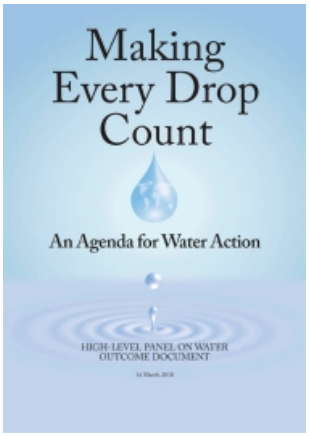
Section 13

Publications in 2018

Making Every Drop Count: An Agenda for Water Action



Published by: High Level Panel on Water

URL: https://sustainabledevelopment.un.org/HLPWater

The report prepared by the High Level Panel on Water calls for a fundamental shift in the way the world manages water to achieve SDGs, particularly SDG 6: Ensure access to water and sanitation for all.The Panel's report found that today 40 percent of the world's people are affected by water scarcity, with as many as 700 million people at risk of being displaced by intense water scarcity by 2030. More than two billion people are compelled to drink unsafe water and more than 4.5 billion people do not have safely managed sanitation services. 80 percent of wastewater is discharged untreated into the environment. The Panel calls for policies that will allow for at least a doubling of water infrastructure investment in the next five years. The report makes the case that ways of working between, for example, governments, communities, the private sector and researchers, are essential.

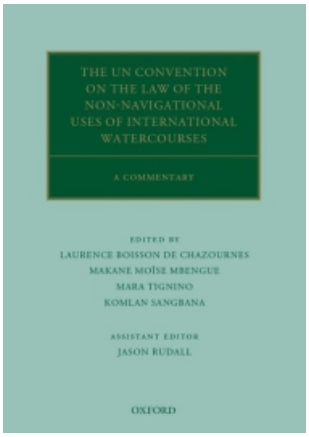
The United Nations World Water Development Report 2018: Nature-based Solutions for Water

Published by: UN Water

URL: http://en.unesco.kz/launch-of-the-united-nations-world-water-development-report-2018-in-almaty

Nature-based solutions can play an important role in improving the supply and quality of water and reducing the impact of natural disasters. The latest edition of the report recognizes water not as an isolated element, but as an integral part of a complex natural process that involves evaporation, precipitation and the absorption of water through the soil. The presence and extent of vegetation cover across grasslands, wetlands and forests influences the water cycle and can be the focus for actions to improve the quantity and quality of available water. Nevertheless, the use of nature-based solutions remains marginal and almost all investments are still channeled to grey infrastructure projects. Yet, to satisfy the ever-growing demand for water, green infrastructure appears to be a promising solution complementing traditional approaches. The authors of the report therefore call for greater balance between the two, especially given that nature-based solutions are best aligned with SDGs.Coordinated by the UN World Water Assessment Program, the UN World Water Development Report is the fruit of collaboration between the 31 United Nations entities and 39 international partners that comprise UN-Water.

The UN Convention on the Law of the Non-Navigational Uses of International Watercourses: A Commentary

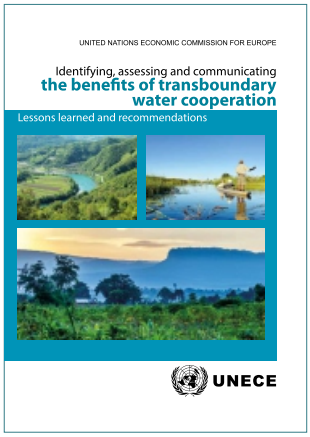


Authors: Laurence Boisson de Chazournes, Makane Moïse Mbengue, Mara Tignino, Komlan Sangbana, and Assistant Editor Jason Rudall

URL: https://global.oup.com/academic/product/the-un-convention-on-the-law-of-the-non-navigational-uses-of-international-watercourses-9780198778769?cc=uz&lang=en&

The publication explores how international and regional laws interact when addressing shared water resources; examines the relationship between the UN Watercourses Convention and Multilateral Environmental Agreements; provides concrete illustrations of the challenges and best practices in the implementation of freshwater management and protection at the universal level.

