



**Monatiquot River, MA**  
2021 Waters to Watch Project



# Board Meeting Book



October 27-28, 2021  
ZOOM MEETING

**National Fish Habitat Partnership  
Board Meeting Agenda**

**Wednesday, October 27, 2021**

**1:00 – 4:00 PM ET**

**Zoom Meeting Information:**

<https://fishwildlife-org.zoom.us/j/86021946504?pwd=Tk1RejZyVWFmODYzNETkSDhiOFVkQT09>

**Meeting ID: 860 2194 6504**

**Passcode: 827581**

<b>Time (PM ET)</b>	<b>Agenda Item</b>	<b>Board Book Tab</b>	<b>Lead(s)</b>
<b>1:00</b>	<p><b>Welcome</b> <i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board staff</b> to take attendance.</li> <li>• <b>Board action</b> to approve the October 27 agenda.</li> <li>• <b>Board action</b> to approve the August 30 meeting summary.</li> </ul>	<b>Tab 1</b>	<b>Ed Schriever</b> ( <i>Association of Fish and Wildlife Agencies, Board Chairman</i> )
<b>1:15</b>	<p><b>Board Meeting Schedule &amp; Upcoming Board Tasks</b> <i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board discussion</b> of the desired meeting frequency for 2022.</li> <li>• <b>Board awareness</b> of the upcoming list of Board tasks and how they fit into the 2022-2023 schedule.</li> </ul>	<b>Tab 2</b>	<b>Alex Atkinson</b> ( <i>NOAA Fisheries, Board Staff</i> )
<b>1:30</b>	<p><b>Presentation of Board Survey Results</b> <i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board staff</b> shares highlights of the Board survey results to inform meeting discussions.</li> </ul>	<b>Tab 3</b>	<b>Ryan Roberts</b> ( <i>Association of Fish and Wildlife Agencies, Board Staff</i> )
<b>1:45</b>	<p><b>National Conservation Priorities Background and Setup</b> <i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board awareness</b> of background from the Science and Data Committee on the process and options developed for the Board's consideration.</li> </ul>	<b>Tab 4</b>	<b>Gary Whelan</b> ( <i>MI Department of Natural Resources, Board Staff, Co-chair of Science and Data Committee</i> )
<b>2:00</b>	<p><b>FHP Input on National Conservation Priorities</b> <i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>FHPs</b> have an opportunity to share input with the Board as they consider options for the FY23 National Conservation Priorities.</li> </ul>		<b>FHP Coordinators</b>

**2:30 National Conservation Priorities Discussion & Vote**

*Desired outcomes:*

- **Board discussion** of options presented by the SDC for the FY23 National Conservation Priorities.
- **Board action** to vote on the FY23 National Conservation Priorities.

**3:30 Upcoming Board Tasks – NFHP Action Plan Board Work Plan, & the Future of National Conservation Priorities**

*Desired outcomes:*

- **Board staff** to remind the Board of upcoming tasks, their timing, and how they are inter-related.

**4:00 Adjourn**

**Tab 4 Ed Schriever** (*Association of Fish and Wildlife Agencies, Board Chairman*)

**Alex Atkinson** (*NOAA Fisheries, Board Staff*)

## National Fish Habitat Partnership Board Meeting Agenda

**Thursday, October 28, 2021**

**1:00 – 3:00 PM ET**

**Zoom Meeting Information:**

<https://fishwildlife-org.zoom.us/j/87044397433?pwd=Y2loNUIITTvNRWjFhOHNjYy9WUFdvZz09>

**Meeting ID: 870 4439 7433**

**Passcode: 731525**

Time (PM ET)	Agenda Item	Board Book Tab	Lead(s)
1:00	<p><b>Welcome</b></p> <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board staff</b> to take attendance.</li> <li>• <b>Board action</b> to approve the October 28 agenda.</li> </ul>		<b>Ed Schriever</b> ( <i>Association of Fish and Wildlife Agencies, Board Chairman</i> )
1:15	<p><b>FHP Session</b></p> <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>FHPs</b> to bring forward current items of interest for the Board's discussion and consideration.</li> </ul>		<b>FHP Coordinator(s)</b>
1:45	<p><b>USFWS Update</b></p> <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board awareness</b> of any new developments at the Department of Interior.</li> </ul>		<b>Steve Guertin</b> ( <i>US Fish and Wildlife Service, Board Member</i> )
2:00	<p><b>Update on the Interagency Operational Plan</b></p> <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board staff</b> to provide an update on the Interagency Operational Plan progress and timeline.</li> </ul>		<b>Mike Bailey</b> ( <i>US Fish and Wildlife Service, Board Staff</i> )
2:15	<p><b>Appointment Process for Tribal Board Members</b></p> <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board staff</b> to outline the process planned for appointing the Tribal Board members once the Board receives the list from the Department of Interior.</li> </ul>		<b>Alex Atkinson</b> ( <i>NOAA Fisheries, Board Staff</i> )
2:30	<p><b>Capitol Hill Happenings</b></p> <p><i>Desired outcomes:</i></p>		<b>Christy Plumer</b> ( <i>Theodore Roosevelt Conservation Partnership, Board Member</i> ) &

- **Board awareness** of the status of relevant legislation that could impact NFHP.

**Mike Leonard** (*American Sportfishing Association, Board Member*)

**2:45 Bass Pro U.S. Open Amateur Tournament Update**

*Desired outcomes:*

- **Board awareness** of the eligibility requirements for Fish Habitat Partnerships to receive Bass Pro funds.
- **Board awareness** of timing of funding availability.

**Tab 5**

**Ryan Roberts** (*Association of Fish and Wildlife Agencies, Board Staff*)

**3:00 Adjourn**



## National Fish Habitat Partnership Board Meeting Agenda Monday, August 30, 2021 3:00 – 5:00 PM ET

### Zoom Meeting Information:

<https://fishwildlife-org.zoom.us/j/93280171466?pwd=ZDIyZVZ4RDlRbnNMQmtoaGRjcjN5dz09>

Meeting ID: 932 8017 1466

Passcode: 824403

### Board Members Present (22):

1	Allen	Stan	X
2	Austen	Doug	X
3	Bowden	Allison	X
4	Boyd	Douglass	X
5	Cantrell	Chris	X
6	Eischeid	Ted	X
7	Gilliland	Gene	X
8	Guertin	Steve	X
9	Gyant/Harper	Barnie/Rob	X
10	Kinsinger/Beard	Anne/Doug	X
11	Kruse	Carter	X
12	LeCoq	John	X
13	Leonard	Mike	X
14	Moore	Chris	X
15	Moore	Bryan	X
16	Nygren	Doug	X
17	Perry	Steve	X
18	Plumer	Christy	X
19	Rauch	Sam	X
20	Schaeffer	Timothy D.	X
21	Schriever	Ed	X
22	Slaughter	Joe	-
23	Trushenski	Jesse	X
24	Wilson/ Henegar	Bobby/ Jason	X

4	Jeff	Hastings	
5	Lori	Maloney	X
6	Heidi	Keuler	X
7	Rick	Westerhof	
8	Steve	Krentz	
9	Gordon	Smith	X
10	Branden	Bornemann	X
11	Jessica	Speed	
12	Joe	Nohner	
13	Kevin	Haupt	
14	Alicia	Marrs	
15	Joan	Drinkwin	
16	Jeff	Boxrucker	X
17	Debbie	Hart	X
18	Jessica	Graham	
19	Tim	Troll	X
20	Therese	Thompson	X
21	John	Netto	
22	Karin	Eldridge	X
23	Jessica	Hogrefe	X
24	Walter	Boltin	
25	Bill	Rice	
26	Michael	Daigneault	
27	Lisa	Heki	

### Board Staff Present (4):

- Alex Atkinson
- Ryan Roberts
- Gary Whelan
- Daniel Wieferich

### FHP & FWS Coordinators (14):

1	Lisa	Havel	
2	Alicia	Marrs	X
3	Jennifer	Graves	

### Others (8):

- Eric MacMillan (USFWS)
- Kim Conley (USFS)
- Doug Beard (USGS)
- Callie McMunigal
- Chris Carlson
- Christopher Estes

**Board Business/Items Approved by the Board:**

- August 30 Board meeting agenda – motion by: Doug Austen, seconded by: Chris Cantrell.
- July 26 Board meeting summary – motion by: Chris Moore, seconded by: Stan Allen.
- 2021 Waters to Watch list – motion by: Stan Allen, seconded by: Jesse Trushenski

Time (PM ET)	Agenda Item	Board Book Tab	Lead(s)
3:00	<p><b>Welcome</b></p> <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board staff</b> to take attendance.</li> <li>• <b>Board action</b> to approve the August 30 agenda.</li> <li>• <b>Board action</b> to approve the July 26 meeting summary.</li> </ul>	Tab 1	<b>Ed Schriever</b> ( <i>Association of Fish and Wildlife Agencies, Board Chairman</i> )
<p>Chairman Schriever started off this Board meeting by polling Board members regarding their ability to attend an in-person Board meeting October 27-29 in Washington DC given the continually evolving situation with variants of COVID-19 (52% indicated they could still attend an in-person meeting while 48% said no). This was followed by some discussion of meeting options including hybrid meeting options. There were mixed feelings among Board members about a hybrid meeting and concerns that would result in some Board members being left out of conversations. Most federal and many state employees still face travel restrictions.</p>			
3:15	<p><b>Upcoming Board Tasks &amp; Board Meeting Schedule</b></p> <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board awareness</b> of the next NFHP Board meeting which is scheduled to be in-person <b>October 27-29 in Washington, DC.</b></li> <li>• <b>Board awareness</b> of the upcoming list of Board tasks and how they fit into the 2021-2022 schedule.</li> </ul>	Tab 2	<b>Alex Atkinson</b> ( <i>NOAA Fisheries, Board Staff</i> )
<p>Alex Atkinson, NFHP Board staff, highlighted key items for the upcoming Board meeting agenda including: National Conservation Priorities, the NFHP Action Plan, a Board work plan, ACE Act reporting, and FHPs Congressional approval. The staff will work to align 2023 timelines (e.g. ACE Act deadlines, FHP funding timelines and FHP schedules) as we continue to navigate the transition following the passage of the ACE Act to allow the Partnership to continue to run smoothly.</p>			
3:30	<p><b>USFWS Update</b></p> <p><i>Desired outcomes:</i></p> <ul style="list-style-type: none"> <li>• <b>Board awareness</b> of the status of the list of Tribal member nominees.</li> <li>• <b>Board awareness</b> of the status of the Interagency Operational Plan development.</li> <li>• <b>Board awareness</b> of NFHP budget developments.</li> </ul>		<b>Steve Guertin</b> ( <i>US Fish and Wildlife Service, Board Member</i> )

Steve Guertin reported to the Board that he met with USFWS leadership the previous week to discuss the role of the USFWS in NFHP moving forward and implementation issues that remain to be resolved. He indicated that next

higher level briefings are planned in the coming weeks about the FY22 list of recommended FHP projects from the Board. Steve updated the Board that the Interagency Operational Plan is coming together and meeting next the 3<sup>rd</sup> week of September. There were no further updates on the Tribal Board member list that was currently under White House level review. Chairman Schriever asked if the IOP will be shared for Board review and Steve indicated the IOP will be shared with the Board. There was discussion among the Board about a desire for further coordination among Federal agencies working on habitat and the Federal Water Subcabinet. It was recognized that there are many opportunities now to coordinate program activities with administration initiatives like America the Beautiful and 30x30, but also push to realize the expanded version of NFHP that was envisioned at its start in 2006.

