

FREE-FLOWING RIVERS

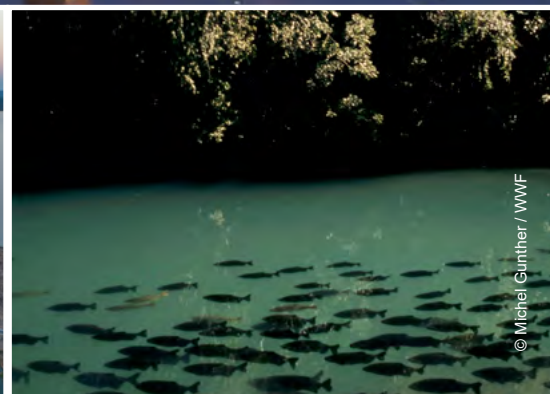
Securing the future of healthy,
unobstructed rivers



A VITAL RESOURCE FACES HEAVY DEMAND

From the Nile to the Yangtze, rivers have long been the lifeblood of civilizations around the world. They are among the most diverse and productive ecosystems on the planet, contributing to economic growth, food security, and human well-being. They support wetlands, forests, and other terrestrial habitats, and are home to many of the more than 100,000 freshwater species that exist—including nearly half of all fish species.

Unfortunately, rivers are severely threatened by humankind's growing demands for food, water, and energy. Just one-third of the world's longest rivers remain free flowing. The rest are interrupted by infrastructure that depresses aquatic wildlife and undermines the invaluable services rivers provide. WWF envisions a world where the most critical free-flowing rivers are valued and protected for the enduring benefit of people, wildlife, and nature.



THREATS AND IMPACTS



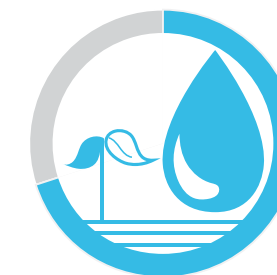
BIODIVERSITY LOSS

Freshwater fish had the highest extinction rate among vertebrates worldwide in the 20th century. According to WWF's 2018 Living Planet Report, freshwater wildlife populations declined 83% between 1970 and 2014. Without thoughtful intervention, free-flowing rivers will continue to be lost and we will continue to witness the decline of freshwater species and their benefits to people.



INFRASTRUCTURE

A severe threat to river systems is dams and other infrastructure development. In particular, over 3,700 hydropower dams are under construction or proposed. While hydropower is a less carbon-intensive energy source, poorly placed dams can have devastating impacts. The future depends on finding alternative energy solutions and developing infrastructure in a way that doesn't impact on people and nature.



IMPACTED COMMUNITIES

Many communities depend on free-flowing rivers for their livelihoods and sustenance. Free-flowing rivers deposit nutrient-rich silt on floodplains and deltas, creating fertile agricultural land. Inland water fisheries provide the primary source of protein for hundreds of millions of people and their value is estimated at upwards of US\$43 billion.

WHERE WE WORK

Our efforts are focused in those areas (see map below) that are the final frontiers for free-flowing rivers, that are hotspots for freshwater biodiversity, and that are urgently threatened by dam development.

BALKANS

The last stronghold of free-flowing rivers in Europe
Fact: The future of these rivers is threatened by the more than 2,500 planned small hydropower plants
Focus: Decreasing investments in, and eliminating subsidies for, small hydropower, and putting in place durable river protections

AMAZON

Hosts four of the top ten longest free-flowing rivers globally
Fact: Rich in species and cultural diversity and threatened with over 500 proposed dams
Focus: Promoting alternative energy visions and financial incentives while keeping critical migratory corridors flowing freely

PANTANAL

Largest tropical wetland in the world
Fact: Stable water flows year-round support nearly 5,000 species threatened by over 100 dams in headwaters and hydroway
Focus: Advocating for alternative energy visions and avoiding harmful planned dams

KAZA & ITS HEADWATERS

Pristine water tower under threat
Fact: Waterways in the KAZA region support the largest population of African elephants and 2.5 million people
Focus: Maintaining water flows while supporting sustainable and equitable development

LUANGWA

Lifeline for communities and wildlife in Southern Africa
Fact: High cultural diversity along the river and rich wildlife populations support a thriving tourism industry
Focus: Promoting alternative energy options and securing protection for the free-flowing Luangwa River

IRRAWADDY & SALWEEN

Last two remaining long free-flowing rivers in Southeast Asia
Fact: Lifelines of transport, agricultural production, and wildlife that includes dolphins and over 400 fish species
Focus: Empowering civil society to conserve Myanmar's natural heritage and protect critical free-flowing rivers, while accelerating the renewable revolution