Identifying, assessing and communicating the benefits of transboundary water cooperation

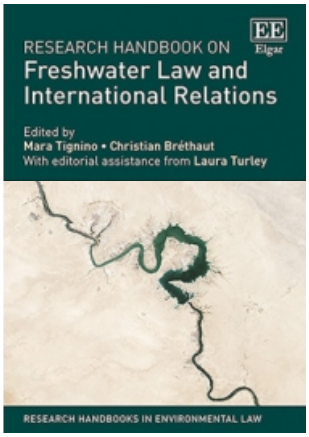


Published by: UNECE

URL: https://www.unece.org/index.php?id=49807

Benefit assessments are useful and practical tools to promote transboundary water cooperation. Indeed, the adoption of a "benefit lens" can prompt and strengthen joint activities, plans or programs. This document takes stock of the three pilot benefit assessments conducted within the framework of the Water Convention's program of work in the Cubango-Okavango River Basin, the Sio-Malaba-Malakisi River Basin and the Drina River Basin. It identifies a series of lessons learned and recommendations to help inform the design and implementation of future benefit assessment exercises. This document should interest all those responsible for water resources and who deal with transboundary issues, for example, ministries of foreign affairs, ministries of finance and development planning, sub-national governments of jurisdictions located in transboundary basins, river basin organizations, as well as financial and technical development partners involved in transboundary water cooperation.

Research Handbook on Freshwater Law and International Relations



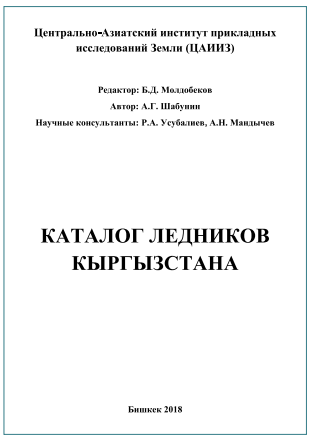
Authors: Mara Tignino and Christian Bréthaut

URL: www.e-elgar.com/shop/books?book_series=Research%20Handbooks%20in%20Environmental%20Law%20series

Recent decades have seen pivotal changes in the management and protection of water resources, with human rights, environmental and water law each developing a strong interest in the conservation of fresh water. This surge in interest has meant that dispute settlement mechanisms, along with diplomatic tools, are becoming increasingly necessary for conflict resolution. This Handbook offers an analysis of the interaction between law and various forms of knowledge and expertise, ranging from economics to environmental and social sciences. Leading scholars examine general and specific water legal regimes and analyze the interplay between various disciplines in order to establish the extent to which law is informed by each.

Catalogue of Glaciers of Kyrgyzstan

(in Russian)

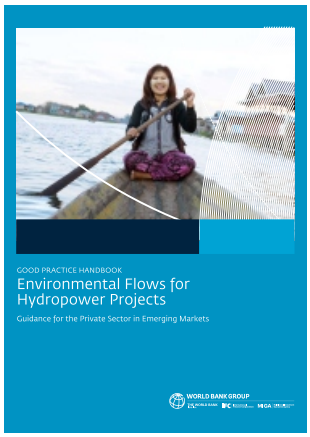


Published by: Central Asian Institute of Applied Geosciences

URL: http://www.caiag.kg/images/2%20Department/2018/Catalogue_of_Glaciers_of_Kyrgyzstan_2018.pdf

Given work contains the basic information on glaciers in the Kyrgyz Republic: location, main morphometric characteristics, and analysis of glaciation dynamics over approximately 70 years (comparison of the present state (2013-2016) with the data in the Catalog of Glaciers in the USSR in the 40-70s of the twentieth century). The publication will be useful for glaciologists, hydrologists, climatologists and those experts who study glaciers, water balance, climate change, etc.

