

FRESHWATER & FOOD

PROTECTING FRESHWATER, CONSERVING CRITICAL
LANDSCAPES, AND BUILDING RESILIENT FOOD SYSTEMS



THE CHALLENGES WE FACE

Freshwater and food are vital to human life and well-being. We depend on nature for both. Yet growing demands on land and water for food production, industry, and economic development are exceeding planetary boundaries—simply put, we take more than the Earth can provide.

Degrading nature leads to climate change, extreme weather events, droughts, floods, wildfires, and the emergence of global pandemics like COVID-19. These in turn have negative impacts on human development and well-being.

The Freshwater and Food team at WWF addresses two of the biggest threats to nature—**agriculture and infrastructure**.

By 2050, a future population of 10 billion is expected to **increase the demand for food production by 50% and increase built infrastructure by 75%** to meet global development needs.

By 2050, **5 billion people could suffer water scarcity and \$10 trillion could be wiped off the global economy** due to climate change.

We must balance the current and future needs of people with the conservation of nature, upon which all life depends.



**70% OF WATER USE
IS FOR AGRICULTURAL PRODUCTION**



**63% OF THE WORLD'S LONGEST
RIVERS ARE OBSTRUCTED
DUE TO DAMS AND OTHER
INFRASTRUCTURE**



**70% OF BIODIVERSITY LOSS
IS CAUSED BY AGRICULTURE**



**80% OF DEFORESTATION
IS CAUSED BY AGRICULTURAL
EXPANSION**



**92% OF FRESHWATER
MEGAFUNA
ARE THREATENED BY EXISTING AND
PLANNED HYDROPOWER DAMS**



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OUR STRATEGY

Despite the challenges, agriculture, infrastructure, and other industries can be part of the solution. It will require both urgent work on the ground with local people and governments to address the degradation of nature and influencing larger systemic change globally. WWF, alongside our partners, will deliver on both.

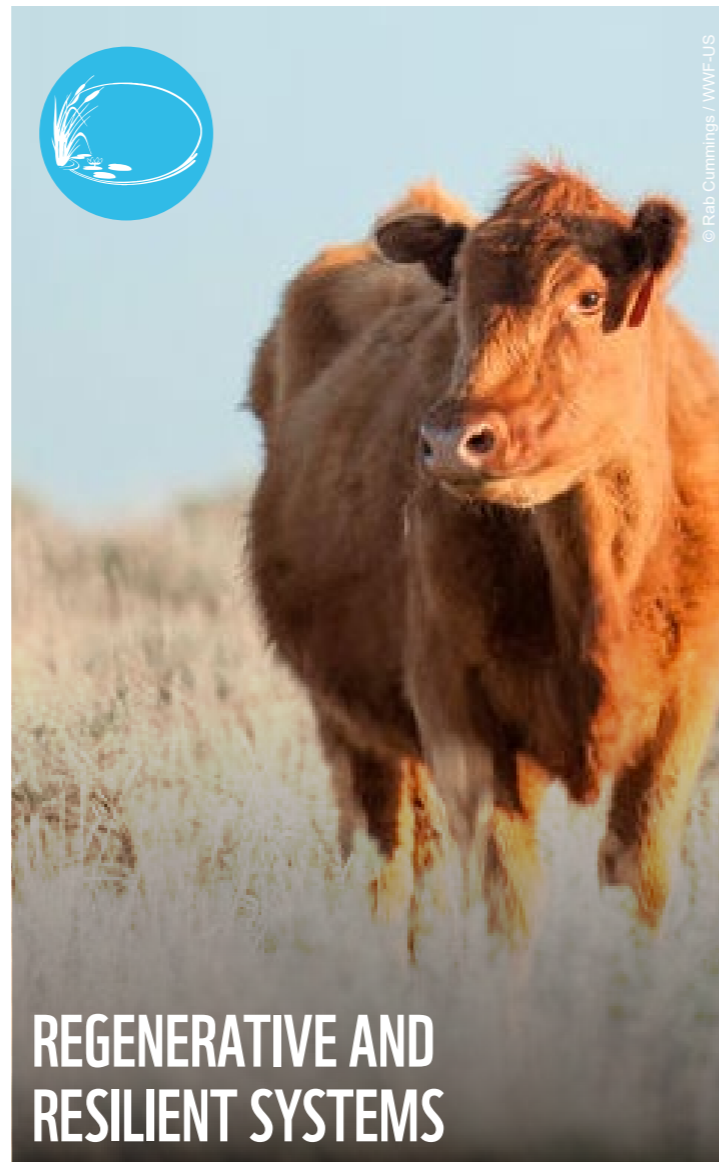
OUR FRESHWATER AND FOOD WORK IS FOCUSED AROUND FOUR AMBITIOUS PILLARS



We conserve and protect some of the most biodiverse landscapes on Earth from the major threats of infrastructure and agriculture.

We work to keep the world's most biodiverse rivers free flowing—from the Amazon to the Greater Mekong—and are protecting freshwater ecosystems from poorly planned infrastructure, overextraction, and pollution. We facilitate transboundary water governance and help develop freshwater policies in the Pantanal, Kavango-Zambezi region (KAZA), and the Rio Grande/Rio Bravo.

