Grant Proposal

Executive Summary

(Limit – 2 Pages)

1. Project Title: Conserving Fish Habitat collaboratively in the U.S. through the National Fish Habitat Partnership

2. Full Legal Name of Organization: National Fish Habitat Board.

If awarded, the grant will be administered on behalf of the National Fish Habitat Board by the Association of Fish and Wildlife Agencies, 1100 First Street NE, Suite 825, Washington DC, 20002

3. Organization Information:

- a. Applicant Classification: Nongovernmental Organization
- **b.** Nongovernmental Organization Classification (if applicable): 501(c)6
- Lead Applicant's Contact Information: Mr. Tom Champeau, Chief (Inland Fisheries), Florida Fish and Wildlife Commission Chair, National Fish Habitat Board c/o Association of Fish and Wildlife Agencies 1100 1st Street NE, Suite 825 Washington, DC 20002 Email: tom.champeau@myfwc.com Phone Number: 850-556-7684

5. Name and Affiliation of Co-Investigator(s)/Partner(s) (if applicable): Gary Whelan, Michigan Department of Natural Resources Ryan Roberts, National Fish Habitat Partnership Program Manager

6. **Project Length:** (1 year)

7. Funding Requested:

a. Total Amount for 2018: <u>\$250,680.00</u>

8. Estimate of Partnership Funds to be Leveraged (if applicable): \$1 Million

9. Funding Source.

Percent WR:____% Percent SFR: 100%

- **10. State Benefit Requirement:** a. X b. X c. X d.___
- 11. Primary National Conservation Need (NCN) Addressed:

NCN #13: Broadening Conservation Partnerships through the National Fish Habitat Partnership

12. Terms and Conditions. Use of MSCGP Grants - All applicants must ensure that their proposed project does not fund, in whole or in part, an activity that promotes or encourages opposition to the regulated hunting or trapping of wildlife or taking of sport fish.

 \boxtimes I agree with the above terms and conditions.

13. Summary Statement (200 words or less):

This project will help address conservation of waterways, to promote healthy habitat, and thriving fish populations that are vital to the well-being of American society, providing clean water, food, and recreation. Healthy waters sustain their ecological functions and resilience while meeting the economic and social needs of society. Unfortunately, in many places around the United States, fish and the habitats on which they depend are in decline. Through the efforts of the National Fish Habitat Partnership, established in 2006, our 20 partnerships established regionally are collaborating on efforts to stop and reverse declines and impairment of fish habitat through voluntary, non-regulatory efforts. The National Fish Habitat Partnership brings a focused and coordinated approach to conserving, rehabilitating, and enhancing the nation's aquatic habitats under the objectives of the National Fish Habitat Action Plan. This proposal strengthens that approach by linking the oversight responsibility of the Board and the operational responsibility of the FHPs to achieve national and regional conservation goals established through the National Fish Habitat Action Plan 2nd Edition (2012). Through collaborative projects, partnerships under the National Fish Habitat Partnership are compounding their efforts in maximizing potential, reach and ultimately successful conservation outcomes in collaboration regionally through this project.

Project Narrative

(Limit - 10 Pages)

Title:

Conserving Fish Habitat collaboratively in the U.S. through the National Fish Habitat Partnership

Problem Statement:

Waterways, healthy habitat, and thriving fish populations are vital to the well-being of American society, providing clean water, food, and recreation. Healthy waters sustain their ecological functions and resilience while meeting the economic and social needs of society. Unfortunately, in many places around the United States, fish and the habitats on which they depend are in decline. This is a particular concern to the 49 million recreational anglers who pursue fish and too many others who depend upon fish and shellfish for sustenance and commerce. Nearly 40 percent of the nation's freshwater fish species are considered at risk or vulnerable to extinction based on peer-reviewed published studies. Through the efforts of the National Fish Habitat Partnership, our 20 Fish Habitat Partnerships based on geography, species and habitat types are collaborating on efforts to stop and reverse declines and impairment of fish habitat through voluntary, non-regulatory efforts.

Project Goals and Objectives

The project goals for this grant application as described in the deliverables section are diverse and designed to meet additional needs and capacity building for the Fish Habitat Partnerships to achieve their objectives. This grant funding provides resources to the Fish Habitat Partnerships that they otherwise would not be otherwise able to accomplish strategic objectives, due to current limited funding and growing partnership needs. The number of Board Recognized Fish Habitat Partnerships (FHPs) have grown in number over the past several years, but overall funding for the National Fish Habitat Partnership has remained static. This multistate grant funding provides an opportunity for Fish Habitat Partnerships to coordinate shared regional and national conservation priorities, advancing strategic initiatives for fish habitat while catalyzing collaboration across the U.S.

