Interstate Commission for Water Coordination of Central Asia	**BULLETIN № 1 (100)**	April 2024

CONTENT

From the Editorial Board

Dear readers!

At the 5th ICWC meeting (Kzyl -Orda, July 8-9, 1993), it was decided to publish the ICWC newsletter each quarter.

Here we are! Just over 30 years later, this is the 100th issue.

Since then, the ICWC Bulletin has evolved from a simple newsletter to an analytical publication reflecting the current status of water policy, joint management and use of water resources in the region at all levels of political and economic hierarchy – from the heads of state to water experts.

The realities of recent decades show that water can no longer be considered isolatedly; water is intertwined with other systems - ecology, economy, energy, climate, food security, etc. The importance of these interdependency is reflected in the ICWC bulletin.

We would like to mention that an outstanding scientist, the first Director of SIC ICWC, Prof. Victor A. Dukhovniy, stood at the origins of the ICWC Bulletin.

April 20, 2024 is his 90th anniversary.

Victor Dukhovniy remains in our memory as a high professional person, a world-renowned scientist, a teacher and mentor who generously shared his experience and knowledge. Victor Dukhovniy left behind a huge scientific heritage, the relevance and scientific value of which would remain for decades.

In 2024, we are to hold an international conference dedicated to the 90th anniversary of Professor Dukhovniy and to prepare a book with articles or short stories from his friends and colleagues reflecting on his contribution to different water related activities, causes and events.

Dinara Ziganshina

Editor-in-Chief

Director of SIC ICWC

Meetings with the participation of the Heads of State of Central Asia

State visit of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Republic of Tajikistan[1]

President of the Republic of Uzbekistan Shavkat Mirziyoyev paid a state visit to Tajikistan on April 18-19.

The main outcome of the visit was the signing of the Treaty on Allied Relations between Tajikistan and Uzbekistan.

«We have agreed that investment and cooperation in the industrial sector should be the key areas of further effective development of our economic ties.

In this context, we will expand a joint Tajik-Uzbek investment company.

[1] Source:
https://president.uz/ru/lists/view/7177
http://president.tj/ru/node/33165

We are convinced that this mechanism facilitates the implementation of a number of specific projects.

In particular, they can cover hydropower, industry, including production of automobiles and their components, pharmaceuticals, and processing of agricultural products.

[…]

We discussed our cooperation in the field of agriculture.

We noted the beginning of successful implementation of a number of projects, in particular «Friendship Garden» in Gissar city and Agro-services Center in Khujand city.

We also talked about the need to boost the work on the creation of joint agrarian complexes.

During the talks we noted the importance of further expansion of cooperation in the energy sector.

Special attention was paid to the implementation of a flagship joint project of two HPPs in the Zarafshan River basin.

Necessary measures to ensure parallel operation of the energy system of Tajikistan and the Unified Energy System of Central Asia were discussed", said the President of Tajikistan Emomali Rahmon, speaking at the press conference.

Official visit of the President of the Kyrgyz Republic Sadyr Japarov to the Republic of Kazakhstan[2]

On April 18-19, the President of the Kyrgyz Republic Sadyr Japarov paid an official visit to the Republic of Kazakhstan.

The Presidents discussed priorities of further Kyrgyz-Kazakh cooperation in trade and economy, water and energy, transport and border and cultural-humanitarian spheres.

The parties confirmed their mutual commitment to develop cooperation in all areas in the spirit of allied relations and strategic partnership.

After the meeting, the Presidents held the Sixth Meeting of the Supreme Interstate Council of the Kyrgyz Republic and the Republic of Kazakhstan.

As a result of negotiations, a number of documents were signed aimed at deepening cooperation across a wide range of bilateral matters, the main of

[2] Source:
https://president.kg/news/all/25243,
https://akorda.kz/ru/glava-gosudarstva-nagradil-prezidenta-kyrgyzstana-sadyra-zhaparova-ordenom-dostyk-i-stepeni-193343,
https://www.akorda.kz/ru/kasym-zhomart-tokaev-i-sadyr-zhaparov-proveli-brifing-dlya-predstaviteley-smi-1935931

which was the Treaty on deepening and expanding allied relations between the Kyrgyz Republic and the Republic of Kazakhstan.

The President Sadyr Japarov was awarded the 1st degree Order of Dostyk (Friendship).

«In recent years, the importance of efficient and equitable use of transboundary water resources has increased. We have agreed to continue our coordinated work. To address challenges in this area as early as possible, it is necessary to take joint measures. Therefore, we agreed to approve a work plan of interstate water infrastructure in the near future and implement it in a timely manner. Kazakhstan is ready to fully fulfill all obligations and jointly implement important projects», President Kasym-Jomart Tokayev said during a media briefing.

Treaty on deepening and expanding allied relations between the Kyrgyz Republic and the Republic of Kazakhstan[3]

(extract)

The Kyrgyz Republic and the Republic of Kazakhstan, hereinafter referred to as the Parties,

Guided by the Treaty of Eternal Friendship between the Kyrgyz Republic and the Republic of Kazakhstan of April 8, 1997,

Re-affirming their commitment to the Treaty on allied relations between the Kyrgyz Republic and Republic of Kazakhstan of December 25, 2003,

On the basis of mutual aspiration for consistent deepening of political dialogue and mutually beneficial multifaceted cooperation,

Striving to achieve long-term multifaceted bilateral cooperation, to fully develop it in political, economic, trade, investment, scientific-technological, cultural-humanitarian and other promising spheres on the basis of inviolable bonds of friendship, brotherhood, good neighborliness and mutual respect,

Being convinced that further comprehensive development of bilateral relations will contribute to the progress and prosperity of both states and to the strengthening of peace and stability in the region,

Re-affirming their commitment to the goals and principles of the Charter of the United Nation,

Striving to achieve new and better forms of cooperation that will bring the current Kyrgyz-Kazakh relations to a qualitatively new level,

have agreed to the following:

[…]

Article 12

The Parties shall closely cooperate to achieve food security by increasing the efficiency of the agro-industry, organizing joint ventures for agricultural production in accordance with their national legislation, as well as creating favorable conditions on their territories.

[…]

[3] Source: https://kg.akipress.org/news:2094869/

Article 14

The Parties shall expand cooperation in the field of science and higher education, including through academic mobility, double degree programs, joint research of mutual interest, and increased quotas for citizens to study in higher education institutions, opening branches of higher education institutions, joint faculties and educational institutions.

The Parties shall cooperate in the field of human capital development in the public service.

[…]

Article 16

The Parties shall strengthen cooperation in a field of effective water use and take measures to establish mutually beneficial mechanism of water and energy cooperation.

The Parties shall continue cooperation on rational use of natural resources, improvement and development of bilateral treaty framework including through consultations on environmental protection.

Article 17

The Parties shall closely cooperate to ensure environmental security, prevent environmental disasters, including those of transboundary nature, and combat their consequences, acting in accordance with the national legislation of the Parties, bilateral and multilateral international treaties to which they are parties.

The Parties shall provide mutual assistance in the prevention and response to natural and man-made disasters that pose a threat to human livelihood and territories.

Article 18

The Parties shall express their readiness to further strengthen cooperation on energy positively assess opportunities for joint development of hydropower potential, and plan to explore possible ways of cooperation on full deployment of all energy sources, while saving natural environment as maximum as possible.

[…]

Events

International Conference “The Contemporary Developments in Afghanistan: Implications on Central Asia”

The conference “The Contemporary Developments in Afghanistan: Implications on Central Asia” organized by the Institute for Advanced International Studies at the University of World Economy and Diplomacy took place in Tashkent on the 20th of February.

The conference included discussions on key aspects of politics, economics, social life and security in Afghanistan and highlighted the role of Afghanistan as a key element in Eurasian regional dynamics and the pressing issues that require attention and joint efforts.

Four key themes that reflect the current situation in Afghanistan and its implications for the wider region were addressed in particular:

- Afghanistan's role in Eurasian connectivity
- Afghanistan and Central Asia: relations on water issues
- Terroristic groups in Afghanistan: challenges and strategies for regional security
- Humanitarian crisis and refugee issues in Afghanistan

The session "Afghanistan and Central Asia: relations on water issues" addressed potential benefits and risks concerning agricultural development, economic growth, and employment prospects in Afghanistan. Particular attention was paid to the impact of the Qosh Tepa Canal construction on neighboring countries.

Iskandar Abdullaev, Visiting Professor of the Justus Liebig University Giessen talked on the potential impacts of the Qosh Tepa Canal and on the actions to strengthen cooperation between the countries. Among the cooperation tracks he mentioned agriculture and water improvements in the Amu Darya

Basin, increasing trade between CA and Afghanistan, capacity building, joint research and developing dialogue platforms.

Yarash Pulatov, Head of Division at the Institute of Water Problems, Hydropower and Ecology, National Academy of Sciences of Tajikistan put focus on the need for sound water use in the region as a way to adapt to climate change and meet growing water demands of the countries.

Dinara Ziganshina, Director of SIC ICWC talked on the legal and institutional framework of water cooperation. Regulation of river water between the Central Asian countries is based on the 1992 Almaty Agreement. However, no agreement exists that includes an agreed water withdrawal by Afghanistan in the Amu Darya Basin. The general matters related to the use of frontier waters with Afghanistan are regulated by the 1958 Treaty on the Regime of Soviet-Afghan State Frontier as well as by customary international norms. All countries and international partners shall follow to the following international law norms in the process of transboundary water development:

- Equitable and reasonable use of a watercourse
- Obligation not to cause significant harm
- Providing a minimum environmental flow

- Good faith cooperation with a view of achieving the optimum use and adequate protection of an international watercourse
- Regular exchange of data and information between riparian countries
- Consultations on transboundary waters
- Prior notification of planned measures
- Environmental impact assessment in a transboundary context

Davletmurad Mamedov, representative of the Ministry for Foreign Affairs of Turkmenistan mentioned the important role of ICWC in the region and urged the countries to develop a region-wide water conservation strategy.

