

# **WATER RESOURCES OF UKRAINE. STATE AND PERSPECTS OF USE**

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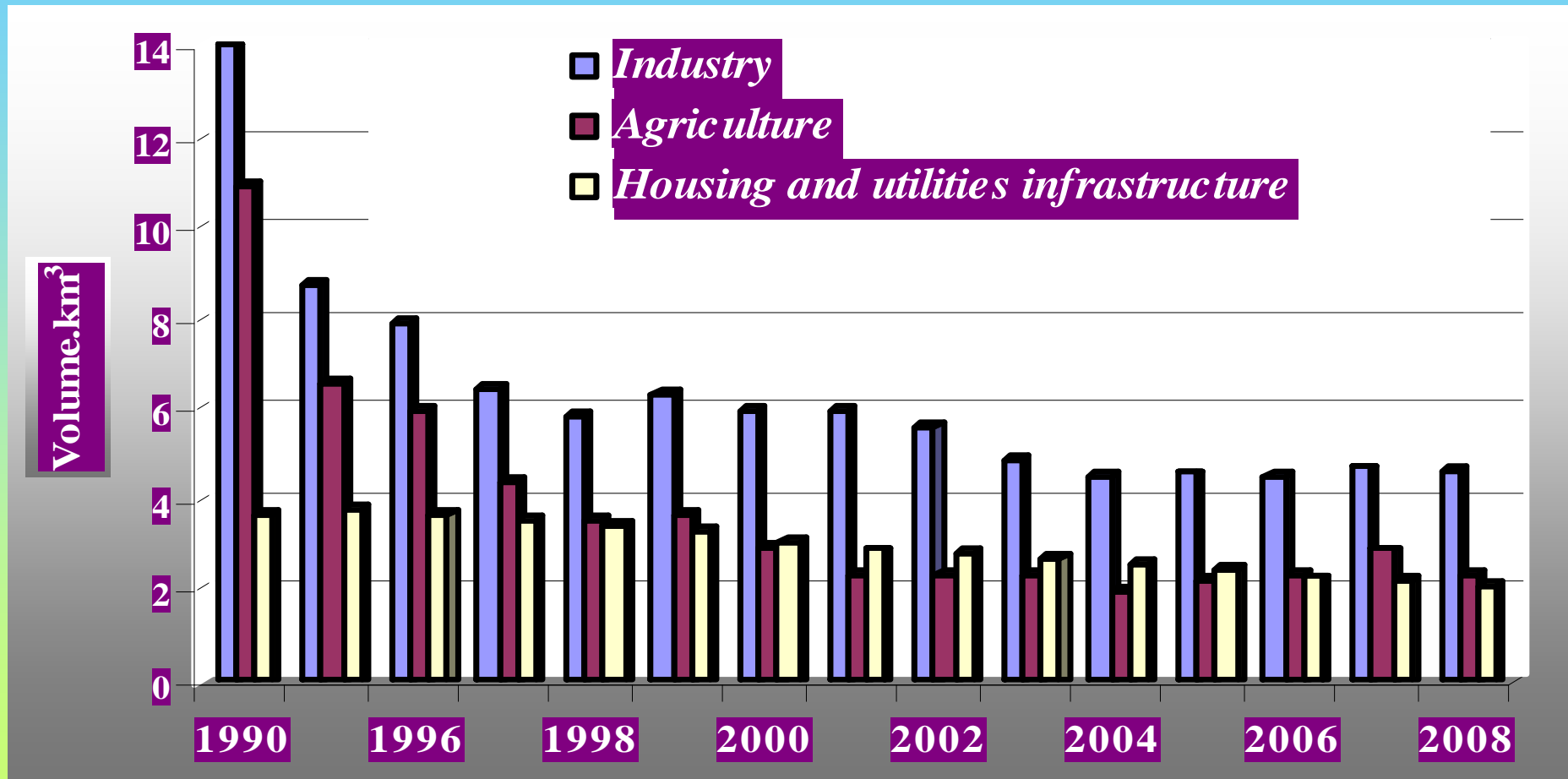
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## Water resources availability and use

- **Potential resources of river waters of Ukraine are 210 cbkm, of which only 25% are formed in Ukraine while the rest comes from Russia, Belorussia and Romania**
- **Total water withdrawal for population and economy is ~ 15 billion cbm per year ( industry- 49.4%; agriculture – 25.8% ; domestic water supply – 22.6%;other -2.2% )**
- **Ukraine is the 111<sup>th</sup> among 152 countries by the amount of domestic water resources available per capita (World Bank statistic)**
- **8 billion cbm of waste water per year is discharged into surface waters**