EASTERN & WESTERN HIMALAYAS

The water towers of Southeast Asia
Fact: Great diversity of species and landscapes and high cultural diversity and traditions within a small area
Focus: Accelerating uptake of renewable energy sources; siting needed dams to lessen impacts and protect wild rivers

LOWER MEKONG

Rice and fish basket of Southeast Asia
Fact: Floodplains provide sustenance and livelihoods for tens of millions of people
Focus: Advocating for renewable energy to meet Cambodia's energy needs and keep the Lower Mekong River free flowing

WWF'S STRATEGY

TO PROTECT THE WORLD'S MOST VITAL, FREE-FLOWING RIVERS, WWF IS UNDERTAKING A FOUR-PART STRATEGY.



SUSTAINABLE BASIN & ENERGY DEVELOPMENT

WWF is supporting uptake of new development pathways, financial tools, and other incentives to shift development planning in ways that maximize economic and energy benefits while minimizing negative impacts on people and nature. Redirecting financial flows to bankable and sustainable renewable energy projects is a critical component of this workstream.

ADVOCACY & OUTREACH

WWF employs public advocacy and communications to advocate for policy change; to increase understanding of the impacts of unsustainable infrastructure and the potential for alternative energy and natural infrastructure solutions; and to raise awareness of the value of healthy, free-flowing rivers.

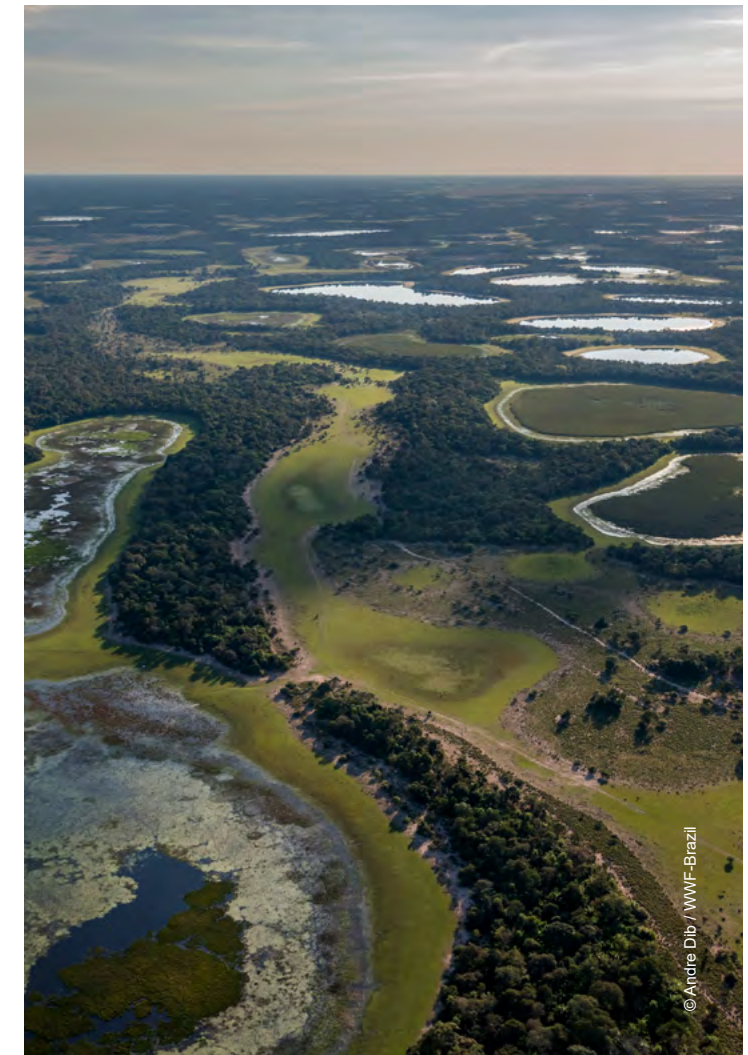


POLICY PROTECTIONS & GOVERNANCE

Protection of the world's most important free-flowing rivers from future development is critical. WWF is working with local communities and other stakeholders to pilot, document, and share various mechanisms to secure rivers and strengthen their management.

SCIENCE

There is still much we don't know about how rivers, wildlife, and human development interconnect. WWF is continuing to measure the health of rivers and assess the efficacy of various policy, market, and community-oriented interventions in specific geographies and at a global scale.

