

Water Resources Management in Georgia



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Water Resources of Georgia

26 060 rivers - total length 60 000 km

18 109 rivers (70%) - the Black Sea basin

7 951 rivers (30%) - the Caspian Sea basin

99.5% rivers - less than 25 km length (average length - 2.3 km)

860 lakes – total area of 175 km²

Total water volume 400 million cubic meters

Predominantly small lakes with the area of less than 1km



Water Resources of Georgia

43 reservoirs – mostly for hydropower generation and irrigation purposes

35 reservoirs - Caspian Basin (storing a total volume 1 700 million cubic meters)

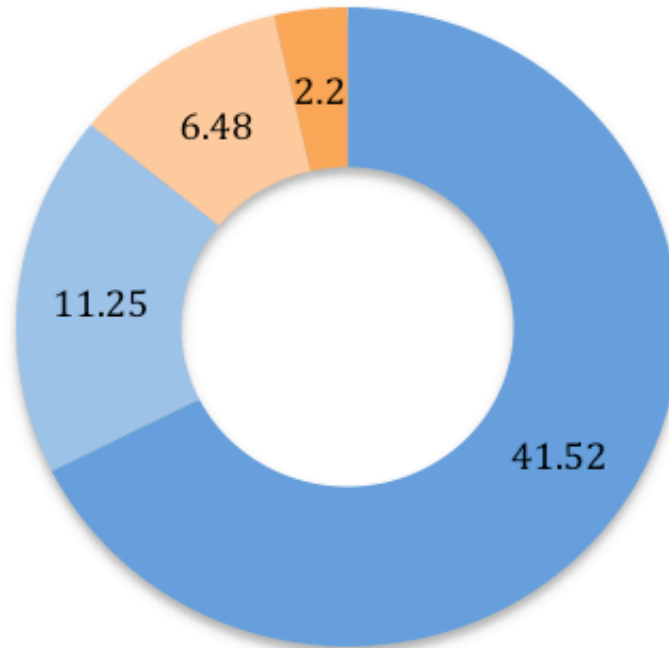
8 reservoirs - Black Sea Basin (storing 1470 million cubic meters)

Wetlands cover 627 km²

Total amount of renewable fresh ground water - 18 billion cubic meters/year



Water Resources Balance



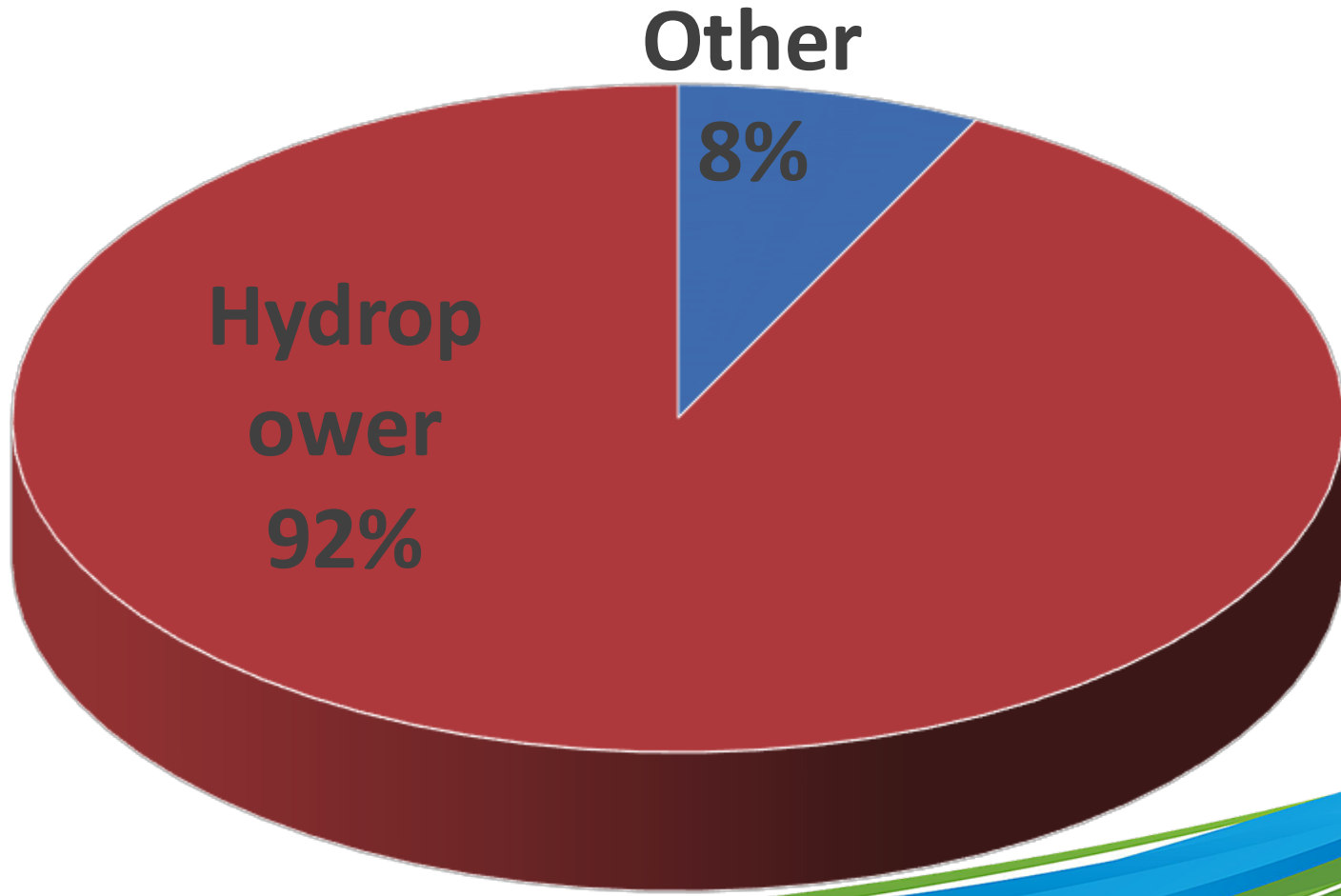
Balance of water resources in Georgia, local and transboundary flow, billion m³/year

