GWP acting for healthy ecosystems

Environmental sustainability is fundamental to the 2030 Agenda for Sustainable Development and the natural environment plays a key role in achieving the Sustainable Development Goals (SDGs). Achieving lasting progress in social and economic domains requires the sustained provision of environmental goods and services, derived from functional and healthy ecosystems.

#### **Context**

Water-related ecosystems possess enormous biological, social, educational, and economic values. They underpin sector-wide activities including water for drinking and economic activities, and underpin important ecosystem services, such as:

- naturally purifying freshwater
- regulating flows and extreme conditions
- acting as carbon sinks, and
- supporting climate adaptation.

Unfortunately, water-related ecosystems are facing serious pressures driven by human activities, including pollution, over extraction, and flow alteration, and these issues are compounded by climate change.

The protection of natural ecosystems has been identified, from the start, as inherent to an integrated approach to water resources management for water security and sustainable development. It is highlighted in the <a href="Dublin Statement on Water and Sustainable">Dublin Statement on Water and Sustainable</a>
Development of 1992, and the sustainability of ecosystems is embedded in the definition of Integrated Water Resources Management (GWP, 2000).





GWP's mission and approach, anchored around IWRM and aiming to advance governance and management of water resources for sustainable and equitable development, builds on these principles. As such GWP, in all its actions, places particular emphasis on environmental concerns to ensure environmental sustainability and avoid degradation of ecosystems. The GWP strategy 2020 – 2025 further identifies water – energy – food – environment nexus approaches, nature-based solutions, and ecosystem management as relevant approaches to water resources management, to be leveraged alongside IWRM.

Within this context, ecosystems preservation and restoration and nature-based solutions are placed at the forefront of a number of GWP interventions. This briefing note highlights a range of such interventions, spanning a broad spectrum of work: multi-stakeholder consultations and advocacy, capacity development and knowledge sharing, partnership building, support to regional, national and basin policy-making and planning, and community-level interventions.

#### **Stories from the GWP Network**

In the following pages of this Briefing Note we offer stories from around the GWP network about our involvement in ecosystem related activities.

# Integrating freshwater data into sector-wide decision making to improve ecosystems in Argentina, Kazakhstan, and Kenya

SDG indicator 6.6.1 tracks the extent to which freshwater ecosystems are changing over time. By understanding the extent to which different types of freshwater ecosystems are changing, countries can use this information to plan and implement appropriate strategies to better protect and manage their freshwater ecosystems.

Working jointly with UNDP Cap-Net, and support from UNEP and UNDP, GWP implemented a pilot project in Argentina, Kazakhstan, Kenya to help countries protect and restore freshwater ecosystems, with a focus on capacity-development, action planning through multi-stakeholder engagement, and integration of environmental data within relevant decision-making processes. 250 professionals were trained and 4 action plans were prepared for priority ecosystems (Link).

### Advancing nature-based solutions in Central and Eastern Europe

Since the early 2010s, GWP Central and Eastern Europe has been working to advance nature-based solutions, with a focus on natural (small) water retention measures (NSWRM) and nature-based waste-water treatment. The work of the Regional Water Partnership covers a broad range of measures, including demonstration projects, knowledge products, stakeholder engagement, policy level work, and partnership development.

In the framework of the Framwat project (2017 – 2020, INTERREG's Central Europe Programme), for example, which aimed at strengthening the regional common framework for floods, droughts, and pollution mitigation by increasing the buffer capacity of the landscape through NSWRM, GWP supported stakeholder engagement, policy dialogues and development of the synthesis guidelines of the project. Under OPTAIN project (2020 - 2025, Horizon 2020) "Optimal strategies to retain water and nutrients", GWP co-leads the work package on Communication and Dissemination, aiming to be a bridge between researchers and end users/farmers. In 2021, GWP CEE Sustainable Sanitation Task Force released a report on the current situation of wastewater collection and treatment in the region, higlighting in particular the potential and opportunities of nature-based solutions.

More recently, GWP has also expanded its work to how nature-based solutions in cities, especially through its participation in a Horizon 2020 project "Implementing nature-based solutions for creating a resourceful circular city" (2018 – 2022).