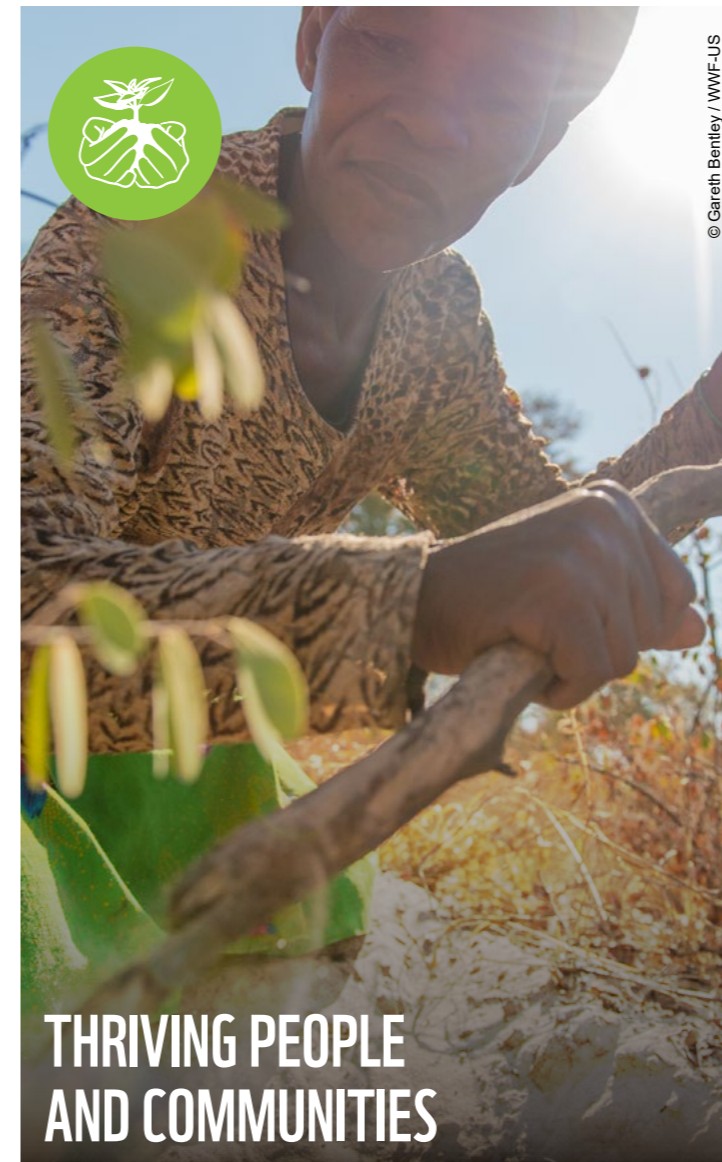
We secure deforestation/conversion free supply chain commitments so that agricultural expansion does not lead to the degradation of critical landscapes. We conserve the world's last intact temperate grassland ecosystems—the Northern Great Plains—through a working-lands approach, ensuring viable livelihoods for millions of people including ranchers and Native Nations.



We transform the way food, commodities, and energy are produced so we can meet the needs of people without degrading nature.

We work with diverse stakeholders on adopting system-scale planning by providing alternative renewable energy solutions to hydropower dams—including wind and solar—so we can mitigate the degradation of freshwater ecosystems. We take a water stewardship approach that bridges corporate water management with broader conservation programs.

We facilitate sustainable food production systems, specifically protein—livestock and aquaculture—to ensure a nutritious food supply and support livelihoods while sustaining nature and mitigating climate change impacts. We identify business models for producers that support reducing greenhouse gas emissions and adopting regenerative agriculture practices, and we implement solutions to reduce global food loss and waste from the field to the consumer.



We support people and communities to develop their own conservation priorities, ensuring that protecting nature also protects their livelihoods.

We collaborate with communities globally to manage precious soil and water resources, to mitigate impacts of development and climate change. Through partnerships like the CARE-WWF Alliance and the Global Alliance for Improved Nutrition (GAIN), and stakeholder engagement like the Basin Report Card, we support a shared vision for the development and conservation of natural resources that is centered on thriving people.

We unlock innovative financing solutions and empower local and Indigenous communities to develop and execute their own development conservation priorities. In the Northern Great Plains our team prioritizes reinforcing cultural identity, food sovereignty, land and resource rights, and access to investment, especially for Native Nations.



We combine innovation, scientific knowledge, policy analysis, finance, and technical expertise to have impact at scale.

We apply ground-breaking science and work with academic institutions to advance cutting-edge conservation tools and methods and tackle emerging threats. We provide technical expertise on the Science Based Targets Initiative, in which companies are taking action to address climate change and water impacts. We engage with the finance community on innovative financing models for sustainable infrastructure and nature-based solutions.

We make impact investments in innovations like seaweed farming to mitigate climate change and transform animal feed production.

