

NATIONAL FISH HABITAT ACTION PLAN

2ND EDITION

COOPERATION
INVESTMENT
STEWARDSHIP





A Commitment to Fish

July 2012

In the classic 1972 movie *Jeremiah Johnson*, starring Robert Redford, a character named Del Gue stated that “the Rocky Mountains is the marrow of the world.” In many ways the same can be said for America’s waters which I believe provide the lifeblood that sustains our nation’s well-being—clean water, food, and recreation, which are critically important to our society’s social and economic health.

Over the last 200 years, America saw a boom in human settlement along its rivers, lakes and coastlines. Our mighty rivers became critical routes for transportation and commerce, fueling our economic progress. The scenic appeal of our oceans and lakes spurred the growth of tourism, drawing tens of millions of people each year to enjoy these national treasures. And a diverse array of fish became common staples of our diet and culture, creating opportunities for recreational and commercial fishing.

Our nation’s progress had unforeseen consequences, though, as our waterways were channelized, dammed, dredged, drained, polluted, and otherwise dramatically altered. Once teeming populations of abundant fish and other aquatic species now show drastic declines. Many fisheries no longer exist. In addition, non-native species—introduced intentionally or by accident—have had significant negative impacts on many fish species and the health of aquatic ecosystems and our economy.

To address these and many other challenges, the first National Fish Habitat Action Plan was developed in 2006. The members of the team that wrote the first plan were true leaders; they had the vision to build on the strengths local, state, federal, and tribal agencies, and the conservation, fishing, and business communities each could contribute to conservation. By bringing the public sector and the private sector together, the National Fish Habitat Partnership has achieved tremendous success in its first six years. There are now 18 regional Fish Habitat Partnerships delivering on-the-ground conservation work. Through the phenomenal commitments made by these regional partnerships together with our conservation partners, on the ground projects that support the Action Plan have proven their worth with an 18:1 return on overall investment. We published the first-ever national assessment of fish habitat—“Through a Fish’s Eye”. And we marked a very important milestone with the signing of a groundbreaking Memorandum of Understanding by the Secretaries of the Departments of the Interior, Agriculture and Commerce to raise the level of cooperation among their departments and more effectively help deliver the alignment of resources that support the Action Plan.

This **2nd Edition of the National Fish Habitat Action Plan** contains new objectives to further direct our work of protecting, restoring, and enhancing fish habitats nationwide. While our mission and goals have not changed, it is time to take on the next set of challenges.

We have created many of the tools necessary to prioritize our efforts and achieve significant progress in conserving fish habitat for the next decade. Now we need more resources and funding to build on our science and data efforts and accelerate our conservation efforts. We will continue leveraging the great work of our partners to achieve our mutual vision of healthy habitats, healthy fish, healthy people, and healthy economies.

Sincerely,

Kelly Hepler, Chair
National Fish Habitat Board

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“The National Fish Habitat Action Plan is the model for using non-regulatory, voluntary conservation actions to address habitat needs for both recreationally- and commercially-valuable species. The Action Plan helps to arrest and reverse fish habitat declines throughout the nation’s freshwater, estuarine, and marine aquatic habitats.”

– Stan Moberly, National Fish Habitat Board and Past President, American Fisheries Society

The Case for Action



A PARTNERSHIP BASED ON EXPERIENCE

America's natural heritage includes some of the most remarkable aquatic systems on earth. These fresh and salt water treasures—as varied as majestic rivers, sub-tropical coral reefs, mountain streams, coastal estuaries, and desert oases—provide habitat for fish enhance our lives in many ways. They provide recreational fishing opportunities for millions, commercial fisheries for our sustenance and economic health, and unrivaled experiences with nature. These waters are key to fish, their ecosystems, and the American communities they support.

Through America's history, our waterways and coasts have provided the habitat necessary to support commercial and recreational fishing. Fish

habitats are also used as waterways for transportation routes, industrial drains, and sources of water for cities, farms, and factories. By the late 20th Century, pollution, dredging, and filling were controlled by law but our waterways and coasts continued to degrade due to runoff and conversion of land to commercial, residential, and agricultural development.

THE ECONOMICS OF FISH HABITAT

- \$125.0 billion and over 1 million jobs – total economic activity from saltwater and freshwater recreational fishing.¹
- \$116.2 billion and over 1 million jobs – total economic activity from commercial fishing.²
- 8.2 billion pounds of coastal and marine fish worth \$4.5 billion were landed in 2010.³
- \$144.6 million in direct economic value and 1100 jobs on the \$28 million invested by NFHP since 2006.⁴
- \$805.7 million and 19,300 jobs – projected long-term value of the future benefits of habitat restored by NFHP to date.⁵

RESULTS SINCE 2006

- Approved 18 Fish Habitat Partnerships covering all 50 states and the District of Columbia.
- Conducted 341 conservation projects in 46 states.
- Completed the first ever national assessment of fish habitat.
- Completed an agreement between the US Departments of the Interior, Agriculture, and Commerce to support the NFHP.
- Highlighted 60 key projects through the "10 Waters to Watch" program.
- Created a map and data web tool at ecosystems.usgs.gov/fishhabitat

Inspired by our natural heritage and challenged by continuing habitat loss, an unprecedented coalition forged the first National Fish Habitat Action Plan in 2006. Made up of anglers, conservation groups, scientists, tribal governments, state, territorial, and federal agencies, and industry leaders, they saw the need to foster voluntary, non-regulatory, science-based action to protect, restore, and enhance America's aquatic systems. The Action Plan served as the cornerstone for the National Fish Habitat Partnership (NFHP).

1. Southwick Associates. *Sportfishing in America: An Economic Engine and Conservation Powerhouse*. Produced for the American Sportfishing Association with funding from the Multistate Conservation Grant Program, 2007.

2. NOAA. *Fisheries of the United States*. 2010. http://www.st.nmfs.noaa.gov/st1/fus/fus10/02_commercial2010.pdf.

3. NOAA. *Fisheries of the United States*. 2010. <http://www.st.nmfs.noaa.gov/st1/fus/fus10/index.html>.

4. Gentner Consulting Group, 2012. Original research.

5. Gentner Consulting Group, 2012. Original research.



OUR TERMINOLOGY

- The National Fish Habitat Partnership **focuses on conservation of fish and their habitats** as keystones for the full range of aquatic biodiversity and aquatic habitats in the United States.
- The terms **aquatic habitat** and **fish habitat** are used interchangeably throughout the Action Plan to mean areas aquatic organisms depend upon to carry out their life processes. A full definition is on p. 26.
- The use of the term **conservation** refers to tools for the protection, restoration, and enhancement of fish and their habitats.
- **A focus on fish** includes the protection, restoration, and enhancement of all freshwater and marine species, including shellfish, aquatic insects, and crustaceans.
- **A focus on habitat** encompasses the protection, restoration, and enhancement of freshwater, estuarine, and marine habitats, from the mountains to shelf.

ACRONYMS

AFWA	Association of Fish and Wildlife Agencies
DoD	Department of Defense
EPA	Environmental Protection Agency
FHPs	Regional Fish Habitat Partnerships
FWS	U.S. Fish and Wildlife Service
NFHP	National Fish Habitat Partnership
NOAA	National Oceanic and Atmospheric Administration
USGS	U.S. Geological Survey



The Action Plan set an ambitious agenda for the Partnership, planning for a first-ever national assessment of fish habitats and the development and support of as many as 12 voluntary regional Fish Habitat Partnerships (FHPs or regional partnerships), committed to high standards of science based conservation.

ACCOMPLISHMENTS 2006-2012

Progress in the first five years of the Action Plan has been remarkable. The ground-breaking national fish habitat assessment, *Through a Fish's Eye: the Status of Fish Habitats in the United States 2010*, expanded our knowledge of the condition of fish habitats. The National Fish Habitat Board approved 18 self-organized Fish Habitat Partnerships covering both fresh and salt water. All 50 states and the District of Columbia are represented in one or more Fish Habitat Partnership (FHP). These partnerships are united by a shared responsibility to pass along healthy fish habitats and intact aquatic systems to future generations of Americans.

In these five years, our partnerships have conducted hundreds of conservation projects across the nation, focusing on the highest priority needs on the landscape, leveraging dollars and capabilities, and engaging anglers, students, community groups, landowners, and businesses to help. In addition

to creating jobs and improving fishing, fish habitat conservation projects can reduce flood risk and maintenance costs, increase human health and quality of life, and stabilize the value of adjacent property.

Much more needs to be done, however, as threats to healthy fish habitats increase. Over the next five years, the National Fish Habitat Partnership plans to build on the success of our partnership model by further broadening our community of support locally and nationally. We will achieve measurable fish habitat conservation results through voluntary and scientifically supported strategic priorities. We hope you will join us in this essential work.

ABOUT THE PLAN

This second edition of the Action Plan retains the mission and goals established for the Partnership in 2006. We have added new objectives that will guide the Partnership--at all levels--for the next several years. The National Fish Habitat Board will also publish annual work plans that move us towards fulfilling our objectives. Those work plans will include specific tasks for the Board, FHPs, staff and committees, and other partners.

The following pages highlight our objectives, provide some examples of FHPs in action, and provide some fun facts. In addition, we highlight the importance of fish habitat conservation to recreational and commercial fishermen, and to communities that rely on fish for subsistence.

Also included are a series of maps highlighting the regional FHPs, and appendices that provide additional information about the National Fish Habitat Partnership.

Our Mission and Goals¹

The mission of the National Fish Habitat Partnership is to protect, restore, and enhance the nation's fish and aquatic communities through partnerships that foster fish habitat conservation and improve the quality of life for the American people.