- Local Flow, Western Georgia
- Local Flow, Eastern Georgia
- Transboundary Flow, Western Georgia
- Transboundary Flow, Eastern Georgia



Water Use

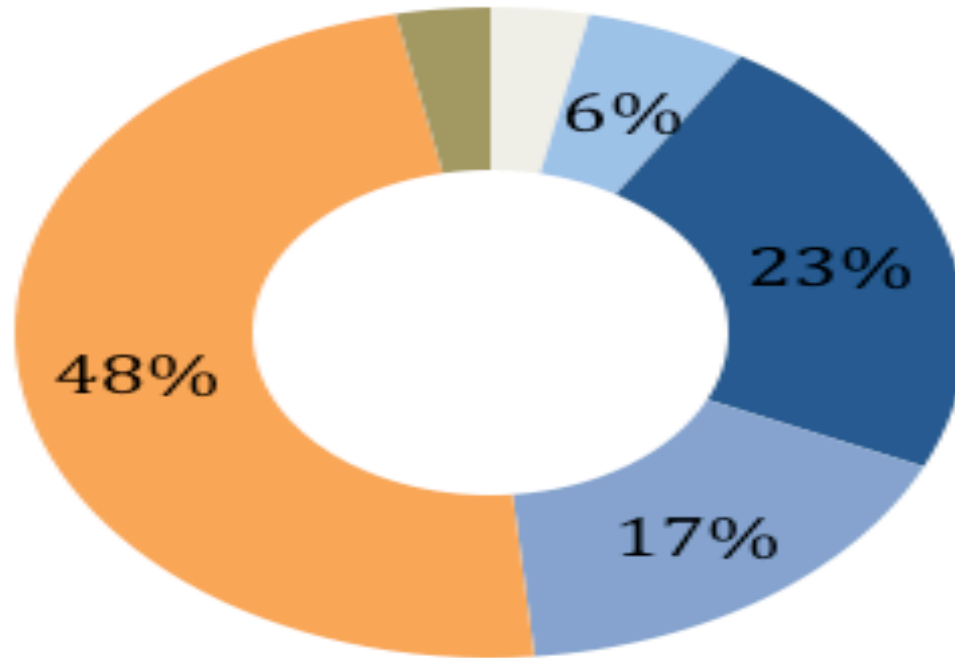
Water Abstraction





Water Use

Other



- Fisheries
- Industry
- Thermal Energy
- Irrigation
- Water Supply
- Other



Main Problems

- Pollution of surface waters from untreated municipal and industrial wastewater
- Pollution from the illegal landfills and agricultural production