# Fresh water consumption



# Zoning of pressures and drivers for water management



**1. Carpathian region  
(incl. fore mountain)**

**2. Polissya region  
( Forest zone)**

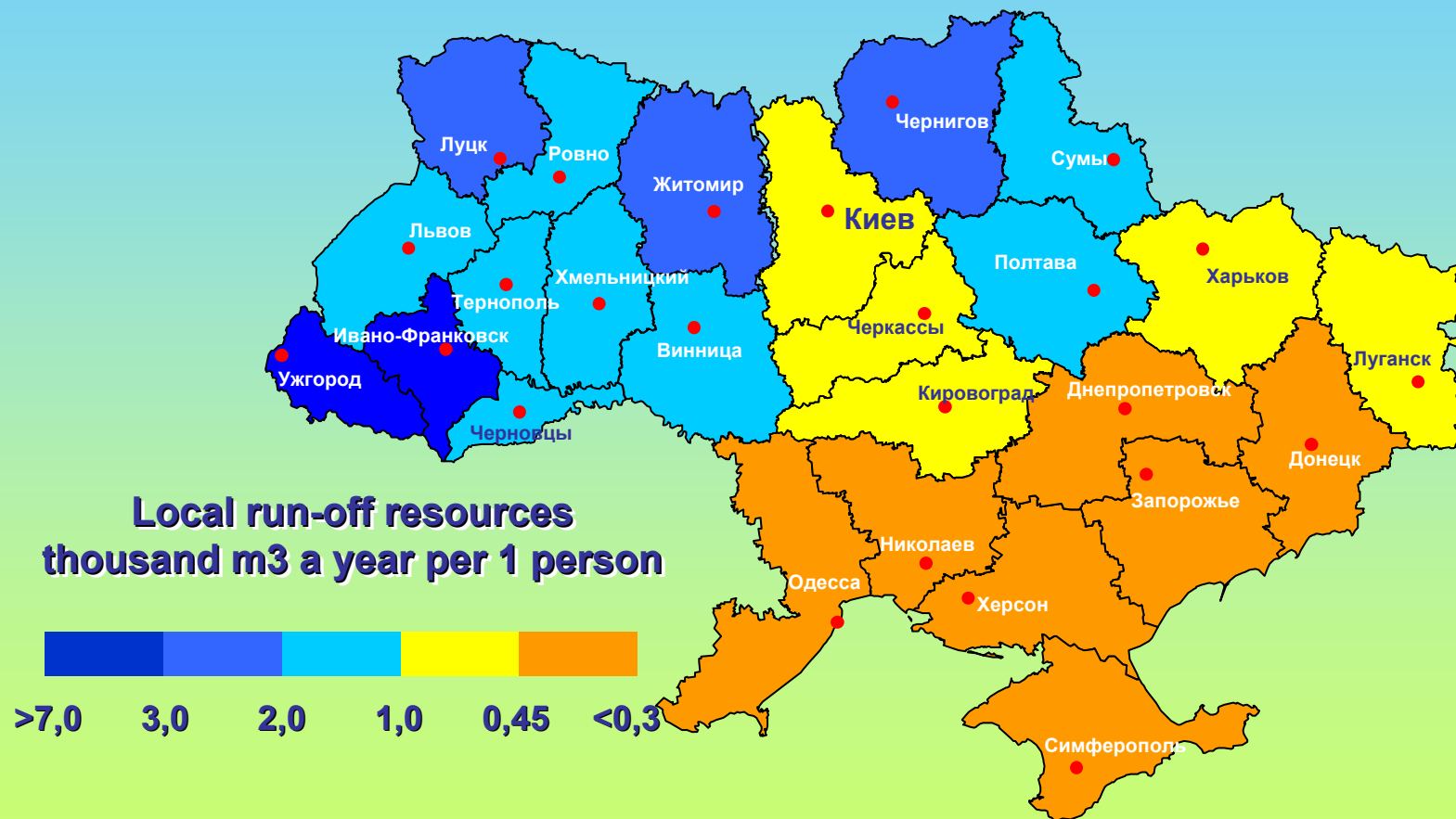
**3. Centre-West region  
(Forest-step zone)**