In the course of discussions, the participants exchanged their views on adaptation to climate change and on socio-economic implications of non-coordinated development.

International Conference “The Silk Road of Knowledge: Science meets green policy”

On February 22-23, 2024, the international conference «The Silk Road of Knowledge: Science meets Green Policy» was organized by the Kazakh-German University. The conference was aimed at enhancing cooperation and networking among scientists, policy makers and practitioners, as well as exchange of experiences and accumulation of knowledge in the field of integrated water resources management, food security, infrastructure development and energy efficiency practices in the context of climate change.

The conference was organized in two high-level panel discussions and a number of thematic sessions:

1. Reviving the Aral Sea Restoration: innovations for sustainable progress
2. Sustainable land management in Central Asia and carbon benefits
3. Hydrogen production in Kazakhstan and Trans-Caspian hydrogen transportation

4. Climate vulnerabilities in Central Asia: universities and policy mainstreaming

5. GIS technologies and modelling approaches for more sustainable management of natural resources

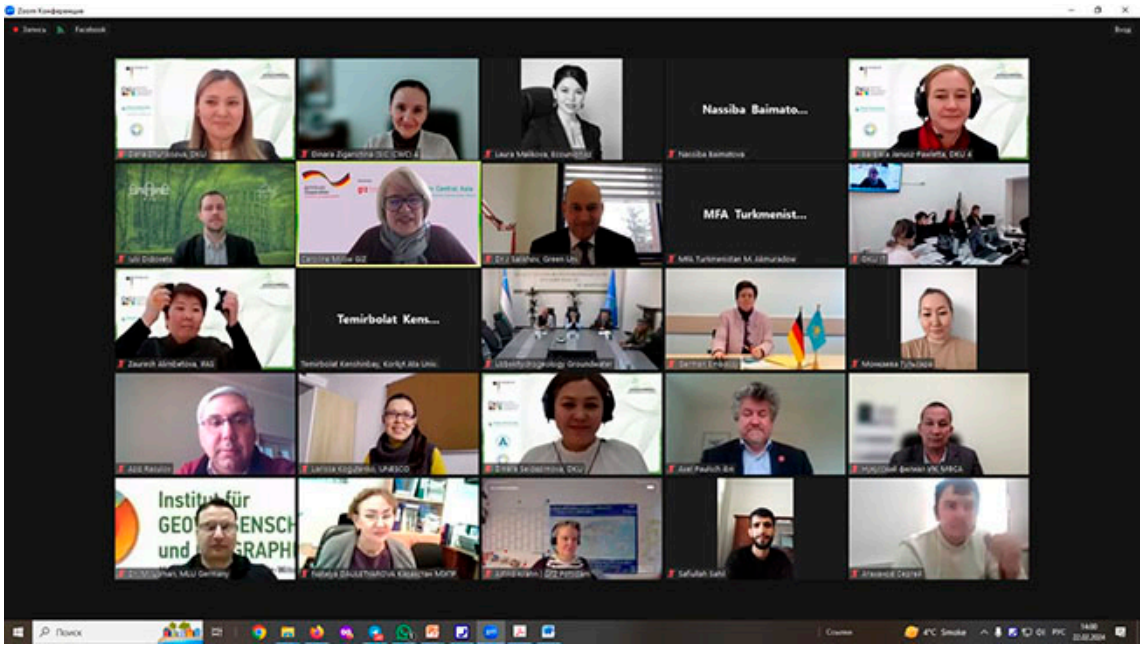
6. Nexus of shared resources' management in the countries of Central Asia

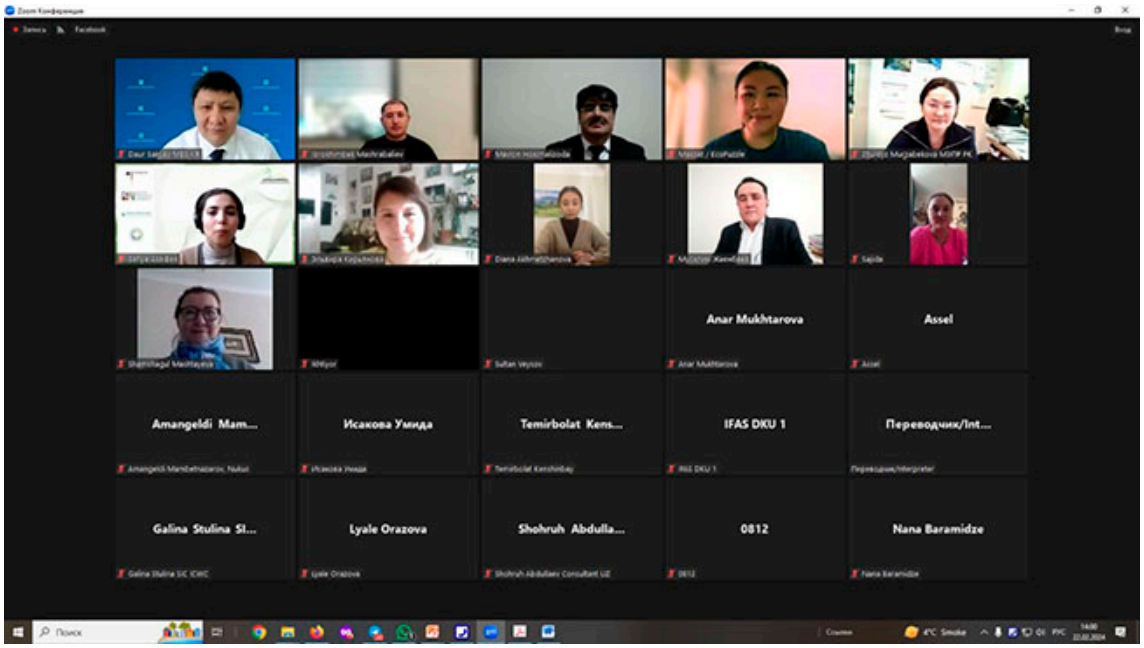
The panel discussion **»Bridging the Gap between Science, Education and Political Practice»** invited representatives of governmental authorities as well as representatives of scientific and research centers to discuss cooperation between policy and science to mitigate climate change in Central Asia.

Dinara Ziganshina, Director of SIC ICWC, talked on the role of the Scientific Information Center in water decision-making processes. She noted the need for joint systematic work to improve data availability and reliability, forecasting, and better communication of research results to decision-makers. The need for long-term joint research programs on water and climate in Central Asia was also noted.

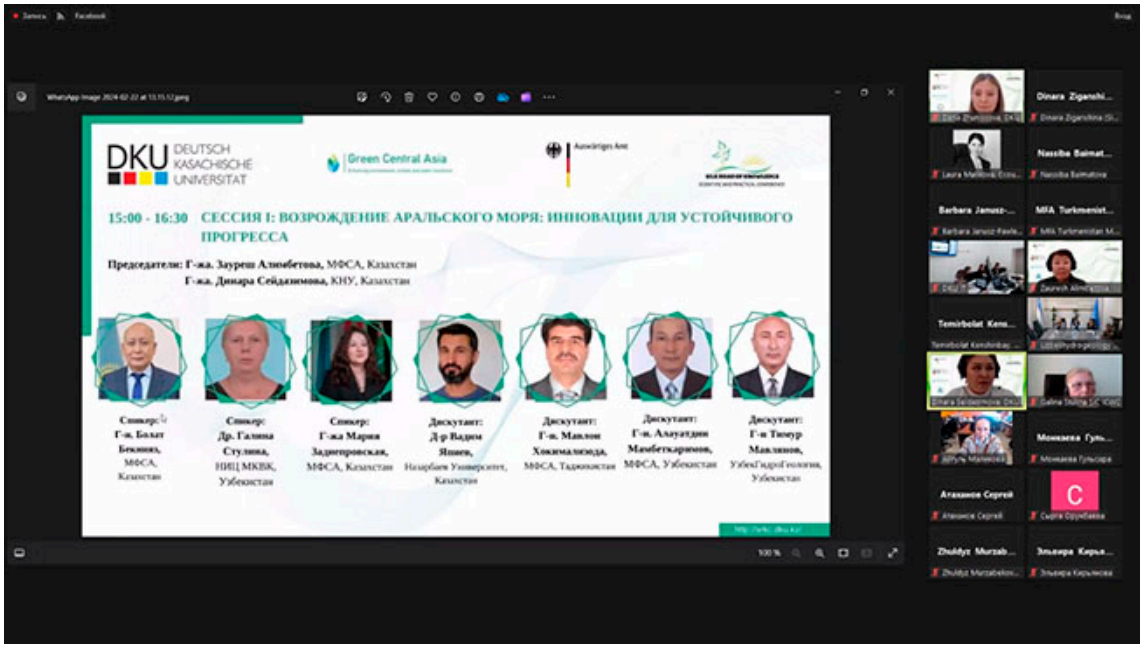
Galina Stulina, SIC ICWC, spoke in the session titled **"Reviving the Aral Sea Restoration: innovations for sustainable progress"**. She presented the results of expeditions conducted by SIC ICWC in cooperation with a number of organizations. As a result of the expeditions (two expeditions in 2019-2020 and two expeditions in 2023), an area of 2.7 million ha was covered by research. The multidisciplinary nature of the expeditions allowed to get a comprehensive view of the state of the dried seabed, make conclusions and recommendations on the direction of actions on the dried seabed and the Aral Sea Region. The future plans include the development of the geoinformation system «The dried seabed of the Aral Sea».