GOOD PRACTICE HANDBOOK. Environmental Flows for Hydropower Projects. Guidance for the Private Sector in Emerging Markets



Authors: World Bank,International Finance Corporation, and Multilateral Investment Guarantee Agency

URL: https://www.ifc.org/wps/wcm/connect/2c27d3d8-fd5d-4cff-810f-c6eaa9ead5f7/Eflows+for+Hydropower+Projects_GPH_03022018finalWEB.pdf?MOD=AJPERES

This Good Practice Handbook provides guidance to practitioners on taking rigorous and consistent approaches to assess and manage hydropower project impacts on downstream river ecosystems and people through the assessment and provision of environmental flows (EFlows). The specific approach proposed by the Handbook allows to understand the context of river functioning and the provision of ecosystem values and services into which EFlows will be introduced, as well as the potential downstream impacts associated with hydropower development and how these can be mitigated. It demonstrates the application of a context-appropriate EFlows Assessment method and conduction of a comprehensive and appropriate stakeholder engagement program leading to a decision on EFlows and other mitigation measures based on the outcome of the assessment. It also compiles an EFlows Management Plan. The Handbook provides a logframe for integrating EFlows into hydropower projects (HPPs) and case studies to illustrate the main concepts addressed in the Handbook.

Water Resources Management in Uzbekistan

(in English and Russian)

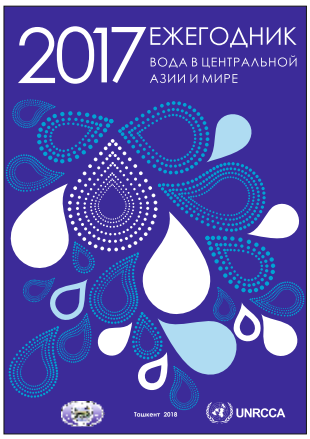
Authors: Experts of SIC ICWC and MWM of Uzbekistan

Published by: GEF Agency of IFAS, OSCE

URL: http://www.cawater-info.net/library/rus/water_resources_management_in_uzbekistan_2ed.pdf

This is the second edition of the book. It is an updated version of the book published in 2011. This publication is an information and analytical almanac presenting the history and development of the water sector in Uzbekistan. The book is intended for the general public.

2017 Water Yearbook: Central Asia and Around the Globe



Authors: SIC ICWC team

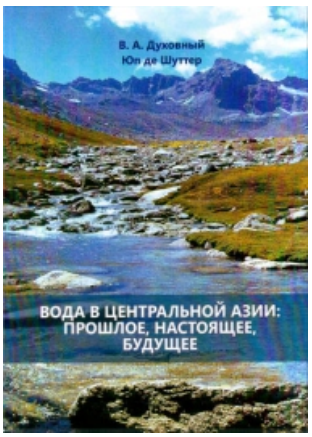
Published by: SIC ICWC with the support of UNRCCA

URL: http://www.cawater-info.net/yearbook/index.html

The Yearbook is designed to present key developments and activities on water-related subjects in Central Asia and globally for ICWC members and all concerned parties in a user-friendly and single format. The 2017 Yearbook consists of 16 sections: Calendar of events; Water management situation in the Aral Sea Basin; IFAS and other regional organizations in Central Asia; Bilateral water cooperation between the states in Central Asia; Key water developments in the countries of Central Asia; etc.

Water in Central Asia: Past, Present, Future

(in Russian)



Authors: V.A.Dukhovniy and Joop de Schutter

Published by: Al-Farabi Kazakh National University

URL: www.cawater-info.net/library/rus/water_in_central_asia.pdf

The book provides a comprehensive study on the water use issue in Central Asia. Based on lessons learnt in the region, the authors demonstrate how to use water by making it an 'ally' in transforming dry land into the "Gardens of Eden" and ensuring sustainable development. As a way for encouragement of unity, the authors suggest consolidating the regional analytical base and developing water diplomacy by establishing a Central Asian think-tank for analysis and forecasts. In their opinion, shared plans and joint activities for a balanced distribution of water between hydropower and irrigated agriculture will be the key for peaceful coexistence in Central Asia.

