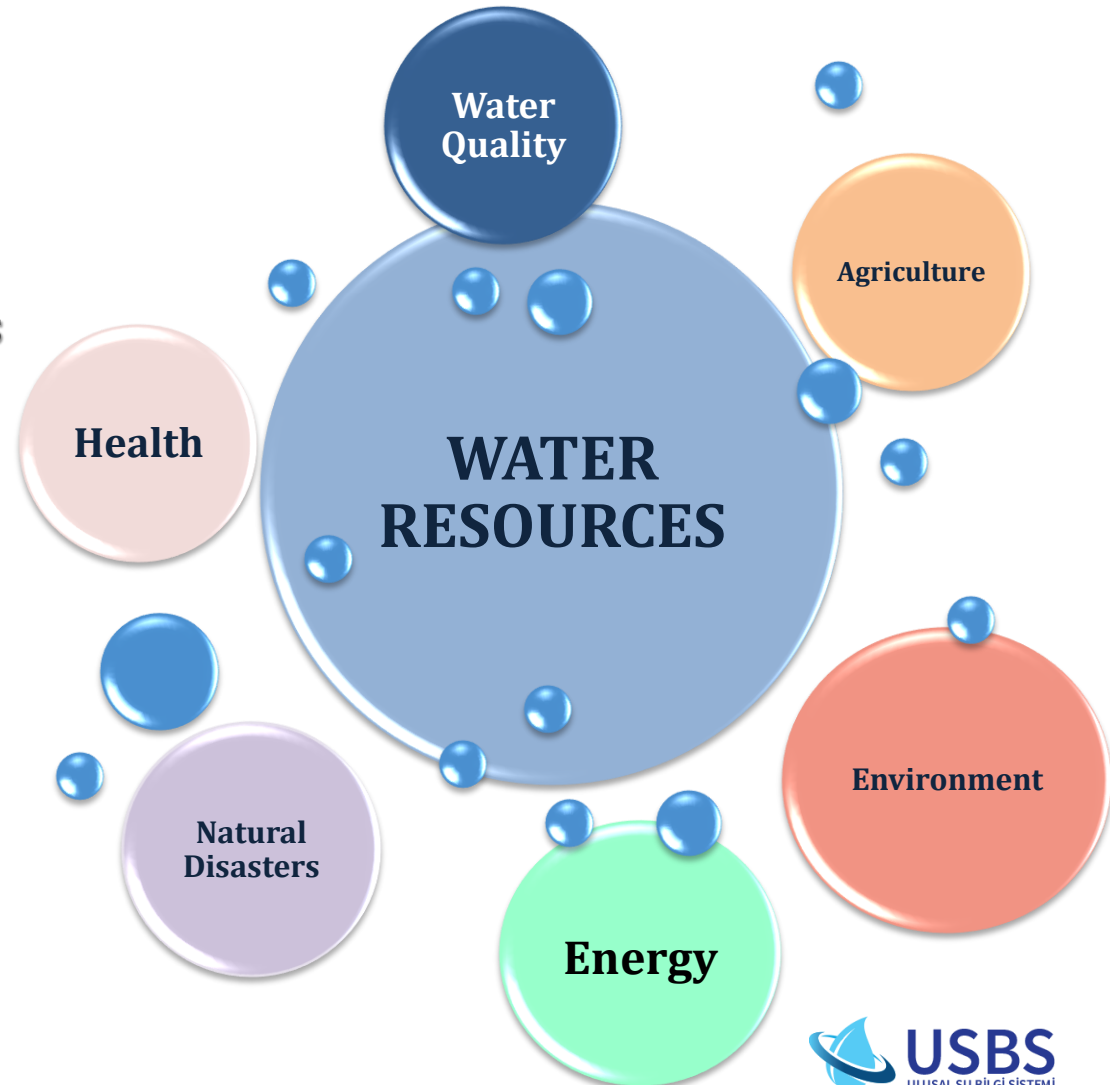
## National Water Information System (NWIS) Modules aim:

- To make an inventory about **quality, quantity and allocation of water sources** with basin-based approach and a contribution to national water management with scientific approach to environmental effects from water usage.

