

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 USA Spending.gov.

Funding Opportunity Number

F24AS00331

CFDA(s)

15.628

Applicant Name

Colorado State University

Descriptive Title of Applicant's Project

Ranking and visualizing eastern brook trout climate refugia to guide their range-wide management

Project Abstract

Brook trout is a popular sportfish and an indicator of coldwater habitats in the eastern USA, but their populations have declined in their native range and climate change poses an additional threat for their persistence. Conservation and restoration action is underway throughout the eastern USA, which necessitates resource inventory and management decisions about where to prioritize and invest effort at multiple jurisdictional levels. Based on our recent project in the southeastern USA, we propose a Multistate Conservation Grant project to develop databases of brook trout count surveys and stream temperature data, model and rank National Hydrography Dataset (NHD) stream segments for trout habitat suitability, and visualize this spatial information and make it available for trout managers in the 16 states encompassing the native range in the eastern USA (from Georgia to Maine). The spatial products rank brook trout habitats at multiple scales from major watersheds to stream segments, so that the product can be used by various stakeholders such as multistate consortiums needing to identify priority regions for conservation (e.g., Eastern Brook Trout Joint Venture), state wildlife agencies managing watersheds, and local river organizations interested in identifying locations for habitat restoration and connectivity projects. By aggregating information and making it available and updateable, this multistate project will result in more coordinated effort to conserve this iconic native salmonid range-wide and consequently use limited resources more efficiently.