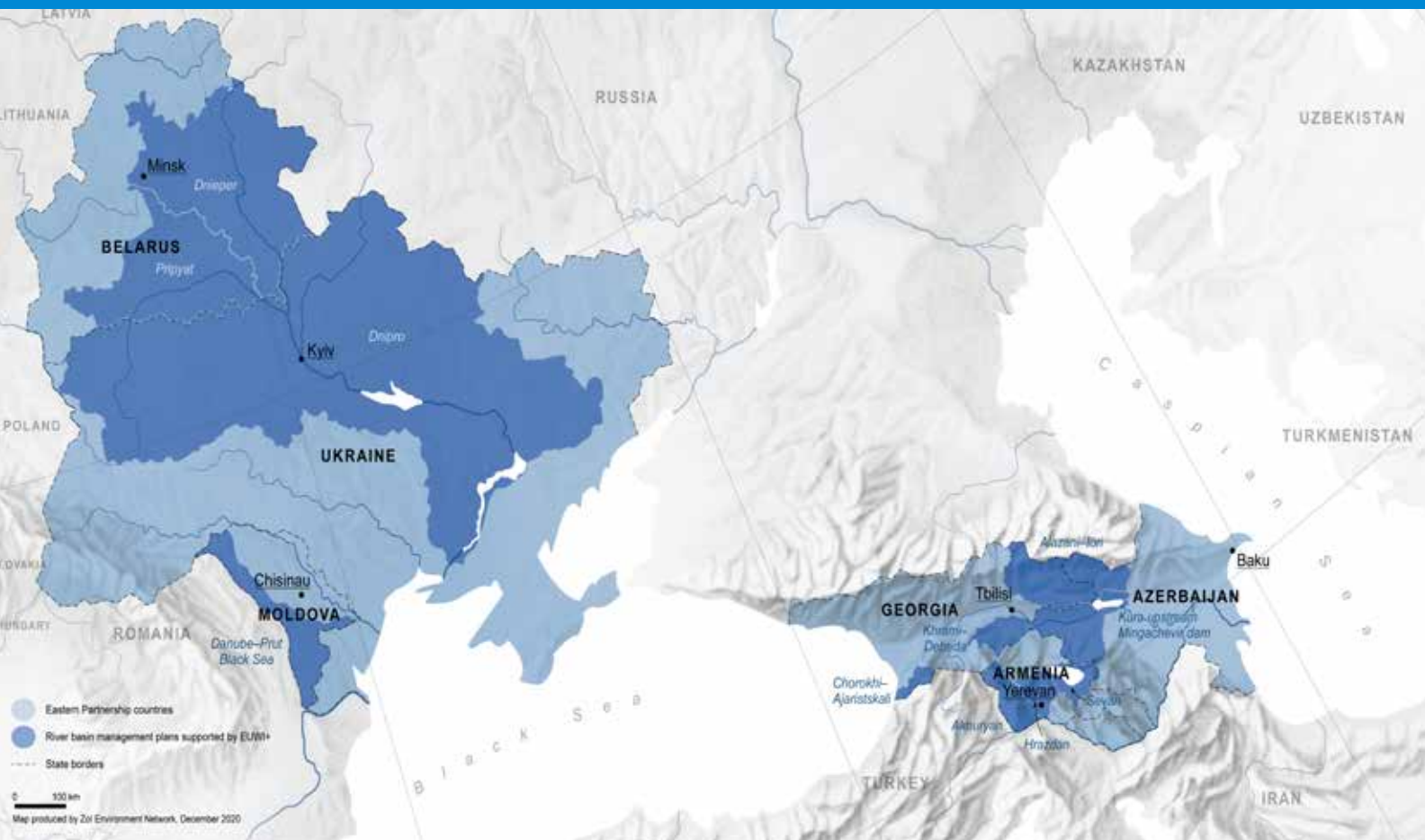


Water Policy Highlights Georgia



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In 2016, a major EU-funded project, the European Union Water Initiative Plus (EUWI+), was started to help strengthen water management in Georgia and the five other EaP countries. The European Commission selected the OECD and UN Economic Commission for Europe (UNECE) along with the EU member states of Austria (Environment Agency) and France (International Office for Water) to jointly implement the project. With EUR 23.5 million from the EU budget and EUR 1 million from Austria and France, the EUWI+ project aimed to strengthen management of national and transboundary water resources and develop tools to improve the long-term quality of all waters. It included EUR 6 million of direct investments in the EaP countries including Georgia to improve river basin policies, management planning and water quality monitoring.