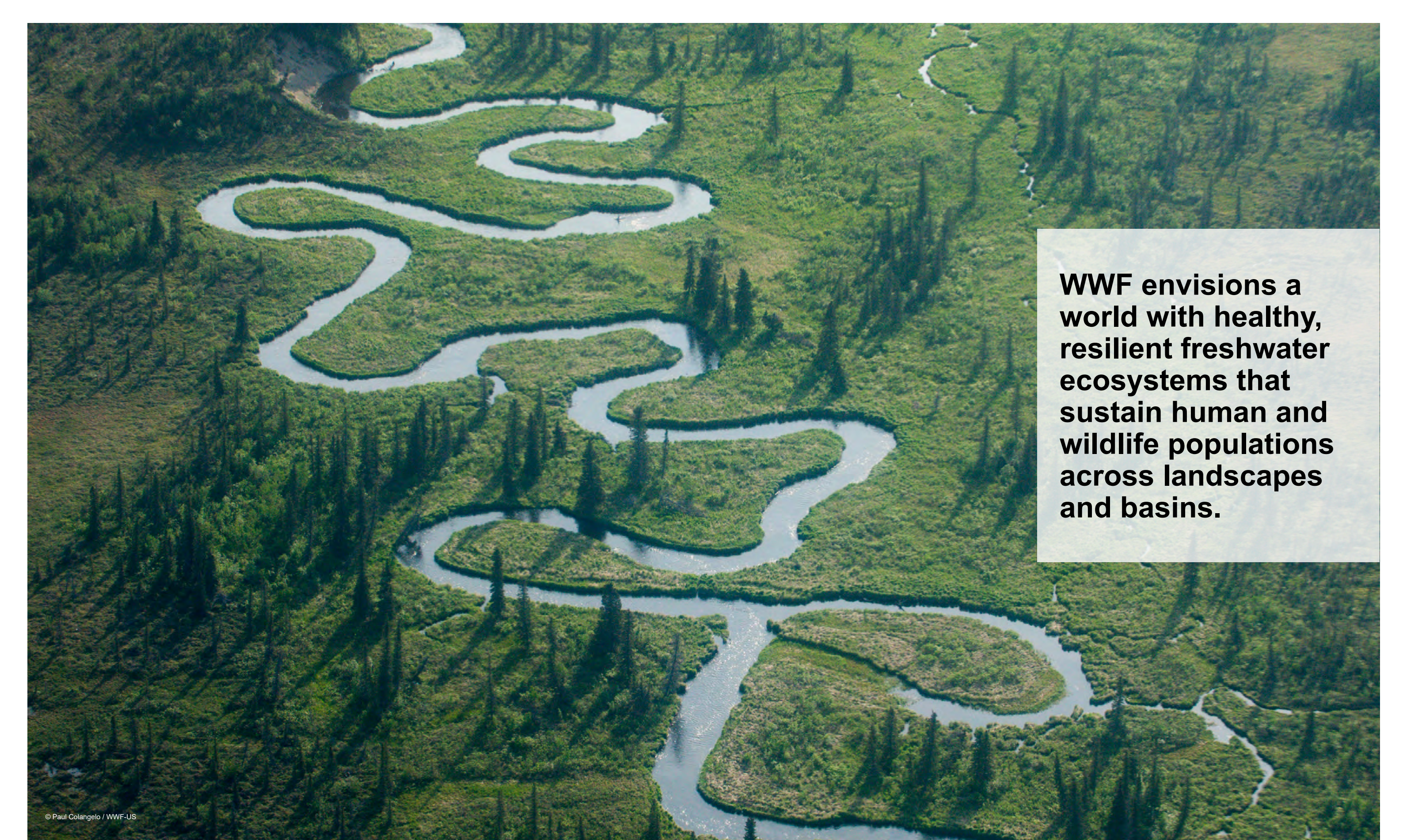


2030 GOALS

By 2030, the most critical free-flowing rivers are valued and protected for the enduring benefit of people and nature.

- at least 15 rivers are under legal protections that ensure connectivity is maintained within priority geographies.
- loss of river connectivity is avoided on at least 22,500 km of river through alternative energy and basin-scale planning



An aerial photograph showing a highly meandering river flowing through a dense, green forest. The river's path is extremely convoluted, creating many small islands and oxbow-like shapes. The surrounding forest is thick and appears to be a mix of deciduous and coniferous trees. The overall scene conveys a sense of a healthy, undisturbed natural environment.

WWF envisions a world with healthy, resilient freshwater ecosystems that sustain human and wildlife populations across landscapes and basins.

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