**4. South- West region  
(step zone)**

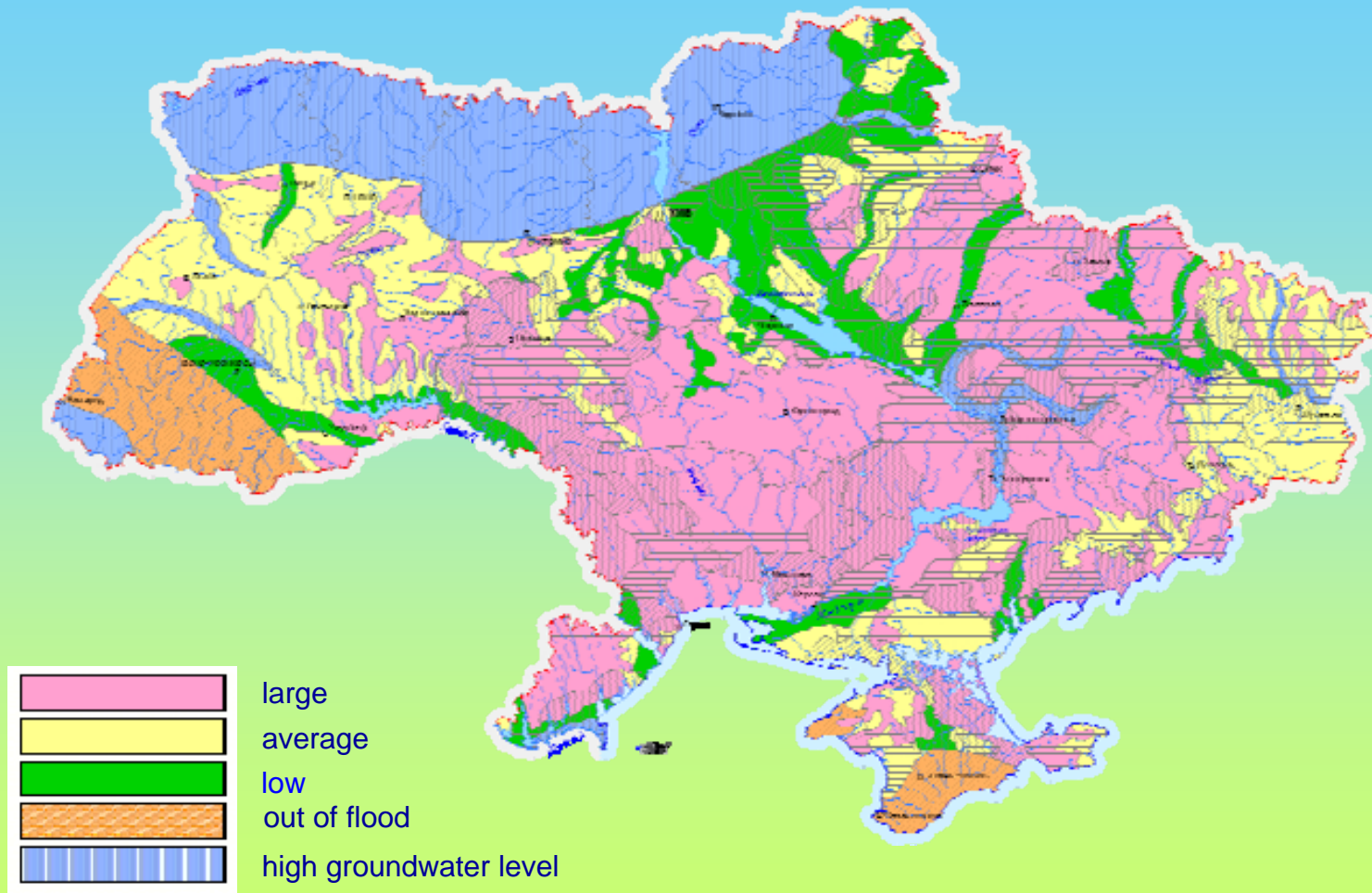
## Regional particularities on water and land resources management