OUR GOALS ARE TO:

- Protect and maintain intact and healthy aquatic systems.
- Prevent further degradation of fish habitats that have been adversely affected.
- Reverse declines in the quality and quantity of aquatic habitats to improve the overall health of fish and other aquatic organisms.
- Increase the quality and quantity of fish habitats that support a broad natural diversity of fish and other aquatic species.



¹ The mission and goals of the Partnership remain the same as those published in the first edition of the Action Plan in 2006.

Objective 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.



The Action Plan and its Partnerships are about *results*: protecting habitat that is healthy and intact, and reversing the decline of damaged habitat. Numerous fisheries and habitats across the country are in need, more than can be repaired or protected at one time, so strategic focus on project selection and completion is critical to achieving positive results.

By acting as a leader for increased cooperation among state, territorial, tribal, and federal agencies, conservation groups, landowners and other stakeholders, Fish Habitat Partnerships will focus existing and new resources to increase effectiveness in achieving long-term, sustainable results.

By design, this objective emphasizes strategic project selection based on sound science and data, that focuses funding to address the causes of, and processes behind fish habitat decline rather than the symptoms of habitat decline.

Our focus on measurable results is to ensure that we are constantly learning from our projects. With increasing public interest in conservation and the



effective use of taxpayer dollars, we must ensure that our conservation efforts are both effective and efficient.

PARTNERSHIP IN ACTION

Deadman's Island, Florida

Southeast Aquatic Resources Partnership

Deadman's Island, located in Florida's Pensacola Bay on the Gulf of Mexico, has a colorful history as a ship careening ground, a quarantine station for yellow fever, a fish fertilizer plant, a glue factory, and a marine railway. Today, surrounded by residences in the city of Gulf Breeze, it is threatened by erosion from wave action, severe storms, dredging and other human activities. Its demise threatens a pristine salt marsh – habitat for oysters and juvenile fish – as well as a marine oak hammock, a bird sanctuary, dunes and wetlands.



Deadman's Island is eroding into the sea due to landscape alterations, including bridge construction, dredging and hardening of the shoreline with seawalls and riprap. These actions have created a sediment deficit, preventing transport of sand to the peninsula to renourish the shoreline, resulting in extreme erosion.

The project partners installed erosion control structures called *ecodiscs*. Created by local Orange Beach businessman David Walter and constructed with the help of local school children, *ecodiscs* consist of natural materials and habitat

elements designed to lessen wave energy protecting the shoreline from erosion. Linked together as a reef the *ecodiscs* provide spawning areas for oysters and refuge for small fish and other marine animals. The project also included planting 2 ½ acres of seagrass.

The project restores living shorelines that reconnect land and water, creating vital habitat for fish and crabs in critical early life stages. Restoring the habitat of Deadman's Island has reduced erosive wave energy; reduced nutrient and sediment runoff; enhanced free movement of sands and sediment in the littoral zone; and improved key habitat for fish and wildlife. These measures will increase marine fish habitat and food sources, diversify sport fishing opportunities, and enhance numbers and diversity of shellfish, invertebrates, and birds needing a sea grass and sand habitat. While the project was temporarily delayed due to the Gulf oil spill in April 2010, the City and citizen volunteers hosted clean-ups, oyster monitoring, and an oyster drill picking party to sustain momentum.

Partners include the City of Gulf Breeze, Southeast Aquatic Resources Partnership, U.S. Fish and Wildlife Service, Environmental Protection Agency, University of West Florida, Southern Company, Florida Department of Environmental Protection, National Fish and Wildlife Foundation, National Oceanic and Atmospheric Administration, U.S. Army Corps of Engineers, Gulf of Mexico Alliance and a variety of other partners and funders.



Objective 2.

Establish a consensus set of national conservation strategies as a framework to guide future actions and investment by the Fish Habitat Partnerships by 2013.

Clearly identified and communicated national strategies will assist partners to focus on the common factors responsible for most of the fisheries and habitat problems occurring today.

All water bodies, from the mountains to the sea, share measurable characteristics that affect their suitability as fish habitat. The technical term for these characteristics is "habitat condition variables." For example, *connectivity* demonstrates the ability

of fish to move among the places where they live, eat, and reproduce. By looking at connectivity we can identify barriers such as dams and culverts that prevent fish from moving freely.

Water quality, energy flow and other variables are used by partners to guide appropriate strategies to address these variables in their regions. Our objective is to use regional strategies to develop a national conservation framework for fish habitat investment.

By establishing and communicating a national framework to partners, this objective emphasizes the need to focus on the process-level issues, not just the symptoms, to reverse the decline in fisheries and aquatic resources by directly addressing the contributing factors.



PARTNERSHIP IN ACTION

Table Rock Lake, Missouri & Arkansas

Reservoir Fisheries Habitat Partnership

Table Rock Lake and Lake Taneycomo, located on the Ozark Plateau on the Missouri-Arkansas border, are two of the Midwest's most popular sport fisheries. Table Rock Lake encompasses 43,100 acres with 745 miles of shoreline, and Lake Taneycomo is 2,000 acres in size. Crappie, white bass, walleye and paddlefish are among the primary sport fish in Table Rock Lake; however, three species of black bass receive the most attention and fishing pressure. Lake Taneycomo supports an excellent fishery for rainbow trout and brown trout. The economic benefit of angling on the lakes is conservatively valued by the Missouri Department of Conservation at \$67 million annually.

This project was designed as a pilot project in a broader national program of habitat restoration in reservoir systems. Building upon a longstanding public-private partnership in southwest Missouri, the project is improving habitat in the reservoirs and their watersheds through cover augmentation, watershed management and other water quality-related projects. This project stands as an example for sustaining and improving reservoir fish populations through large-scale habitat improvements.

In 2007, Bass Pro Shops and the National Fish and Wildlife Foundation launched a 5-year, \$4.5 million partnership with the Missouri Department of Conservation and Arkansas Game and Fish Commission, along with other agencies and watershed groups, to improve habitat and water quality in Table Rock Lake and its watershed. Fish Habitat structures including 1,460 brush structures, 104 rock piles, 49 stump fields, 11 rock/stump combination piles and 26 shallow water rock fence structures were installed. Locations were recorded by global positioning system and are available online to the public. In addition, over 2,000 septic tank

pump-outs and seven septic tank improvements were completed to reduce nutrient inputs into Table Rock Lake, as well as eight cost-share projects for erosion control and sediment reduction in the watershed. Habitat improvements to the upper portion of Lake Taneycomo began in November 2011, including large rock structures providing holding areas for trout and locations for anglers to fish. Project publicity has stimulated cooperation by numerous media and commercial partners.

Evaluation and monitoring of the fish habitat structures began in 2010 in Table Rock Lake using electrofishing surveys, SCUBA observations, and radio-telemetry tracking of largemouth bass. An angler creel survey will begin in 2012.

Partners include the Missouri Department of Conservation, Arkansas Game and Fish

Commission, National Fish and Wildlife Foundation, Bass Pro Shops, the U.S. Fish and Wildlife Service (FWS), the U.S. Army Corps of Engineers, Table Rock Lake Water Quality, Inc. and other non-governmental organizations, angler groups and private citizens.



Objective 3.

Broaden the community of support for fish habitat conservation by increasing fishing opportunities, fostering the participation of local communities – especially young people – in conservation activities, and raising public awareness of the role healthy fish habitats play in the quality of life and economic well-being of local communities.



In addition to providing habitat for fish, America's waterways and coasts provide food, income, and recreation for the American people.

These natural and cultural treasures are interwoven with our lives as individuals, families, businesses and communities.

Catching a fish – or teaching a child to catch a fish – connects us to our waterways as few other activities can. In fact, more Americans fish than play basketball and football combined.

Yet the nature of fish – out of sight and often out of mind – makes them vulnerable to everyday activities such as fertilizing lawns, paving parking lots, and growing food. But when people are aware of these issues, they begin to care. We will continue to educate Americans about how everyday activities affect fish and their habitats.

By providing leadership and coordination, the National Fish Habitat Partnership is helping communities protect and restore our waterways and fisheries. Keeping our waterways healthy helps build a strong economy and healthy communities.



PARTNERSHIP IN ACTION

Bear Creek, Wisconsin

Driftless Area Restoration Effort

The Bear Creek watershed lies within the Wisconsin portion of the four-state Driftless Area. This project was conducted on the Fargen family farm, following the purchase of a perpetual fishing easement by the Wisconsin Department of Natural Resources (DNR). Prior to renovation, Bear Creek was a put-and-take fishery that required stocking to maintain a sport fishery.

Years of unsustainable agricultural practices destabilized stream banks and caused mass erosion along the length of Bear Creek. Flooding in 2008 damaged the stream's hydrology and morphology. Sediment filled instream habitat, reducing spawning areas and cover for aquatic species. Undesirable overhead tree cover limited sunlight needed for insect growth in an area where tall prairie grasses were historically more common along streams.

The project partners reconfigured the channel and planted prairie vegetation along the riparian strip to improve water quality by slowing runoff and capturing non-point nutrients. Narrowing and deepening the channel helped to reduce water temperature and better accommodate future floods. In-stream structures (vortex weirs, submerged logs, bank undercuts and rip-rap) created pools and riffles that increased instream cover and propagation opportunities for fish and other stream wildlife. The perpetual fishing easement and stream restoration provides a new outdoor opportunity of the highest quality for the general public.

Restoration of the upper mile of the Fargen easement was nearly completed in 2011, with additional restoration planned on other segments of the stream, both up and downstream. If successful, Bear Creek will support a sustainable native, wild brook trout population. Wild naturalized brown trout and rainbow trout populations will also benefit, as will aquatic insects, turtles, and frogs. Habitat improvement on tributaries of Bear Creek will complement the work on the mainstem. Many of the feeder streams are already excellent brook trout streams, so the possibilities throughout the watershed are excellent.