The Future of the Amu Darya Basin in the context of Climate Change

(in Russian)

Published by: SIC ICWC

URL: www.cawater-info.net/projects/peer-amudarya/pdf/peer-amudarya-finalbook.pdf

The publication summarizes results of the research project "Transboundary Water Management Adaptation in the Amu Darya Basin to Climate Change Uncertainties", which was implemented by the SIC ICWC of Central Asia, BWO Amu Darya and the Analytical Agency "Ynanch-Vepa" (Turkmenistan) as part of the USAID-supported program called Partnerships for Enhanced Engagement in Research (PEER).

Water for Land Reclamation, Economic Sectors and Natural Environment in the context of Climate Change (Collection of papers of the EECCA Network of Water Management Organizations).Two parts.

(in Russian)

Published by: SIC ICWC

URL: Part 1. www.cawater-info.net/library/rus/eecca_papers_collection_vol_11_2018.pdf

Part 2.www.cawater-info.net/library/rus/eecca_papers_collection_vol_12_2018.pdf

Given collection contains the papers that present the state-of-the-art in research and the on-going efforts in reclamation of land and provision of water for economic sectors and natural environment for mitigation of climate change effects in the countries of Eastern Europe, the Caucasus and Central Asia.

Prospective Application of Remote Sensing in Water Sector and Irrigated Agriculture in the Countries of Central Asia

(in Russian)

Published by: SIC ICWC

URL: www.cawater-info.net/library/rus/rs_papers.pdf

Remote sensing (RS) offers wider opportunities for observation, analysis and quicker response to changes, especially in the context of increasing extremes, such as floods, droughts, bank erosion, etc. At the same time, RS allows evaluating results and environmental impact of measures planned for the improvement of water and land productivity.

2017 Review of Developments in Water Management and Related Environmental Policies in China and in "Belt and Road" Countries

(in Russian)

Author: E.A.Simonov

Published by: SIC ICWC

URL: www.cawater-info.net/library/rus/inf/50.pdf

The state of river basins and transboundary water politics to a great extent depends on "out of water box" economic and political processes and trends. For the Eurasian continent such a framework process that concerns all resource development and use aspects is the China's Belt and Road Initiative (BRI). The review is compiled in form of a short list of the key trends and developments in 2017, including source references.

Strengthening Shardara Multi-Purpose Water Infrastructure in Kazakhstan

Authors: Jesper Karup Pedersen, Mikkel Kromann, Aditya Sood with inputs from A.Kenzheakhmetova, A.Ryabtsev and Kazakhstani experts

Published by: OECD

More than 8 000 large multi-purpose water infrastructures (MPWIs) around the world contribute to economic development, as well as water, food and energy security, encompassing all human-made water systems including dams, dykes, reservoirs and associated irrigation canals and water supply networks. Focused on the specific case of the Shardara MPWI located in Low Syr Darya Basin, South Kazakhstan and Kyzyl-Orda oblasts (provinces) of Kazakhstan, this report looks at the choice and design of MPWI investment strategies that ensure a high economic return on investments and potential bankability, based on application of a computer model and lessons learned from 15 international MPWI case studies.

Afghanistan: Rehabilitation of Hydraulic Infrastructure, Water Supply and the Groundwater Use Issues

(in Russian)

Published by: SIC ICWC

URL: www.cawater-info.net/afghanistan/pdf/afg1_2018.pdf

The brochure represents a review of materials on the development of drinking water supply, rehabilitation and construction of hydraulic infrastructure and the use of groundwater.

Afghanistan: Transboundary Water Resources Management Issues

(in Russian)

Published by: SIC ICWC

URL: www.cawater-info.net/afghanistan/pdf/afg2_2018.pdf

The digest presents a compilation of news over 2018 on Afghanistan's water policy and relations with neighbors.

Innovation Technologies in the Deserts of China, Israel, and Libya

(in Russian)

Published by: SIC ICWC

URL: www.cawater-info.net/library/rus/inf/51.pdf

This publication demonstrates cases of application of innovation technologies to combat desertification in China, Israel, and Libya.