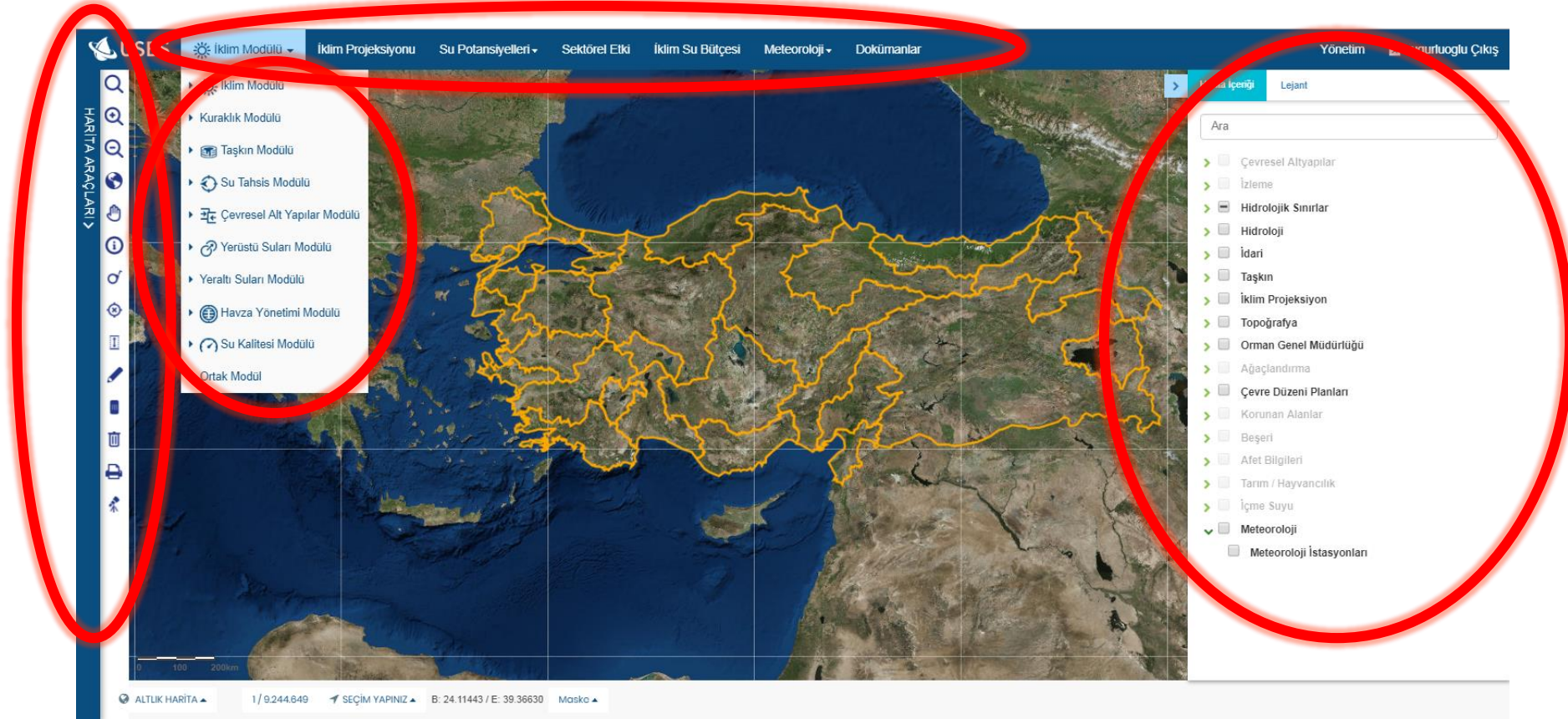


# NWIS Content Coverage

- Water quality and quantity**
- Ecologic Life**
- Basin Management**
- Allocations, loss and leakages**
- Energy and Industrial Sector**
- Natural Disasters**
- Climate Change**