Deliverables and Benefits

The National Fish Habitat Partnership brings a focused and coordinated approach to conserving, rehabilitating, and enhancing the nation's aquatic habitats under the objectives of the National Fish Habitat Action Plan 2nd Edition (2012). This proposal strengthens that approach by linking the oversight responsibility of the Board and the operational responsibility of the FHPs to achieve national and regional science and data driven conservation goals.

In general, this project will support activities of the Fish Habitat Partnerships that will help to achieve four of the objectives in the National Fish Habitat Action Plan, 2nd Edition:

- 1. Achieve measurable habitat conservation results through strategic actions of Fish Habitat Partnerships that improve ecological condition, restore natural processes, or prevent the decline of intact and healthy systems leading to better fish habitat conditions and increased fishing opportunities.
- 2. Broaden the community of support for fish habitat conservation by improving fish populations that lead to increased fishing opportunities, fostering the participation of local communities especially young people in conservation activities, and raising public awareness of the role healthy fish habitats and robust fisheries play in the quality of life and well-being of local communities.
- 3. *Fill gaps in the National Fish Habitat Assessment* and its associated database to empower strategic conservation action supported by the best available scientific information to improve people's lives in a manner consistent with fish habitat conservation goals.
- 4. *Communicate the conservation outcomes* produced collectively by Fish Habitat Partnerships, as well as new opportunities and voluntary approaches for conserving fish habitat, to the public and conservation partners.

More specifically, the project will provide the following deliverables:

- Across the United States through the **Reservoir Fish Habitat Partnership**, this project • will help fisheries habitat loss in reservoirs due to the natural aging process threatens the recreational and economic value of this vital resource. The U.S. Army Corps of Engineers (USACE) is initiating internal discussions on how to deal with and correct issues of declining storage, flood control capacity, hydropower generation, restricted navigation, and municipal water supply issues as a result of excessive sedimentation and nutrification. However, to date, no natural resource effects have been discussed. While sedimentation is a primary concern, nutrification and water releases need to be included in discussions moving forward. The Reservoir Fisheries Habitat Partnership proposes to develop a "white paper" focusing on the effects of reservoir aging on habitat loss to include what that means to fish community structure and the resultant effects on recreational opportunities and associated economics. This effort will be done in concert with USACE staff (Land Uses and Natural Resources Program Manager and Senior Hydrologist), Dr. Esteban Miranda (habitat loss and effects on fish community structure) and Dr. Kevin Hunt (economics), both at Mississippi State University. This information will then be provided to USACE Administration to provide background for inclusion of "natural resource" ramifications of reservoir aging in the hope that funding for the remediation of these issues will be included in any USACE funding initiatives. NFHP MSCG funding, through the Reservoir Fisheries Habitat Partnership, will be used for graduate student literature reviews and any coordination efforts (travel, salaries) to produce the white paper. Additional funding will be needed for this effort and we intend to solicit funding from USACE and the Bureau of Reclamation.
- In Hawaii, the Hawaii Fish Habitat Partnership is **Developing a spatial framework to** link watershed characteristics to coastal ecosystems. This project will expand ongoing stream and estuary hydrologic and habitat analysis to include adjacent near-coastal marine habitats. In Hawaii, these very limited and critical aquatic systems function as nursery habitat and are important for production of recreationally- and commercially-

important fish and invertebrates. A variety of shallow-water aquatic systems are represented along the coastline of the main Hawaiian Islands. These include semienclosed embayments, both groundwater- and surface water-supported estuaries and ancient Hawaiian fishpond structures. This sub-award will provide continuation support to current effort to develop a spatial framework linking watershed characteristics to estuarine systems. This geospatial analysis will include the Island of Oahu and will extend to Maui as funding and resources permit. Results of this work will provide information for prioritizing conservation and management of Hawaiian estuaries and will produce information for revisions of the Hawaii portion of the Board's National Fish Habitat Assessment.

