NATIONAL FISH HABITAT PARTNERSHIP

Board Meeting Book

September 22-23, 2022
Fort Worth, TX.
Fort Worth City Club

National Fish Habitat Partnership
Board Meeting Agenda

WHEN: Thursday, September 22, 2022 from 9:00 - 5:00 PM CT
Friday, September 23, 2022 from 9:00 – 1:00 PM CT

WHERE: Fort Worth City Club 301 Commerce St, Fort Worth, TX 76102 (Oak Room)

VIRTUAL MEETING INFO (both days):
https://fishwildlife-org.zoom.us/j/88952166347?pwd=VE00UFk4MUoxQ2psd1loTlk0Q1FuQT09
Meeting ID: 889 5216 6347
Passcode: 252395

Or Dial by phone:
+1 301 715 8592 US
Meeting ID: 889 5216 6347
Passcode: 252395

Thursday, September 22, 2022 9:00 – 5:00 PM CT

Time (PM CT)	Agenda Item	Board Book Tab	Lead
9:00	**Attendance & Welcome** *Desired outcomes:* • **Board staff** to take attendance (sign-in sheet). • **Board action** to approve the September 22-23 agenda. • **Board action** to approve the June 28, 2022 meeting summary.	Tab 1	**Ed Schriever** *(Association of Fish and Wildlife Agencies, Board Chairman)* & **Board Staff**
9:15	**Welcome Remarks from Texas Parks & Wildlife Division**	Tab 1b	**Tim Birdsong** *(Deputy Division Director, Fisheries Management & Conservation)*
9:30	**Annual Review of Board Member Terms** *Desired outcomes:*	Tab 2	**Ed Schriever** *(Association of Fish and Wildlife Agencies, Board*

	• **Board staff to present** the current Board member terms and their expirations. • **Board review** of the Board member appointment procedure.		*Chairman)* & **Mike Bailey** *(USFWS, Board Staff)*

9:50	**NCTC Fish Passage Meeting Report Out**
	Desired outcomes:
	• **Board awareness of** the sessions and discussions at the recent NCTC Fish Passage Meeting. Topics to cover include:
	  ○ NFHP-level (Ed/Christy)
	  ○ Workgroups (Gary)
	  ○ FHP significance (Debbie)
	  ○ IOP (Ed/Mike)
		Tab 3	**Ed Schriever** *(Association of Fish and Wildlife Agencies, Board Chairman)***, Christy Plumer** *(TRCP, Board Member)***, Gary Whelan** *(Board Staff, Science and Data Committee Co-Chair, MI Department of Natural Resources)***, Debbie Hart** *(SEAKFHP Coordinator)***, & Mike Bailey** *(USFWS, Board Staff)*

10:45	**BREAK**		
11:00	**How is NFHP Accessing & Coordinating Funding from the Bipartisan Infrastructure Law (BIL)?** *Desired outcomes:* • **Board awareness & discussion** of NFHP plans to access and coordinate on various BIL funding opportunities.		**Ed Schriever** *(Association of Fish and Wildlife Agencies, Board Chairman)*
11:45	**USFWS Update** *Desired outcomes:* • **Board awareness of** the status of FY22 project funds. • **Board awareness of** the plan for FY23 FHP project administration and any other updates from the USFWS.		**Steve Guertin** *(USFWS, Board Member)*
12:00	**LUNCH on your own**		
1:30	**Board Establishes National Conservation Priorities** *Desired outcomes:* • **Board member awareness & discussion** of the proposed set of FY23 National Conservation Priorities. • **Board vote** on the proposed set of FY23 National Conservation Priorities.	Tab 4	**Adam Ringia** *(NFHP Board Member, NCP Workgroup Chairman, Southwest Tribal Fish Commission)*

2:15	**Plan for FHPs to Receive Designation by Congress under the ACE Act** *Desired outcomes:* • **Board awareness & discussion** of Partnerships Committee proposed timeline and process for advancing FHPs to Congress for designation.	Tab 5	**Stan Allen** *(NFHP Partnerships Committee co-chair, Pacific States Marine Fisheries Commission)* & **Carter Kruse** (*Board member, Turner Enterprises)*
3:15	**BREAK**		
3:30	**What's Next for the NFHP Action Plan?** *Desired outcomes:* • **Board awareness of** the history of the NFHP Action Plan, its purpose, and revision schedule. • **Board awareness of** the contents of the legacy NFHP Action Plan and the process to create a contemporary NFHP Action Plan before the FHP Congressional designation process begins. • **Seeking Board volunteers** to create the new edition of the NFHP Action Plan by November meeting. • Action Plan will be up for vote at the February/March 2023 meeting.	Tab 6	**Stan Allen** *(NFHP Partnerships Committee co-chair, Pacific States Marine Fisheries Commission)* & **Gary Whelan** *(Board Staff, Science and Data Committee Co-Chair, MI Department of Natural Resources)*
4:00	**Beyond the Pond Update & Bass Pro Funded Projects** *Desired outcomes:* • **Board awareness of** the status of the non-profit branch of NFHP, Beyond the Pond. • **Board awareness of** the 9 projects funded by the Bass Pro Shops donation & video production planned.	Tab 7	**Ryan Roberts** *(Board Staff, Association of Fish and Wildlife Agencies)*
5:00	**Adjourn**		

WHERE: Fort Worth City Club 301 Commerce St, Fort Worth, TX 76102 (Oak Room)

VIRTUAL MEETING INFO (both days):

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Friday, September 23, 2022 9:00 – 1:00 PM CT

Time (PM ET)	Agenda Item	Board Book Tab	Lead
9:00	**Welcome & Debrief from Yesterday** *Desired outcomes:* • **Board staff** to take attendance (sign-in sheet).		**Ed Schriever** *(Association of Fish and Wildlife Agencies, Board Chairman)* & **Board Staff**
9:30	**NFHP Habitat Assessment** *Desired outcomes:* • **Board awareness of** decision points (e.g. audience, scale) for the 2025 NFHP Habitat Assessment. • **Board awareness of** assessment survey results. • **Board discussion of** the desired attributes for the 2025 NFHP Habitat Assessment.	Tab 8	**Gary Whelan** *(Board Staff, Science and Data Committee Co-Chair, MI Department of Natural Resources)*
10:00	**FHP Item – PMEP Nearshore Habitat Database** *Desired outcomes:* • **Board awareness of** the recently debuted PMEP Nearshore Habitat Database and its functionality.	Tab 9	**Kate Sherman** (*Board Staff, Pacific States Marine Fisheries Commission)*

10:45 **BREAK**

11:00 **NFHP Board Committee Report Outs** Tab 10a **Committee Chairs**

Desired outcomes:

- **Board members** updated on newly elected Committee leadership to join the Executive Committee.
- **Board members** updated on existing Committee activities and work plans.

1. **Science & Data Committee** (20 minutes) Tab 10b **1. Gary Whelan & Daniel Wieferich**
    - **a.** Database update
    - **b.** Board understanding of the status of the Project Tracking Database System:
        i. Develop updated database schema (completed)
        ii. Develop draft data entry form using ESRI Survey123 Connect (completed)
        iii. Present NFHP Project Tracking efforts at AFS annual meeting (completed)
        iv. Solicit review of data entry form from NFHP partners (in progress)
        v. Incorporate FY22 projects into upgraded data system (next step)
    - **c.** Next SDC items
2. **Partnerships Committee** (20 minutes) Tab 10c **2. Stan Allen & Bryan Moore**
    - **a.** ACE Act crosswalk
    - **b.** FHPs to Congress
    - **c.** Online form
3. **Governance Committee** (10 minutes) **3. Doug Austen**
4. **Policy Committee** (10 minutes) **4. Tim Schaeffer**
5. **Communications Committee** (10 minutes) Tab 10d **5. Johnny LeCoq**
6. **Executive Committee** (10 minutes) **6. Ed Schriever**

12:30 **Meeting Wrap Up** **Board Staff**

- Thank you all for coming!
- Revisit any parking lot items – assign to work groups or Committees.

Reminders:

- Board travel reimbursements forms (Ryan)

- Board meets virtually on **Tuesday, November 29, 2022 from 1:00 – 4:30 PM ET**

12:45 **Adjourn**

National Fish Habitat Partnership
Board Meeting Agenda
Tuesday, June 28, 2022

Microsoft Teams Meeting Information: JOIN HERE (link also in Google calendar invite)
Phone Conference ID: 847 684 995#

Tuesday, June 28, 2022 1:00 – 4:30 PM EDT

NFHP Board Attendance:

#	Last Name	First Name	Board Committee	Attendance
1	Allen	Stan	Partnerships Committee	X
2	Austen	Doug	Governance Committee	X
3	Bowden	Allison	Partnerships/Policy Committee	X
4	Boyd	Douglass	-	-
5	Boyles	Robert	Governance Committee /wherever needed	X
6	Cantrell	Chris	Communications Committee	X
7	Eischeid	Ted	Partnerships Committee	X
8	Gilliland	Gene	Communications & project review	X
9	Guertin	Steve	Wherever needed	X
10	Gyant/Conley	Barnie/Kim	SDC	X
11	Kinsinger/Beard	Anne/Doug	SDC	X
12	Kruse	Carter	Partnerships Committee	X
13	LeCoq	John	Communications Committee	-
14	Leonard/Chester	Mike/Anne	Policy Committee	X
15	Linnell	Karen	EXCOMM/Policy Committee	X
16	Moore	Chris	Governance Committee	-
17	Moore	Bryan	Partnerships Committee	X
18	Rivers	Patrick	Policy or Communications	X
19	Perry	Steve	Partnerships Committee	X
20	Plumer	Christy	Policy Committee	X
21	Rauch	Sam	Governance Committee	X
22	Ringia	Adam	NCP, wherever needed	X
23	Schaeffer/Caccese	Timothy D./Bob	Policy Committee	X
24	Schriever	Ed	Executive Committee	X
25	Slaughter	Joe	Partnership, Policy, or SDC	X
26	Trushenski	Jesse	SDC	X
-	Wilson	Bobby- RETIRING	-	-

Board Staff	Other Attendees
Gary Whelan	Debbie Hart
Mike Bailey	Kevin Haupt
Alex Atkinson	Alicia Marrs
Shannon Boyle	Todd Ewing
Kate Sherman	Kyla Richards
Ryan Roberts	Annie Chester
Daniel Wieferich	Doug Nygren
	Richard Mitchell
	Christopher Estes
	Heidi Keuler
	Jessica Hog
	Jennifer Graves
	Jess Newton
	Rick Westehrof
	Todd Ewing
	Gordon Smith
	Callie McMunigal
	Lisa Havel
	Lori Maloney
	405-317-9488
	703-888-7796
	907-227-9549
	Will Duncan
	Jeff Boxrucker
	Mike Daigneault
	Jeff Duda

Approved by Motion:

- June 28, 2022 Board Meeting Agenda – motion by: Robert Boyles, second by: Chris Cantrell
- Conditionally approve the April 26-27, 2022 Meeting Summary *(pending the addition of Karen Linnell to the attendance list*) - motion by : Chris Cantrell, second by: Alison Bowden
- Conditionally adopt the staff-drafted Board member appointment process, pending 2 key revisions *(outlined below)*.

- FY23 FHP Conservation Project list for submission to the Secretary of Interior – motion by: Robert Boyles, seconded by: Alison Bowden, abstention: Steve Guertin.

Time (PM ET)	Agenda Item	Board Book Tab	Lead
1:00	**Attendance & Welcome** *Desired outcomes:* • **Board staff** to take attendance. • **Board action** to approve the June 28 agenda. • **Board action** to approve the April 2022 meeting summary.	Tab 1	**Ed Schriever** *(Association of Fish and Wildlife Agencies, Board Chairman)* & **Board Staff**

Chairman Schriever welcomed the Board to this virtual meeting. Chairman Schriever reminded the Board of Bobby Wilson's retirement and introduced the newest member, Robert Boyles, who will replace Bobby Wilson as the SEAFWA representative. The Board approved the meeting agenda and noted that Karen Linnell was left off the April Board meeting attendance list. Pending that revision, the Board approved the April 2022 meeting summary. Board staff, Alex Atkinson, reviewed the Board's upcoming meeting schedule – meeting in-person in Ft. Worth, Texas September 22-23, 2022 and virtually on November 29, 2022. Upcoming key NFHP Board items include: FY23 project submission to DOI (by July 1), Bass Pro funding disbursement, development of Board procedures, FHP process to be approved by Congress.

1:15	**Expiring Terms - Board Member Appointment Process** (*topic from April meeting*) *Desired outcomes:* • **Board review and discussion** of the Board member appointment procedure. • **Board vote to approve** the updated Board member appointment process.	Tab 2	**Ed Schriever** *(Association of Fish and Wildlife Agencies, Board Chairman)* & **Alex Atkinson** *(NOAA Fisheries, Board Staff)*

Chairman Schriever introduced this agenda item by reminding the Board of the structure of membership terms per the ACE Act. There are several at-large positions which had a rotating timeframe of initial appointments of 1, 2, and 3 years – some of which are already up for reappointment. Those at-large seats will all go to a 3-year term following their initial term. Some seats are obligatory based on the organization (e.g. Federal agencies, and Sportfishing and Boating Partnership Council) and the regional associations inform the Board of who their Board representatives will be. Board staff presented the draft process to handle the expiring Board member terms they drafted. The process establishes:

- A method by which the Board will review all the Board member terms at each Fall board meeting.
- A 60-day window before a Board member term expires when the Chairman will distribute an open solicitation on the NFHP, NOAA, AFS, and Native American Fish and Wildlife Society websites.
- The Board staff will ask the current expiring member whether they are interested in continuing to serve.
- Any new individuals interested in filling the Board seat will submit a letter of interest and a CV to the Board.
- Board members will review any applicant packages and vote in public session at the next Board meeting.

- Within 30 days of the Board meeting, the new Board member will be required to attend an orientation session held by Board staff.

Board members discussed the draft process and propose suggested revisions to the process including. A Board member also suggested that we ask any member who is interested in serving an additional term for their parent organization to submit a letter of support. However, another Board member reminded the group that these members represent a sector, not necessarily the specific organization. There was discussion about how to ensure that the Tribal Board member seats are efficiently filled and may require more time given their review by the Secretary of Interior. The Governance Committee will discuss this item and determine the best approach for ensuring these seats are filled expeditiously. Board staff will work with the Governance Committee to flesh out the detail in item #3 in the process.

The Board voted to conditionally adopt this process pending 2 key revisions (**motion by Adam Ringia, seconded by: Pat Rivers**):

1. Add "a minumum of…" to the list of sites where the vacant Board seats will be advertised in order to continue to grow that list as appropriate.
2. Strike "new" from #4 to get letters and CVs from all and strike the final sentence in #4.

1:35	**Board Committees and Governance** *Desired outcomes:* • **Board members to select** Board committees to join. • **Board to discuss** developing governance structure.	Tab 3	**Ed Schriever** *(Association of Fish and Wildlife Agencies, Board Chairman)*

Chairman Schriever reminded the Board about how they have primarily existed under the ACE Act framework in a virtual setting. This has prevented the Board from further fleshing out a governance structure that works bet to support NFHP 2.0. Chairman Schriever reminded the Board of the existing and productive Board Committees (Science & Data and Partnerships Committees) and their membership and that one of the primary duties of the Board following the passage of the ACE Act is to put forward the Fish Habitat Partnerships for consideration by Congress by 2025.

Chairman Schriever presented a recommended Board committee and governance structure moving forward including adding new Board Committees (Executive, Governance, Communications, Policy) to the Board. Committees would meet regularly to focus on work plans, Board tasks, and the "meat grinding" activities of NFHP. The Executive Committee would be made up of the Board Chairman and all other Committee chairs. A Board member recommended that the USFWS be made an ex officio member of the Executive Committee given their role in the Partnership. Board members were asked to indicate their Committee of preference in the Zoom chat and staff would follow up following the conclusion of the meeting.

2:15	**FY23 NFHP Funding Package – Vote on Proposal for Secretary of Interior** *Desired outcomes:* • **Board awareness** of the process by which Board Subcommittee reviewed and selected FY23 FHP projects for funding.	Tab 4	**Stan Allen** *(Pacific States Marine Fisheries Commission, Review Subcommittee Co-Lead, Board Member)* &

- **Board opportunity to discuss and ask questions** about the FY23 FHP project list recommended for funding by the Review Subcommittee.
- **Board awareness** of Tribal-led projects in the FY23 proposed projects list.
- **Board vote** on proposed recommendation package for FY23.

Bryan Moore *(Trout Unlimited, Review Subcommittee Co-Lead, Board Member)*

Stan Allen and Bryan Moore presented the FY2023 Fish Habitat Conservation project subcommittee review process and funding recommendations to the Board. They reviewed the ACE Act requirements of the Board and FHPs and reminded the Board that the subcommittee utilized 2 groups of Board members, each of which scored 10 FHPs. The subcommittee then decided on a 3-tier approach to determine the recommended FHP allocation levels for FY23. Overall, 142 projects were submitted from the FHPs for a total request of $8.6M in funding with 1 FHP requesting operational funds only. NFHP funding would be matched by ~$50M in non-Federal funds and 9% of the proposed recommended funding will be to support Tribally-led projects. This year, project scoring criteria were divided into "soft" and "hard" criteria. Gary Whelan reviewed the Board's project proposal for operational funding that will be included in the project list for FY23.

The subcommittee recommended that all projects submitted by FHPs and the Board be submitted to DOI for potential funding. The Board was reminded that the USFWS requested an extra $1M in funding for FY23 for a total request of $7.664M. And that the match consideration issue was not fully resolved. Kudos were given by the subcommittee to Bryan and Stan for their leadership on this task and for another year of continued improvements to implement the ACE Act.

2:45 **July Fish and Wildlife Service Workshop**

Desired outcomes:

- **Board awareness of** the upcoming USFWS workshop and NFHP's participation.

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

Chairman Schriever shared about the upcoming AFWA, USFWS, and NFHP-hosted July 18-20 *Partner Workshop – Fish passage opportunities through the Infrastructure Investment and Jobs Act* at the National Conservation Training Center. A cast of 100+, including NFHP, folks in the fish passage community will convene to discuss fish passage opportunities in the context of the Bipartisan Infrastructure Law (BIL). NFHP has an opportunity on Day 1 to share our implementation model for achieving on the ground results and hopes that this is a start to a conversation that we can build on. DOT, FEMA, and DOE are some of the large recipients of BIL funding and there will be some education of these non-conservation partners over the course of the workshop.

Board member, Sam Rauch, made a brief announcement at the end of this agenda item reminding the Board of NOAA's currently open Notices of Funding Opportunity (Tribal-focused NOFO and open to public NOFO) related to BIL funding. He also announced the latest NOAA-funded NFHP projects through this year's opportunity. This year, NOAA funded 3 projects ($150,000) that both engage the recreational fishing communities and improve fish habitat. Funded projects will restore coral reefs in Hawaii, engage underrepresented coastal communities in habitat conservation in South Carolina, and engage anglers in caring for their home waters in Alaska.

3:00 **Update on National Conservation Priorities (NCP)** Tab 5

Desired outcomes:

Adam Ringia *(NFHP Board Member, NCP Workgroup*

- **Board awareness of** the NCP Workgroup progress to date.

Chairman, Southwest Tribal Fish Commission)

Board member, Adam Ringia Chairman of the National Conservation Priorities workgroup, presented a draft set of FY24 NCPs based on a survey to FHPs about their current priorities and performance metrics.

1. *Conserve intact healthy waters*
2. *Conserve hydrologic conditions for fish*
3. *Conserve physical and living habitat for fish*
4. *Reconnect fragmented fish habitats*
5. *Conserve water quality for fish*
6. *Maintain and improve structure and function of FHPs to conserve fish habitat*
7. *Enhance recreational, commercial, subsistence, and traditional fishing opportunities*

**conserve = protect, rehabilitate, restore, and improve*

The workgroup will develop strategies under each NCP for how to use those NCPs to determine what types of metrics can be used to measure and be utilized for the Congressional report. A final list of NCPs will be shared in August for action of the Board in September.

3:20 **Bass Pro Funding Opportunity Update** Tab 6 **Ryan Roberts** *(Association of Fish and Wildlife Agencies, Board Staff)*

Desired outcomes:

- **Board awareness of** the process by which Board members reviewed and selected projects for funding.
- **Board awareness of** nine FHP projects selected for funding from the Bass Pro funding opportunity.
- **Board awareness of** planned communications around the Bass Pro funded projects.

Ryan Roberts provided an update on the nine projects selected for funding under the Bass Pro donated funds. There were 30 project applications that requested over $5M in funds and projects were reviewed and selected by a subcommittee of non-Federal NFHP Board members. The projects were posted on the NFHP website on June 17th and will be occurring in: PA, AR, IL, MO, TN, TX, and IA. Bass Pro has requested there be regular communication updates as these projects progress and will be developing videos on these projects. All funds need to be expended by the end of 2023.

3:35 **Update on Project Tracking System Improvements** **Daniel Wieferich** *(USGS, Science and Data Committee Co-Chair, Board Staff)*

Desired outcomes:

- **Board awareness** on progress of updates to the NFHP Project Tracking System.

Daniel reported to the Board about the planned updates to the NFHP Project Tracking System which includes the project tracking database and a project dashboard that includes a map. By November 2022, USGS hopes to have an upgraded system. USGS held a two-day workshop June 7-8 that included FHP coordinators, Board staff, and some

Board members. The very productive workshop gathered input on the FHP coordinator needs, challenges to implementation, and beyond. Some main workshop takeaways were that the request for proposal process plays a critical role in data collection for all the NFHP needs later in the process (e.g. communicating about project, project tracking and evaluation). USGS is in the process of hiring a person (Kayla) through the $50k grant they received to assist with these data tracking updates. The team is done updating all FY21 FHP data and is focused on FY22. There was some discussion about how to best show progress towards achieving the National Conservation Priorities and how scale is an important process to keep in mind with all of these reporting and data tracking needs.

4:00 **Board National Fish Habitat Assessment** Tab 7 **Gary Whelan** *(MI DNR, Science and Data Committee Co-Chair, Board Staff)*

Desired outcomes:

- **Board understanding of** the existing National Fish Habitat Assessment products to start scoping the 2025 National Fish Habitat Assessment.

Gary Whelan shared an introductory presentation queuing up the conversation about the National Fish Habitat Assessment which was postponed from the April meeting. The ACE Act includes a new NFHP Assessment to be completed by 2025, but very few additional details other than to fill gaps in the National Fish Habitat Assessment. Gary provided an overview of the previous assessment that had a broad audience and was built to provide consistent and comparable information and identify the most limiting disturbances for fish habitat nationwide. There was some Board discussion about how much the previous assessment data and products have been used at the state and Federal levels – the EPA has used the assessment products directly in their watershed scoring system, but it has not been used by FHPs as much. This high level introduction serves as a starting point for the Board to continue to build on its vision for what the next assessment should accomplish.

4:15 **FHP/NFHP Board Member Meet and Greet** **Debbie Hart** *(Southeast Alaska FHP Coordinator)*

Desired outcomes:

- **Board discussion of** bringing the NFHP Board & FHP representatives together in a friendly & fun virtual environment for everyone to get to know one another & learn what each FHP does.

Debbie Hart, coordinator for the Southeast Alaska Fish Habitat Partnership, invited Board members to participate in a more informal virtual meet and greet/happy hour to continue to foster informative relationships among FHPs and Board members. This happy hour will provide more interaction between FHPs and Board members to explain how we work to be better prepared for the Congressional approval process. Several FHP coordinators have stepped up and will help plan the date, be on the lookout for Doodle polls.

4:30 **Adjourn**

Progress in Implementation of the National Fish Habitat Action Plan in Texas

Summary of Conservation Investments and Outcomes (2008-2022)

The Inland Fisheries Division of Texas Parks and Wildlife Department manages and conserves freshwater fisheries resources in over 191,000 miles of creeks and rivers and 1,100 public impoundments, which total 1.7 million surface acres. Approximately 25% of the Division's $20.3 million annual budget and 9% of the Division's workforce (approximately 220 full time employees) are focused on fish habitat conservation. Division resources are leveraged with other sources of public and private funding, including grants awarded by the National Fish Habitat Partnership. Habitat enhancement, restoration, and preservation projects are delivered in collaboration with other state and federal agencies, Fish Habitat Partnerships, Friends of Reservoirs chapters, fishing clubs, private landowners, communities, river authorities, river conservancies, watershed alliances, and other non-governmental organizations. Examples include conservation of natural river flows through water transactions and protection of aquifer recharge features and springs, restoration and preservation of riparian buffers and living shorelines, management of reservoir water levels and downstream releases to maximize the availability of fish spawning and nursery habitats, aquatic vegetation management, and in-water structural habitat enhancements.

The Inland Fisheries Division was an early advocate and supporter of the National Fish Habitat Action Plan, National Fish Habitat Partnership (NFHP), and Fish Habitat Partnerships, playing active leadership roles in the steering committees and science teams of the Desert Fish Habitat Partnership (DFHP), Reservoir Fisheries Habitat Partnership (RFHP), and Southeast Aquatic Resources Partnership (SARP). Division contributions have included engagement of the Texas U.S. Congressional delegation to support passage of the National Fish Habitat Conservation Act;

co-authoring of the 2012 National Fish Habitat Action Plan, SARP Southeast Aquatic Habitat Plan, and RFHP Strategic Plan; co-authoring of the 2015 National Fish Habitat Assessment; and delivery of 84 NFHP-supported fish habitat projects, which have been recognized through nearly a dozen national and international awards.

