

WETLANDS AND WATER



Wetlands, water and life are inseparable. Wetlands not only hold most of our available fresh water, they improve its quality by naturally filtering pollutants, and provide a home for 40% of the species on our planet. For all life to thrive, urgent action is needed to protect wetlands and use water more sustainably to ensure there is enough for people and nature.



WHY THE WATER IN OUR WETLANDS MATTERS

Our 'blue' planet may seem awash with water, but only 2.5% of that water is fresh water and most of it is stored in glaciers, snow caps or underground aquifers.

Less than 1% of Earth's fresh water is usable and most of that is contained in wetlands, including about a third in rivers and lakes.

The water in our wetlands is one of our most vital natural resources. Wetlands sustain humanity and nature through multiple services, including:

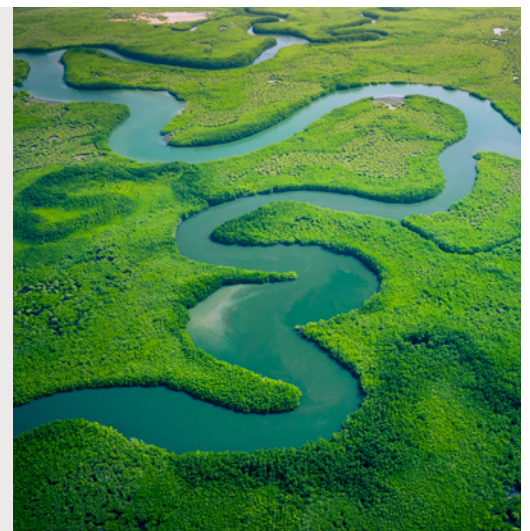
- **Capturing and storing rainwater and replenishing groundwater aquifers**
- **Regulating water quantity and supply by releasing water at the right time to the right place in the right amounts**
- **Improving water quality and providing safe drinking water by naturally removing, filtering and absorbing pollutants**
- **Keeping us fed by supporting aquaculture, inland fisheries, rice paddies, and other food production**
- **Supporting social and economic development by providing livelihoods for a billion people**
- **Protecting communities by absorbing storm surges and floodwater**
- **Providing a home for the 40% of the world's species that live and breed in wetlands.**

Wetlands are essential for achieving the 2030 Agenda for Sustainable Development, including Sustainable Development Goal 6 to ensure the availability and sustainable management of safe water and sanitation for all.

WHAT ARE WETLANDS?

Wetlands are a major, planet-wide habitat that make life on Earth possible. Article 1.1 of the Convention on Wetlands defines wetlands as: "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres." They are ecosystems where water is the primary factor controlling

the environment and the associated plant and animal life. This encompasses all inland wetlands, such as marshes, ponds, lakes, fens, rivers, floodplains, and swamps; a range of coastal wetlands, including saltwater marshes, estuaries, mangroves, lagoons, and coral reefs; and human-made wetlands like fishponds, rice paddies, and salt pans. Global inland and coastal wetlands cover over 12.1 million km², an area larger than Canada.



WHAT ARE THE CHALLENGES?

A growing water crisis is threatening both people and our planet. We are simultaneously using more water than nature can replenish and destroying the ecosystems that all life depends on most – wetlands.

Unsustainable water use

We have a finite amount of fresh water and our current use is unsustainable. Population growth, intensive agriculture, urbanization, and changing consumption patterns are putting unbearable pressure on our water supplies and the wetlands that contain them. Water use has increased sixfold over the past century, rising to 10 billion tons of water every day. And yet, 2.2 billion people still do not have access to safely managed drinking water, and 4.2 billion people – over half the world's population – are without adequate sanitation.

Chronic mismanagement means that global freshwater sources are compromised, exposing 82% of the world's population to high levels of pollution in their water supply.

Agriculture, the sector responsible for 70% of our water use, is the source of much of this pollution and the water crisis is further exacerbated by enough water to fill Lake Geneva three times being squandered in the 1.3 billion tons of food wasted each year.

By 2025, it is estimated that 35% of people will face declining water supplies. The water insecurity already blighting hundreds of millions of lives impacts health, nutrition, education and livelihoods, and was a key factor in conflicts in at least 45 countries in 2017. Without major transformations in our water use and management, the water crisis is set to intensify: by 2050, we will need 14% more water to produce 70% more food for 10 billion people.