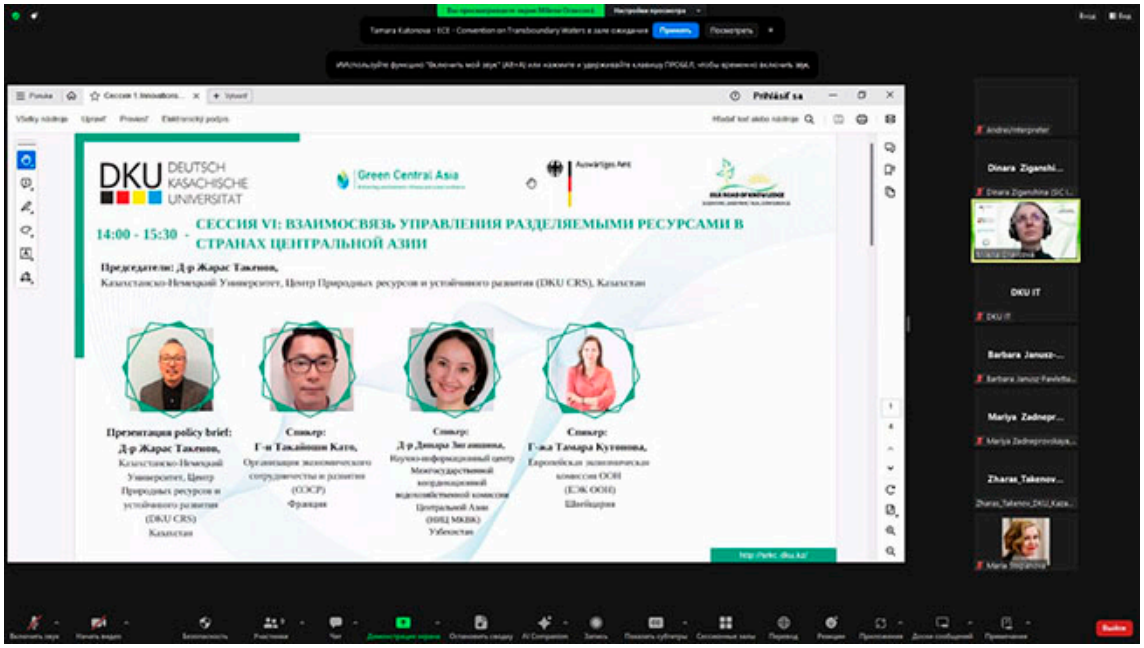
The ways and mechanisms of possible intersectoral interactions between water, energy, agriculture and environment were discussed during the session on **"Nexus of shared resources' management in the countries of Central Asia"**. Representatives of OECD, SIC ICWC and UNECE spoke at the session as partners in implementation of the IKI Project «Regional mechanisms for low-carbon, climate-resilient transformations of water-energy-land use nexus in Central Asia».





Dinara Ziganshina, Director of SIC ICWC presented some tools and assessments that can contribute to better understanding and practical application of nexus approaches at various levels. Among the presented works, in particular, were the “Assessment of water, energy and food security and development prospects”, the discussion paper “Rethinking Institutional and Financial Mechanisms on Water and Energy Cooperation in Central Asia” and “Territorial water security outlook”.


DKU DEUTSCH KASACHISCHE UNIVERSITÄT
Green Central Asia
15:00 - 16:30 СЕССИЯ I: ВОЗРОЖДЕНИЕ АРАЛЬСКОГО МОРЯ: ИННОВАЦИИ ДЛЯ УСТОЙЧИВОГО ПРОГРЕССА
Председатели: Г-жа. Зауреш Алиобетова, МФСА, Казахстан
Г-жа. Динара Сейдикимова, КНУ, Казахстан
Спикер: Г-н. Болат Бекенов, МФСА, Казахстан
Спикер: Др. Галина Стулина, НИЦ МКВК, Узбекистан
Спикер: Г-жа Мария Задепровская, МФСА, Казахстан
Дискутант: Д-р Вадим Яшин, Назарбаев Университет, Казахстан
Дискутант: Г-н. Маилон Хожамлиязода, МФСА, Таджикистан
Дискутант: Г-н. Алауатдин Маибеккариев, МФСА, Узбекистан
Дискутант: Г-н Тимур Маклаков, УзбекГидроЭнергоПроект, Узбекистан


DKU DEUTSCH KASACHISCHE UNIVERSITÄT
Green Central Asia
14:00 - 15:30 СЕССИЯ VI: ВЗАИМОСВЯЗЬ УПРАВЛЕНИЯ РАЗДЕЛЯЕМЫМИ РЕСУРСАМИ В СТРАНАХ ЦЕНТРАЛЬНОЙ АЗИИ
Председатели: Д-р Жарас Такенов,
Казахстанско-Немецкий Университет, Центр Природных ресурсов и устойчивого развития (DKU CRS), Казахстан
Презентация policy brief: Д-р Жарас Такенов, Казахстанско-Немецкий Университет, Центр Природных ресурсов и устойчивого развития (DKU CRS) Казахстан
Спикер: Г-н Такайоши Като, Организация экономического сотрудничества и развития (ОЭСР) Франция
Спикер: Д-р Динара Зиганшина, Научно-информационный центр Межгосударственной координационной водохозяйственной комиссии Центральной Азии (НИЦ МКВК) Узбекистан
Спикер: Г-жа Тамара Кутепова, Европейская экономическая комиссия ООН (ЕЭК ООН) Швейцария

President of the ICID, Dr. Marco Arcieri paid a working visit to the Republic of Uzbekistan[4]

On March 17, 2024, a meeting with Marco Arcieri, President of the International Commission on Irrigation and Drainage (ICID) was held at the Ministry of Water Management of the Republic of Uzbekistan.

The Minister of Water Management, Mr. Sh. Khamraev, who is also an Honorary Vice-President of the ICID, warmly welcomed the guest during his visit to our country and noted that this first visit to Uzbekistan as the President of the ICID is a good opportunity to share ideas on ambitious matters of mutual cooperation in the field of water management, irrigation and food security.

In turn, Marko Arcieri noted that this is his first official visit as the President of the ICID to Central Asia, he has big plans and new ideas to take cooperation between ICID and Uzbekistan to a new level.

[4] Source: https://aral.uz/wp/2024/03/17/

Vadim Sokolov, Vice-President of the ICID, Head of the Agency for Implementation of IFAS Projects in Uzbekistan, also attended the meeting and presented the work done as part of the Water and Irrigation Sector Development Strategy 2021-2023. In particular, the results achieved in such areas as water and energy saving, digitalization, public-private partnership were mentioned.

It was said that on the initiative of the head of Uzbekistan, the year 2024 was declared as the « Year of Canal Lining», as part of which 1.5 thousand kilometers of large canals and 10 thousand kilometers of small (on-farm) canals are to be lined.

Marco Archieri was familiarized with the laboratories of the Research Institute of Irrigation and Water Problems, ongoing research and conditions created for young scientists, the exhibition platform on drip irrigation, as well as the activities of the «Water Conservation School» established with the support of the Agrobank of Uzbekistan.

The first representative of Uzbekistan on the post of Vice-President of the ICID was Academician Alexander Askochensky in the 1960s, who made a great contribution to a modern irrigation system in Central Asia. Since Uzbekistan became independent, Professor Victor Dukhovniy has got this honored position in 2003. In 2019, Sh. Khamraev, Minister of Water Management of Uzbekistan was elected as Vice-President of the ICID for a 3-year term. Currently, he is an Honorary Vice-President. Vadim Sokolov, Head of the Agency for Implementation of IFAS Projects in Uzbekistan, was elected as Vice-President of the ICID in November 2023 for a term of three years.

The purpose of ICID President's visit to Uzbekistan is to participate in a series of training workshops titled «Farmers’ guidelines on soil and water management in salt-affected areas» developed as part of FAO's Global Framework Program on Water Scarcity in Agriculture (WASAG).

The Women in Water Diplomacy Second Global Network Forum

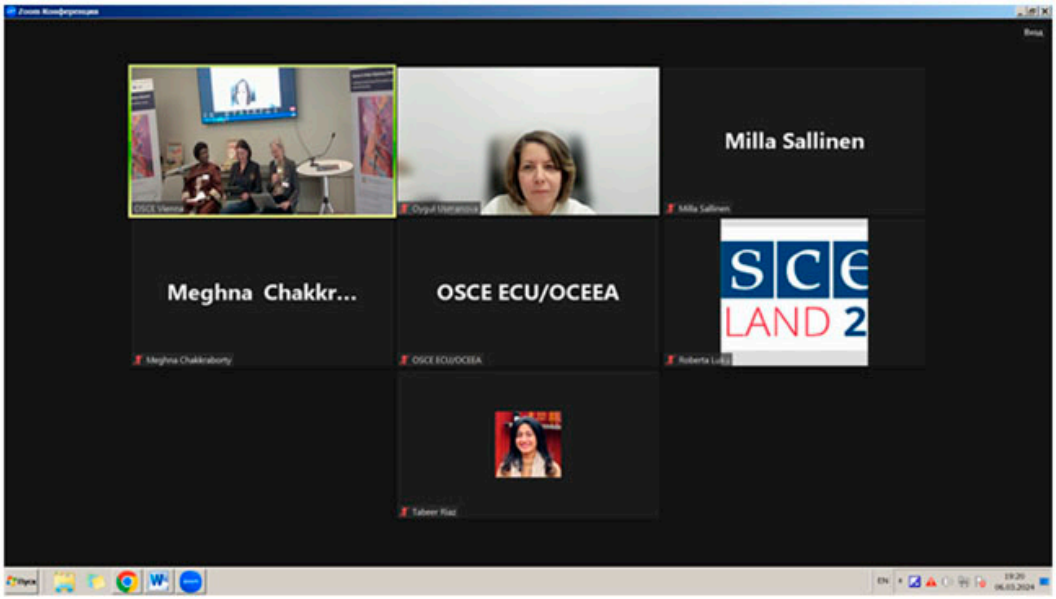
The Women in Water Diplomacy Second Global Network Forum was held in Vienna, Austria from March 4-7, 2024. The second Global Network Forum was organized by the Stockholm International Water Institute (SIWI), the Environmental Law Institute (ELI), the Organization for Security and Cooperation in Europe (OSCE), and the Central Asia Regional Environmental Centre (CAREC).

