

# REQUEST FOR PROPOSALS

## Reservoir Fisheries Habitat Partnership

**Deadline for Proposal Submission: September 15, 2015**

**Introduction:** The Reservoir Fisheries Habitat Partnership (RFHP) is pleased to request proposals for partial funding of reservoir fisheries habitat enhancement projects. The RFHP is a national partnership established to promote and facilitate the conservation of habitat for fish and other aquatic species in reservoir systems through collaborative actions that contribute to:

- *The ecological health and function of reservoirs and their associated waters and watersheds*
- *The restoration, protection and enhancement of fish and other aquatic species and communities, therein*
- *The sustainability and enhancement of reservoir fisheries*
- *Public awareness of the conservation issues and challenges facing reservoir and associated waters and watershed management in the 21st Century*
- *The quality of life of the American people*

Proposed projects can be focused on habitat issues in the reservoir proper and/or in watersheds above the reservoir and/or tailwaters below.

**Eligible applicants include:** state and federal governmental agencies; non-governmental organizations (e.g., sportsman's groups, community associations, watershed user groups, cooperatives, civic groups), municipalities, universities, schools, state and tribal governments. Projects must be on public reservoirs. Projects on reservoirs with no or limited public access are not eligible. **Proposals must include "on-the-ground" habitat restoration objectives. Research proposals are not acceptable.**

**Project Duration:** Work conducted for the project is to be completed within 12-18 months of contract approval. Projects should be designed to begin in June 2016; however funding from RFHP is likely not going to be available until summer to early fall 2016. Actual project start date will be the date funding documents are signed.

**Funding:** Approximately **\$90,000** is available for projects. RFHP anticipates funding 5-6 projects @ \$10,000-\$20,000 each. Given the limited amount of funding available at this time, RFHP grants should be considered as a partial funding source for projects with multiple funding sources and partners. Grants must have a minimum of **1:1 non-federal contributions**, which may be in cash, time, goods, or other services. All contributions (cash and/or in-kind) must be acquired during the project period. Special consideration will be given to projects with more than the minimum match. Eligible costs will be paid for work done no earlier than contract approval. Grant funds may **NOT** be used to support overhead, political advocacy, deficit reduction activities, projects that have already been completed, or for activities that constitute legally required mitigation for the adverse effects of an activity regulated or otherwise governed by state or Federal law. Salaries of full-time employees may be part of the grant request as long as they are for only time spent directly on planning, administration and/or "on the ground" work on the project. Applicants are urged to not make "salaries" a major part of the funding request.

Applicants are strongly urged to discuss project ideas with the Coordinator prior to submitting proposals if questions about eligibility exist.

**For questions relative to project development and submission contact: Jeff Boxrucker, Coordinator, Reservoir Fisheries Habitat Partnership; 405-659-1797; [jboxrucker@sbcglobal.net](mailto:jboxrucker@sbcglobal.net) or visit the [www.reservoirpartnership.org](http://www.reservoirpartnership.org) website.**

**Proposal Requirements:** Proposals should be no more than 10 pages in length, formatted as described in Appendix A. This page limitation does not include attachments and support materials. Timelines may use a June 1, 2016 starting date, but the actual start date will be determined by completion of the contract document (funding is not likely to be available prior to June 2016).

**Proposal Selection Process:** Final projects will be selected for funding following review by the Regional Working Groups. Members of each Regional Working Group (geographically aligned with the Association of Fish and Wildlife Association regions) will review and score each project proposal based on the criteria listed below. Each of the Regional Working Groups will submit their prioritized list of projects to the Reservoir Fisheries Habitat Partnership Executive Committee which will select projects for funding at their fall meeting (November 2015). Projects selected will then be submitted to the National Fish Habitat Partnership (NFHP) Board and to the U.S. Fish and Wildlife Service (FWS) for final approval (early 2016). Applicants will be notified of final proposal status upon review by NFHP and FWS (early 2016). Given that funding is from federal sources, environmental compliance documents are required. Successful applicants will be advised on how to fill out these documents. The RFHP Coordinator is available to assist in this process.