• On the Pacific Coast, a program will be implemented titled: Intertidal Water Crossing Structures on U.S. West Coast Estuarine Fish and Their Habitat: A Multi-State Conservation Grant Proposal from the California Fish Passage Forum, the Pacific Marine and Estuarine Fish Habitat Partnership, and the Pacific Lamprey Fish Habitat Partnership

Water crossing structures enable the transportation of people, livestock, vehicles, and materials across rivers and other bodies of water. These structures have often created barriers to fish passage, an issue which has recently drawn intense scrutiny due to concerns over impacts to anadromous fish. Although much work has focused on the impacts of *freshwater* crossing structures, *intertidal* structures have received less attention. This may be due to the importance of passage for adult anadromous fish in freshwater, and that bidirectional flows in intertidal environments complicate interpretation of structures as barriers. Intertidal water crossing structures likely have adverse impacts to estuarine habitats extensively used by these species as rearing environments. Examining the impacts of intertidal water crossing structures only through the lens of fish passage therefore misses key aspects to how these structures can affect fish.

A 2018 draft report, titled, "*Effects of Intertidal Water Crossing Structures on Estuarine Fish and Their Habitat: A literature review and synthesis*," (NOAA, Washington Department of Fish and Wildlife, Cramer Fish Sciences) reviewed the literature on intertidal water crossing structures and how they affect fish dependent on intertidal habitats for passage during migration or for extended early life stage rearing. Their findings are important for establishing fish passage criteria, providing design guidelines, and identifying key data gaps for future research of intertidal water crossing structures.

The above noted report indicates that numerous information gaps exist concerning intertidal water crossing structures. Simple questions regarding the impacts of intertidal water crossing structures upon fish populations remain unanswered because we lack information on everything from the locations of these structures, to local movement dynamics and the population consequences of lost access and changes in habitat quality and quantity.

Deliverable for the project would include the following:

- Existing efforts—Identify existing efforts underway to document restrictions to tidal connectivity in U.S. West Coast estuaries (e.g., Oregon Watershed Enhancement Board effort, PNW Coast Landscape Conservation Design, Washington Habitat Connectivity Work Group, ODFW Connectivity Team)
- 2. Data gathering and compilation Implement a call for data to obtain and compile that identify locations of passage/connectivity enhancement sites. (note: Several syntheses have occurred to date).
- 3. Gap analysis—Identify locations on the landscape where we lack data and information, thus where assessments are needed to identify where these restrictions exist.
- 4. Spatial analysis—Identify extent of area behind identified barriers, structures and passage restrictions.
- 5. Convening—Host a summit to identify gaps and technical (science and data) information needed to address ways to reduce passage restrictions as well as share tools and products developed (spatial database, etc.).
- In the Midwest, the Midwest Glacial Lakes Partnership, Fishers and Farmers Fish Habitat Partnership, and Great Lakes Basin Fish Habitat Partnership will collaborate in the Upper Midwest and provide conservation messaging regarding property management choices made by riparian property owners and how their property management can affect habitat quality in streams, lakes, and Great Lakes. It is critical for our fish habitat partnerships to collaborate with private property owners to identify critical information needs, attitudinal barriers, and limits for restoration based on property uses such as recreation or agriculture. There are numerous programs operated by county, state, and federal agencies to incentivize and manage conservation projects on private lands, but knowledge of the ecological benefits of natural shorelines and buffer zones does not necessarily lead to action by property owners. Recent research has shown that connecting to property owners' underlying sense of stewardship increases their willingness to act. Furthermore, enabling property owners to envision their property to be in the future and how they would continue to achieve their objectives for their property after the proposed conservation actions are implemented would increase participation. This project will identify property owners that have implemented conservation projects and develop marketing materials to recruit and encourage other property owners to complete similar projects. Specifically, the project will contract with professional photographers, writers, and web developers to create education, outreach and promotional materials focused on landowners and fish habitat. The project builds upon a previous Multistate Conservation Grant awarded to NFHP and the Midwest Glacial Lakes Partnership by expanding the ecosystems covered from inland lakes to include streams and Great Lakes. It will further build upon that grant by converting the materials created in the grant into draft articles to be submitted to targeted print and digital media

such as Better Homes and Gardens, Lake and Home, Country Life, Hobby Farm, local newspapers, and tourism magazines to reach a broad audience.

