OMB Number: 4040-0019
Expiration Date: 02/28/2025

Project Abstract Summary

This Project Abstract Summary form must be submitted or the application will be considered incomplete. Ensure the Project Abstract field succinctly describes the project in plain language that the public can understand and use without the full proposal. Use 4,000 characters or less. Do not include personally identifiable, sensitive or proprietary information. Refer to Agency instructions for any additional Project Abstract field requirements. If the application is funded, your project abstract information (as submitted) will be made available to public websites and/or databases including USAspending.gov.

* Funding Opportunity Number

F-FWS-WSFR-23-001

CFDA(s)

15.628

* Applicant Name

Mississippi State University

* Descriptive Title of Applicant's Project

Vulnerabilities of reservoir fish habitats to climate change

* Project Abstract

Depending on reservoir attributes and extent of local temperature and precipitation change, reservoir fish habitats may differ greatly in their vulnerability to climate change. Highly vulnerable habitats are likely to experience greater impacts, whereas habitats with low vulnerability may be less impacted or even benefit from climate change. Understanding which in-lake or off-lake qualities make certain reservoirs vulnerable to climate change provides a basis for developing appropriate mitigation and adaptation measures at the local reservoir scale as well as at broad regional scales. This study will use existing databases about reservoir fish habitat, past climate, and projected climate to develop nationwide ratings of reservoir vulnerability to climate change, and to distinguish the specific climatic factors that pose the greatest threats to reservoir fish habitats. The vulnerability scores generated will allow managers to justify and strategically allocate habitat management dollars.