The event brought together Network members from the Nile Basin, Central Asia-Afghanistan, Southern African basins including the Zambezi, Orange-Senqu, Okavango, as well as shared basins across the Americas. The second Global Network Forum was to take stock of Network's developments and priorities with strong focus on advancing the Global Strategy's prioritized activities, enable joint learning and discussions between Network members and supporters, enable inter-basin exchange and learning, and collectively mark International Women's Day.

The first two days gave an opportunity for joint learning and discussions between Network members. On March 6, the International Women's Day Water Diplomacy Symposium was held. The Head of International Communications Division of SIC ICWC, Oygul Usmanova participated online in the panel discussion on "Investing in women water diplomats". She underlined that women are still well underrepresented in the water sector in Central Asia, pointed to the main barriers that we face when it comes to raising the role of women in water management and the society as a whole, and focused on the need to build capacities of women professionals so that they could engage in water decision making on equal footing with men.

The last day of the Forum was dedicated to OSCE, which is headquartered in Vienna. During a moderated interactive panel "Addressing inclusive water governance" the participants reflected on how does participatory inclusive approach contribute to building sustainable water management in the context of climate change and what organizations and institutions like OSCE should focus on, when it comes to fostering inclusivity in water-related decision-making and processes.

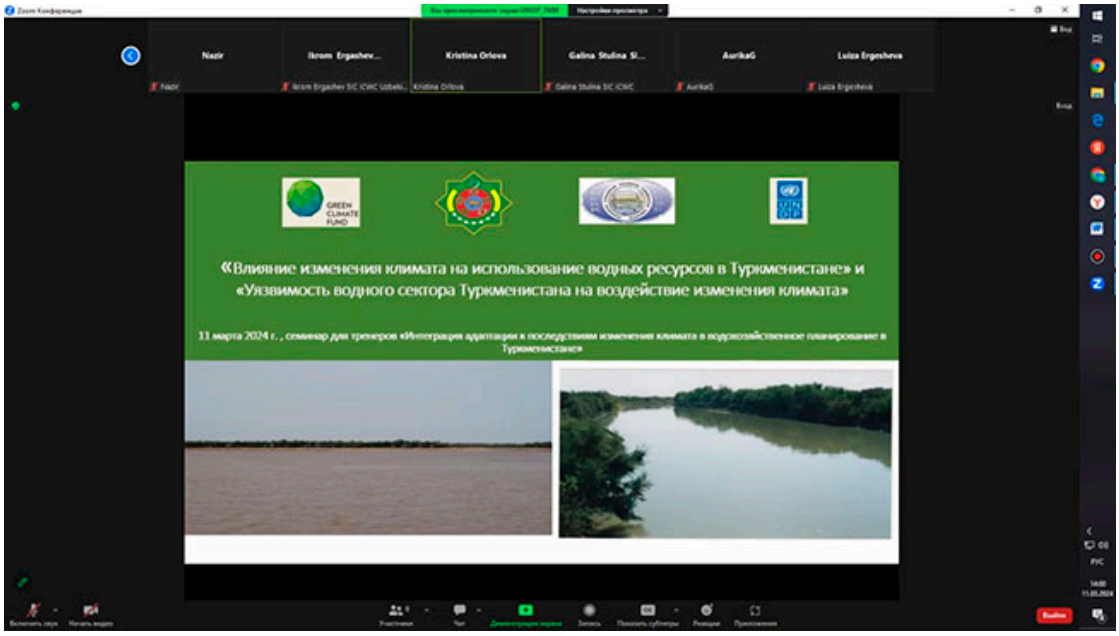
The Head of International Communications Division of SIC ICWC spoke online on activities undertaken by SIC as part of its commitment made on the occasion of the UN Water Conference in 2023 to work closely with the Central Asian countries and other partners to advance evidence-based transboundary water cooperation. In particular, she showed examples of enhancement of the CAWater-Info portal, its information system and knowledge base to make them more accessible, easy to use and add visual context for wider audience and experts, of development of partnerships at expert level, and of stakeholder mapping that form a part of inclusive water governance.



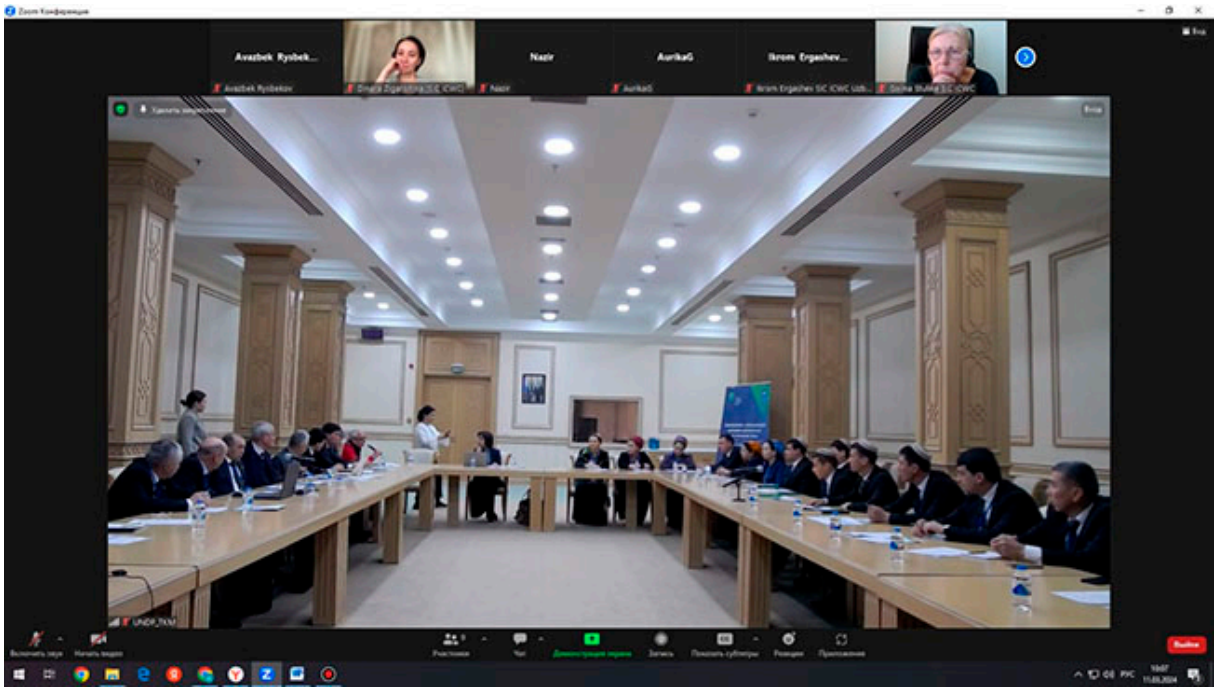
Trainings on adaptation to the effects of climate change in Turkmenistan

Climate change has significant, mainly, negative impacts on water resources in Central Asia. In the future, the negative impacts ranging from increasing frequencies and intensities of floods and droughts, more severe water scarcity, erosion and deposits, reduction of glacial and snow cover to deteriorating water quality and ecosystems are expected to aggravate. Moreover, the impact of climate change on water resources will have a cascading effect on human health, economy and society since multiple sectors, such as agriculture, energy and hydropower, health care, tourism and environment, directly depend on water.

Adaptation to climate change effects is the most effective under the high competencies of professional staff. The competencies on adaptation can be improved, in particular, through tailored thematic training. It is important to build capacities of trainers, who could continue working on systemic and regular mainstreaming of adaptation techniques and practices across all areas of the public and private sector.



Thus, on **11-12 March 2024,** SIC ICWC together with SIC ICSD and with the financial support of UNDP in Turkmenistan held training on adaptation to impacts of climate change and elimination of its negative effects in water planning for professionals/trainers representing different government institutions, academia, and private sector (Union of Industrialists and Entrepreneurs).



