



*Fish and Aquatic Conservation Initiative,
Caribbean Ecological Services Field Office*

Reconnecting the Rivers of Puerto Rico

The Situation

The rivers of Puerto Rico present a series of threats that could include:

- physical barriers such as dams, bridges, roads, and culverts
- contamination
- sedimentation
- channelization
- destabilization in the banks

Specifically, structures like dams represent a physical obstacle that abruptly disrupts the natural flow of the river.

Impact on Native Species and Their Life Cycle

The reduction of connectivity in the rivers affects the aquatic fauna (fish and crustaceans) dominated by migratory species. The migration between interior waters, estuarine and marine ecosystems is fundamental for these species to complete their life cycles.



Mountain mullet, credit USFWS/A. Galindo

Impact on the Ecosystem and its Function

These threats might affect the structure, biological composition, ecology, and ecosystem function. In addition, it might also limit the benefits that riverine ecosystems offer to human beings, including water, food, and recreation.

What are We Doing?

The Caribbean Ecological Services Field Office of the U.S. Fish and Wildlife Service (USFWS) and the USFWS Fish and Aquatic Conservation Program



Aerial view of Cambalache dam at Río Grande de Arecibo, credit UPRM-NOAA CREST/W. Hernández

work with partners to restore aquatic ecosystems by removing or modifying physical barriers (e.g., dams, culverts and other stream-crossing structures) for the benefit of aquatic fauna.

Benefits

- Restoration of the natural movement of the river (hydrology)
- Restoration of the natural downstream movement of sediment
- Erosion reduction
- Improves water quality
- Improves public health and safety
- Reestablishes aquatic connectivity upstream for migratory species
- Increases the available habitat for the species and therefore their distribution and abundance
- Species are able to move into important areas to feed, reproduce and grow
- Benefits fishing and recreational activities

Initial Project: Partial Removal and/or Modification of the Cambalache Dam at Río Grande de Arecibo

This project was developed as part of the Aquatic Connectivity Initiative in Puerto Rico. Its purpose is to partially remove and/or modify the Cambalache dam located in the Río Grande de Arecibo in the municipality of Arecibo, Puerto Rico. The goal is to restore the connectivity of approximately 25 km riverine habitat which will provide a series of benefits for the ecosystem, aquatic species and the public. This project is a collaborative effort between the USFWS, the Puerto Rico Department of Natural and Environmental Resources, the National Wildlife Refuge Association, Protectores de Cuencas, Inc. and the University of Puerto Rico at Mayagüez.

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