**Evaluation criteria:** Projects will be scored according to criteria in three categories:

- **Category I: Aquatic Habitat Restoration/Protection (130 possible points)**
  - Priority Regional Reservoir Habitat Impairments
    - RFHP completed a nationwide reservoir habitat impairment assessment in 2013
    - Impairments were prioritized by region of the country (see map and table in Appendix B)
      - Proposals will score more points if addressing the higher regional habitat impairments (table in Appendix B);
      - Clearly state the impairment(s) that the project is focusing on and state how project will address the impairment(s);
      - Cite a management plan that identifies the impairment (if available and include a link if published on the web) Note: contact the management agency to see if a written plan addressing habitat impairments exists.
  - Clearly state the objective(s) of the project. Objectives should include how the project will address the impairment and what performance measures will be used to determine success.
    - Examples of performance measures include:
      - Siltation/turbidity and excessive nutrients
        - Amount (area or length) of riparian area stabilized;

- Amount of sedimentation reduced (rate, tons/ac etc.);
- Number of sediment retention structures installed or % base load treated;
- Number of watershed BMP's implemented (sewer pump-outs, farming practice improvements, pet waste policies, removal of impervious surfaces etc.);
- Amount (area) of wetlands created, protected or restored for nutrient removal;
- Amount of nutrients removed (could include deactivation with alum or physical removal by excavation).
- Degraded shorelines and/or loss of sensitive habitats
  - Amount (length or linear ft<sup>2</sup>) of shoreline wetlands or submergent/emergent vegetation protected, created or restored;
  - Amount (length or linear ft<sup>2</sup>) of shoreline habitat protected, created or restored;
  - Amount (area) of cove habitat protected, created or restored.
- Structural habitat
  - Amount of structure added;
    - Number and size of brush piles, rock piles, etc.
  - Number of native plants planted along with number and size of structures built to protect plants from herbivory;
  - Acres of nuisance/invasive plants treated/removed
  - Changes in water quality parameters;
  - Changes in fish sampling catch rates in affected area,
  - Changes in rates of recruitment, or population size structure;
  - Changes in angler catch rates, harvest rates, and measures of directed fishing effort;
  - Measures of recreational use or economic benefit.
- Water Regime
  - Negotiations held with water management agencies;
    - Fisheries-favorable water level management plan/water release schedule secured;
    - Water rights secured;
    - Fish loss barriers installed.
- Connectivity
  - Acres of cove/backwater habitat reconnected to main body of reservoir;
  - Miles of stream/river reconnected to body of reservoir;
    - Barriers to upstream migration removed.

- Describe the type and duration of monitoring following completion of the restoration efforts. (**Project monitoring and evaluation is a major component of the proposal scoring process and should be an integral part of proposal development.**)
  - Include duration of monitoring program;
  - Include a brief description of what, if any, baseline information is available.
- **Category II: Quality of Life (50 pts)**
  - Would the habitat project in question help the RFHP achieve its objectives to provide, protect and enrich quality of life for all Americans?
    - Develop environmental amenities, nature experiences, and wildlife-based activities and opportunities on lands adjacent to reservoir systems to engage and inform local communities and visiting public on the values and benefits of healthy reservoir systems;
    - Promote conservation of fish and aquatic resources to boaters and other water-based recreationists;
    - Maintain and enhance public access;
    - Support recreational industries and related economic activities that advance watershed health and contribute to conservation of fisheries and aquatic habitats in reservoir systems.
  - Would the project restore/enhance habitat that would directly support an economically important or high-use fishery (as documented in past studies or the published literature) or other types of fisheries within the project area? List the targeted sport fishes that the project is intended to affect in order of priority.
  - Would project outcomes lead to improvements in water quality for human health, recreational use, or ecological health of the reservoir system? Be specific in how this project directly or indirectly will positively affect water quality.

