



**REPUBLIC OF TURKEY
MINISTRY OF FORESTRY AND WATER AFFAIRS
Directorate General for Water Management**

BASIN MANAGEMENT IN TURKEY

NERMİN ÇİÇEK

**HEAD OF THE BASIN MANAGEMENT AND
PLANNING DEPARTMENT**

17 OCTOBER 2012

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- ❖ Potential of Water Resources
- ❖ Legal and Institutional Structure
- ❖ European Union works
- ❖ Basin Protection Action Plan (NATIONAL)
- ❖ Water Framework Directive and Basin
 - Based Studies
- ❖ Conclusions

POTENTIAL OF WATER RESOURCES

GENERAL INFORMATION ABOUT TURKEY

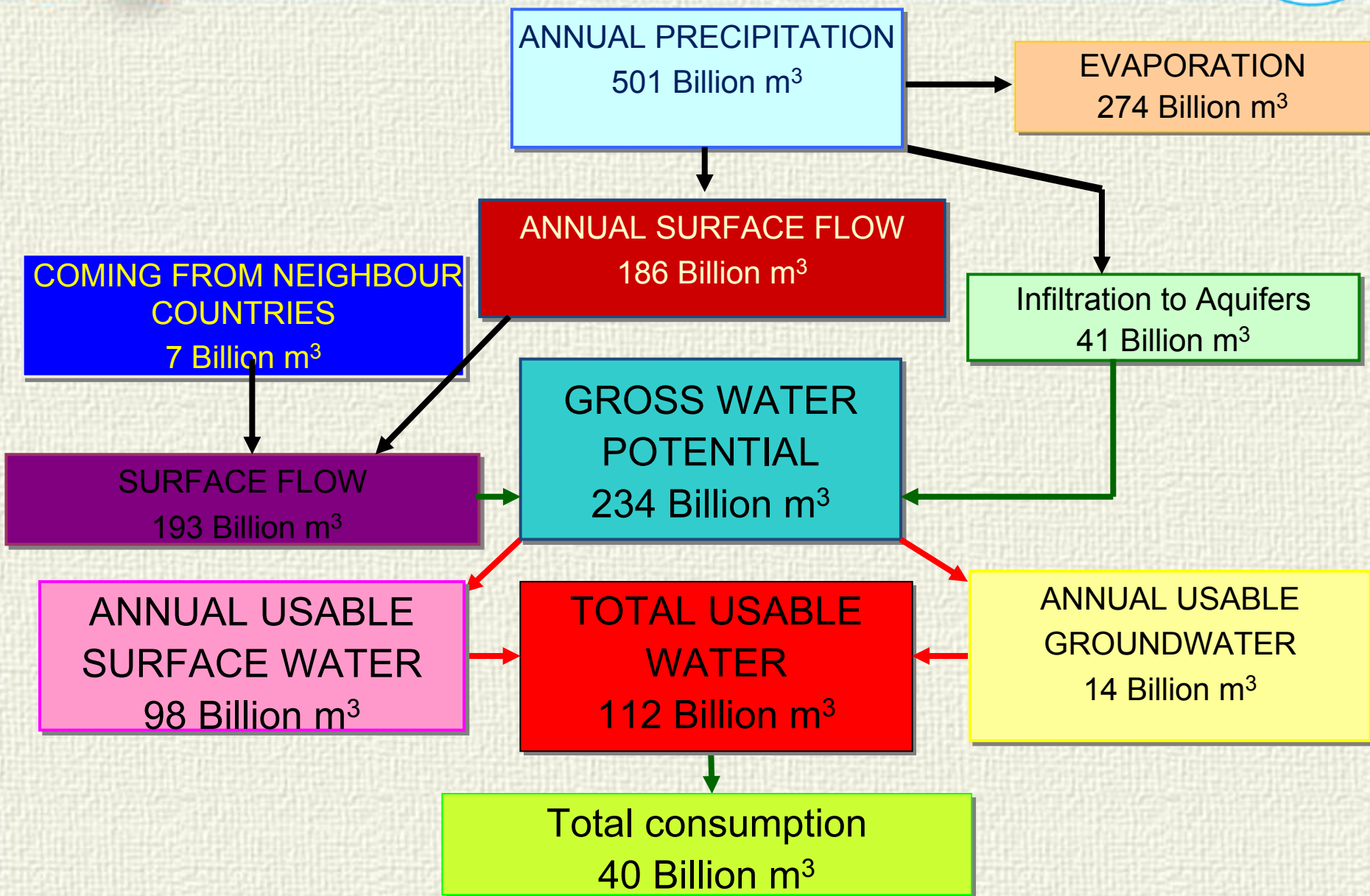
- ✓ Surface area ~ 784,000 km²
- ✓ Population ~ 74,000,000 people
- ✓ GDP ~ \$ 700,000



- ✓ 7 geographical region
- ✓ 81 provinces
- ✓ Capital City → Ankara

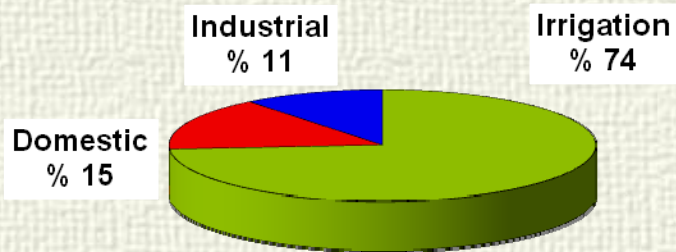


WATER POTENTIAL IN TURKEY



WATER SUPPLY AND CONSUMPTION IN TURKEY

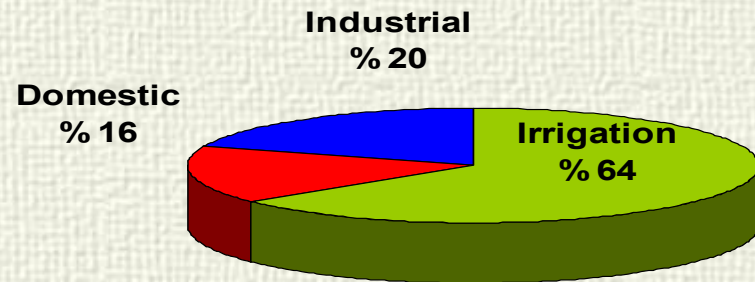
Year 2010



Irrigation : 32 billion m³ (%74)
Domestic : 6 billion m³ (%15)
Industrial : 5 billion m³ (%11)