Review of the Institutional Framework of Water and Land Reclamation Sectors in Different Countries of the World

(in Russian)

Published by: SIC ICWC

URL: www.cawater-info.net/library/rus/inf/52.pdf

Globally, water resources are not managed in one and same way – every country has its own approaches. This review provides several country case-studies.

Improvement of the State Agricultural and Water Governance System in Uzbekistan (Law Collection, Volume 45)

(in Russian)

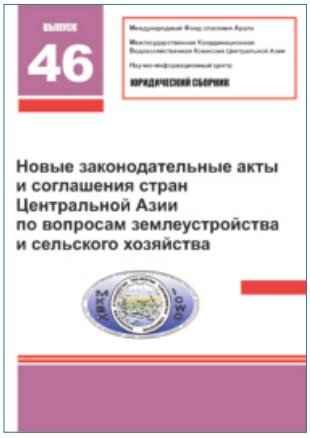
Published by: SIC ICWC

URL: www.cawater-info.net/library/rus/legal_45.pdf

This collection introduces the Decree and Resolutions of the President of Uzbekistan concerning the improvement of agriculture and water management.

New Legislative Acts and Agreements on Land Management and Agriculture in the Countries of Central Asian (Law Collection, Volume 46)

(in Russian)



Published by: SIC ICWC

URL: www.cawater-info.net/library/rus/legal_46.pdf

This volume includes laws of Turkmenistan "On State Land Cadastre", "On State Regulation of Agriculture Development", "On Reclamation of Land", as well as the Agreement between the Government of Uzbekistan and the Government of Tajikistan on Cooperation in Geodesy, Cartography, Land Management, Cadastre and Remote Sensing.

The Itaipu Dam - Benefit Sharing on Joint Construction and Operation between Brazil and Paraguay

(in Russian)

Author: D. Ziganshina

Published by: SIC ICWC

URL: www.cawater-info.net/projects/peer-amudarya/pdf/itaipu.pdf

This brochure provides information on the Itaipú Dam, one of the largest ones in the world. The Dam built and operated jointly by Paraguay and Brazil gives a successful example of benefit sharing in the use of hydropower. The publication was prepared on the basis of a review of information and analytical documents, as well as the technical visit to the Itaipú Dam in March 2018.

Innovations in Support of Water Reforms in Uzbekistan

(in Russian)

Authors: V.I.Sokolov, N.N.Mirzaev, Sh.Khodjaev, I.Akramov, U.Solieva, O. Anarbekov, Z. Gafurov, M. Abduraimov

Published by: GEF Agency of IFAS

This collection of papers prepared by the Uzbekistan Water Partnership seems to be a good initiative to involve those working in the water sector of Uzbekistan in exchange of opinions and sharing of achievements. Given publication introduces different sides of problems faced in the country water sector and irrigated agriculture and their solutions.

Environmental Challenges in the Region of Central Asia at the Present Stage and in the Future: Search for Joint Solutions

Published by: Ma`no

In November 2018, the international roundtable "Environmental challenges in the region of Central Asia at the present stage and in the future: search for joint solutions" organized by the "Ma'no" Center for research initiatives and the Friedrich Ebert Foundation in Central Asia was held in Tashkent, Uzbekistan. Following the roundtable, a collection of papers presented by the participants was published with the financial support of the Friedrich Ebert Foundation.

Surface Water. Quality Monitoring Systems in Central Asia: Needs Assessment

Published by: CAREC

URL: http://www.riverbp.net/library/publications/issledovanie-potrebnosteysistem-monitoringa-kachestva-poverkhnostnykh-vod-v-tsentralnoy-azii/

This regional study was conducted within the framework of the project "Strengthening cooperation on water quality management in Central Asia" implemented by the UN Economic Commission for Europe (UNECE) in cooperation with the Regional Environmental Centre for Central Asia (CAREC) and supported by the FinWaterWei. The purpose of this project is to promote basin-wide regional cooperation on water quality.