## Thought leadership on freshwater storage in the Caribbean, bringing to light the role of natural systems

In 2021, GWP and the International Water Management Institute (IWMI) launched a Perspectives Paper, "Storing Water: A new integrated approach for resilient development." The Paper calls for new thinking around freshwater storage, incorporating the role of natural systems and nature-based solutions. It outlines an integrated water storage agenda for resilient development in a world increasingly characterised by water stress and climate uncertainty. Building on this thinking, GWP Caribbean released a perspective paper "Status, Need and Role of Freshwater Storage in the Caribbean" to advance the knowledge and thinking on freshwater storage in its region.

## Supporting ecological protection in China through legislation and capacity-development

The sustainable management of the Yangtze River Basin made headway in 2019 with the formulation of a draft river protection law, encompassing ecological conservation and green development. GWP China Yangtze River Basin Partnership played a key role, collating the extensive consultations that underpinned the proposed law, which would be China's first legislation on a specific river basin. The law was adopted by the National People's Congress in December 2020.

In 2020, GWP China brought together a team of experts to provide an online training course on monitoring and protection of the ecological resources of rivers and lakes. This training contributed to the establishment of the "Belt and Road" River and Lake Ecological Protection Joint Training Center by the Yangtze River Water Conservancy Commission.

### Integrating environmental approaches in catchment management in Uganda

In Uganda, GWP has been supporting catchmentbased management since the mid-2010s, putting an emphasis on the sustainable management of natural ecosystems and nature-based approaches. Under the Water, Climate and Development Programme (WACDEP), GWP identified priority climate and water issues in major catchments in Uganda. In support to the Ministry of Water and Environment and with the Sahara and Sahel Observatory, GWP contributed to the development of an integrated catchment management approach to solve the issues identified, which led to the project "Enhancing resilience of communities to climate change through catchment based integrated management of water and related resources in Uganda" (EURECCA), supported by the Adaptation Fund (2017 - 2021). Two of the four objectives of the project focused on ecosystems and sustainable agricultural landscapes.

In 2020, the Adaptation Fund endorsed the concept note for a new project "Enhancing Resilience of Communities and Fragile Ecosystems to Climate Change in Katonga Catchment (RECOFE)", which is now submitted to the board for consideration. The RECOFE project is focused on strengthening the resilience of communities and fragile ecosystems to climate change impacts through the promotion of appropriate water infrastructure investments and nature-based solutions. GWP Eastern Africa is the proposed executing entity, in collaboration with the Ministry of Water and Environment.

## Advancing the Water – Energy – Food – Ecosystems nexus and biodiversity conservation in the Mediterranean

GWP Mediterranean has identified Water – Energy – Food – Ecosystems (WEFE) nexus approaches as a framework for optimizing the use of natural resources while addressing environmental needs and climate change impacts. It has been supporting political processes, institutional capacity-building, and WEFE nexus implementation. At regional level, GWP was appointed notably to facilitate the technical task force of the Union for Mediterranean on the Nexus and facilitates nexus-related activities across the Mediterranean. GWP Mediterranean has also provided long-standing support to WEFE nexus approaches in South East Europe, for the sustainable management of natural resources.

In the Middle East and North Africa, GWP is currently piloting, through the Matchmaker 2 project funded by SIDA and UfM, WEFE nexus tangible and scalable local technical solutions, combined with employability capacitation and policy tools (Link).

To reduce to reduce major environmental stresses in the Mediterranean coastal areas, GWP joined forces with nine countries and partners under the umbrella of the GEF/UN Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (2019-2024). GWP is particularly focusing on supporting integrated coastal zone management, notably by leveraging WEFE nexus and source-to-sea approaches (Link).

Focusing on biodiversity conservation, GWP Mediterranean is supporting the sustainable management of Lake Ohrid in South East Europe, which faces issues of declining fish stocks, eutrophication, habitat destruction, and poor water status. In November 2020, the transboundary Lake Ohrid Watershed Management Plan was approved, after a two-year development process under the coordination of GWP Mediterranean, and as part of the GEF project "Enabling transboundary cooperation and integrated water resources management in the extended Drin River Basin". The Lake Ohrid management plan was informed by transboundary data gathering, including joint water quality surveillance and monitoring, an economic analysis, and an analysis and valuation of ecosystem services.

In Tunisia, GWP contributed to the conservation and sustainable development of the lagoon of Ghar El Melh in the North of Tunisia through the project "Conservation and Sustainable Development of Coastal Wetlands with High Ecological Value in Tunisia", supported by the MAVA foundation. An area of focus for GWP was youth empowerment and the promotion of youth entrepreneurship and green jobs that that can contribute to reduce pressure on wetlands (Link).