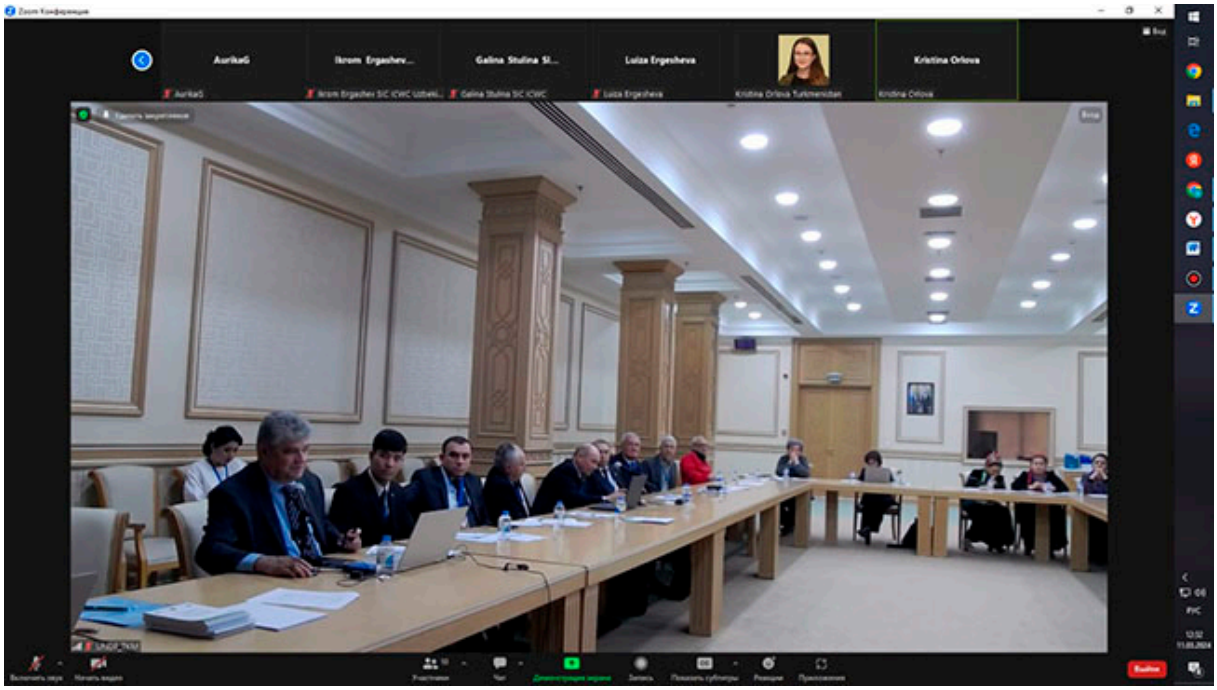
The objective of given training workshop was to build capacities of trainers to support the mainstreaming of adaptation techniques and practices and to scale up knowledge of climate change impacts and adaptation options across all areas of the public and private sector.

Experts of SIC ICWC and SIC ICSD presented a new Teaching Guide to the trainers, which was based on lessons from the past training workshops for water professionals and decision makers on adaptive water use planning.

It is expected that potential experts/trainers will improve their competencies on integration of adaptation in water planning and will have practical skills in dissemination of acquired knowledge on the basis of the developed Teaching Guide.

On **13-15 March 2024**, as part of the UNDP/GCF Project “Developing a National Adaptation Planning Process in Turkmenistan”, a workshop “Raising awareness on adaptation to climate change and risks imposed by climate change in the sectors and economic activity of Turkmenistan: water and agricultural sectors” was held in Ashgabat.

The workshop was organized jointly by UNDP, Ministry of Environment Protection of Turkmenistan, SIC ICWC and SIC ICSD, with the support of the Green Climate Fund. The online workshop was held in a hybrid format.



This was the fifth of six planned workshops for members of the Coordination Mechanism and decision makers on integration of adaptation into water planning in Turkmenistan.

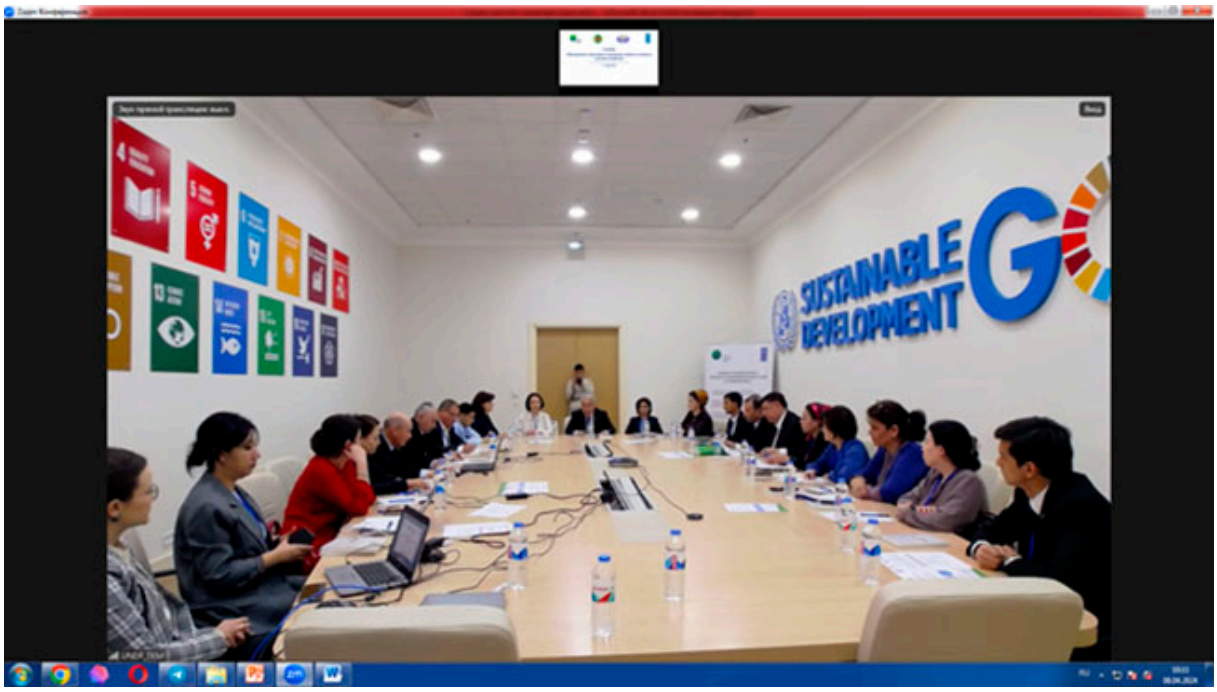
The main objective was to present the current status and perspectives for development of adaptation strategies in water and agricultural sectors and discuss opportunities for intersectoral cooperation and nexus at the national and international levels. Among many other topics, particular attention was paid to innovation approaches and technologies that could contribute to resilience to climate change, improved water management and agricultural productivity, while maintaining environmental equilibrium and economic development in the country.

The first day of the workshop included lectures from international and national experts of the UNDP Project, while in the second day experts of SIC ICWC and SIC ICSD delivered their lectures.

On **April, 8-9, 2024,** the workshop on “Tools for adaptation to climate change in water and agricultural sectors” was held as a part of the UNDP/GCF project “Developing a National Adaptation Planning Process in Turkmenistan”.

The workshop was organized by UNDP, the Ministry of Environmental Protection of Turkmenistan, SIC ICWC and SIC ICSD, with the financial

support of the Green Climate Fund. The workshop was held in the conference hall of the UN building in Ashgabat, in a hybrid format via Zoom.



This workshop is the final in a series of six two-day workshops for the members of the Coordination Mechanism and decision-makers on integration of adaptation to climate change into water planning.

The main objective of the workshop was to familiarize the participants with the conditions of formation, use and protection of water resources in the context of climate change at global, regional and national levels.

The participants had the opportunity to improve their knowledge of the various tools used in water management practices that help to effectively adapt to climate change.

Regional workshop on water diplomacy

A regional workshop on water diplomacy was organized by the UNDP/GEF project “Conservation and sustainable management of land resources and high nature value ecosystems in the Aral Sea basin for multiple benefits” on April 9 in Ashgabat.

The workshop’s objective was to discuss lessons of transboundary water cooperation between Turkmenistan and other riparian countries of the Aral Sea Basin and inform stakeholders on current activities of the International Fund for saving the Aral Sea.

The workshop brought together representatives from various ministries and departments of Turkmenistan, including the Ministry of Foreign Affairs, the Ministry of Agriculture, the State Committee of Water Economy, the Academy of Sciences, the Khyakimliks of Dashoguz and Lebap velayats, the Turkmen Agricultural University named after S. Niyazov, the Dashoguz branch of the Executive Committee of the IFAS, the Middle Amu Darya Branch of the Basin Water Management Organization “Amu Darya”, the «Turkmensuvylymtaslama» Institute, as well as non-governmental, regional and international organizations involved in cooperation on water and other environmental issues in Central Asia.

Director of SIC ICWC Dr. Ziganshina made presentation on "Transboundary water cooperation in the Amu Darya River Basin: achievements and future prospects."

During the workshop, the participants were engaged in discussions covering various topics such as enhancing regional cooperation in the Amu Darya River basin, the impact of climate change on regional water resources, the issues related to transboundary watercourses, and the significance of water diplomacy in the Caspian Sea region.

6th Water and Peace seminar

The 6th Annual Water and Peace Seminar on conflict and cooperation dynamics around large infrastructure in transboundary basins was held in Almaty, Kazakhstan on 17-18 April. The seminar was organized jointly by the German-Kazakh University and the IHE Delft Institute for Water Education within the program of Cross-regional learning for transformative water diplomacy (CroWD).

The seminar was focused on cooperation between states on large water infrastructure in transboundary basins. In the course of two days the following topics were addressed

- Impact of infrastructure development in transboundary basins
- Local aspects and stakeholder dynamics around dams
- Conflict and cooperation around infrastructure in transboundary basins
- Role of international water law and institutions
- Institutional mechanisms and dam management in transboundary basins
- Cultural and emotional aspects of dam construction

The seminar brought together researchers and representatives of higher education institutions and academia, government and non-government, regional and inter-regional organizations, private sector and transboundary water and water diplomacy centers from the Netherlands, Sudan, India, Jordan, Zimbabwe, Uzbekistan, Kazakhstan, Sweden, US, Germany, Hungary and Finland.

SIC ICWC was represented by Director Dinara Ziganshina (online), Deputy Director Sherzod Muminov, and researchers Alexander Dolidudko and Matlyaba Rakhimova.

Dinara Ziganshina made presentation on “Water Infrastructure of Interstate Importance in Central Asia: Legal, Institutional and Financial Arrangements”. Sherzod Muminov took part in the panel discussion on the removal of conflict risks and the cooperation potential around infrastructure through legal and institutional arrangements and answered a number of questions:

- Why dams become the cause of conflicts more frequently than other hydraulic structures?
- What mechanisms are available to solve dam-caused conflicts and were they successful?
- What are the key emerging water infrastructure related challenges and how can we improve legal and institutional arrangements in this context?
- What are successful practices of cooperation through legal or institutional arrangements for water infrastructure?

