

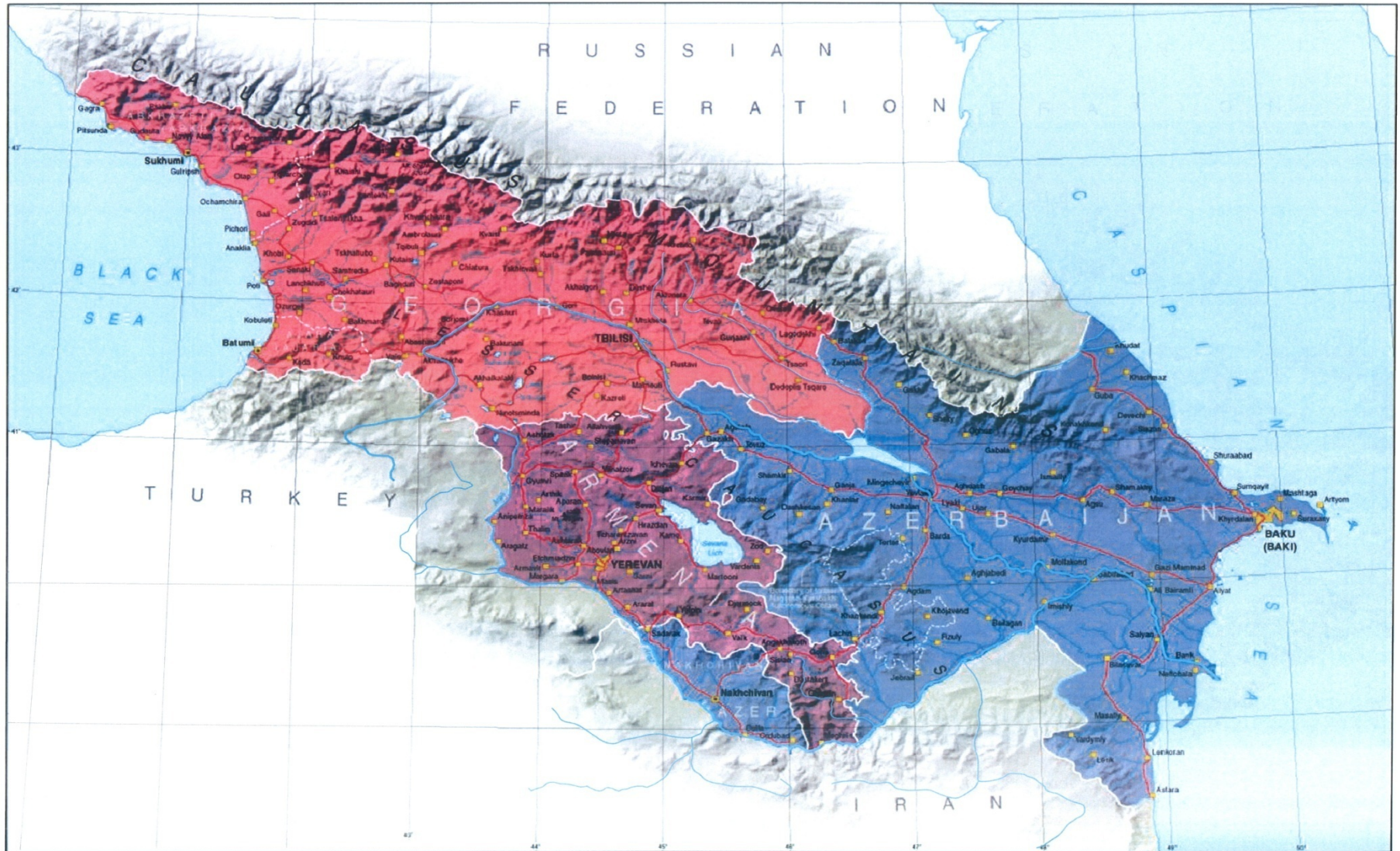


# TRANSBOUNDARY PROBLEMS OF INTEGRATED WATER RESOURCES MANAGEMENT IN THE KURA-ARAZ RIVER BASIN

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# The scheme of transboundary rivers of South Caucasus