From 2008-2022, 84 fish habitat projects were supported in Texas through $1,226,000 in funding from SARP, DFHP, RFHP, and NFHP (i.e., Beyond the Pond). Funding was leveraged at least 1:1 by the Division and local partners. Those 84 projects resulted in the restoration, enhancement, or protection of more than 26,000 acres of fish habitats in the ciénegas, creeks, rivers, and reservoirs listed below, 8 of which were recognized as NFHP "Waters to Watch" (i.e., lakes Houston, Conroe, Livingston, and Wichita, the Rio Grande, Balmorhea Springs, and the Blanco and Llano rivers).

Desert Fish Habitat Partnership (6 projects, $144,500)

- Fish habitat restoration or enhancement at Alamito Creek (2), Rillito Springs, Phantom Springs Ciénega (2), and San Felipe Creek

Reservoir Fisheries Habitat Partnership (27 projects, $449,000)

- Fish habitat enhancement projects completed at lakes Belton, Buchanan, Conroe (2), Dunlap, Palestine (2), Livingston (6), Possum Kingdom, Austin, Canyon (3), Hubbard, Fork (2), Buchanan, John Paul Landing, Lewisville, and Coleman
- 1 multi-lake fish habitat study completed at lakes Sam Rayburn, Nacogdoches, Naconiche, Toledo Bend, Conroe, and Fork
- The Division was awarded $250,000 to support fish habitat enhancements at Lake Ralph Hall through the inaugural cycle of the Bass Pro Shops / National Fish Habitat Partnership U.S. Open Grant Program

Southeast Aquatic Resources Partnership (51 projects, $882,500)

- 35 habitat restoration projects completed at Caddo Lake (1), Blanco River (7), Llano River (15), Pedernales River (7), and James River (5)
- 6 conservation assessments conducted (e.g., James River springs assessment, James River aquatic gap sampling, Llano River habitat mapping using side-scan and unmanned aerial systems)
- 6 conservation plans assembled (e.g., Master Plan for the South Llano River Conservation Demonstration Area, Upper Llano River Watershed Conservation Plan, Hill Country Rivers Restoration Guidelines)
- 4 conservation demonstration projects conducted (e.g., Blanco River flood recovery and South Llano River fire recovery workshops and field-based demonstration of best management practices)

National Fish Habitat Board Membership and Terms - September 2022

Last Name	First Name	Title	Affiliation	Representing	Current Term Expires
Allen	Stan	Senior Program Manager	Pacific States Marine Fisheries Commission	At Large - Commercial Fishing	2/9/2024
Austen	Doug	Executive DIrector	American Fisheries Society	Science-based fisheries organization	2/9/2024
Bowden	Allison	Conservation Director for Rivers, Coasts & Oceans	The Nature Conservancy	At Large - Conservation	2/9/2023
Boyd	Douglass	Vice Chair	Sport Fishing and Boating Partnership Council	At Large - Sportfishing	2/9/2024
Cantrell	Chris	Engineering and Construction Services Branch Chief	Arizona Game and Fish Department	State Agency (Western AFWA)	11/14/2021
Eischeid	Ted	Planner II	Matanuska-Susitna Borough of Alaska	Local government	2/9/2024
Gilliland	Gene	Conservation Director	Bass Anglers Sportsman Society (BASS)	Freshwater recreational anglers	2/9/2023
Guertin	Steve	Deputy Director	US Fish and Wildlife Service	Federal Agency	Serves by virtue of office
Gyant	Barnie	Associate Deputy Chief	US Forest Service	Federal Agency	Serves by virtue of office
Kinsinger	Anne	Associate Director, Ecosystems	US Geological Survey	Federal Agency	Serves by virtue of office
Kruse	Carter	Director of Conservation	Turner Enterprises, Inc.	National private landowner	2/9/2024
LeCoq	John	CEO	Fishpond	Corporate industry	2/9/2024
Leonard	Mike	Conservation Director	American Sportfishing Association	Recreational sportfishing industry	2/9/2024
Linnell	Karen	Executive Director	Ahtna Intertribal Resource Commission	Tribal	2/9/2025
Moore	Chris	Executive Director	Mid-Atlantic Fishery Management Council	At Large - Commercial Fishing	2/9/2024
Moore	Bryan	Chief Intergovernmental Officer	Trout Unlimited	At Large - Conservation	2/8/2022
Rivers	Pat	Deputy Director	Minnesota Department of Natural Resources	State Agency (MAFWA)	1/31/2025
Perry	Steve	Coordinator, Steering Committee Member	Eastern Brook Trout Joint Venture	Landowner representative of an active FHP	2/9/2024
Plumer	Christy	Conservation Director	Theodore Roosevelt Conservation Partnership	At Large - Sportfishing	2/9/2024
Rauch	Sam	Deputy Assistant Administrator for Regulatory Programs	NOAA Fisheries Service	Federal Agency	Serves by virtue of office
Ringia	Adam	Executive Director	Southwest Tribal Fisheries Commission	Tribal	2/15/2025
Rivers	Pat	Deputy Director of the Division of Fish and Wildlife	Minnesota Departnment of Natural Resources	State Agency (Midwest AFWA)	1/31/2025
Schaeffer	Timothy D.	Executive Director	PA Fish and Boat Commission	State Agency (Northeast AFWA)	11/1/2023
Schriever	Ed	Executive Director	Idaho Department of Fish and Game	State Agency (Western AFWA)	11/1/2023
Slaughter	Joe	Natural Resources Manager	Georgia Power Company		2/9/2024
Trushenski	Jesse	Chief Science Office and Vice President for Animal Welfare	Riverence	Agricultural production	2/9/2024
Boyles	Robert	Director	South Carolina Department of Natural Resources	State Agency (SEAFWA)	6/1/2025

Immediate Follow Up Working Actions from the Partner Workshop: Fish Passage Opportunities through the Bipartisan Infrastructure Law

Updated August 26, 2022

Immediately following the *Partner Workshop*, the federal agencies met and decided on a few important and urgent topics they would like to pursue to promote effective implementation of the BIL funding related to barrier removal and fish passage.

This short paper summarizes and organizes the most urgent topics and provides a strategy for immediate and meaningful engagement. It is not intended to address all important issues identified in the workshop but provides a starting point for engagement and collaboration. It outlines an overall process and six small groups to get discussions underway.

For some of these topics, please note consideration of broader aquatic connectivity or conservation/restoration programs and objectives. However, in the interest of time, the groups will initially focus on BIL fish passage efforts and draw in other, related efforts as time and opportunity allows.

Overall Process

1. Step One: Federal agencies will assign a staff person for each of groups in which they have interest by *August 05, 2022*. Not every agency has to have a representative on every group. We are aiming for 4-5 people per group as a starting point to develop initial thoughts per topic. We will also seek representation from non-Federal entities who participated in the workshop. *The role of these small groups is to develop an initial set of options to which the larger group will be able to provide input.*

2. Step Two: Small groups will meet to discuss ideas, gather data, and develop initial set of options / thoughts by *September 30, 2022*. Based on discussion, the following reminders should be incorporated into all discussions:
    a. *Where appropriate, focus on transformational opportunities (don't limit to "how we've always done it," however "don't recreate the wheel" if it is not useful).*
    b. *Include rationale for options and suggestions; not only what the option(s) are by why they make sense. This is necessary for transparency and a unified voice across federal agencies.*
    c. *Focus on the whole being more than the sum of its parts.*
    d. *Be proactive in looking for opportunities to work outside silos and across entities when it makes sense.*

Scheduling and Logistics: Because time is short, the facilitator will send out a Doodle Poll to the participants from each small group with 4-5 options for 1.5 to 2 hour meetings. Participants will have a short time window to fill out Doodle Poll. Facilitator will schedule 2 meetings for each group (maybe a 3rd backup) between September 8th and September 28th. Groups will meet virtually (using Microsoft Teams) between 2-3 times and the facilitator will work to document options developed on calls for group review. It is hoped that groups will forward options by September 30th.

Facilitation: Each small group will be assigned a professional facilitator from Council Oak. This neutral facilitator will be responsible for working with the participants in the group to develop options to forward to federal agencies apropos to their small group topic. In order to ensure agencies are compliant with the Federal Advisory Committee Act, we will not be seeking formal, consensus recommendations from these small groups.

Compiled options document will be available for review by October 12, 2022.

3. Step Three: Report out/meet with federal agencies, states, tribes, partners by *October 21, 2022*, to review and discuss options/ideas.

   Scheduling and Logistics: Will send compiled list of options to participants of the Partner Workshop NLT one week prior to call. Will ask people to respond with written comments and ideas regarding details of concern or improvement for presented options. Will hold a 2.5 hour call limited to any new ideas, significant adjustments, or fatal flaws. There will be a lot of people on this call, so hoping to have a list of items for discussion prior to the call.

   Revised options document will be available for review by October 27, 2022.

4. Step Four: Convene federal agency staff level to review options and determine which options to forward to leadership by November 4th.

   Scheduling and Logistics: In person, one day meeting, with key federal agency staff at a location in the Washington, D.C. area. There will be an opportunity for virtual participation for key staff. We will strive to achieve consensus on crucial topics, but request that each agency appoint a decision maker that will attend the meeting who can make a final staff level determination for their agency. To keep the size of this meeting manageable, we ask that each federal agency provide no more than three participants.

   Final options document will be available for pre-briefs with agency leadership by November 16th, 2022.

5. Step Five: Reconvene federal agency leadership to review recommendations by *December 9, 2022*. We hope to be done by November 16th with small group work, overall review, and revision as to allow pre-briefing for agencies leadership.

   Scheduling and Logistics: Director Williams' Office will schedule this meeting based on availability of senior leadership from other federal agencies.

   Anticipated products: Final decisions will be the key content in a short interagency strategic approach that will guide fish passage activities related to BIL funding. It is anticipated this will include focusing funds and activities, implementing projects, assessing outcomes, and communicating progress, and coordinating across federal agencies and seeking feedback from partners and other stakeholders.

Small Groups Brainstormed at Federal Agency Meeting

Small Group #1: Capacity-building ideas

This small group should work to answer the following questions:

1. What are the critical services for which additional capacity is needed to make executing BIL efforts successful?
    a. Who needs this capacity (e.g., federal agencies, non-profits, states, tribes, others)?
    b. Which services/capabilities/capacities are the ones most time sensitive?
2. What are innovative ways to fill capacity issues of most critical/time sensitive needs (e.g., hire, borrow, train, pool/collaborate among agencies or partners)?
    a. 1, 3, 5 year timeframes may be helpful.
3. How do we ensure that options do not exacerbate capacity issues for states, tribes, or other partners?
4. How might tribal people or disadvantaged community members assist in filling some capacity gaps?

Small Group #2: Telling the Fish Passage Story

Please note, this workshop is looking at coordinating an approach to tell a national story of success with the dual objectives of raising awareness about the importance of fish passage/aquatic health and to promote continued funding. Although there is overlap, it is not focused on community outreach and engagement, another important topic.

Most Important Questions

1. Who are the most important entities with whom we want to share fish passage/aquatic ecosystem implementation and success stories (e.g., Congress, Agency Leadership, American People? Others?)
    a. What will resonate with them? What will they think is important?
2. What should agencies/partners to count/measure to tell the story of implementation success and impact for fish passage efforts?
    a. How do we measure conservation benefits (outputs and outcomes)?
    b. Other benefits (e.g. jobs, public safety, flood risk reduction, reduced infrastructure O&M costs, recreation, etc.)?
3. What is a common way/method of measuring these benefits? Please consider time and cost in recommending methods.

Important, But Secondary Questions (just a brainstorm)

4. What are some existing outlets/mechanisms/efforts we can use to tell the story of the benefits/impacts of fish passage? Ideas for new outlets/mechanisms/efforts?
5. What projects already exist that we could use as good success examples and why (what about the project is successful (e.g., outcome, collaboration, problem-solving, etc.)
6. How can tribes and disadvantaged communities be more involved in framing and telling the story?

Small Group #3: Project Prioritization Approach

1. Develop a set of clear, concise, and common national objectives for BIL fish passage/barrier removal funds. (Note: not every agency or entity needs to play the same role in meeting these objectives but should see themselves in them).
2. Develop options, and discuss pros/cons, for how Federal agencies and partners can collectively meet these common objectives. Specifically consider how projects could be developed and prioritized to achieve these objectives (e.g., shared criteria and geographical focal points?).
3. What tools/data already exist to support prioritization? Are there additional tools that could be developed?
4. How might Federal agencies align BIL fish passage funding with tribal priorities and needs? Are there existing mechanisms? New ideas?
5. How might Federal agencies provide benefits to disadvantaged communities through BIL fish passage funding? Are there existing mechanisms? New ideas?

Small Group #4: Reduce Funding Burden on Applicants

1. Identify and prioritize elements of funding processes that create unnecessary burden on applicants across the lifecycle of a funded project/grant, etc.
    a. Identifying appropriate funding (e.g., better information regarding eligibility, focus, timing, etc.)
    b. Applying for funding (e.g., single entity to manage all funds, single-application process that all agencies look at, application workshop with multiple agencies in attendance, staggered timing, letter of interest, etc.).
    c. Managing funding
    d. Reporting on funding
    e. Other?
2. What are opportunities/options to reduce those burdens/make the funding cycles more efficient for BIL funds? Consider pros/cons of each option (e.g., legality, equity, able to quickly implement v. long-term solution).
    a. Short term solutions
    b. Longer term solutions to explore

Small Group #5: Developing a More Inclusive Approach

Improving Tribal Engagement and Involvement

1. How can federal agencies work together to reduce burden on tribes in engaging and partnering on aquatic connectivity/fish passage efforts? (e.g., single, multi-agency consultation process)?
2. What actions my federal agencies take to better understand tribal needs?

Opportunities for Underserved or Disadvantaged Communities

3. Who are underserved related to this topic? What tools/guidance/information help identify them? (Note: different projects may have different types of communities)
4. What are their primary interests in fish passage projects?
5. What benefits might they have from participating in or supporting fish passage projects?
6. How does this tie into project prioritization? Telling the story?
7. How do you provide resources to keep these communities participating in a meaningful way (at all project steps)?

Small Group #6: Models for Federal Agency and Partner Strategic Communication and Collaboration

1. How can federal agencies ensure effective communication and coordination among BIL efforts at the strategic level in the short term and long term?
2. How can non-federal partners' feedback be included in federal agency efforts in an efficient manner?
3. How can federal agencies meaningfully engage tribes at strategic and implementation components of fish passage efforts?
4. How can federal agencies ensure they understand needs of and opportunities of underserved communities in improving aquatic ecosystem health?

Title: National Conservation Priorities Development

Desired Outcomes:

- **Board approval** of the FY2024 National Conservation Priorities
- **Board understanding** of the goal of the NCPs and how they should be used by FHP's
- **Board understanding** of how the shift from FWS requirements to ACE act impacts the FHP's and the implementation of the NCP's

Background. The ACE Act Section 203 (e)(1)(C) requires the National Fish Habitat Partnership (NFHP) Board to develop and use National Conservation Priorities (NCPs) as the basis for Fish Habitat Partnership (FHP) project development. NCPs are also needed to inform the 5-year Congressional report (Section 209 (a)(2)) which must include: an estimate of the amount of fish habitat maintained or improved by NFHP; a description of public access to fish habitat established or improved; a description of improved public recreational fishing; and an assessment of the status of fish habitat conservation projects.

NCPs are developed regularly by the NFHP Board (Board) to guide FHP project development and are critical to the FHP Request for Proposal (RFP) processes. To develop the FY2024 NCPs, a workgroup has been formed consisting of 6 Board members (Adam Ringia, Joe Slaughter, Carter Kruse, Jesse Trushenski, Stan Allen, and Gene Gilliland), 3 FHP Coordinators (Joan Drinkwin, Lori Maloney, and Jeff Boxrucker), and 4 Science and Data Committee members (Moe Nelson, Kate Sherman, Daniel Wieferich, and Gary Whelan).

After an initial organization meeting on March 23, the Workgroup received input from the Board on NCP scale expectations at the April Board Meeting. The Workgroup also requested input via a survey from the FHPs in April and May. This survey provided a range of information concerning the current priorities (whether to add or delete NCPs, ranking NCPs, reworking needs and metrics, and match availability) and whether FHPs have performance metrics and goals to measure NCP effectiveness along with if they considered the ACE Act requirements in those metrics. Information from 8 FHPs was received and considered in the deliberations of the Workgroup in their June 10 meeting.

At the June 10th meeting, the Workgroup developed a draft set of FY2024 NCPs based on all available information. The Workgroup presented these proposed FY2024 NCP to the Board at the June 28th Board Meeting and received general approval of the direction and content. The Workgroup met on July 17th and discussed strategies for implementing the NCPs to help guide FHP in selecting and placing their projects to ensure they are getting credit for addressing particular NCP's. The workgroup also discussed Climate Change, and why there was not a specific need for a Climate NCP. The Draft NCPs were then sent out to the FHP's and Science and Data Committee for

additional review and discussion, and to recommend additional strategies under each NCP to guide FHP's in how those NCP's should be used and develop measurement metrics that will be nested under each of the NCPs.

The Workgroup met again on August 17th to review and discuss the feedback from the FHP's and SDC. The group agreed that waiting for metrics until after the Board approves the NCPs was appropriate so that extra work was not done. The workgroup also developed a preamble to explain the purpose of the NCPs in general and narrative descriptions of each NCP, along with a short list of example projects that could fit under the NCP.

Next steps after Board Approval will be to request the SDC to develop potential measurable metrics for each NCP to include how they will be incorporated into the database and reported to Congress. The proposed metrics will be presented at the November 2022 Board Meeting for consideration.

Draft Proposed 2024 National Conservation Priorities, with explanations and a subset of sample strategies

Introduction. The National Fish Habitat Partnership has identified seven National Conservation Priorities (NCPs) to guide the work of the Fish Habitat Partnerships, the Board, and fish habitat conservation work at large for FY 2024. These NCPs are provided below along with a short intent statement about the NCP and example strategies intended to evoke the intention of each NCP, but not define or limit the kinds of efforts needed to protect, restore and enhance the nation's fish and aquatic communities. *The NFHP includes many FHP's, each with different goals and objectives, and as the systems and species we seek to conserve are diverse, so are the strategies that can meaningfully address our fish habitat conservation goals.* Example strategies are offered as just that—examples meant to encourage thought, not curb creativity. The NCPs are intended to create space and offer support to the many types of projects and activities that are bringing about positive change for fish and fish habitat. The number given to each NCP is strictly for organization and does not infer priority in anyway.

As used in the NCPs, the word ***conserve*** is broadly defined as protect, rehabilitate, restore, and improve.

Proposed 2024 NCPs and example strategies for Board consideration.

1. **Conserve waters and habitats where all processes and functions are operating within their expected range or natural variation.**

   This priority focuses action on acquiring or protecting in other ways fish habitats that are currently functioning and are considered intact for the purpose of preventing future degradation. In essence: protect what is currently working.

Example strategies may include:

a. Acquire land, water rights/reservations, or easements for intact systems.
b. Protect habitat forming process (e.g., sediment transport, tidal regimes, riparian vegetation, nutrient regimes) in intact systems.
c. Prevent the degradation of water quality parameters in intact systems.
d. Create and implement management plans (including but not limited to fisheries management plans, invasive species plans, species recovery plans).

2. **Conserve hydrologic conditions for fish.**

This priority focuses on ensuring that appropriate hydrologic (annual and daily flows) and hydrodynamic (current or velocity) conditions are always available to allow fish to maximize their production. This is accomplished by rehabilitating degraded and improving engineered hydrographs and hydrodynamic conditions to ensure all needed fish habitats are available at the appropriate times.

Example strategies may include:

a. Restore natural-like conditions and variability for hydrology including currents and velocities in degraded and engineered systems.
b. Secure fishery-favorable water level (rule curves) conditions in degraded and engineered lakes with water control structures, impoundments, and reservoirs
c. Acquire water rights for streams, lakes, impoundments, and reservoirs for degraded and engineered systems.
d. Work with water users to incorporate fish habitat values, including flows and water levels needed to sustain fish communities, into water management plans in degraded and engineered systems.
e. Restore ground and surface water hydrologic connections in degraded and engineered systems.
f. Manage or plant vegetation to conserve hydrologic conditions
g. Restore tidal flow and alongshore/nearshore flow regimes in degraded and engineered marine systems.

3. **Conserve physical and living habitats and features that support viable and sustainable species and/or populations in impacted or at-risk systems.**
This priority focuses on protection, rehabilitation, and/or enhancement of those critical habitat features within a waterbody that are necessary to support ecological function and processes such as structure, vegetation, habitat complexity, etc. that may be lacking, may have been altered, or simply may not be functioning effectively.

Example strategies may include:

a. Restore instream meanders and reconnect floodplains in artificially straightened streams
b. Rehabilitate, restore, or protect submerged aquatic vegetation
c. Install artificial or natural habitat components (reefs, living shorelines, natural or artificial substrate, lake and reservoir structures, and woody material and boulders in stream)

4. **Reconnect fragmented fish habitats**

When aquatic habitats lack full connectivity, fish cannot freely move among the places they need to complete their life cycle and maximize their production. This priority is focused on identifying, removing, rehabilitating, or otherwise addressing anthropogenic barriers so they no longer restrict fish movement and instead allow fish to access habitats, migrate, locate refugia, and seek food and mates.

Example strategies may include:

a. Identify access impairments to spawning, nursery, rearing, and refugia areas.
b. Facilitate removal of physical anthropogenic barriers
c. Incorporate fish friendly designs for both upstream and downstream movement in construction and rehabilitation of water diversion systems and other dams.
d. Restore habitat conditions (physical, temperature, chemical, lack of water, buried stream segments, concrete channels, etc.) in anthropogenically altered reaches that fragment systems.
e. Restore or rehabilitate tidal connectivity in estuaries

5. **Conserve water quality for fish**

This priority focuses on efforts to conserve the physical, chemical, and biological aspects of water quality, mitigate causes of impairment, and restore degraded conditions in support of fish habitat and fish populations.

Example strategies may include:

a. Implement practices to conserve watersheds and processes that maintain water quality for fish.
b. Projects to reduce or control thermal impairments, pollutants, surface runoff, tidal flow restrictions, and/or sedimentation in degraded systems
c. Reestablish functioning wetlands, vegetation buffers, and similar habitat in degraded systems

6. **Maintain structure and function of FHPs**

   The twenty FHPs conduct the foundational work necessary to ensure that NFHP achieves its mission 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. This priority focuses on maintaining strong and effective FHPs and supporting their unique approaches to collaborative, science-driven fish habitat conservation.

   Example strategies may include:

   a. Secure funding for FHP operations (including administrative, outreach, and science needs).
   b. Create, implement, and revise aquatic habitat management plans (e.g., FHP strategic plans, fisheries management plans, invasive species plans, species recovery plans) in concert with FHP partner organizations and entities.
   c. Develop and maintain monitoring frameworks and data systems for habitat conditions and FHP projects.
   d. Facilitate outreach events/efforts that elevate public interest in conserving aquatic habitat.
   e. Facilitate implementation of fish habitat conservation and assessment projects supported by multiple funding sources.

7. **Enhance recreational, commercial, subsistence, and traditional fishing opportunities when conducting projects that conserve fish habitat.**

   This priority includes actions that are intended to broaden support for fish habitat conservation, increase fishing opportunities, support traditional practices, and increase participation in fish habitat conservation activities by local community, particularly young people, by improving access, education, and participation.

   Example strategies may include:

   a. Educate youth and adults in fishing and habitat conservation best practices in concert with habitat conservation outreach.
   b. Consider and engage tribal communities where applicable to ensure that habitat conservation projects support treaty fishing rights where possible.
   c. Improve access to fishing opportunities by Install/improve fishing docks, access ramps, shoreline structures, and trails when part of the habitat conservation project.

NFHP Partnerships Committee

Members:

- Jessica Speed
- Heidi Keuler
- Deborah Hart
- Lori Maloney
- Carter Kruse
- Jeff Boxrucker
- Alicia Marrs
- Therese Thompson (*co-chair*)
- Bryan Moore (*co-chair)*
- Alicia Marrs
- Lisa Havel
- Joe Nohner
- Ted Eischeid
- Karen Linnell
- Joe Slaughter
- Stephen Perry
- Stan Allen (*co-chair)*
- Alex Atkinson (*Board staff support*)

FHP Congressional Designation Process

Background:

The Partnerships Committee, plus several Board members who expressed interest in developing this process, have been meeting to discuss and develop recommendations for how the FHPs will approach applying for Congressional designation. During the initial formation of NFHP, there was an application process for all new FHPs seeking recognition by the Board. The Committee has started a crosswalk between the ACE Act requirements and criteria and the former FHP application documents and guidance. The Committee is in the process of revising the application process and guidance documents to incorporate all the FHP criteria specified by the ACE Act. The Committee has also focused discussions on the timing and strategy by which FHPs will seek Congressional designation. The ACE Act, language below, requires that FHPs seek Congressional designation no later than October 30, 2025 in order to continue to receive Federal funds.