# NWIS Web Interface



# NWIS Management Panel

USBS

UYGULAMAYA GERİDÖN

Menü Yönetimi <

Katman Yönetimi >

Esri Servisleri

Katman ve Grup Yönetimi

Veri Katmanları Yönetimi

Portal Yönetimi <

Taxa Yönetimi <

HDRM Anket Yönetimi <

Kimyasal Referans Yönetimi <

+Katman Grubu Ekle

+Katman Ekle

- Çevresel Altyapılar

- Sulama Hizmetleri

Sulama Alanı

Ana Kanallar

Sanayi Tesisleri

Organize Sanayi Bölgesi

Deşarj Noktaları

Atıksu Arıtma Tesisi

Katı Atık Depolama Alanları

İçme Suyu Arıtma Tesisi

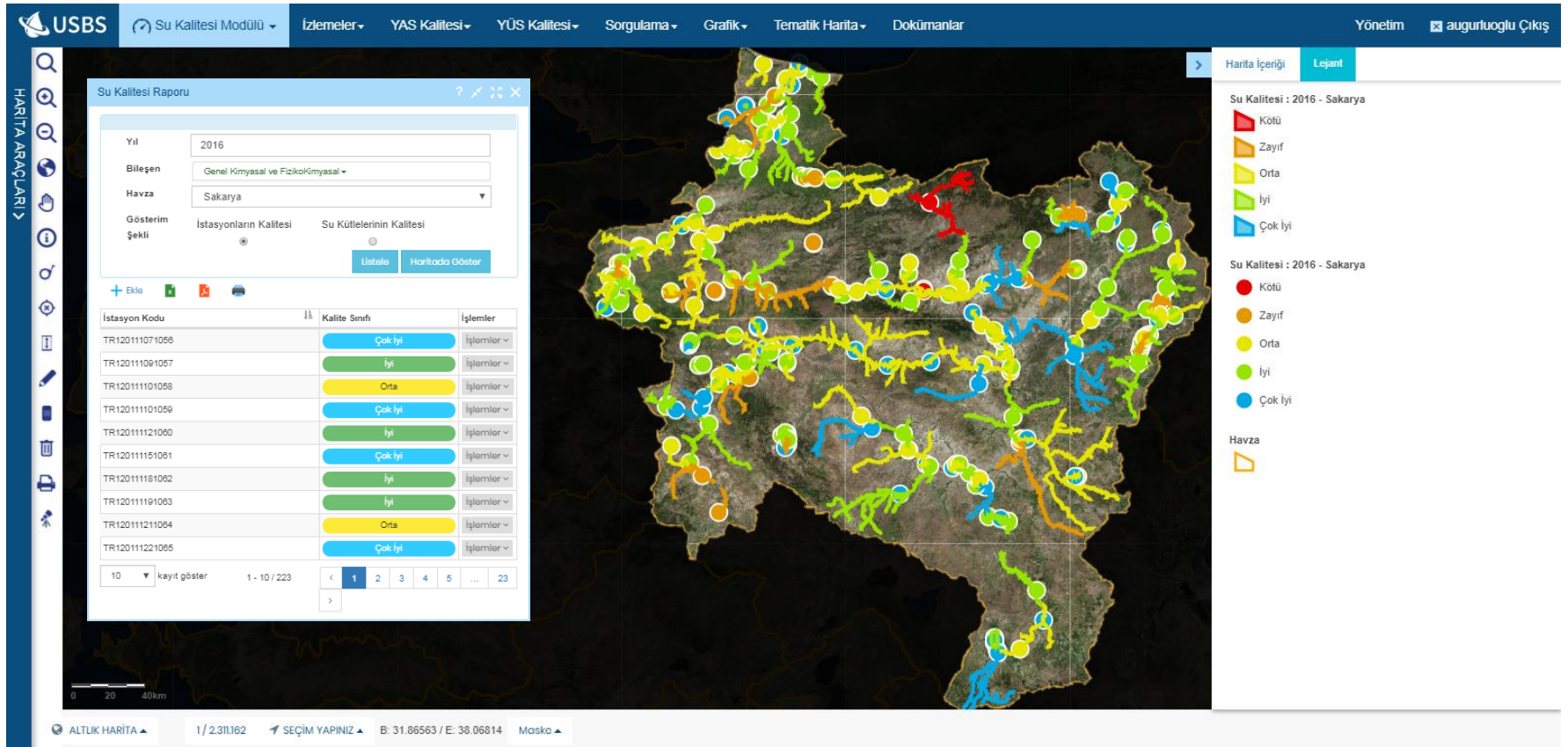
+ izleme

# NWIS Data Visualization

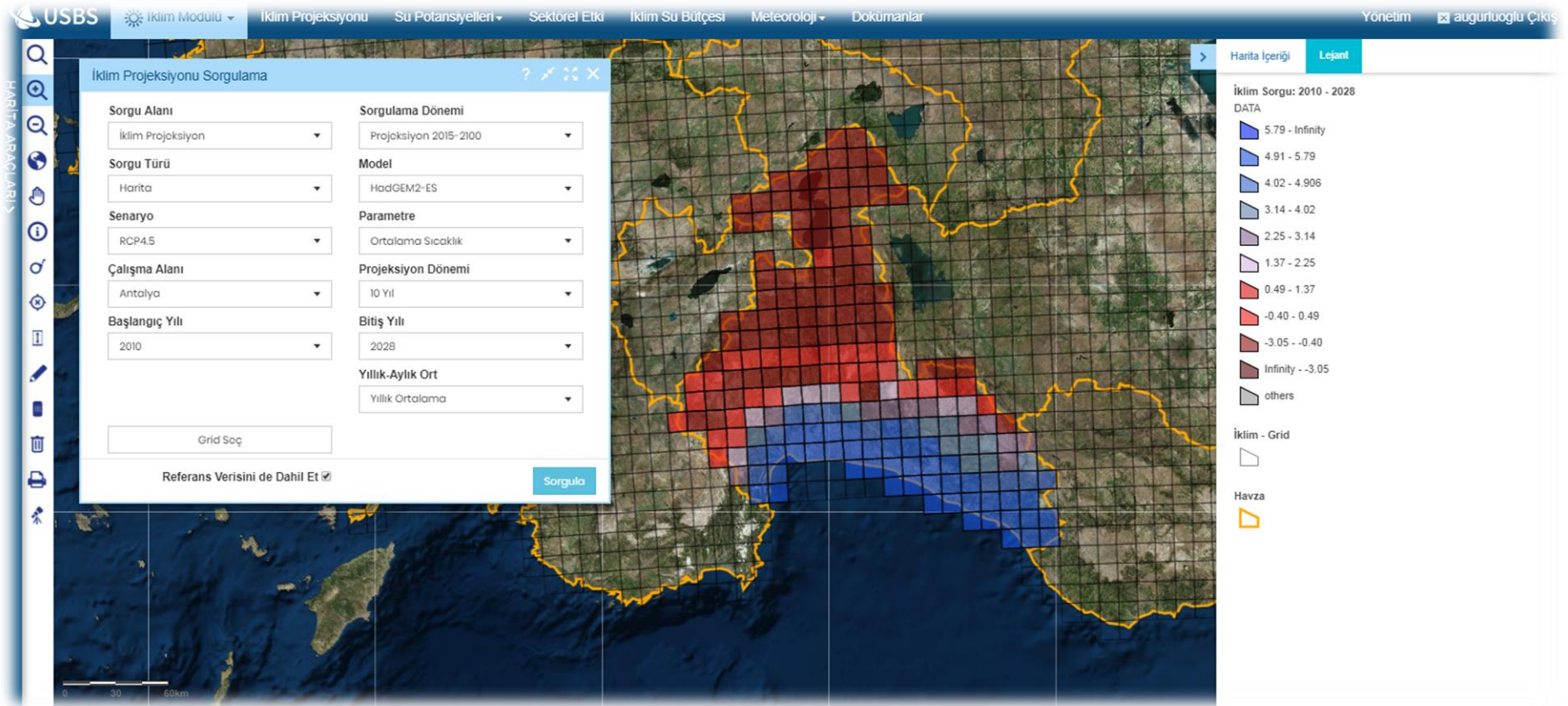




# NWIS Data Update



# NWIS Data Analysis





# Integration

**USBS** Su Kalitesi Modülü İzlemeler YAS Kalitesi YÜS Kalitesi Sorgulama Grafik Tematik Harita Dokümanlar Yönetim augurluolu Çıkış

**HARITA ARAÇLARI**

**Katman Seçimi**

Katman İsmi
