







Brazil's new fish farming Decree threatens freshwater conservation in South America

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Abstract

Aquaculture has tremendous importance in providing food for a growing world population. Nevertheless, unsustainable aquaculture causes nutrient buildup and favors biological invasions in natural habitats, demanding strategies to regulate such activity and therefore minimize environmental risks. Contrary to these concerns, the Brazilian Government has recently issued a new Federal Decree (10576/2020) encouraging the farming of invasive non-native species and excluding the Ministry of Environment from the legal process of issuing fish farming permits in reservoirs. The Decree increases the risk of non-native species establishment in inland waters at a national level and their propagation into neighboring countries, such as Argentina, Bolivia, Paraguay, and Uruguay. These consequences will endanger preserved freshwater ecosystems in the continent, including their native biodiversity, which represents both a problem of national sovereignty and a threat to the fundamental human right for a healthy environment. For this reason, the Decree contradicts the Brazilian Federal Constitution and conflicts with international treaties regulating invasive species and promoting sustainable development. It calls for immediate legal action and is yet another unfortunate sign of the increasing gap between science and decision making that has plagued the country in recent years.

Section snippets

Freshwater conservation in Brazil nowadays

Biodiversity is rapidly declining in freshwater ecosystems worldwide (Albert et al., 2020). This global crisis and the lack of effective conservation responses is still largely a consequence of political agendas that favor short-term economic growth over long-term sustainable development. One striking example is the current Brazilian government, which has failed in its duty to ensure the conservation of the environment for future generations, promoting regular budget cuts in science, social,...

Legal understanding

With the publication of Decree 10,576, the power to issue permits for non-native and native fish farming in reservoirs was transferred to the Secretariat of Aquaculture and Fisheries (SAP). It contradicts the National Environmental Policy (Law nb 6938/1981) that delegates to the Ministry of the Environment, through the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA), the responsibility for handling environmental issues at the Federal level. Complementary Law...

The gap between science and policy in Brazil

By recognizing the relevance of connecting science and policy, several countries have established science advisory boards. In contrast, the Brazilian government seems to regularly ignore the existence of the Ministry of the Environment and the Ministry of Science, Technology, Innovation and Communication, both with highly qualified scientific staff from several research areas. Although policymakers can in principle consult these specialists, which is a logical conduit for scientific inputs to...

CRedit authorship contribution statement

All authors contributed writing the first and final versions of the manuscript; A. O. L., R. P. M., H. C. G., F. D. D., J. R. S. V. and R. E. R. also contributed to conceptualization, methodology and supervision, while L. T., C. N. M. P., L. O. L., L. B. L. and F. T.-M. also contributed to methodology....

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper....

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...In Brazil, aquaculture farming has been considered to be projects with small environmental impacts and are permitted to use simplified licensing procedures. In fact, a new Decree (10576/2020) makes the process even simpler, removing environmental criteria to licensing and focusing only in the perceived economic benefits (Latini *et al.*, 2021). Although SHPs are the object of a complete environmental impact assessment process, this procedure fails to analyze cumulative impacts of multiple SHPs on the environment....

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