ACE Act Language re: Congressional Designation:

> (1) DESIGNATION REVIEW.—Not later than 5 years after the date of enactment of this Act, any partnership receiving Federal funds as of the date of enactment of this Act shall be subject to a designation review by Congress in which Congress shall have the opportunity to designate the partnership under subsection (f).
>
> (2) INELIGIBILITY FOR FEDERAL FUNDS.—A partnership referred to in paragraph (1) that Congress does not designate as described in that paragraph shall be ineligible to receive Federal funds under this title.

<u>Proposed</u> Process & Timeline for FHP Application for Designation

Timing	Task
Feb/Mar 2023	Revised NFHP Action Plan approved by Board.
By August 1, 2023	All FHPs complete application & 1-pager and submit to the Board for review (prior to entering the RFP process).
Fall 2023 Board Meeting	Board reviews the FHP applications and discusses at the Board meeting.
Early 2024 Board Meeting	Board votes on whether or not to advance FHP application packages to Congress.
By Summer 2024	Staff assists Partnerships Committee with package assembly for submission to Congress

NFHP Action Plan (3rd Edition)

Desired Outcomes:

- **Board awareness of** the history of the NFHP Action Plan, its purpose, and revision schedule.
- **Board awareness of** the contents of the legacy NFHP Action Plan and the process to create a contemporary NFHP Action Plan before the FHP Congressional designation process begins.
- **Seeking Board volunteers** to create the new edition of the NFHP Action Plan by November meeting.
- Action Plan will be up for vote at the February/March 2023 meeting.

Background:

The original National Fish Habitat Action Plan (AP) was born in 2001 when an ad hoc group supported by the Sport Fishing and Boating Partnership Council explored the notion of developing a partnership effort for fish on the scale of what was done for waterfowl in the 1980s through the North American Waterfowl Management Plan. The waterfowl plan has worked wonders during the past two decades to boost waterfowl populations by forming strong local and regional partnerships to protect key habitats. The Plan was codified by Title II of PL 116-188 America's Conservation Enhancement Act: National Fish Habitat Conservation Through Partnerships on October 30, 2020.

In 2020 a group of the NFHP staff revised the Action Plan and were nearing the stage of Board approval when the ACE Act was signed into law. This paused the further progress of the Action Plan revision since the staff shifted their focus to seating the new Board and getting things back up and running. It is now time to revive the revision. The Action Plan will be an important reference for the FHPs as they seek Congressional designation. As such, we want Congressional members and staff to access a most updated version of our Action Plan that accurately reflects the objectives of NFHP since the ACE Act was passed.

Beginning at the September Board meeting, we want to orient new Board members to the elements of the plan, how it has changed over the years and get everyone on the same page so the Board is able to finalize the plan at the early 2023 Board meeting.

Goals for the 2020 AP Revision:

- Make the Action Plan for timeless – ease the burden of future revisions.
- Greatly reduce the length of the Action Plan (2nd edition was 41 pages) so that it is more easily digested.
- Insert FHP vignettes showcasing specific FHPs.
- Insert an improved visual of the NFHP governance structure.
- Revise how the objectives are written so they are concise and easy for any audience to understand.

The current draft of the NFHP Action Plan follows and is not for distribution.

DRAFT IN REVISION – NOT FOR DISTRIBUTION

National Fish Habitat Action Plan – 3rd Edition

The Case for Action

America's natural heritage includes some of the most remarkable aquatic systems in the world. These fresh- and salt-water treasures, from majestic rivers and tropical coral reefs to mountain streams and desert oases, enhance our lives in many ways. These waters provide recreational fishing opportunities for millions; commercial fisheries for sustenance and economic health; and unrivaled experiences with nature. These water bodies are critical to our lives and to the health of our communities.

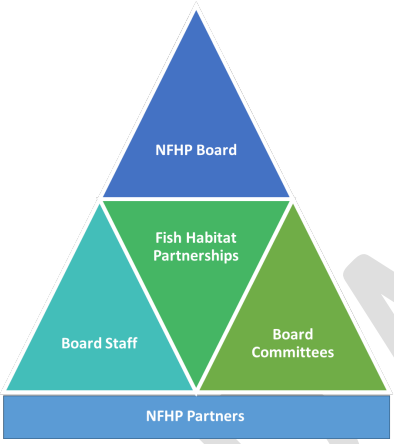

Figure 1 Organization of the National Fish Habitat Partnership. Fish Habitat Partnerships [central triangle], the main focus of on-the-ground efforts, are supported by the Board, staff, and committees which are supported by a wide range of NFHP partners.

Much of the U.S. population lives near inland or coastal water bodies. While this proximity offers people opportunities to recreate, enjoy natural beauty, and support commercial fishing communities; human activities have direct negative effects on water quantity, quality, and other aquatic habitat characteristics. In fact, many of these aquatic systems are threatened or already degraded. Large scale agriculture, development, and deforestation are among human-induced activities that can degrade healthy fish habitat. According to the 2015 National Fish Habitat Assessment, *Through a Fish's Eye*, 22% of inland stream miles in the lower 48 states are at high or very high risk of habitat degradation (Crawford et al. 2016). Action is needed to protect, restore, and enhance fish habitats and prevent degradation of healthy habitats.

Inspired by our aquatic natural heritage, the Sport Fishing and Boating Partnership Council in 2002 identified the need for a framework to guide voluntary, non-regulatory action to protect, restore, and enhance America's fish habitats. An unprecedented coalition of anglers, conservation groups, scientists, tribal governments, state and federal agencies, and industry leaders forged the first National Fish Habitat Action Plan in 2006. The Action Plan served as the cornerstone for the National Fish Habitat Partnership (NFHP) and established an ambitious agenda to achieve its goals. NFHP updates its Action Plan every 6-7 years and issued a second edition Action Plan document in 2012. Since its inception in 2006, NFHP has been a partner in 1,193 projects benefiting fish habitat in all 50 states. As threats to fish habitats increase, NFHP continues to build on previous efforts to broaden the community of support to conserve fish and aquatic communities. We hope you will join us in this important work.

In October of 2020, the National Fish Habitat Partnership was recognized by Congress with the signing of the America's Conservation Enhancement Act (S. 3051, ACE Act). The new law expands NFHP Board membership, authorizes funding to partner organizations, introduces new Congressional requirements and more. The ACE Act authorizes funding (fiscal years 2021 – 2025) for NFHP fish habitat conservation projects. It also authorizes funding for the five participating federal organizations (National Oceanic and Atmospheric Administration, US Geological Survey, US Fish and Wildlife Service, US Forest Service, and Environmental Protection Agency) to provide technical and scientific assistance to NFHP. The passing of the ACE Act marks a historic achievement and national dedication to support NFHP and our mission to protect, restore, and enhance the nation's fish habitats.

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Our Mission and Goals

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 use non-regulatory approaches and science-based decision-making to:

- Protect and maintain intact and healthy fish habitats.
- Prevent further degradation of fish habitats.
- Increase the quality and quantity of fish habitats that support a broad natural diversity of fish and other aquatic species.

Who We Are

NFHP is supported by a wide variety of partners and guided by its Board, committees, and staff (Figure 1). This collaborative effort aligns resources among its partners to make a collective impact through regional or issue specific Fish Habitat Partnerships (FHPs). These 20 individual FHPs form a network focused on improving fish habitats nationwide.

Fish Habitat Partnerships

FHPs are the primary work units of NFHP that identify and prioritize on-the-ground habitat restoration or conservation projects. FHPs are formed around: 1) important fish habitats (e.g. Pacific Marine and Estuarine Partnership); 2) distinct geographic areas (e.g. Great Lakes Basin Fish Habitat Partnership); or 3) "keystone" fish species or system types (e.g. Eastern Brook Trout Joint Venture). They develop strategic plans to support fish habitat conservation at local and regional scales with local partners. By working with diverse public and private partners and other regional habitat conservation programs, FHPs leverage funding sources to achieve on-the-ground results for fish habitats. Visit the website for a list of current Fish Habitat Partnerships.

National Fish Habitat Board, Committees, and Staff

The National Fish Habitat Board (Board) promotes, oversees, and coordinates implementation of the National Fish Habitat Action Plan. The Board serves as a catalyst for new funding and resources to support fish habitat conservation and as the approving body for new FHPs. The Board is led by a Chair, elected from the state fish and wildlife agency membership, and is supported by staff from the Association of Fish and Wildlife Agencies (AFWA), the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), U.S. Geological Survey (USGS), and other state fish and wildlife agencies who provide technical and administrative assistance. Board operations are guided by its charter and specific Board tasks are outlined in a Board Work Plan that identifies specific tasks stemming from the Action Plan Objectives.

The Board consists of 26 members from stakeholder groups that include:

- State and local government representatives;
- Federal government representatives;
- Indian tribal representatives;
- A private landowner representative;
- An agricultural production representative;
- Corporate industry representatives;
- A private sector representative; and

- At-large members representing sportfishing, commercial fishing, academic, and land and aquatic resource conservation organizations.

The Board has several standing committees working to advance long-term Board priorities and may establish ad-hoc committees to address short-term needs. Visit the website for a list of current Board membership.

Partners
ADD DESCRIPTION OF PARTNER ROLE IN NFHP.

Our Terminology

The term **conservation** refers to the protection, restoration, and enhancement of fish and their habitats.

The term **fish habitat** refers to freshwater, estuarine, and marine habitats from the mountain top to continental shelf. Fish habitat includes abiotic (e.g. water quantity, quality, and physical) and biotic (e.g. other organisms in the aquatic community such as benthic invertebrates and shellfish) factors.

Acronyms

NFHP – National Fish Habitat Partnership
FHPs – Fish Habitat Partnerships
AFWA – Association of Fish & Wildlife Agencies
FWS – U.S. Fish and Wildlife Service
NOAA – National Oceanic and Atmospheric Administration
EPA – Environmental Protection Agency
USGS – U.S. Geological Survey
USFS – U.S. Forest Service

Objective 1

Achieve measurable habitat conservation results through strategic actions of Fish Habitat Partnerships.

FHPs work to protect healthy and intact habitat and ~~reverse habitat declines~~prevent further degradation of fish habitats by identifying, prioritizing, facilitating, and, in some cases implementing, fish habitat conservation projects. Projects aim to address the causes of, and processes driving fish habitat decline rather than the symptoms of habitat decline. As of September 2022, the Board's National Conservation Strategies to guide FHP efforts are:

- Protect intact and healthy waters.
- Restore hydrologic conditions for fish.
- Reconnect fish habitats.
- Restore water quality.

Commented [AA1]: Fill in new approved NCPs after Sept. Board mtg.

By addressing these National Conservation Strategies, FHPs focus available resources to achieve long-term and sustainable results. They demonstrate leadership and increased collaboration among state and federal agencies, tribal governments, conservation groups, landowners and other stakeholders. Our focus on measurable results ensures FHP conservation efforts are effective, efficient, and continually improving. Since its inception, NFHP has worked to ensure projects achieve measurable habitat outcomes including acres or miles of high priority habitat enhanced, restored or reopened. For example, from 2015 to 2018, NFHP funding from the USFWS and partners was used to enhance, restore, or reconnect over 11,000 acres and 1,600 miles of fish habitat across the country.

Objective 2

Broaden the community of support for fish habitat conservation.

Communication with and outreach to a wide range of audiences are vital to broaden support for fish habitat conservation. NFHP shares the value of fish habitat conservation with individuals of diverse economic, racial, ethnic, religious, and cultural backgrounds. In doing so, NFHP encourages conservation of intact habitats, fosters increased stewardship to improve degraded areas, and generates support for enhancement and restoration activities where they are needed. Effective communication is critical to inform audiences about economic, environmental, and recreational benefits of on-the-ground conservation efforts. NFHP promotes the work of the FHPs and the benefits they provide to local and regional communities to grow public support for these important conservation efforts. These communications include development of infographics, reports, social media posts, and web articles featuring the fish habitat conservation work of the FHPs. NFHP is committed to advancing FHP work and promoting the benefits it provides to local communities by growing public support for these important conservation efforts.

Objective 3

Use science as a basis to direct fish habitat conservation actions.

Science and data drive NFHP decision-making, project prioritization, and reporting. Maintaining updated information on the status of fish habitats is vital to our work. The Board has a dedicated Science and Data Committee (SDC) that develops and implements the Board's science and data strategy. The SDC ensures the best available fish habitat information and analyses are provided to the Board, FHPs, and partners to support their decisions. Working in coordination with the FHPs and partners, the SDC supports fish habitat assessments and other analyses necessary to strategically identify and prioritize fish habitat conservation actions. This includes ensuring that all partners have ready access to these data.

NFHP's science and data strategy is focused on the physical, chemical, and biological processes of fish habitats and is built on the following:

- Identifying intact systems for protection;
- Identifying underlying causes for declining fish populations in degraded systems;
- Developing, refining, and implementing an integrated landscape approach that includes the upstream/downstream connections of large-scale habitat condition factors;

- Classifying and assessing the condition of the nation's fish habitats;
- Supporting FHPs to develop meaningful, evidence-based project performance metrics; and
- Providing partners easy access to key habitat information to support their work.

Objective 4

Increase public and private investments in fish habitat conservation*.

Conserving fish habitat requires dedicated resources and targeted investment strategies. Estimates of the damages to aquatic connectivity indicate that national remediation costs for this focus area alone exceeded $1.185 trillion dollars in 2018 (Trushenski et al. 2018). NFHP is also protecting intact fish habitats and improving damaged fish habitats across watersheds nationwide, a far more ambitious and expensive endeavor. As a result, it is imperative that additional funding be secured from a wide range of public and private sources to support this work.

Board members will support the growth of additional public and private investments in fish habitat conservation from within and beyond their own agencies and organizations. Developing relationships with a broad range of both traditional and new partners is essential to achieve this objective and to provide private funds to match public dollars already supporting fish habitat conservation efforts. In particular, it is a Board priority to develop new and non-traditional partners to broaden the base of financial support for NFHP. Non-traditional partners are those not typically involved in fish habitat conservation efforts including, but not limited to, private companies, local utilities, and members of the public engaged in outdoor recreation in and around our nation's oceans, lakes, rivers, and streams.

**Participation in this objective is dependent on legal limitations of fundraising.*

Reporting Our Progress

The objectives described above outline long-term approaches that build on previous successes to achieve the mission to protect, restore, and enhance the nation's fish and aquatic communities. However, the number of fish and aquatic communities that require restoration or conservation in the U.S. are vast and the NFHP mission does not have a clear and defined endpoint as more habitats face declines every day. Thus, NFHP works continuously to advance the progress of these objectives. As NFHP advances its mission, incremental accomplishments are documented and reported. FHPs submit Annual Accomplishments Reports to the Board as part of the funding allocation process. These reports include detailed descriptions of all projects and activities of the FHP over the previous three years. In addition, NFHP issues Annual Reports that summarize National accomplishments as well as individual FHP project data and accomplishments. These reports provide a method of accountability to assess annual progress and an opportunity to identify areas for growth and change within the Partnership. Finally, FHPs report to the Board on the effectiveness of their programs and projects every three years to ensure full transparency of FHP work.

National Fish Habitat Board Membership (August 2022)

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As described in the ACE Act, the 26 members of the National Fish Habitat Board represent the following interests (full membership list and terms can be found at: https://www.fishhabitat.org/about/staff-board/):

1. Department of Interior
2. US Geological Survey
3. Department of Commerce
4. Department of Agriculture
5. Association of Fish & Wildlife Agencies
6. Northeast Association of Fish & Wildlife Agencies
7. Midwest Association of Fish & Wildlife Agencies
8. Western Association of Fish & Wildlife Agencies
9. Southeastern Association of Fish & Wildlife Agencies
10. Indian Tribes
11. Indian Tribes
12. Regional Fishery Management Councils or Marine Fisheries Commissions
13. Sport Fishing and Boating Partnership Council
14. Recreational sportfishing industry
15. Marine recreational anglers
16. Freshwater recreational anglers
17. Commercial fishing industry
18. Habitat conservation organizations
19. Habitat conservation organizations
20. Science-based fisheries organization
21. National private landowner organization
22. Agricultural production organization
23. Local government interests involved in fish habitat restoration
24. Corporate industry (natural resource commodity or natural resource user or industries with an interest in fish and fish habitat conservation)
25. Corporate industry (natural resource commodity or natural resource user or industries with an interest in fish and fish habitat conservation)
26. Landowner representative of an active partnership or private sector

Acknowledgments

The National Fish Habitat Board would like to thank the following individuals who revised and improved the National Fish Habitat Action Plan. The Board would also like to thank the many people and organizations that reviewed and commented on the Action Plan.

Board Members:
Ed Schriever, Idaho Department of Fish and Game *(National Fish Habitat Board Chair)*
Bobby Wilson, Tennessee Wildlife Resource Agency *(National Fish Habitat Board Vice Chair)*
Peter Aarrestad, Connecticut Department of Energy & Environmental Protection
Doug Beard, U.S. Geological Survey

Board Staff:
Alex Atkinson, NOAA Fisheries
Eric MacMillan, U.S. Fish and Wildlife Service
Mike Bailey, U.S. Fish and Wildlife Service
Ryan Roberts, Association of Fish and Wildlife Agencies

Gary Whelan, Michigan Department of Natural Resources

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Sidebars/box Context & FHP Vignettes (intersperse throughout the Plan)

Fun Facts

- There are 20 FHPs throughout the U.S. The state of Alaska has the most – five FHPs!
- Some salmon migrate more than 1,000 miles in the ocean, while others remain in marine areas close to the streams where they were born (NOAA Fisheries: https://www.fisheries.noaa.gov/species/coho-salmon)
- 3.5 million rivers and tributaries connect the U.S. to the sea (NOAA Fisheries – Value of River Habitat for Fish Passage infographic *in draft*)
- All of the larger freshwater fish and invertebrates endemic to Hawaii are diadromous, meaning they must migrate to and from the sea to complete their life cycle.
- 30% of U.S. threatened and endangered fish species occur in the arid Southwest.
- Wild Brook Trout is the only native trout that inhabits the cold, clear streams of the eastern U.S.
- Pacific Lamprey have been on the Earth for 400 million years.
- Lahontan cutthroat trout are the largest inland trout in the world reaching sizes up to 48 inches and weighing up to 50 pounds.

Recreational Fishing and Fish Habitat Conservation

Recreational fishing is an economic engine for the U.S., supporting over 1 million jobs and providing $125 billion in annual economic activity (Southwick Associates 2018). In 2018, 16% of the U.S. population participated in fishing, continuing its 11-year upward trend in participation since 2007. Youth participation comprises a significant portion of participation with 7.3 million children ages 6 to 12 participating (Recreational Boating and Fishing Foundation/Outdoor Foundation 2019). Freshwater fishing contributes $41.9 billion to the annual U.S. Gross Domestic Product (GDP) which is more than the economic contribution of the transit and ground passenger transportation industry in 2016 (Southwick Associates 2018).

Our nation's 49 million anglers are also ardent conservationists (Southwick Associates 2018). Many anglers recognize the importance of clean water and abundant fish and support conservation organizations that collect annual membership dues which fund important fish habitat conservation projects. Through the 1950 Federal Aid in Sport Fish Restoration Act (also known as the Dingell-Johnson Act), federal excise taxes from fishing tackle and motorboat fuel are distributed to states to support fisheries management and habitat conservation and restoration. Since 1951, anglers have contributed over $38 billion to fisheries conservation, more than any conservation group or other government (Southwick Associates 2018).

FHP Vignette – Western Native Trout Initiative

About Us:
The Western Native Trout Initiative is a collaborative, multi-state approach that focuses on 21 native trout and char species that are biologically, recreationally, economically, and culturally important to the West. Conserving (protecting, restoring, and recovering) western native trout, char, and kokanee populations at a range-wide or landscape scale will take a unified, collaborative effort to be successful. The Western Native Trout Initiative was formed in 2006 to serve as a key catalyst for the implementation of conservation or management actions, through partnerships and cooperative efforts, resulting in improved species status, improved aquatic habitats, and improved recreational opportunities for native trout anglers across western states. The partnership incorporates the best conservation strategies of existing ventures to save native trout and plays an essential role in conserving water and iconic western landscapes for future generations.

Project Snapshot:
The Warner Basin in Oregon is home to the Warner Lakes Redband Trout (state sensitive, federal species of special concern) and Warner sucker (federally endangered), and our goal is to ultimately delist these fish. The basin has significant habitat impairment issues that prevent that goal being achieved, including aging agricultural irrigation infrastructure, unscreened water diversions, fish passage barriers, and degraded riparian habitat. Project actions include implementing fish passage solutions at irrigation diversions, screening irrigation diversion intakes, enhancing stream corridor habitats in Deep Creek and Honey Creek, and developing a watershed scale restoration approach in collaboration with landowners and diverse interest groups. Within Deep Creek, 25 water users and landowners will directly benefit from this project. Project partners will implement fish passage projects at ten water diversions to open 38.25 stream miles in the Warner Basin by 2025 and will complete fish passage projects with the three irrigation

districts in the Warner Basin. The project includes ten high priority structures to be completed over six years at a total cost of $10.2 Million.

Project Benefits:
Limited water in the eastern Oregon desert means that Warner Basin streams are a critical water source to irrigators, ranchers, as well as migratory birds, other wildlife, and native fishes. The Warner Basin is primarily managed to produce hay and raise beef cattle. The low-lying portion of the basin provides the most fertile agricultural land in the area shared with stream reaches critical to fish migrating from the large lakes in the valley to access prime spawning grounds in the upper basin. Basin habitat partners have been working closely with the local agricultural community for the last decade to gain trust and build a shared vision among all stakeholders, as aging water diversion structures no longer can effectively and safely irrigate privately owned agricultural lands.

(Photo)

Did you know?
The Western Native Trout Initiative nominated Deep Creek Town Diversion as a Waters to Watch project in 2018. The project was our partnership's second-largest project in the basin. It was a precursor to Warner Basin watershed-scale rehabilitation that is now being implemented by the ten planned projects over six years.

FHP Vignette – Atlantic Coastal Fish Habitat Partnership

About Us:
The Atlantic Coastal Fish Habitat Partnership covers the Atlantic States from Maine to Florida. The partnership's strategic plan provides for aquatic habitat conservation from the headwaters to the continental shelf that support diadromous, estuarine, and marine fish species. This work directly benefits local economies dependent on fishing, boating, and wildlife viewing.

Project Snapshot:
ACFHP worked with the U.S. Fish and Wildlife Service to partially fund the Columbia Dam removal in Knowlton Township, NJ. The Columbia Dam was a complete barrier to fish passage from the ocean to the Paulins Kill, a tributary of the Delaware River. Weeks after dam removal, American shad were observed migrating upstream to reproduce. This work was led by The Nature Conservancy and several partners including New Jersey fish and Wildlife and American Rivers.

Project Benefits:
This project restored access to 20 river miles for migrating fish in this region, improved in-stream habitat for resident fishes and macroinvertebrates, and improved water quality in the former impoundment.

(Photos)

TNC, Ellen Creveling Columbia Dam_Intact
TNC, Columbia Volunteer Drone Team Columbia Dam after removal

Did you know?
Over the last ten years, The Atlantic Coastal Fish Habitat Partnership has worked with over 75 different project partners to restore a total of 1,340 acres of habitat and open access to 191 miles of river habitat.

This work has created an economic value of over $116 million!*

* National value estimates produced by Brad Gentner of Gentner Consulting Group, Inc. based on original work and Charbonneau, J.J. and J. Caudill. 2010. Conserving America's Fisheries: An Assessment of Economic Contributions from Fisheries and Aquatic Resource Conservation. U.S. Fish and Wildlife Service White Paper. Business Management and Operations, Division of Economics. September 2010. Arlington VA. 42pp.

FHP Vignette – Midwest Glacial Lakes Partnership

About Us:
The Midwest Glacial Lakes Partnership represents over 40,000 naturally formed lakes. The Partnership's boundary is defined by the locations of past glaciers across eight states in the Upper Midwest, including part or all of Illinois, Indiana, Iowa, Michigan, Minnesota, North Dakota, South Dakota, and Wisconsin.

Project Snapshot:
Fish habitat in lakes is threatened by factors including changing climate, poor water quality, and a lack of nearshore habitat. The MGLP has invested heavily in building its Conservation Planner, a tool that assesses these threats on each of the 40,000 lakes within the Partnership's boundary. The Conservation Planner provides information about the threats, recommends lake-specific strategies for partners to consider in addressing threats, enables lake conservation planning at regional scales, and provides an information source with summarized data for stakeholders as they address the needs of their lake.

Project Benefits:
The MGLP provides science-based assessment tools and generates outreach materials to share management strategies, science, and other information for stakeholders. It also supports conservation projects that serve as examples of new and essential methods for lake conservation. The Partnership's approach is motivated by benefits to fish populations and focuses on conserving lake ecosystems through in-lake, shoreline, and watershed conservation. This ecosystem-level approach provides numerous co-benefits to wildlife, water quality, and lake users as it works to fix the causes and not just the symptoms of problems.

(Photos)

Did you know?

If you walked along the shoreline of every lake in the Partnership you would travel over 89,000 miles, enough to go around the world three times. The health of these shorelines are critical for fishes along with all of the inhabitants of our lakes and is one of the Partnership's key conservation priorities.