### **Category III: Partnerships, Fund Leveraging, and Promotion (80 pts)**

- Would the habitat project in question help the RFHP achieve its objectives to establish partnerships between management agencies and reservoir stakeholders; leverage outside sources of funding; and advance public awareness and understanding of the value of healthy reservoir systems?
  - Establish national and regional technological assistance, data sharing and information network capacities to support development and adoption of best management practices among managers and among individuals and organizations engaged in the conservation of fish habitat in reservoir systems;
  - Support and participate in watershed planning initiatives to promote implementation of best management practices for conservation of fisheries and fish habitat in reservoir systems;
  - To ensure practitioner awareness of and access to RFHP and its support capacities, establish outreach to reservoir managers, relevant authorities and communities within reservoir systems, and other private and public stakeholders engaged in conservation of those systems and their fisheries;

- Develop and formalize institutional relationships between RFHP and principle partners to establish landscape-level networks of communication and governance that will facilitate effective, efficient, and sustaining conservation of aquatic habitat in reservoir systems;
- Identify and develop long-term funding opportunities for RFHP projects and operations;
- Advance public awareness of the economic, societal and ecological value and benefits of healthy reservoir systems;
- Advance public understanding of the connections between habitat quality in reservoir systems and land-use practices within their associated watersheds;
- Nurture a public that is well-informed and involved in current and emerging resource issues in reservoir systems.
- List all partners involved in the project
  - Include type of partner, i.e., state, federal, ngo, municipality, user-groups;
  - To be considered a partner they must appear in the budget table and provide either cash or in-kind contributions to the project;
  - Identify the degree of involvement that the state fish and wildlife management agency has with the project (**letter of support from state fish and wildlife agency must accompany the proposal**).
- Develop a budget and include funds leveraged from all partners (list all partners and the amount of cash and/or in-kind contribution from each partner separately in the budget table included in Appendix A).

## Appendix A

### A. Applicant Information:

US Army Corps of Engineers, Savannah District  
James Sykes, District Fisheries Biologist, 4144 Russell Dam Drive, Elberton, GA 30635,  
706-213-3425

### B. Project Information:

Lake Russell Shoreline and Deepwater Habitat Enhancement

Location: Richard B. Russell Lake is located in the Piedmont region of South Carolina and Georgia along the Savannah River; (Russell) N 34.06833 W 082.64081 (see map in Appendix B)

U.S. Congressional District: SC District 3, GA District 9

Project objective(s): Establish shoreline and littoral zone vegetation and deepwater habitat adjacent to vegetation to improve fish habitat in Russell Lake.

Estimated on-the-ground start and end dates: June 2016 – November 2017

Amount of grant and estimated total cost of project: \$10,025

Total Project Cost: \$20,261

List of partners: **Georgia Department of Natural Resources (GADNR) and South Carolina Department of Natural Resources (SCDNR)**

### C. Project Description

**Project overview:** Russell Lake is a relatively young Corps of Engineers (COE) hydroelectric and pumped storage reservoir located on the Savannah River system in South Carolina (SC) and Georgia (GA), and often suffers from bank erosion and limited littoral zone vegetative structure. Limited annual water level fluctuations and the lack of a native aquatic plant seed bed in Russell Lake are considered the primary reasons for the lack of abundant native aquatic plants, especially emergent shoreline-oriented species. Recent efforts to establish water willow on Lake Russell have been successful by employing a variety of planting techniques in a wide range of shoreline sites and substrate types. These techniques will be employed to establish additional colonies of water willow on Lake Russell. Benefits will include increased abundance of nursery habitat for fish populations that occur in this reservoir and to some degree, offer shoreline stabilization and nutrient filtering. In addition, deepwater structures will be placed to provide adjacent habitat for adult fish both pre and post spawning periods and foraging locations. Critical partnerships include Georgia Department of Natural Resources (GADNR) and South Carolina Department of Natural Resources (SCDNR).

### III. Proposal:

**1. Project overview:** Representatives of the COE, GADNR and SCDNR will collectively select 10 habitat locations in Russell Lake. The 10 selected sites will be planted with 325 water willow plants each. The plants will be introduced in 1-4 feet of water along the shoreline and will be spaced approximately 18" apart and cover a shoreline area of 1,350 sq.ft. (6' wide x 225' long). Littoral zone plantings will stabilize substrates, reduce resulting siltation, erosion, and nutrient input, and provide structural habitat for shoreline-spawning fish species (i.e. largemouth bass, redear

sunfish, bluegill, etc.). Plantings will also provide an immediate stable, protective nursery area for juvenile fish. Deepwater fish attractors will be placed adjacent to the established plant colonies in 8-15 feet of water. The deepwater structures will consist of 3 “Georgia Cubes” and 3 “Honey Hole trees.