William Fargen, who grew up on the farm, said of the restored stream, "It's beautiful. It runs faster. It's a pretty picture. Everybody admires it." Benefits extend well beyond the local area; Mike Barniskis of Trout Unlimited said, "What we are doing here helps the eutrophic [dead] zone in the Mississippi Delta by keeping the nutrients cycling here instead of directly running off down the Mississippi River." An economic study, conducted by NorthStar Economics, Inc., showed annual

economic returns of \$24 for each dollar spent on stream restoration in the Driftless Area.

The list of contributing partners is long, and includes the U.S. Department of Agriculture, U.S. Fish and Wildlife Service, Wisconsin DNR, Sauk County, Trout Unlimited, and other angling groups.



Objective 4.

Fill gaps in the National Fish Habitat Assessment and its associated database to empower strategic conservation action supported by broadly available scientific information, and integrate socio-economic data in the analysis to improve people's lives in a manner consistent with fish habitat conservation goals.

A major success of the first five years of the National Fish Habitat Partnership was publication of the report *Through a Fish's Eye: Status of Fish Habitats in the United States, 2010*. This landmark report was the first national-scale look at habitat condition across the country.

We recognize, however, that some key information is missing due to the lack of nationally consistent

data. Examples of missing information include historical and regional degradation due to logging, mining, or animal farming. Additional gaps include the effects of water pumped or diverted from streams and dams that fragment and obstruct fish passage.

This missing information means that areas originally identified as low risk for habitat degradation may

actually be at a higher risk than expected because of factors not included in the original assessment.

To remain true to our science-based decision-making strategies, we will fill in the gaps so that future reports, planned for 5-year intervals, will more accurately describe the condition of aquatic habitats. All partners will contribute to and have access to this shared database.

We also recognize the need for good socio-economic information to help guide priority-setting. This information may include economic value of conservation projects and the overall benefit to local communities.



FUN FACT

America has over

204,000 km² of coastal waters

+ 110,000 km² of inland waters

+ 156,000 km² of Great Lakes waters

470,000 km² of total waters*

*excludes marine territorial waters

PARTNERSHIP IN ACTION

Fish Passage in the Little Susitna Watershed, Alaska

Matanuska-Susitna Basin Salmon Habitat Partnership

The Little Susitna River is near the cities of Palmer and Wasilla in the fastest growing region in Alaska. The Matanuska-Susitna basin supports healthy wild populations of coho, Chinook, chum, pink and sockeye salmon as well as resident fish, including Dolly Varden and rainbow trout. Salmon are a staple of life for many Alaskan residents, particularly Alaska Native people, and a critical element of the local economy. This watershed supports large subsistence, commercial, and recreational harvests of coho and Chinook salmon in freshwater and in the Northern Cook Inlet. Migrating salmon also recycle essential nutrients from the ocean to freshwater ecosystems.

Adult salmon spend a few weeks in these waters, and juvenile salmon can live here for longer periods of time before they migrate down the Little Susitna River to Cook Inlet. The creeks, ponds and wetlands in the watershed provide abundant food, habitat free from winter ice, and clean, cool water for juvenile fish growth.



migration of adult and juvenile salmon as well as resident fish. Impassible conditions at culverts are created by high water velocity, turbulence, inadequate water depth, and elevated or "perched" outfalls at stream crossings. Some culverts that were designed to provide for fish passage may not have been installed properly or were inadequately maintained, becoming fish passage impediments over time.

The goal of the project is to restore juvenile fish passage, improve stream function, and enhance fish habitat on tributaries to the salmon-rich Little Susitna River. Replacing a poorly designed and/or installed culvert allows salmon to return to their spawning and rearing grounds, thus completing their life cycle and fulfilling their role in the ecosystem. These projects also enhance instream and riparian habitat at stream crossings by returning the creek to its natural width and allow for natural streambed material to move through the new culvert. This increases the capacity for creeks

to remain in channel during high water events, reducing damage to roads and property due to flooding, and improving public safety.

Partners include the Mat-Su Basin Salmon Habitat Partnership, The Nature Conservancy, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, U.S. Geological Survey, Wasilla Soil and Water Conservation District, and the Aquatic Restoration and Research Institute.



Objective 5.

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.

Communicating tangible outcomes for fish and for people is key to sustaining public support for fish habitat projects.

For the public, we will use successful and cost-effective strategies to raise awareness of how partnership projects benefit their communities. In doing so, we will continue to build support for voluntary,

community-based conservation. Continued public support is essential to reversing habitat decline at the national scale.

To its partners, the national partnership will encourage and promote regional habitat planning guided by the best available information and science.

While developing baselines, indicators and measures of success are all part of the projects, the national partnership also will make it easy and timely for partners to share data, various conservation approaches and other best management practices

By promoting objective, consistent practices and lessons learned, the most successful and cost-effective strategies will be repeated and replicated.

Finally, to the public, the national partnership will use all traditional and digital channels available to communicate localized project results.

However, the focus of the stories will be about not only the benefits to the fish and ecosystem, but will also show the specific benefits to the community members.

Coverage of these projects also will reinforce the techniques they can use to be good stewards of our nation's waterways.



FOCUS AREA

Recreational Fishing and Fish Habitat Conservation

Recreational fishing is an incredible economic engine for the U.S., supporting over 1 million jobs and providing a \$125 billion economic impact every year. Our nation's 40 million anglers are also ardent conservationists.¹ Anglers understand that in order to enjoy sportfishing, fish need clean waters and healthy habitats. Fishing license fees, used by the states and territories for fishery conservation and management programs, including habitat restoration and protection activities, represent a significant portion of state/territorial fish and wildlife agency budgets. Through the purchase of fishing licenses, anglers contributed over \$621 million for fishery conservation and management in 2010.² Additionally, the Wallop-Breaux amendment to the Federal Aid in Sport Fish Restoration Act collects an excise tax from sportfishing manufacturers on nearly all sportfishing equipment and captures over half of the federal motorboat fuel taxes that are paid by boaters and anglers. This money is apportioned to state/territorial fishery programs through the Sport Fish Restoration and Boating Trust Fund. The trust fund also supports the Multi-state Conservation Grant Program (MSCGP) which is an important

source of funding to implement the National Fish Habitat Partnership. The MSCGP is jointly administered by the Association of Fish and Wildlife Agencies and the U.S. Fish and Wildlife Service.

"Did you know..."³

- More Americans fish than play basketball (24.0 million) and football (8.9 million) combined.
- If fishing were ranked as a corporation in the Fortune 500, it would outrank Sears, Pepsi, Apple and Intel.
- The number of jobs supported by anglers could employ all attendees of the last seven Super Bowls – TWICE!
- Fishing as a leisure-time activity ranks higher than playing golf, target shooting, hunting with firearms, backpacking and wilderness camping, baseball, mountain biking and skiing.
- The economic activity generated by sportfishing is greater than the gross state product of 23 states.



¹ Southwick Associates. *Sportfishing in America: An Economic Engine and Conservation Powerhouse*. Produced for the American Sportfishing Association with funding from the Multistate Conservation Grant Program, 2007; and http://www.st.nmfs.noaa.gov/st5/publication/econ/2009/US_Tables_Econ.pdf.

² U.S. Fish and Wildlife Service. *National Fishing License Report – 2006* (<http://faims.fws.gov/reports/rwservlet?faimskeys&report=fwri0020&program=7>)

³ "Did you know" facts from Southwick Associates (above). Cited therein as "U.S. Department of the Interior, *Fortune Magazine*, *National Sporting Goods Association*, U.S. Office of Management and Budget, *Responsive Management*, Southwick Associates and United Parcel Service."

Our Focus on Strategic Actions¹



The National Fish Habitat Partnership, including the regional FHPs and the national board, pursues its goals and objectives by using four fundamental strategies:

1. Support Fish Habitat Partnerships and ensure their effectiveness.
2. Mobilize and focus national and local support for achieving fish habitat conservation goals.
3. Measure and communicate the status and needs of aquatic habitats.
4. Provide national leadership and coordination to conserve fish habitats.

These strategies allow us to generate better results as we protect, restore, and enhance fish habitat throughout the United States.

Each year, the National Fish Habitat Board creates a workplan that includes performance measures. The workplan is tied to the goals and objectives of the Action Plan, these strategies, funding, and science and data¹.

SUPPORT FISH HABITAT PARTNERSHIPS AND ENSURE THEIR EFFECTIVENESS

- Continue to develop and sustain Fish Habitat Partnerships organized around important

FUN FACTS

- Est. 357.4 million fish taken during 71.5 million recreational fishing trips on the Atlantic, Gulf of Mexico, and Pacific coasts².
- The top 10 states for expenditures by anglers are FL, TX, MN, CA, MI, PA, WI, SC, NC, and MO³.

² *Fisheries of the United States 2010, NOAA, 2011*

³ *Sportfishing in America, ASA, 2007.*

regions, aquatic habitats and species. Partnerships engage a wide range of partners to protect, restore and enhance fish habitats.

- Support Fish Habitat Partnerships in identifying strategic priorities, developing action plans and conservation strategies, and achieving results. The national partnership helps local and regional efforts evaluate strategies and garner the resources and tools needed to succeed.
- Provide science-based methods and tools to help regional partnerships measure and demonstrate progress. Regional partnerships will utilize these methods and tools to leverage existing and established state, territorial, federal, tribal and local agency monitoring programs.