FHP Vignette – Hawai'i Fish Habitat Partnership

About Us:
The Hawai'i Fish Habitat Partnership encompasses the main Hawaiian Islands. The partnership seeks to develop and implement on-the-ground conservation projects that improve continuity between streams, estuaries, and nearshore marine habitats to support self-sustaining aquatic communities.

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Project Snapshot:
A recently-completed Hawai‘i Fish Habitat Partnership project supported the removal of more than an acre of densely-packed invasive woody vegetation at the head of the He‘eia Estuary in He‘eia State Park, located on windward Oahu. Clearing the invasive brush was done by community volunteers who were coordinated by the local watershed group Hui O Koolaupoko. Tree removal resulted in “daylighting” the stream and estuary waters and was followed by replanting low-stature, native riparian vegetation along the shorelines. The result was a significant increase in the amount of quality habitat used by recreationally, commercially, and culturally important fish and invertebrates.

Project Benefits:
The Hawai‘i Fish Habitat Partnership fills an unmet need in Hawai‘i by planning and implementing aquatic habitat restoration projects in a variety of coastal marine, estuarine, and stream habitats. Voluntary aquatic habitat restoration is being completed on multiple islands to increase stocks of important fish and invertebrates to benefit anglers and local communities.

(Photos)

Did you know?
The Hawai’i Fish Habitat Partnership has implemented over 40 projects on five islands with almost $2M in direct funding since recognition by the National Fish Habitat Board in 2009.

Beyond the Pond (Bass Pro Shops U.S. Open Grant Program Update)

Desired Outcome: Board awareness of status of projects funded through the Bass Pro Shops U.S. Open Grant Program

Background: The National Fish Habitat Partnership (NFHP) announced in June that nine projects funded through a nearly $1.6 million grant program established through proceeds from the Bass Pro Shops U.S. Open Amateur Bass Fishing Championships held in 2021. The projects funded through this opportunity are high-priority focus areas of the Reservoir Fish Habitat Partnership. These projects were selected out of 30 proposals from across the U.S.

The selected projects will bring over $3 million in total match funding in support of the Bass Pro Shops grant that will go directly to on-the-ground projects benefitting fish habitat and improving angling opportunities.

Projects funded through this opportunity include:

Beaver Lake, Norfork Lake, Bull Shoals Lake, Arkansas
The proposed project will directly benefit anglers by concentrating fish around fish habitat structures and improving angler success rates. Many of these natural structures in these lakes are degraded. New structures will provide habitat and refuge for fish and improve fishing.

Blue Marsh Lake, Pennsylvania
The shoreline projects through this grant will take areas that are unavailable or not favorable to shoreline anglers and turn them into fishing hot spots with easy angler access. The increased shoreline habitat will draw more fish to the project areas and allow anglers access to catch those fish. The stone-framed deflectors used in shoreline stabilization provide a stable platform for anglers to fish from, increasing the ease of use and enjoyment for many anglers.

Lake Shelbyville, Illinois
The success of this project will be gauged primarily by improved quality of the fishery, fish use of habitat structures, quality improvements, bank stabilization, and reduced sedimentation. Shoreline stabilization will also provide increased angler access.

Mark Twain Lake, Missouri
Through this grant, the installation of artificial structures at two locations will restore approximately 60 acres of underwater fisheries habitat. The artificial structures are constructed of PVC materials and concrete that provide long-term durability, are capable of withstanding the stresses of submerged and dry environments, and are designed to reduce snagging of traditional fishing tackle and equipment. The structures will be placed at differing elevations in the reservoir basin to provide stability and integrity. Furthermore, this project incorporates the development of direct shoreline access to the restoration site, which appeals to a broad demographic, including families, youth, senior citizens, and novice anglers.

Old Hickory Lake, Tennessee
This project will benefit anglers by providing a substantial increase in access to quality fish habitat structures for anglers of all skill levels. Specifically, the project will add 400 artificial structures spread out among ten sites with a design that has a proven track record of attracting sportfish species. These sites will receive a special marker buoy as part of the new Bill Dance Fishing Trail in Tennessee and be specially chosen to increase angler success at various times throughout the year. Ten additional sites will receive two new 10-ft tall artificial attractors named Tennessee Towers. Ten large rock humps and two rock reefs approximately 75 ft in length will add offshore habitat for more experienced anglers. This diversity of habitat types will greatly increase the enjoyment and recreational opportunities for our anglers by providing new access to high-quality fishing locations.

Pymatuning Reservoir, Pennsylvania/Ohio
Pymatuning Reservoir is the largest impoundment in Pennsylvania at 17,088 acres. With 70 miles of shoreline along the reservoir, the Pennsylvania Department of Conservation and Natural Resources is responsible for maintaining over 42 miles. The lake also includes 28 miles of shoreline in the state of Ohio. The reservoir was built on what used to be the largest swamp in Pennsylvania, and the former wetland soils are prone to erosion. Pymatuning Dam was completed in 1934, and as the lake continues to age, many miles are in need of stabilization to improve safe fishing access, better fish habitat, and water. The offshore fish habitat has also deteriorated over time. The Pennsylvania Fish and Boat Commission has developed a fish habitat improvement plan in cooperation with the Pennsylvania Department of Conservation and Natural Resources. This plan includes shoreline stabilization structures that will enhance shoreline rock habitat for fish, increase safe angler access, and improve water quality.

Ralph Hall Reservoir, Texas
The large number of fish habitat structures constructed through this grant will provide popular areas for anglers to target for multiple decades and potentially the life of the reservoir. The habitat created will serve to increase the ultimate carrying capacity of sportfish in the reservoir, as well as angler success rate and overall yield of fish. Maps and the precise coordinates and descriptions of all fish habitat structures will be published online on Texas Parks and Wildlife's fish habitat website and shared with the angling public.

Table Rock Lake, Missouri
Through this grant, Table Rock Lake will be will replenished with 645 brushpiles to ensure they

remain viable as fish attractors for anglers as well as serve as nursery habitats for sportfish recruitment. This project will enhance a pilot project through the Missouri Department of Conservation and the Arkansas Game and Fish Commission, Bass Pro Shops, and the U.S. Army Corps of Engineers in 2007. From 2007 to 2013, more than 2,100 megastructures were deployed on Table Rock Lake and Bull Shoals Lake using specialty-built habitat barges made by Tracker Boats.

Three-Mile Lake, Iowa
Through this grant, new natural fish habitat structures, including gravel spawning areas, rock piles, rock fields, and rock reefs, will be constructed to improve the fish habitat in Three-Mile Lake. In addition, over 1,300 feet of shoreline in critical need of repair will be deepened and fortified with rip rap gravel. This shoreline enhancement will prevent future erosion into the lake. In addition, the shoreline improvements will prevent future water quality issues and provide some additional underwater rock habitat for sportfish.

The funding for this grant program is managed through Beyond the Pond, the non-profit organization established in 2015 to benefit the National Fish Habitat Partnership and associated Fish Habitat Partnerships under NFHP.

National Fish Habitat Assessment Scoping Survey
National Fish Habitat Partnership Board
September 2022

1. Who will be the audience for the new 2025 Assessment and how broad does the Board want the audience to be? (Multiple choice and check all desired)
   - NFHP Board
   - General Public
   - Informed Public
   - Legislators
   - High Level Agency Administrators
   - Corporate Officers
   - FHP staff
   - Fisheries Professionals
   - Other (please list)
2. What messages does the Board want to convey from the Assessment? (Multiple choice and check all desired)
   - National scale status of aquatic habitat
   - FHP scale status of aquatic habitat
   - Key priority areas for fish habitat projects
   - Show effectiveness of conservation strategies at the appropriate spatial scale
   - Other (please list)
3. Does the Board want a similar looking nationally based product to the 2015 Assessment (http://assessment.fishhabitat.org)?
   - Yes
   - No
   - If no, what would the Board want as a final product? (Please indicate what is desired)
4. What datasets does the Board want included in the 2025 Assessment? (Please list datasets or data areas that you want considered for the Assessment)
5. What socioeconomic datasets does the Board want included in the 2025 assessment? (Please list datasets or data areas that you want considered for the Assessment)
6. Does the Board want the 2025 Assessment to consider including all complete FHP assessment products?
   - Yes but only if an individual FHP data is compatible with other FHPs' datasets.
   - Yes include all complete FHP data regardless of compatibility with other FHPs' datasets.
   - No, only include consistently collected national datasets which may include FHPs' datasets that meet that definition.

PMEP is delighted to announce the release of the **State of the Knowledge of U.S. West Coast Nearshore Habitat Use by Fish Assemblages and Select Invertebrates** report and data products, released in conjunction with the national American Fisheries Society Annual Meeting in August 2022.

PMEP developed the Nearshore Project with three main objectives:

1. Define and map boundaries for delineating nearshore zones along the U.S. West Coast.

2. Compile and standardize spatial data on nearshore habitats within defined nearshore zones.

3. Produce a state-of-the-knowledge report on U.S. West Coast nearshore fish and invertebrate habitats.

PMEP has compiled standardized spatial data on nearshore habitats within defined nearshore zones to reflect what we know about nearshore habitat classification and extent along the entire U.S. West Coast. Nearshore areas are delineated by PMEP ecoregions, which include the Salish Sea, Pacific Northwest, Central California, and Southern California Bight. Each ecoregion section describes the habitats by nearshore zones, fish assemblages, and invertebrate use. Nearshore habitat data from multiple sources was standardized using the Coastal Marine Ecological Classification System (CMECS).

The report and data products provide a baseline for investigating changes, shifts, and adaptations of habitats for nearshore marine species of the U.S. West Coast. The geodatabase includes feature classes of nearshore zones and biotic and substrate habitat layers, and the data products are designed for use by resource managers, restoration practitioners, and researchers. The report and data are available on PMEP's website:

- Report: www.pacificfishhabitat.org/assessment-reports
- Data: www.pacificfishhabitat.org/data

Board Governance Structure ● Proposed Committees for NFHP Board

Standing Committees

Committee	Role	Potential Focus and Tasks
Executive	Coordinate Board and Committee functioning and staff direction, in lieu of an Exec Director or Exec Secretary type of role or to assist that person if ever able to hire them	• Responsible for urgent decisions made in between Board meetings. • Assist Board Chair and Vice Chair in keeping the Board on task, setting the agenda/focus for each Board meeting.
Governance (this committee can be small, maybe 3-4 people) **Chairperson**: Doug Austern	Principal responsibility is to ensure that the Board continuously strives to be as effective as it can be.	• Annual Board meeting calendar and other meeting logistics. • Write the bylaws, which should include at a minimum: o how members are appointed by the board; o what the terms of office are for officers/members; o how ineffective board members are removed from the board; o the stated number of board members to make up a quorum which is required for all policy decisions; o how urgent decisions are made between Board meetings. • Manage recruitment, filling of open Board positions as needed, vetting potential Board members, per the rules set by Congress. The board's nominating process should also ensure that the board attempts to remain appropriately diverse with respect to gender, ethnicity, culture, economic status, disabilities, and skills and/or expertise needed on the Board. • Writing Board policies: Conflict of Interest, other policies as needed. • Writing standing Committee charters, recruiting/recommending Committee chairs and vice chairs. • Conduct annual Board evaluation of the Board itself (collectively and also individual Board member performance). • Provide orientation to new Board members: including the organization's mission, bylaws, policies, and programs, as well as their roles and responsibilities as board members. Discover new Board members' interests and abilities so as to strategically involve them in committees or workgroups. Assign them a Board "buddy" type of mentor.

Partnerships **Chairpersons**: Bryan Moore, Stan Allen, Therese Thompson	Serves as a forum for preliminary discussions, fact-finding, and formulating recommendations for Board actions that affect Fish Habitat Partnerships.	• Develop recommended approaches for how to meet the cost share/match outlined in the ACE Act (if the Board wants to be involved in this issue). • Develop recommended approach for NFHP funding allocation process for FY24 and the future. • Review the previously written Document of Interdependence; still relevant? Can this document still serve a purpose? • Review the previously written criteria for becoming a FHP and compare with Congressional criteria, make recommendations to Board on how to proceed with establishing written criteria and interpretations by August 2022. • Provide comments/recommendations to the Board about Board deliberations and decisions where FHPs have knowledge/experience. • Consider and recommend FHP Performance Evaluation measures: annual performance measures and also longer term evaluation processes to obtain then maintain status as a recognized FHP. • Review and identify the scale and scope of the linkages between FHP priorities and the NFHP National Conservation Strategies. • Liaise with the FHPs: issues they are facing, issues that need to be brought to the attention of the full Board or other Board committees.
Communications **Chairperson**: Johnny LeCoq	Develops guidelines and oversees consistent, effective communication aligned with the NFHP mission and brand. Maintains the brand standards and defines the voice and tone of the organization. This committee acts as the voice of the organization and the messages it sends influences the organization's most important asset: its reputation. Perceptions of its reputation affect the organization's ability to attract funding and enhance its influence.	• Establish/review a communications/branding plan with key messages, logo/brand guidelines, communication channels. • Write the annual NFHP report, e-newsletters, press releases. • Develop other media/stories as possible. • Develop graphics/dashboards/etc. that encapsulate NFHP successes for strategic audiences. • Waters to Watch and other national or regional campaigns. • Develop talking points for Board members. • Oversee communications program staff to ensure website and other platforms are accurate, updated, and reflect the organization’s communications goals and objectives.

Board Governance Structure ● Proposed Committees for NFHP Board

Science and Data **Chairpersons**: Gary Whelan and Daniel Wieferich	Primary purpose is to provide scientific and data management expertise and oversight to advance the goals and objectives of the NFHP Board in a scientifically sound and strategic manner.	• Advise on setting future science and data priorities to include national conservation priorities. • Develop strategies to support Board science and data priorities by ensuring the completion of appropriate fish habitat assessments and the NFHP National Assessment. • Project Tracking Database implementation and upkeep. • Assisting the Board in setting performance evaluation measures for projects (*not* FHP organizational metrics which are under Partnership Committee): How do we evaluate the actual projects being implemented – did the design work, did the work succeed in the short term/long term, cost/benefit analysis, etc.
Policy **Chairperson**: Tim Schaeffer	Primary function is to coordinate and advance legislative and administrative policies and funding opportunities for the benefit of NFHP and its associated fish habitat partnerships.	• Coordinate NFHP Board reporting requested by Congress. • Work to fully fund the ACE Act, and ensure that 400K for technical support is appropriated to the five federal agencies per the ACE Act. • Suggest clarifications or amendments to the ACE Act as determined by the Board. • Coordinate bringing FHPs to Congress for reauthorization when applicable.
Projects review annual workgroup	Functions to review annual project submissions from the RFP process; prepare recommended table of projects for full Board review	• Should be Board members only (no FHP participation) in lieu of having dedicated staff to fulfill this role

Additional tasks specific to the ACE Act and the NFHP Board that will need to be assigned to committees:

1. One of the committees should be tasked with writing the letter to Congress each year.
2. One of the committees should be tasked with liaising with Beyond the Pond (Board to Board, and also the communications/messaging the two organizations need to share).

3. One of the committees should be tasked with organizing/writing collective grant applications on behalf of the Board or the FHPs (i.e. Multi state grants or others).
4. One of the committees should be tasked with overseeing the Interagency Operational Plan process/authors/timeline.

Considerations for Advancement of Board Governance & Effectiveness

Board Roles and Responsibilities

Establish Direction

- Develop and maintain focus on mission and vision.
- Establish strategic direction.
- Delegate authority for organizational management.
- Articulate, safeguard, model, and promote organizational values.

Ensure Resources

- Develop policies related to the generation of financial resources.
- Ensure that the necessary resources are made available for implementation of the mission.
- Ensure that NFHP has the leadership needed at both the programmatic level and the board level.

Provide Oversight

- Establish financial policies and ensure accountability.
- Ensure compliance with applicable laws and ethical standards.
- Monitor progress toward strategic goals and evaluate outcomes.

Individual Board member responsibilities

- Attend all board and committee meetings and functions, such as special events.
- Stay informed about the organization's mission, services, policies, and programs.
- Review agenda and supporting materials prior to board and committee meetings.
- Serve on committees and offer to take on special assignments.
- Suggest possible nominees to the board who can make significant contributions to the work of the board and the organization.
- Keep up-to-date on developments in the organization's field.
- Follow conflict-of-interest policy.
- Refrain from making special requests of the staff.
- Assist the board in carrying out its fiduciary responsibilities.

Board Governance Structure ● Proposed Committees for NFHP Board

Governance

The NFHP Board needs to agree on its bylaws and standing committees and what temporary workgroups are needed, what their tasks are and in the case of workgroups when/if they should be disbanded. Each standing committee and work group should be chaired by a Board member. Each Board member should be required to sit on a committee, or to put a staff person from their organization on a committee in their place if they cannot personally meet the time commitment.

This Board needs to engage in some planning activities:

- What is the strategic mission of NFHP, what does the Board want the organization to look like 10 years from now, 20 years from now?
- Research the internal and external environment.
- Identify changing community needs including the program's strengths, weaknesses, opportunities and threats (SWOT analysis).
- Review the previous NFHP Action Plan to determine which parts are still relevant and which parts need to be tweaked or replaced entirely.
- Identify the critical issues facing the organization.
- Set goals and measurable objectives that address these critical issues.
- Integrate all the organization's activities around a focused mission.
- Prioritize NFHP goals and develop timelines for their accomplishment. Goals should be conservation goals but can also be organizational goals.
- Establish an evaluation process and performance indicators to measure the progress toward the achievement of national goals and objectives.

Other observations to consider:

- NFHP is not a standalone 501c3-6 nonprofit organization nor a strictly governmental type of Board, so it does not completely fit under either model BUT can draw governance strengths from both of those types of organizations.
- This is a large Board and should have a facilitator to assist at every Board meeting.
- This Board needs an executive director or an executive secretary or an individual with similar job responsibilities to an executive director if that is an inappropriate title. This person needs to be responsible to the Board first and foremost, not an employee of another organization.
- Can the 400K for those federal agencies as described in the ACE Act be used to help pay for Board/Standing Committee staff support or did Congress mean "technical support" as in a very narrow definition to mean science/data technical support only?
- Consider pros/cons of establishing an Executive Committee to assist Board Chair

Board Governance Structure ● Proposed Committees for NFHP Board

Title: Science and Data Committee Report

Desired Outcomes:

- **Board Decision** on the direction for the 2025 National Fish Habitat Assessment.
- **Board Understanding** of the status of the Project Tracking Database System.
- **Board Understanding** of SDC work on the National Conservation Priorities.

2025 National Fish Habitat Assessment Scoping

The ACE Act requires the Board report to Congress on the condition of the nation's aquatic habitat by 2025 and to fill the gaps in the National Fish Habitat Assessment (Assessment). One gap specifically noted in the ACE Act is the omission of socioeconomic data. To accomplish this reporting task, the Board's desired Assessment needs to be fully scoped by early 2023. The SDC started this process at the June Board meeting with an overview of existing assessment products. At this meeting, the SDC requests Board direction on what is desired and expected from the 2025 National Fish Habitat Assessment.

Background. The Board has developed two Assessments, one in 2010 and another in 2015, both of which followed the guidance laid out in the National Fish Habitat Action Plan. Both Assessments use NHDPlusV1 as the spatial framework in the lower 48 states and a similar system in Hawaii. Since NHDPlusV1 does not exist for Alaska, HUC12 watershed units were used as the spatial layer. The Assessments evaluated rivers and streams for all of the U.S., although at different resolutions in Alaska and Hawaii, and had a high-level analysis of coastal areas of the lower 48 states with regional analyses in Southeast Alaska, Hawaii and the Gulf of Mexico. These Assessments did not fully cover lakes, reservoirs, coastal or marine habitats. The Assessments also did not include Great Lakes waters of the U.S.

Both assessments had a very broad audience that included the general public, congressional and state legislators along with their staff, FHP coordinators and their staff, Board and Board staff, and the scientific community. Both assessments were designed to withstand the peer review process, and both did through a number of presentations made at professional society meetings and publications in peer reviewed books and journals.

For each of the 2.7 million NHDPlusV1 segments in the lower 48 states, the equivalent system in Hawaii, and for HUC12 watersheds in Alaska, nationally and consistently developed data layers ranging from local geology to land use to fish community data were attributed to the spatial framework. Approximately 80 variables are attributed to each of the lower 48 states' 2.7 million river and stream segments and since less data was available, fewer variables were attributed to

spatial units in Hawaii and Alaska. For the lower 48 states, these attributed variables were combined with fish community data, collected with single pass electrofishing, from appropriately 40,000 segments to produce statistical dose-response curves that allowed degradation risk scores to be generated for all lower 48 state segments. For Alaska and Hawaii along with coastal systems, attributed stressor data was scored using expert opinion to generate system scores. The one exception is the Gulf Coast estuaries which used fish community data generated statistical dose-response curves to develop degradation risk scoring. System degradation risk scores were generated for all parts for the U.S. were spatial and stress data were available. Maps were generated for the lower 48 states, Alaska and Hawaii. Summaries, techniques, and data products are all available for the 2015 Assessment in the online Through a Fish's Eye Report at http://assessment.fishhabitat.org.

The Science and Data Committee during the development of both Assessment products did evaluate if and how FHP assessments could be integrated into the Assessments. Due to the differences in spatial formats and inconsistently measured datasets, there was no practical way to integrate this important information into the Assessments. Another analysis of these FHP data will be done to understand current transferability of information into future Assessments which will be reported on at the Spring 2023 Board Meeting.

While both the 2010 and 2015 Assessments reached a level of analysis that had not been achieved previously, there were still significant gaps that could not be filled. The key gaps are as follows:

- Spatial
    - Inland – There was a lack of coverage for lakes and reservoirs.
    - Coastal – There was a lack of a consistent spatial framework to properly map estuaries, nearshore areas, and coastal waters for both marine and Great Lakes areas.
    - Alaska and Hawaii–NHDPlus was not available for these states, although similar products were derived for Hawaii and Southeast Alaska.
- Fisheries Data Layers
    - Inland – Lack of consistent spatial coverage of fish community data for many river and stream areas was noted. Similarly, fish community data could not be easily gathered with consistent methods for lakes and reservoirs. This resulted in macrohabitat analysis gaps and low sample sizes for some types of rivers and streams.
    - Coastal - Fish community data could not be easily gathered with consistent methods for most of the coastal waters with some data allowing analysis for Gulf of Mexico estuaries. Development of dose-response curves could not be conducted for most coastal U.S. waters.
    - Alaska – Fish community data is not available for most Alaskan waters and coverage is spotty in most areas. The use of the Alaska Anadromous Fish Catalog was attempted but this dataset is incomplete with respect to the species coverage and is not intended for this type of analysis.

- Anthropogenic Layers
    - Hydrology – National databases for hydrology which included both gauged and ungauged stream reaches was not available so this key variable could not be included in the analysis.
    - Grazing Intensity – Appropriate databases for this key regional variable were not available and it could not be included in the analysis.
    - Timber Harvest Intensity - Appropriate databases for this key variable were not available and it could not be included in the analysis.
    - Barriers – While national data layers for dams and road-stream crossings were available and used in the Assessment, it was acknowledged to be incomplete for those variables. Available data also did not include tidal gates, chemical barriers or concrete stream/river channels.
    - Water Quality – While available national data layers for water quality were included in the Assessment, there were significant gaps in coverage both spatially and for a range of chemicals.
    - Material Recruitment and Transport – Complete national data layers for material recruitment and transport (i.e. sediment and woody debris) were not available and could not be incorporated into the Assessment.
    - Geomorphology - Complete national data layers for geomorphology and bottom form were not available and could not be incorporated into the Assessment. This includes data on harbor installations, jetties, channelized stream segments, and shoreline hardening.
    - Living Habitat and Invasive Species – Complete layers for living habitat (i.e. oyster and mussel beds and SAV) and invasive species were not available and could not be incorporated into the Assessment.

Even with the known gaps and flaws, the Assessments are remarkable compilations of data and the peer-reviewed statistical analytical approaches are sound with the available data. **The 2015 Assessment provides the only national broad scale information on where most of the intact systems are located and an image of the degradation of our aquatic systems.** This peer-reviewed assessment provides the only national spatially informed data on the state of the Nation's aquatic habitat and has been useful in discussions with key national decision makers. The fish community data used in the 2015 Assessment clearly showed where there are significant issues with habitat degradation. The data gaps and spatial scales are acknowledged to cause some interpretation issues, particularly in the desert and low precipitation regions of the U.S.

Since 2015, considerable progress has been made to address some of the data gaps noted above. For example, a layer of unimpaired hydrology is now available from USGS with more detailed work being done on specific large watersheds such as the Delaware River. New and much improved coastal assessments are being done in the Northeast and West Coast at this time. A new and much

improved spatial framework is now available for the Great Lakes. Other important new assessments have been done on barriers in the Southeast, Northeast and Northwest along with new information on impairments in glacial lakes to name a few examples. An analysis of newly available datasets and updated existing datasets will need to be done prior to developing the next Assessment depending on what the Board wishes the Assessment to examine and look like.