**3:40 Update on FY23 RFP Process & Timing**

**Alex Atkinson** (NOAA Fisheries, Board Staff)

*Desired outcomes:*

- **Board awareness** of the items needed in order for FHPs to begin FY23 RFP process.
- **Board awareness** that the FY22 Allocation Subcommittee is reconvening & staff hosting an FHP call on September 1.

Alex Atkinson, NFHP Board staff, provided a refresher for the Board on the new timing of Request for Proposals run by the FHPs each year based on changes in the ACE Act.

- **By March 31** – Project proposals are due to the NFHP Board. *\* although March is the first major deadline in the Act, FHP project proposals also must undergo Steering Committee Review by March*
- **By July 1** - Recommended project list for FY23 is due from the Board to DOI for review.

By this time of year in the former NFHP model, many FHPs had already opened up their RFPs. However, because the newly established Board timeline in the ACE Act and because Board has not yet voted upon the National Conservation Priorities for FY23, some FHPs are not proceeding with the release of their RFPs. After the Board votes in October to establish the FY23 National Conservation Priorities, the FHPs will have more of the required pieces to assemble their RFPs, however, they will also have to make additional modifications to their RFPs to reflect the specific project requirements outlined in the ACE Act. To get moving on shaping up the Board's portion of the project review for FY23, the Allocation Subcommittee will be meeting tomorrow to reflect on the FY22 Board review process and brainstorm ways to improve upon the Board review process. That group will also be meeting again following the Board receiving feedback from DOI. Additionally, the Board staff is planning a facilitated call with all FHP coordinators on September 8<sup>th</sup> to walk through the ACE Act requirements for FHPs projects to ensure that all FHPs have the same consistent information and messaging to communicate with partners given that this year continues to ease into the transition to fully implementing the ACE Act.

**3:50 NFHP FY23 National Conservation Priorities Update**

**Tab 3**

**Gary Whelan** (MI Department of Natural Resources, Board Staff, Co-chair of Science and Data Committee)

*Desired outcomes:*

- **Board awareness** of the status of the Science and Data Committee's work to develop options for the FY23 National Conservation Priorities.
- **Board opportunity** to provide feedback to the Committee about the National Conservation Priorities.

Gary Whelan, co-chair of the Science and Data Committee, provided the Board an introduction to the Committee's initial brainstorming around National Conservation Priorities. The list provided is not ranked, but provides the Board an initial starting place for thinking about FY23 priorities. The group hopes to rank the list by mid-September to provide by the next Board meeting. Gary asked for feedback on this list and that Board member review these ideas and think about priorities in advance of October.

**4:00 Video: Example of FHP Collaboration with Landowners in Southeast Aquatic Resources Partnership (SARP) Tab 4 Board Staff**

*Desired outcomes:*

- **Board awareness** of the collaboration on the Alum Fork of the Saline River project in Arkansas with SARP.

A SARP video highlighting collaboration with local landowners was shown – here’s the introduction from SARP: This project was a streambank restoration project on the Saline River in Benton, AR. Mr. Brian Nalley, owner of Buckhorn Ranch, LLC., reached out to Matthew Irvin, West Central Arkansas Stream Team Coordinator with the Arkansas Game and Fish Commission looking for some assistance to his erosion problems. Mr. Nalley previously reached out to a few other folks until he found Matthew who was able to assist him. Matthew is a graduate of Louisiana Tech University at Ruston, Louisiana with a B.S. in Wildlife Conservation and he has 10 years of wildlife management experience and 11+ years of streambank stabilization, aquatic habitat improvement, and water quality education experience. Matthew has experience with surveying, designing, planning, permitting and constructing many streambank stabilization projects. Matthew's experience coupled with the landowner's energy and proactive conservation management provided the required elements to implement this great project providing benefits to aquatic resources and recreational activities. Please enjoy the video.

**4:15 2021 Waters to Watch Campaign Tab 5 Ryan Roberts (Association of Fish and Wildlife Agencies, Board Staff)**

*Desired outcomes:*

- **Board awareness** of the Waters to Watch campaign goals and the 2020 campaign outcomes.
- **Board awareness and discussion** of the Fish Habitat Partnership nominated Waters to Watch for 2021.
- **Board vote** to endorse the 2021 Waters to Watch.

Ryan Roberts reminded the Board that the goals of the annual Waters to Watch campaign are to focus attention on FHPs, garner local and national support, and strengthen existing and develop new collaborators with shared goals. We’ve featured over 100 projects via the campaign and have added retrospective projects to the list where we take a look back at a previously featured Water to Watch and get an update on its progress. The timing of this year’s campaign was pushed back from spring to early fall to align with National Hunting and Fishing Day (September 25). NFHP will announce the campaign with a press release and on social media. The Board voted to approve the 2021 Waters to Watch list of projects.

**4:35 Capitol Hill Happenings TBD**

*Desired outcomes:*

- **Board awareness** of relevant legislation that could impact NFHP activities.

Christy Plumer presented to the Board about legislative happenings. We are in the middle of the FY22 appropriations process and it is delayed. \$7.662M is included in HR4502 for NFHP, but the Senate and Commerce Justice and Science appropriations budgets have yet to be released. We do know that USFWS budgeted for technical and scientific assistance funds, while it did not make it into the NOAA NMFS budget. Long-term, we will advocate for those funds to be included in the budget requests across all agencies who are authorized to receive those funds in the ACE Act. We want to be more organized for our advocacy work for FY23 which is well underway. We’d like to

put a letter together with a funding request across the Board and will start working on that soon to aim to have a letter before the Board early next year.

Christy also shared an update about the Bipartisan Infrastructure Framework (BIF) and indicated that the team has been pushing hard for infrastructure to have a paradigm shift looking at new innovations, natural infrastructure, green infrastructure, etc. These are all integrated with the environment. The BIF was approved by Senate in early August by a bipartisan group of Senators and includes \$1.2T with \$500B in new spending. The House will consider the BIF by September 27. Christy outlined several wins within the BIF including:

- Wildlife Crossing Program \$350M – some aquatic connectivity and culvert replacements (competitive grant program)
- Clean Water \$14.65B
- PROTECT Grant \$1.4B – focused on climate resilience, aquatic connectivity in this grant program
- USACE Ecosystem Restoration \$1.9B
- National Ocean and Coastal Security Program \$492B
- Legacy Roads and Trails \$250M
- WaterSMART \$400M – on-rand or on-farm with a focus on the west, water efficiency, in-stream flows
- Abandoned mine rehabilitation
- Sportfish Restoration reauthorization
- Culvert removal and restoration program \$900M

Finally, Christy outlined the contents of the budget reconciliation package (10 year package) which includes \$3.5T and only requires a simple majority to pass. Authorizing committees are spending quickly, House will move packages to the floor by September 15<sup>th</sup>.

#### **4:45 Bass Pro U.S. Open Amateur Tournament Update**

*Desired outcomes:*

- **Board awareness** of the eligibility requirements for Fish Habitat Partnerships to receive Bass Pro funds.
- **Board awareness** of timing of funding availability.

**Ryan Roberts** (*Association of Fish and Wildlife Agencies, Board Staff*)

Ryan Roberts, NFHP Board staff, provided an update about the Bass Pro Tournament. The latest event was hosted at Lake St. Clair in Michigan and was attended by Gary Whelan, Board staff, and Joe Nohner, Midwest Glacial Lakes Partnership coordinator. Ryan shared that an agreement between Bass Pro and Beyond the Pond is in place for funding, shared with the Board on Friday. Bass Pro did not want to sign a formal agreement. The grant program gives priority to projects to improve reservoirs, lakes, and flows to reservoirs and lakes. Projects will be selected by the NFHP Board. Half events have been completed (4 of 8) and NFHP has had a presence at all events. The next event is on September 11 – outside Nashville, TN. A board member recommended that the Board consider giving Bass Pro a memorable gift to show our appreciation of their donation to NFHP.