In the course of two days the discussions addressed the matters related to dams, large water infrastructure, environmental and social implications of dams, conflicts and cooperation.

14th Meeting of the Working Group on Water and Health

The 14th meeting of the Working Group on Water and Health was held on 16-17 April 2024 in Geneva. The meeting was organized by UNECE and the WHO Regional Office for Europe.

Mrs Zulfiya Yarullina took part in the meeting on behalf of SIC ICWC.

The main objectives were to review the implementation of the Protocol's program of work for the period 2023-2025 and provide guidance on its further development, while giving consideration to the financial and human resource situation. The Working Group also discussed how to benefit from the Protocol's practical framework to facilitate progress in the implementation of the water,

sanitation, hygiene and health-related Sustainable Development Goals in the pan-European region.

The welcome and congratulation ceremony took place for the two new Parties – North Macedonia and Uzbekistan – that have joined the Protocol since the sixth session of the Meeting of the Parties (Geneva, 16-18 November 2022). Representatives of the Republic of Uzbekistan and North Macedonia were invited to the Presidium, where they shared the main objectives on water, sanitation and health and relevant commitments of their respective countries.

The Working Group was familiarized with the tasks and events planned as part of the work program for the current 2024 and the next 2025. The parties discussed how to benefit from and give prominence to the work under the Protocol with regard to the implementation, follow-up and review of global and regional commitments in the areas of water, environment, sanitation, hygiene and health, including the 2030 Agenda for Sustainable Development, the outcomes of and follow-up to the United Nations 2023 Water Conference (New York, 22–24 March 2023), the Declaration of the Seventh Ministerial Conference on Environment and Health (Budapest Declaration) and other relevant global and regional environmental and health commitments.

Also, during the meeting the Parties presented information on:

- prevention and reduction of water-related diseases;
- water, sanitation and hygiene in institutional settings and public places;
- small-scale water supplies and sanitation;
- long-term vision and strategy for implementation of the Protocol on
- Water and Health;
- safe management of water supply and sanitation systems;
- equitable access to water and sanitation;
- increasing resilience to climate change.

In the course of informal communications between representatives of Uzbekistan and UNECE specialists, the work plan and further steps of Uzbekistan in the light of the initiated country project presented on March 14 this year in Tashkent on the development of targets under the Protocol were discussed.

A workshop on transboundary water allocation, Water-Energy- Food-Environment (WEFE) nexus

A workshop on transboundary water allocation, WEFE nexus and development of agreements and other arrangements was held in Livingstone, Zambia on 15-16 April. The workshop was organized by the Water Convention in partnership with numerous partners.

The participants exchanged experiences, shared good practices and practical tools on transboundary water allocation and the nexus. The workshop showcased a variety of working tools and approaches in this area and the importance of considering local specifics in process of their application.

Director of SIC ICWC Dinara Ziganshina presented the Central Asian experience in building legal and institutional frameworks of transboundary water allocation in the Aral Sea basin, while highlighting key achievements and challenges.

On 17 April, Ms Ziganshina as a vice-chairman of the Implementation Committee of the Water Convention took part in the workshop in support of technical negotiations for drafting a Cooperation Agreement between Zambia and Congo on establishment of a joint body in the Luapula River basin.

International Workshop on increasing capacities to prevent, prepare for and respond to accidental water pollution from tailing facilities

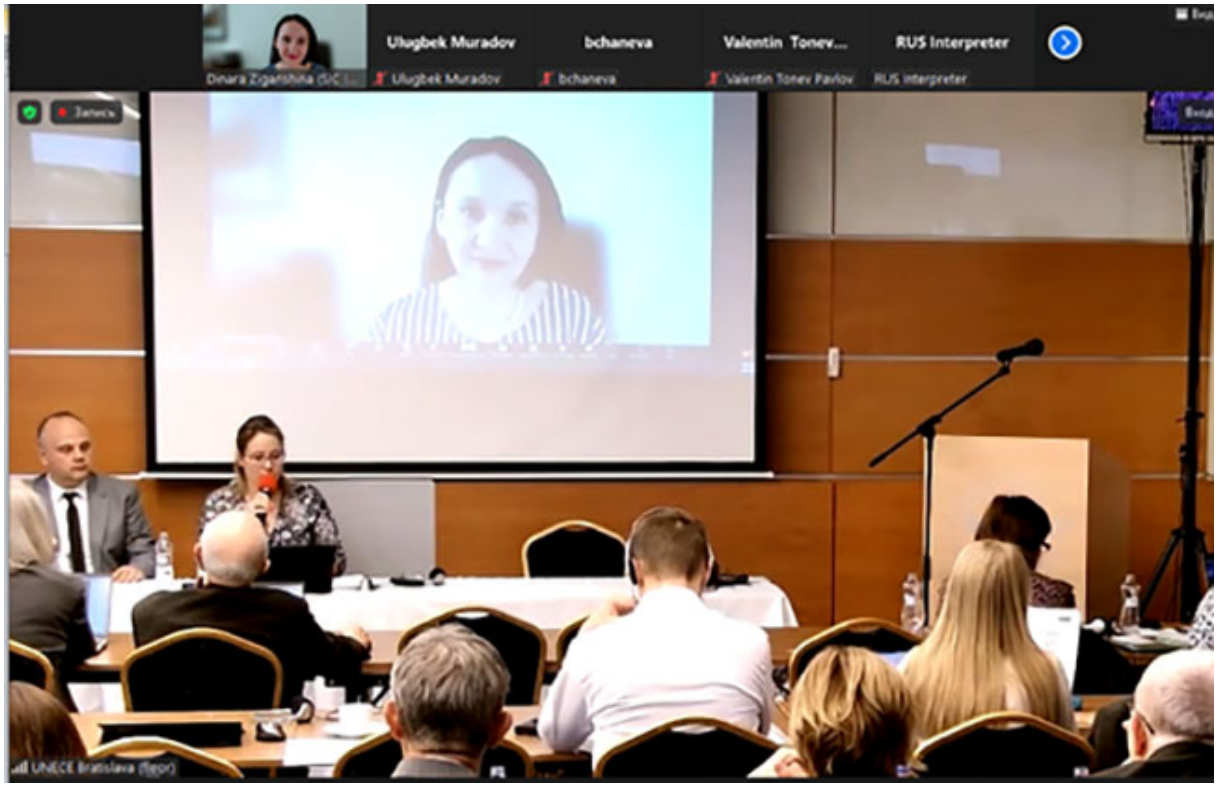
On April 23, 2024, an international workshop on increasing capacities to prevent, prepare for and respond to accidental water pollution from tailing facilities was held in Bratislava. The workshop was hosted by Slovakia and organized by UNECE in partnership with the Conventions' Joint Expert Group on Water and Industrial Accidents.

The workshop included five sessions:

- International and national regulatory frameworks on tailings safety and the prevention of accidental water pollution and their practical application
- Role of transboundary basin organizations in the prevention and
- mitigation of accidental water pollution
- Life cycle, monitoring and controls of Tailings Management Facilities
- (TMFs), including early warning systems
- Discussion on financing of Tailings Management Facilities (TMFs) after closure
- Tailings and water pollution risks, including tools to mitigate them

Director of SIC ICWC Dinara Ziganshina intervened in Session 2 with the report on the issues of water quality addressed by ICWC and by bilateral country groups in the region. She underlined, in particular, that the UNECE projects on water quality and tailings' impact in the region had formed a good basic platform to advance activities in this area.

In March 2024, to support Uzbekistan, joined recently to the Protocol on Water and Health, a new project "Strengthening action in Uzbekistan on water and sanitation and protection of water resources from accidental pollution in the face of climate change" was launched by UNECE. Among other things, it is planned to support the Joint Uzbek-Kazakh Working Group on environmental protection and water quality in the Syr Darya River Basin by starting working on the Joint Emergency Action Plan for prevention, preparedness and response to industrial/tailing accidents in the basin.