2. **Monitoring plan overview:** Initial establishment of the plants will result in approximately 1,350 sq. ft. of vegetation per site. Each site is expected to double in coverage within 12-months of the planting date. Sites will be visited annually to estimate both survival and expansion. The two deepwater structures will be evaluated using an underwater camera during the summer months to assess use and to detect any differences in fish community or fish abundance. The evaluation will provide useful information for the most beneficial use of future habitat funds.
3. **Outreach plan overview:** A posting on the Savannah Districts’ “Balancing the Basin” blog and GADNR Facebook site will be completed to highlight the project and its objectives.
4. **Provisions to protect the restoration project site after project completion:** The established sites will be available for use by the angling public and long-term maintenance is not anticipated.
5. **List of required permits:** Russell Lake is covered under a Regional General Permit for Minor Activities on Corps Lakes on the Savannah River. Activities including the installation of fish attractors and other fishery habitat enhancements are covered under this permit. The COE will coordinate the use of this permit with appropriate lake management staff at Russell Lake prior to commencement of work.
6. **Project timeline:**
  - a. June 2016 – Site Selection
  - b. July-Nov 2016 – Purchase, Construct and Deploy Deepwater Structures
  - c. April - May 2017 – Plant 2,000 Partner contributed water willow in aquatic nursery and order additional 1,250 water willow from commercial nursery
  - d. July-Aug 2015 – Monitor fish use of deepwater structures
  - e. July-Sep 2017 - Plant 325 water willow at each of the 10 sites
  - f. Oct-Nov 2017 – Monitor initial survival and establishment of water willow

**D. Budget:**

1. **Amount requested** through Reservoir Fisheries Habitat Partnership: \$10,025

-1,250 Water willow plants at \$2.50 =	\$3,125
-30 “honey hole” trees at \$115 =	\$3,450
-Materials for 30 Georgia cubes =	\$3,450

2. **Amount of in-kind** contributions: \$10,236

-2,000 water willow plants at \$2.25=	\$4,500
-Labor plant establishment	\$2880
-Labor Georgia Cube construction=	\$1,440
-Labor Honey Hole Assembly	\$ 744
-Labor Site Selection	\$ 432
-Labor Monitoring	\$ 192
-Labor Outreach	\$ 48

**Partner Contributions must be listed separately in table. Add more lines to table if needed.**

3. The timeline should be an approximation of when the funds under each funding category will be spent, i.e., June through August, 2016.

<b>Categories</b>	<b>Partner Contribution Amount</b>	<b>Cash or In-Kind</b>	<b>Timeline (anticipated date of expenditures)</b>
<b>Reservoir Fisheries Habitat Partnership</b>			
Administrative/Technical Services			
Construction Costs/Materials	-Materials for 30 GA cubes \$3,450 -30 Honey Hole structures \$3450 -1,250 water willow plants \$3125		Jul-Nov 2016 Jul-Nov 2016 Apr-May 2017
Labor (paid)			
Labor (volunteer)			
Miscellaneous (outreach materials)			
<b>Partner A – Corps of Engineers</b>			
Administrative/Technical Services			
Construction Costs/Materials	-1,000 Water Willow Plants \$2,250		Apr-May 2017
Labor (paid)		-Site Selection 6 hrs - \$144 -Assembly Honey Holes 31 hrs - \$744 -Establish Plants 4 hours per site - \$960 -Monitor Plant Survival 3 hours \$72	Jun 2016 Jul-Nov 2017 Jul-Sep 2017 Oct-Nov 2017
Labor (volunteer)			
Miscellaneous (outreach materials)		-Blog Article 2 hrs - \$48	
<b>Partner B Georgia DNR</b>			
Administrative/Technical Services			
Construction Costs/Materials	-1,000 Water Willow Plants \$2,250		
Labor (paid)		-Site Selection 6 hrs - \$144 -Assembly Georgia Cubes 60 hrs - \$1440 -Monitoring Deepwater Structure 2 hrs \$48 -Establish Plants 4 man-hours per site - \$960 -Monitor Plant Survival 3 hours \$72	Jun 2016 Jul-Nov 2016 Jul-Aug 2017 Jul-Sep 2017 Oct-Nov 2017
Labor (volunteer)			
Miscellaneous (outreach materials)			