#### **5:00 Adjourn**

### National Fish Habitat Partnership - Board Tasks and Meeting Schedule

Task	2021		2022				2023				2024				2025		
	July – Sept.	Oct.- Dec.	Jan.- March	April - June	July – Sept.	Oct. – Dec.	Jan. - March	April - June	July – Sept.	Oct. – Dec.	Jan - March	April - June	July – Sept.	Oct. – Dec.	Jan. - March	April - June	July – Sept.
Virtual Board Meeting	X		X		X		X		X		X		X		X		X
In-Person Board Meeting				X		X		X	X		X	X	X		X	X	
Board Develops & Refines Procedures	X	X	X				X				X				X		
Board Develops/Expands Committees	X	X															
Board Reviews Committees Work & Proposed Annual Workplan		X				X				X				X			
Board Reviews, Refines, & Approves National Conservation Priorities		Oct				X				X				X			
Board Appoints 2 Tribal Board members	X																
Board Reviews & Approves the First Interagency Operational Plan (IOP)	X	Oct															
Board Reviews and Refines the IOP		X				X				X				X			
Draft & Review Report to Congress (submitted by Feb 1) <i>(Report to Congress on Future of FHPs and Modifications)</i>		X				X				X				X			
Board Revisits the NFHP Action Plan	X	X															
Board Reviews and Approves Annual Board Work Plan		X				X				X				X			
Board Solicits FHPs for Project Submissions			X				X				X				X		
Board Reviews Project Submissions			X	X			X	X			X	X			X	X	
Board Submits FHP Project List to DOI					X				X				X				X





Q1 What are the most important NFHP issues to you as a Board member?

projects priorities funding place **Board** needs  
partnership sustainability support habitat conservation NFHP FHPs

Q2 What would you like to see the Board achieve in the next 2 years?

see Board members develop new **NFHP** Plan **Board** conservation  
funding process

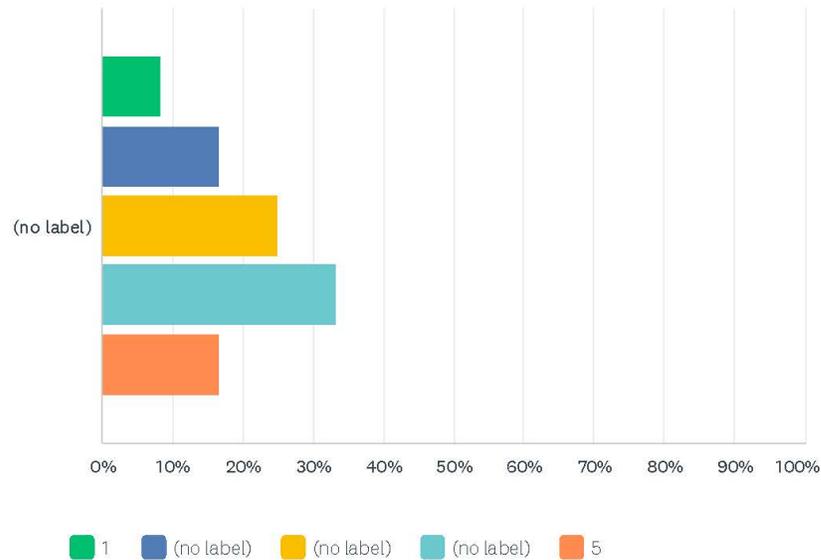
Q3 What do you hope to see for the National Fish Habitat Partnership?

see habitat conservation funding partnerships **fish habitat** Better

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q4 In 2023, I support maintaining the current list of 5 national conservation priorities.

Answered: 12 Skipped: 0

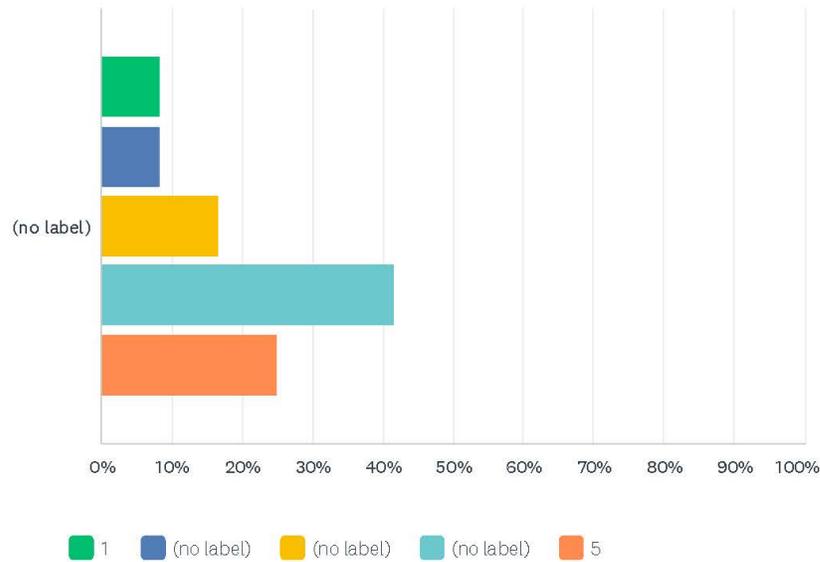


	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	8.33%	16.67%	25.00%	33.33%	16.67%	12	3.33
	1	2	3	4	2		

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q5 In 2023, I envision maintaining a similar list of conservation priorities with small changes.

Answered: 12 Skipped: 0

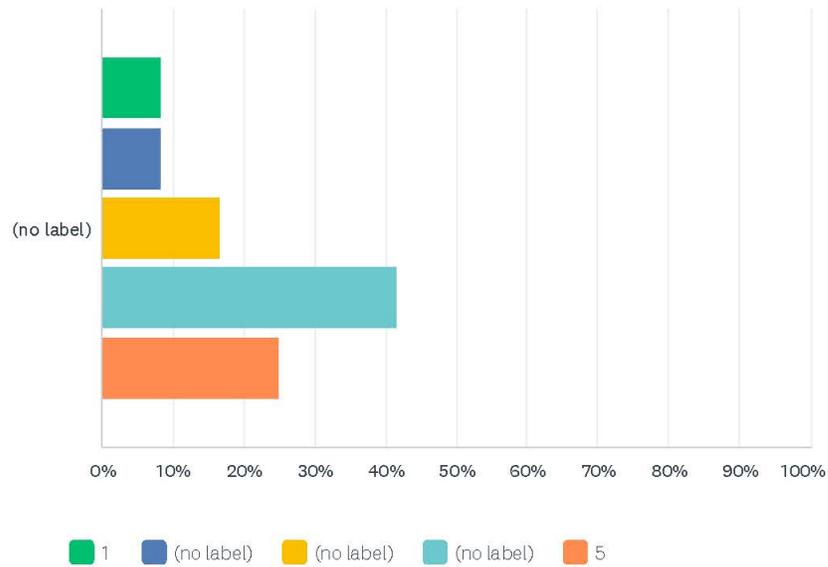


	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	8.33%	8.33%	16.67%	41.67%	25.00%	12	3.67
	1	1	2	5	3		

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q6 In 2023, I support maintaining high-level national conservation priorities with the expectation that national conservation priorities may be revised to be more specific in the future.

Answered: 12 Skipped: 0

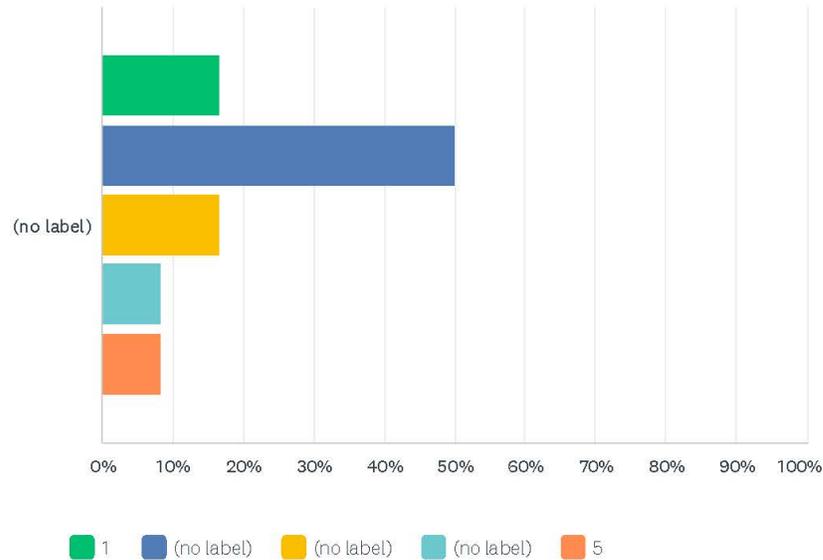


	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	8.33%	8.33%	16.67%	41.67%	25.00%		
	1	1	2	5	3	12	3.67

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q7 In 2023, I envision making substantial changes to the national conservation priorities.

Answered: 12 Skipped: 0

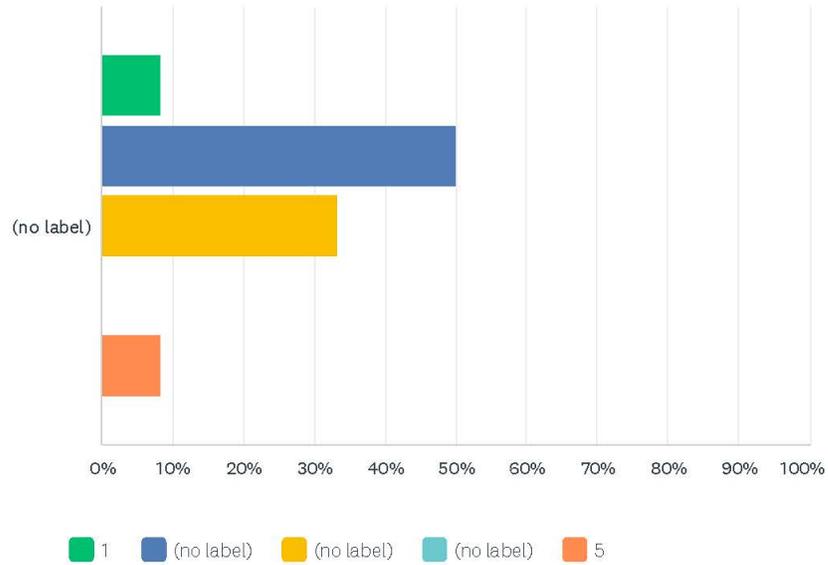


	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	16.67%	50.00%	16.67%	8.33%	8.33%		
	2	6	2	1	1	12	2.42

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q8 I feel national conservation priorities should be specific and quantitative in nature.