We influence production and consumption so that diets can be healthy, sustainable, and culturally and economically accessible for all.

FRESHWATER AND FOOD INITIATIVES

FREE-FLOWING RIVERS—keeping the world’s most biodiverse rivers free-flowing and healthy by strengthening protections, promoting more sustainable energy planning, and advocating to stop harmful dams.

TRANSBOUNDARY GOVERNANCE & SUSTAINABLE FINANCE—strengthening governance of healthy freshwater ecosystems through integrated basin management to promote transboundary connectivity and sustainable development that generates economic returns.

FRESHWATER & FOOD TRANSFORMATION—transforming the way businesses manage their water and agriculture operations and enable collective action for scaled impact within basins.

NORTHERN GREAT PLAINS—working with public agencies, tribal nations, private ranchers, corporations, and other partners to enhance the grasslands and their biodiversity, restore two flagship species, and sustain the economy and culture of the people who live there.

SUSTAINABLE PROTEIN SYSTEMS—halting the conversion and deforestation of remaining critical natural habitats by food production and reducing the use of water, energy, and land for feed production.

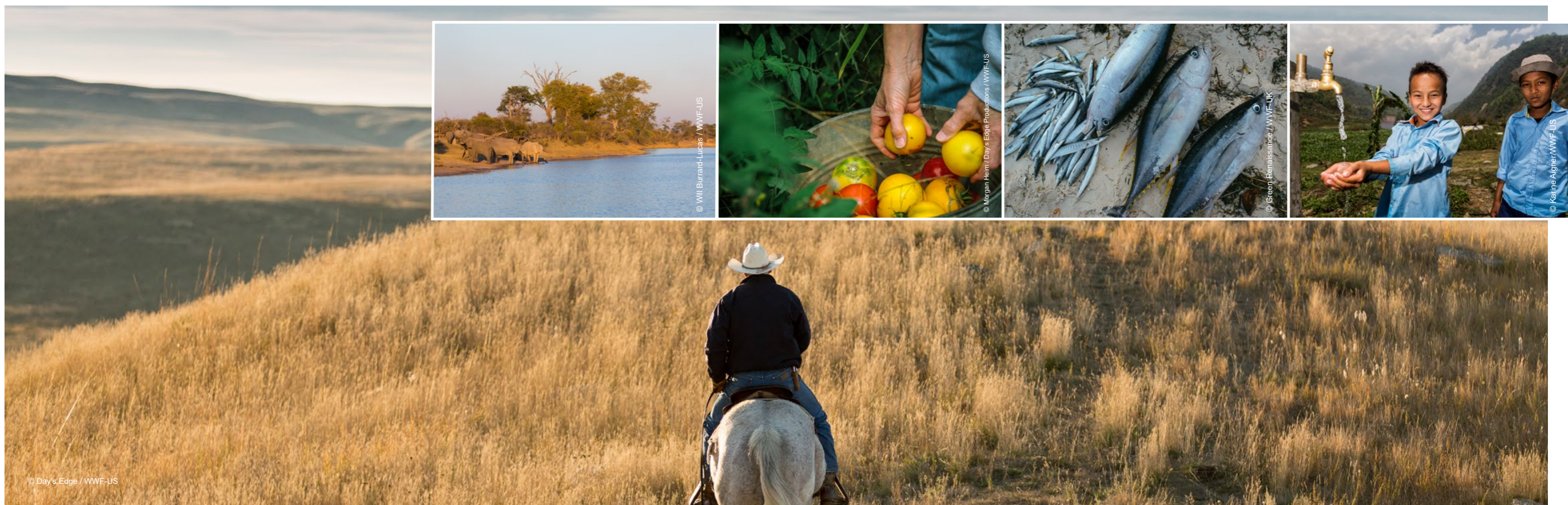
FOOD LOSS & WASTE—influencing governments and food businesses globally to halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.

FRESHWATER AND FOOD 2030 GOALS

- ▶ Achieve zero land conversion of native habitat due to agricultural expansion or infrastructure in our priority landscapes.
- ▶ Protect the world’s last remaining free-flowing rivers and the freshwater ecosystems they support.
- ▶ Reduce freshwater degradation through improved water stewardship in textile, food, and beverage supply chains.
- ▶ Ensure we produce enough food to nourish everyone in the world, using regenerative, resilient, sustainable agroecosystems.
- ▶ Reduce the environmental footprint of food systems, with a priority on animal protein and feed commodities.
- ▶ Curtail global consumption of natural resources by ending loss, waste, and inefficiencies in the food system, from the farm to the consumer, and shift our demand to better align with our nutritional needs.
- ▶ Ensure local people and Indigenous communities are supported and empowered to determine their own conservation future, especially in our priority landscapes.



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**Our vision is to protect
and conserve the world's
freshwater ecosystems and
critical landscapes, and rebuild
resilient food systems globally.**

It's a massive undertaking.

**But our global influence and
impact at scale means WWF is
uniquely positioned to deliver.**

**With our partners across
the world, we can ensure
that nature will thrive while
nourishing people.**

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