Key Direction Needed from the Board. To properly design the 2025 Assessment, the SDC needs Board direction on the following questions:

- **Who will be the audience for the new 2025 Assessment and how broad does the Board want the audience to be?** This information will inform the SDC on how many output information layers should be included along with the detail of the information.
- **What messages does the Board want to convey from the Assessment?** For example, does the Board want to show the current state of the nation's aquatic habitat using consistently measured fish and habitat data? Does it just want to just show FHP scale assessment information for all 20 FHPs? Information from this question will assist the SDC in scoping the needed product.
- **Does the Board want a similar product to the 2015 Assessment or something else? If something else, what would the Board want as a final product?** This information will help the SDC scale and scope the Assessment product.
- **What datasets does the Board want included in the 2025 assessment?** This information will be used to determine what data may be available to meet the Board direction in this area.
- **What socioeconomic datasets does the Board want included in the 2025 assessment?** This information will be used to determine what data may be available to meet the Board direction in this area.
- **Does the Board want the 2025 Assessment to try to include all FHP assessment products?** Information from this question will help scope the SDC determination of the feasibility of this approach. This was not done in previous Assessments due to the incompatibility of the FHP assessments across the nation and their inherit data gaps. This can be examined/scoped again if desired by the Board.

The Board will receive a survey prior to the meeting that asks for input on the above questions prior to the Board meeting. The survey results will be reviewed at the Board meeting then "final" decisions/input on each question will be requested. These data will be vital to the proper scoping of the 2025 Assessment.

Project Tracking Data System Update

FY2022 Project Tracking System Priorities and Progress

- An updated database scheme has been completed.
- A new draft data entry form using ESRI Survey123 Connect has been completed.
    - The Project Tracking Data System Team is soliciting a review of the data entry form from NFHP partners which is in progress at this time.
- NFHP Project Tracking presentation was made at AFS Annual Meeting in Spokane (August 2022).
- The key next step is to incorporate all FY2022 projects into the upgraded data system.

National Conservation Priorities Review and Metric Development

- The SDC reviewed and provided comments on the draft NCPs to the workgroup which included a discussion at our August 5 meeting.
    - Once the NCPs are approved by the Board, the SDC will work on generating a draft list of potential measurement metrics for each NCP for consideration by the Board. We are planning to present this draft list to the Board at the November Board Meeting and will incorporate a FHP review of any draft metrics prior to this presentation.

Waters to Watch 2022 Nominations

Desired Outcome: (Board Approval of Waters to Watch nominations for 2022)

Background: The Communications Committee of the National Fish Habitat Partnership is planning to announce the 2022 Waters to Watch during the week of September 26th. The below projects were nominated by the 20 FHPs under NFHP and have been endorsed by the Communications Committee and Partnerships Committee.

2022 Waters to Watch Nominations:

1. Deshka River, AK – Mat-Su Basin Salmon Habitat Partnership

2. Grandpa's Farm Road Bridge, AK – SE Alaska FHP

3. Huzzah, Courtis, Shoal Creek Wetlands, MO – Fishers and Farmers Partnership

4. Neskowin Fish Passage Improvement Project, OR – Pacific Marine and Estuarine Partnership

5. Raystown Lake, PA - Reservoir Fish Habitat Partnership

6. Susitna River, AK – Pacific Lamprey Conservation Initiative

7. Tin Cup Creek, ID – Western Native Trout Initiative/Desert Fish Habitat Partnership (Retrospective)

8. White River, VT – Eastern Brook Trout Joint Venture (Retrospective)

9. Wildcat Creek, CA – California Fish Passage Forum

10. Williamsburg off-channel wetland, OH – Reservoir Fish Habitat Partnership

The full nomination write-ups for each of the projects can be found HERE.

NFHP Partnerships Committee
ACE Act Crosswalk with Former FHP Application Process

Members:

- Jessica Speed
- Heidi Keuler
- Deborah Hart
- Lori Maloney
- Carter Kruse
- Jeff Boxrucker
- Alicia Marrs
- Therese Thompson (co-chair)
- Bryan Moore (co-chair)
- Alicia Marrs
- Lisa Havel
- Joe Nohner
- Ted Eischeid
- Karen Linnell
- Joe Slaughter
- Stephen Perry
- Stan Allen (co-chair)
- Alex Atkinson (Board staff support)

Background:

To inform the development of the FHP Congressional designation process, the Partnerships Committee cross-walked the ACE Act FHP criteria with the original FHP application process from the start of the Partnership. This comparison allowed FHP coordinators and Board members to begin revising the original FHP application form and guidance to align with the ACE Act requirements. This application (submission to the Board) would be the first step for FHPs beginning the Congressional designation process. The group will be meeting once again in advance of the September Board meeting to further flesh out the details of the proposed process.

Resulting tasks to be completed:

- ☐ Board to approve the **NFHP Action Plan** at the February/March Board Meeting of 2023
- ☐ Complete and adopt "new" **FHP NFHP Recognition Guidance and Policy Document**
- ☐ Complete and adopt process (if needed) for recognizing new/candidate FHPs
- ☐ Complete and adopt guidance for how FHPs are/will be evaluated
- ☐ Adopt a timeline and process for **FHP Congressional Designation**

Cross-walk Findings:

New guidance needed from Board:

- 50% Non-federal funding match requirement and option for State and Tribal match waiver
- Congressional designation – Board needs to determine a timeline and process for FHPs to submit an application to the Board.

Recommended for Board review:

- Under the "engagement" and "diverse groups and private partners" purposes of FHPs under the ACE Act, where other stakeholder groups are referenced; Board may want to review the intent of those placements and determine if similar additional stakeholders need to be part of FHPs, or at a minimum encouraged.
- An ability to coordinate the implementation of priority projects that support the goals and national priorities set by the Board that are within the Partnership boundary (***note***: ***Depending if geographical boundaries are a concern to the new NFHP Board this section may need revision.***)
- **ACE Act Section – Requirements for Recommendation to Congress:** is able to address issues and priorities on a nationally significant scale ***note***: ***Depending if geographical boundaries are a concern to the new NFHP Board this section may need revision.***)

Minor revisions to original guidance needed:

- Focus on promoting the health of important fish and fish habitats
- **ACE Act Section - Criteria for designation:**
  - Ability to develop fish habitat conservation priorities based on sound science and data, the ability to measure the effectiveness of fish habitat projects of the Partnership, and a clear plan as to how Partnership science and data components will be integrated with the overall Board science and data effort ***(note: Recommend some word-smithing here to add this language more directly into the guidance and include new guidance emerging from the NFHP Science and Data Committee and incorporating the NFHP National Conservation Strategies.)***
- **ACE Act Section - Requirements for Recommendation to Congress**
  - identifies representatives to provide support and technical assistance to the Partnership from a diverse group of public and private partners, which may include State or local governments, nonprofit entities, Indian Tribes, and private individuals, that are focused on conservation of fish habitats to achieve results across jurisdictional boundaries on public and private land (***note: Some updates may be included here if the NFHP Board seeks to recommend additional stakeholders to be considered by FHPs.***)

- is organized to promote the health of important fish species and important fish habitats, including reservoirs, natural lakes, coastal and marine environments, coral reefs, and estuaries
- Identifies strategic fish and fish habitat priorities for the Partnership area in the form of geographical focus areas or key stressors or impairments to facilitate strategic planning and decision making (***note***: ***Depending if geographical boundaries are a concern to the new NFHP Board this section may need revision.***)
- Demonstrates completion of, or significant progress toward, the development of a strategic plan to address declines in fish populations, rather than simply treating symptoms in accordance with the goals and national priorities established by the Board
- Promotes collaboration in developing a strategic vision and implementation program that is scientifically sound and achievable.

Waters to Watch 2022 Nominations

Desired Outcome: (Board Approval of Waters to Watch nominations for 2022)

Background: The Communications Committee of the National Fish Habitat Partnership is planning to announce the 2022 Waters to Watch during the week of September 26th. The below projects were nominated by the 20 FHPs under NFHP and have been endorsed by the Communications Committee and Partnerships Committee.

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The full nomination write-ups for each of the projects can be found HERE.

PARTNER WORKSHOP

Fish Passage Opportunities through the Bipartisan Infrastructure Law

VOLUME 1: JULY 2022 MEETING SUMMARY

PARTNER WORKSHOP 2022: MEETING SUMMARY

WORKSHOP SUMMARY

The U.S. Fish and Wildlife Service (USFWS), in partnership with the Association of Fish and Wildlife Agencies (AFWA) and The National Fish Habitat Partnership (NFHP), convened a two-and-a-half-day meeting of federal, state, and tribal agency representatives, as well as non-governmental organizations (NGOs), to discuss the Fish Passage opportunities under the Bipartisan Infrastructure Law (BIL), also referred to as the Infrastructure Investment and Jobs Act (IIJA). The meeting took place at the National Conservation Training Center (NCTC) in Shepherdstown, West Virginia, and had the following objectives:

- Achieve a greater understanding of federal agency and non-federal partner goals, activities, and timelines.
- Identify collaborative opportunities to improve fish passage through the IIJA.
- Explore opportunities to identify and advance shared ecological and socioeconomic goals and measures of success.
- Identify future needs and mechanisms for communication, collaboration, and coordination.

Throughout the workshop, attendees had the opportunity to hear from representatives from all of these sectors about the work that they are doing, the challenges they face, and the opportunities to maximize the impact of BIL funds. Several plenary sessions on Monday provided valuable context for an interactive Tuesday, where participants spent the entire day in dialogue during seven breakout sessions. On Wednesday, attendees heard a synthesis of the ideas discussed in the breakout sessions. In the afternoon, the federal agency representatives had an opportunity to meet and discuss immediate next steps.

A copy of the meeting agenda can be found in Appendix A. A full list of workshop participants can be found in Appendix B. Below is a session-by-session summary; copies of the presentations can be found in Attachment A: Compiled Presentations by Session.

PARTNER WORKSHOP 2022: MEETING SUMMARY

DAY 1: MONDAY, JULY 20, 2022

Leadership Welcome

The Leadership Welcome included an address by Director Martha Williams of the U.S. Fish and Wildlife Service, Mr. Tony Wasley, President of the Association of Fish and Wildlife Agencies, and Minnesota Division of Fish and Wildlife Deputy Director Patrick Rivers, who represented the National Fish Habitat Partnership. These speakers addressed the historic opportunity that this funding represents and affirmed their enthusiasm and commitment to working together across agencies and the public and private sectors to do the best possible work with the dollars available. They stressed that achieving this will require a commitment to guard against fragmentation of objectives among this group of partners and to always be mindful of the common set of objectives and values. With its combined knowledge and expertise, with clear communication this group is well positioned to complete projects where they matter most.

Panel Presentation: Perspectives on the Challenge and Opportunity of Fish Passage

- **George Pess, NOAA's Northwest Fisheries Science Center** provided an overview of how barriers impact fish populations, the main types of barriers encountered, and the scale, severity, and distribution of these barriers. His presentation focused on dams and emphasized that removing these dams can restore critical habitats that will provide both essential ecosystem services to the watershed and social, economic, and cultural benefits to the people living there.
- **Paul Ward, Columbia River Inter-tribal Fish Commission (CRIFTC)** opened by describing the inseparable relationship many tribes have with fish both culturally and as a "first food." He then provided an overview of how tribes of the Pacific Northwest have been regional leaders in protecting the aquatic ecosystem in the Columbia River Watershed through long-term planning at the basin level that also protects tribal treaty fishing rights. The CRITFC has a plan in the basin that aims to restore fish through the entire life cycle, which in turn better supports the surrounding ecosystem.
- **Kayed Lahkia, Federal Emergency Management Agency (FEMA)** discussed aging dam infrastructure in the nation and the issues around rehabilitating and removing that infrastructure. He also discussed the National Dam Safety Program's role in improving fish passage. The program received funding under IIJA specifically for removing High Hazard Potential Dams.
- **Brian Graber, American Rivers** provided an overview of American Rivers' work and the role it can play in relationship building, training, and advocacy. American Rivers focuses on multi-benefit restoration projects where fish passage is a benefit alongside habitat restoration, improvements in water quality, public safety, and job creation, among others. Mr. Graber focused on dam removal, emphasizing that the National Inventory of Dams (NID) does not reflect many small structures such as culverts, bridges, and fords that make up the vast majority of fish passage barriers. American Rivers advocacy through the Uncommon Dialogue on Hydropower,

River Restoration, and Public Safety has helped develop the 21st Century Dams Act, which, if passed, would fund $7.5 billion for dam removal.

DISCUSSION

Question: In the 21st Century Dams Act, there was language establishing an interagency coordinating entity to address dam removal and federal investments in developing guidance for dam removal. It was not included in IIJA. Is this an oversight?

- **Brian Graber:** The 21st Century Dams act has the language including both federal agencies and other stakeholders around dam removal funding. It was not included as we were directed to consider removing language unrelated to an existing program.

Panel Presentation: Scope and Scale of Fish Barriers in the United States

- **Dan Wieferich, U.S. Geological Survey (USGS)** provided an overview of available data and databases (at the state, regional, and national level) detailing the location and severity of fish barriers. Mr. Wieferich presented data collection methods and the barrier types that they cover. Many federal datasets contain only one kind of barrier, such as the NID or the National Inventory of Low Head Dams. In contrast, some state databases may include data on multiple barrier types or more minor barriers such as culverts, which are difficult to collect on the national scale. He then discussed decision support tools, or prioritization tools, and concluded with strategies to build on current and past efforts: use common reference datasets, common data standards, and terminology, increase understanding of shared or supporting priorities for decision support, and share resources such as code and documentation.
- **Kat Hoenke, Southeast Aquatic Partnership (SARP)** followed with an overview of the SARP Aquatic Barrier Inventory and Prioritization tool. While this tool covers only the geographic extent of the southeastern United States, it is regarded as one of the best resources of its kind. Importantly, it includes unregulated dams – while the NID contains 40,000 dams for this region, the SARP inventory includes 146,000. SARP relies heavily on partners to help locate low head dams, which are the largest data gap in the NID. The Inventory includes 25,000 assessed road-stream crossings, collected using a SARP-developed protocol for rapid assessment using ArcGIS Survey123. Ms. Hoenke ended by describing how SARP has six active connectivity teams composed of partners from all sectors who work together on project selection and management, regulatory streamlining, and community education and outreach.
- **Cathy Bozek, U.S. Fish and Wildlife Service (FWS)** outlined how the FWS identifies, prioritizes, and selects the best projects for support. The criteria considered include ecological importance, community importance, design quality and sustainability, and project support and readiness logistics. Overall, there is no one-size-fits-all approach to project prioritization, and many sources of information need consideration when analyzing project viability and selection.

DISCUSSION

Question: On the FWS resilience criteria, can you go into more detail about how you define "climate change resilience"?

Cathy Bozek: We have not refined exact quantitative measures, but we are looking at how the resilience of the habitat and species improves when a barrier is removed. We define resilience as the ability to recover from or persist through changes due to climate change. For example, if a barrier removal opens access to cold water refugia in the headwaters, that can help improve brook trout resilience to increasing temperatures. Other barrier removals could reduce the risk of habitat-damaging flooding and erosion that is otherwise increasing with climate change.

Question: Part of the purpose of this meeting is pulling together in the same direction to create the best conservation benefit. Dan, in one of your slides, you showed all the different organizations and the criteria they consider in funding decisions. Where are the commonalities in those criteria, and how can we bring those together to provide the most significant benefit and transparency?

Dan Wieferich: There is a lot of discussion going on around that, and hopefully, it is something we can better tune into during the workshop. There are some national datasets that we could utilize – T&E species and SGCN species. Some of the big issues that we face are the lack of uniformity in our fish passage information across the US. There is a wide range of information that can and is being used in different regions.

Question: What are the barriers and opportunities to bring to a national, standardized setting?

Kat Hoenke: When it comes to a national standard, the region's differing criteria are true, but there are multiple standardization efforts, especially with the standardization of the road crossing barriers. There are efforts to take the North Atlantic Protocol and expand it west. There are a handful of standards that make sense for the nation, both for road crossing and dams. There are significant data gaps in finding structures; if we could combine efforts to find everything, partners could work together to address it. But addressing the fragmentation comes first.

Question: When you looked at barriers, you indicated mostly physical structures. Have you considered including things like concrete channels or streams that are in culvert systems? Have you considered water quality and quantity, which are key barriers to fish movement, and have you started inventorying those?

Kat Hoenke: We have started to do that. Some state agencies, such as Washington and Oregon, have temperature and flow barriers datasets. Collecting data for each type is important to understand how they impact connectivity fully. One of the topics raised previously is the incorporation of water diversions. That type of information is something we have begun tracking, identifying channels that are causing downstream issues. We have some interest from a Montana partner on tracking temperature data next.

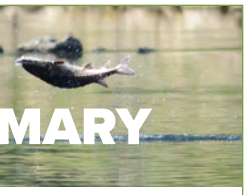
Dan Wieferich: At the national scale, the USGS is also launching national water quality modeling. Some of those efforts are just kicking off and should be available in the next 3-4 years.

Question: We heard Brian talk about being transformational and not just moving money out the door. How much time is needed to be "ready" if we will be transformational in the later years of the IIJA?

Cathy Bozek: The criteria I talked through was prioritizing projects in terms of providing funding for on-the-ground construction that won't hit substantial roadblocks. Stepping back and planning proactively will be important to think big picture.

Panel Presentation: What Does a High Quality Barrier Removal Look Like?

- **Bjorn Lake, National Oceanic and Atmospheric Administration (NOAA),** provided an overview of a watershed approach to fish passage.
- **Eric Rahm, Missouri Department of Conservation,** described Missouri's state-level prioritization and implementation of an Aquatic Organism Passage (AOP) project.
- **Therese Thompson, Western Native Trout Initiative (National Fish Habitat Partnership),** presented examples of projects in the Bear River Watershed and the challenges they faced during the implementation of barrier removal projects.
- **Sara Gottlieb, The Nature Conservancy (TNC),** reviewed TNC's Best Practices for Dam Removal, emphasizing the importance of a multi-benefit approach.



- **Nat Gillespie, U.S. Forest Service (USFS),** described best practices in culvert design for AOPs, specifically the Stream Simulation Design approach. Typical approaches constrict the natural channel, and rigid structures are not flexible to stream changes. The Stream Simulation approach accounts for floodplain conveyance, most geomorphic processes, and all aquatic passage needs. The design components include a minimum bankfull width that can accommodate 100-year flood recurrence with room for debris, a natural stream bottom based on reference reach, and a life span of 50-75 years. This approach has also proven to be very flood resilient, highlighting the close connection between enhanced ecological connectivity and flood resilience.
- **Mindy Simmons, U.S. Army Corps of Engineers (USACE),** discussed the Corps' Aquatic Ecosystem Restoration (AER) mission, its budget, and what it can and cannot fund. She included examples of fish passage projects at dams, partnership projects in Oregon, and upcoming investments under IIJA.

DISCUSSION

Question: Did you quantify the changes in the culverts you fixed over time to understand the proportion that changed and became barriers again?

Nat Gillespie: Hydraulic culverts I showed are part of an assessment to identify barriers, and yes, we were able to track them. It was fortunate that we were able to track the culverts because usually, you cannot. We dedicated Federal Highway Administration (FWHA) funding to monitor the stream simulation design. When built correctly, culverts continue to pass fish.

Question: Everyone mentioned trust as a big hurdle between government agencies and on-the-ground partners. Has anyone "formalized" the "support group" concept to connect partners who have completed projects with potential partners who want to get projects done?

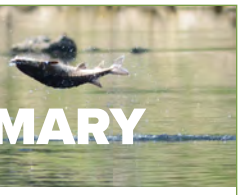
Eric Rahm: In our work with two counties, we invited neighboring counties to construction sites to show them the process. Over time, the counties call us with information about a crossing, and they ask for help in the design and funding. I speak with counties frequently to build relationships and trust.

Overview of Federal Efforts Under the IIJA

The first day concluded with a federal agency rundown, in which representatives of all agencies present provided a "lightning talk" that highlighted the funding received under IIJA for fish passage, the existing programs and programs under development, challenges and limitations of those programs, funding opportunities, and avenues for partnership within and outside of the federal family. Summaries of national agency efforts for fish passage under IIJA are included in Appendix C: Federal Summaries.

DISCUSSION

Comment: Section 247 of the BIL was awarded $550M to improve resiliency, dam safety, and environmental improvements, including fish passage at FERC licensed projects. Currently, there is a Request for Information about prioritization and implementation of the funding, including a 38-question survey, which closes in September. It will influence the funding distribution in 2023. If you have partners who



are FERC-licensed, encourage them to apply. It is unclear whether the funds can be used on dams where fish passage is not part of the license.

Question: Are there any limitations on where the FWHA culvert grant funds can be spent? Do the projects need to be on FWHA-managed roads, federally managed roads, state, private, etc.?

Joe Krolak, FWHA: The statute guides the removal, repair, and restoration of culverts and weirs for anadromous fish species. Weirs can be widely interpreted; they may include dam removal, if it is acting as a weir, or could also be a fish ladder. There are three eligible entities – states, including state DOTs and other state agencies, local government units, and tribes. Projects do not have to be on a managed road – if entities propose a grant that meets those priorities, it would be an eligible use of funds.

Question: A new migration crossing highway program provides authorizing language for aquatic connectivity. How might that be used in FHWA fish passage efforts?

Joe Krolak: There is a wildlife crossing safety program that includes a $70 million pilot per year. There are certainly overlaps in terrestrial and aquatic passage. This is an inflection point for us, and we are looking to change the state of practice for highways. This grant program is specific to wildlife, but aquatics should also be considered.

Question: What are the discussions around benefitting resilient populations and mitigating the impacts of climate change?

Joe Krolak: There are both cross benefits and resilience benefits for AOPs and other crossings. USFS mentioned the stream simulation approach, which has both climate change and resiliency benefits. The prioritization process talks about climate resilient fish stocks – that is part of the consultation process we are engaging with FWS and NOAA Fisheries.

Question: You mentioned that the fish passage program money was not allowed to be used for monitoring. Is that unique to that program, and why? Does it apply to other programs?

Janine Harris, NOAA: We will fund implementation monitoring and sometimes fund effectiveness monitoring through other mechanisms. We will run out of time to fund good effectiveness monitoring in projects where we are already funding feasibility, stakeholder engagement, and planning. We expect to see it over time but not in the current fiscal year funding opportunity.

Question: does the construction of something on USACE property to get fish to pass around it count as an impact on operations on that project?

Amy Babey, USACE: Yes, existing USACE projects are not budgeting nor funding for that under the IIJA. Instead, that is under regular operations and maintenance (O&M). The Continuing Authorities Program 206 carveout would not be used for an existing USACE project. A change in operations could happen through a request to fund through O&M budget processes.

Question: You mentioned that the nonfederal sponsor must submit a Letter of Intent, sign a cost share agreement, and then fund the project O&M in perpetuity. Is it true that after the barrier is removed, is the nonfederal partner still responsible for O&M?

Amy Babey: Yes, at the end of the project, we will provide an O&M manual, and the nonfederal sponsor will be required to conduct the O&M in that manual in perpetuity. Hopefully, for barrier removal, the O&M should be minor.

Question: Are you interpreting your funding as project dollars or technical assistance and capacity building? We have a session tomorrow on capacity building to do all of this work. The dollars coming through FWHA, is your assumption that most of the funding will go to projects already identified, or can some be allocated to partners to identify and develop projects?

James Demby: Funding goes towards rehabilitation projects. FEMA has state assistance grant money through the National Dam Safety Program that builds capacity in state dam safety offices, but the grant is set up for the rehabilitation and removal of dams, including project scoping, preconstruction, and construction.

Joe Krolak: The language in the statute says projects. We are still open to the idea that the grant could be for a component to get to a place in the project delivery process to help facilitate it or help a partner get to a place to start or carry a project forward in subsequent years. There are sections of the omnibus on March 15, 2022, that specify that funds may be applied only for the purposes of this program. Other US Department

of Transportation BIL-related programs with AOP and crossings may not be as prescriptive as this program, and additional funds for capacity building may be available.

Closing Remarks, Pat Rivers, National Fish Habitat Partnership

The day closed with remarks from Pat Rivers calling for focus during Tuesday's breakout session on keeping the energy behind this effort going beyond the lifetime of the funding opportunity. During the sessions, it is important to keep in mind that the BIL will not provide complete funding for new projects but provides the impetus to start many new projects and continue working with important partners to make good work great.

DAY 2: TUESDAY, JULY 21, 2022

Opening Remarks, Kregg Smith, Oregon Department of Fish and Wildlife Fish Passage Coordinator

Before the breakout sessions, Kregg Smith provided opening remarks about Oregon's investment in resilient rivers, forests, coasts, and landscapes to protect healthy fish populations. He highlighted working with the state DOT as an important partner in identifying impactful project areas that have achievable outcomes under the available funding. He highlighted a four-dam removal in the Klamath river, as well as work with irrigation districts to purchase in-stream water rights to protect the flows of the Rogue river. Overall, Oregon has done significant outreach on the BIL since many partners are not aware of the specifics of the law and the opportunities it presents, and is a good example to follow as outreach will be an integral component of executing the BIL funds moving forward.