¹ *The strategic actions of the Partnership remain the same as those published in the first edition of the Action Plan in 2006.*

MOBILIZE AND FOCUS NATIONAL AND LOCAL SUPPORT FOR ACHIEVING FISH HABITAT CONSERVATION GOALS

- Build strong grassroots support that places fish habitat conservation higher on the public agenda and enlists new contributions from the private sector. Partners at all levels—federal, tribal, state, territorial, and local—will help bring new and sustained attention to the need for action and will mobilize diverse stakeholder groups to advocate for and engage in fish habitat protection, restoration and enhancement.
- Increase funding for fish habitat conservation efforts at the national, regional and local levels by cultivating sufficient public and private fund sources. National and regional fundraising campaigns, corporate sponsorships, restitution and settlement funding, and other approaches will be used to increase the amount of funding available for cost-effective conservation projects.
- Focus existing resources to increase effectiveness in achieving results. Act as a catalyst for increased cooperation among federal, state, territorial, tribal and local agencies and increased collaboration with non-governmental organizations, businesses, landowners and local communities.

MEASURE AND COMMUNICATE THE STATUS AND NEEDS OF AQUATIC HABITATS

- Continue to refine quantitative metrics to track the progress of conservation and issue a national *Status of Fish Habitats* report every five years to document and publicize the progress.

- Encourage and promote regional habitat planning guided by the best available information and science.
- Enhance existing data networks used by partners. Create linkages to share data, conservation approaches and other habitat information.
- Assist partnerships in developing baselines, indicators and measures of success. Promote objective and consistent assessment of projects allowing successful and cost-effective strategies to be identified and replicated, and less successful strategies to be improved upon or abandoned.
- Communicate project results and lessons learned. Enable and facilitate learning among all partners about aquatic ecosystems and how to be good stewards of the environment.

PROVIDE NATIONAL LEADERSHIP AND COORDINATION TO CONSERVE FISH HABITATS

- Work with states, territories, and the Association of Fish and Wildlife Agencies to identify, coordinate and focus incentives at the state/territorial level to protect, restore and enhance aquatic habitat.
- Work with states, territories, and the Association of Fish and Wildlife Agencies to coordinate efforts conducted under State Wildlife Action Plans and other similar programs. Work with other habitat conservation programs, such as the Migratory Bird Joint Ventures and Landscape Conservation Cooperatives, to promote cooperation and coordination.

- Through a Federal Caucus, coordinate existing federal efforts to benefit fish habitat. Federal agencies have important roles as land, water and wildlife managers and a wide array of actions and responsibilities. Identifying opportunities, coordinating agency actions and following up on successful strategies will enable federal agencies to maximize resources and results.
- Maintain a National Fish Habitat Board to promote, oversee and coordinate implementation of the Action Plan including coordination with other national and state/territorial initiatives.

SUBSISTENCE AND FISH HABITAT CONSERVATION

Subsistence fishing (fishing for customary and traditional purposes) is economically and culturally important to people throughout the United States. Fish are used as food for humans and animals, in handicrafts, and for ceremonial occasions among other uses. Subsistence fishing is so critical to some Native American tribes in the Pacific Northwest and the Great Lakes regions, for instance, that they have constructed multi-million dollar hatcheries to maintain and bolster salmon and walleye populations. Since subsistence fishing is highly valued in the culture of many Americans, and very important to rural economies, the National Fish Habitat Partnership and the regional FHPs work to support projects that benefit subsistence fisheries.

Role of the National Fish Habitat Board

GOVERNING BOARD

Following publication of the first edition of the National Fish Habitat Action Plan, a National Fish Habitat Board was established in September 2006 to promote, oversee and coordinate implementation of the Action Plan. The Board consists of 22 members from stakeholder groups that include:

- state fish and wildlife agency and Association of Fish and Wildlife Agencies representatives;
- federal agency representatives;
- conservation/science/academic members, including one representative from the National Fish and Wildlife Foundation and one representative from the American Fisheries Society; and

- at-large members representing tribal governments, interstate management agency representatives, industry (fishing, boating, ecotourism, etc.), elected officials and other interests.

Board members are approved by an Executive Leadership Team which consists of the President and Executive Director of the Association of Fish and Wildlife Agencies (AFWA); the Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration; and the Director of the U.S. Fish and Wildlife Service (FWS). The Board chair is elected from the state government membership of the Board.

Terms, processes, succession and other details are laid out in the National Fish Habitat Board Charter

(available at www.fishhabitat.org). The Board carries out the mission of the Partnership by:

- Providing national leadership and coordination to conserve fish habitats;
- Approving and supporting Fish Habitat Partnerships and fostering new efforts;
- Establishing interim and long term national fish habitat conservation goals and supporting regional goals;
- Mobilizing and focusing national, regional and local support; and
- Measuring and communicating the status and needs of fish habitat.

STAFF AND COMMITTEES

The Board is supported by staff from AFWA, Michigan Department of Natural Resources, FWS, NOAA Fisheries Service, and U.S. Geological Survey (USGS), who provide technical and administrative support for the Board's activities. In addition, the Board established standing committees on science and data as well as communications (see more below and in the exhibits). The Board may also establish ad-hoc committees to address short term needs. Information about Board meetings and decisions is available at www.fishhabitat.org.



Role of Fish Habitat Partnerships

Fish Habitat Partnerships are the primary work units of the National Fish Habitat Partnership and take the lead in getting projects implemented “on-the-ground.” These partnerships are formed around important aquatic habitats, distinct



geographic areas, “keystone” fish species or system types. The Fish Habitat Partnerships:

- Provide leadership that develops projects at regional and local levels;
- Work with other regional habitat conservation programs to promote cooperation and coordination and improve results;
- Engage key audiences and the general public to build support for fish habitat conservation;
- Involve diverse groups of public and private partners;
- Collaboratively develop a compelling strategic vision and achievable implementation plan that is scientifically sound;
- Leverage funding from sources that support local and regional partnerships;
- Use adaptive management principles including evaluation of project success and functionality;
- Develop appropriate regional habitat evaluation measures and criteria that are compatible with national measures; and
- Execute projects that address fish habitat conservation that make a difference.



THE NATIONAL FISH HABITAT PARTNERSHIP'S IDENTITY

- Base our actions on science and data.
- Focus our resources on making a measurable difference.
- Measure our outcomes.
- Monitor and disseminate our results.
- Encourage public-private partnerships.
- Build on existing collaborative efforts.
- Don't stop until the job is done.

FOCUS AREA

Commercial Fishing and Fish Habitat Conservation



Commercial fishing plays an enormous role in the U.S. economy. United States commercial fishing in 2010 produced 8.2 billion pounds of landed fish valued at \$4.5 billion. These landings fuel a secondary economy that involves fish processing, restaurants, grocery stores, sales of tackle and gear, icehouses, and many other businesses involved in the seafood supply chain, generating \$183 billion per year to the U.S. economy and more than 1.5 million full and part-time jobs. The livelihoods of fishermen and their communities depend on healthy habitats such as wetlands, rivers, coral, and seagrasses. Consumers depend on clean water and habitats to produce safe seafood for their families. Many commercial fishermen and their communities are committed to conserving the habitats that their jobs depend on. Since 2004, commercial fisherman and their communities have worked with Fishery Management Councils to protect over 700 million acres of ocean habitat essential to marine fisheries. They have also identified over 100 habitat areas of particular concern to help focus habitat conservation and research efforts important to fisheries. Domestic

aquaculture, another important component of U.S. commercial fisheries, also supports healthy fish habitats through efforts like habitat restoration for native Olympia oysters.

Did you know...

- From 2000 to 2004, estuarine fish species comprised approximately 46 percent by weight and 68 percent by value of total U.S. commercial landings.¹
- There was a 45 percent increase in coastal watershed county population between 1970 and 2010.²
- 111,000 acres of estuarine wetlands have been lost between 2004 and 2009.³
- In the Gulf of Mexico, 98 percent of commercial landings are comprised of estuarine dependent species (Lellis-Dibble et al.), including shrimp, menhaden, and crabs. In 2010, shrimp landings, worth \$338.5 million comprised 53% of total value of commercial landings in the Gulf of Mexico.⁴

¹ Lellis-Dibble, K.A., K.E. McGlynn, and T.E. Bigford. 2008. *Estuarine Fish and Shellfish Species in U.S. Commercial and Recreational Fisheries: Economic Value as an Incentive to Protect and Restore Estuarine Habitat*. NOAA Technical Memorandum NMFS-F/SPO-90.

² National Oceanic and Atmospheric Administration. *State of the Coast Website*. (<http://stateofthecoast.noaa.gov/population/welcome.html>)

³ U.S. Fish and Wildlife Service. *Status and Trends of Wetlands in the Conterminous United States 2004-2009*. (<http://www.fws.gov/wetlands/Documents/Status-and-Trends-of-Wetlands-in-the-Conterminous-United-States-2004-to-2009.pdf>)

⁴ National Oceanic and Atmospheric Administration. *Fisheries of the United States 2010*. (<http://www.st.nmfs.noaa.gov/st1/fus/fus10/index.html>)

The Role of Sound Science and Data

Sound science and data are the cornerstones of the National Fish Habitat Partnership's ability to bring scarce resources to bear where they can gain the highest returns. Science and data drive our decision-making. The role of the Science and Data Committee is to ensure the very best available information and analyses are provided to the Board, partnerships, and partners to support their decisions.

To support this work, the committee examines new assessment, performance, and monitoring approaches; reviews existing efforts in these areas; and provides timely advice on science and data issues to the Board and partnerships. The committee also guides the Partnership's science and data projects such as the national assessment, the map and data viewer, and effectiveness. Co-chaired by a state fisheries agency representative and a federal agency representative, membership consists of representatives from academia as well as state, federal and non-governmental organizations.