Water Action Agenda Symposium

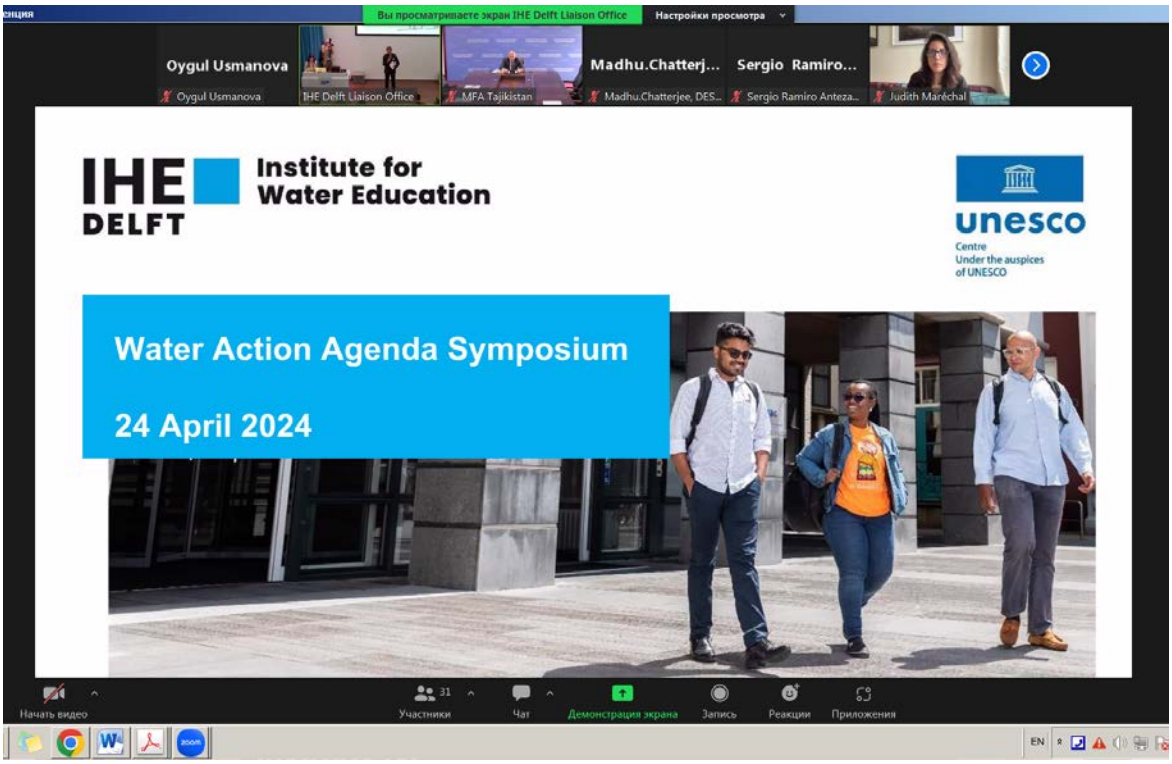
On April 24, the IHE Delft Institute for Water Education organized in cooperation with the Dutch Ministry of Infrastructure and Water Management the Water Action Agenda Symposium to drive progress in the implementation of the commitments that form the agenda. The event was in Hybrid format (in presence and online).

The Water Action Agenda is one of the main outcomes of the UN 2023 Water Conference which took place last year in New York. The agenda consists of 842 voluntary commitments (as of March 2024), submitted by the international water community with the ambition to define and implement game-changing initiatives to accelerate efforts in view of achieving SDG 6.

The symposium presented an analysis of voluntary commitments based on the survey sent to commitment holders. According to the analysis' results, half of all the commitments is global, cover mostly SDG6 and SDG13, NGOs are the

most involved in the commitments (66%), and their thematic areas focus on (in decreasing order) WASH, IWRM, climate change adaptation, water quality and pollution, and climate change mitigation. Different perspectives of implementation and progress on selected voluntary commitments were presented and a way to improve monitoring of implementation of the Water Action Agenda, including tracking and presentation of progress at large global events, such as 10 WWF, COP and 3rd Dushanbe Water Action Decade Conference was discussed.

Ms Oygul Usmanova took part in the Symposium on behalf of SIC ICWC.



International Conference “Enhancement of Cooperation on Water Security Between the Central Asian Countries”

On April 25-26, Dushanbe hosted the International Conference «Enhancement of Cooperation on Water Security between the Central Asian Countries».

The Conference was organized by the Institute of Asian and European Studies at the National Academy of Sciences of Tajikistan and the National Foundation «Silk Road - the Path of Consolidation», with the support of the United States Institute of Peace.

The aim of the conference was to provide a comprehensive analysis and monitoring of the current state and show prospects of enhancement of cooperation on water security between the Central Asian countries, as well as to develop and promote optimal mechanisms and tools to spur the process. Mobilization of the region's leading experts in the field of water security allowed not only exchange of opinions, but also finding optimal mitigation mechanisms and tools, with the focus on water.

The Conference was organized in the form of the following sessions:

1. New approaches to water and energy security.

2. Ensuring effective transboundary water management of the Amu Darya and the Syr Darya.

3. Maintaining and expanding the inter-basin country dialogue in the region.

4. Innovative solutions for enhanced regional cooperation on water and energy.

The conference brought together representatives of the Executive Office of the President of Tajikistan, the Ambassador of Kazakhstan to the Republic of Tajikistan, councilors of Kyrgyz and Turkmen Embassies, representatives of the United States Institute of Peace, the Institute of Asian and European Studies, the Institute of Water Problems, Hydropower and Ecology of Tajikistan, the Institute of Water Problems and Irrigation (Uzbekistan), the Kazakhstan Institute of Strategic Studies, the Academy of Sciences of Kyrgyzstan and others.

Mr. Ikrom Ergashev from SIC ICWC made a presentation on Available Water Supply in the Countries and Mechanisms for the Improvement of Water Management in Amu Darya and Syr Darya Basins.

Analysis of hydrological conditions in the Syr Darya and Amu Darya River Basins for the non-growing season 2023-2024

The actual inflow to the upper reservoirs of the Syr Darya River basin (Toktogul, Andijan, Charvak) during the non-growing season (October 2023-March 2024) was 5.3 km^3 or 107% of the forecast.

Inflow to the Toktogul reservoir amounted to 3.11 km^3 or 113% of the forecast. Inflow to the Andijan reservoir was 15% lower than expected, while the actual inflow to the Charvak reservoir was 9% higher.

Total water releases from the three upper reservoirs amounted to 10.44 km^3 or 8% less than the forecast of BWO Syr Darya.

Total lateral inflow amounted to 9.94 km^3 in the reach from the Toktogul reservoir to the Shardara reservoir, including water discharge from the Karadarya and Chirchik Rivers – this was more than the total inflow to the upper reservoirs but 5% lower than the total water releases from these reservoirs.

By the end of the non-growing season, the water volume was 8.84 km^s in the reservoirs, including: Toktogul reservoir – 7.28 km^3 or 116% of the plan, Andijan reservoir – 0.96 km^3 or 119 % of the plan, Charvak reservoir – 0.61 km^3 or 119 % of the plan. The Toktogul reservoir was drawn down by 4.47 km^3, Charvak reservoir – by 0.92 km^3, and Andijan reservoir – by 0.18 km^3.

Inflow to the Bakhri Tojik reservoir was 10.75 km^3. This is by 0.26 km^3 less than in the forecast schedule accepted as a reference at the 85th ICWC meeting – 9.08 km^3 of water were discharged into the river. This is by 0.42 km^3 less than in BWO's schedule. The reservoir accumulated up to 3.32 km^3 of water.

The total water withdrawal from the Naryn and Syr Darya Rivers made up 3.87 km^3, including for the: Kyrgyz Republic – 0.01 km^3, Republic of Tajikistan – 0.04 km^3, Republic of Kazakhstan (through Dustlik canal) – 0.49 km^3, and Republic of Uzbekistan – 3.33 km^3 (Table 1.1).

The inflow to the Shardara reservoir amounted to 10.31 km^3 during the non-growing season 2023-2024. This is by 0.86 km^3 less than scheduled by BWO Syr Darya. By the end of the season, the reservoir was filled with water to 4.82 km^3 (93% of the plan). The discharge from the Shardara reservoir amounted to 4.9 km^3 (70% of the forecast), including: water discharge into the river – 4.22 km^3, water withdrawal to the Kyzylkum canal – 0.05 km^3, and water releases into Arnasay – 0.63 km^3.

The water use in the lower reaches of the Syr Darya (water withdrawal, losses) amounted to 2.94 km^3 (Table 1.2.). Inflow to the Aral Sea was 1.16 km^3 by the data of KazHydromet and 1.27 km^3 (79% of expected amount) by the data of the Committee for Water Resources of Kazakhstan.

Table 1.2 below shows the river water balance, while Table 1.3 gives the reservoir water balance.

Table 1.1

Water use by riparian countries of the Syr Darya River Basin
(in the reach up to Shardara reservoir), non-growing season 2023-2024

#	Water- user	Water volume, km^3		Water availability, %
		Limit/ schedule	Actual	Season
1	Total water withdrawal	4.25	3.87	91
2	by country:			
	Kyrgyz Republic	0.05	0.01	24
	Republic of Uzbekistan	3.35	3.33	99
	Republic of Tajikistan	0.37	0.04	11
	Republic of Kazakhstan	0.49	0.49	100
3	by river reach:			
3.1	Toktogul reservoir-Uchkurgan hydroscheme	1.38	1.38	100
	including:			
	Kyrgyz Republic	0.04	0.01	28
	Republic of Tajikistan	0.08	0.03	34
	Republic of Uzbekistan	1.25	1.34	107
3.2	Uchkurgan hydroscheme-Bakhri Tojik reservoir	0.25	0.22	87
	including:			
	Kyrgyz Republic	0.01	0.0002	3
	Republic of Tajikistan	0.07	0.0010	2
	Republic of Uzbekistan	0.17	0.21	125
3.3	Bakhri Tojik hydroscheme–Shardara reservoir	2.62	2.28	87
	including:			
	Republic of Kazakhstan	0.49	0.49	100
	Republic of Tajikistan	0.212	0.010	5
	Republic of Uzbekistan	1.92	1.78	92

Table 1.2

Water balance of the Syr Darya River for the non-growing season, 2023-2024

#	Balance item	Water volume, km^3		
		Forecast/ plan	Actual	Deviation (actual - plan)
1	Inflow to the Toktogul reservoir	2.75	3.11	0.36
2	Lateral inflow in the Toktogul reservoir - Shardara reservoir reach (+)	9.24	9.94	0.70
	including:			
2.1	*Discharge from the Karadarya river*	1.34	1.75	0.41
2.2	*Discharge from the Chirchik river*	1.21	1.16	-0.05
2.3	*Lateral inflow from CDN and small rivers*	6.69	7.03	0.34
3	Flow regulation by reservoir: recharge (+) or diversion of flow (-)	3.61	2.79	-0.81
	including:			
3.1	*Toktogul reservoir*	5.47	4.46	-1.00
3.2	*Bakhri Tojik reservoir*	-1.86	-1.67	0.19
4	Regulated flow (1+2+3)	15.59	15.84	0.25
5	Water diversion in the Toktogul – Shardara reach (-)	-4.25	-3.87	0.37
6	Inflow to Shardara reservoir	11.17	10.31	-0.86
7	Water releases from Shardara reservoir into the river	6.99	4.22	-2.77
8	Water use at Shardara – Aral reach*	5.37	2.94	-2.42
9	Water supply to the Aral sea (Karateren g/s)**	1.62	1.27	-0.35

