

Collapse in migratory fish populations threatens health of millions and critical freshwater ecosystems

May 21 2024, by Amy Fallah



Index of abundance of 1,864 monitored populations of 284 species of migratory freshwater fishes, showing a decline of -81% between 1970 and 2020. Credit: ht tps://files.worldwildlife.org/wwfcmsprod/files/Publication/file/6f6b5o5dn1_LPI _migratory_freshwater_fishes_2024_Technical_report.pdf?_ga=2.192433699.8 42664729.1716212254-872615330.1682020948



Populations of migratory freshwater fish species—including salmon, trout, eel, and sturgeon—continue to decline across the globe. This decline risks the food security and livelihoods of millions of people, the survival of countless other species, and the health and resilience of rivers, lakes and wetlands.

This news is supported by a <u>global study</u> published today by the World Fish Migration Foundation, ZSL, IUCN, The Nature Conservancy (TNC), Wetlands International and WWF.

Published ahead of World Fish Migration Day on May 25, the new Living Planet Index (LPI) report on freshwater migratory fishes reveals a staggering 81% collapse in monitored population sizes on average between 1970 to 2020, including catastrophic declines of 91% in Latin America and the Caribbean and 75% in Europe.

Habitat loss and degradation—including fragmentation of rivers by dams and other barriers and conversion of wetlands for agriculture—account for half of the threats to migratory fishes, followed by over-exploitation. Increasing pollution and the worsening impacts of climate change are also fueling the fall in freshwater migratory fish species, which have now been declining consistently for 30 years.

"The catastrophic decline in migratory fish populations is a deafening wake-up call for the world. We must act now to save these keystone species and their rivers," said Herman Wanningen, founder of the World Fish Migration Foundation. "Migratory fish are central to the cultures of many Indigenous Peoples, nourish millions of people across the globe, and sustain a vast web of species and ecosystems. We cannot continue to let them slip silently away."

Migratory freshwater fishes are vital to the <u>food security</u> and <u>nutritional</u> <u>needs</u> of hundreds of millions of people, particularly in vulnerable



communities across Asia, Africa and Latin America. They also support the livelihoods of tens of millions, from local fisheries to the <u>global trade</u> in migratory fish and fish-byproducts, and the multi-billion dollar recreational fishing industry.

"In the face of declining migratory freshwater fish populations, urgent collective action is imperative. Prioritizing river protection, restoration, and connectivity is key to safeguarding these species, which provide food and livelihoods for millions of people around the world. Let's unite in this crucial endeavor, guided by science and shared commitment, to ensure abundance for generations to come," said Michele Thieme, Deputy Director, Freshwater at WWF-US.

The report is not all doom and gloom. Nearly one-third of monitored species have increased, suggesting that <u>conservation efforts</u> and improved management can have positive impacts. Some promising strategies include the improved and/or species-focused management of fisheries, habitat restoration, <u>dam removals</u>, the creation of conservation sanctuaries, and legal protection.

For example, in Europe and the United States, thousands of dams, levees, weirs and other river barriers have been removed in recent decades, and momentum for such actions is growing. In 2023, <u>Europe removed a record 487 barriers</u>—a whopping 50% increase over the previous high reported in 2022.

Meanwhile, in the United States, the largest dam removals in history are currently underway along the Klamath River in California and Oregon. Dam removals can be cost-effective, job-producing solutions that help reverse the disturbing trend of biodiversity loss in freshwater systems as well as solutions that improve river health and resilience for people, too.

While scaling up dam removals is a key solution to reversing the collapse



in freshwater migratory fish populations, there are more. Decision makers across the globe must urgently accelerate efforts to protect and restore free-flowing rivers through basin-wide planning, investing in sustainable renewable alternatives to the thousands of new hydropower dams that are planned across the world as well as other measures that contribute to the ambitious goals in the Kunming-Montreal Global Biodiversity Framework to protect 30% of inland waters and restore 30% of degraded inland waters.

In particular, rising to the Freshwater Challenge's goal of restoring 300,000 km of degraded rivers will contribute enormously to reversing the trend in migratory fish populations. WWF-US recently joined as an inaugural member of the White House's America the Beautiful Freshwater Challenge Partnership, the largest freshwater restoration and protection initiative in history.

Along with protecting and restoring healthy rivers, there is an urgent need to strengthen monitoring efforts; better understand fish species' lifehistory, movement and behavior; expand international cooperation, such as adding more freshwater migratory fish species to the Convention on Migratory Species (CMS); and promote greater public and political engagement.

There are many initiatives around the world supporting the recovery of migratory fish species and freshwater biodiversity in general. The Emergency Recovery Plan for Freshwater Biodiversity highlights a variety of measures that could transform the management and health of rivers, lakes and wetlands to improve the health of freshwater systems and biodiversity.

The Global Swimways Initiative identifies and prioritizes key river migration routes that are important for ecologically, culturally and economically important fish <u>species</u>. It highlights the collaborative



efforts of international river basin authorities in addressing this critical issue. Since 2014, the WFMF has organized World Fish Migration Day every two years to raise awareness about migratory fish—the next is on May 25 with over 68 countries participating so far.

More information: Study: <u>Living Planet Index: Migratory Freshwater</u> <u>Fishes</u>

Provided by WWF

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