

## **Transboundary water resources management: the Syrdarya river case study**

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Management of the Syrdarya river waters in the present conditions is performed within the framework of international agreements under the leadership of ICWC, the decisions of which are implemented by the BWO "Syrdarya".

The BWO plans, submits for approval of ICWC and implements the operating regimes of the Naryn-Syrdarya reservoir cascade and water supply quotas to the riparian states, as well performs the operational management, control and monitoring of water withdrawals, and operates waterworks facilities and water intake structures.

The achieved agreements between the states on joint management of water resources, and the established institutional structures give possibilities in general to deal with complex issues on interstate water allocation. The main task of the BWO - water delivery in agreed volumes - mainly is fulfilled. Repair-and-maintenance operations on the waterworks facilities, canals and other structures transmitted by the riparian countries to the BWO's interim operation are conducted regularly. A system of automated control, dispatching and monitoring of water resources is implemented.

Given the changing water management situation, and the complete regulation of river runoff, the increasing water deficit and different interests states and industries in water use, the following is essential to ensure fair and equitable water supply to water users:

timely review, approval and adoption of the operating modes of the Naryn-Syrdarya reservoir cascade and water withdrawal quotas,

observance of the agreed releases by the owners of reservoirs;

management of required forecasts and on-line hydrological and hydrometric information along the river channel, tributaries and dams;

financing of operation of hydraulic structures in quantities sufficient to maintain their good technical condition.

The main tasks of joint activities between the riparian countries to improve water resources management in the Syrdarya river for near future can be outlined on the basis of past experience.

The rules of water resources management in the Syrdarya river basin, including the Aydar-Arnasay system, the Priaralie and the northern part of the Aral Sea need to be developed and agreed. The rules must contain the optimized operational modes for reservoirs ensuring the long-term regulation and sustainable distribution of flow with minimal risk for irrigation and ecosystems under growing water needs and quality requirements.

Rehabilitation measures for hydraulic structures, gauging stations and interstate canals are required.

In addition, it is necessary to continue implementation of automated control systems on the interstate structures such as SCADA, providing efficiency and quality of water resources management.