Regions and zones	Pressure	Main sectors	Drivers
<b>1. Carpathian region</b>	<b>Floods from the mountain rivers, erosion, High ground water table</b>	<b>Tourism Nature protection Agriculture (drainage)</b>	<b>Climate change, development of eco-tourism &amp; recreation and extensive agriculture</b>
<b>2. Polissya region (Forest zone)</b>	<b>Floods Soil contamination High ground water table + short dry periods</b>	<b>Agriculture (drainage) Nature protection</b>	<b>Transfer of agricultural lands to nature, eco-tourism, extensive agriculture ( dairy farms)</b>
<b>3. Centre-West region (Forest-step zone)</b>	<b>Water and soil contamination Erosion</b>	<b>Agriculture (drainage &amp; irrigation) Industry Water supply Nature protection</b>	<b>Climate change Intensive and extensive (organic farming ) agriculture, ecotourism</b>
<b>4. South- West region (step zone)</b>	<b>Water scarcity, droughts Floods by rising ground water, water and soil contamination</b>	<b>Agriculture (irrigation) Tourism &amp; recreation Water supply Industry Nature protection</b>	<b>Climate change Intensive (irrigated ) agriculture Industry, tourism, nature protection</b>

# REGIONALIZED WATER SUPPLY



# **WATER ADVERSE EFFECT SUSCEPTIBILITY OF THE TERRITORY OF UKRAINE (flood, underflooding)**



# **Current water problems and challenges**

- **Insufficient natural water resources**
- **Increasing frequency of nature disasters linked to climate change and anthropogenic activities**
- **High water consumption rate in all sectors of economy**
- **Unsatisfactory water quality**
- **Negative impacts on ecosystems**
- **Low level of awareness of population in area of water use and water resources protection**
- **Not enough developed groundwater use for drinking water supply**
- **Outdated water infrastructure and management technologies**
- **Uncompleted and insufficient water policy and legislation**
- **Undeveloped and insufficient public participation**
- **Lack of finances from the state and private sector for modernisation and rehabilitation of infrastructures, irrigation and drainage systems**



# **Stakeholders participation** **National seminar**

**Principles: transparency, open mind,  
interactive process, integrity**

**30 Participants from Ministries, State  
Committees, Research institutes,  
Universities, regional river basin management  
departments, NGOs**