Answered: 12 Skipped: 0

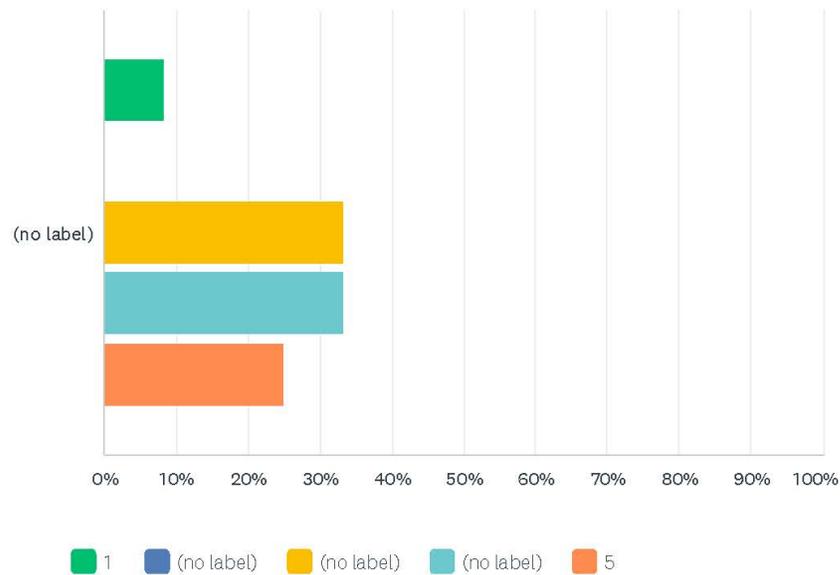


	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	8.33%	50.00%	33.33%	0.00%	8.33%		
	1	6	4	0	1	12	2.50

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q9 I support high-level (qualitative) national conservation priorities that should encompass the diverse makeup of the current suite of NFHP partners.

Answered: 12 Skipped: 0

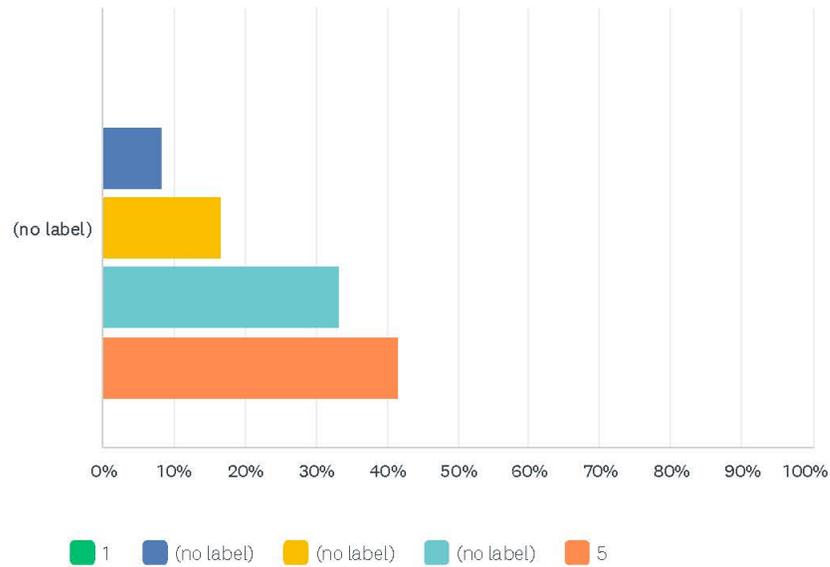


	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	8.33%	0.00%	33.33%	33.33%	25.00%	12	3.67
	1	0	4	4	3		

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q10 I support higher level (qualitative) national conservation priorities but believe the Board needs a means to measure and report more specific conservation goals through other Board efforts such as a revised version of the NFHP Action Plan or Board Work Plan or other guiding documents.

Answered: 12 Skipped: 0

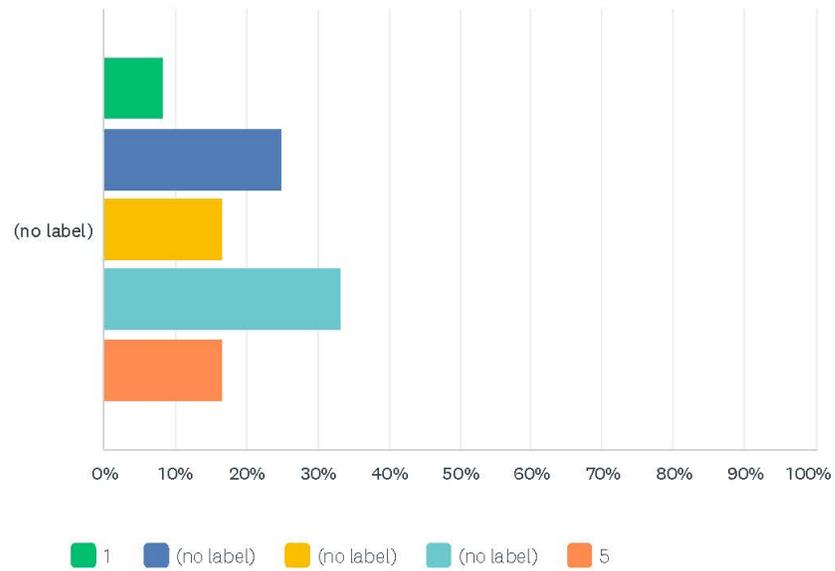


	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	0.00%	8.33%	16.67%	33.33%	41.67%		
	0	1	2	4	5	12	4.08

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q11 I support having a specific list of national conservation priorities for major habitat types (e.g. lakes/reservoirs, streams, coastal/marine/Great Lakes).

Answered: 12 Skipped: 0

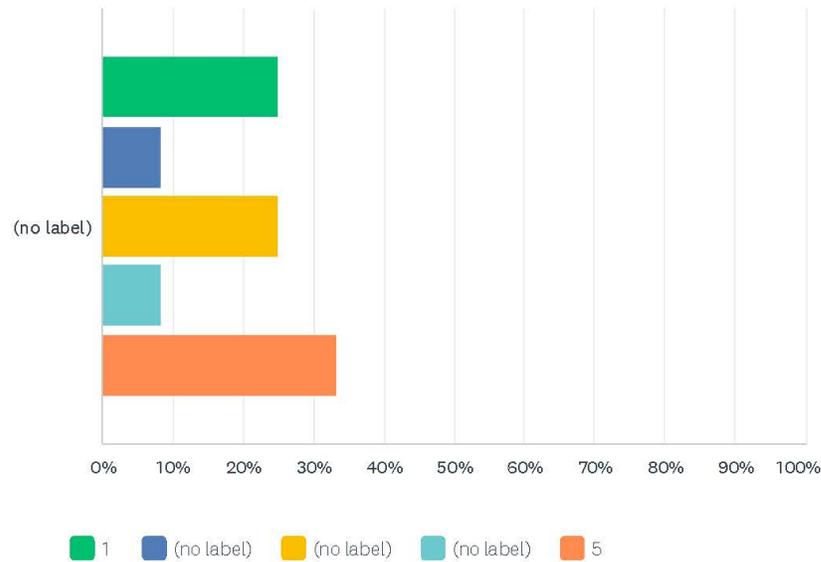


	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	8.33%	25.00%	16.67%	33.33%	16.67%		
	1	3	2	4	2	12	3.25

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q12 Coordination and operations (e.g. FHP coordinators, National coordinator, Science & Data Committee) fit as a national conservation priority.

Answered: 12 Skipped: 0

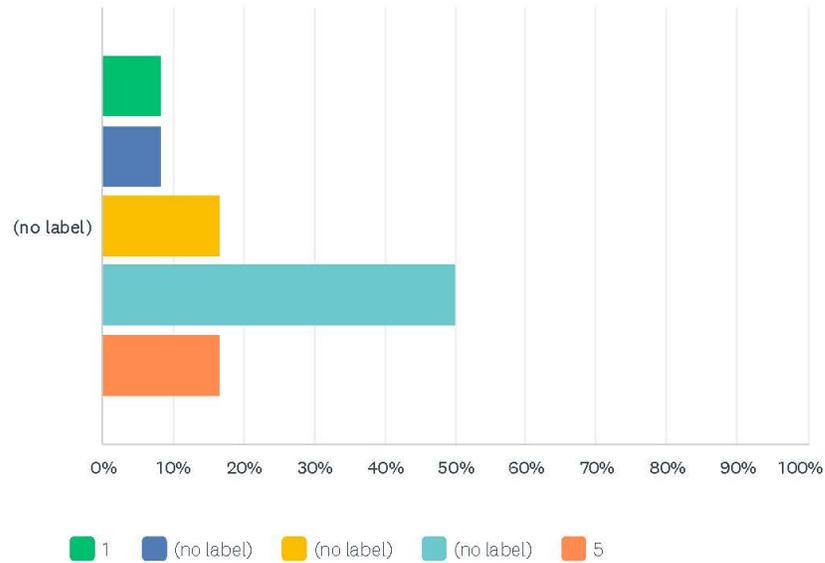


	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	25.00%	8.33%	25.00%	8.33%	33.33%		
	3	1	3	1	4	12	3.17

National Fish Habitat Board Survey Regarding National Conservation Priorities

Q13 National and regional assessment of habitat and prioritization of projects fits as a national conservation priority.

Answered: 12 Skipped: 0



	1	(NO LABEL)	(NO LABEL)	(NO LABEL)	5	TOTAL	WEIGHTED AVERAGE
(no label)	8.33%	8.33%	16.67%	50.00%	16.67%	12	3.58
	1	1	2	6	2		

## Q14 What would you like to see in the Board's list of National Conservation priorities?

Answered: 9 Skipped: 3

#	RESPONSES	DATE
1	I would like to see DEIJ and America the Beautiful administration initiatives inform the development of the NFHP priorities	10/19/2021 1:43 PM
2	High level goals that allow regional partnerships to implement.	10/18/2021 10:39 AM
3	Flexibility in how they are used. Some partnerships can't address each priority.	10/15/2021 5:26 PM
4	Adequate amounts of clean water for the sustainability fish populations nationwide	10/13/2021 11:27 AM
5	Nothing more than a high level description of the priorities.	10/11/2021 11:38 AM
6	Rather than try to make each of the other national priorities quantitative in nature, I think we could signal our desire for more quantitative-oriented work by stating that as a stand-alone priority. Something like, "To achieve measurable improvements in fish habitat and conservation gains through support of quantitative habitat assessments and projects." (not great verbiage, but somewhere to start) I would also like to see climate-related language incorporated into the other priorities or (preferably) the need for habitat conservation for climate resiliency as a stand-alone priority. Finally, I would like to see some language that signals our desire for diverse partnership. I think the Board can signal these preferences--and others, I suppose--within more broadly written priorities.	10/11/2021 11:12 AM
7	debated and agreed up priorities where conservation action can lead to successful outcomes. Right now everything is a priority and there's no clear success criteria.	10/11/2021 9:09 AM
8	follow ACE...add angling opportunity	10/9/2021 1:50 PM
9	Either as an independent priority, or added within one or more current priorities, an emphasis on the "people" side of NFHP... restoring fish habitat for the benefit of healthier fisheries ultimately leading to improved fishing opportunities (and associated economic and social benefits to the nation)	10/8/2021 1:12 PM