TOTAL: 43 billion m³

Year 2023

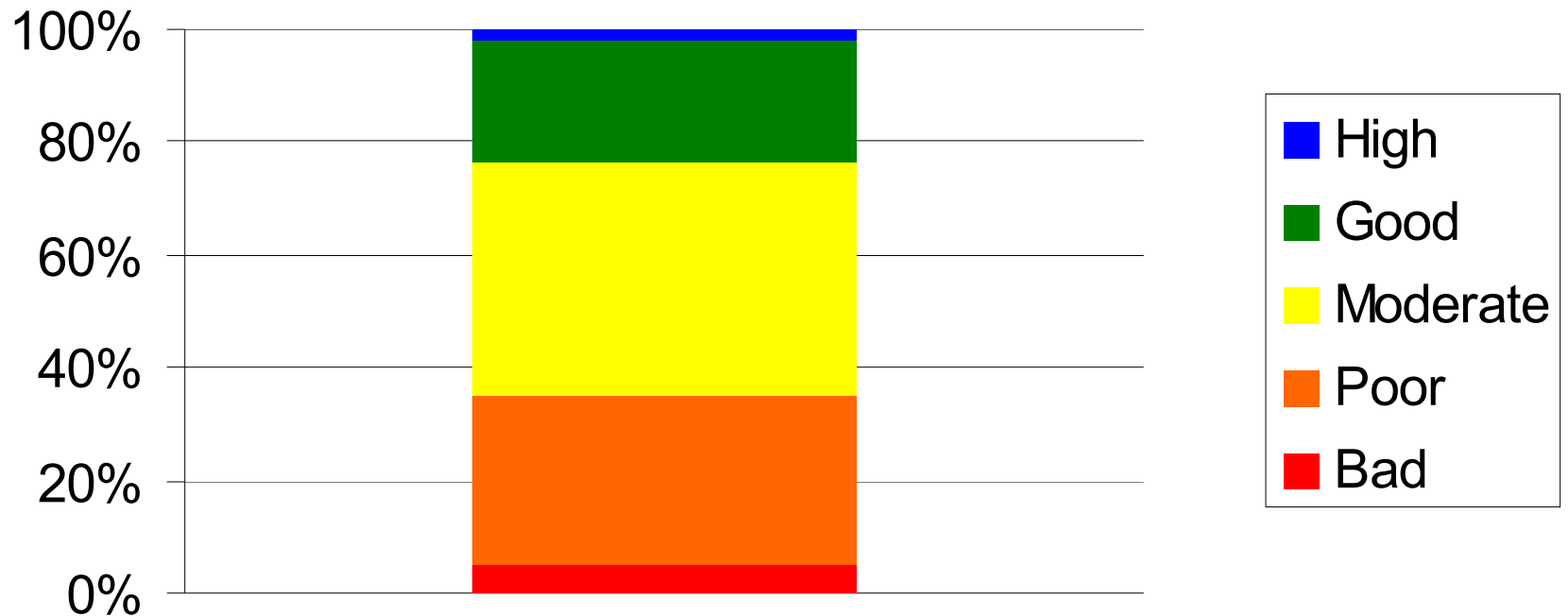


Irrigation : 72 billion m³ (%64)
Domestic : 18 billion m³ (%16)
Industrial : 22 billion m³ (%20)

TOTAL : 112 billion m³

TURKEY'S WATER CHALLENGE

Estimated national water body status, 2009



TURKEY AS EU CANDIDATE MEMBER

During the presidency of Sweden beginning of negotiations for Environment - Chapter 27 officially declared at the "Intergovernmental Accession Conference" which took place in Brussel, December 21st, 2009.



CLOSING BENCHMARKS

Two closing benchmarks for water:

- Transposition of WFD
- River basin management plans for 25 river basins

LEGAL AND INSTITUTIONAL STRUCTURE



HARMONIZATION OF WFD



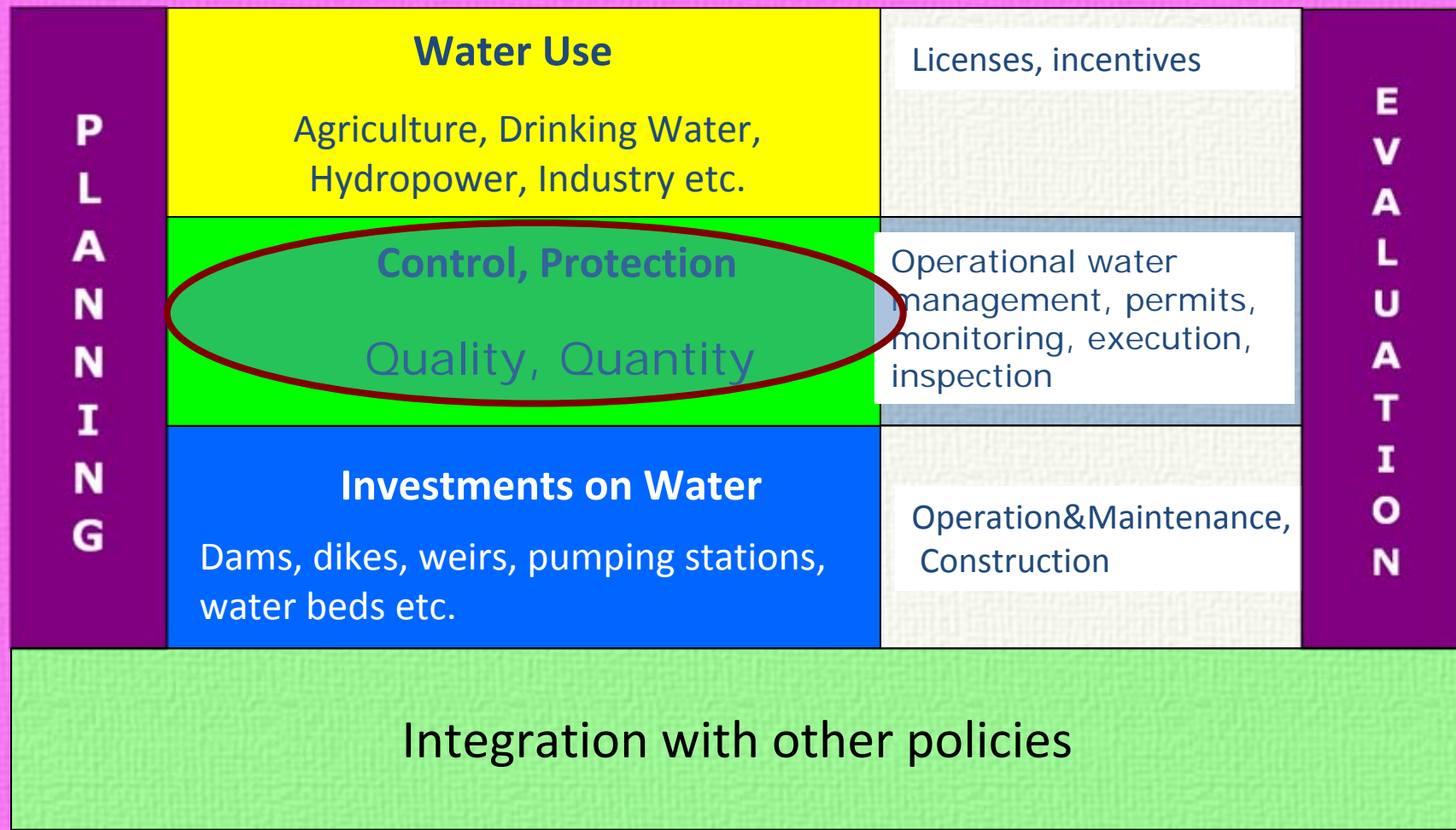
**Revising the existing
legislation**

**Environmental Law/By-
Law on Water Pollution
Control**

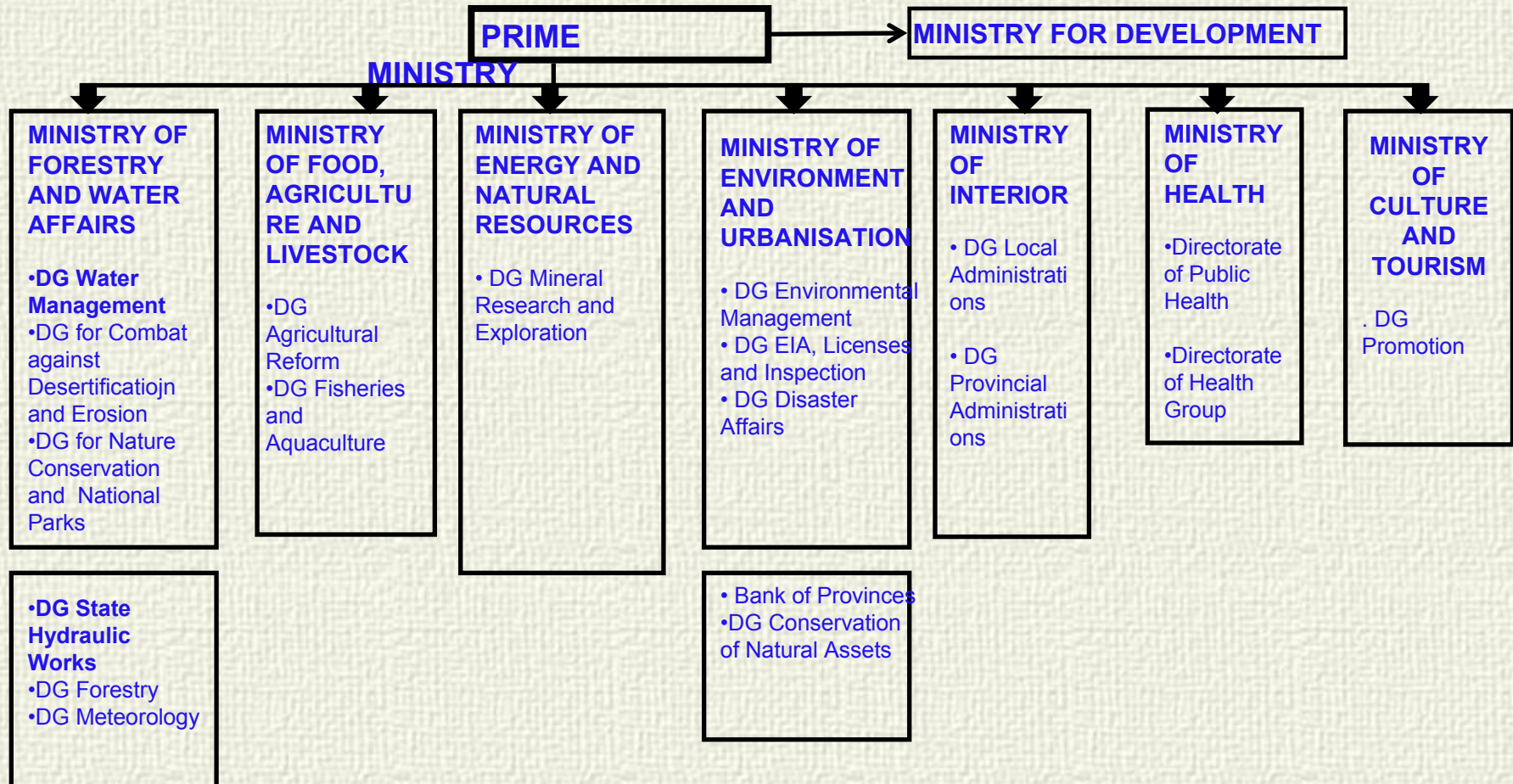
New legislation

- **Water Law***
- **By-law on River
Basin protection**

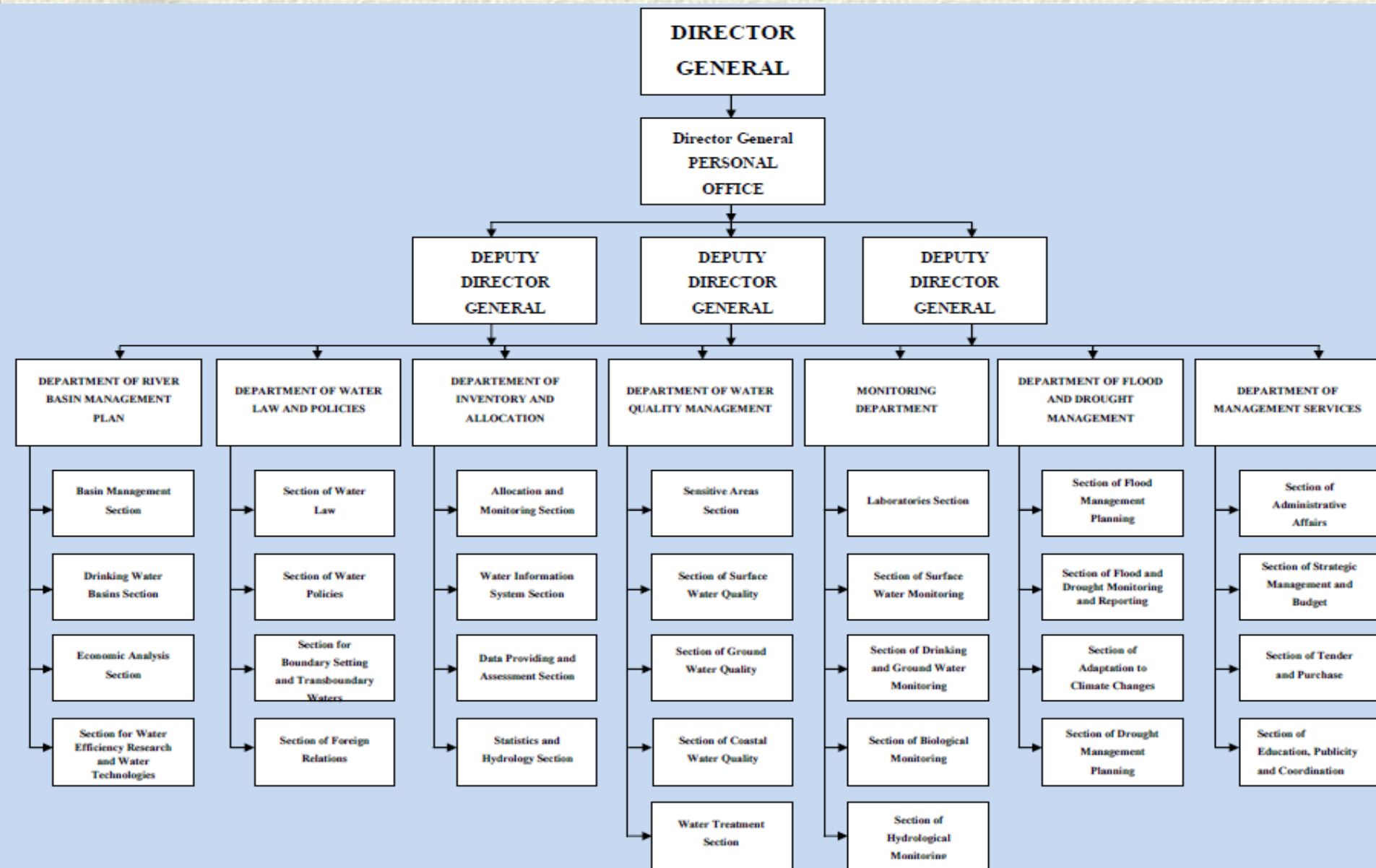
Coordination, Policy and Legislation



RELATED INSTITUTIONS IN TURKEY



ORGANIZATION



WATER MANAGEMENT COORDINATION BOARD



Water Management Coordination Board has been established by the Circular of the Prime Ministry no 2012/7.