Antalya-Burdur-Isparta
Corine 2012
Havza

**Harita İçeriği** **Lejant**

- GÖL - GÖLET
- DİĞER ARAZI KULLANIM ALANLARI (ALAN)
- 2B ORMAN ALANLARI
- YERLEŞİM ALANLARI
  - KENTSEL GELİŞME ALANI
  - KENTSEL YERLEŞİK ALAN
  - KIRSAL YERLEŞME ALANI
- ENERJİ - SULAMA (ALAN)
  - DOĞALGAZ ÇEVİRİM İSTASYONU
  - SULAMA ALANI
  - YERALTI SU KAYNAKLARI
- HAVAYOLLARI (ALAN)
  - HAVAALANI / HAVA LİMANI
- DOĞAL KARAKTERİ KORUNACAK ALANLAR
  - KAYALIK TAŞLIK ALAN
  - MAKLIK - FUNDALIK-ÇALILIK ALAN
  - PLAJ - KUMSAL
  - SAZLIK - BATAKLIK ALAN
- ORMAN VE AĞAÇLANDIRILACAK ALANLAR
  - AĞAÇLANDIRILACAK ALAN
  - ORMAN ALANI
- TARIMSAL ARAZI KULLANIMLARI
  - BÖLGEYE ÖZEL ÜRÜN ALANI (Bağcılık, Çay, Fındık vb.)
  - TARIM ARAZİSİ
  - ÇAYIR - MERA
  - ORTÜ ALTİ TARIM ARAZİSİ