## Q15 What do you see as the purpose of the NFHP National Conservation Priorities?

Answered: 12 Skipped: 0

#	RESPONSES	DATE
1	To set the scope of NFHP work and establish high level priorities that can be stepped down in each individual FHP	10/19/2021 1:43 PM
2	To provide guidance, direction, and focus to the work of the FHPs and our partners.	10/18/2021 6:12 PM
3	Help guide overall investment.	10/18/2021 10:39 AM
4	ACE Act Title II Section 201(2) - Meets a requirement under the law. (Oblivious purpose) Guides the board in decision making and reporting to Congress.	10/15/2021 5:26 PM
5	There will always be more work to do than there are resources. The priorities should narrow the scope of projects such that implementation of projects provides meaningful benefit to important species.	10/13/2021 4:35 PM
6	To give overarching direction and set metrics to determine success	10/13/2021 11:27 AM
7	To provide national direction and guidance for conserving fish habitat.	10/11/2021 11:38 AM
8	To communicate the nature of the NFHP and its work in a broad sense. To be inclusive--to make room for solid habitat conservation projects, regardless of the specific nature of the work. I do not think narrowly written, prescriptive priorities will serve the NFHP or the FHPs well. As I shared with the SDC during our recent discussions, really specific priorities are likely to exclude otherwise perfectly good projects because they don't 'fit' and--in some cases--they may create perverse incentives that undermine fisheries conservation efforts. There are other levels at which more specifics might be appropriate, but not for national priorities.	10/11/2021 11:12 AM
9	Drive conservation action towards measurable, specific, and highest priority conservation outcomes. Facilitate leveraging of funds.	10/11/2021 9:09 AM
10	warm fuzzy goals that we can point to that show we are following the requirements in the Act	10/9/2021 1:50 PM
11	Providing a unified vision for the NFHP Board and partnerships. Ensuring we're all in agreement on the program's direction and working to that end.	10/8/2021 1:12 PM
12	The higher level priorities for why we are all doing what we do. These national priorities should have specifics under them for meeting those priorities.	10/8/2021 12:50 PM

**Title: National Fish Habitat Conservation Priorities Options**

**Desired Outcome:**

- **Background for the Board Discussion on National Fish Habitat Conservation Priorities Options** in the form of a Science and Data Committee (SDC) analysis on potential National Fish Habitat Conservation Priorities Options.

**Background:**

The America's Conservation Enhancement Act (ACE Act) Title II Section 201 (2) requires the National Fish Habitat Partnership Board (Board) to establish consensus on a set of National Conservation Priorities to guide the actions and investment of Fish Habitat Partnerships (FHPs), and to measure the success of the National Fish Habitat Partnership (NFHP) as a program. The FHPs are the primary work units of the NFHP and are formed around key aquatic habitat types or habitat processes, focal keystone species, or distinct geographic areas. With this diverse set of FHPs a set of national conservation priorities are needed from the Board to: guide FHPs to effectively address fish habitat conservation needs at the appropriate scale, mobilize partners and the public, prepare and execute their proposal processes in a timely fashion, and leverage resources to conserve, restore and improve habitat.

After reviewing previous sets of Board priorities from November 2007 and February 2013, the Board approved an interim set of qualitative National Conservation Priorities for FY2022 as follows:

1. *Protect intact healthy waters*
2. *Restore hydrologic conditions for fish*
3. *Reconnect fragmented fish habitats*
4. *Restore water quality*
5. *Coordination and operational support for FHPs to make on-the-ground progress within program appropriations*

The Board now needs to develop a new set of National Conservation Priorities to guide NFHP into the foreseeable future. To assist in this task, the Science and Data Committee (SDC) organized three system workgroups to provide potential priority options as follows:

1. Rivers and Streams
  - Tim Birdsong (TPWD)
  - Jeff Kopaska (IA DNR)
  - Dana Infante (MSU)
  - Mike Bailey (USFWS)

- Craig Paukert (USGS MO COOP)
  - Jim McKenna (USGS)
  - Richard Mitchell (EPA)
  - Kat Hoenke (SARP)
  - John Young (USGS)
  - Christopher Estes (AK FGD – retired)
  - Dana Infante (MSU)
  - Jonathan Higgins (TNC)
  - Lori Maloney (EBTJV)
  - Richard Mitchell (USEPA)
2. Lakes and Reservoirs
- Tim Birdsong (TPWD)
  - Dana Infante (MSU)
  - Jeff Kopaska (IA DNR)
  - Jesse Trushenski (Riverence)
  - Gene Gilliland (BASS)
  - Christopher Estes (AK FGD – retired)
3. Coastal and Great Lakes
- Moe Nelson (NOAA)
  - Joan Drinkwin (PMEP)
  - Peg Brady (NOAA)
  - Bruce Vogt (NOAA)
  - Jim McKenna (USGS)
  - Kate Sherman (PSMFC)
  - Mike Bailey (USFWS)

Gary Whelan and Daniel Wieferich facilitated that process for each of the system groups and the SDC has developed the options below as a set of potential National Conservation Priorities with the intent to assist the Board's discussion. This list includes examples of qualitative and quantitative priorities along with additional Board suggested priorities based on the July-August input from the Board. As noted within applicable options, SDC has ranked individual priorities within system groups for consideration at the October Board Meeting.

*Overall Recommendations.* One overall trend from this work is clear, the SDC members ranked protection of intact systems higher than rehabilitating impaired systems regardless of which system they worked on as protection/conservation of intact systems has a much higher return on investment than repairing damaged systems. It is orders of magnitude more expensive to fix degraded systems than to protect them prior to being degraded and rehabilitated systems rarely

achieve the level of restoration required for the system to adequately provide the fisheries and ecosystem services that they once provided. The SDC asks to Board to broadly consider the protection/conservation of intact systems with protection/conservation including the full range of options from the broad legal protection or acquisition of lands and water consistent with the ACE Act to the protection of individual intact system functions or factors (i.e. hydrology, connectivity, material recruitment and transport, water quality, living habitat, and geomorphology). The SDC members also recommend that this document be a living document that is reviewed on a regular schedule to incorporate new science and policy information along with new Board direction from upcoming work on the NFHP Action Plan and Annual Workplans. Finally, any selected National Conservation Priority should have clear measurements of success provided or quickly developed for them to ensure that FHPs can properly design projects to meet the Board's priorities.

## **Potential National Conservation Priority Options**

### **1. Use the existing set of National Conservation Priorities.**

- *Protect intact healthy waters*
- *Restore hydrologic conditions for fish*
- *Reconnect fragmented fish habitats*
- *Restore water quality*
- *Coordination and operational support for FHPs to make on-the-ground progress within program appropriations*

### **2. Use the existing set of National Conservation Priorities with annual (or appropriate timeframe) areas of emphasis.** This option does not exclude FHP work in any area but would score work higher in areas of emphasis. An example for consideration is provided for each priority area.

- *Protect intact healthy waters*
  - For example – In FY2023, the NFHP Board will score projects and FHPs that protect intact systems higher with a goal in FY2023 of protecting XXX miles of rivers and streams, XXX acres of lakes and reservoirs, and XXX acres or sq. miles of estuaries, Great Lakes and marine waters
- *Restore hydrologic conditions for fish*
  - For example – In FY2023, the NFHP Board will score projects and FHPs that rehabilitate hydrology in systems higher with a goal in FY2023 of rehabilitating hydrology in XXX miles of rivers and streams, XXX acres of lakes and reservoirs, and XXX acres or sq. miles of estuaries, Great Lakes and marine waters. Hydrology should be viewed broadly to include annual and daily flow patterns, lake and reservoir elevations, and currents/water velocity.

- *Reconnect fragmented fish habitats*
    - For example - In FY2023, the NFHP Board will score projects and FHPs that reconnect systems higher with a goal in FY2023 of reconnecting XXX miles of rivers and streams, XXX acres of lakes and reservoirs, and XXX acres or sq. miles of estuaries, Great Lakes and marine waters. Connectivity should be viewed broadly to include longitudinal and local/riparian connections.
  - *Restore water quality*
    - For example - In FY2023, the NFHP Board will score projects and FHPs that rehabilitate water quality systems higher with a goal in FY2023 of improving water quality in XXX miles of rivers and streams, XXX acres of lakes and reservoirs, and XXX acres or sq. miles of estuaries, Great Lakes and marine waters. Water quality should be viewed broadly to include temperature and all chemical constituents.
  - *Coordination and operational support for FHPs to make on-the-ground progress within program appropriations*
    - For example, In FY2023, the NFHP Board will score projects and FHPs that measurably increase local public awareness and support for fish habitat conservation support higher with a goal of increasing public awareness and financial support for NFHP projects by 10% within the appropriate geographic influence area of FY2023 funded NFHP projects.
3. **Use the existing set of National Conservation Priorities with the addition of one National Conservation Priority on structural fish habitat and provide annual (or appropriate timeframe) system-specific focus areas within each priority.** Within the existing National Conservation Priorities, the Board would provide a set of nested system-specific items for annual (or appropriate timeframe) work focus areas. FHP projects that address these annual priorities would be scored higher than those that do not. Unranked SDC work priority suggestions are provided for each National Conservation Priority with habitat actions and information acquisition being separate groups within each National Conservation Priority. SDC did not rank these work priorities overall due to the mixing of system types. Some work priorities will show up in multiple National Conservation Priorities as they do not classify cleanly into one priority.
- *Protect intact healthy waters*
    - **Habitat Actions**
      - Preserve intact healthy fish habitats
      - Protect intact healthy waters by identifying reference stream conditions and least disturbed lotic systems for protection and compare

to current protection status. (Resources: EPA NRSA 2013-2014, NFHP 2015)