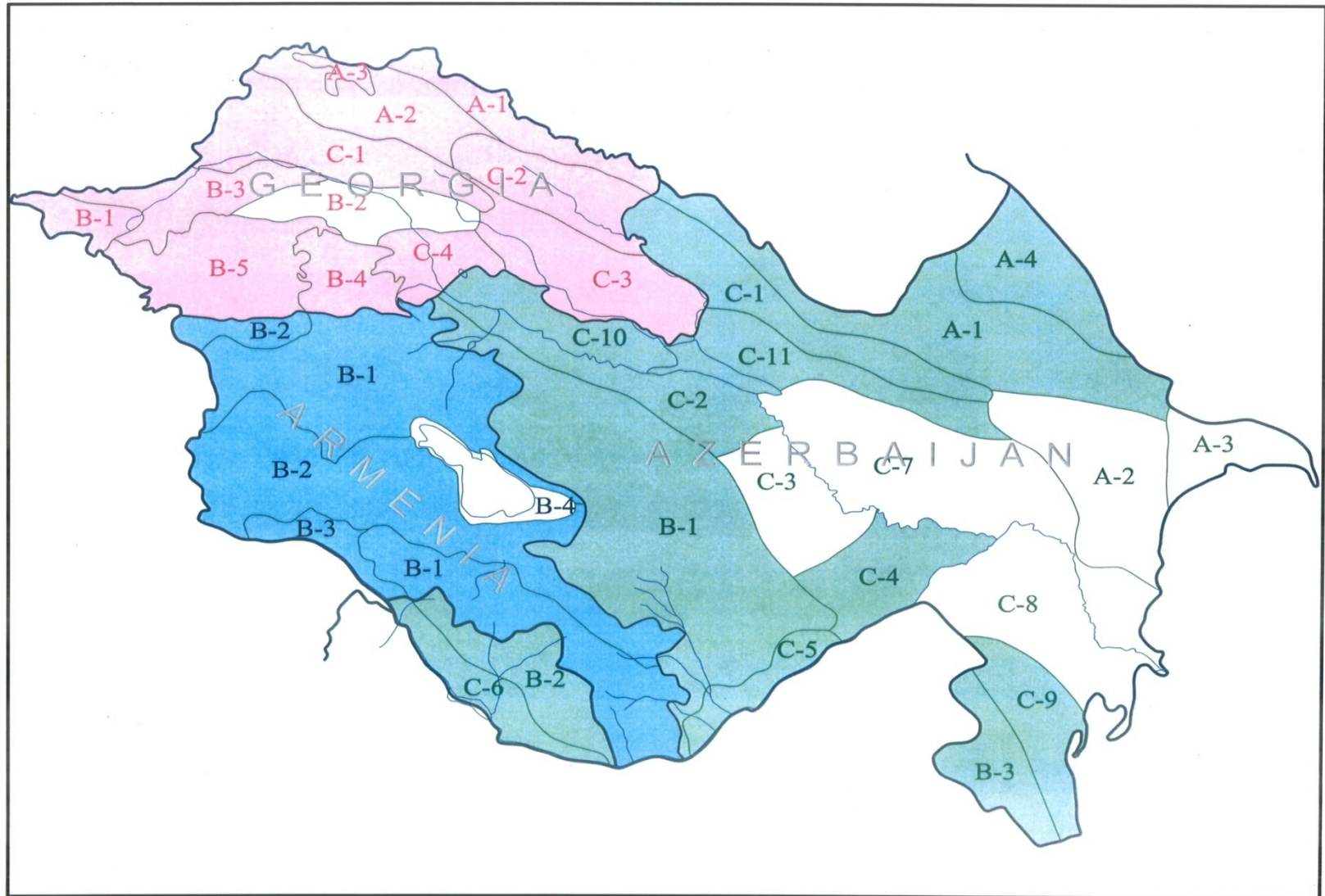


# Transboundary rivers





# The scheme of location of transboundary territories of underground waters



# Ecological problems in Kura-Araz rivers basin

1

- Excessive pollution of transboundary Kura, Aras rivers and their tributaries

2

- Municipal, industrial and agricultural pollution

3

- Bacteriological contamination of groundwater in the irrigated areas, cities and cattle farms