- In the Western U.S. the grant would fund two strategic elements through the Western Native Trout Initiative (WNTI) and the Desert Fish Habitat Partnership (DFHP):
 - 1) Continue the successful multi state grant collaboration between WNTI and DFHP to produce an infographic/kiosk and related outreach materials for two projects co-funded by WNTI and DFHP in Idaho and Oregon in 2017. In Idaho, the Tincup Creek Stream Restoration project improves riparian conditions and habitat for 1.25 miles and 5 acres for Yellowstone Cutthroat Trout, northern leatherside chub, boreal toad, western pearl shell mussels and bluehead sucker. In Oregon, the Deep Creek Floodplain Restoration Project improves aquatic habitat and riparian function on 3.5 miles of the Deep Creek watershed, the most interconnected habitat for Redband Trout in the Crooked River basin. Project activities restore 6 sections of stream, 150 acres of floodplain, and create a temperature refuge in the North Fork Crooked River watershed for Redband Trout, speckled dace, and Columbia spotted frog. Outreach efforts will focus on increasing citizen understanding and awareness of the area and project objectives, the value of these types of restorations, and the root causes which have necessitated restoration actions.
 - 2) Support to strengthen strategic partnership development and outreach by working with well-established public, private and non-governmental conservation groups to develop communication, education and outreach materials to help inform potential partners and to increase overall NFHP-based western project awareness and understanding of goals, objectives and accomplishments. More specifically, activities will support a Western Native Trout Challenge angling program across 12 western states for 21 species of western native trout and char.
- Three FHPs in the East, (Eastern Brook Trout Joint Venture, Atlantic Coastal Fish Habitat Partnership, Southeast Aquatic Resources Partnership) will continue their multi-year collaborative focus on whitewater to bluewater fish habitat connectivity needs that span the geographic boundaries of the three individual FHPs. This grant will continue to assist in connectivity efforts throughout the region by enabling additional culvert assessment work. Additionally, priority HUC12s within our two priority HUC8s (Rivanna and Rapidan-Upper Rappahannock Rivers) to address fish habitat fragmentation will be identified. This will include documenting significant fish passage barriers using previously developed decision support tools, as well as apply the results of our ongoing culvert assessment work. These partnerships will use this grant to communicate the scientific basis of river rehabilitation through connectivity improvements throughout the Eastern U.S. to their constituents and partners.

• This grant will also provide **staff and Board support for the National Fish Habitat Partnership** through activities that highlight the National Fish Habitat Partnership program. Activities include support of Board and Board staff participation in national meetings and Board science and data activities in 2019. Activities also include providing communications support for the Board and partnership as well as outreach to constituents at regional and national meetings, as well as providing management services for the Board.

Monitoring and Evaluation

All of the Fish Habitat Partnerships conduct regular short and long-term monitoring for on-theground projects that are implemented through this grant program. Reports are also provided to the National Fish Habitat Board throughout the year and updates regarding the grant are provided to relevant AFWA committees. Outcomes are also presented at national and regional meeting across the U.S. through our network of partnerships and periodic FHP Evaluations are available annually on the progress of the FHPs.

Experience

Galvanized into action by continuing losses of aquatic habitat, an unprecedented coalition of anglers, conservation groups, scientists, state and federal agencies, and industry leaders forged the National Fish Habitat Action Plan in 2006. The Action Plan is an investment strategy for making the most effective use of habitat conservation dollars using a science-based approach and achieving real gains in aquatic habitat quality and quantity by protecting, restoring, and enhancing key fisheries habitats. Since 2006, the Partnership has supported over 700 projects benefiting fish habitat in all 50 states. The Partnership works to conserve fish habitat nationwide, leveraging federal, state, tribal, and private funding resources to achieve the greatest impact on fish populations through priority conservation projects of 20 regionally-based Fish Habitat Partnerships.

Certification Regarding Fishing/Hunting

"By submitting this proposal, the organization's primary contact and/or authorized representative identified in this grant application certifies that the National Fish Habitat Partnership (1) will not use the grant funds to fund, in whole or in part, any activity of the organization that promotes or encourages opposition to the regulated hunting or trapping of wildlife or the regulated taking of fish; and (2) that the grant funds will not be used, in whole or in part, for an activity, project, or program that promotes or encourages opposition to the regulated hunting and trapping of wildlife or the regulated taking of the regulated taking of fish."

Certification Regarding Partnership Funds (if applicable)

"By submitting this proposal, the organization's primary contact and/or authorized representative identified in this grant application certifies that the National Fish Habitat Partnership: 1)

understands that partnership fund contributions are assessed in the Association's review and selection of its priority list of MSCGP projects, but are not considered by the USFWS to be an official non-federal match/cost-share; 2) will provide the partnership funds identified in order to complete the proposed project; 3) understands that if the promised partnership funds are not provided, and there is not a sufficient explanation, potential consequences could include a poor "quality assurance" evaluation by the National Grants Committee for the organization's future MSCGP applications; the imposition of "special award conditions" on this proposed grant and/or future grants (pursuant to 43 CFR 12); and if the failure to provide partnership funds affects the scope/objective or deliverables or other terms and conditions of the grant, then the USFWS could take necessary enforcement and termination actions (pursuant to 43 CFR 12)."