- Restore and preserve natural river flows
- Restore and preserve natural watershed conditions
- Restore and preserve undeveloped shorelines
- Protect 100 or XXX miles of intact river and stream habitat per year.
- Protect 1000 or XXX miles of intact and healthy river and stream habitat including natural stream flows. Document whether the key target fish or invertebrate populations remained constant or increased in distribution, relative abundance or measured abundance.
- Protect 100 or XXX sq. miles of intact lake and impoundment/reservoir habitat per year.
- Protect 10,000 or XXXXX acres of intact lake habitat including natural lake levels - document whether the key target fish or invertebrate populations remained constant or increased in distribution, relative abundance or measured abundance.
- Conserve “resilient strongholds” which are Great Lakes and marine habitats that are most resilient to climate change and can support the most diverse range of plants and animals into the future.
- Conserve the connectivity of habitat which will be essential for maintaining healthy populations, promoting biological diversity and enabling organisms to respond to environmental changes.
- Protect natural shorelines and nature-based infrastructure that provides fish habitat and community resilience in estuaries.
- Ensure resiliency of fish habitat to climate change and measure the following for targeted systems:
  - Acreage protected/restored in landward migration zones
  - Public perception of climate change and the importance of restoration/protection of habitat
  - Climate change adaptation measures
  - Quantify blue carbon sequestration
  - Climate resilience in restoration projects of NFHP
- Protect 100 or XXX sq. miles of intact estuarine, coastal and Great Lakes habitat per year.
- Protect 100 or XXX sq. miles of intact watersheds per year with an emphasis on those that are climate change sensitive.
- Information Acquisition to Inform Future Board Decisions
  - Monitor conservation outcomes and assess benefits to fish and people

- Identify “resilient strongholds” which are inland, Great Lakes and marine habitats that are most resilient to climate change and can support the most diverse range of plants and animals into the future.
- Identify the connectivity of habitat which will be essential for maintaining healthy populations, promoting biological diversity and enabling organisms to respond to environmental changes.
- Ensure resiliency of fish habitat to climate change by quantifying blue carbon sequestration of each marine system targeted by work.
- Identify high quality systems for protection or conservation.
- *Restore hydrologic conditions for fish*
  - Habitat Actions
    - Restore and preserve natural river flows and hydrologic conditions
    - Restore and preserve natural watershed conditions
    - Restore altered fish habitats
    - Rehabilitate any of the NFHP processes and factors (**hydrology**, geomorphology, water quality, material transport, connectivity, and living habitat) on 50 miles of degraded river and stream habitat per year.
    - Increase the number of river miles by XXX that have adequate amounts of seasonal long-term instream flows have been legally conserved (protected, restored, and enhanced) by either securing water rights, purchasing or leasing water for one or more of these purposes to sustain habitat conditions (quantify and quality) needed to sustain fish and other aquatic habitats (freshwater and estuarine).
    - Manage water levels to maintain and enhance fish habitats
    - Increase the number of lakes/reservoirs by XXX that adequate seasonal long-term water levels have been legally conserved (protected, restored, and enhanced) by either securing water rights, purchasing or leasing water for one or more of these purposes to sustain habitat conditions (quantity and quality) needed to sustain fish and other aquatic habitats (freshwater and estuarine).
  - Information Acquisition and Outreach to Inform Future Board Decisions
    - Monitor conservation outcomes and assess benefits to fish and people
    - Support applied research to refine strategies and techniques for fish habitat restoration
    - Restore hydrologic conditions for fish by identifying the role of natural hydrology in structuring riverine fish assemblages and use this relationship to assess potential responses to hydrologic disturbance to

- improve return on habitat investments. (Resource: USGS EcoFlows program)
- Development of or review of scientific knowledge about how various climate change scenarios will interact with other stressors to impact available habitat for species of interest and thus change the expected baseline for watershed improvements
  - Training, education, and outreach products that help municipalities and other local organizations properly design roads, stream crossings, and other infrastructure to reduce erosion, score, and flooding risk during high water events, which are increasing in intensity and frequency.
  - Work with municipalities/governments/highway departments to understand environmentally sensitive infrastructure especially in light of changes in precipitation.
- *Reconnect fragmented fish habitats*
    - Habitat Actions
      - Restore and preserve natural watershed conditions
      - Restore altered fish habitats
      - Restore instream and floodplain connectivity
      - Removal of physical and/or chemical barriers to movement, thus maximizing habitat available during low flow and high temperature periods.
      - Rehabilitate any of the NFHP processes and factors (hydrology, geomorphology, water quality, material transport, **connectivity**, and living habitat) on 50 or XX miles of degraded river and stream habitat per year.
      - Restore and reconnect Great Lakes and marine fish habitat as measured by amount of each of the following removed or reconnected:
        - Area of tidal wetlands and shellfish beds by type
        - Area of Submerged Aquatic Vegetation (SAV)
        - Total aquatic habitat area.
        - Area of improved access/connectivity
        - Number of barriers to tidal connectivity/fish passage
        - Length of stream miles
        - Life history and strategy needs for key species such area of nursery habitat
        - Amount of habitat complexity
        - Thermal (coldwater) refugia
      - Rehabilitate any of the NFHP processes and factors (hydrology, geomorphology, water quality, material transport, connectivity, and living habitat) on 10 or XX sq. miles of degraded estuarine, coastal, and Great Lakes habitat per year.

- Information Acquisition and Outreach to Inform Future Board Decisions
  - Monitor conservation outcomes and assess benefits to fish and people.
  - Support applied research to refine strategies and techniques for fish habitat restoration.
  - Development of or review of scientific knowledge about how various climate change scenarios will interact with other stressors to impact available habitat for species of interest and thus change the expected baseline for watershed improvements
  - Reconnect fragmented fish habitats by assessing cumulative impact of small barriers to fish passage and upstream access to add value to previous barrier prioritization projects (e.g. TNC fish passage prioritization).
  - Develop training, education, and outreach products that help municipalities and other local organizations properly design roads, stream crossings, and other infrastructure to reduce erosion, score, and flooding risk during high water events, which are increasing in intensity and frequency.
  - Develop projects to work with municipalities/governments/highway departments to understand environmentally sensitive infrastructure especially in light of changes in precipitation.
  - Conserve genetic diversity of fish populations to maximize likelihood of beneficial alleles and thus population persistence: genetic baseline studies followed by translocation and/or genetic rescue.
  - Develop large scale, ecosystem level conservation strategies/plans that connect wetlands, SAV beds, and shellfish reefs in a comprehensive way to enhance their co-benefits and resilience to climate and other stressors.
- *Restore water quality*
  - Habitat Actions
    - Restore and preserve natural watershed conditions
    - Restore altered fish habitats
    - Advance coastal blue carbon efforts.
    - Restore water quality
    - Reduce sediment, phosphorus or nitrogen inputs into 100 or XXX miles of degraded river and stream habitat degraded waters to a level within 25% of the natural variation or above applicable numeric state water quality criteria. Document whether the key target fish or invertebrate populations remained constant or increased in distribution, relative abundance or measured abundance.
    - Increase resiliency of aquatic systems to climate change.

- Information Acquisition to Inform Future Board Decisions
  - Monitor conservation outcomes and assess benefits to fish and people.
  - Support applied research to refine strategies and techniques for fish habitat restoration.
  - Development of data products or decision support tools to help prioritize locations of projects based on potential for thermal conditions (e.g. locations of springs and groundwater inputs) to support healthy target fisheries populations into the future
  - Development of or review of scientific knowledge about how various climate change scenarios will interact with other stressors to impact available habitat for species of interest and thus change the expected baseline for watershed improvements
  - Identify key degraded systems whose sediment, phosphorus or nitrogen inputs have been modified by more than 25% above numeric State Water Quality criteria or from the natural and expected variance for such inputs.
  - Better understand the potential role of climate change induced range shifts on re-structuring fish communities, trophic relationships (and other "emergent properties"), and habitat use to better understand the implications for aquatic habitat preservation and restoration into the future.
- *Restore and enhance “structural” or “processes that control” fish habitat*
  - Habitat Actions
    - Restore and preserve littoral habitats
    - Restore and enhance structural fish habitats
    - Rehabilitate any of the NFHP processes and factors (hydrology, geomorphology, water quality, material transport, connectivity, and living habitat) on 50 or XX sq. miles of degraded lake and impoundment/reservoir habitat per year.
    - Rehabilitate any of the NFHP processes and factors (hydrology, geomorphology, water quality, material transport, connectivity, and living habitat) on 50 or XX miles of degraded river and stream habitat per year.
    - Rehabilitate any of the NFHP processes and factors (hydrology, geomorphology, water quality, material transport, connectivity, and living habitat) on 10 or XX sq. miles of degraded watersheds per year with an emphasis on those that are climate change sensitive.
    - Increase the societal value of a minimum of 100 or XXX miles of lotic habitat lotic habitat by 10 or XX% per year.

- Increase the societal value of a minimum of 100 or XX sq. miles of lentic or marine habitat by 10 or XX% per year.
- Conserve or restore habitat for one extirpated population in each Great Lake and marine coast segment every decade to allow reestablishment of such populations.
- Expand the total number of accessible, appropriate metacommunity habitat nodes for one declining fish population per Great Lake and marine coast segment in 5 years.
- Implement one multitrophic restoration effort in a Great Lake and a marine coast in the next decade.
- Increase recreational angling opportunities by XX on XX miles of rivers and streams, XXX acres of lakes and reservoirs, and XXX acres or sq. miles of Great Lakes, estuary, and marine habitat.
- Information Acquisition and Outreach to Inform Future Board Decisions
  - Determine the number of anadromous fish lakes/reservoirs legally documented as anadromous fish bearing waters by formally locating and mapping anadromous species distribution by species and life phase(s) in accordance with state or other prevailing laws and regulations. These data will provide a voluntary legal mechanism to establish an additional layer of legal habitat protection and conservation under state (e.g. in Alaska AS 16.05.871), federal, tribal or other legal mechanisms.
  - Determine the current status and full scope of possible future changes for habitats and species to improve prioritization. This analysis should consider classifying habitat by using the full scope of the conservation toolkit (Protect, Restore, and Enhance).
  - Develop improved tools and data on fish habitat to include:
    - Standard monitoring protocols for habitats (e.g., seagrass)
    - Regional monitoring standards for restoration projects to include, but limited to, water quality, fish populations, organism and plant biodiversity, and all of the NFHP habitat processes and factors.
    - Filling data gaps while conducting FHP and Board habitat surveys and monitoring. For example, conduct a data gathering exercise and benchmark such as like PMEP CMECS mapping.
    - The incorporation and standardized use of state and federally recognized habitat mapping classification standards like CMECS (Coastal Marine and Ecological Classification Standards) and NHD+ HD.