<b>Partner C South Carolina DNR</b>			
Administrative/Technical Services			
Construction Costs/Materials			
Labor (paid)		Site Selection 6 hrs - \$144 Establish Plants 4 man-hours per site - \$960	Jun 2016 Jul-Sep 2017
Labor (volunteer)			
Miscellaneous (outreach materials)			

\* Volunteer labor should be calculated at \$10/hr for age 16 and under; 18/hr other volunteers; agency staff labor rates @ \$24/hr

**3. Budget narrative:** The RFHP funds will only be used to purchase supplies and materials required to complete the proposed project. Approximately 1,250 potted water willow plants will be purchased from a commercial nursery with RFHP funds. The 30 Honey Hole trees will be ordered from a vendor and purchased with RFHP funds. Finally, the necessary materials required for the construction of the 30 Georgia Cubes also will be purchased using RFHP funds.

Remaining project needs will be provided in-kind by all the project partners. The COE and GADNR will both propagate 1,000 water willow plants each at their respective small aquatic plant nurseries. In addition, GADNR will provide the necessary labor in-kind to construct the 30 Georgia Cubes. Furthermore, GADNR also will provide an underwater camera and the necessary labor to monitor the use of the deepwater attractors. COE, GADNR and SCDNR will provide two persons each for the planting of the water willow plants.