4

- Degradation of river basins as a result of quarrying activities

5

- Exhaustion of reserves in local areas as a result of uncontrolled use of groundwater, water absorption outside standard conditions



# THE MAIN TRANSBOUNDARY PROBLEMS IN KURA-ARAZ RIVERS BASIN



**There are no serious problems associated with the use of water resources between countries**

**The main problem associated with pollution of water sources**



# **THE MAIN TRANSBOUNDARY PROBLEMS IN KURA-ARAZ RIVERS BASIN**



**Waste waters of big cities of Georgia and Armenia are discharged into the Kura, Araz rivers and their tributaries without any biological treatment**

**Waste water of large industrial facilities of Georgia and Armenia are discharged into the Kura, Araz rivers and their tributaries without any treatment**

# Suffer country of Kura-Araz transboundary contamination-Azerbaijan



Azerbaijan is located in the lower part of the Kura-Araz rivers basin, plays a role of transit land for surface and groundwater flowing from the Mountain Ranges of the Greater Caucasus and the Lesser Caucasus down to the Caspian Sea



Therefore all negative influences of pollution is reflected in Azerbaijan territory



All pollutants from the neighboring countries are discharged in the Kura, Araz rivers and directed to the territory of Azerbaijan along transboundary flow



# **Suffer country of Kura-Araz transboundary contamination-Azerbaijan**



**Kura, Araz rivers and their tributaries flow into the Azerbaijan territory with the heavy metals, organic links in a dirty state**



**Water sources are polluted in the occupied territory of Azerbaijan, underground and surface objects, high capacity Sarsang reservoir is exploited by invaders**

# For regulation problems

First of all, every basin country should follow recommendations of the Helsinki Convention 1992 regarding transboundary water objects





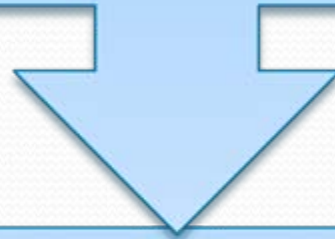
# For regulation problems

Independent monitoring system should be created by participating of international organizations ,including UNESCO and UNECE commissions, WWC, INBO and others on the transboundary water objects



# **For regulation problems**

**Evaluation of quality and quantity of water inflows between transboundary countries is expedient**



**The creation condition of groundwater feeding, chemical and bacteriological structures should be explored as a complex under the influence of polluted surface water**