- Reviewing and incorporating data from other organizations indicators to investigate as NFHP progresses its priorities and benchmarks. Examples include:
  - The Puget Sound Partnership does a lot of work on indicators through our Vital Signs work:  
<https://vitalsigns.pugetsoundinfo.wa.gov/>
  - Ocean indicators developed by California Current Integrated Ecosystem Assessment:  
<https://www.integratedecosystemassessment.noaa.gov/regions/california-current/cc-indicator-status-trends>
- Develop additional information sets to assist in prioritization by considering employing a matrix approach to identifying areas to conserve, by asking a set of key questions for any given habitat and location to include, but not limited to:
  - Is the area currently considered as “high value” for nursery, foraging, migration, reproduction, and for which species?
  - Can we predict the scope of possible change in temperature, salinity, sea level, nutrient and sediment loads for the habitat in the future?
- Develop guidance to encourage effective use of science-guided fish enhancement with critical habitat improvement to ensure that habitat conservation and enhancement works in step with population measures such as stocking and harvest control.
- Improve our understanding of metapopulation/community dynamics and what spatial and life stage bottlenecks exist for maintenance or restoration. Many, if not most, fish populations exist in a metacommunity dynamic, where differential movement among one or several large habitat units and numerous small, but appropriate, habitat patches supports the overall population and provides resistance to and resilience from major ecological disturbances. Expanding the number of interconnected appropriate habitat patches should enhance fish community and population resilience.
- Development of science-based habitat objectives to properly scale and locate conservation measure that will move fish communities toward desired outcomes in the Great Lakes, estuaries, and marine systems.
- Develop guidance to restore multiple trophic levels simultaneously. For example, if a forage limitation exists, direct manipulation of predator fish numbers and/or their habitat might not move fish communities to desired outcomes.

- Specify the biological dependencies and habitat bottlenecks for 10% of the declining top predator species in the Great Lakes and marine coasts.
  - Develop multitrophic rehabilitation strategies for one species in each Great Lake or marine coast segment.
  - Develop standardized “valuation” of fish diversity and habitat.
- *Coordination and operational support for FHPs to make on-the-ground progress within program appropriations*
    - Apply non-profit management research to refine strategies and techniques for fish habitat restoration by FHPs.
    - Catalog and attribute to the NFHP data system information from assessments and conservation plans of others (FHPs, NGOs, state and fed govt’s) that share common goals to provide new opportunities for cooperative conservation actions.
    - Develop and implement enduring mechanisms for sustained engagement, capacity/knowledge building among key stakeholders who will leverage and support the NFHP Priorities.
    - Develop human well-being, socio-economic metrics to allow better evaluation of NFHP projects to include, but not limited to:
      - Socioeconomic benefits of restoration projects
      - Relationship between fish habitat restoration and recreational and commercial fishing opportunities
4. **Use system specific priorities.** In this option, the Board would provide annual (or the appropriate timeframe) system or system-specific priorities. The following are SDC National Conservation Priorities options by system type and are in ranked order. Projects that meet selected Board priorities would score higher than those that do not. Some work priorities will show up in multiple National Conservation Priorities as they do not classify cleanly into one priority.
- *River and Streams*
    - Preserve intact fish habitats
    - Protect intact healthy waters by identifying reference stream conditions and least disturbed lotic systems for protection and compare to current protection status. (Resources: EPA NRSA 2013-2014, NFHP 2015)
    - Restore and preserve natural river flows
    - Monitor conservation outcomes and assess benefits to fish and people
    - Restore and preserve natural watershed conditions
    - Restore altered fish habitats
    - Restore instream and floodplain connectivity

- Support applied research to refine strategies and techniques for fish habitat restoration
- Removal of physical and/or chemical barriers to movement, thus maximizing habitat available during low flow and high temperature periods.
- Development of data products or decision support tools to help prioritize locations of projects based on potential for thermal conditions (e.g. locations of springs and groundwater inputs) to support healthy target fisheries populations into the future.
- Restore hydrologic conditions for fish by identifying the role of natural hydrology in structuring riverine fish assemblages and use this relationship to assess potential responses to hydrologic disturbance. (Resources: USGS EcoFlows program)
- Rehabilitate any of the NFHP processes and factors (hydrology, geomorphology, water quality, material transport, connectivity, and living habitat) on 50 miles of degraded river and stream habitat per year.
- Review and develop information and guidance about how various climate change scenarios will interact with other stressors to affect available habitat for species of interest and thus change the expected baseline for watershed improvements. These data would be used to assist in prioritization and scoring of NFHP projects.
- Assess the cumulative impact of small barriers to fish passage and upstream access to add value to previous barrier prioritization projects (e.g. TNC fish passage prioritization) to improve prioritization of connectivity projects.
- Protect 100 or XXX miles of intact river and stream habitat per year.
- Develop training, education, and outreach products that help municipalities and other local organizations properly design roads, stream crossings, and other infrastructure to reduce erosion, score, and flooding risk during high water events, which are increasing in intensity and frequency.
- Develop projects to work with municipalities/governments/highway departments to understand environmentally sensitive infrastructure especially in light of changes in precipitation.
- Increase the number of habitat projects that conserve genetic diversity of fish populations to maximize likelihood of beneficial alleles and thus population persistence. These projects should include evaluating the effectiveness of such efforts by conducting genetic baseline studies followed by an evaluation of translocation and/or genetic rescue efforts.
- Protect 1000 or XXXX miles of intact and healthy river and stream habitat including natural stream flows to include documenting whether the key target fish or invertebrate populations remained constant or increased.

- Increase the number of river miles that have adequate amounts of seasonal long-term instream flows have been legally conserved (protected, restored, and enhanced) by either securing water rights, purchasing or leasing water for one or more of these purposes to sustain habitat conditions (quantity and quality) needed to sustain fish and other aquatic habitats (freshwater and estuarine) distribution, relative abundance or measured abundance.
- *Lakes and Reservoirs*
  - Restore and preserve natural watershed conditions
  - Restore and preserve undeveloped shorelines
  - Manage water levels to maintain and enhance fish habitats
  - Monitor conservation outcomes and assess benefits to fish and people
  - Restore and preserve littoral habitats
  - Restore and enhance structural fish habitats
  - Increase the exchange of information between FHPs and applied research to refine strategies and techniques for fish habitat restoration.
  - Protect 100 or XXX sq. miles of intact lake and impoundment/reservoir habitat per year.
  - Protect 10,000 or XXXXX acres of intact lake habitat including natural lake levels to include documenting whether the key target fish or invertebrate populations remained constant or increased in distribution, relative abundance or measured abundance.
  - Rehabilitate any of the NFHP processes and factors (hydrology, geomorphology, water quality, material transport, connectivity, and living habitat) on 50 or XX sq. miles of degraded lake and impoundment/reservoir habitat per year.
  - Increase recreational angling opportunities by X% on target waters.
  - Increase the number of anadromous fish lakes/reservoirs legally documented as anadromous fish bearing waters by formally locating and mapping anadromous species distribution by species and life phase(s) in accordance with state or other prevailing laws and regulations as a voluntary legal mechanism to establish an additional layer of legal habitat protection under state (e.g. in Alaska AS 16.05.871), federal, tribal or other legal mechanisms.
  - Increase the number of lakes/reservoirs that adequate seasonal long-term water levels have been legally conserved (protected, restored, and enhanced) by either securing water rights, purchasing or leasing water for one or more of these purposes to sustain habitat conditions (quantity and quality) needed to sustain fish and other aquatic habitats (freshwater and estuarine).
  - Determine the current status and full scope of possible future changes for habitats and species to improve prioritization. This analysis should consider

- classifying habitat by using the full scope of the conservation toolkit (Protect, Restore, and Enhance).
- Increase the societal value of a minimum of 100 or XXX sq. miles of lentic habitat by 10 or XX% per year.
  - *Estuaries, Great Lakes, and Marine*
    - Develop improved tools and data on fish habitat to include:
      - Standard monitoring protocols for habitats (e.g., seagrass)
      - Regional monitoring standards for restoration projects to include, but limited to, water quality, fish populations, organism and plant biodiversity, and all of the NFHP habitat processes and factors.
      - Filling data gaps while conducting FHP and Board habitat surveys and monitoring. For example, conduct a data gathering exercise and benchmark such as like PMEP CMECS mapping.
      - The incorporation and standardized use of state and federally recognized habitat mapping classification standards like CMECS (Coastal Marine and Ecological Classification Standards) and NHD+ HD.
      - Reviewing and incorporating data from other organizations indicators to investigate as NFHP progresses its priorities and benchmarks. Examples include:
        - The Puget Sound Partnership does a lot of work on indicators through our Vital Signs work:  
<https://vitalsigns.pugetsoundinfo.wa.gov/>
        - Ocean indicators developed by California Current Integrated Ecosystem Assessment:  
<https://www.integratedecosystemassessment.noaa.gov/regions/california-current/cc-indicator-status-trends>
    - Develop additional information sets to assist in prioritization by considering employing a matrix approach to identifying areas to conserve, by asking a set of key questions for any given habitat and location to include, but not limited to:
      - Is the area currently considered as “high value” for nursery, foraging, migration, reproduction, and for which species?
      - Can we predict the scope of possible change in temperature, salinity, sea level, nutrient and sediment loads for the habitat in the future?
    - Advance coastal blue carbon efforts.
    - Restore and reconnect Great Lakes and marine fish habitat as measured by amount of each of the following removed or reconnected:
      - Area of tidal wetlands and shellfish beds by type
      - Area of Submerged Aquatic Vegetation (SAV)
      - Total aquatic habitat area.