Main pollutants are:

- Ammonium
- BOD
- Suspended Solids
- Heavy metals (hotspots – due to mining)



Main Problems

- Scarcity (Eastern Georgia)
- Erosion and floods
- Unsustainable water use - high losses of water from drinking water supply systems and irrigation



Responsibilities in Water Sector

Ministry of Environment and Natural Resources Protection
implements state policy in water sector

Water Resources Division, Integrated Management Department

- Implements governmental policy of water protection and pollution prevention
- Establishes and adopts maximum allowable concentration for wastewater discharge
- Approves limits for water abstraction
- Conducts state inventory of water use

National Environmental Agency

- Monitors state of surface water and groundwater

Environmental Supervision Department

- Implements state control on water pollution



Responsibilities in Water Sector

Ministry of Labor, Health and Social Affairs

- Develops and approves environmental quality standards (sanitary norms) for surface & groundwater
- Establishes technical regulations for safe drinking water according to the recommendations of the World Health Organization (WHO)



Responsibilities in Water Sector

Ministry of Agriculture

- Implements laboratory control on compliance of drinking water with quality parameters established by the Ministry of Health
- Develops the state policy in the field of irrigation & drainage and oversees its implementation



Responsibilities in Water Sector

Ministry of Regional Development and Infrastructure

- Coordinates the development of water supply and sanitation systems

Georgian National Energy Regulatory Commission

- Defines the methodology for establishing tariffs and service fee payments as well as the tariff limits and service fee payments as well as the tariff limits, for water supply



Legal Framework

Law of Georgia “On Environmental Protection” (1996)

- Provides baseline for establishment of environmental quality (including water quality) norms (*standards*)

Law of Georgia “On Mineral Deposits” (1996)

- Considers groundwater as part of mineral deposits and regulates all aspects of groundwater use and to certain extant groundwater protection as well



Legal Framework

Law of Georgia “On System of Protected Areas” (1996)

- Provides legal ground for establishment of protected area categories (including marine protected areas and water)

Laws of Georgia “On Health Protection” (1997) and “On Public Health” (2007)

- Provide basis for establishment of sanitary norms and rules with regard to water quality

Marine Code of Georgia (1997) and Law of Georgia “On Marine Space” (1998)

- Provide framework for pollution prevention and control measures of coastal and territorial waters



Legal Framework

Law of Georgia on Water (16 October, 1997)

- Sets up the legal basis for water resource protection and management

Main Sub-legal acts under the **Law on Water** :

- Regulation on the protection of Georgian surface waters from the pollution
- Regulation on water protection zones
- Methodology on the calculation on Maximal Admissible Discharges of pollutants in the wastewater discharged to the surface water
- Instruction of State Accounting of Water Use



Association Agreement with EU

Obligations under the Agreement related to water resources management

To harmonization with

Directive 2000/60/EC establishing a framework for Community action in the field of water policy as amended by Decision No 2455/2001/EC

Directive 2007/60/EC on the assessment and management of flood risks

Directive 91/271/EEC on urban waste water treatment as amended by Directive 98/15/EC and Regulation (EC) 1882/2003

Directive 91/676/EC concerning the protection of waters against pollution caused by nitrates from agricultural sources as amended by Regulation (EC) 1882/2003

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Progress Towards meeting Directive 2000/60/EC Requirements

Draft Law of Georgia on Water Resource Management is a legal basis for introduction of Integrated Water Resources Management (IWRM) system for protection and sustainable use of water resources

Basic novelties

Institutional Setup for Integrated Water Resources Management

- Intersectional Committee for Protection and Use of Water Resources
- Water Resources Management Service of the Ministry of Environment and Natural Resources Protection
- Water Basin Services
- Water Basin Councils



Progress Towards meeting Directive 2000/60/EC Requirements

Basic novelties

Water Management unit

- River basin/ river basin district

Water classification according to EU approach

- Water quality status
- Water use

Water monitoring according to EU standards

- Hydromorphological
- Biomonitoring



Progress Towards meeting Directive 2000/60/EC Requirements

Basic novelties

Introduction of water use permits

- Special permits for water abstraction and water discharge

Polluter pays principle

Participatory decision-making

Thank you for attention!



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