### Working for the sustainable management of wetlands and rivers in South Asia

River sand mining and the protection of urban wetlands have been particular areas of attention for Sri Lanka Water Partnership. The partnership contributed to the regulation of the river sand mining sector in Sri Lanka, which benefitted over 300,000 people (read the impact story). With regards to urban wetlands, the work has included

institutional capacity building, biodiversity assessments, and creating awareness among stakeholders and communities on the need to control rapid environmental degradation in Bolgoda and other urban wetlands.

India Water Partnership supports the restoration of the Hindon River in Northern India, contributing in particular to stakeholder engagement and awareness raising of communities. In 2016, for example, the 2030 Water Resources Group and India Water Partnership brought together stakeholders across the Hindon River basin, to develop a collective approach to river rejuvenation. In 2020, India Water Partnership started collaborating with partners on stakeholder mapping and development of a GIS platform to support decision making for tributaries management in Hindon River Basin.

At regional level, GWP South Asia supported youth engagement for river ecosystems through the organisation of a Water Academy for Youth in 2022. Through this academy, 20 youth were trained on problem solving, design and systems thinking, leadership, and integrated water resources management and were mentored by various partner organisations. They were able to develop project ideas for improving the health of rivers in their countries.

## Southern Africa: Sustaining ecological benefits and improving resilience in a transboundary basin

The project "Management of Competing Water Uses and Associated Ecosystems in Pungwe, Busi and Save Basins" (a GEF-funded project, 2021 -2024, with Implementing agency IUCN and Executing agency GWP) aims to strengthen transboundary cooperation and management of water resources and associated ecosystems for improved water security, climate change resilience and sustainable livelihoods in shared basins in Zimbabwe and Mozambigue. It seeks to promote holistic approaches using the waterenergy-food nexus, with specific interest in connected ecosystems. It focuses on developing capacities for managing water resources and designing participatory and community-based strategies (more information <u>here</u>).

### Supporting ecosystems management and youth empowerment in West Africa

Since 2019, GWP West Africa has supported ecosystem management in the Volta Basin, especially through multi-stakeholder capacity

building, development of a plan for the development and management of ecosystems in the Volta Basin, and support to the identification of nature-based solutions for the basin. This work has been carried out notably under the Volta Basin Strategic Action Plan Implementation Project and under a project on integrated flood and drought management in the Volta Basin.

Work on ecosystem management in the Volta basin will continue especially through the GEF project "Reversing Ecosystem and Water Degradation in the Volta River Basin" launched in 2022, for which GWP West Africa is one of the executing agencies.

Over 2021 – 2022, GWP contributed to the implementation of the project "Regional Partnership on Water and Environment in Central and West Africa (PREE)", implemented by IUCN with the support of SIDA. The overall objective of the project was to strengthen the resilience of natural ecosystems and local communities in the river and lake basins of West and Central Africa. One area of focus for GWP West Africa was on the Fouta Djallon highlands, identifying opportunities, options, and priorities for sustainable management and restoration of degraded ecosystems.

On another front, GWP promotes youth empowerment and supports innovative youth-led micro-projects in West Africa (Burkina Faso, Togo, and Benin) that strengthen climate resilience, with a strong emphasis on agroecology, agroforestry, and forestation, including riverbanks. This workstream is being implemented through the project "Tonfuturtonclimat" supported by the Government of Quebec (phase I 2017 – 2020, phase II 2021 – 2024) in collaboration with the the International Secretariat for Water.

#### **Tackling plastic pollution in Cameroon**

Since 2021, GWP Cameroon has been collaborating with stakeholders in Cameroon's economic capital, Douala, to understand how to tackle plastic pollution which affects the drains, rivers, and sea in the city (Link).

### Examples of other higher-level governance results achieved

GWP has supported over the years the development of several river basin management plans and national policies and plans that include provisions for enhanced environmental conservation and ecosystems preservation and restoration, including, for example:

- Honduras: involvement in the preparation of the Water, Forest and Soil Management Plan (2017), through leading the water stakeholders consultations on the draft plan
- Kazakhstan: support to the development of the Lake Balkhash Basin Agreement (2016), including a range of environmental protection measures
- China: contribution to the amendment of the national law on the prevention of water pollution (2017)
- Moldova: support to the recognition of the lower Prut River and its floodplain lakes as a biosphere reserve by UNESCO (2018). GWP Moldova was instrumental in gaining stakeholder, including local authorities, buy-in for the idea