With the project ending in mid-2021, this summary highlights milestones of EUWI+ in Georgia. It recalls the state of water governance that led to the creation of the project. It highlights efforts to strengthen management of water resources at the national level and also in transboundary rivers. It also identifies tools developed to improve the long-term quality of all waters. Finally, it identifies outstanding issues for further action.



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Water management is a key environmental challenge for Georgia

Water governance

The Eastern Partnership (EaP) builds on the willingness of the EU's six Eastern neighbours – Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine – to align their policies and legislation to the European Union. EaP countries share a legacy of environmental problems and face new pressures, including from climate change, as they pursue economic growth and benefits for citizens. Environmental co-operation is thus a principal focus area of work for the EaP.

While EaP countries update their environmental legislation, they also need to strengthen administrative capacity; enforcement of legislation and public participation and awareness of environmental challenges. There are important links between poverty and the environment, such as access to clean drinking water and appropriate sanitation.

Addressing transboundary resource management and pollution is another complex issue, which includes ensuring the necessary institutional and legal frameworks are in place. EaP countries need to strengthen procedures for implementing commitments under multilateral environmental agreements. They also need to strengthen their capacity to implement projects financed by international organisations and donors.

Better environmental policies bring significant economic and social benefits. A strong water sector that supports the population, all sectors of the economy and the environment is a key part of this process.

Georgia does not have a systemic shortage of water; the opposite is true for most of the country. However, Georgia does struggle with a variety of water-related challenges. Regional disparities in water availability, are compounded by poor groundwater and surface water quality caused by inadequate treatment and pollution control. The irrigation and energy sectors are placing growing demands on water resources. Georgia has not

Regional disparities in water availability, are compounded by poor groundwater and surface water quality caused by inadequate pollution control, while the irrigation and energy sectors are placing growing demands on water resources.

systematically addressed how to manage these demands or their environmental implications. Georgia is the main upstream country on the Kura River flowing into Azerbaijan. However, despite protracted discussions and studies, there is yet no undersigned transboundary agreement under the United Nations Economic Commission for Europe (UNECE) Convention. Exchange of data and information between the two countries remains arbitrary and slow. This creates risk of water-related hazards such as floods, droughts and landslides – a significant challenge for the downstream state.

The Association Agreement between Georgia and the European Union in 2014, obliging the country to harmonise its water legislation with the EU water acquis, has defined the direction of national water policy in Georgia. With limited local financial resources and technical capacity in relevant institutions, Georgia has long relied on the European Union and other international donors to support water sector reforms.

The EUWI+ project

In 2016, a major EU-funded project, the European Union Water Initiative Plus (EUWI+) was started to help strengthen water management in Georgia and the five other EaP countries. The European Commission selected the OECD and UNECE along with the EU Member States of Austria (Environment Agency Austria) and France (International Office for Water) to jointly implement the project. With EUR 23.5 million from the EU budget and 1 million from Austria and France, the EUWI+ project aimed to strengthen management of national and transboundary water resources and develop tools to improve the long-term quality of all waters. It allocated EUR 6 million of direct investments in the EaP countries to improve river basin management planning and water quality monitoring, including Georgia.

The regional EUWI+ project built on results from earlier EU-funded water governance actions in EaP countries. These included facilitation of the EUWI National Policy Dialogues by the OECD and UNECE in 2006-15, as well as the EU Environmental Protection of International River Basins (EPIRB) project.