Budget

*P.F: Partnership Funds – projects are not required to provide partnership funds for the multistate conservation grant program, however higher consideration is given to P.F when 2 or more projects score the same.

Table 1. MSCG budget breakdown by individual FHP and Board project.(Budget requests include all direct and indirect costs.)

	Fish Habitat Partnerships	MSCGP	P.F.*	Total
AFWA	Program Support	\$31,400.00		\$31,400.00
Eastern U.S.	Atlantic Coastal FHP, Eastern Brook Trout Joint Venture, Southeast Aquatic Resources Partnership	\$30,000.00		\$30,000.00
Western U.S.	Desert FHP Western Native Trout Initiative	\$25,000.00		\$25,000.00
Midwest U.S.	Midwest Glacial Lakes Partnership Fishers and Farmers Partnership Great Lakes Basin Partnership	\$30,000.00		\$30,000.00

U.S.	Reservoir Fish Habitat Partnership	\$20,000.00	\$20,000.00
Pacific Northwest	California Fish Passage Forum Pacific Marine and Estuarine Partnership Pacific Lamprey Partnership	\$60,000.00	\$60,000.00
Hawaii	Hawaii Fish Habitat Partnership	\$20,000.00	\$20,000.00

Budget Breakdown Total request = \$250,680.00

2019 Proposed Budget

	Budget
Salary	5,900.00
Benefits	1,200.00
Travel	17,000.00
Supplies	1,500.00
Contract	185,000.00
Other	5,800.00
Total	216,400.00
Indirect on Contracts	28,000.00
Indirect on other expenses	6,280.00
Grant total	\$250,680.00

Total MSCGP for the 1-year project is \$250,680.00; Total matching partnership funds for the 1-year project is \$1,000,000.

Qualifications of Key Personnel

Tom Champeau, Chairman, National Fish Habitat Board

Mr. Champeau became chair of the National Fish Habitat Board in 2015. Tom has spent 35 years with the Florida Fish & Wildlife Commission. While working in the field, Tom led major lake habitat restoration projects, worked with the local communities and the mining industry on lake design and management for phosphate mined pits, and defining fish community metrics for establishing minimum flows for rivers in Southwest Florida. Tom holds degrees from the University of Michigan and University of Nebraska.

Ryan Roberts, Program Manager, National Fish Habitat Partnership

Ryan Roberts is the Communications Coordinator for the National Fish Habitat Partnership. Mr. Roberts has 10 years of experience in public relations/communications and has worked on the National Fish Habitat Partnership since 2008. Mr. Roberts created several communications toolkits for use by National Fish Habitat Partnerships and created an overall communications strategy for the partnership. Mr. Roberts' contributions were key in the development and release of the Status of Fish Habitat Partnership 2010 Assessment and the 2nd Edition of the National Fish Habitat Action Plan (2012). Mr. Roberts graduated from Penn State University with a B.S. in Telecommunications/Business (Minor).

Gary Whelan, NFHP Board Science and Data Committee Co-Chair

Gary Whelan is one of the two co-chairs of the NFHP Board Science and Data Committee and has worked on NFHP since its inception. Mr. Whelan is a Program Manager for the Michigan Department of Natural Resources – Fisheries Division where he manages the Research Section, oversees the Fish Health Program, and provides direct support to and manages components of the Habitat Management Unit. His fisheries career has spanned over 345 years and he has worked in nearly every aspect of fisheries in the State of Michigan. In his role for NFHP, he has been responsible for all of the Board's Science and Data efforts including the development and release of the Status of Fish Habitat Partnership 2010 and 2015 Assessments. He was also deeply involved in the development of the 1st (2006) and the 2nd Editions of the National Fish Habitat Action Plan (2012). Mr. Whelan holds a B.S. in Zoology (Fisheries Management focus) from the University of Wyoming and a M.S. in Fisheries Management from the University of Missouri.

Staff level leadership and management support of the work of the Board group will be provided by AFWA, USFWS, NOAA, state agencies and other partners such as NGO's.

National Fish Habitat Board Members: http://www.fishhabitat.org/about/staff-board/