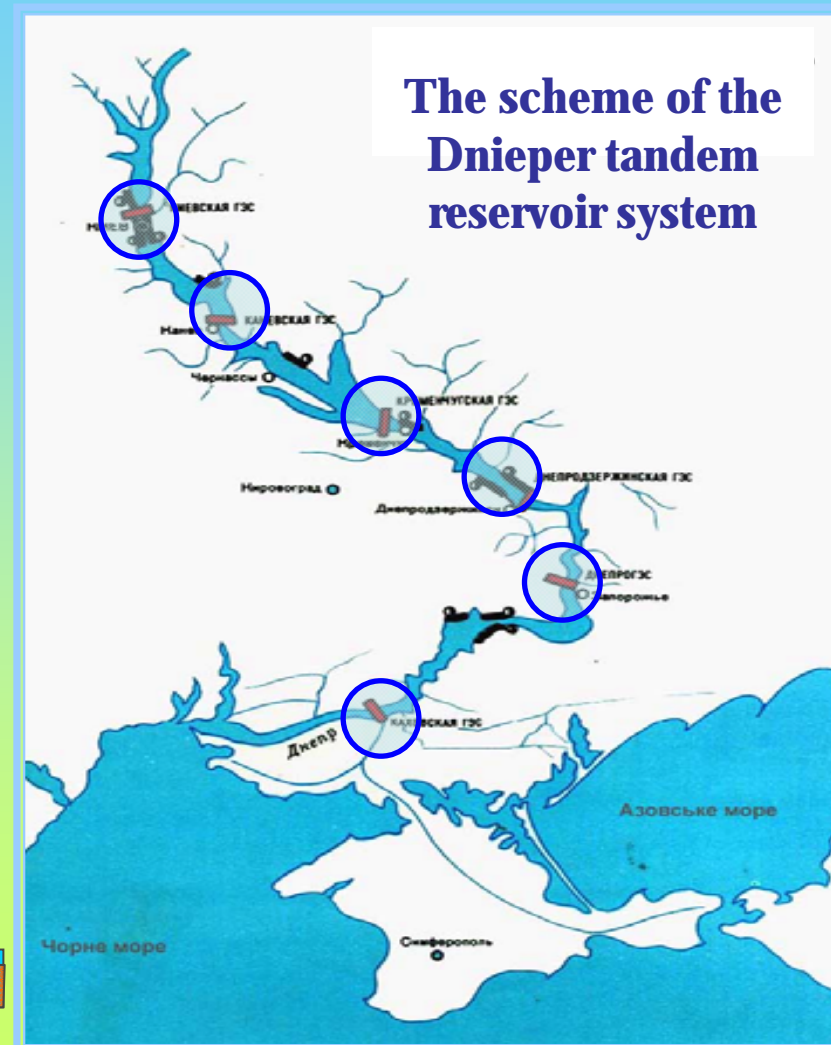
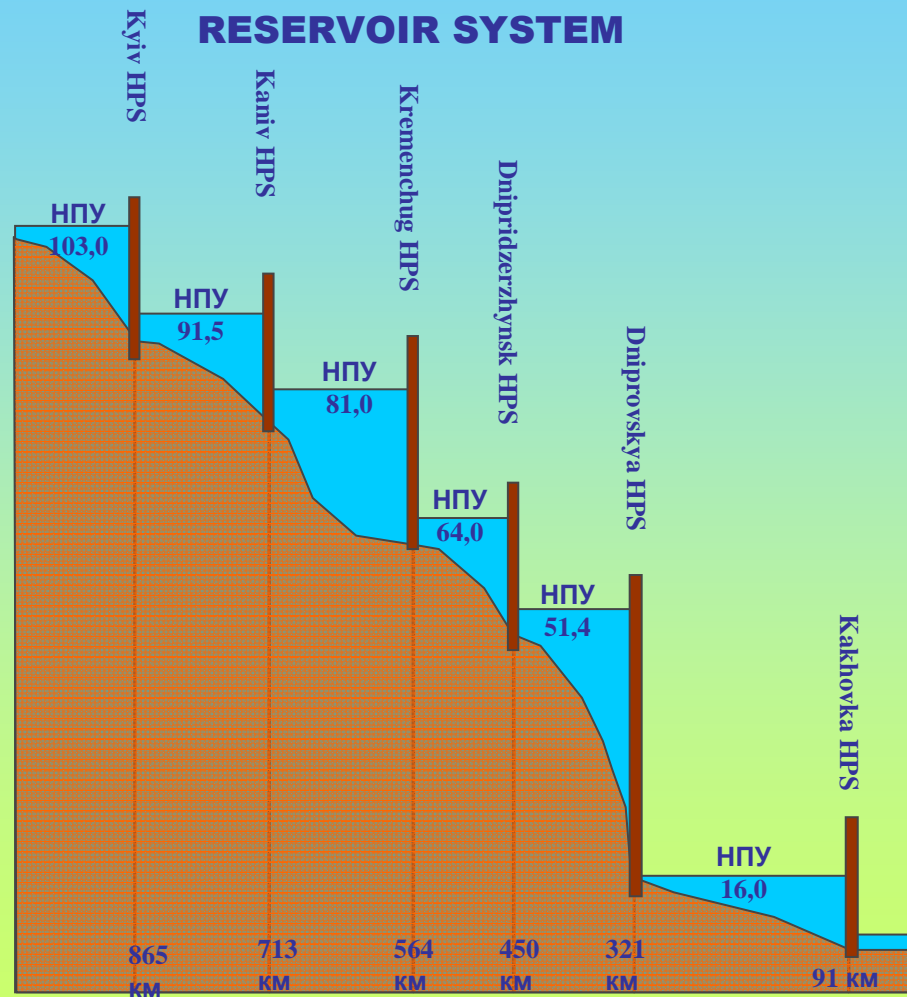
***Ukraine has intergovernmental agreements on cooperation in the field of water management on the boundary waters with the contiguous states, such as:***

**Russia (1992),  
Hungary (1993),  
Moldavia (1994),  
Slovakia (1994),  
Poland (1996),  
Romania (1997),  
Belorussia (2001).**



# AUTONATED CONTROL SYSTEM FOR THE DNIEPER RIVER BASIN /ACSB-DNIEPER/ SINCE 1986

## THE DNIEPER TANDEM RESERVOIR SYSTEM





# TRANSMITTED-DATA CIRCUIT IN THE AUTOMATED INFORMATION-MEASURING SYSTEM OF FLOOD FORECAST IN THE RIVER TYSA BASIN (AIMS "TYSA")