EUWI+ has also drawn synergies with other EU-funded projects and activities, including the Shared Environmental Information System (SEIS) East project. The SEIS aimed to facilitate access to environmental information and its integration into the knowledge-based economy.

Development of Georgia's national water policy to 2016



Georgia is located between the Greater and Lesser Caucasus mountain ranges. It is drained to west by the Inguri and Rioni Rivers to the Black Sea and to the east by the Kura River to the Caspian Sea through Azerbaijan. The central plain has a continental climate and the country has good water resources fed by mountain rivers draining from the north and south ranges. The population of Georgia is 3.7 million (2019) with 1.1 million located in the capital of Tbilisi in the central plain of the Kura basin. The water problems and issues include water supply and sanitation (WSS), industrial pollution (particularly downstream of Tbilisi and the industrial region of Rustavi), coastal pollution on the Black Sea, floods and water demand for agriculture.

Legal and policy frameworks

The Georgian Water Code of 2016 and an overarching strategic framework were begun in 2010. As a follow-up to the second UN Sustainable Development Summit in 2012, Georgia began to prepare a national integrated water resources management (IWRM) plan with assistance of international projects. This plan laid the foundations of the new Water Code by promoting an integrated and basin management approach. The European Union has supported development of the Water Code of Georgia through the EUWI and EPIRB projects, as well as EUWI+. Development of the Code was delayed due to changes in the government and the COVID-19 pandemic but is close to adoption.

There is no Water Council in Georgia, which is a barrier to applying IWRM principles. However, the State Commission on Water Supply and Energy – established in May 2008 and chaired by the Prime Minister – provides policy direction for the WSS sector. Meanwhile, the Ministry of Regional Development and Infrastructure is responsible for sector administration. In 2009, the urban water and sanitation sector development plan “was adopted with a vision to ensure continuous and reliable water supply and safe sanitation services to all of Georgia’s urban residents by 2020.” Investments of USD 1.65 billion were envisaged from 2011-20 to reach this goal.

Institutional reforms

An Association Agreement between Georgia and the European Union, signed in 2014, entered into force in July 2016. It committed the country to implement a range of water and environmental EU legislation, including the Water Framework

Directive (WFD), and directives for floods and nitrates. In late 2017, the Ministry of Environment and Nature Resources combined with the Ministry of Agriculture to form the Ministry of Environmental Protection and Agriculture. Since its creation, the new ministry has focused on meeting its obligations under the Association Agreement.

Monitoring and analysis

In 2016, WFD monitoring coverage of Georgia was limited in terms of both water quality and quantity. In addition, licensing and policing procedures were weak and required strengthening. Georgia has been undertaking biological monitoring since 2010 with assistance from the Kura project funded by the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF) and various EU-funded projects. As part of the EU EPIRB project, Georgia undertook ecological surveillance monitoring in several pilot basins, albeit with limited technical resources. The Fisheries Institute based in Batumi in the Chorokhi pilot basin also undertook biological monitoring linked to development of a first WFD-compliant river basin management plan (RBMP) for the Chorokhi completed in 2015. The Institute also worked alongside the NEA’s Tbilisi laboratory in the EU Environmental Monitoring of the Black Sea (EMBLAS) project. Together, they implemented the Marine Strategy Framework Directive, organising coastal and open sea surveys at the regional level. In 2016, the groundwater monitoring network was in operation but needed refurbishment after many years of neglect. New monitoring sites and re-equipping of sites with automatic data loggers were required.

Finland provided Georgia with technical assistance to improve water quality monitoring in line with the WFD; the work concluded in 2017. A major Global Climate Fund project initiated in 2016 is now in implementation. It aims to expand the hydro-meteorological monitoring network in Georgia, providing early warning systems and information management tools for the entire country. Implemented over seven years at a cost of USD 70 million, the project will support Flood Directive implementation.