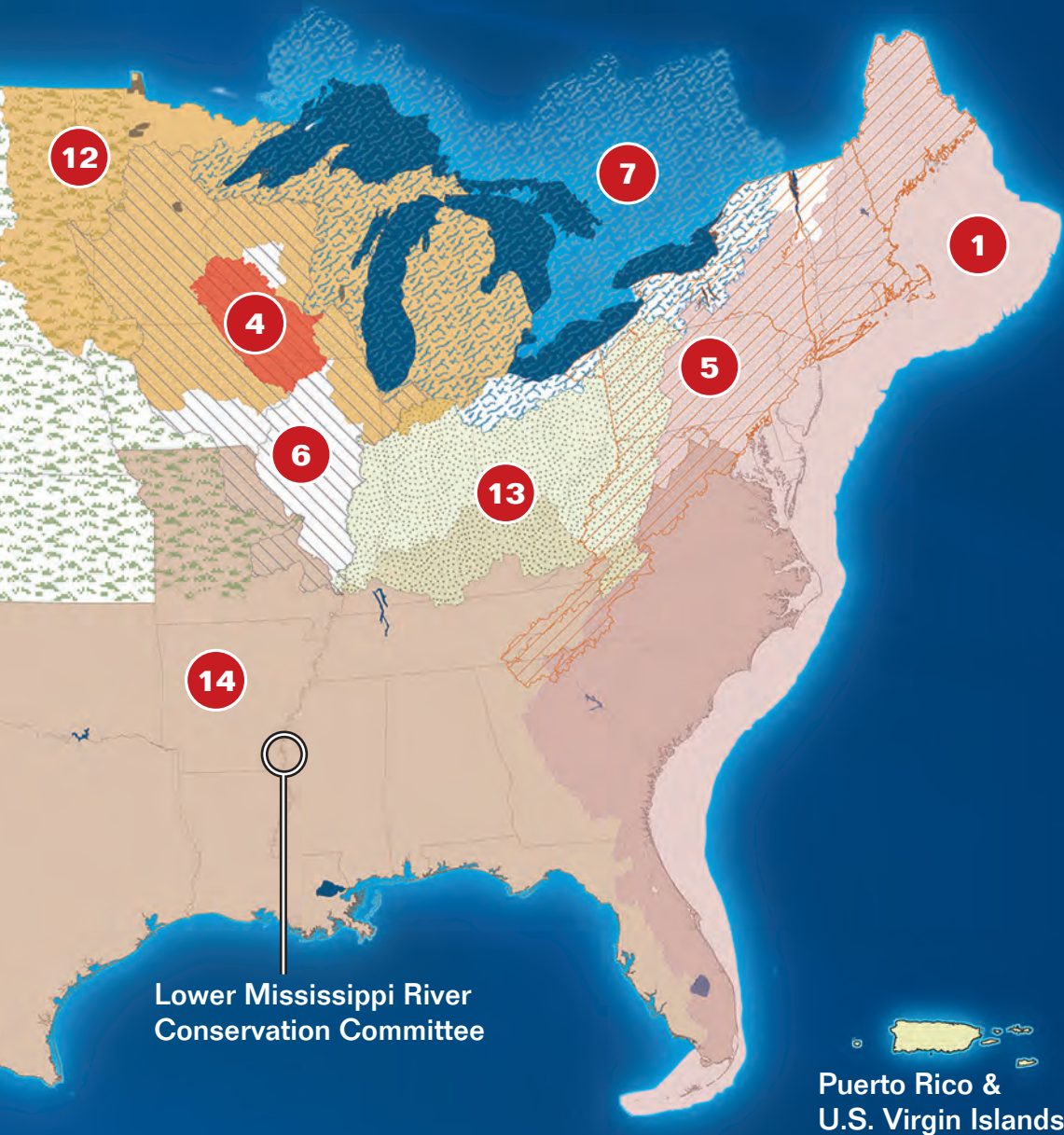
THE NATIONAL FISH HABITAT PARTNERSHIP'S BENEFITS

- Clean and sufficient amounts of water, a critical measure of landscape health and the well-being of people.
- Healthy, resilient habitats that are critical to fish and wildlife, water conservation, flood control and people.
- Improved recreational, commercial and subsistence fishing, boating, fish and wildlife viewing, and other uses of aquatic resources.
- Strong local economies and increased economic well-being for all Americans.
- Effective use of limited funds to produce measurable benefits to fish and people.
- Improved understanding of habitat connectivity and how aquatic systems function and are maintained.

Fish Habitat Partnerships 2012



Note: Alaska and Hawaii not to scale



Geographic/Species Based Partnerships

- 1 Atlantic Coastal FHP
- 2 California Fish Passage Forum
- 3 Desert FHP
- 4 Driftless Area Restoration Effort
- 5 Eastern Brook Trout Joint Venture
- 6 Fishers and Farmers Partnership
- 7 Great Lakes Basin FHP
- 8 Great Plains FHP
- 9 Hawaii FHP
- 10 Kenai Peninsula FHP
- 11 Matanuska-Susitna Basin Salmon Habitat Partnership
- 12 Midwest Glacial Lakes Partnership
- 13 Ohio River Basin FHP
- 14 Southeast Aquatic Resources Partnership
- 15 Southwest Alaska Salmon Habitat Partnership
- 16 Western Native Trout Initiative
- 17 Pacific Marine and Estuarine FHP

System Based Partnership

- 18 Reservoir FHP*
**the Reservoir FHP is a system based partnership that covers reservoirs geographically across the country.*

Denotes Fish Habitat Partnership "Candidate"

Fish Habitat Partnerships 2012 *Continued*



1 Atlantic Coastal Fish Habitat Partnership
(October 2009)
www.atlanticfishhabitat.org



6 Fishers and Farmers Partnership for the Upper Mississippi River Basin
(March 2010)
www.fishersandfarmers.org



2 California Fish Passage Forum
(March 2010)
tinyurl.com/Cal-Fish-Passage



7 Great Lakes Basin Fish Habitat
(October 2009)
www.fws.gov/midwest/GLBFHP



3 Desert Fish Habitat Partnership
(March 2009)
tinyurl.com/Desert-fish-habitat



8 Great Plains Fish Habitat Partnership
(October 2009)
www.prairiefish.org



4 Driftless Area Restoration Effort
(October 2007)
www.darestitution.com



9 Hawaii Fish Habitat Partnership
(March 2009)
www.fws.gov/pacificislands/hfhp.html



5 Eastern Brook Trout Joint Venture
(October 2007)
www.easternbrooktrout.org



10 Kenai Peninsula Fish Habitat Partnership
(January 2009)
office.kenaiwatershed.org/KPFHP



11 Matanuska-Susitna Basin Salmon Habitat Partnership
(October 2007)
tinyurl.com/MatSuBasinFHP



15 Southwest Alaska Salmon Habitat Partnership
(May 2008)
www.swakcc.org



12 Midwest Glacial Lakes Partnership
(March 2009)
www.midwestglaciallakes.org



16 Western Native Trout Initiative
(February 2008)
www.westernnativetrout.org



13 Ohio River Basin Fish Habitat Partnership
(October 2009)
tinyurl.com/Ohio-River-Basin



17 Pacific Marine and Estuarine Partnership
(January 2012)
www.pacificfishhabitat.org



14 Southeast Aquatic Resources Partnership
(October 2007)
www.southeastaquatics.net



18 Reservoir Fisheries Habitat Partnership
(October 2009)
www.reservoirpartnership.org

Note: Dates in parentheses are the date the FHP was approved by the National Fish Habitat Board.

The Role of Effective Communications



Effective communication is the key to the long-term success of conserving fish habitat. By sharing the value of fish habitat conservation, we can encourage protection for intact habitats, foster increased stewardship over degraded areas, and generate support for restoration activities where they are needed.

FUN FACT

America has over 3032 marine and freshwater fish species.

The role of the Communications Committee is to foster partnerships and build a community of support for fish habitat conservation. The committee provides timely recommendations to the Board and partnerships on communications-related efforts and initiatives. The committee supports the regional Fish Habitat Partnerships by supplementing their communications and outreach efforts, while working with the Board, the FHPs, and the Partner Coalition to create strong messaging and successful programs such as “10 Waters to Watch”. The committee is chaired by the Board’s communications coordinator.

“The second edition of the Action Plan is built on the success and experiences of our Partners. Creating and maintaining these Partnerships is the foundation of the Action Plan and will be the primary focus as we address conservation needs for our nation’s waterways now and into the future.**”**

– Kelly Hepler, Chairman, National Fish Habitat Board and Assistant Commissioner, Alaska Department of Fish and Game

Appendix 1: Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING BETWEEN

U.S. Department of the Interior

U.S. Department of Agriculture

U.S. Department of Commerce

for

Implementing the National Fish Habitat Action Plan

I. PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to promote collaborative, science based conservation by ensuring that the component agencies, bureaus, and offices of the Department of the Interior, the Department of Agriculture, and the Department of Commerce (Departments), with direct or indirect responsibilities for aquatic habitat conservation, protection, and restoration, support efforts to implement the National Fish Habitat Action Plan (Action Plan) in accordance with their respective agency missions, policies, and regulations and subject to the availability of funds.

The Action Plan is a science-based, voluntary, and non-regulatory effort providing a nationwide strategy to harness the energies, expertise, and existing programs of federal and state agencies, conservation organizations, foundations, and individuals.

