

Why People Need Freshwater Biodiversity

Photo by Randolph Femmer

Freshwater ecosystems support the health and well-being of human life and society through a myriad of services. Intact freshwater biodiversity maintains the health of freshwater ecosystems and the benefits they provide. However, staggering rates of freshwater biodiversity loss and declining ecological function of freshwater ecosystems threaten these natural benefits and human life.

National and international concerns are mounting over the accelerating pace of biodiversity loss. World leaders have continued to explicitly include biodiversity protection and restoration in international agreements. At the same time, our understanding of biodiversity is steadily advancing, bringing with it new policy tools and decision-making frameworks. This combination of international awareness and relevant and actionable biodiversity information provides a rare policy window to acknowledge and address freshwater biodiversity loss.

Nine Ways Freshwater Biodiversity Support Humans

- Food
- Climate Regulation
- Recreation
- Material Goods
- Water Purification & Nutrient Cycling
- Culture
- Health & Genetic Resources
- Catchment Integrity
- Science & Education



Whitefish drying on a fish rack in Pilot Station, Alaska. Photo by Ryan Toohey, U.S. Geological Survey.

Key Takeaways:

- Freshwater biodiversity provides many services to people everywhere, supporting modern society and vulnerable human populations. The accelerating pace of biodiversity loss and declining ecological function of freshwater ecosystems could threaten these natural benefits.
- Because of the competing uses for freshwater, we often overlook the value of the life that occupies this environment, and how much we rely on freshwater biodiversity every day.
- If freshwater biodiversity is protected, conserved, and restored, and appreciated by humanity, it will continue to support human well-being and a sustainable future based in resilient ecosystems and nature-based solutions.
- Policymakers may consider the benefits of maintaining freshwater biodiversity when creating or updating conservation targets, such as those being developed as part of the Convention on Biological Diversity's Post-2020 Global Biodiversity Framework or by other international bodies such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

[Read the paper!](#)