River Basin Management

A number of projects, going back as far as 2000, have promoted RBMPs. Up to 2016, no RBMP had been approved at the national level. The boundaries of the river basins are still not defined.

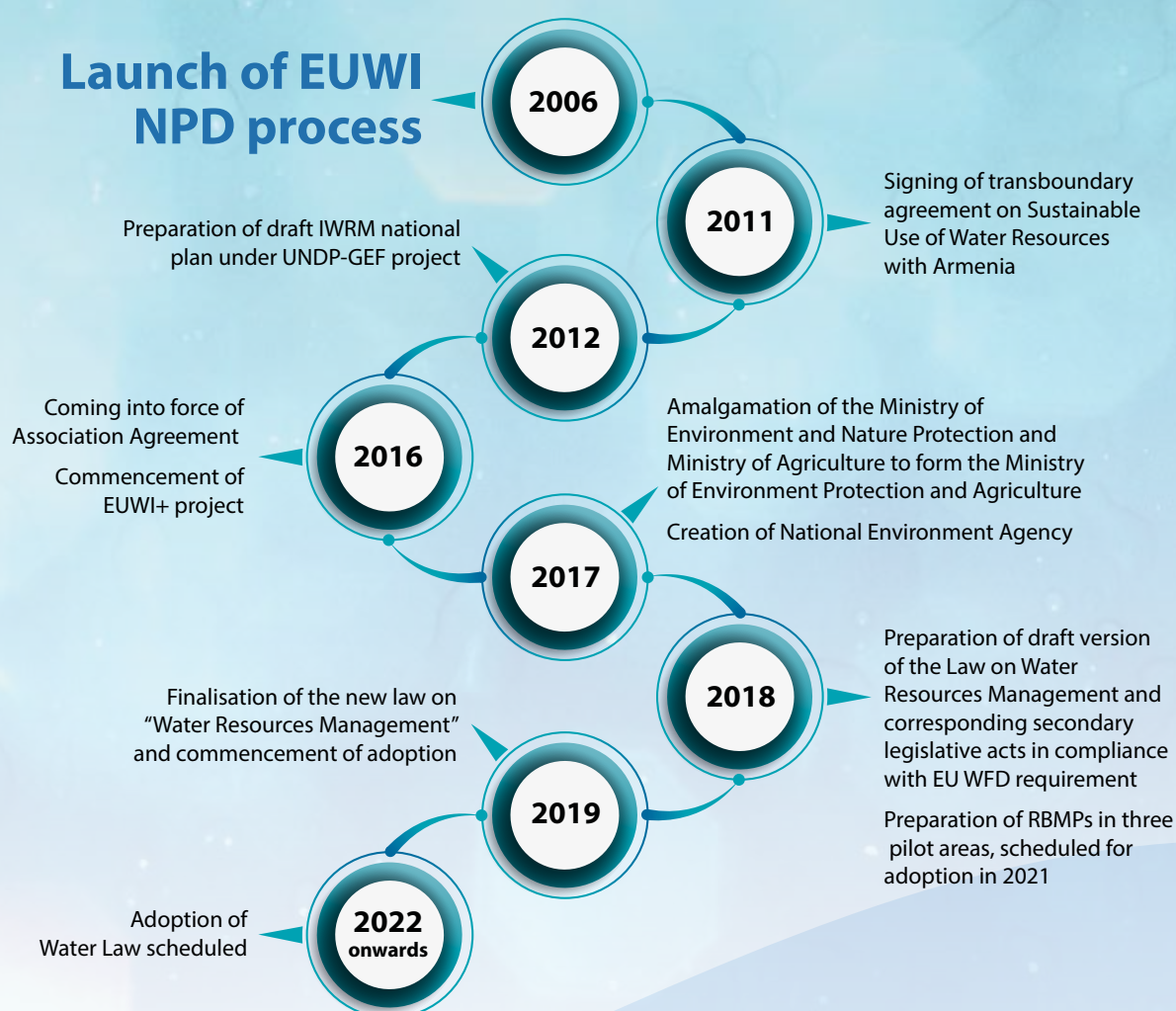
The Chorokhi RBMP, prepared under the EPIRB project, was limited in scope as it did not include the coastal area around Batumi. It was adopted at the local level, but implementation has been slow. The coastal zone from Chorokhi to the Adjara border, including Batumi, was assessed, but no RBMP was produced. No fully WFD-compliant RBMP had, therefore, been developed in Georgia up to 2016 on either of the two major river basins (Kura and Rioni). A UNDP project did prepare a flood risk plan for the Rioni River. However, it did not look at the wider water resource issues.