Series of Methodological Guidelines for the Application of Best Practices in Green Economies

(in Russian)

Published by: CAREC

The series of publications is intended for practitioners at national and regional environmental agencies in the countries of Central Asia, as well as for those who are interested in application of green technologies in the water sector. The series was prepared as part of the EU/UNDP/UNECE joint project "Supporting Kazakhstan's transition to a Green Economy model" by CAREC.

The series contains information on 4 best practices:

1. Construction of a high-tech greenhouse in a "cold" region

URL: http://www.riverbp.net/library/publications/seriya-metodicheskikhrukovodstv-po-primeneniyu-luchshikh-praktik-dlya-prodvizheniya-zelenoyekonomi-4/

2. Development of oasis irrigation in deserts and semi-deserts

URL: http://www.riverbp.net/library/publications/seriya-metodicheskikhrukovodstv-po-primeneniyu-luchshikh-praktik-dlya-prodvizheniya-zelenoyekonomi-3/

3. Adoption of green technologies in rural education entities

URL: http://www.riverbp.net/library/publications/seriya-metodicheskikhrukovodstv-po-primeneniyu-luchshikh-praktik-dlya-prodvizheniya-zelenoyekonomi-2/

4. Automated Control System of the Aktobe Reservoir

URL: http://www.riverbp.net/library/publications/seriya-metodicheskikhrukovodstv-po-primeneniyu-luchshikh-praktik-dlya-prodvizheniya-zelenoyekonomi/

Water Resources and Water Management in Russia in 2017 (statistical book)

(in Russian)

Published by: National Information Agency "Natural Resources"

This is the updated statistics on water availability, use and protection; some water management indicators were adjusted as for the whole country, by constituent entities of the Russian Federation, river and sea basins, economic sectors, etc. Additionally, a number of indicators were updated to reflect economic costs and financing of the Federal Water Agency, other ministries and agencies, water users, as well as quantitative results of water management/ conservation activity were shown.

Environment and its Protection in Russia: Changes in 25 Years

(in Russian)

Author: I.P.Blokov

Published by: Greenpeace

Based on almost 1500 literature sources, the author analyzes changes that occurred in nature protection in Russia over the last 25 years. By discussing various aspects, such as budget expenditures, norms and changes in environmental law, public participation in nature protection and the degree of public concerns in this respect, media coverage of these issues, dynamics of forest fires, waste management problems and others, the author demonstrates occurring changes, identifies the most critical elements and areas, indicates directions and measures to be taken to remedy the situation. For the first time, the monograph presents a quantitative analysis of changes in environmental law and relevant publications in the media over a long period of time.

Ecological Atlas of Russia

(in Russian)

Published by: Russian Academy of Sciences

The "Ecological Atlas of Russia" is a project of the Faculty of Geography at the Lomonosov Moscow State University. The Atlas is a fundamental and comprehensive reference book that contains spatial and temporal information on ecological situation and environmental impact of economy and shows measures taken to rehabilitate the natural environment and improve the ecological situation.

The Thirst for Water Everyone Needs, but Not Affordable to Everyone

(in Russian)

Authors: G.G.Gulyuk, D.M.Ryskulov

Published by: All-Russia Research Institute of Hydraulic Engineering and Land Reclamation named after A.N. Kostyakov

This publication introduces geographic, geo-economic, and geopolitical dimensions of the water factor, as well as its strategic role in Russia's economy and Eurasian development, in joint governance of the continent's states, global trade and transport system.

Historical Development of Environmental Agencies in the Russian Federation

(in Russian)

Author: A.A. Solovyanov

Published by: Feoriya

The monograph traces the history of emergence and transformation of legislative and executive powers in Ancient Rus', Russia, RSFSR, USSR and the Russian Federation since the X century to the beginning of the XXI century. It analyses how natural resources and sites were governed. This monograph also addresses the history of emergence of agencies that monitored environmental impacts and reported on information about its state. Transformation of the waste management system is considered as well.