Breakout Sessions

The entirety of Tuesday was devoted to small group discussion in seven breakout sessions:

1. Identifying Fish Barriers and Prioritizing Projects
2. Collaborating to Make the Whole Larger Than the Parts
3. Addressing the Capacity Challenge
4. Frameworks for Collaboration/Implementation
5. Developing an Inclusive Approach to Fish Passage
6. Monitoring and Measuring Success
7. Making Fish Passage a More Mainstream Concern

The breakout sessions had the following goals:

- Encourage cross-organizational orientation and understanding of capabilities and programs;
- Collect information about resources in an as efficient way as possible;
- Collect information regarding ideas of collaboration or implementation effectiveness;
- Identify implementation opportunities or gaps not yet considered; and
- Collect information on which to develop next steps for interagency coordination and on-the-ground implementation.

Each breakout room had a facilitator and a "dedicated listener" who took detailed notes and listened for themes to assist with developing the synthesis for Wednesday's whole group discussion. Participants contributed ideas to every breakout session by rotating between them. Detailed notes from each of the breakout sessions, as well as the prompt questions, can be found at the end of this summary in Appendix D: Breakout Summaries.

Following the breakout sessions, the facilitators and dedicated listeners synthesized what they heard and packaged those takeaways into a presentation delivered on Wednesday morning. Following the presentation, there was a large group discussion on the takeaways.

DAY 3: WEDNESDAY, JULY 22, 2022

Opening Remarks

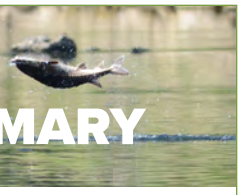
- **Jim Fredericks, Idaho Department of Fish and Game** focused on the state perspective and the extent to which projects are driven by local knowledge and involve heavy public input. While the focus on large dam removal is appreciated, there are many states (particularly in the West) where small diversions are more common, and thus fish passage projects are often a part of improving irrigation infrastructure. Since many of these smaller projects are partnership-driven, the challenge in the coming years will be building capacity both within the government and in existing partnerships by developing strategies to deliver federal funds on a massive scale to local efforts.
- **Serena McClain, American Rivers,** focused on watershed projects, highlighting the example of Bloede Dam removal in Maryland. Two dams upstream were removed in 2010 and 2011, followed shortly after that by the Bloede removal. Ms. McClain highlighted that tracking the project's benefits through monitoring has allowed American Rivers to leverage the project to help regulators understand the riverine process and add to the broader scientific knowledge around the country about river systems following multiple dam removals.

Following the opening presentations, the dedicated listeners from Tuesday's breakout sessions reported on each breakout session's key themes and takeaways.

Synthesis 1: Implementation Models of Success

KEY TAKEAWAYS

The key takeaways of this breakout were to be strategic (or creative) and inclusive. Several agencies have funding sources beyond IIJA that may have nexus with fish passage, such as how



to streamline the distribution of funds within legislative/regulatory sideboards and how to be creative about using existing coordination mechanisms to meet future coordination needs. To improve inclusivity, a better understanding of stakeholders is needed; grow the table and bring in non-traditional organizations and stakeholders throughout the project process. Federal agencies can do a lot to connect partners and collaborate across regions.

Many groups noted that not all stakeholders care about fish and that these communities vary widely. These groups must be approached equally, using appropriate approaches to garner community support. It will be important to seek direct input from partners and stakeholders about what synergies exist between stakeholders' priorities, needs, and concerns and project criteria, evaluation, and expected benefits.

There is no one-size-fits-all approach. Partnering with and adjusting the approach as necessary to understand the audience is integral to directing benefits to tribes and underserved communities. Communities will respond differently to different techniques and forums for sharing information, which must be considered.

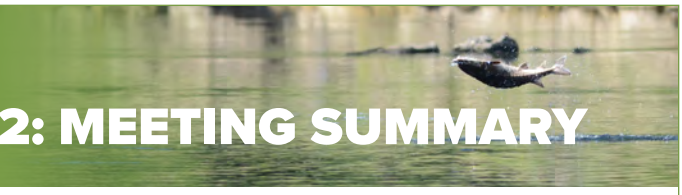
POSSIBLE ACTIONS

Where possible existing mechanisms, partnerships, forums for collaboration, engagement, and community support should be leveraged. In many cases this should occur at the state or local level, where expertise on topics such as biological knowledge and landowner relationships can be leveraged for the success of fish passage projects. In other cases, networks such as the National Fish Habitat Partnership and various Watershed Councils can assist. Leveraging these relationships and resources can inform the implementation of projects beyond what is stated in the IIJA expenditure guidelines.

Mechanisms for action can include Intergovernmental Personnel Act agreements (IPAs), Memoranda of Understanding (MOUs), and Interagency Agreements (IAAs). Untapped networks such as AmeriCorps and college interns can provide staffing resources. Non-profit organizations can play a role in communicating with the community, generating stakeholder support, advocating, and lobbying for fish passage funding in policy changes and appropriations. Nonprofit organizations can operate with more flexibility than governmental agencies. The federal government can help support nonprofits in these endeavors, especially in their work with underserved communities.

Actions that can be taken in the short term include:

- Identify IIJA nexuses across agencies and communicate this information to stakeholders, potential applicants, and partners.
  - Possible result: a funding opportunity matrix for BIL fish passage funds.
- Develop top-line messaging across federal and state agencies to amplify goals.
- Reduce burdens on applicants and agencies, recognizing consultation fatigue on tribes, and improve grant administration and processes overall.
- Prioritize effective engagement and coordination within organizations – if it is not a priority for agencies to do good stakeholder



engagement, how can it be made a priority? Establishing processes for engagement and collaboration are necessary to:

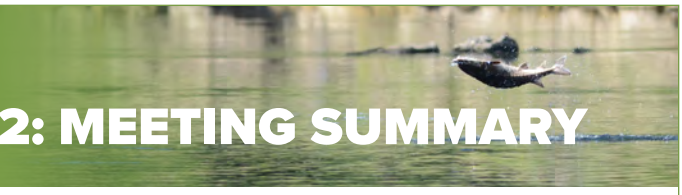
- Engage early and often with stakeholders.
- Engagement throughout the planning process, including following project completion.
- Utilize local information – partnership is a two-way street.
- Incorporate community concerns into decisions.
- Develop and use visuals
- Be transparent
- Focus on positive messaging
- Focus on economic value and ecosystem services to tell the story

- Proactively identify partners and stakeholders
  - Bring in non-traditional organizations and stakeholders into this effort (and engage them throughout the process). Incorporate Traditional Ecological Knowledge and consider the cultural importance of projects.
  - Federal agencies can connect partners and collaborate across regions, providing a national perspective.

DISCUSSION

The presentation prompted a discussion on improving the grant process, specifically around the idea of a single application clearinghouse. The following ideas were proposed during the conversation:

- Create a centralized, common application for multiple grants. There was consensus that this would require a high level of coordination and collaboration but that it would be one of the most effective ways to aid partners in accessing BIL funds.
  - This would be one of the most impactful ways to increase the flow of funds to underserved communities experiencing severe capacity constraints.
  - An unintended consequence might be that agencies spend time screening proposals they cannot fund, as different agencies have different selection criteria.
  - This would also require a set of common metrics for evaluating proposals. What would that include? Upstream miles affected by barrier removal is not always the best metric when applied across the country due to different geographic and habitat contexts.
  - Where possible, it would be beneficial to pool applications for multiple small projects in the same watershed to create a single application and a single grant to manage.
- Create a pre-screening process with an initial query that applicants could make after searching for the types of projects they think they want to apply for. Following that could be a proposal period where they submit to opportunities identified in the query results.
  - A few potential filters identified included: what type of barrier does the project involve? If it is a dam, is it a high-hazard dam? Is the project on public or private land?
  - Any pre-application process would need to be designed in a way sensitive to tribal sovereignty. Sometimes grants require a tribal sovereignty waiver – which many tribes will not do – but the waiver is not



until the end of the application process thus resulting in a waste of limited time and resources. Since grants require a contract with the federal government, tribes want agreements to be set up so that the federal government does not insert itself in managing the grant dollars.

- Create a process to pool funding/create funding collaboration between agencies for watershed projects could be an ambitious way to execute BIL funds.
  - This would create a question of which agency oversees the project and how that would be determined. By percent of funding committed?
  - Alternatively, create a selection committee for incoming proposals that could identify and share applications that meet the criteria for multiple funding streams through BIL.

    For example, if NOAA receives a proposal about a high-hazard dam, pass it to FEMA, and they can work with that applicant.

- Consider connections to the overall ecosystem health components, especially when prioritizing a watershed approach.
  - Identify other programs/networks that can be tapped into, such as the National Estuary Program, or geographic programs in the Chesapeake Bay & Puget sounds, and EJ small grants programs like Urban Waters that may already be involved with fish passage work and could be potential partners.
- An example of a new type of approach was shared by a representative from the state of California: counties voted to tax themselves to create a fund for projects regarding access to the bay, climate resilience, and ecosystem restoration. Multiple agencies have sent representatives to work with applicants to ensure they meet all agency requirements to address regulatory concerns. Through this system, projects are progressing faster than ever before.

Synthesis 2: Project Prioritization and Talking with Communities

KEY TAKEAWAYS: INVENTORY AND PRIORITIZATION

The breakout sessions asked whether the lack of data limits the ability to improve aquatic connectivity. There are many barrier inventories for different types of barriers on varying geographic scales and they were developed to serve different purposes. No single barrier inventory is complete, but there is an opportunity to build off each other's data in areas of geographical overlap. An integrated inventory like SARP is valuable for projects and as a best practice example of methodology and process.

Dozens of criteria for developing priority lists were identified during the breakout sessions. The most frequently mentioned criteria were human health and safety, ecological/species conservation, and synergy with other activities to make the project multi-benefit. These conversations also acknowledged that barrier removal might not be the best solution for every project. Furthermore, multiple criteria sources are often combined to determine action plans, while partnerships must integrate the priorities of multiple organizations into projects. The funding source can also affect prioritization, as project proposals are selected to match specific RFP criteria.

POSSIBLE ACTIONS: INVENTORY AND PRIORITIZATION

From the breakout discussion, several actions for project inventory and prioritization emerged:

- Continue to develop ways to layer and integrate priority areas and criteria.
- Develop and expand partnerships to represent a broad range of benefits and build support.
- Identify and pursue opportunities where AOP may not be the primary benefit but is a "co-benefit."
- Funding entities develop and communicate clear priorities for grant programs.

KEY TAKEAWAYS:

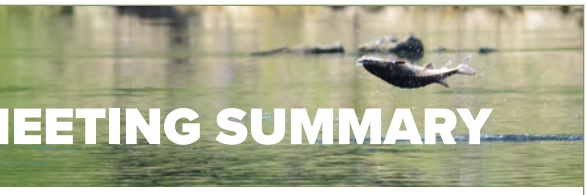
- Efficient allocation of BIL funds to happy local recipients will result in additional funding.
- Once barriers are removed, habitat is opened, and species become present upstream. This can result in increased numbers of fish in self-sustaining fisheries, delisting species from the endangered species list, and preventing other species from becoming threatened.
- Barrier removal can result in preserving temperature-sensitive fish native fish and preventing invasive fish species from establishing populations.
- Normalizing fish passage and AOPs with non-traditional partners—making it the go-to tool in the toolbox.
- Demonstrate greater and sustained collaboration among agency partnerships.

POSSIBLE ACTIONS: TALKING WITH COMMUNITIES

- Develop a coordination mechanism to increase the interagency coordination, resulting in joint technical guidance, leveraging of authorities, streamlined permitting, and sharing of agency expertise.
- Identify community-based champions to talk about successes. Use different messengers to reach different audiences.
- Create good stories via identifying memorable tag lines, charismatic species, before and after photos of demonstration projects that showcase agency coordination and include a clear economic benefit message that focuses on the benefits of fish passage specific to the target audience.
- Get the message out early in education and early, multi-disciplinary career training. Incorporate AOP in "Engineering 101."
- Celebrate the 2026 World Fish Migration Day Party by recognizing the work that has been done and invite Congressional Delegates and elected officials at all levels.

DISCUSSION

- Many inventory lists might not include nontraditional passage projects such as irrigation/diversion structures, thermal barriers, and water quality barriers. Water quantity is a barrier as well and it is not well identified. Concrete flood control structures in urban areas are barriers as well.
  - EPA has the ATTAINS database, where states input data on water quality assessments and try to identify the cause of water quality impairments. The EPA Healthy Watershed Tool is a resource as well.



- BLM has the Habitat Monitoring Program, which records dry streams. This data could be incorporated into Western states' fish passage barrier databases.

- States tend to use their own databases on water quality and historical knowledge about watersheds to prioritize projects. Because the state data can be much more relevant to their work, some state representatives questioned the value of a national database as it might not be localized enough for their needs.
- Increased coordination with state Departments of Transportation (DOTs) was identified as an opportunity for engagement and coordination to document barriers.
- Increased coordination with state Dam Safety Offices could expand access to BIL fish passage funds:
  - These would be primarily multi-benefit projects, as dams that are removed are typically removed due to public safety concerns. A more cohesive national story on fish passage benefits could help push for more dam removals by making it a valuable side-benefit.
  - Dam removal has only just begun to be a mitigation option and the old mindset of keeping infrastructure in place is still strong. The paradigm is shifting but will take time and a more focused narrative.
- In Washington state, a tribal injunction compelled the state to correct fish passage barriers, and now the state is mandated to do so in a specific timeline. After that ruling, counties and cities are proactively looking to remove barriers to avoid legal disputes and are trying to access funding.
- Through strategic storytelling and shifting the narrative and dialogue around AOP, smaller counties and cities are seeing savings in maintenance costs. High-quality videos that emphasize the human connection to the land have been helpful.
  - The Fish Habitat Partnership has been working to create a film festival to share the stories of its practitioners.
  - Freshwaters Illustrated could be another partner in developing a video on AOP and flood resiliency.
- The Dirt and Gravel Roads Program in Pennsylvania is a model program. Counties are incentivized to do environmentally conscious maintenance by providing access to program funding. The program works collaboratively with the townships and partners in the Pennsylvania Department of Conservation and Natural Resources to improve road projects by incorporating AOP projects into culvert replacements, for example. Water Conservation Officers are partnering with counties to help facilitate these projects.
- While this workshop focuses on Fish Passage, non-fish bearing streams should not be forgotten. In forested landscapes with high stream density, non-fish bearing stream crossings can represent 80-90% of the road/stream crossings on the landscape. Most of these have far exceeded their designed lifespan and are failing catastrophically during minor storm events. These failures deliver tens of thousands of cubic yards of sediment downstream to fish-bearing streams, thus falling within the scope of fish passage work.

Synthesis 3: Developing Capacity and Measuring Success

KEY TAKEAWAYS: CAPACITY

Capacity concerns are shared by all entities involved in funding and implementing BIL. Capacity issues exist for all barrier removal program development and implementation phases. Typical capacity issues include the availability of personnel, funding, and supplies. For natural resource entities, capacity concerns include scaling up existing efforts rather than building new skillsets. An overarching concern is balancing speed versus effectiveness. Another overriding concern is how to hire experienced personnel with time-limited funding and political/ bureaucratic constraints.

Eight capacity concerns emerged during the breakout discussions:

- Ensuring benefits flow to underserved communities.
- Conducting community outreach on barrier removal, especially talking about dam removal.
- Supporting and providing technical assistance to Tribes (esp. USDOT culvert program).
- Balancing efficiency and effectiveness in achieving environmental compliance goals.
- Engaging experienced and effective project managers.
- Growing grant writing and grant management capacity.
- Implementing appropriate project design and conducting design reviews promptly.
- Lack of funding to investigate unresolved and unknown scientific and technical issues.

ACTIONS TO ADDRESS CAPACITY CONSTRAINTS INCLUDE:

- Leveraging partners' strengths through MOUs, personnel agreements, developing a library of experts, centralized teams, or using existing guidelines for design or communications.
- Centralizing training, combined with tailored training for underserved entities.
- Maximizing contractor expertise and resources.
- Develop Standard Operating Procedures for program-level environmental compliance efforts.
- Develop single points of application for grant processes, reducing match requirements, streamlined/ centralized reporting. Centralize grant eligibility information.

- By preparing public works agencies to replace infrastructure with AOP structures post-emergency
- Partner with community influencers, leaders, and champions to support outreach and engagement.

Short-term actions should include cross-walking IIJA authorities pertaining to allowable activities and timeframes to support various proposed efficiencies, ensuring the ongoing discussions with the federal family include further discussion on capacity building, and convening a workgroup on coordination, personnel training, and development.

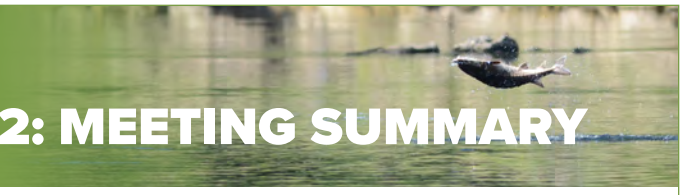
KEY TAKEAWAYS: MONITORING

Discussions focused on the difference between performance and effectiveness monitoring. Performance monitoring is conducted to ensure project performance and facilitate adaptive management. Effectiveness monitoring is scalable and can include a broader range of metrics depending on the complexity of the project and the availability of resources. Monitoring should consist of collecting baseline data and post-project monitoring to assess project success. Participants cataloged various types of monitoring and discussed potential socioeconomic metrics, as well as other ecosystem services.

The key constituencies for effectiveness monitoring are Congress, taxpayers, communities, and landowners. Agencies are expected to show a return on investment (e.g., restore fish populations). However, monitoring protocols can prioritize different types of effectiveness monitoring for projects. Significantly, non-fish passage programs such as NRCS for dam removal, or EPA grants can be leveraged to support effectiveness monitoring.

The following questions regarding effectiveness monitoring should be considered by the federal family moving forward:

- Which agency authorities allow award recipients to pay for effectiveness monitoring?



- What is the appropriate time scale to implement effectiveness monitoring?
- How can we identify the projects where effectiveness monitoring should be stipulated?
- Does the literature include monitoring templates for discreet ecosystem types?
- Can federal agencies coordinate on language in opportunity announcements to ensure that effectiveness monitoring is included?
- Would applicants agree to conduct effectiveness monitoring beyond the completion of the project?
- Should effectiveness monitoring be prioritized where watershed level impacts can more readily be observed?

Next steps for monitoring include developing a crosswalk of all federal authorities to fund effectiveness monitoring, convening an interagency team to discuss the goals for monitoring protocols (beyond performance monitoring) under IIJA and how those may differ, and exploring to enhance the datasets pertaining to fish passage effectiveness within existing data collection efforts/tools.

DISCUSSION

- While contractors have relationships with private landowners and may play a role in bringing the landowner on board with a project, however, they may expect to be hired to do the work despite OMB requirements that projects need to be competitively bid.
  - Sometimes, an agency waiver to bypass the lowest bidder can be an option based on the contractor's past performance. Best Value contracting allows consideration of background and relationships along with cost.
- Contractors may bring projects to a review board and then that project becomes their intellectual property. They receive mitigation funding related to a permit, and when the contractor brings a proposal, the DEP gives them a small seed grant, making it their intellectual property and sole source.
  - OMB guidance and criteria on sole source could be a valuable topic for conversation regarding "creative contracting."
- While there is a need for personnel with expertise, there is also a huge need for young professionals to grow careers within the federal family. BIL's funding focus on senior staff might be shortsighted when standing up programs for young people and mentoring them through their careers is more valuable to the mission.
- Engineering and design is a bottleneck that projects reach very quickly. It needs to be elevated in the next steps after the workshop and part of the interagency coordination discussion. Is there a possibility for an interagency-funded think tank focused on fish passage design? USFS has an AOP team training program that teaches their standards of design and could do a lot of good if given a broader mandate.
  - Bob Gubernick, Mark Weinhold, Dan Cenderelli, and Erica Borum are conducting seven week-long trainings in 2023, open to all free of charge.

    https://www.fs.fed.us/biology/nsaec/

    https://www.fs.fed.us/biology/education/workshops/aop/index.html

PARTNER WORKSHOP 2022: MEETING SUMMARY

WORKSHOP WRAP-UP

To close out the workshop, attendees heard from Kurt Thiede, Association of Fish and Wildlife Agencies (AFWA), and Rick Jacobson, US Fish and Wildlife Service (USFWS), on the importance of expanding the conservation community and embracing a transformational approach to fish passage under this unprecedented funding opportunity. They emphasized that the combined knowledge and experience in the group present is not to be underestimated and that there are tried and true existing partners to leverage while embracing a hybrid approach that supports both current regional priorities and watershed goals. In this effort, perfect does not have the be the enemy of the good – while new tools, processes, and goals are developed, it is time to start working with the tools and resources already available.

Engaging with tribes and underserved communities is a growing priority in executing the BIL funding, which means changing how business is usually done and spending twice as much time listening as talking when engaging with these communities. Mr. Jacobson ended his remarks by emphasizing the importance of guarding against fragmentation of the federal approach and creating a unified national message on fish passage to ensure the work remains relevant beyond IIJA. Leadership is paying attention, and this gives the fish passage effort momentum.

DJ Monette, Associate Native American Advisor at USFWS, closed the meeting with a prayer "Rising Spirit" by Chief Evon Peter, First Chief of Arctic Village Alaska.

PARTNER WORKSHOP AGENDA 2022

Fish Passage Opportunities through the Bipartisan Infrastructure Law

JULY 18-20, 2022 | National Conservation and Training Center
698 Conservation Way, Shepherdstown, WV 25443

MEETING OBJECTIVES

ACHIEVE greater understanding of federal agency and non-federal partner goals, activities, and timelines.

IDENTIFY collaborative opportunities to improve fish passage through the Infrastructure, Investment, and Jobs Act (IIJA - also referred to as the Bipartisan Infrastructure Law).

EXPLORE opportunities to identify and advance shared ecological and socioeconomic goals and measures of success.

IDENTIFY future needs and mechanisms for communication, collaboration, and coordination.

LOGISTICS

All plenary sessions will be held in the auditorium located next to check in.

Dress is casual. It is a walking campus, so please wear comfortable shoes.

MONDAY JULY 18, 2022

8:00 am **CHECK IN BEGINS**

9:00 am **WELCOME** *(Auditorium)*

- **Steve Chase,** *Director of the National Conservation and Training Center*

9:10 am **LEADERSHIP KICKOFF – FOCUS ON COORDINATION**

- **Martha Williams**, *Director of the U.S. Fish and Wildlife Service (virtual)*
- **Tony Wasley**, *President of the Association of Fish and Wildlife Agencies (virtual)*
- **Pat Rivers,** *National Fish Habitat Partnership*

9:30 am **LOGISTICS AND AGENDA REVIEW**

- **Linda Manning,** *Council Oak (facilitator)*

9:40 am **PANEL: PERSPECTIVES ON THE CHALLENGE AND OPPORTUNITY OF FISH**

- **George Pess,** *National Oceanographic and Atmospheric Administration* will provide an overview of how barriers impact fish populations (historically and currently), the main types of barriers encountered, and the scale, severity, and distribution of these barriers.
- **Paul Ward,** *Columbia River Inter-Tribal Fish Commission* will discuss the importance of fish to tribal peoples, describe long term advocacy for barrier removal, and restoration and tribal trust resources.

10:10 am **BREAK**

PARTNER WORKSHOP 2022 MEETING SUMMARY: APPENDIX A

MONDAY JULY 18, 2022

10:40 am

CONTINUED: PERSPECTIVES ON THE CHALLENGE AND OPPORTUNITY OF FISH PASSAGE

- **Kayed Lakhia,** *Federal Emergency Management Agency* will discuss issues relating to aging dam infrastructure.
- **Brian Graber,** *American Rivers* will discuss co-benefits of improving fish passage, including flood risk management, infrastructure resiliency, public safety, and the *Uncommon Dialogue* that, in part, led to today's focus to address fish passage.
- **Q&A**

11:15 am

PANEL: SCOPE AND SCALE OF FISH BARRIERS IN THE UNITED STATES

- **Daniel Wieferich,** *U.S. Geological Survey* will provide an overview of available data regarding location and severity of fish barriers.
- **Kat Hoenke,** *Southeast Aquatic Resource Partnership* will introduce their geospatial inventory and prioritization tool and discuss its use and value to the partnership.
- **Cathy Bozek,** *U.S. Fish and Wildlife Service* will discuss criteria commonly considered when prioritizing and selecting projects.
- **Q&A**

12:00 pm

LUNCH

1:00 pm

PANEL PLENARY: WHAT DOES A HIGH QUALITY BARRIER REMOVAL LOOK LIKE?

- **Bjorn Lake,** *National Oceanographic and Atmospheric Administration* will discuss approaches for watershed-scale restoration, including the importance of collaboration.
- **Eric Rahm,** *Missouri Department of Conservation* will provide state-level examples of collaborative watershed-scale restoration and community engagement.
- **Therese Thompson,** *Western Native Trout Initiative (National Fish Habitat Partnership)* will provide an overview of how WNTI engages in watershed-scale restoration.
- **Sara Gottlieb,** *The Nature Conservancy* provide will provide an overview of best practices for dam removal.
- **Nat Gillespie,** *U.S. Forest Service* will provide an overview of best practices in culvert design for aquatic organism passage.
- **Mindy Simmons,** *U.S. Army Corps of Engineers* will discuss opportunities and challenges with integrating fish passage into the Corps' mission areas, including aquatic ecosystem restoration.
- **Q&A**

PARTNER WORKSHOP 2022 MEETING SUMMARY: APPENDIX A

MONDAY JULY 18, 2022

2:30 pm — **BREAK**

2:45 pm — **OVERVIEW OF FEDERAL EFFORTS UNDER IIJA**

Each federal agency that has received funding related to fish passage under the Infrastructure Investment and Jobs Act will provide an overview of the authority, funding, and key activities of their efforts or planned efforts.

