

# RIVERS AND BIODIVERSITY



*Kihansi Spray Toad: extinct because of a dam*

River systems are the zone of Earth's highest biological diversity – and also of our most intense human activity. Freshwater biodiversity is in a state of crisis, a consequence of decades of humans exploiting rivers with large dams, water diversions and pollution. Freshwater species are even more endangered than those on land.

Large dams harm biological diversity by flooding land, fragmenting habitat, isolating species, interrupting the exchange of nutrients between ecosystems, and cutting off migration routes. They reduce water and sediment flows to downstream habitat, and change the nature of a river's estuary, where many of the world's fish species spawn. The impacts from dams increase the vulnerability of entire ecosystems to other threats, such as climate change.

The irretrievable loss of the Yangtze River *baiji* dolphin to the [Three Gorges Dam](#) or the extinction of a third of all wild salmon runs on dammed rivers throughout the US

West are just the most charismatic examples of how humans are shredding the safety net that supports our own existence and viability.

We're losing life forms that have the ability to nourish us, keep our water clean, produce breathable air and fertile soil, and ultimately make our planet the amazing place it is. If we don't protect our biological richness and diversity, we undercut the re-generative capacity of the Earth, we undermine the prospect of life creating the conditions conducive to life.

The huge impact of large dams on biodiversity can be slowed and even reversed. First, dams proposed for environmental hotspots of biodiversity should be stopped, and these rivers [permanently protected by law](#) . Rivers rich with migratory species are especially inappropriate for dams and should be deemed off limits.

The planet's most lethal dams should be [decommissioned](#). And dam planning processes and [standards](#) must be improved: most of the time, we may be aware of only a fraction of the species a watershed holds before damming proceeds. It's time for a revolution in how environmental assessments are conducted.

Source : <http://www.internationalrivers.org/rivers-and-biodiversity>