II. BACKGROUND

Aquatic habitat supports fish, shellfish, amphibians, and other aquatic life that is important to the

Nation's biological diversity, the economies of local communities and the Nation, and recreational use and enjoyment by millions of Americans. However, coastal, marine, and freshwater habitats have been damaged and destroyed by human activities. These losses have caused significant declines in fish populations throughout the United States, and have resulted in substantial economic losses. Our Departments have substantial interests in reversing declines in aquatic communities and habitats by working with partners in state and tribal government, local government, not-for-profit organizations, private entities, and individuals.

The Action Plan provides a national strategy to address aquatic habitat from the interior to the oceans. It supports cooperative, proactive, aquatic habitat protection, and restoration goals at multiple geographic scales. Through fish habitat protection and restoration, jobs are created and recreational and commercial fishing communities will benefit. The Action Plan's voluntary partnership approach complements Federal and state regulations that protect aquatic habitat. The Action Plan supple-



ments, but does not replace the existing foundation of statutory authority and associated regulatory programs implemented by the Departments that presently serve to protect aquatic habitats from degradation. Communication and coordination among our Departments, whose activities affect aquatic habitat, will help to improve the quality of our stewardship and the health of our Nation's aquatic habitat.

III. AUTHORITIES

This MOU is issued by the Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Commerce (Secretaries), pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 *et seq.*), Clean Water Act (33 U.S.C. § 1251 *et seq.*), Fish and Wildlife Coordination Act (16 U.S.C. §§ 661-666c.), Coral Reef Conservation Act of 2000 (16 U.S.C. § 6401 *et seq.*), Coastal Zone Management Act (16 U.S.C. § 1451 *et seq.*), Estuary Restoration Act of 2000 (33 U.S.C. § 2901 *et seq.*), Endangered Species Act (16 U.S.C. § 1531 *et seq.*), and the Coastal and Estuarine Lands Conservation Program (16 U.S.C. §§ 1456-1456d), and other Federal laws. These statutes provide the Agencies with authority to, among other things:

- Conserve and manage the fishery resources of the United States;
- Cooperate with state and other public or private agencies and organizations in the conservation of fish and wildlife and their habitats;
- Protect, restore, and enhance the coastal and estuarine resources of the United States, and;

- Provide for the conservation of species that are endangered or threatened, and the ecosystems on which they depend.

IV. DEFINITIONS

As used in this MOU the following terms are specifically defined:

A. National Fish Habitat Action Plan (Action Plan).

The *National Fish Habitat Action Plan* dated April 24, 2006, and any subsequent revisions or amendments.

B. National Fish Habitat Board.

A governing board established by the Action Plan to promote, oversee, and coordinate implementation of the Action Plan.

C. Federal Caucus.

A working group open to all Federal agencies, chaired by the U.S. Fish and Wildlife Service, organized to coordinate Federal participation in implementation of the Action Plan.

D. Fish Habitat Partnership.

An entity designated by the National Fish Habitat Board as a "Fish Habitat Partnership" that coordinates the implementation of the Action Plan at a regional level. A Fish Habitat Partnership may include among its members Federal, state, tribal, local, non-profit, or private entities or individuals.

E. Aquatic communities.

Aquatic organisms living or growing in, on, or near freshwater, estuarine or marine habitats and co-occurring with one another under relatively similar environmental conditions.

F. **Aquatic habitat.** Any area on which an aquatic organism depends, directly or indirectly, to carry out the life processes of the organism, including an area used by the organism for spawning, incubation, nursery, rearing, growth to maturity, food supply, or migration, including an area adjacent to the aquatic environment if the adjacent area:

- (1) Contributes an element, such as the input of detrital material or the promotion of a planktonic or insect population providing food, that makes fish life possible;
- (2) Affects the quality and quantity of water sources;
- (3) Provides public access for the use of fishery resources; or
- (4) Serves as a buffer protecting the aquatic environment.

E. **Aquatic organism.** Species that depend upon aquatic habitat for one or more stages of their life cycle, such as spawning, incubation, nursery, rearing, growth to maturity, food supply, or migration, including but not limited to fishes, shellfish, amphibians, turtles, and aquatic invertebrates.

F. **Conservation.** Activities that protect, sustain, and, where appropriate, restore, and enhance populations of fish, wildlife, or plant life or a habitat required to sustain fish, wildlife, or plant life or its productivity.

V. RESPONSIBILITIES

To achieve the objectives of this MOU, the heads of all agencies, bureaus, and offices within the

Departments with direct or indirect responsibilities for aquatic habitat conservation, protection, and restoration shall be responsible for ensuring that the following principles are followed:

A. Principle 1. The Departments Shall Support Implementation of the National Fish Habitat Action Plan.

- (1) The Departments recognize that the Action Plan is a partnership with state and tribal fish and wildlife agencies, local agencies, not-for-profit organizations, private entities, and individuals to improve the quality and quantity of aquatic habitat.
- (2) The Departments shall ensure their actions, to the extent permitted by law and subject to the availability of appropriations, and in accordance with their respective agency missions, policies, and regulations, are consistent with and support the priorities of the Action Plan. In so doing, the Departments can improve the efficiency of Federal Government operations and ensure effective coordination with state, tribal, and local agencies, not-for-profit organizations, private entities, and individuals.

B. Principle 2. The Departments Shall Participate in National Fish Habitat Action Plan Forums.

- (1) The Director, U.S. Fish and Wildlife Service; the Chief, U.S. Department of Agriculture,

Forest Service; and the Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration shall participate as members of the National Fish Habitat Board.

- (2) Each of the component agencies, bureaus, and offices of the Departments with direct or indirect responsibilities for aquatic habitat conservation, protection, and restoration, shall as appropriate, to the extent permitted by law and subject to the availability of appropriations, and in accordance with their respective agency missions, policies, and regulations:
 - (a) Participate as members of the Federal Caucus at policy and technical levels to coordinate Federal participation in implementation of the Action Plan in support of state agency-led efforts to achieve the goals of the Action Plan.
 - (b) Review its policies, procedures, resources, and capabilities to further the goals of the Action Plan, and make revisions, where appropriate during regularly scheduled reviews of same, to support the goals.
 - (c) Incorporate the goals of the Action Plan in its own plans for managing Federal lands and water resources, during regularly scheduled reviews of such plans.
 - (d) Contribute materials, technical assistance, services, or matching funds to projects that support the goals of the Action Plan and Fish Habitat Partnerships established under the Plan.
 - (e) Coordinate and contribute technical assistance, services or funds for the science and data initiatives of the National Fish Habitat Board.
 - (f) Consider the goals of the Action Plan when awarding loans, grants, contracts, and cooperative agreements.
 - (g) Consider the goals of the Action Plan when issuing permits to states or private entities when such permits may influence aquatic habitat.
 - (h) Collect, manage, analyze, and share data and contribute information technology expertise to build or integrate databases to assess aquatic communities, habitat conditions and outcomes of projects.
 - (i) Encourage and support affiliated efforts by non-Federal partners to implement the Action Plan, including the fulfillment of the Federal trust responsibilities to Native American governments.
 - (j) Contribute to the development of informational materials for stakeholders and the general public to raise awareness of the values of aquatic habitat and the Action Plan.
 - (k) Coordinate its activities in support of the Action Plan with other interagency efforts, including but not limited to America's Great Outdoors, Landscape Conservation Cooperatives, the Aquatic Nuisance Species Task Force, the Coral Reef Task Force, the National Action

Plan for Freshwater Resources, the National Ocean Policy Implementation Plan, and the National Fish, Wildlife and Plants Climate Adaptation Strategy.

- (l) Coordinate its activities with states, territories, tribes, and local governments to meet the goals of the Action Plan.

VI. IMPLEMENTATION

This MOU shall be implemented by all agencies, bureaus, and offices of the Departments, as applicable.

VII. REPORTING

Within 180 days from the date of this MOU, and at 2-year intervals thereafter, all bureaus, agencies, and offices implementing this MOU will report to their respective Secretary on agency accomplishments and progress in support of state-led efforts to achieve the goals of the Action Plan.

VIII. GENERAL PROVISIONS

A. Nothing in this MOU shall obligate the Department of the Interior, the Department of Agriculture, or the Department of Commerce to obligate or transfer any funds. This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement, contribution of funds, or other transfer of anything of value between the Parties will be handled in accordance with applicable laws, regulations, and procedures, including those for government

procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the Parties and shall be independently authorized by appropriate statutory authority.

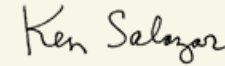
- B. Changes to this MOU shall be made in writing by mutual consent of all Parties, through an issuance of a written modification signed and dated by all Parties.
- C. Documents furnished to a Party under this MOU may be subject to the Freedom of Information Act (FOIA, 5 U.S.C. § 552). A Party shall not release to a FOIA requester documents originating with another Party. Rather, the Party that received the FOIA request shall forward such document(s) to the originating Party for review, determination, and response directly to the requester.
- D. This MOU is not intended to, and does not create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity, by any party against the United States, its agencies, its officers, or any person.

IX. EXPIRATION

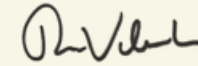
This MOU becomes effective on the date that the last party to this agreement signs and shall remain in effect for 5 years from the date of execution. This MOU may be extended upon written request of any of the Departments and the subsequent written concurrence of the others. Any of the Departments may terminate participation in this MOU with a 60-day written notice to the others.