Minister of Forestry and
Water Affairs

Undersecretary of the Ministry of
EU Affairs

Undersecretary of the Ministry of
Science, Industry and Technology

Undersecretary of the Ministry of
Environment and Urbanization

Undersecretary of the Ministry of
Foreign Affairs

Undersecretary of Energy and
Natural Resources

Undersecretary of Food,
Agriculture and Livestock

Undersecretary of the Ministry of
Interior

Undersecretary of the Ministry of
Development

Undersecretary of the Ministry of
Culture and Tourism

Undersecretary of the Ministry of
Health

Director General of State
Hydraulic Works

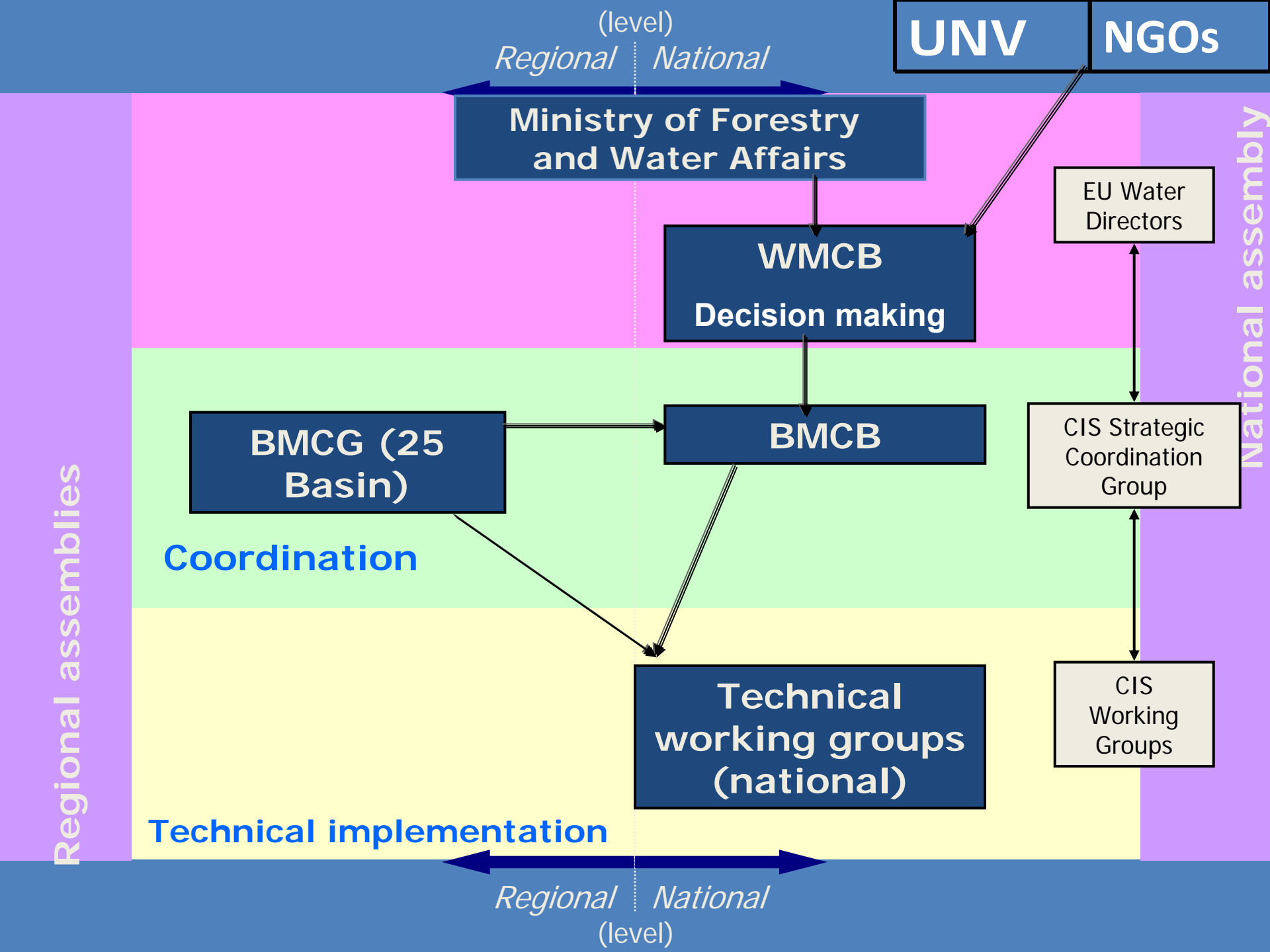
Director General of Water
Management

Director General of Nature
Conservation and National Parks

Director General of Combat Against
Desertification and Erosion

Director General for Meteorology

Director of Water Institute of
Turkey

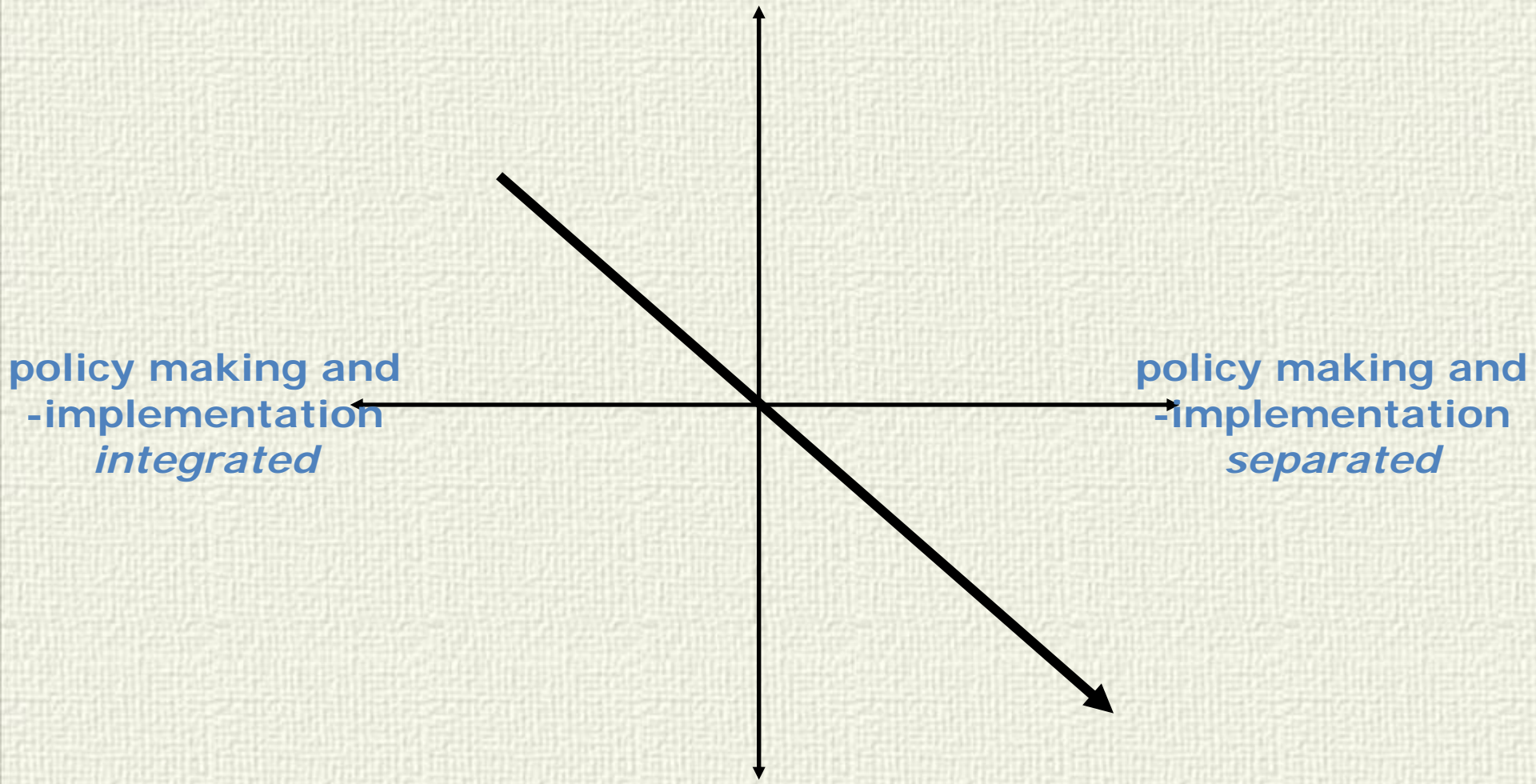


concentration of tasks at
national level

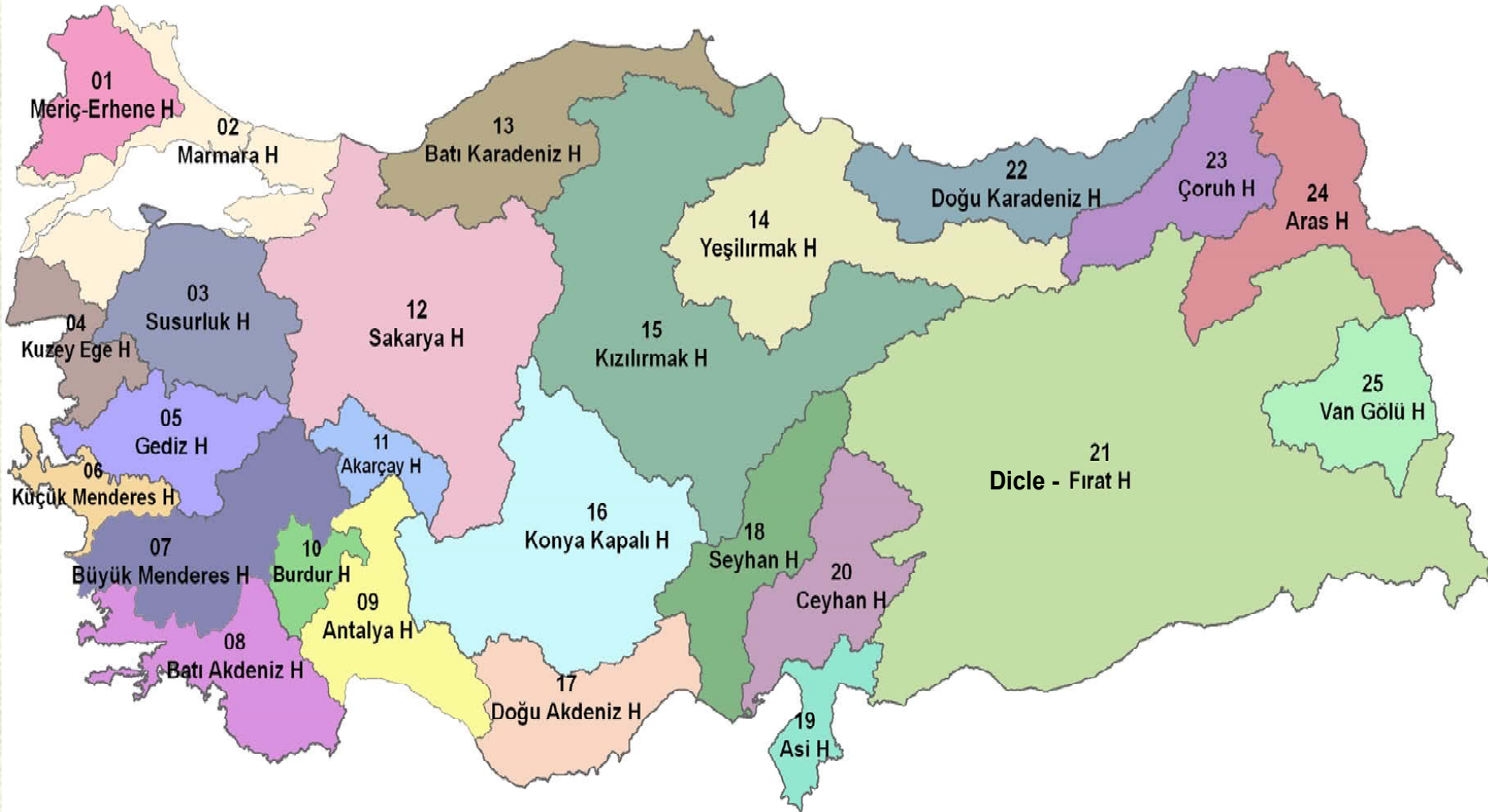
policy making and
-implementation
integrated

policy making and
-implementation
separated

concentration of tasks at
regional level



RIVER BASINS IN TURKEY



- Waste Water Treatment Action Plan
- River Basin Protection Action Plans
- River Basin Management Plans

Orman ve Su İşleri
Bakanlığı

MINISTRY OF ENVIRONMENT AND
FORESTRY
DG Environmental Management



WWTAP

(2008 – 2012)

ANKARA - 2008



AKARÇAY HAVZASI KORUMA EYLEM PLANI

MINISTRY OF ENVIRONMENT AND
FORESTRY
DG Environmental Management

AKARÇAY HAVZASI KORUMA EYLEM PLANI