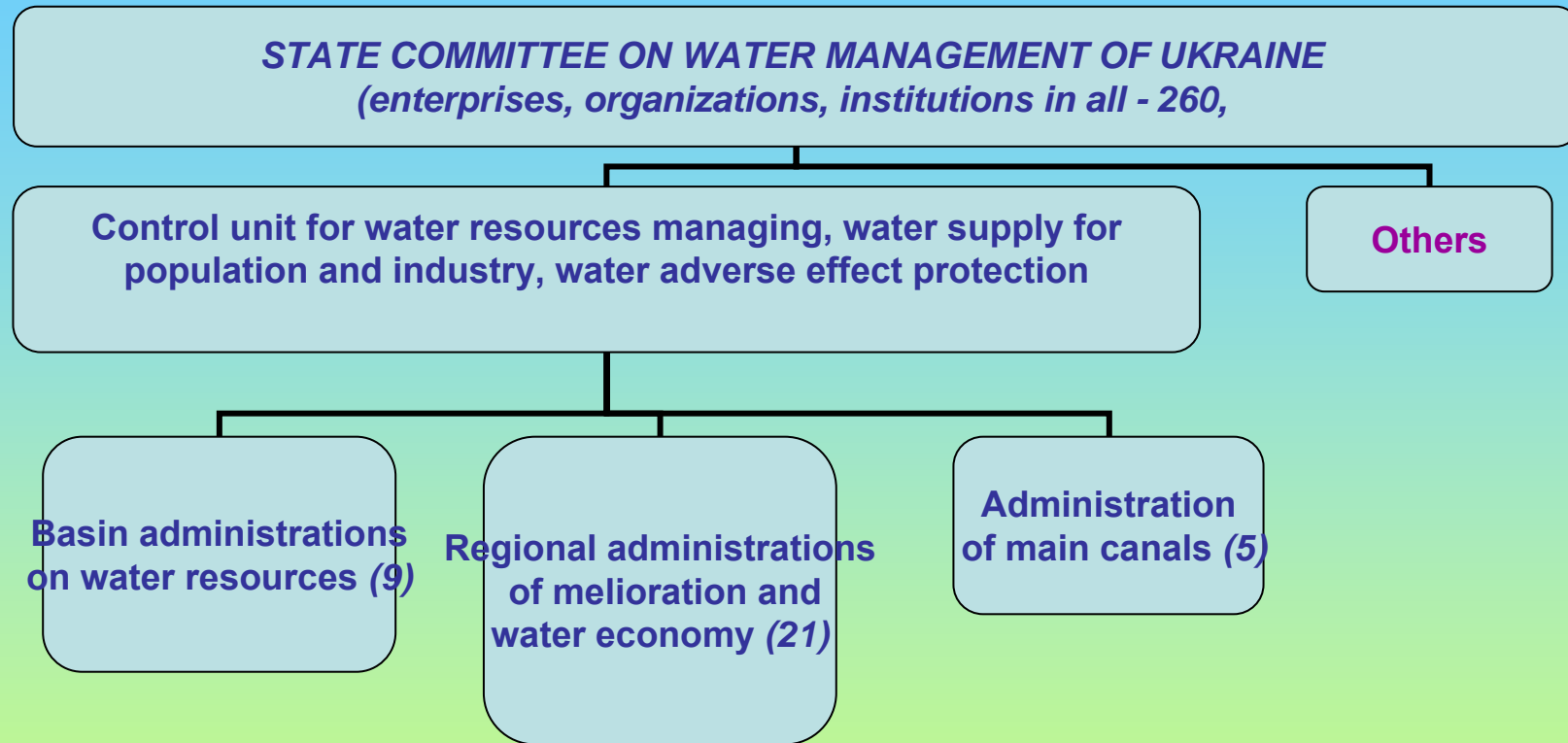
*Uzhorod city,  
Ukraine*



*Niredgaza city, Hungary*



# COMMITTEE ORGANIZATIONAL STRUCTURE



# Policy recommendations

- Improving *water code* and *land code* a.o.
- Harmonisation with European legislation and standards
- National dialogue incl. stakeholders
- Implementation of the WFD in UA
- Law for basin management organisation and responsibilities
- Supporting government to prescribe water saving technologies
- To develop a state program for climate change adaptations
- To develop a state and a independent system of water laws enforcements
- Improve investment security in the water sector
- Introduction of polluter pays principle
- Create transparency in water policy and rise public awareness