*Water withdrawal plus river water losses and minus lateral inflow
** Based on the data of the Committee for Water Resources of the Republic of Kazakhstan

Table 1.3

Reservoir water balance in the Syr Darya River basin
for the non-growing season, 2023-2024

#	Balance item	Water volume, km^3		
		Forecast/ plan	Actual	Deviation (actual - plan)
1	**Toktogul reservoir**			
1.1	Inflow to the reservoir	2.75	3.11	0.36
1.2	Water volume in reservoir:			
	- beginning of the season (1 October 2023)	11.75	11.75	0.00
	- end of the season (1 April 2024)	6.28	7.28	1.00
1.3	Water releases from the reservoir	8.21	7.57	-0.64
1.4	Flow regulation: recharge (+) or diversion of flow (-)	5.47	4.46	-1.00
2	**Andijan reservoir**			
2.1	Inflow to the reservoir	0.85	0.72	-0.13
2.2	Water volume in the reservoir:			
	- beginning of the season (1 October 2023)	0.77	0.77	0.00
	- end of the season (1 April 2024)	0.81	0.96	0.15
2.3	Water releases from the reservoir	0.82	0.52	-0.30
2.4	Flow regulation: recharge (+) or diversion of flow (-)	-0.03	-0.20	-0.17
3	**Charvak reservoir**			
3.1	Inflow to the reservoir	1.35	1.48	0.13
3.2	Water volume in reservoir:			
	- beginning of the season (1 October 2023)	1.53	1.53	0.00
	- end of the season (1 April 2024)	0.51	0.61	0.10
3.3	Water releases from the reservoir	2.36	2.34	-0.02
3.4	Flow regulation: recharge (+) or diversion of flow (-)	1.02	0.87	-0.15
4	**Bakhri Tojik reservoir**			
4.1	Inflow to the reservoir from the river	11.01	10.75	-0.26
4.2	Lateral inflow	0.352	0.184	-0.17
4.3	Water volume in reservoir:			
	- beginning of the season (1 October 2023)	1.69	1.69	0.00
	- end of the season (1 April 2024)	3.44	3.32	-0.13
4.4	Water released from the reservoir	9.61	9.10	-0.51

#	Balance item	Water volume, km^3		
		Forecast/ plan	Actual	Deviation (actual - plan)
	including:			
	- releases into the river	9.50	9.08	-0.42
	- water intake from the reservoir	0.11	0.028	-0.08
4.5	Flow regulation: recharge (+) or diversion of flow (-)	-1.86	-1.67	0.19
5	**Shardara reservoir**			
5.1	Inflow to the reservoir	11.17	10.31	-0.86
5.2	Lateral inflow	0.0	0.0	0.00
5.3	Water volume in reservoir:			
	- beginning of the season (1 October 2023)	1.01	1.01	0.00
	- end of the season (1 April 2024)	5.19	4.82	-0.36
5.4	Water releases from the reservoir	6.99	4.90	-2.09
	including:			
	- discharge into Arnasay	0.00	0.63	0.630
	- water releases into the river	6.99	4.22	-2.77
	- water intake from the reservoir	0.00	0.05	0.05
5.5	Flow regulation: recharge (+) or diversion of flow (-)	-4.18	-6.09	-1.91
	TOTAL flow regulation by reservoirs: recharge (+) or diversion of flow (-)	0.41	-2.63	-3.04

2 Amu Darya River basin

The actual water availability in the Amu Darya River at “nominal Kerki” g/s section (upstream of water intake to Garagumdarya) was 10.33 km^3 (90% of the forecast) which is by 1.23 km^3 less than the forecast (Table 2.1).

Inflow to the Nurek reservoir amounted to 3.81 km^3 (95% of the forecast), while water releases from the reservoir were 7.65 km^3 (98% of BWO Amu Darya’s schedule). Recharge of river flow through drawdown of the Nurek reservoir amounted to 3.84 km^3. By the end of the season, the reservoir was drawn down to 6.02 km^3.

The plan of water accumulation in the reservoirs of Tuyamuyun hydroscheme (TMHS) was fulfilled during the non-growing season. By April 1, the actual water volume was 0.09 km^3 more than planned and amounted to 2.97 $км^3$. The flow at the Darganata section was 5.19 km^3 (80% of the forecast). As a result of unrecorded inflow, water releases from TMHS were less than BWO's schedule – 5.33 km^3 (84% of the forecast).

The assigned limit on water withdrawal in the Amu Darya Basin was used by 89%. The total water withdrawal was 14.04 km^3, including 11.06 km^3 - downstream of Kerki g/s (starting from the water intake to Garagumdarya). Available water supply varied by states from 92% (Tajikistan) to 94% (Turkmenistan) and 83% Uzbekistan (Table 2.1). Water availability was 92% in the upper reaches (up to intake to Garagumdarya), 95% in the middle reaches (from "nominal Kerki" g/s to TMHS) and 75% in the lower reaches (78% in Turkmenistan and 73% in Uzbekistan).

The assigned limit of sanitary and environmental flow for canals in the lower reaches of the Amu Darya was used by 68%, and 0.55 km^3 of water were delivered. According to UzHydromet's data, river and collector drainage water was delivered to the Aral Sea and the Aral Sea region, which amounted to 1.25 km^3 or 60% of the plan.

Tables 2.2 and 2.3 show the data on river water balance and reservoir water balance, respectively.

Table 2.1

Indicators of available water supply of the riparian countries in the Amu Darya River Basin, non-growing season 2023-2024

#	Water-user	Water volume, km^3		Water availability, %
		Limit / schedule	Actual	Season
1	Total water withdrawal	15.74	14.04	89
2	Breakdown by states:			
	Kyrgyz Republic	-	-	-
	Republic of Tajikistan	2.88	2.66	92
	Turkmenistan	6.50	6.10	94
	Republic of Uzbekistan	6.37	5.28	83
3	Downstream of “nominal Kerki” g/s	12.50	11.06	89
	Including:			
	Turkmenistan	6.50	6.10	94
	Republic of Uzbekistan	6.00	4,96	83
4	By river reach			
4.1	Upper reaches	3.25	2.98	92
	Including:			
	Kyrgyz Republic	-	-	-
	Republic of Tajikistan	2.88	2.66	92
	Republic of Uzbekistan, Syrkhandarya province	0.37	0.32	87
4.2	Middle reaches	8.34	7.95	95
	Including:			
	Turkmenistan	5.10	5.02	98
	Republic of Uzbekistan	3.25	2.94	91
4.3	Lower reaches	4.15	3.10	75
	Including:			
	Turkmenistan	1.40	1.09	78
	Republic of Uzbekistan	2.75	2.02	73
5	Sanitary-environmental flow to canals in the lower reaches	0.80	0.55	68
	Including:			
	Turkmenistan	0.15	0.14	92
	Republic of Uzbekistan	0.66	0.41	63
6	Water supply to the Aral Sea region	2.1	1.25	60

#	Water-user	Water volume, km^3		Water availability, %
		Limit / schedule	Actual	Season
	and the Aral Sea			

Table 2.2

Water balance of the Amu Darya River, non-growing season 2023-2024

Balance item	Water volume, km^3		
	Forecast/ plan	Actual	Deviation (actual-plan)
1. Water content in the Amu Darya River – unregulated flow at nominal Kerki section*	11.57	10.33	-1.232
2. Flow regulation by the Nurek reservoir: recharge (+) or diversion of flow (-)	3.76	3.84	0.08
3. Water withdrawal in the middle reaches (-)	-8.34	-7.95	0.39
4. Return flow in the middle reaches (+)	0.97	0.89	-0.08
5. River flow at Darganata g/s	6.50	5.19	-1.31
6. Water releases from TMHS (including water diversion from the reservoir)	6.38	5.33	-1.05
7. Water withdrawal in the lower reaches, including diversion from TMHS (-)	-4.15	-3.10	1.05
8. Sanitary-environmental flow to canals (-)	-0.80	-0.55	0.25
9. Flow of the Amu Darya River at Samanbai g/s	0.98	0.63	-0.35

* Excluding water withdrawal in the upper reaches (Tajikistan, Uzbekistan (Surkhandarya province))

Table 2.3

Reservoir water balance, Amu Darya River basin, non-growing season 2023-2024

Balance item	Water volume, km^3		
	Forecast/ plan	Actual	Deviation (actual-plan)
1 Nurek reservoir			
1.1. Inflow to the reservoir	4.03	3.81	-0.22
1.2. Water volume in the reservoir:			
– beginning of the season (1 October 2023)	10.51	10.51	0.00
– end of the season (1 April 2024)	6.39	6.02	-0.36
1.3. Water releases from the reservoir	7.79	7.65	-0.14
1.4. Flow regulation by the Nurek reservoir: recharge (+) or diversion of flow (-)	3.76	3.84	0.08
2 TMHS reservoirs			
2.1. River flow at Darganata g|s	6.50	5.19	-1.31
2.2. Water volume in the reservoirs:			
– beginning of the season (1 October 2023)	3.48	3.48	0.00
– end of the season (1 April 2024)	2.88	2.97	0.09
2.3. Water releases from hydroscheme	6.38	5.33	-1.05
including:			
– water releases into the river	4.50	3.84	-0.67
– water diversion	1.88	1.50	-0.38
2.4. Flow regulation: recharge (+) or diversion of flow (-)	-2.00	-1.36	0.64

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