KASIM 2008



Büyük Menderes RBMP
YÖNETİM PLANI



Su politikası alanında Topluluk faaliyetleri için gerçeğe oluşturan, 23
Ekim 2000 tarihli ve 2000/60/EC sayılı AVRUPA PARLAMENTOSU VE
KONSEYİ DİREKTİFİ
Madde 13 ve Ek VI gereğince

Ankara, 2010

STATUS OF BASIN PROTECTION ACTION PLANS



BASIN PROTECTION ACTION PLANS



River Basin Protection Action Plans (RBPAPs) to be prepared

Public participation

Water potential of the basin
Existing water use
Planning status
Status of re-use of treated waste water / Planning proposal
Estimation of water demands

Chemical assessment
Point sources, diffuse sources, pollution loads originating from leachates, and the assessment of total pollution loads
Classification of water quality

Measures to be taken are defined
Short- medium- and long-term measures are scheduled
Short-term measures to be taken by the municipalities for waste water treatment plants and emergency measures are examined and planned
Public participation

Draft prepared, public participation ensured
Final version published
The responsibilities of institutions are defined

Improvement of water quality

25 Basins

Analysis of current situation in the basin

Current and planned status of water resources

Hot spots

Programme of measures

Basin Protection Action Plans

Pressures and impacts (industrial, domestic, diffuse)
Status of infra-structure
Climate conditions
Water resources
Settlements
Solid waste disposal situation
Protected areas
Agriculture and livestock
Land use
Afforestation, erosion and pasture improvement