Data management

There had been numerous attempts to develop a water cadastre for Georgia before 2016 but with limited success. The formation of the NEA and participation in the SEIS is likely to stimulate renewed efforts. An effective water cadastre is the cornerstone to effective water management and regulation.

Transboundary water management

Regarding transboundary waters, a general agreement on co-operation in environmental management between Armenia and Georgia was signed as early as 1998. In 2011, a draft protocol was also prepared for co-operation between the Ministry of Nature Protection of the Republic of Armenia and the Ministry of Environmental Protection of the Republic of Georgia on Protection and Sustainable Use of Transboundary Water Resources. Georgia has participated and hosted numerous transboundary projects in the Kura basin since 2001, supported by UNDP-GEF, the European Union, USAID and NATO. Joint assessments and monitoring of the transboundary Khrami-Debed River have been carried out, but no RBMP has been produced. Georgia is negotiating a bilateral agreement with Azerbaijan on water resource management under the UNECE Water Convention and has been subject to a number of targeted studies; however, until 2021, no final agreement had been signed.



EUWI+ project support to water policy reform in Georgia

Legislative and strategic frameworks progressed

The Georgia Water Code, under development since 2012, has received support from the EPIRB and EUWI+ project. Delayed by the COVID-19 pandemic, the project ended in July 2021. Approval of the Code, alongside a policy paper on the preparation of a National Water Strategy, is expected in 2022. The EUWI+ project has focused its attention and support on the practical aspects of implementing the Association Agreement and WFD requirements while the legal process proceeds. The strengthening of the water management and regulatory structures attracted more attention than in other countries along with the wider IWRM considerations.

Developments in River Basin Management

This focus on the technical components has brought about significant advances in both RBMP and monitoring that should be built upon. The development of RBMPs on Alazani-lori RB and Khrami-Debeda RB is a model and highlight for both the country and EUWI+ project. The plans, which comprises integrated planning and monitoring, have been strongly facilitated by the presence of the NEA, which houses many of the regulatory and management provisions. Their development involved around 20 Georgian experts. The estimated amount of the programmes of measures of the 2 RBMPs concerns sanitation up to 75%. There has been extensive public consultations and involvement of local



authorities. Specific guidance document and videos have been produced to facilitate public consultations. However, a sustainable basin council has yet to be established and responsibility for implementation of the Programme of Measures has not been agreed. At the national level, the Ministry of Environmental Protection and Agriculture will adopt the RBMPs in accordance with the new Water Code. Until the RBMPs are approved, there are no legal obligations for implementation. In the meantime, with help from UNECE under the project, the Alazani-Idri RBMP was undergoing a strategic environmental assessment – a first in Georgia and the region.