# **For regulation problems**

**Measures for the localization of pollution process should be prepared and implemented**

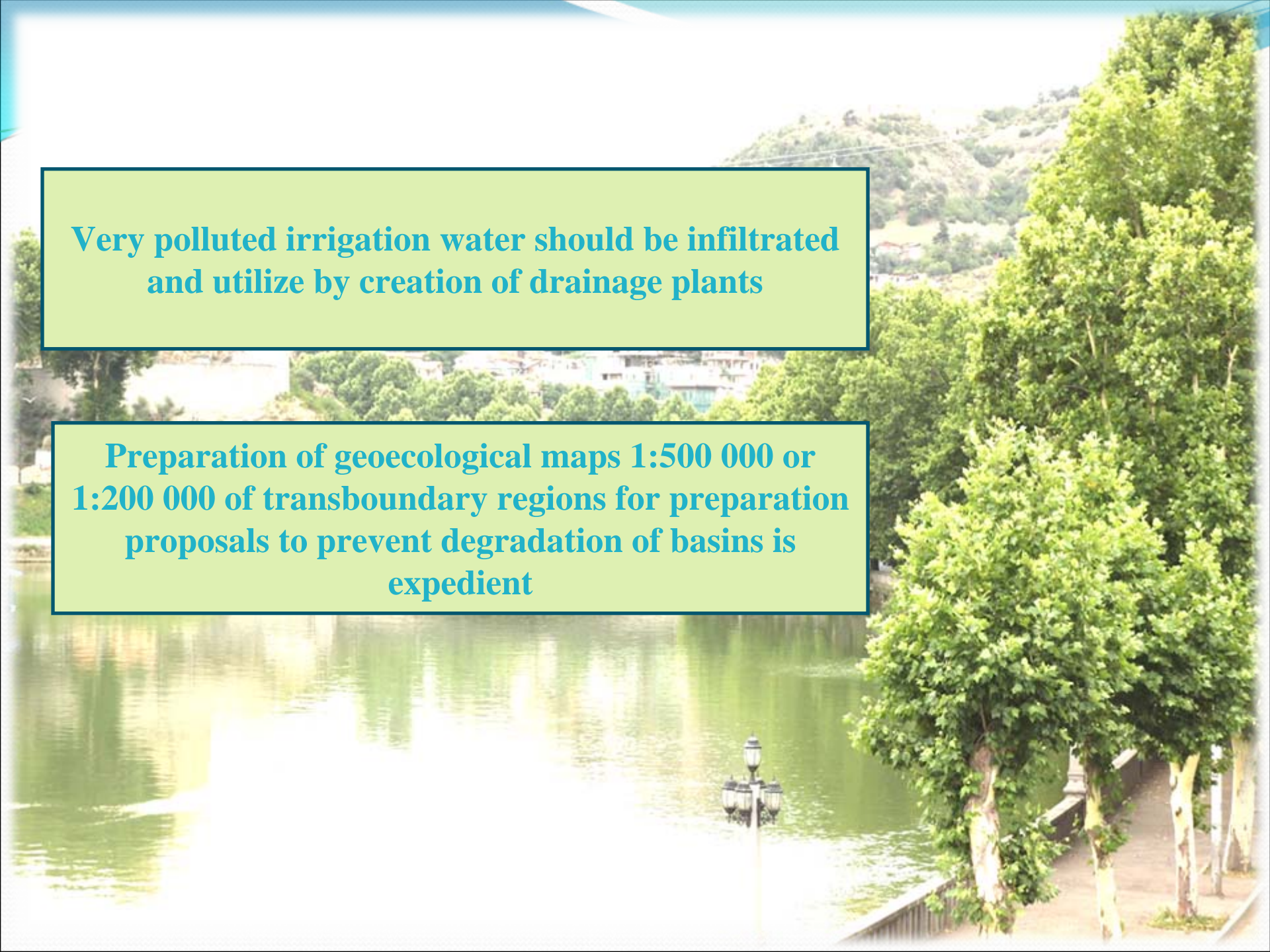
**All surface and underground water objects, water intakes should be inventory, water cadastre must be created**

# For regulation problems

**Current and potential polluted water sources should be inventoried by participation of international organizations**

**Waste water treatment plants should be modernized and at least should be prevented river discharge of untreated water of big cities**



A scenic view of a river with a fountain, trees, and a hillside in the background. The river is in the foreground, with a fountain spraying water. The background shows a hillside with trees and buildings. The sky is blue and clear.

**Very polluted irrigation water should be infiltrated and utilize by creation of drainage plants**

**Preparation of geocological maps 1:500 000 or 1:200 000 of transboundary regions for preparation proposals to prevent degradation of basins is expedient**

	<b>Every country should be prepare integrated water resources management scheme for its own territory</b>

	<b>Basin countries should achieve the preparation of integrated water resources management scheme by participation international organizations</b>



Thank you