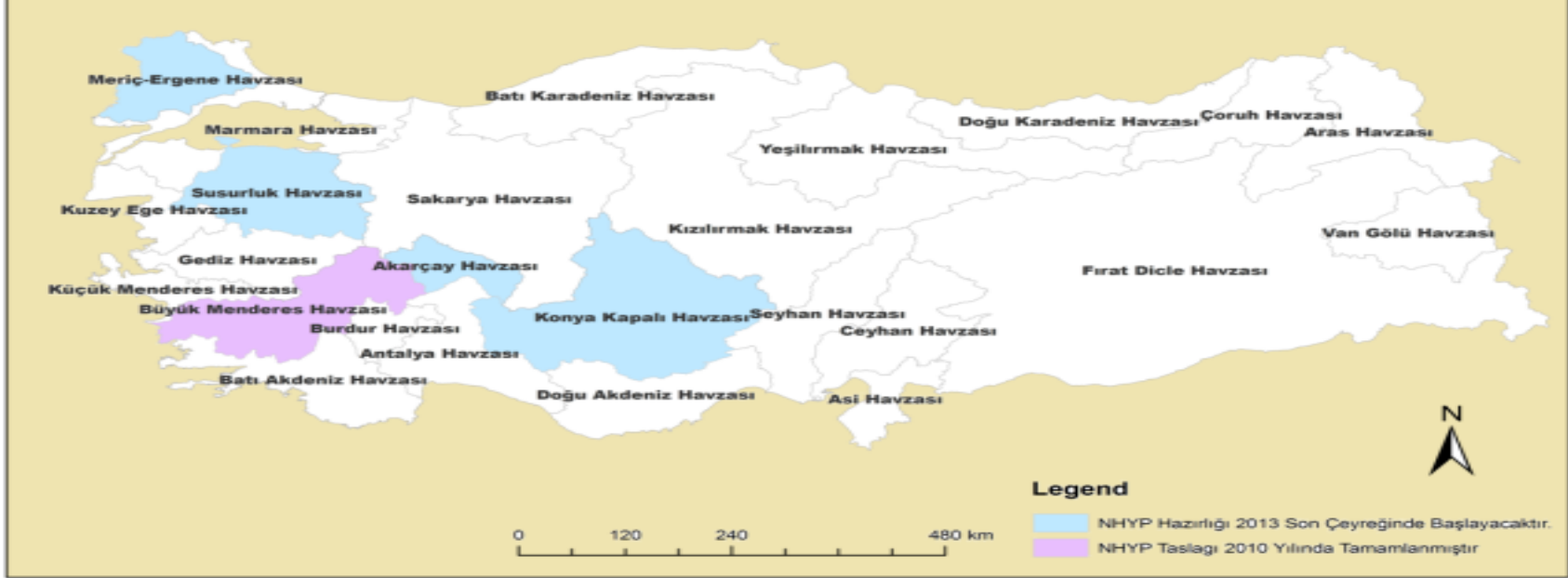
Collection of data on water quality from related institutions

Spots that need to be handled urgently
Basin specific problems
Special provisions for drinking water areas, e.g. Olive oil sector, sediment transportation, atmospheric deposition, geothermal waters, mining

Existing data are assessed

Proposals for monitoring network

NEHİR HAVZASI YÖNETİM PLANLARI DURUMU

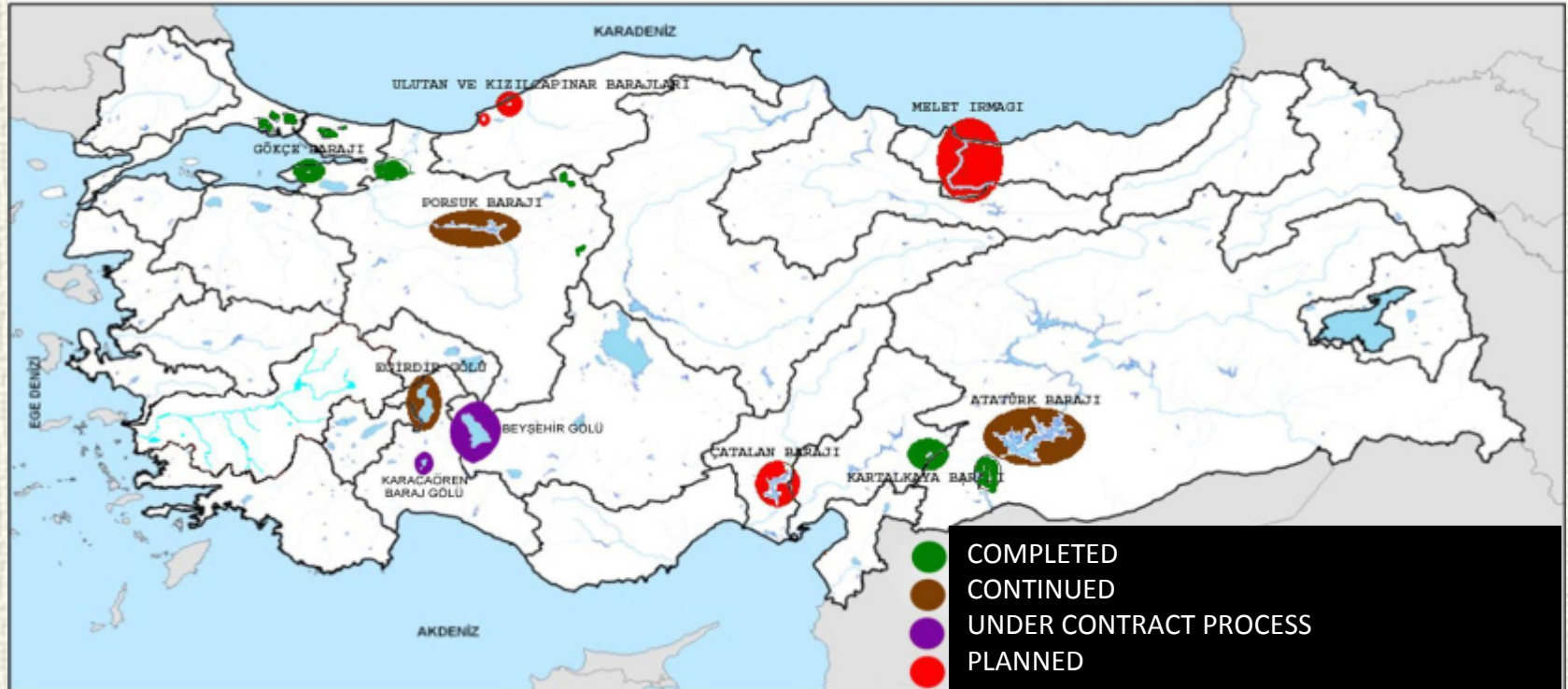


We will start preparing River Basin Management Plans in 5 basins (**Susurluk, Akarçay, Meriç-Ergene, Konya Kapalı, Büyük Menderes**) after 2013.

Under the Institution Building for Pre-Accession (IPA) Programme for 2011, our project proposal of 6.6 million Euro has been approved for the basins named above.

DRINKING WATER BASIN SPECIAL PROTECTION PLANS

DETERMINATION OF SPECIAL PROVISION STUDIES IN TURKEY



Determination of Special Provision studies are being conducted for the protection of drinking water basins.



WATER FOOTPRINT STUDIES IN TURKEY

TRAINING WITH CERTIFICATE IS CARRIED OUT BY THE
COORDINATION OF WWF AND GENERAL DIRECTORATE OF WATER
MANAGEMENT

WATER EFFICIENCY AND ECONOMY

We are struggling with water loss and leakage,
developing standards, passing to certificate phase.