Corine 2012  
Corine 2012

- Orman ve Yan Doğal Alanlar
- Su Kütleleri
- Sulak Alanlar
- Tarimsal Alanlar
- Yapay Bölgeler

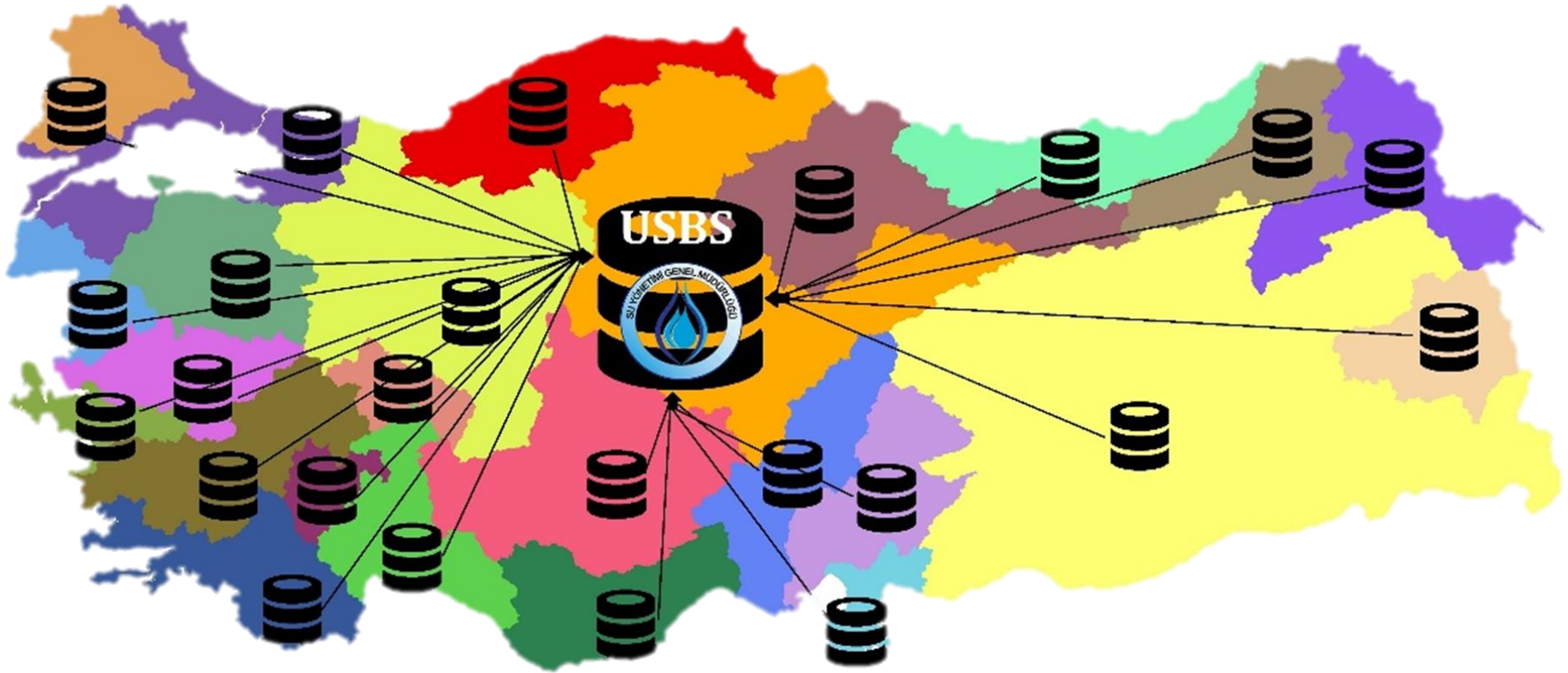
ALTILIK HARITA 1/144.448 SEÇİM YAPINIZ B: 31.35771 / E: 36.72781 Maske

# Spatial Analysis





# NWIS





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**USBS**  
ULUSAL SU BİLGİ SİSTEMİ

**General Directorate of Water Management**  
**Water Information System Section**  
Water Affairs Expert  
**Alper UĞURLUOĞLU**



With the support of the French Ministry for Environment, Foundation of Prince Albert 2 of Monaco, UfM Secretariat



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