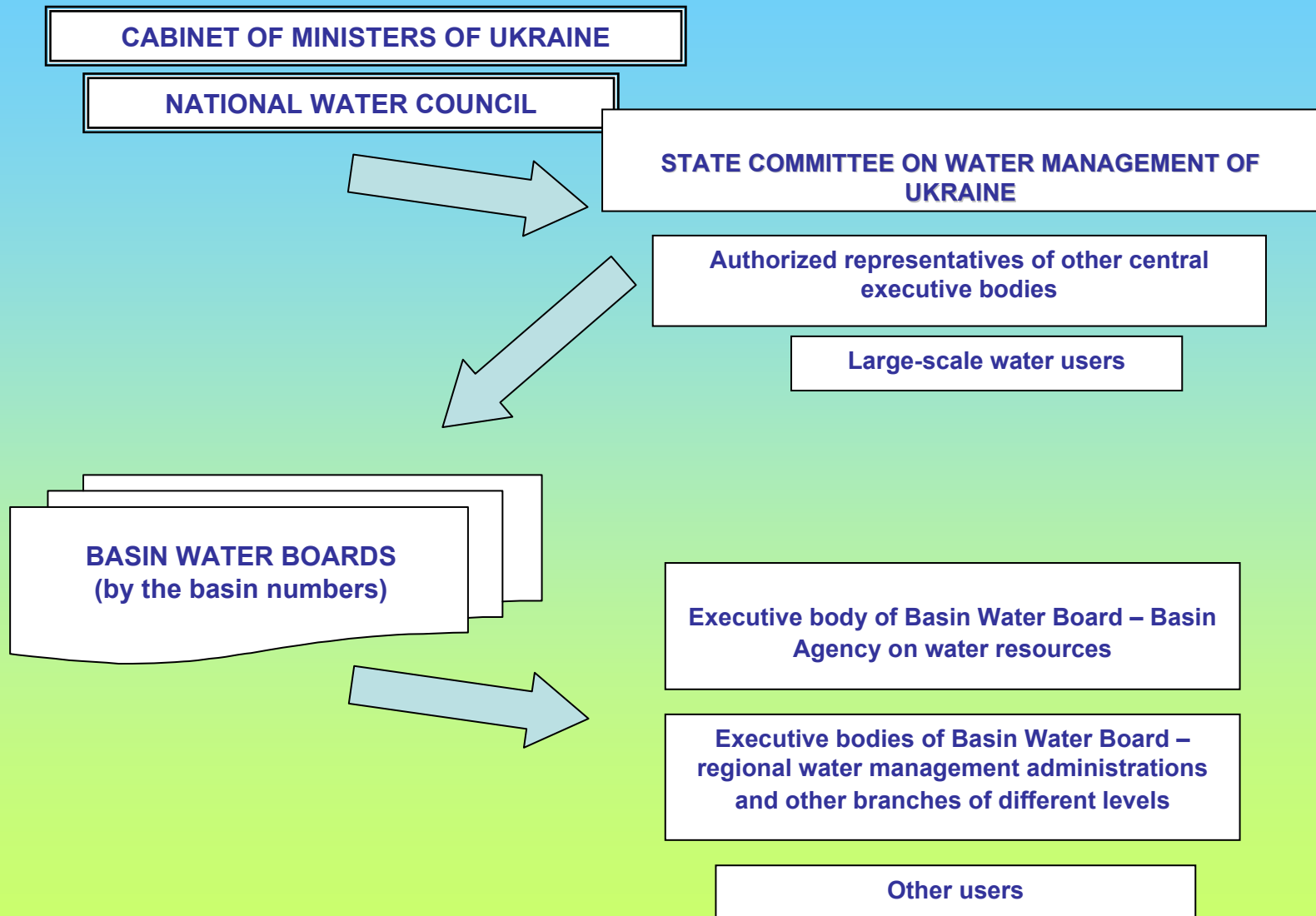
## **EFFECTS OF REFORMS:** **(2007-2015)**



### **Water management system reforming** **will provide with:**

- ***state water policy implementation;***
- ***financial expenditure optimization;***
- ***efficient monitoring system forming;***
- ***improvement of transboundary cooperation;***
- ***attracting investments, technical and legal assistance from EU countries, investment climate improvement .***

# PROSPECTS OF SECTOR REFORMING





**THANK YOU  
FOR ATTENTION!**