STUDIES FOR REUSE OF TREATED DOMESTIC WASTEWATER IN IRRIGATION

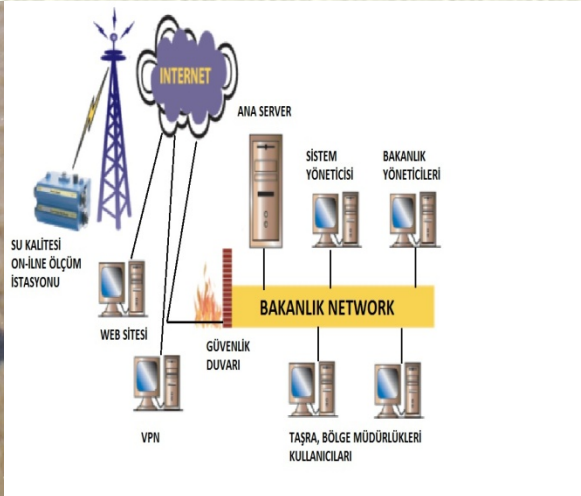
Important steps for the reuse of treated domestic
wastewater.

The project (750.000 Euro) is being started with
Afyonkarahisar Municipality under the scope of
Holland bilateral cooperation studies.

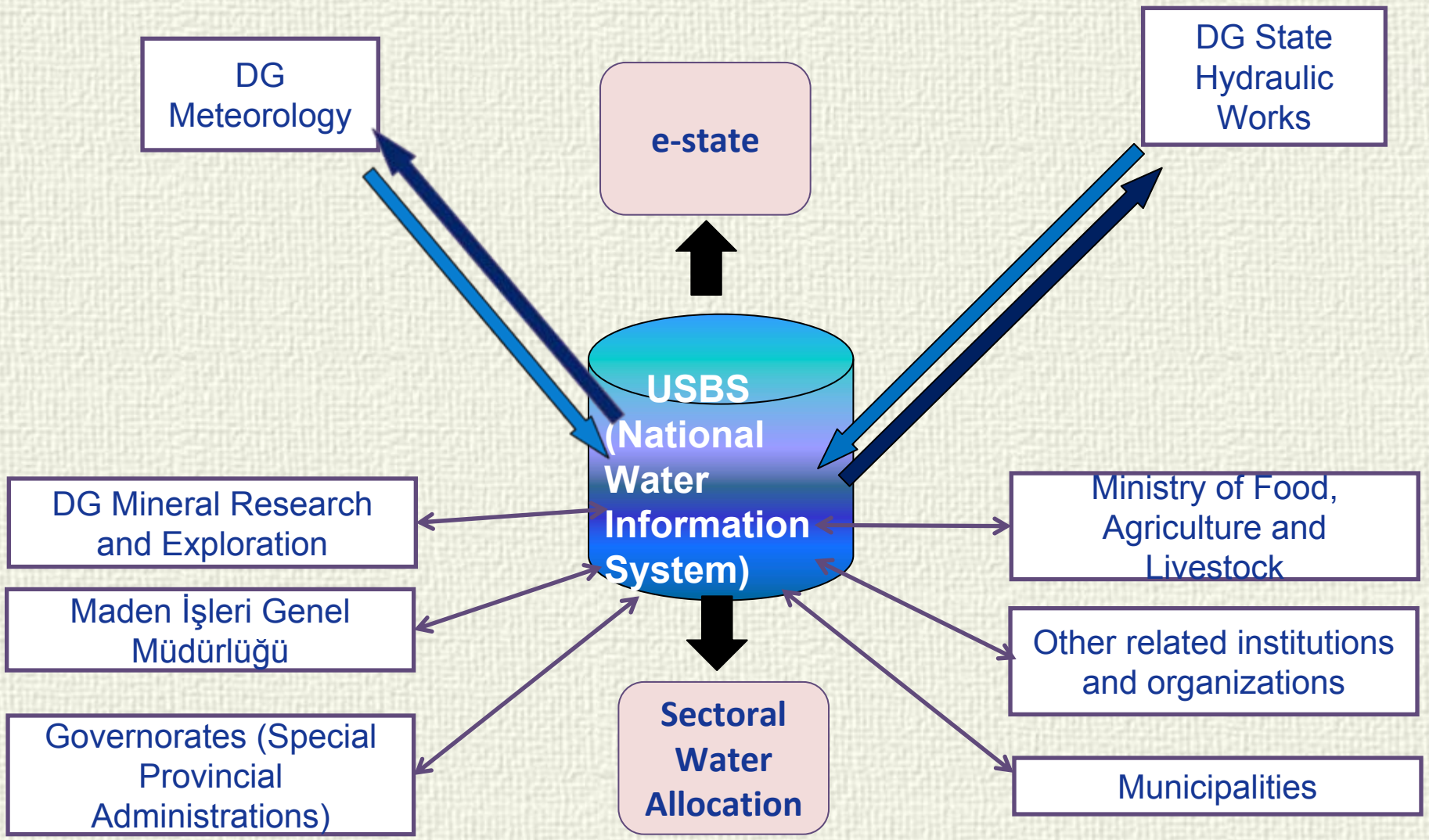
UNDER THE SCOPE OF 4.000.000 EURO EU TWINNING PROJECT

IN BÜYÜKMENDERES ERGENE SUSURLUK SAKARYA AKARÇAY BASINS

DETERMINATION OF MEASURING STATIONS, PARAMETERS WHICH WILL BE MEASURED AND MEASUREMENT INTERVALS



Water Database of the Ministry of Forestry and Water Affairs



Flood management plans are being prepared



Flood Protection Action Plans start in the West Black Sea Region.

Strategies for dry periods are being identified.

The impacts of climate change are being identified.



WE ARE PROVIDING BASIN WIDE TRAININGS AND PUBLIC PARTICIPITATION



- 39 persons received a certificate in the Training of Trainers Project.
- 60 persons received a certificate in Water Footprint Training.
- Basin management training is given to municipalities.
- NGO pool is formed.
- TAIEX application about water economy is confirmed.
- Negotiations training is completed.



NATIONAL BASIN MANAGEMENT STRATEGY

National Basin Management Strategy (2012-2023)

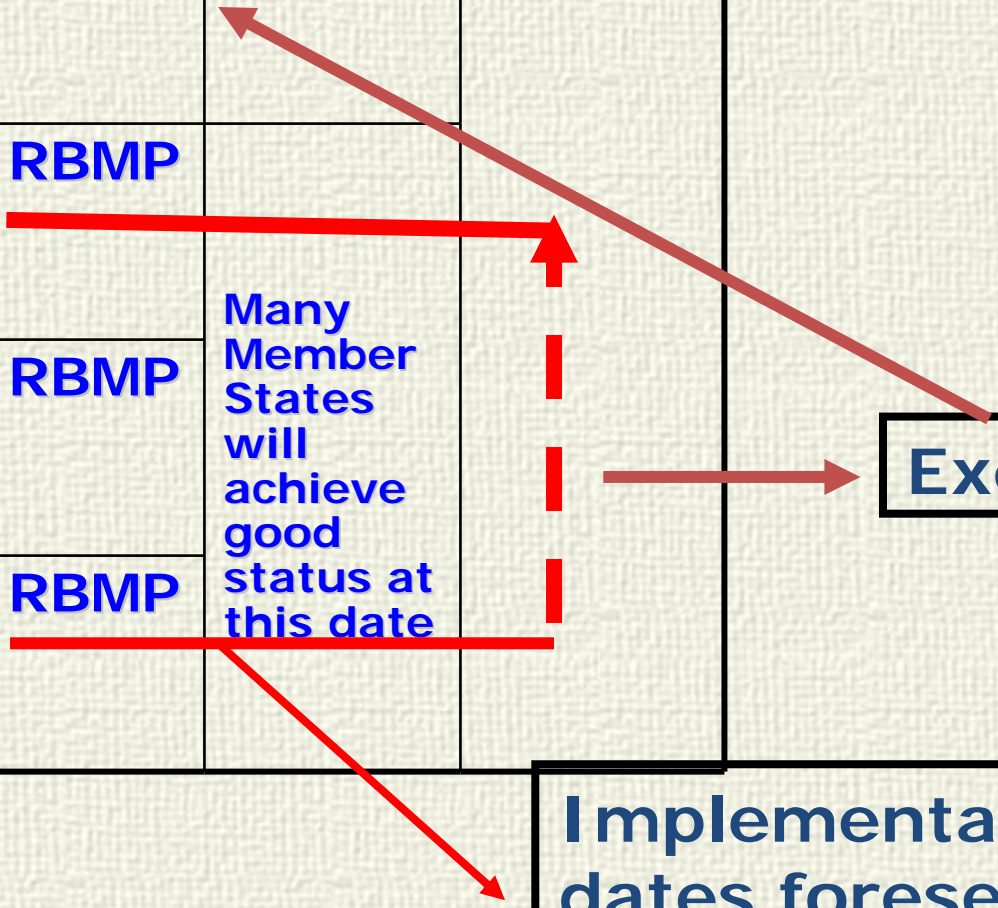
We have established our Basin Management Strategy by combining all the components for basin management within the form of a strategy.