SIGNATURES

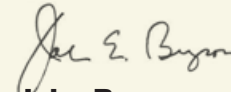
IN WITNESS WHEREOF, the Parties hereto executed this Memorandum of Understanding on the dates) set forth below:



Ken Salazar
Secretary
Department of the Interior



Tom Vilsack
Secretary
Department of Agriculture

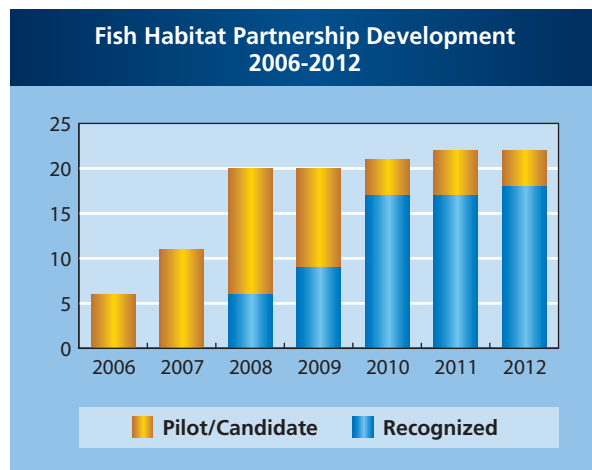


John Bryson
Secretary
Department of Commerce

Appendix 2: Fish Habitat Partnerships

Fish Habitat Partnerships recognized by the National Fish Habitat Board are the primary work units of the National Fish Habitat Partnership. The Board has established policies that guide the establishment and operation of the partnerships.

Fish Habitat Partnerships are self-identified, self-organized, and self-directed communities of interest formed around geographic areas, keystone species, or system types. They involve diverse groups of public and private partners that are focused on conservation of important fish habitat across jurisdictional boundaries and land ownership types.



When the Action Plan was approved in 2006, five partnerships had organized with the intention of affiliating with the Action Plan. They were termed “pilot” Fish Habitat Partnerships, and helped the Board to develop and test its policies and guidance. Additional partnerships wrote to the Board indicating their intention to seek recognition; these were designated “candidate” Fish Habitat Partnerships.

By 2012, eighteen Fish Habitat Partnerships had met all criteria and were recognized by the Board. Each of the FHPs has a strategic plan that identifies habitat conservation priorities and how the partnership will address issues in meeting those priorities. An additional four candidate FHPs have written to the Board indicating their intentions to become recognized at some time in the future.

PARTNERSHIP RESOURCES

Fish Habitat Project Endorsement Template

http://fishhabitat.org/images/template_jul26_2011.pdf

Process for recognizing new Fish Habitat Partnerships (2010)

http://fishhabitat.org/images/Board_Mar_2010/process_new_fhps_march_2010.pdf



FUN FACTS

- The NFHP website is found at www.fishhabitat.org
- There are 18 FHPs throughout the United States. Alaska has the most – five FHPs!
- One out of five fishing days in the U.S. takes place in saltwater.¹
- More marine anglers prefer to catch redfish (48%), followed by striped bass (34%).²
- More freshwater anglers prefer largemouth bass (52%), followed by panfish (28%).³
- Most fishing tackle purchases include lures (46%), followed by terminal tackle (26%) then fishing line (24%).⁴

¹ FWS, 2006 National Survey on Hunting and Angling.

² Southwick Associates, AnglerSurvey.

³ Southwick Associates, AnglerSurvey.

⁴ Southwick Associates, AnglerSurvey.

Appendix 3: 2012 National Fish Habitat Board and Committees



NATIONAL FISH HABITAT BOARD MEMBERS

Kelly Hepler – Chair
Assistant Commissioner
Alaska Department of Fish and Game

Stephen G. Perry – Vice Chair
Chief, Inland Fisheries Division
N.H. Fish and Game Department
Representing the Northeastern Association of Fish and Wildlife Agencies

Mike Andrews
Vice President
The Nature Conservancy

Dan Ashe
Director
U.S. Fish and Wildlife Service

Douglass Boyd
Vice Chair
Sportfishing & Boating Partnership Council

Randy Fisher
Executive Director
Pacific States Marine Fisheries Commission

Brad Gentner
President and Chief Economist, Gentner Consulting Group
Representing Coastal Conservation Association

Chris Horton
Midwestern States Director
Congressional Sportsman's Foundation

Joe Larscheid
Fisheries Bureau Chief, Conservation and Recreation Division
Iowa Department of Natural Resources
Representing the Midwest Association of Fish and Wildlife Agencies

Bob Mahood
Executive Director
South Atlantic Fishery Management Council



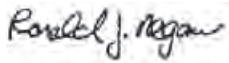
D. Fred Matt

Executive Director
Native American Fish & Wildlife Society



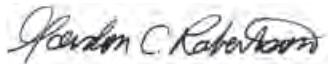
Stan Moberly

Past President
American Fisheries Society



Ron Regan

Executive Director
Association of Fish and Wildlife Agencies



Gordon Robertson

Vice President
American Sportfishing Association



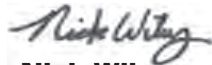
Samuel D. Rauch III

Acting Assistant Administrator for Fisheries
NOAA



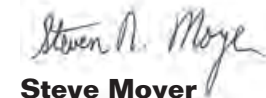
Mike Stone

Chief of Fisheries (Retired)
Wyoming Game and Fish Department
Representing the Western Association
of Fish and Wildlife Agencies



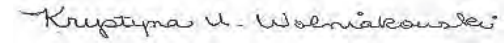
Nick Wiley

Commissioner
Florida Fish and Wildlife Conservation Commission
Representing the Southeastern Association of Fish
and Wildlife Agencies



Steve Moyer

Vice President for Government Affairs
Trout Unlimited



Krystyna Wolniakowski

Director, Western Partnership Office
National Fish and Wildlife Foundation



Anne Zimmermann

Director, Watershed, Fish, Wildlife, Air
and Rare Plants
U.S. Forest Service





COMMUNICATIONS COMMITTEE

Ryan Roberts – *Chair*

National Fish Habitat Board Communications Coordinator
 Association of Fish and Wildlife Agencies

Laura MacLean – *Vice-Chair*

Director of Communications and Marketing
 Association of Fish and Wildlife Agencies

EXECUTIVE LEADERSHIP TEAM

Ron Regan

Executive Director
 Association of Fish and Wildlife Agencies

Jon Gassett

President, Association of Fish and Wildlife Agencies and
 Commissioner, Kentucky Department of Fish and Wildlife Resources

Samuel D. Rauch III

Acting Assistant Administrator for Fisheries
 NOAA

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“State Fish and Wildlife Agencies have been instrumental in helping to carry out the mission of the National Fish Habitat Action Plan, working in concert with the Board and on the ground with the Partnerships. The objectives set for the revised Action Plan will enhance these relationships for years to come.”

– Ron Regan, National Fish Habitat Board and Executive Director, Association of Fish and Wildlife Agencies

Appendix 4: Strategies & Resources of Federal Agencies

Tapping a broad range of strategies and resources, the federal government supports the National Fish Habitat Partnership's goal of efficient and effective conservation of the nation's fish and aquatic communities and the habitat that supports them. Many federal agencies have direct or indirect responsibilities for aquatic habitat conservation, and the results of effective conservation contribute to the social and economic well-being of the American public they serve. For example, fishing in healthy habitats promotes human health and economic activity; fish-friendly road crossings are less prone to damage from flooding; and conserving soil nutrients is good for fish as well as for farmers.

The National Fish Habitat Partnership provides a unique and valuable forum for stakeholders to engage with federal agencies, to access the agencies' varied expertise and resources, and to pursue common ecological, social, and economic goals. The Partnership promotes networking across boundaries of jurisdiction and land ownership, between public and private entities, and across all levels of government: federal, state, territorial, local, and tribal governments.

Contributions of federal agencies toward fish habitat conservation vary with their legislative authority, mission, budget, organization, geographic coverage, and agency initiatives and priorities. Some agencies have reallocated or realigned resources to support science and data efforts at

national or regional scales, or contribute to on-the-ground conservation projects of the partnerships. By aligning strategies and leveraging resources of federal agencies, the National Fish Habitat Partnership has more efficiently advanced science, rehabilitated fish habitat, improved fishing, and enhanced public awareness.

Coordination among agencies to achieve common goals is a critical but challenging task. This year, the Secretaries of the Interior, Commerce, and Agriculture signed a memorandum of understanding committing to increased coordination and collaboration between their departments to benefit the National Fish Habitat Partnership.

To further facilitate interactions among federal agencies and with other partners, the Federal Caucus was created to:

- Provide communication links among federal agencies cooperating under the National Fish Habitat Partnership;
- Provide a mechanism through which federal partners can jointly identify strategies and resources to support goals of the National Fish Habitat Partnership;
- Ensure that the National Fish Habitat Partnership helps agencies achieve their missions by enhancing partnerships and improving measurement of results and performance; and



- Enhance networking and collaboration among federal partners, the National Fish Habitat Board, and other partners implementing the National Fish Habitat Action Plan.

Engagement in the National Fish Habitat Partnership by federal agencies takes several forms:

- Leadership: federal agencies provide staff to direct and administer various aspects of the National Fish Habitat Partnership as well as Fish Habitat Partnerships, from coordinators to steering committee members. The close coordination allows for integration of National Partnership and Fish Habitat Partnership goals directly into agency practice.

- Funding: federal agencies support conservation projects through dedicated funds or by realigning existing programs with the priorities of individual partnerships.

- Data sharing and database development: federal agencies collect data on landscape development, water quality, and a host of other factors related to fish habitat health. These data are essential to the Partnership's assessment efforts. To ensure these and other data sets are available for continued use by the Partnership, the data used in *Through a Fish's Eye: The Status of Fish Habitats in the United States 2010* (and future assessments) are accessible through an online

geo-referenced database maintained by the U.S. Geological Survey. The federal government is working toward broader access of relevant data through Data.gov and Geo.data.gov to facilitate more effective collaboration.