- Area of improved access/connectivity
- Number of barriers to tidal connectivity/fish passage
- Length of stream miles
- Life history and strategy needs for key species such area of nursery habitat
- Amount of habitat complexity
- Thermal (coldwater) refugia
- Identify and conserve “resilient strongholds” - marine habitats that are most resilient to climate change and can support the most diverse range of plants and animals into the future.
- Identify and conserve the connectivity of habitat which will be essential for maintaining healthy populations, promoting biological diversity and enabling organisms to respond to environmental changes.
- Protection of natural shorelines and nature-based infrastructure that provides fish habitat and community resilience in the Great Lakes, estuaries, and marine systems.
- Determine the current status and full scope of possible future changes for habitats and species to improve prioritization. This analysis should consider classifying habitat by using the full scope of the conservation toolkit (Protect/Conserve, Restore, and Enhance).
- Ensure resiliency of fish habitat to climate change in FHP projects by:
  - Increasing acreage protected/restored in landward migration zones
  - Improving the public perception of climate change and the importance of restoration/protection of habitat
  - Incorporating climate change adaptation measures
  - Quantifying blue carbon sequestration
  - Incorporating climate resilience measures
- Develop large scale, ecosystem level conservation strategies/plans that connect wetlands, SAV beds, and shellfish reefs in a comprehensive way to enhance their co-benefits and resilience to climate and other stressors.
- Ensure resiliency of fish habitat to climate change by quantifying blue carbon sequestration
- Catalog and attribute to the NFHP data system information from assessments and conservation plans of others (FHPs, NGOs, state and fed govt’s) that share common goals to provide new opportunities for cooperative conservation actions.
- Develop guidance to encourage effective use of science-guided fish enhancement with critical habitat improvement to ensure that habitat conservation and enhancement works in step with population measures such as stocking and harvest control.

- Restore the habitat for one extirpated population in each Great Lake, estuary, and marine coast segment every decade to allow for successful reintroduction efforts.
- Improve our understanding of metapopulation/community dynamics and what spatial and life stage bottlenecks exist for maintenance or restoration. Many, if not most, fish populations exist in a metacommunity dynamic, where differential movement among one or several large habitat units and numerous small, but appropriate, habitat patches supports the overall population and provides resistance to and resilience from major ecological disturbances. Expanding the number of interconnected appropriate habitat patches should enhance fish community and population resilience.
- Expand the total number of accessible, appropriate metacommunity habitat nodes for one declining fish population per Great Lake, estuary, and marine coast segment in 5 years.
- Protect 100 or XXX sq. miles of intact estuarine, coastal and Great Lakes habitat per year.
- Rehabilitate any of the NFHP processes and factors (hydrology, geomorphology, water quality, material transport, connectivity, and living habitat) on 10 or XX sq. miles of degraded estuarine, coastal, and Great Lakes habitat per year.
- Development of science-based habitat objectives to properly scale and locate conservation measure that will move fish communities toward desired outcomes in the Great Lakes, estuaries, and marine systems.
- Develop guidance to restore multiple trophic levels simultaneously. For example, if a forage limitation exists, direct manipulation of predator fish numbers and/or their habitat might not move fish communities to desired outcomes.
- Specify the biological dependencies and habitat bottlenecks for 10% of the declining top predator species in the Great Lakes and marine coasts.
- Develop multitrophic rehabilitation strategies for one species in each Great Lake or marine coast segment.
- Implement one multitrophic restoration effort in a Great Lake, estuary, and a marine coast in the next decade.
- *Watershed and Landscape*
  - Protect intact healthy waters
  - Restore hydrologic conditions for fish
  - Rehabilitate any of the NFHP processes and factors (hydrology, geomorphology, water quality, material transport, connectivity, and living habitat) on 10 or XX sq. miles of degraded watersheds per year with an emphasis on those that are climate change sensitive.

- Reconnect fragmented fish habitats
  - Restore water quality
  - Coordination and operational support for FHPs to make on-the-ground progress within program appropriations.
  - Protect 100 or XXX sq. miles of intact watersheds per year with an emphasis on those that are climate change sensitive.
  - Identify high quality systems.
  - Develop and implement enduring mechanisms for sustained engagement, capacity/knowledge building among key stakeholders who will leverage and support the NFHP Priorities.
  - Identify key degraded systems whose sediment, phosphorus or nitrogen inputs have been modified by more than 25% above numeric State Water Quality criteria or from the natural and expected variation in inputs. Reduce sediment, phosphorus or nitrogen inputs into 100 miles of degraded river and stream habitat degraded waters to a level within 25% of the natural variation in input rates or above applicable numeric state water quality criteria. Document whether the key target fish or invertebrate populations remained constant or increased in distribution, relative abundance or measured abundance.
  - Increase resiliency of aquatic systems to climate change.
  - Increase the number of anadromous fish habitat (river miles and lakes/reservoirs) legally documented as anadromous fish bearing waters by formally locating and mapping anadromous species distribution by species and life phase(s) in accordance with state or other prevailing laws and regulations as a voluntary legal mechanism to establish an additional layer of legal habitat protection for that location under state (e.g. in Alaska AS 16.05.871), federal, tribal, or other legal mechanisms.
  - Identify high quality systems.
  - Better understand the potential role of climate change induced range shifts on re-structuring fish communities, trophic relationships (and other "emergent properties"), and habitat use to improve FHP project prioritization by better understanding the implications for aquatic habitat preservation and restoration into the future.
- *Socioeconomic*
- Increase the societal value of a minimum of 100 or XXX sq. miles of lentic or marine habitat by 10% or XX% per year
  - Develop human well-being, socio-economic metrics to allow better evaluation of NFHP projects to include, but not limited to:
    - Socioeconomic benefits of restoration projects
    - The societal and economic relationships between fish habitat restoration and recreational and commercial fishing opportunities

- Increase the societal value of a minimum of 100 or XXX miles of lotic habitat by 10% or XX% per year.
- Develop standardized “valuation” of fish diversity and habitat.

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## National Fish Habitat Partnership/Bass Pro Shops Grant Program

### Background:

The National Fish Habitat Partnership is pleased to announce that a grants program will be established in late 2021 to benefit FHPs under the National Fish Habitat Partnership. This grant program is being made possible through proceeds from the [Bass Pro Shops US Open National Bass Fishing Amateur Team Championships](#). The tournaments will benefit local fish habitat with proceeds supporting the National Fish Habitat Partnership (NFHP). One-third of all entry fees will be matched equally with donations from both Bass Pro Shops and Tournament sponsor Toyota. This amount will be equal to 100 percent of all entry fees - to benefit conservation through our partnerships. While the total amount available for the grant program is unknown, it is expected to be between \$1 Million and \$1.5 Million.

### Grant Structure:

This grant program will be implemented through Beyond the Pond, the 501c3 organization established to benefit the National Fish Habitat Partnership. **Through this grant opportunity, the highest priority will be for projects specifically designed to improve aquatic habitat within reservoirs resulting in enhanced angling opportunities. Funding may also be used to improve natural lake habitats and conserve tributary flows into lakes and reservoirs.**

Examples of on the ground conservation could include, Riparian and underwater vegetation planting, shoreline native habitat planting, bank sloping and shaping in tributaries, and habitat structure placement.

### Criteria:

Through this Grant Application, individual projects can be funded at a maximum of **\$75,000**

To help applicants put forward the best possible projects, the National Fish Habitat Partnership and Beyond the Pond, has established a set of criteria by which projects are evaluated for funding. Applicants should address these criteria in their project applications.

Successfully funded projects must utilize grant funds for this opportunity by 9/30/2023.

**The deadline to submit a project application under the Small Grants Program is COB March 30, 2022.** We hope to receive some great projects to implement in hopes to continue this grant program for future years. Incomplete applications will not be accepted. Please feel free to contact [rroberts@fishwildlife.org](mailto:rroberts@fishwildlife.org) with questions.

## NFHP/Bass Pro Shops Small Grants Program: Application Review/Ranking Criteria

### Project Eligibility Screening

- 1) Does this project specifically benefit on-the-ground habitat conservation work? (Y/N)
- 2) Does this project conserve habitat in any of the following systems, Reservoirs, Natural Lakes, or Tributaries that connect Reservoirs or Lakes?
- 3) Does this project support the below objectives/measures? If yes, which ones? (Y/N)
  - a. *fulfills a local or regional priority that is directly linked to the strategic plan of the Partnership and is consistent with the purpose of this title;*
  - b. *addresses the national priorities established by the Board;*
  - c. *is supported by the findings of the habitat assessment of the Partnership or the Board, and aligns or is compatible with other conservation plans;*
  - d. *identifies appropriate monitoring and evaluation measures and criteria that are compatible with national measures;*
  - e. *provides a well-defined budget linked to deliverables and outcomes;*
  - f. *leverages other funds to implement the project;*
  - g. *addresses the causes and processes behind the decline of fish or fish habitats; and*
  - h. *includes an outreach or education component that includes the local or regional community.*
  - i. *will increase fish populations or positively re-distribute fish populations in a manner that leads to recreational fishing opportunities for the public;*
  - j. *increases public access to land or water for fish and wildlife-dependent recreational opportunities;*
- 4) Is this project implemented through one of the FHPs under the National Fish Habitat Partnership? (Y/N)
- 5) Will this project be completed within 18 Months of the funding being received? (Y/N)

**Conservation Benefits (5 points possible)**

- 1) Does this benefit Reservoir habitat, if yes explain technical merits of the project?
- 2) Does this project benefits a sportfish species, if so which species?
- 3) Explain in one paragraph, how this project will benefit fish populations.
- 4) Will this project improve angling opportunities?
- 5) Will this project include quantifiable habitat measures/benefits (i.e. Stream Miles restored, vegetation planted)?

**Community Involvement (2 Points)**

- 1) Project has great potential to foster/generate a community conservation ethic through citizen/youth involvement? (Y/N)
- 2) Will the project have local community involvement? (Y/N)

**Involvement with partners (4 points possible)**

- 1) The appropriate/relevant partners are involved (i.e. other state or federal agencies, or nonprofit partners) and contributing to budget (in kind or cash).
- 2) Budget items and partnership contributions are clearly defined and considered reasonable.
- 3) Grant award catalyzes or sparks other partners or future or ongoing efforts.
- 4) Outreach component included in your project

**Application Quality (1 point possible)**

Proposal is well-written, complete, includes a budget, and clearly conveys sufficient information to evaluate project.

**Timeline for grant:**

- **Share parameters with Fish Habitat Partnerships – September 2021**
- **Solicit pre-proposals from Fish Habitat Partnerships – October 2021**
- **Board members select pre-proposals and invite selected partnerships to submit full proposals – November 2021**
- **Invite select members of Beyond the Pond/NFHP Board to US Open Championship event for ceremonial check presentation (November 19-21, 2021) (Table Rock Lake, Ridgedale, MO).**
- **Board will select top project proposals for funding (Based on available funding) (early 2022)**