RBMP TIME TABLE

2027(EU) 2033	4. RBMP		TURKEY
2021(EU) 2027	3. RBMP		
2015(EU) 2021	2. RBMP	Many Member States will achieve good status at this date	
2009(EU) 2015	1. RBMP		

Exemptions

Implementation dates foreseen by the Directive

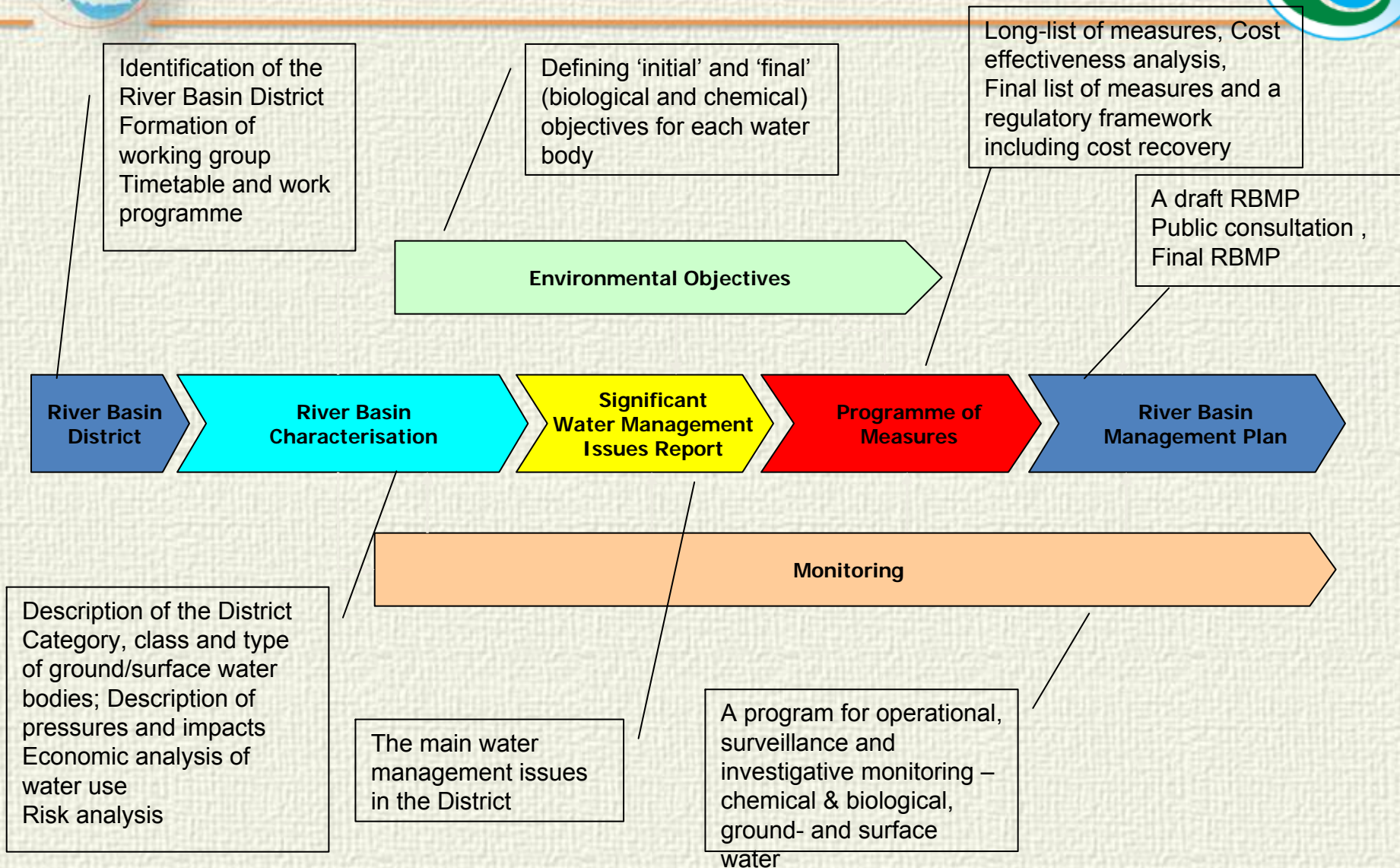


Balancing users and protectors





Steps of River Basin Management Plans



RIVER BASIN MANAGEMENT PLAN GOOD WATER STATUS

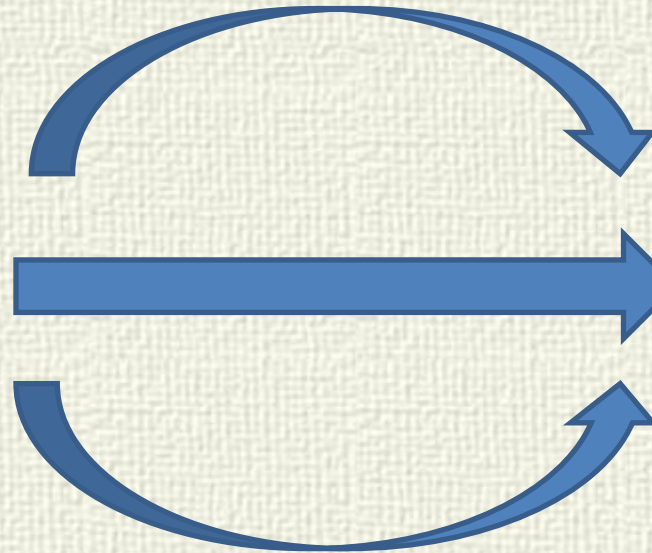
Ecology

Chemistry

Hydro-

Morphology

(Flood, dams, ports, channels, over-abstraction etc)



Water Status

HIGH
GOOD
MODERATE
POOR
BAD

EVALUATION

- Integrated approaches in sustainable water management should be adopted.
- Water Framework Directive is a significant road map.
- Integration of the other side actions of the blue print document will also provide an important contribution.
- It is vital to underline the WFD objectives also from the viewpoint of economic and social aspects, climate change, drought and water budget.
- The economic aspects should be taken into consideration in detail in the blue print document.
- The relations between the EU Member States and the Candidate countries should be strengthened.
- The experiences of RENA should be shared with other countries.

Thank you for your attention

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21/01/10

21/01/10

26 JANUARY 2010
26 Kasım 2008 Marakeş/Fas

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