**Optional supporting materials:**



**Honey Hole Tree Deployed in Russell Lake – July 2013**



**Georgia Cube – Sep 2015**



**COE Aquatic Plant Nursery – Russell Lake – April 2009**



**GADNR Aquatic Plant Nursery – Sep 2015**

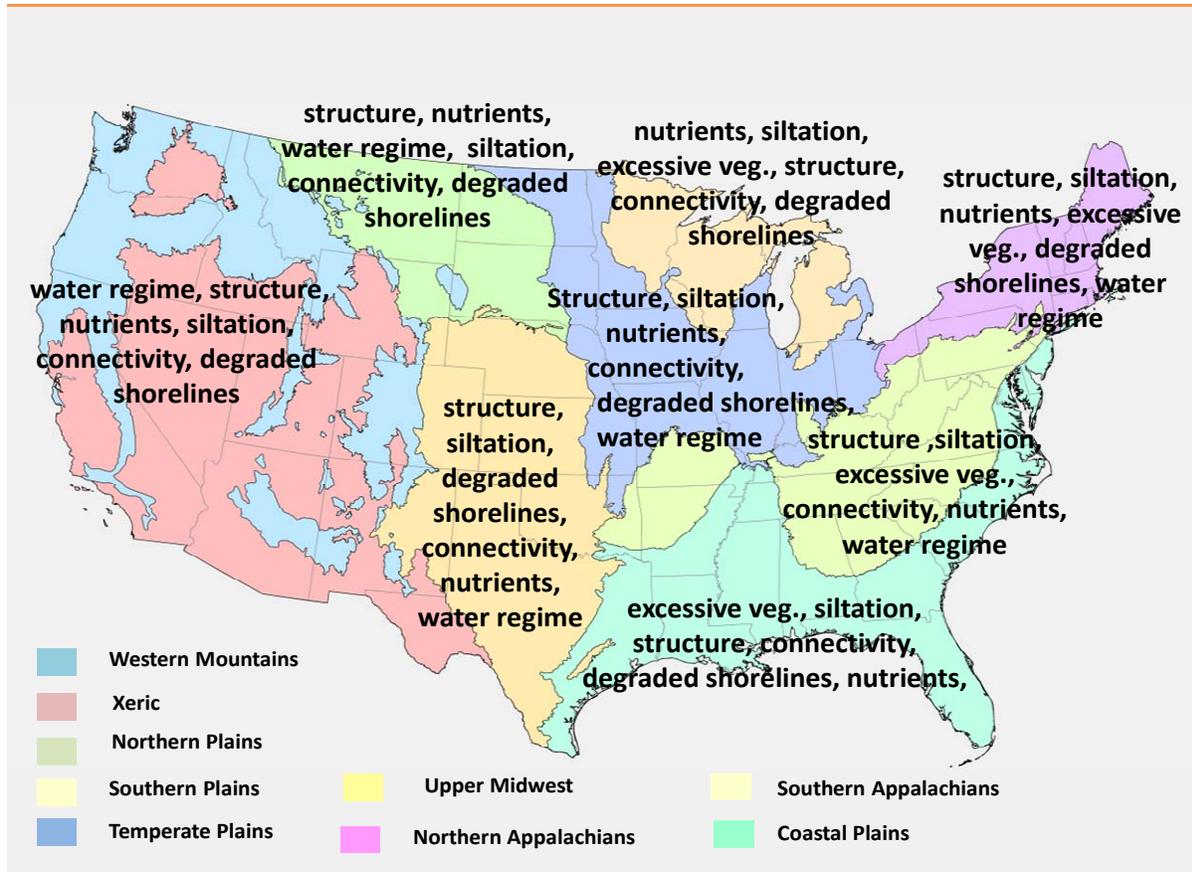


**Established Water willow colony – Russell Lake - 2014**

**Submit proposals electronically (Word; .pdf) to:  
[jboxrucker@sbcglobal.net](mailto:jboxrucker@sbcglobal.net) by 15 September 2014.**

## APPENDIX B

# Priority Impairments by Region



- Regions above were used to differentiate priority impairments in the assessment.
- Lists of impairments are based on the percent of reservoirs in each region that were moderately to high or highly impaired for individual impairments.
- The Western Mountains and Xeric were combined into two regions for purposes of the RFP because impairments were similar and to make it easier for applicants to discern which region the target reservoir is in.
- Lists of impairments for each region are in priority order (see table on next page).

PRIORITIZED REGIONAL IMPAIRMENTS

REGION	IMPAIRMENT	POINTS
<b>Western Mountain/Xeric</b>	Water Regime (low retention, mistimed fluctuations, extreme drawdowns)	<b>50</b>
	Lack of Structural Habitat (woody and vegetation)	
	Excessive Nutrients (algae blooms)	<b>25</b>
	Siltation/Turbidity	
	Connectivity (lack of connection with embayments/backwaters, tributaries)	<b>10</b>
	Degraded Shoreline Areas (excessive shallows, mudflats, disturbed riparian)	
<b>Northern Plains</b>	Lack of Structural Habitat	<b>50</b>
	Excessive Nutrients	
	Water Regime	<b>25</b>
	Siltation/Turbidity	
	Connectivity	<b>10</b>
	Degraded Shoreline Areas	
<b>Upper Midwest</b>	Excessive Nutrients	<b>50</b>
	Siltation/Turbidity	
	Excessive Vegetation (typically invasive/non-native plants)	<b>25</b>
	Lack of Structural Habitat	
	Connectivity	<b>10</b>
	Degraded Shoreline Areas	
<b>Southern Plains</b>	Lack of Structural Habitat	<b>50</b>
	Siltation/Turbidity	
	Degraded Shoreline Areas	<b>25</b>
	Connectivity	
	Excessive Nutrients	<b>10</b>
	Water Regime	
<b>Temperate Plains</b>	Lack of Structural Habitat	<b>50</b>
	Siltation/Turbidity	
	Excessive Nutrients	<b>25</b>
	Connectivity	
	Degraded Shoreline Areas	<b>10</b>
	Water Regime	
<b>Coastal Plains</b>	Excessive Vegetation	<b>50</b>
	Siltation/Turbidity	
	Lack of Structural Habitat	<b>25</b>
	Connectivity	
	Degraded Shoreline Areas	<b>10</b>
	Excessive Nutrients	
<b>Northern Appalachians</b>	Lack of Structural Habitat	<b>50</b>
	Siltation/Turbidity	
	Excessive Nutrients	<b>25</b>
	Excessive Vegetation	
	Degraded Shoreline Areas	<b>10</b>
	Water Regime	
<b>Southern Appalachians</b>	Lack of Structural Habitat	<b>50</b>
	Siltation/Turbidity	
	Excessive Vegetation	<b>25</b>
	Connectivity	
	Excessive Nutrients	<b>10</b>
	Water Regime	