- Education: federal agencies develop and contribute to the development of a broad range of outreach materials for students, stakeholders and the general public to raise awareness of the values of aquatic habitat.
- Recruiting partners: federal agencies help to identify regional and local partners for fish habitat conservation projects and encourage their participation.
- Monitoring and evaluation: federal agencies perform extensive on-the-ground monitoring of a broad range of waters and assist in the evaluation of many Fish Habitat Partnership projects.
- Strategic planning: federal agencies incorporate the goals and objectives of the Action Plan and of the National Fish Habitat Partnership into their strategic plans.
- Technical expertise: federal agency experts identify best management practices, conduct research, and analyze data to evaluate project success.
- Federal projects: federal agencies conduct actions to promote the National Fish Habitat Action Plan, including projects on federal land.



Strategies and Resources Contributed by Federal Agencies to the National Fish Habitat Partnership									
2012 Federal Caucus member agencies	Leadership	Funding	Data sharing / database development	Education	Recruiting partners	Monitoring/ evaluation	Strategic planning	Technical expertise	Projects on federal lands
Department of Commerce									
NOAA Fisheries Service	●	●	●	●	●	●	●	●	
National Ocean Service			●					●	
Department of the Interior									
U.S. Fish & Wildlife Service	●	●	●	●	●	●	●	●	●
U.S. Geological Survey	●		●		●		●	●	
Bureau of Land Management	●	●	●	●	●	●	●	●	●
Office of Surface Mining		●		●	●	●		●	
National Park Service			●	●	●	●		●	●
Bureau of Reclamation	●				●			●	
Bureau of Ocean Energy Management			●	●	●	●		●	●
Department of Agriculture									
Forest Service	●	●	●	●	●	●	●	●	●
Natural Resources Conservation Service		●		●	●		●	●	
Farm Service Agency					●			●	
Environmental Protection Agency									
		●	●	●	●			●	
Department of Defense (DoD)									
U.S. Army Corps of Engineers	●	●	●		●			●	
DoD Natural Resources Program								●	●
Department of Transportation									
Federal Highway Administration		●		●	●			●	
Department of Homeland Security									
Federal Emergency Management Agency		●		●	●				

Appendix 5: Science and Data Strategy



The National Fish Habitat Action Plan's science and data strategy is focused on the physical, chemical, and biological processes of aquatic systems and is built on the following four objectives:

- Identifying causative factors for declining fish populations in aquatic systems;
- Developing and implementing an integrated landscape approach that includes the upstream/downstream connections of large-scale habitat condition factors;
- Classifying and then assessing the condition of the nation's fish habitats; and
- Providing partners easy digital access to key habitat information to support their work.



The strategy assists partners in understanding priorities for projects and how to arrest, prevent, and reverse declines in both freshwater and coastal systems. We use an integrated landscape approach with consistent methodologies to demonstrate linkages between upland and coastal systems nationally. To facilitate this approach, a map-based interactive data system using web-based Geographic Information System (GIS) technology allows partners to quickly view the current status of their local waters. The data system will allow users to assess what is likely impairing the waters, determine potential solutions, identify who has used similar restoration approaches, and learn how their waters are changing in response to conservation efforts.

Our strategy also assists partners in understanding why fish and aquatic resources in both freshwater and coastal systems have declined. It will also focus on factors that can stop and reverse this decline and retain the improved or another desired condition. These factors include:

- Connectivity of habitats. Can fish reach all of the habitats they need to complete their life cycle and maximize their production?
- Hydrologic alteration. For rivers, streams and tidal areas refers to how the annual, seasonal, and daily water flow cycles that aquatic organisms rely on and need to maximize production have been changed by our actions. This includes

alterations to water current magnitude and direction in coastal systems along with effects on the cycle of freshwater inputs into these systems. For lakes and reservoirs refers to how the annual, seasonal, and daily water level cycles that aquatic organisms rely on and need to maximize production have been changed by our actions.

- Direct habitat alteration. Examines the amount of aquatic habitat that has been physically changed by our actions in both inland and coastal systems. It includes riparian zone alteration—the amount of land adjacent to our waters that has been modified, which results in changes to input and transport of sediment and woody debris.
- Water quality alteration. The change in key water quality parameters, such as temperature, salinity and dissolved oxygen, that result in reduced aquatic productivity.
- Alteration of aquatic communities. Examples include the loss of key predators or the introduction of invasive species that affect species composition and size structure, water quality, physical habitat, and social acceptability.

These factors contribute to most of the fisheries and habitat problems we see today; treating local habitat symptoms and conditions in itself cannot adequately address these factors and provide long-term solutions.

To properly determine where to invest limited resources, the Board has implemented an assessment process that allows for the direct and rapid assessment of the condition of the nation's waters. This includes the classification of all waters into



similar groups based on published landscape-scale classification systems, facilitating comparisons with activities of others on similar systems within their classified group. Initial efforts assessed all waters with respect to their habitat stress level, using a suite of factors that address the process-level factors described above along with some of the biotic indicators of ecosystem stress. Data from nationally consistent datasets were analyzed to identify the level of risk of current habitat degradation (system stress) and these results were disseminated in *Through a Fish's Eye: The Status of Fish Habitats of the United States, 2010* report.

With the large amount of data being generated, it is critical to integrate data from all levels into one information platform. This platform will provide all partners required information on an appropriate scale on the classification, habitat stress, and condition scores of all waters. These data will provide insights into how to change the trajectory of their scores, provide options to address key factors, and provide methods and mechanisms to properly evaluate their conservation actions.



The data system will also provide our partners ready access to existing conservation and habitat priorities, a key piece of social selection information, along with other socioeconomic parameters. Information on existing priorities can help guide partners in designing projects. Examples are found in the State Wildlife Action Plans, state fisheries management plans, marine fishery management plans, watershed assessments, and The Nature Conservancy Conservation Plans. This information is currently unavailable to our partners, who could benefit from it in their planning processes.

Ensuring successful implementation of the science and data system requires a detailed structural system design, incremental development of priority components, commitment from partners to provide and exchange data so that information will be improved and updated, and dedicated scientific and technical expertise to maintain system requirements. The data system will integrate multiple information sources into a single accessible gateway of National Fish Habitat Partnership information.

Appendix 6: Communications Strategy

The communications strategy strives to build an engaged community concerned with the conservation of our nation's aquatic habitats. The strategy is critical to creating and promoting a common message among the Board, state, territorial, and tribal agencies, the federal caucus, Fish Habitat Partnerships, and the Partner Coalition. The strategy highlights the value of communications as a tool for fostering lasting, productive relationships among diverse partners. These relationships are what makes our efforts to conserve fish habitat effective and builds credibility with a growing audience.

Our primary focus area is to advance the work of the Fish Habitat Partnerships. The strategy recognizes that the work of the Fish Habitat Partnerships is of the utmost importance to showcase, especially how their efforts to address the objectives in the National Fish Habitat Action Plan makes a difference on the ground. In addition, the strategy focuses on:

- Providing advice to the National Fish Habitat Board and its staff in identifying outreach opportunities and potential challenges related to communications.
- Developing professional communications materials to keep partners fully informed, foster mutually beneficial relationships, and encourage new partners to join Fish Habitat Partnerships.

- Maintaining and fulfilling a list of measurable outcomes for the work of the communications committee and Fish Habitat Partnerships.
- Fostering partnerships with organizations specializing in marketing and communications.

The National Fish Habitat Partnership uses the following primary networks to build awareness, support, engagement, and action in various forms. The committee will work through these networks to reach out to their constituencies and local groups.

NATIONAL FISH HABITAT BOARD

Communications will promote the Board's leadership, coordination, and facilitation role, and support the Board in serving as ambassadors and influential advocates for the National Fish Habitat Partnership in policy arenas and in coordinating with other federal and state/territorial initiatives.

FISH HABITAT PARTNERSHIPS

Fish habitat conservation projects are the marketable force for our communications efforts. We will focus on compelling stories about the work of the Fish Habitat Partnerships and project outcomes. By placing visibility and emphasis on the Fish Habitat Partnerships through website updates and media outreach, we can increase the community of support for future projects and build collaborations with new partner organizations.





PARTNER COALITION

The Partner Coalition serves as an outlet for information sharing on priorities, projects, and successes while helping us build a grassroots network of support for fish habitat conservation.

Broader visibility through the media will also help grow the community of support for the National Fish Habitat Partnership and shine a light on the work of Fish Habitat Partnerships. The “10 Waters to Watch” campaign has received significant media attention on our efforts. Building upon this attention and coordinating site visits with local, regional, and national media outlets will help raise awareness of the Partnership.

We will also work to expand our reach in social media platforms to help bring additional members into the partner coalition. Social media is an excellent tool for relaying stories about the good work of the FHPs. We will also maintain a presence with our constituents by having displays at trade shows and meetings across the country. We believe continued outreach through these events will advance the work of the National Fish Habitat Partnership.

ASSOCIATION OF FISH AND WILDLIFE AGENCIES AND STATE/ TERRITORIAL AGENCIES

We will support the Association of Fish and Wildlife Agencies in serving as the main conduit for communications with state and territorial fish and wildlife agencies. We will support the Association’s role in assisting states and territories with aligning their priorities and resources with the Fish Habitat Partnerships.

FEDERAL CAUCUS

We will maintain message cohesiveness by working on communications initiatives and outreach efforts with the agencies that make up the Federal Caucus. This will help leverage our efforts by bringing federal agency support to bear on our shared priorities. In addition, by sharing the value of agency support for the Partnership with agency leaders we can acknowledge the tremendous contributions that the federal agencies are making and ensure coordination with other federal initiatives.

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