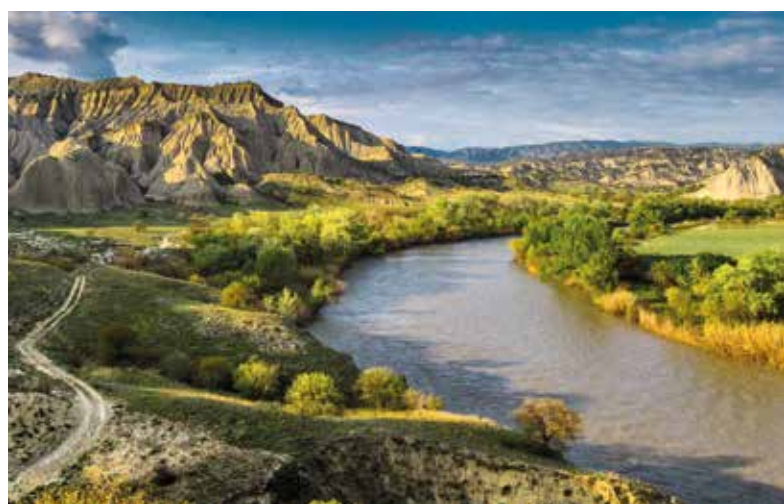
In addition to developing the Alazani-Idri and Khrami-Debeda RBMPs, Georgia has also extended the Chorokhi RBMP to the border of Adjara north of the town of Kobuleti, including the coastal area with the city of Batumi. This first major coastal RBMP (2021) connects the jurisdictions of the WFD and the EU Marine Strategy Directive, and thus the work of the EUWI+ project and the EU-funded EMBLAS project. A consultation has been held concerning the coastal part of this RBMP.



Improved water monitoring and analysis

The NEA laboratories have received significant support from the project and a strong rapport has been established. Training has been provided to the central laboratory in quality assurance and management, as well as with maintaining accreditation. During the EUWI+ project, the NEA central laboratory moved to new premises on the outskirts of Tbilisi and received various state-of-art analytical equipment. The Batumi and Kutaisi laboratories also received equipment for water analyses.

The project has strengthened a range of monitoring programmes to bring about compliance with the WFD, including groundwater and coastal and transitional water monitoring programmes. The management of surface waters and groundwaters was traditionally separated in the Soviet Union; this remains the case in many former Soviet states. However, Georgia has brought this management under a single roof with the formation of the NEA. The project worked with the NEA to establish the potential yield of groundwater resources



in the country and to design both the quality and quantity of monitoring programmes in the pilot river basins. The project has strengthened the monitoring system by installing seven automatic data loggers in strategic locations. This work is a step towards an IWRM and conjunctive use of surface waters and groundwaters in Georgia, and should be supported in any EUWI+ extension. The hydrological monitoring system has also been strengthened with investments to improve key water flow monitoring sites.

The monitoring of coastal and transitional waters (CTW) within one nautical mile of the tidal limit under the WFD is an important element of any coastal RBMP. Therefore, in parallel with the Adjara RBMP described above, Georgia introduced the methodology and principles of a CTW programme. The project,

working with the National Fisheries Institute based in Batumi and the local NEA local laboratory, provided training on CTW, both in the laboratory and the field. The project commissioned the design of a CTW monitoring programme for the Georgian Black Sea coast, including delineation of the coastal water bodies and design of a survey programme. The project also provided equipment to the Fisheries Institute to carry out surveys, the first of which took place in autumn 2019. This work was linked to that of the EU EMBLAS project, which is aimed at implementation of the Marine Strategy Directive in the Black Sea.

Strengthening the economic dimensions of water management

The reform of surface water abstraction charges is particularly important. These charges can create an incentive for water abstractors to minimise their drawings of water, reduce its waste and loss in transit, and pass on these charges to the final users. This gives final users an incentive to reduce consumption. Any reform of surface water abstraction charges will require harmonisation with the existing one for groundwater to ensure a balanced approach. This would entail revision of the Law on Licence and Permits of 2005. In addition, creating the necessary licensing regime would have implications for staffing and funding of the relevant section of the Ministry of Environmental Protection and Agriculture.

Multi-stakeholder dialogue as a driver of policy reform

The National Policy Dialogue (NPD) on water has supervised the national water policy reform process. A multi-stakeholder platform with cross-ministerial support, the NPD recognises the horizontal nature of water and its importance to the citizens and economy of Georgia. It has also brought together donors and other international projects to annually share experiences and identify synergies to aid implementation and streamline progress.