- Federal Highway Administration, **Joe Krolak**
- Federal Emergency Management Administration, **James Demby**
- National Oceanographic and Atmospheric Administration, **Janine Harris**
- U.S. Army Corps of Engineers, **Amy Babey**
- U.S. Fish and Wildlife Service, **Mike Bailey**
- Environmental Protection Agency, **Richard Mitchell**
- National Fish and Wildlife Foundation, **Amanda Tipton Bassow**
- Bureau of Land Management, **Sharmila Premdas**
- Bureau of Reclamation, **Genevieve Johnson**
- Department of Energy, **Brian Bellgraph**
- Natural Resources Conservation Service, **Gene W. Kim** *(virtual)*
- U.S. Forest Service, **Kimberly Conley** *(virtual)*

4:45 pm — **DAY ONE CLOSING INSPIRATION: THE OPPORTUNITY AHEAD**

- **Pat Rivers,** *National Fish Habitat Partnership*

5:00 pm — **ADJOURN DAY ONE**

5:15 pm — **FEDERAL AND STATE AGENCY QUICK TOUCH BASE**

- **Federal Agencies** *(Instructional East, Room 201)*
- **State Agencies** *(Instructional East, Room 105)*

PARTNER WORKSHOP 2022 MEETING SUMMARY: APPENDIX A

TUESDAY JULY 19, 2022

8:30 am

DAY TWO OPENING INSPIRATION: STRATEGIC FRAMEWORK FOR IIJA IMPLEMENTATION

- **Kregg Smith,** *Oregon Department of Fish and Wildlife*

8:45 am

AGENDA REVIEW AND MORNING BREAKOUT SESSION INSTRUCTIONS

- **Linda Manning,** *Council Oak (facilitator)*

Participants will rotate to all three breakout sessions to provide feedback, ideas, and information on the following topics. The facilitator stays with their topic area and is supported by a "listener" who will assist in synthesizing information for Wednesday morning's report out and discussion session.

- **Rotation One** – 9:00 to 10:00
- **Break** – 10:00 to 10:15
- **Rotation Two** – 10:15 to 11:15
- **Rotation Three** – 11:20 to 12:15
- **Virtual Participants** *will meet as a group and discuss all three topics. Please see your email for Teams Meeting log-in. Information will be incorporated into in-person feedback.*

Session One: Identifying Fish Barriers and Prioritizing Projects (Instructional East, Room 114). This breakout will focus on collecting information and best practices regarding existing barrier inventories and project prioritization systems at various scales (national, watershed, regional, state). It will also focus on understanding the criteria used to evaluate the severity of barriers and the importance and readiness of projects. The following questions will guide the conversation:

1. *List known barrier **inventories** and discuss scope/scale of that inventory (watershed, national, regional, state). Please discuss criteria that is used to assess, sort, and prioritize barriers.*

2. *List known **barrier removal project lists** and discuss scope/scale. What criteria are used to prioritize projects? What are the fish/conservation criteria? Are there other criteria helpful for implementation? What other project prioritization criteria are helpful for success in implementation?*

3. *Discuss any existing efforts that attempt to develop a national inventory of barriers or projects. Would a national list of barriers or projects be helpful? If so, how should it be approached? What should be included?*

PARTNER WORKSHOP 2022 MEETING SUMMARY: APPENDIX A

TUESDAY JULY 19, 2022

Session Two: Collaborating to Make the Whole Larger Than the Parts (Instructional East, Room 201). The IIJA funding represents an unprecedented, national-scale focus on improving fish conservation and recovery. It brings together the existing public and non-profit conservation sectors and specifically includes in a significant way agencies responsible for water resources and transportation infrastructure. This breakout session aims at collecting information that federal agencies can use to improve collaboration with each other, and with tribes, states, and the non-profit sectors. The following questions will guide the conversation:

1. *What are the most important roles that the federal government can play in improving fish passage/removing barriers (e.g., communication, measuring success, training, etc.)?*
2. *What are the specific needs/contributions of tribes?*
3. *What are the specific needs/contributions of states?*
4. *What are the specific needs/contributions of the non-profit sector?*

Session Three: Addressing the Capacity Challenge (Instructional East, Room 105). The IIJA effort will require a large scale-up across the public, private, and non-profit sectors. This breakout will focus on identifying where capacity will most need to be increased or developed and brainstorm some ideas to accomplish it. The following questions will guide the conversation:

1. *What are the biggest capacity concerns(e.g., project design, project management, engineering and project implementation, specific technical skills, community engagement, permit review)? Please be specific.*
2. *Which skills sets might be the most critical?*
3. *What are some specific ideas for developing capacity (e.g., trainers, boots-on-the-ground, information, technical assistance)?*
4. *How might we involve/targeted disadvantaged communities in employment, training, or other opportunities at the national or local level?*

12:15 pm **LUNCH**

PARTNER WORKSHOP 2022 MEETING SUMMARY: APPENDIX A

TUESDAY JULY 19, 2022

1:15 PM

AFTERNOON BREAKOUT SESSIONS

Participants will rotate to four breakout sessions to provide feedback, ideas, and information on the following topics. The facilitator stays with their topic area and is supported by a "listener" who will assist in synthesizing information for Wednesday morning report out and discussion session.

- **Rotation One:** 1:15 to 1:55
- **Rotation Two:** 2:00 to 2:40
- **Break:** 2:40 to 3:00
- **Rotation Three:** 3:00 to 3:45
- **Rotation Four:** 3:50 to 4:35
- **Virtual Participants** *will meet as a group and discuss all four topics. Please see your email for Teams Meeting log-in. Information will be incorporated into in-person feedback.*

Session Four: Frameworks for Collaboration/Implementation (Instructional East, Room 201). Fish passage and barrier removal work is conducted at a variety of scales and across many different types of public, private, and non-profit entities. This session will explore opportunities to develop new, or expand existing, frameworks for collaboration to support IIJA implementation. The follow questions will guide the conversation:

1. *Describe existing national, state, or regional frameworks for collaboration. How might federal agencies with IIJA funding participate in these frameworks (e.g., FEMA, USACE, FHWA)?*
2. *To what degree can these frameworks be replicated or used elsewhere?*
3. *What are the pros/cons of expanding existing frameworks to support IIJA implementation?*
4. *Are there other approaches to a collaborative framework for IIJA fish passage funding that could be considered?*
5. *What tools exist, or should be developed, to support collaborative implementation?*

Session Five: Developing an Inclusive Approach to Fish Passage (Instructional East, Room 105). For the most art, fish passage projects exist in the landscape alongside other human and community needs. To ensure that barrier removal, fish passage, and aquatic connectivity are viewed as positive, engaging in meaningful dialogue with communities to understand their interests is helpful. The following questions will guide the conversation:

1. *What are common community concerns regarding fish passage projects? Who tends to have these concerns (e.g., homeowners, community officials, businesses, other interests)? Do we understand the concerns of disadvantaged communities?*
2. *What are some models or examples of how concerns have been addressed (especially for disadvantaged communities)?*

TUESDAY JULY 19, 2022

3. *What benefits might you articulate to communities from fish passage/barrier removal projects (e.g., access to nature, fishing, recreation, etc.)*
4. *How might we better engage disadvantaged communities in fish passage work?*

Session Six: Monitoring and Measuring Success (Instructional East, Room 111). This breakout will focus on better understanding existing methods for monitoring success of fish passage projects and the role monitoring and assessment could play in improving barrier removal techniques. The following questions will guide the conversation:

1. *What are some current ways that people measure success for barrier removal? Consider ecological and socioeconomic factors.*
2. *How well do we understand the effectiveness of current barrier removal techniques/efforts?*
3. *What does/should a good monitoring or maintenance effort look like?*
4. *How should we best conduct monitoring efforts to better understand effectiveness of fish passage efforts to improve techniques and understand overall success? Project-by-project? Landscape scale?*

Session Seven: Making Fish Passage a More Mainstream Concern (Instructional East, Room 114). To increase the likelihood that fish passage efforts live beyond the IIJA effort, they must be shown to be valuable and its efforts successful. This breakout aims to gather ideas about what a successful effort looks like and how to build momentum for future successes. The following questions will guide the conversation:

1. *What does success look like for this effort at a national level (long term goal, short term measures)?*
2. *How can federal agencies, states and communities take steps to routinely consider fish passage in infrastructure and land use projects/actions?*
3. *How can we prevent future barriers from coming onto the landscape?*
4. *How might the power of this collaborative work to make fish passage a more mainstream community concern (e.g., messages, mechanisms)?*
5. *Would there be/what would be the benefit(s) of a coordinated communication/education approach?*

4:45 pm **DAY TWO CLOSING INSPIRATION: FISH PASSAGE AND CLIMATE CHANGE**

- **Keith Curley,** *Trout Unlimited*

5:00 pm **ADJOURN DAY TWO**

PARTNER WORKSHOP 2022 MEETING SUMMARY: APPENDIX A

WEDNESDAY JULY 20, 2022

8:30 am — **DAY THREE: AGENDA REVIEW**

- **Linda Manning,** *Council Oak (facilitator)*

8:35 am — **DAY THREE OPENING INSPIRATION: CHALLENGES AND VISION OF SUCCESS**

- **Jim Fredericks,** *Idaho Department of Fish & Game – Related Water Topics and Challenges*
- **Serena McClain,** *American Rivers – Insight Into A Successful Dam Removal*

9:00 am — **SYNTHESIS/DISCUSSION: IMPLEMENTATION MODELS FOR SUCCESS**

Summary of key points from the following breakout sessions followed by full group discussion:

- *Collaborating to Make the Whole Larger than the Parts*
- *Frameworks for Collaboration/Implementation*
- *Developing an Inclusive Approach to Fish Passage*

10:00 am — **BREAK**

10:30 am — **SYNTHESIS/DISCUSSION: PROJECT PRIORITIZATION AND TALKING WITH COMMUNITIES**

Summary of key points from the following breakout sessions followed by full group discussion:

- *Identifying Fish Barriers and Prioritizing Projects*
- *Making Fish Passage a More Mainstream Concern*

11:15 am — **SYNTHESIS/DISCUSSION: DEVELOPING CAPACITY AND MEASURING SUCCESS**

Summary of key points from the following breakout sessions followed by full group discussion:

- *Addressing the Capacity Challenge*
- *Monitoring and Measuring Success*

12:00 pm — **WORKSHOP WRAP UP AND NEXT STEPS**

- **David Miko,** *U.S. Fish and Wildlife Service*
- **Kurt Thiede,** *Association of Fish and Wildlife Agencies*

12:30 pm — **ADJOURN WORKSHOP**

Note: Federal Agency follow-up coordination session will take place from 1:30-4:30.

PARTNER WORKSHOP 2022
MEETING SUMMARY: APPENDIX B

MEETING PARTICIPANTS

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PARTNER WORKSHOP 2022 MEETING SUMMARY: APPENDIX B

MEETING PARTICIPANTS

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PARTNER WORKSHOP 2022
MEETING SUMMARY: APPENDIX B

MEETING PARTICIPANTS

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PARTNER WORKSHOP 2022 MEETING SUMMARY: APPENDIX B

MEETING PARTICIPANTS

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FEDERAL SUMMARIES

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

Federal Highway Administration (FHWA)

PURPOSE	ACTIVITIES
▪ The BIL (Section 21203) establishes the National Culvert Removal, Replacement, and Restoration Grant program (Culvert AOP Program) to provide funding for projects that would meaningfully improve or restore passage for anadromous fish (anadromous fish species are born in freshwater such as streams and rivers, spend most of their lives in the marine environment, and migrate back to freshwater to spawn).	▪ Grants for the replacement, removal, and repair of culverts or weirs that would meaningfully improve or restore fish passage for anadromous fish; and with respect to weird, may include infrastructure to facilitate anadromous fish passage around or over the weir and weir improvements. ▪ Technical assistance to Indian Tribes and underserved communities to assist in their project design and grant process and procedures.

FUNDING	LIMITATIONS
▪ Authorized $800M by BIL and appropriated $200M every FY from FY22-26 ▪ FY22: $200M ▪ FY23: $200M	▪ Determinations on funding limitations are still under discussion.

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

Federal Highway Administration (FHWA)

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

- Alignment with Administration Policy Criteria: climate Change and resilience; aquatic and terrestrial passage, equity and environmental justice, and safety.
- Relation to other BIL programs at DOT, for example the Bridge Improvement Program, PROTECT, Wildlife Crossing Safety/Wildlife-vehicle Collision Research

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

- Consult with the NOAA Administrator and USFWS Director to create the annual competitive grant program.
- Consult with NOAA and USFWS to:
- Develop a new process to provide technical assistance to tribes and underserved communities to assist in the project design and grant process and procedures.
- Establish a procedure to prioritize awarding grants.
- Establish a process for determining criteria for awarding grants.

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

Federal Emergency Management Agency (FEMA)

PURPOSE	ACTIVITIES
▪ IIJA includes an unprecedented injection of funding for the National Dam Safety Program to reduce dam safety related risk through national leadership, training, technical assistance, research, public outreach, and financial assistance.	▪ Financial assistance for technical, planning, design, and construction activities toward the repair, removal, or structural or nonstructural rehabilitation of eligible high hazard potential dams. ▪ Financial assistance to states to maintain and improve their regulatory dam safety programs ▪ Implement development and delivery activities, such as training, research, technical assistance, and public awareness and to reduce dam-related risks nationally.

FUNDING	LIMITATIONS
▪ IIJA funding for fish passage is implemented through the National Dam Safety Program (NDSP). ▪ The NDSP received $800M under IIJA. ▪ $67M to non-grant O&S available for five years. ▪ $733M to Federal Assistance (FA) available until expended, of which $75M is for the removal of dams.	▪ Funding for the removal of dams is granted to States pursuant to Section 8A of the National Dam Safety Act. ▪ There are several requirements for dams to receive HHPD funding (see "useful links") ▪ The following dams are not eligible for HHPD funding: federally-owned dams, a hydropower project with an authorized installed capacity of greater than 1.5 megawatts, and dams built under the authority of the Secretary of Agriculture.

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

Federal Emergency Management Agency (FEMA)

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

- Opportunity to coordinate across the various programs within DHS and FEMA to develop an enterprise approach for identifying, analyzing, and managing dam related risks and hazards.
- Opportunity to improve FEMA's decision-making processes to better inform investments that improve the nation's capability to prepare for, respond to and mitigate dam related hazards and risks.

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

- Will work with other federal agencies to understand potential opportunities to coordinate, align and leverage federal investments to achieve mutual and/or complementary outcomes.

USEFUL LINKS

- Rehabilitation of High Hazard Potential Dam (HHPD) Grant Program: https://www.fema.gov/emergency-managers/risk-management/dam-safety/rehabilitation-high-hazard-potential-dams

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

National Oceanic and Atmospheric Administration (NOAA)

PURPOSE	ACTIVITIES
▪ Support fish passage for native migratory and sea-run fish in coastal ecosystems, including the Great Lakes.	▪ Projects and technical assistance through cooperative agreements. Specifically, dam, culvert and fish passage barrier removal, including project development and feasibility studies; engineering, design and permitting; implementation monitoring; stakeholder engagement, education and outreach; and building capacity of new and existing restoration partners.
▪ Tribal Fish Passage funds are specifically to provide federal financial and technical assistance to Indian tribes and tribal commissions or consortia to remove barriers to fish passage. ▪ The PCSRF (Pacific Coastal Salmon Recovery Fund) supplements State and Tribal programs for Pacific salmon and steelhead recovery and conservation.	▪ The Tribal Fish Passage opportunity will fund the same types of activities as the Fish Passage funds, including specifically building tribal organization capacity. ▪ For PCSRF include direct and pass-through grants for habitat restoration and acquisition; restoration planning & assessments; research, monitoring, and evaluation; hatcheries and harvest management; public outreach, education, and landowner recruitment.

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

National Oceanic and Atmospheric Administration (NOAA)

FUNDING	LIMITATIONS

▪ Implementation of this funding is through existing programs.
▪ Fish Passage: The BIL provides $400 million over 5 years for restoring fish passage by removing in-stream barriers. Up to 15% is reserved for Indian Tribes.
  ▪ NOAA's Restoring Fish Passage Through Barrier Removal opportunity in FY22 will provide up to $65 Million for projects that can be from $1 million to $15 million over the award period.
  ▪ The Restoring Tribal Priority Fish Passage Through Barrier Removal opportunity in FY22 will provide up to $12 Million for projects that can be from $300K to $5 Million over the award period.
▪ PSCRF: The BIL provides $172 million over 5 years to supplement the appropriated funds to PCSRF. PCSRF FY22 appropriated funds were $65 million.
	▪ For FP and TFP funds, there are no match requirements (cost-share is included in evaluation criteria) but current ineligible project types include activities required by a local, state, or federal consent decree, court order, license condition, statute, or regulation; and effectiveness monitoring and research.
	▪ For PCSRF:
	  ▪ 33% cost-share requirement (states only)
	  ▪ 10% monitoring requirement (state and tribal commissions/consortia only)
	  ▪ 3% maximum for direct administrative expenses (states and tribal commissions/consortia only)
	  ▪ There are no prohibitions for individual tribe applicants.

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

- Coordinated with Restoration and Resilience Funding: https://www.fisheries.noaa.gov/feature-story/two-habitat-restoration-and-coastal-resilience-funding-opportunities-open-under)
- Coordinated Tribal Engagement (https://www.noaa.gov/sites/default/files/2022-05/IIJATribalProvisionsNOAAExecutiveSummaryandResponse.pdf)

PARTNER WORKSHOP: Fish Passage through Bipartisan Infrastructure Law, July 2022

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

National Oceanic and Atmospheric Administration (NOAA)

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

- New Anadromous Salmonid Fish Passage Guidance https://www.fisheries.noaa.gov/resource/document/anadromous-salmonid-passage-facility-design
- Programmatic environmental compliance (e.g., MSA, ESA, NEPA)
- Regional coordination
- Bureau of Indian Affairs (BIA) communications

USEFUL LINKS

- NOAA BIL website with all BIL funding opportunities (not specific to Fish Passage): https://www.noaa.gov/infrastructure-law
- NOAA Fisheries Funding Opportunities: https://www.fisheries.noaa.gov/funding-opportunities/open-opportunities
- PCSRF FY22 NoFO: https://www.fisheries.noaa.gov/grant/pacific-coastal-salmon-recovery-fund
- PCSRF Story Map: https://storymaps.arcgis.com/stories/d9a81c21abef4c5bb590301e230548b6
- NOAA Fish Passage NoFO: https://www.fisheries.noaa.gov/grant/restoring-fish-passage-through-barrier-removal-grants
- NOAA Tribal Fish Passage NoFO: https://www.fisheries.noaa.gov/grant/restoring-tribal-priority-fish-passage-through-barrier-removal-grants
- Resources for NOAA Restoration Center Applicants: https://www.fisheries.noaa.gov/national/habitat-conservation/resources-noaa-restoration-center-applicants

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

U.S. Army Corps of Engineers (USACE)

PURPOSE	ACTIVITIES

▪ Restore fish and wildlife passage by removing in-stream barriers
▪ Provide technical assistance to non-federal interests carrying out such activities
▪ USACE Aquatic Ecosystem Restoration mission: restore degraded ecosystem structure, function, and/or dynamic processes to a more natural condition
	▪ USACE partners with a non-Federal sponsor for one or more of the following:
	  ▪ Technical assistance
	  ▪ Feasibility
	  ▪ Design/Implementation (i.e., construction, which includes monitoring and adaptive management until ecological success is achieved)

FUNDING	LIMITATIONS

▪ $115M of non-expiring funds (IIJA/BIL only) – periodic allocation of funds to projects
▪ Funding specifically for In-stream Barrier Removal is "carved out" of the funding provided for the Continuing Authorities Program (Section 206 - Aquatic Ecosystem Restoration). Some existing CAP 206 projects can now be funded via the "in-stream barrier removal carve-out" as they move into a new phase
▪ Unlike the traditional CAP 206 program, the barrier removal funding is
  ○ 100% Federally funded (vs cost-shared 65/35)
  ○ Has no per-project cost limit (vs. $10M limit for "normal" CAP project)
	▪ While projects are 100% federally funded, the non-federal partner must:
	▪ Submit letter of intent (LOI) through local USACE district office
	▪ Sign a cost-share agreement for study and design/implementation
	▪ Acquire/purchase Lands, Easements, Rights of way, Relocations, and Disposal areas (LERRDS) (i.e., cannot remove a dam that USACE owns)
	▪ Address any HTRW issues
	▪ Fund Operations and Maintenance of the project
	▪ Does not provide authority to remove, breach, or otherwise alter operations of a Federal hydropower dam

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

U.S. Army Corps of Engineers (USACE)

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

- Numerous opportunities to leverage other USACE aquatic ecosystem restoration projects and programs and support America the Beautiful
- Could complement fish passage efforts underway at USACE dams by opening up additional habitat in those watersheds
- Synergies with the Sustainable Rivers Program, a partnership with The Nature Conservancy, which enhances environmental conditions related to operation of USACE dams and locks (e.g., by providing improved flows downstream)
- Potential use of the Corps Water Infrastructure Financing Program (CWIFP, Federal Loan program similar to EPA's WIFIA) that provides low-cost loans to enable local investment in non-Federal dam safety projects with cost > $20M (see separate one-pager, link). Eligible purposes for projects:
    - Reduce flood damage
    - Restore aquatic ecosystems
    - Improve navigation
- Army Engineer Research and Development Center (ERDC) has conducted and partnered on extensive research related to fish passage (particularly at large dams), dam removal, and aquatic habitat connectivity prioritization. Their efforts will be useful not only to USACE, but to others implementing fish passage and barrier removal projects.
- Opportunities to expand our partnerships with agencies that support fish passage research and system-wide monitoring, like USGS Science Centers.

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

- All projects require a non-Federal partner to sign a cost-sharing agreement
- External entities will have opportunity to participate in project scoping and review of recommended plans

USEFUL LINKS

- Sustainable Rivers Program
- Corps Water Infrastructure Financing Program (CWIFP)
- ERDC Ecosystem Management and Restoration Research Program (EMRRP)

PARTNER WORKSHOP: Fish Passage through Bipartisan Infrastructure Law, July 2022

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

U.S. Fish and Wildlife Service (USFWS)

PURPOSE	ACTIVITIES
The National Fish Passage Program (NFPP) ▪ Works on a voluntary basis to restore rivers and conserve our nation's aquatic resources by removing or bypassing in-stream barriers. ▪ Benefits both fish and people by removing obsolete and dangerous dams, permanently eliminating public safety hazards, and by restoring water quality, recreation opportunities, and river ecosystems.	Voluntary, nonregulatory program implemented at USFWS field stations in coordination with partners including: ▪ Project development and implementation ▪ Technical assistance ▪ Financial assistance ▪ Coordination support

FUNDING	LIMITATIONS
▪ $200 million over 5 years ($40 million annually)	▪ NFPP funding is available to most entities (States, Tribes, local governments, NGOs, etc.). ▪ The IIJA does not provide NFPP any new authority to remove, breach, or otherwise alter the operations of a Federal hydropower dam. ▪ Dam removal projects under IIJA must include written consent of the dam owner if ownership is established.

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

U.S. Fish and Wildlife Service (USFWS)

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

NFPP has historically and continues to coordinate across USFWS programs to implement fish passage projects strategically and effectively. NFPP is excited about the potential to leverage new opportunities such as America the Beautiful, other funding opportunities provided through the IIJA (e.g., Culvert Program, Bridge Investment Program, etc.), as well as existing programs (e.g., NFHP), to restore and maintain aquatic connectivity across the landscape.

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

NFPP relies heavily on a vast network of internal and external partners to successfully develop and implement projects. NFPP intends to continue coordinating, as well as improve coordination with partners to strategically implement fish passage projects across the country.

USEFUL LINKS

- NFPP BIL geospatial dashboard: https://www.arcgis.com/apps/dashboards/99040e452de9487f80d9f5748f717880
- NFPP BIL web page including links to project specific web pages: https://www.fws.gov/story/2022-04/fish-passage-restores-rivers-protects-wildlife-and-rebuilds-economies
- FWS press release covering the release of NFPP BIL FY 2022 project list: https://www.fws.gov/press-release/2022-04/biden-harris-administration-announces-38-million-bipartisan-infrastructure

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FISH PASSAGE AT-A-GLANCE

Environmental Protection Agency (EPA)

PURPOSE	ACTIVITIES
▪ IIJA funds mostly tied to Clean Water Act Implementation which can include support for living resources. ▪ Existing programs have flexibility to support fish passage (antidegeneration, temperature, nonpoint source, etc.) ▪ Example: EPA's Region 10 drinking water program provides funds for fish passage with nexus for drinking water quality improvements in partnership with Forest Service, Bureau of Land Management, and the States of Oregon and Washington.	▪ Grants to States, Tribes, and other partnerships. ▪ Technical assistance. ▪ Forums for coordination at watershed levels.