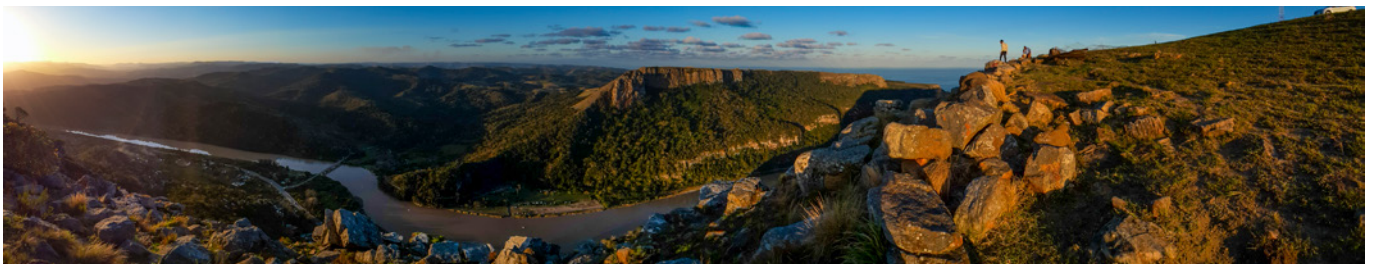
Wetland loss

Wetland loss and pollution is intensifying the water crisis and threatening all life. Nearly 90% of the world's wetlands have been lost since the 1700s, 35% have

disappeared since the 1970s, and those that remain are disappearing three times faster than forests. A quarter of all wetland species and 1 in 3 freshwater species face extinction and freshwater wetland loss costs about US\$2.7 trillion a year in lost services.

There are multiple causes of wetland loss but they all have one thing in common – us! Intensive water infrastructure development, drainage and infilling for agriculture and construction, pollution and waste, overexploitation of resources, and invasive species are all contributing to the destruction and deterioration of the world's precious wetlands and the species that depend on them.

Climate change is making the wetland and water crisis even worse. Scientists forecast that there will be significantly less renewable surface and groundwater in already dry regions by 2050. At the same time, new regions will become water stressed, increasing water competition between people and ecosystems.



INTEGRATED WATER RESOURCES MANAGEMENT IN SOUTH AFRICA

Identifying and understanding the value of 22 strategic water sources fundamental to South Africa's water and economic needs has led to nearly 50 integrated water interventions aimed at increasing water quantity, improving water quality, and expanding economic development. Although these water sources cover just 8% of South Africa's land area, they provide half the country's surface water – supporting 51% of the population and 64% of the economy. Interventions include:

- Integrating wetlands and built infrastructure into water management to better serve the cities of Durban and Pietermaritzburg.
- Conserving the Umzimvubu River system from source to sea through restoration and management, while supporting economic development in the region.
- Improving the water quality of the Berg River, that supplies water-stressed Cape Town, and the surrounding agricultural areas, that export 70% of their produce to Europe.

WHAT CAN WE DO?

Urgent action is required at every level to protect wetlands and address the water crisis. We could have enough water for nature and humanity if we better manage and value wetlands and water – and treat both as a collective responsibility. Conserving wetlands and using them wisely is essential if we are to achieve the water sustainability needed for people and biodiversity to thrive.

- **Stop destroying, start restoring**

The protection, restoration and wise use of wetlands would sustainably support increased demands for water. Don't dam, divert or drain wetlands. Instead, address pollution, clean up freshwater sources, and use them efficiently.

- **Integrated Water Resources Management** *By coordinating water, land and resources we can deliver maximum social and economic welfare fairly without compromising the sustainability of ecosystems. Policy makers should integrate water and wetlands into development plans and resource management locally, nationally and internationally.*

- **Increase efficiency and investment** *The agriculture sector can both produce more food and be better wetland/water stewards, including by taking action to cut food waste from farm to fork. Industry also has opportunities to reduce water use by up to 50%. To accelerate action to protect the world's wetlands, governments, the private sector and communities*

need to increase investment in wetlands as nature-based solutions for water resource management.

- **Get involved** *Everyone depends on wetlands and everyone can play a part in safeguarding them. At a local level, you can find out where your closest wetlands are, what challenges they face, and how you can help protect them. There are also many campaigns and initiatives aimed at triggering action nationally and internationally to save the world's wetlands.*

Every year, there is an opportunity to celebrate wetlands' vital services and raise global awareness about their immense value to humanity and nature on World Wetlands Day on the 2nd of February.



THE CONVENTION ON WETLANDS

Adopted in Ramsar, Iran in 1971, the Convention on Wetlands is the only global treaty to focus on a single ecosystem. Its 171 Contracting Parties commit to:

- **Designate wetlands of high value on the list of Wetlands of International Importance (Ramsar Sites), and**
- **Use all wetlands wisely and cooperate on transboundary issues.**

Today there are 2,400 designated Ramsar Sites, covering a total surface area of over 250 million hectares (an area slightly larger than Algeria). The network of Ramsar Sites includes coastal and inland wetlands of all types. The Convention on Wetlands is working to reverse wetland loss and degradation around the world. The Convention supports sustainable development, disaster resilience, and climate action, contributing to 16 different Sustainable Development Goals.