Data management

EUWI+ project supported the acquisition of a server for a national platform; provided tools and training to reinforce metadata production and increase availability of metadata in on-line metadata catalogues; implemented the first interoperability process for automatic integration of surface water quality; integrated ground water quantity data for visualisation; supported permit data digitalization. These results are a significant step towards a national water information system in Georgia.



Water policy reform achievements

Improved strategic planning builds confidence and attracts donor support

- assistance provided to develop the new Water Code
- support provided to develop a national water strategic framework
- assistance provided to reform water abstraction charges – recommendations for phasing out irrigation sector subsidies.

Water sector becomes increasingly aligned with EU legislation and good practice, the public is increasingly involved in water management

- development of first WFD-compliant RBMPs in Georgia in the Alazani-Iori and Khrami-Debeda basins and extension of the Chorokhi Black Sea coast basin RBMP including Batumi. All plans include Programmes of Measures to improve degraded water bodies and implement water-related Directives.

International commitments and transboundary water management are well integrated and drive sector progress

- support provided for transboundary water co operation with Azerbaijan on the Kura River and joint monitoring with Armenia on the Khrami-Debeda River (pilot survey and report and draft Ministerial agreement).

Improved monitoring and data management inform high-level decision-making and resource prioritisation

- investment in state-of-the-art analytical equipment to the central and regional laboratories, and technical support for laboratory quality management
- type-specific WFD Ecological Status Classification Systems for benthic invertebrates developed
- introduction of WFD-compliant investigative monitoring as well as coastal and transitional waters monitoring on the Black Sea coast
- investment to strengthen strategic groundwater and hydrological monitoring sites
- Monitoring Development Plans for surface and groundwater on progress reached and future needs.
- first step to implement a national water information system.

Stakeholder engagement increased and cross-sector importance of policy coherence recognised

- annual National Policy Dialogue on Water active with strong political support and wide participation.
- public participation during the RBMP planning process.

Future opportunities for the national water policy reform journey

The five-year regional EUWI+ project completed its activities in Georgia in July 2021, but the water reform journey will continue. While the country has made progress since 2016, the project has exposed a number of outstanding issues.

Post-pandemic recovery

In addition, the global pandemic caused by COVID-19 has impacted the public budgets of all EaP countries, including Georgia. The need to respond to environmental challenges has never been greater, yet budgets face conflicting pressures as countries prioritise finances for recovery. The COVID-19 pandemic has shone a light on the importance of access to clean drinking water and adequate sanitation and the significance of hygiene in communities.

A legal and strategic framework to guide reforms

The immediate challenge for Georgia will be the adoption of its Water Code and a Water Strategy. Although there is a WSS Strategy and basin council, meaningful IWRM will be difficult to achieve without an overarching Water Strategy. Some form of inter-sectoral co-ordination body is also needed.

Association Agreement timelines

Under the WFD, Georgia needs to meet several tight deadlines for strengthening its monitoring systems and developing RBMPs to comply with its Association Agreement. The country is proceeding well in the strengthening of its monitoring systems under the NEA umbrella, attracting national funding and significant international support. However, with regard to the RBMP, Georgia is struggling. There is not yet an RBMP on either the Kura River, upstream or downstream of Tbilisi, or the Rioni River. Development and implementation of RBMPs will be a major challenge for Georgia in the short time available. As in all the Caucasus countries, permitting, licensing and regulatory policy is a challenge, and development of a functioning water cadastre is an essential tool.

In any EUWI+ extension, the following priorities are recommended:

- **Adoption and operationalisation of National Water Strategy.** The strategy is expected to guide cross-sectoral planning and IWRM. There is no provision for establishment

of a high-level, cross-sectoral body to develop and oversee implementation of the strategy. However, some forum needs to bring together the executive ministries. Ideally, a permanent water council supported by a series of working groups would be established. Failing that, an equivalent body under the NPD could be a temporary solution. A water sector donor group should co-ordinate the planned and ongoing water and environmental projects to maximise synergy and collaboration, which is often missing. Again, such a donor group could be under the NPD or be a separate forum.

- **Development of secondary legislation.** The approval of the Water Law will generate the need for a large amount of secondary legislation. Some of this may already exist in draft form, and may require adaptation (e.g. EU guidance documents). Further, some country-specific legislation may be needed. This secondary legislation should include reform of water abstraction charges for surface waters to complement those for groundwaters, providing guidance on their application and policing.
- **Formation and training of basin councils and Rioni RBMP development.** The roles and responsibilities of the basin councils and legal obligations should be set out in secondary legislation. The rules and procedures and membership need to be agreed and their financial support assured by central and local governments. The members and technical support staff should be trained in RBMP development and IWRM principles.

The Rioni River has been identified as the next candidate for an RBMP, beside the remaining Kura basin and Induri. It is contiguous with the Black Sea RBMP under development and been subject to a recent UNDP flood management project. Although the UNDP project did not produce a RBMP, it would provide a solid data and information baseline for any WFD-compliant RBMP, thus reducing required input. The whole Kura basin needs to be completed in addition to Alazani-Iori and Khrami-Debeda RBMPs.

- **Coastal and transitional waters monitoring.** Further work is needed on monitoring of the Black Sea coastal zone. Delineation of water bodies in accordance with the WFD and Marine Strategy Framework Directive should be completed.



In addition, support is needed for seasonal sampling along the coast, including Paliastomi Lake and as far as Anaklia – the northern limit of Georgian jurisdiction.

- **Biological monitoring and ecological classification development.** Georgia needs to strengthen its capacity for biological monitoring and ecological classification to implement the WFD successfully and support the planning processes. Field monitoring in the pilot river basins should be extended and support identification of reference sites and creation of site passports. The classification systems should be expanded to include other biological elements (macrophytes, phytobenthos, zooplankton and fish). All this requires more NEA investment in biological monitoring for the central (Tbilisi) and local laboratories. This should be done in conjunction with experts in Armenia and Azerbaijan to ensure a consistent approach.
- **Hydrological monitoring development** is needed for both surface and groundwater. The networks need extension and data interpretation must ease reducing alterations and pollution.
- **Information management support to NEA.** Further assistance is required to integrate the various national databases (hydrogeology, hydrology, water quality, water abstractions, etc.) to the Database Management Portal. This work, initiated under EUWI+, needs to resume to provide NEA with a functioning management system. In undertaking this work, the project will maintain close links with the SEIS programme to ensure compatible products.
- **UNECE Water Convention Bilateral Agreement between Georgia and Azerbaijan.** This support could be linked to related EUWI+ activities and development of a transboundary RBMP in the middle Kura, as well as information exchange and data-sharing agreements for emergency response.

In addition, Georgia should continue its joint monitoring programme with Armenia and consider development of a transboundary RBMP on the Khrami-Debeda River. A harmonization of all the RBMPs concerning the Kura river basin needs to be developed between the 3 Caucasus countries in order to strengthen consistency between monitoring, objectives, measures, etc.

- **National Policy Dialogues,** which co-ordinate IWRM, are essential in countries without a Water Strategy or active implementing body (Water Council). The mandate of the NPD should be clearly defined and streamlined. It should avoid trying both to co-ordinate donors and projects that can be done at another forum.
- **Public awareness and consultation.** Enhanced public awareness, understanding and support would improve the daily use of water resources by agriculture, industry and local communes. Regular public information and practical involvement of water users in basin councils promotes understanding, local ownership and support for better protection, reduced pollution and more efficient use of resources as well as awareness to ecosystem services. These are all essential to strengthen water management in Georgia.

As the world recovers from the COVID-19 pandemic and responds to a changing climate, this challenging backdrop provides the catalyst and focus for the next phase of the water policy reform journey in Georgia. Future reforms must strive for cross-sectoral policy coherence. In so doing, they must recognise the horizontal nature and value of water as the sector targets improvements for the health of citizens, the environment and the economy; fulfilling international commitments; and making the best use of limited financial resources.



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