FUNDING	LIMITATIONS
▪ EPA received $50B to improve Nation's drinking water, wastewater, and stormwater infrastructure mostly through State Revolving Funds. ▪ EPA received $1.7B for Geographic Programs. ▪ EPA received $132M for National Estuary Program.	▪ EPA received no new authorities under IIJA for fish passage. ▪ For most EPA programs, projects need to demonstrate water quality benefit and/or implement a watershed plan. ▪ IIJA does not include CWA 319 grants for nonpoint source.

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Environmental Protection Agency (EPA)

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

- EPA work on fish passage through existing programs that can be leveraged. For example, NPS CWA 319 has awarded grants to 47 dam removal projects since 2021 ($7.8M/$19M total)
- Many existing EPA partnerships are already working on fish passage.

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

- NEP partnerships: 365 fish passage projects since 2006 ($2.7M/$885M total)
- Geographic Programs are typically partnerships with states, feds, and others workin in collaboration with other agencies on fish passage.

USEFUL LINKS

- National Estuary Programs: https://www.epa.gov/nep
- Nonpoint source programs: https://www.epa.gov/nps
- State Revolving Funds: https://www.epa.gov/cwsrf
- National Aquatic Resource Surveys (e.g., National Rivers and Stream Assessment and National Lakes Assessment): https://www.epa.gov/national-aquatic-resource-surveys
- Healthy Watersheds: https://www.epa.gov/healthywatersheds
- Recovery Potential Screening Tool: https://www.epa.gov/rps

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FISH PASSAGE AT-A-GLANCE

National Fish and Wildlife Foundation (NFWF)

PURPOSE	ACTIVITIES
▪ Funding for Aquatic Organism Passage is available through several existing programs.	▪ America the Beautiful Challenge – activities targeting at risk species, habitat connectivity, corridors, migration, ecosystem services, resilience, public access, and community engagement. ▪ National Coastal Resilience Fund activities are nature-based coastal resilience projects that reduce exposure for communities and enhance habitat for fish and wildlife. ▪ Chesapeake SWG and WILD ▪ Delaware Watershed Conservation Fund activities are primarily habitat restoration and protection.

FUNDING	LIMITATIONS
▪ America the Beautiful Challenge – grants of $200k - $5M (~$85M available in 2022) ▪ National Coastal Resilience Fund – grants of $100k - $10M (~$40M available in 2021 and $140M in 2022) ▪ Chesapeake SWG and WILD – grants of $50k - $500k (estimate $10.3M available in 2021 and $38.5M in 2022) ▪ Delaware Watershed Conservation Fund – grants of $75k - $1.5M (~$11.4M in 2021 and $16M in 2022) ▪ All programs except for America the Beautiful are longstanding programs administered by NFWF with new, dedicated IIJA funding.	▪ America the Beautiful funding is limited to state agencies, tribes, and territories. Projects must support implementation of a landscape conservation plan. Matching requirements range from zero to 50%. ▪ National Coastal Resilience funding limited to planning, design, and implementation activities and projects must have resilience benefit to communities. ▪ Chesapeake funding is for capacity building, planning, design, and implementation, and projects must be consistent with the Chesapeake Bay Watershed Agreement, especially to benefit eastern brook trout, river herring, and other at-risk or listed species in State Water Action Plans. ▪ Delaware funded activities are capacity building, planning, design, and

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National Fish and Wildlife Foundation (NFWF)

	implementation of projects consistent with Delaware River Basin Restoration Partnership and Program Framework. Matching requirement is 20% for capacity building and 50% for implementation.

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

- These efforts are already funded in partnerships both internal and external to the federal government.

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

- America the Beautiful Challenge in funded through several federal agencies including DOI, USDA, and DOD, as well as Native Americans in Philanthropy.
- National Coastal Resilience Fund is funded through partnerships between NOAA, DOD, Occidental, Shell, and TransRe.
- Chesapeake SWG and WILD are funded by a partnership of EPA, USFWS, USFS, NRCS, and Altria.
- Delaware Watershed Conservation Fund is funded in partnership with USFWS, William Penn Foundation, and AstraZeneca.

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FISH PASSAGE AT-A-GLANCE

Bureau of Land Management (BLM)

PURPOSE	ACTIVITIES
▪ Use IIJA funds to fund projects through the existing Ecosystem Restoration (ER) program (Title VIII – Section 40804 – Ecosystem Restoration). ▪ Ecosystem Program dollars will be invested strategically, justly, and efficiently to improve the functioning, resilience, and ecological adaptability of ecosystems. Program investments will be planned and implemented collaboratively across the DOI and with communities when appropriate, while improving job opportunities and equitable access to healthy ecosystems for Americans. ▪ BLM is coordinating fish passage efforts through the Aquatic Resources Program and the Engineering Program.	▪ The Aquatic Resources Program and the Engineering program will work closely to ensure that structures meet current standards. There will be an effort to boost the training of biologists, hydrologists, and engineers in fish passage design and an expansion of the available training opportunities for Stream Simulation. Some specific activities will include: ▪ Activity 1a: Contracts to Restore Ecological Health ▪ Activity 2: Good Neighbor Authority (grants to States or Tribes for restoration projects) ▪ Activity 10: USDA Collaborative Aquatic Landscape Restoration.

FUNDING	LIMITATIONS
▪ Overall funding for fish passage structures within the BLM comes from Deferred Maintenance funds and the Great American Outdoors Act. The IIJA does not directly fund fish passage structures for BLM, however, BLM would like to work with USDA and other DOI agencies to help restore connectivity and fish passage under the IIJA. ▪ Activity 1a: Funding has been moved out to FY23; ~$4.7M expected. Implemented via stewardship contracts or agreements. ▪ Activity 2: Received over $4.7M in FY22 and funded over $1.3M in fish passage projects. Implemented via Good Neighbor and Tribal Forest Protection Act agreements. ▪ Activity 10: No funds received in FY22. No specified implementation mechanisms.	▪ Activity 1a: Only Federal Lands, Tribal Forests, and Rangelands qualify ▪ Activity 2: Only Federal Lands qualify ▪ Activity 10: Only Federal Lands, Tribal Forests, and Rangelands qualify

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Bureau of Land Management (BLM)

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

- Landscape-level approach (includes watersheds) that considers and informs management decisions at multiple scales following Departmental Manual Part 604: Landscape-level Management.
- Leverage Recent or Planned Restoration Actions or Initiatives:
  - Benefits America the Beautiful
  - Responds to the Climate Action Plan
  - Leverages other BIL funded projects; does not duplicate funding of other work
  - Cross-jurisdictional restoration efforts, federally-adjacent, or near planned or recent restoration actions
  - Implements activities at a finer- or coarser-scale of other recent or planned actions

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

- Coordinate with all other DOI agencies, Tribes, USFS, Federal Highway Administration, NOAAF, FEMA, and USACE.
- Federal Land Management Agencies Memorandum of Understanding towards meeting common criteria and standards for fish passage structures (BLM, NPS, USFS, USFWS).
- BLM is partnering with Trout Unlimited to inventory fish passage structures, and with USGS to develop apps/tools for identifying fish passage structures. BLM plans to focus our efforts on connecting habitat across land ownerships; encourage public-private partnerships; improve inventories of problem structures; prioritize replacement and carry out implementation.

USEFUL LINKS

- https://www.blm.gov/programs/aquatics
- https://doi.gov/priorities/investing-americas-infrastructure/ecosystem-restoration/projects

BIPARTISAN INFRASTRUCTURE LAW
FISH PASSAGE AT-A-GLANCE

Bureau of Reclamation (BOR)

PURPOSE	ACTIVITIES
▪ Provide funding through competitive grant programs over a five-year period for on-the-ground projects that restore aquatic ecosystems, watershed health, and provide multiple benefits for water management and ecosystems.	▪ Example programs that benefit fish passage include: ▪ Aquatic Ecosystems Restoration and Protection Projects that improve habitat, including improving fish passage. ▪ Environmental Water Resources Projects that increase reliability for ecological values or improve the condition of a natural feature ▪ Multi-Benefit Projects to Improve Watershed Health that include habitat restoration projects ▪ Cooperative Watershed Management Program that supports watershed planning and restoration projects for watershed groups

FUNDING	LIMITATIONS
▪ Funding will be provided over a five-year period and determined through regular federal budget process. ▪ Funding will be provided through both existing programs (noted below) and through programs currently under development. ▪ Aquatic Ecosystems Restoration and Protection - $250M ▪ Environmental Water Resources Projects – $400M, including all WaterSMART grants ▪ Multi-Benefit Projects to Improve Watershed Health - $100M ▪ Cooperative Watershed Management Program - $100M	▪ Programs all require cost share, appropriate eligible entities, and have varying requirements. See "Useful Links."

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Bureau of Reclamation (BOR)

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

- Coordination occurs throughout programs within Reclamation. Grant and river restoration programs are considerate of climate change adaptation, as appropriate. Reclamation will continue to leverage participation in additional initiatives, such as America the Beautiful.

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

- Reclamation welcomes collaboration with other partners. This is especially encouraged at the project level for both grant applications and ongoing restoration projects.

USEFUL LINKS

- WaterSMART | Bureau of Reclamation (usbr.gov)

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U.S. Forest Service

PROGRAM/PURPOSE	ACTIVITIES
Legacy Roads & Trails Remediation (LRT) ▪ USFS National Engineering Program is lead ▪ New program, but similar to previous Legacy Roads program (2008-2018) ▪ Purpose: Improve aquatic passage, reduce sedimentation, climate resiliency, and Source Water Protection	▪ AOPs, road decommissioning, road and trail relocation (USFS land only)
Collaborative-based Aquatic-focused Landscape-scale Restoration (CALR), ▪ USFS National Biological & Physical Resources Program (lead) ▪ New Program ▪ Purpose: Improving fish passage and water quality	▪ Dam removals, irrigation weir retrofits, culverts, habitat or water quality barriers, stream restoration (federal and non-federal lands, including Tribal lands)
Dam Decommissioning, USFS National Engineering Program (lead) ▪ Purpose: removing USFS-owned, non-hydropower, high-hazard dams	▪ High Hazard Dam removal (USFS managed lands, non-hydropower Federal dams)

FUNDING	LIMITATIONS
• Legacy Roads & Trails Remediation (LRT) ○ $250 million over 5 years	▪ USFS roads, culverts, and trails
• Collaborative-based Aquatic-focused Landscape-scale Restoration (CALR) ○ $80 million over 5 years	▪ Federal and non-Federal lands, including Tribal lands
• Dam Decommissioning ○ $10 million over 5 years	▪ Non-hydropower Federal dams on USFS-managed lands

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U.S. Forest Service

OPPORTUNITIES/PLANS FOR WITHIN AGENCY COORDINATION

- Legacy Roads & Trails Remediation (LRT)
  - Program coordinated across multiple staff areas, including Fisheries and Recreation programs.
  - USFS Regions were asked to prioritize projects submitted to LRT program
- Collaborative-based Aquatic-focused Landscape-scale Restoration (CALR)
  - $10 million to NFWF – America the Beautiful Challenge
  - Program coordinated across multiple staff areas (Fisheries, Watershed programs)

OPPORTUNITIES/PLANS FOR EXTERNAL COORDINATION

- Collaborative-based Aquatic-focused Landscape-scale Restoration (CALR)
  - $10 million to NFWF – America the Beautiful Challenge
  - Further coordination with DOI and Tribes is expected for future allocations

APPENDIX D: BREAKOUT SUMMARIES

The following represents the detailed breakout notes from each of the seven breakout sessions on Day 2 of the Partner Workshop: Fish Passage through the Bipartisan Infrastructure Law. All in-person and virtual workshop participants were allowed to provide input into each breakout group, and their inputs are compiled here.

The purpose of these brainstorming sessions was to quickly identify issues, challenges, opportunities, and solutions for some of the most urgent and vital issues identified by meeting participants before and during the workshop. This summary may serve as a reference document for future discussions on strategically designing, implementing, monitoring, and communicating efforts for Fish Passage activities under the Bipartisan Infrastructure Law. These do not represent a consensus of the participants.

Breakout Session 1: Identifying Fish Barriers and Prioritizing Projects

BREAKOUT PROMPT

This breakout will focus on collecting information and best practices regarding existing barrier inventories and project prioritization systems at various scales (national, watershed, regional, state). It will also focus on understanding the criteria used to evaluate the severity of barriers and the importance and readiness of projects. The following questions will guide the conversation:

1. List known barrier inventories and discuss scope/scale of that inventory (watershed, national, regional, state). Please discuss criteria that is used to assess, sort, and prioritize barriers?
2. List known barrier removal project lists and discuss scope/scale. What criteria are used to prioritize projects? What are the fish/conservation criteria? Are there other criteria helpful for implementation? What other project prioritization criteria are helpful for success in implementation?
3. Discuss any existing efforts that attempt to develop a national inventory of barriers or projects. Would a national list of barriers or projects be helpful? If so, how should it be approached? What should be included?

Breakout Summary

Overall, moving projects from prioritization to action depends on various factors beyond fish or conservation criteria, including funding source, readiness, a willing and able partner, etc.

ECOLOGICAL OR CONSERVATION CRITERIA

- Ecological benefits
- Species benefits
- Habitat Connectivity
- Flow dependency / timing
- Ecological resiliency
- Species' physical resiliency
- Degree of change / impact within the watershed
- ESA listing status
- State "species of conservation need"
- Downstream barriers
- New opportunities upstream
- Habitat quality upstream
- Invasive species expansion / potential
- Barrier evaluation – is it mostly passable?

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OTHER "CO-BENEFITS" - FOR SOME PROJECTS, THE ECOLOGICAL BENEFIT MAY BE THE "CO-BENEFIT" OF THE PROJECT

- Social
- Social Equity – be aware if there are "negative covariants" that may suppress a project's implementation. E.g., is the area in an area of high impervious surface so being screened out too early?
- Recreational
- Flood Risk reduction / resiliency
- Water Quality/Quantity, including pollutants, temperature, etc. (may also be conservation criteria – e.g., can the species survive / thrive if the barrier is removed)
- Public Health
- Historic / Cultural relevance
- Life safety / Risk (e.g., removing a high hazard dam safety)
- Synergy with other projects

IMPLEMENTATION CRITERIA OR CONSIDERATIONS

- Is the barrier impacting access to a Tribal trust resource
- Projects that are prioritized for other reasons/ purposes (e.g., public safety, flood risk reduction)
- Willing partner (e.g., dam owner) (this changes over time so can / should be revisited)
- Is it "shovel ready"?
- Is it a strategic use of planning dollars available through IIJA?
- Can it be finished with IIJA dollars?
- What's the timeline?
- Technical complexity
- Political complexity / Political Support
- Community Support
- Will it create momentum in the watershed, creating or carrying forward other projects?
- Cost benefit ratio
- Economic benefit / cost effectiveness
- Agency / Presidential Administration priorities: supporting Tribal communities, urban communities, economically disadvantaged communities
- Synergy with other priorities – e.g., land management priorities to access Forest Service lands for wildfire prevention/ firefighting; dam safety
- Project cost
- Consistency with state, Tribal, federal plans and management documents
- Opportunity to match funding

Breakout Session Two: Collaborating to Make the Whole Larger Than the Parts

BREAKOUT PROMPT

The IIJA funding represents an unprecedented, national-scale focus on improving fish conservation and recovery. It brings together the existing public and non-profit conservation sectors and specifically includes, in a significant way, agencies responsible for water resources and transportation infrastructure. This breakout session aims at collecting information that federal agencies can use to improve collaboration with each other, and with tribes, states, and the non-profit sectors. The following questions will guide the conversation:

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1. What are the most important roles that the federal government can play in improving fish passage/removing barriers (e.g., communication, measuring success, training, etc.)?
2. What are the specific needs/contributions of tribes?
3. What are the specific needs/contributions of states?
4. What are the specific needs/contributions of the non-profit sector?

BREAKOUT SUMMARY

Partner Contributions – Federal

- Streamlining distribution of funds within legislative/regulatory sideboards.
- Administrative transparency – sharing inventories, prioritization criteria, data to tell the story.
- Connect partners and collaborate across regions, provide national perspective.

Partner Contributions – State

- On the ground expertise – biological knowledge, landowner/community relationships, development of management plans.
- Implementation past BIL, long-term projects beyond federal expenditure guidelines.
- Non-federal match – Leverage agency and partner funds, in-kind match, etc.

Partner Contributions – Non-Profits

- Communications and generating stakeholder support.
- Advocacy/lobbying - state/federal appropriations and necessary policy changes.
- Agility – spending/staffing flexibility to fill gaps.
- Science/administrative support, particularly for under-resourced communities.

Partner Contributions – Tribes

- Traditional Ecological Knowledge, insight into cultural importance of projects, community support
- Use treaty reserved rights/tribal sovereignty to optimize resource benefits of otherwise overlooked development projects.
- Communicate through tribal liaisons and tribal associations to incorporate tribal expertise into decision-making and project implementation.

Partner Contributions – Other

- NFHP – Prioritization/decision support, communication within and between agencies, funding distribution.
- Academia – Research and modeling capacity, training, creating pipeline of trained personnel.
- Private sector – Landowner buy-in and identification, match leverage, mitigation.

Solutions

- Use administrative priorities to request/ implement coordination directives from leadership across related agencies.
- Align grant criteria/evaluations with shared partner priorities.
- Improve grant administration/processes to ensure “right bucket for the right project”, reduce application and approval burden.
- Create collaboration framework of early/ often consultation leveraging capacity across agencies/partners. (added above)

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Breakout Session Three: Addressing the Capacity Challenge

BREAKOUT PROMPT

The IIJA effort will require a large scale-up across the public, private, and non-profit sectors. This breakout will focus on identifying where capacity will most need to be increased or developed and brainstorm some ideas to accomplish it. The following questions will guide the conversation:

1. What are the biggest capacity concerns (e.g., project design, project management, engineering and project implementation, specific technical skills, community engagement, permit review)? Please be specific.
2. Which skills sets might be the most critical?
3. What are some specific ideas for developing capacity (e.g., trainers, boots-on-the-ground, information, technical assistance)?
4. How might we involve/targeted disadvantaged communities in employment, training, or other opportunities at the national or local level?

BREAKOUT SUMMARY

The Challenge: Capacity Needs Including Potential Skill Gaps

Participants identified the potential for capacity gaps related to a variety of areas including fish passage design and engineering, science, and technical expertise, permit review and processing, community engagement and communications, grants application and management, project management, contract management, project monitoring and evaluation, tools and technology development, and supplies. Under each of these categories participants identified specific concerns as follows:

Fish passage design and engineering needs

- This capacity need exists not only for the federal and state oversight agencies but also for those implementing grants.
- There was significant concern about having sufficient qualified personnel to undertake site-specific design review related to all types of AOPs.
- There was also specific mention of the need for specific expertise related to barriers, culverts and road stream-crossing design and inspections.
- The group expressed concerns about the extent to which bringing in contractor expertise for design review activities is appropriate (rather than solely having in-house reviewers).

Science and technical expertise

- A key area of concern is the need for assistance to support Tribal implementation, including expertise related to science.
- A significant concern of the group related to scientific knowledge was on climate science expertise and the ability to address connections between fish passage and climate resilience and climate change adaptation.
- There was also mention of the need for more expertise on river systems, landscape analysis/planning, hydrology, water quality, wildlife and geology (especially at the State level).
- A particular area of expertise mentioned was the lack of understanding related to energy

system changes and the impacts on hydro-electric facilities.

- It was noted that in general the development of federal agency scientific expertise is on a decline due to budgeting constraints, and this is not solely as fish passage issue.
- In addition to these scientific concerns, there was also mention of the need for more expertise related to cost estimating for restoration, development and removal efforts.

Permit review and processing

- A significant concern raised in discussion was the capacity of state and federal agencies and tribes to be able to sufficiently address environmental requirements (permitting and procedural) in a reasonably timely manner.
  - These include Clean Water Act 401 and 404 permits, ESA (section 7) requirements, marine mammal protection act reviews and NEPA procedures (and the State counterparts to these requirements).
  - ESA section 7 was specifically raised as a complication for FERC licensees.
- Concern focused primarily around having sufficient staff to execute all requirements in a timely manner.
- There was also concern raised about having the engineering expertise needed for permit reviews.
- In addition the group discussed concerns about ensuring that cultural reviews per Section NEPA 106, SHPO and the NHPA are appropriately implemented.

Community engagement and communications

- The group raised concerns about having personnel to conduct stakeholder engagement and community outreach regarding specific fish passage projects, including expertise in running public meetings.
- Of specific concern was also have communicators with expertise in risk communication and/or deep ties the local community for any dam removal scenarios.
- It was also noted that aside from specific communications, there should be capacity for the development of umbrella messaging that could be used across various agencies, programs and partners.
- There was also concern about having capacity to undertake appropriate outreach to and engagement with underserved communities.
- There was also concern about ensuring appropriate engagement between Federal/State agencies and Tribes.
- It was noted that Federal Agencies presently often lack the social science expertise that helps to support excellent engagement and communication.

Grants

- States and Tribes will need more personnel with expertise in grant writing, tracking and reporting, especially those with training/background in IIJA.
- Federal agencies will need to provide technical assistance to Tribes for grant application and navigation of technology associated with grants.
- There was significant concern at all levels about having enough dedicated and focused grants management staff.

- Concerns about ensuring underserved communities have understanding and access to grant programs.
- Concerns about State staff need more grant management training.

Project management

- Concern about local governments, Tribes and NGOs being able to quickly train and launch project managers.
- Local public works departments will have to figure out how to address capacity issues where many culverts will need to be replaced, since they are accustomed to completing such projects as needed, one at a time.
- Also noted was a concern about the expertise and time needed by project managers to do landowner outreach to attain necessary permissions.

Contract management

- Raised concerns about understanding and appropriately implementing procurement requirements, especially related to engaging technical/engineering expertise. For example, the appropriate use of design-build contracts.

Monitoring and evaluation

- The group raised the need for personnel to undertake a collective assessment of success across the entire effort (which would rely on developing consistent monitoring criteria) and the need for capacity to do so.
- As mentioned in the science/technology section above, this effort would require a variety of scientific expertise that goes well beyond AOP engineering and design and delves into eco-system analysis.
- Having no follow-up funds for grantees to report out and provide long-term monitoring/ adaptive management (aka "effectiveness monitoring" as opposed to "performance monitoring" of the structure which is more easily accounted for.)
  - This concern seemed to vary by Federal agency with some expressing no flexibility in funding.
- Not having appropriate tools, for feedback loop and making the data readily available.

Tools and technology development

- Having capacity to develop an inventory/ centralized database tool to track completed projects.
- Taking the time and having funds to develop a tool for consolidated grant information (aka one-stop-shopping) so applications can more readily identify grant opportunities, which will save time and resources on the back end by avoiding unnecessary time expenditures on in applicable situations.
- Ensuring that there is appropriate project Prioritization potentially via project ranking and prioritization- decision support tools.
- Building centralized capacity to develop joint training and training tools for technical topics, again to avoid duplication of efforts across programs and Agencies.

Supplies

- In addition to concerns about having sufficient personnel with sufficient expertise and abilities, the group also raised concerns about having enough construction equipment for simultaneously completing projects across the nation.

- The group also noted ongoing supply chain issues that could prevent attainment of necessary building materials for culverts and bridges.

General Road-Blocks To Building Capacity

The group discussed some of the issues with building capacity that regularly come up these include:

- Timing and speed of hiring for agencies with bureaucratic human resources processes and/or lack of immediate authority for hiring (aka political roadblocks).
- Hiring is made more difficult with IIJA funding because of the limited nature of the funding (it is harder to convince people to take a short-term position).
- Competition for talent in the face of potential pay gaps for those with expertise and generally a lack of people when so many organizations and agencies are going to be looking for similar expertise simultaneously.
- Funding Capacity where grants may restrict the activities that can be funded.
- How to retain institutional knowledge, rather than retirements

Potential Solutions to Addressing Capacity Issues

The group discussed not only approaches for developing and building capacity but also discussed alternative solutions to address the problems created by capacity gaps. The following solutions were suggested:

Overall hiring/capacity building

- Speak to administration/leadership with one voice to promote hiring.
- Workforce development: Work with tribal/MSIs to build the work force. Native American Fish & Wildlife Society is a good resource with existing networks.
- Use conservation corps to increase interest in natural resource/science careers and otherwise engaging people early: high school, college.
- Target colleges and universities (and increase focus at smaller colleges and community colleges).
- Tap into Tribal student networks – there are tribal liaisons at some colleges and regional conferences of native American organizations that may have student networks. Attending these functions and making personal connections would be a good first step.
- States, Tribes and local governments should actively voice concerns to leadership about lack of Federal Agency staff.
- Allow for 4 to 5 year awards/budgeting cycles in order to hire and retain quality people.
- Have multi-Agency Federal contracts for a “cadre” of contractors to support grant applicants or develop designs across multiple Agencies.

Overall reducing/leveraging existing resources needed to get projects completed

- Prepare small communities to replace current infrastructure with AOP-beneficial infrastructure when it fails, for example after an extreme flooding event.
  - Potentially look to Minnesota as an example of working with public works to support AOP-friendly culverts

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- Leverage State and local DOT scheduled infrastructure replacements to plan ahead and combine efforts.
- Push against internal "always done this" practices and look for flexibility within legal authorities.
- Leverage existing tools to develop broad-based Prioritization Tools.
  - Potentially use CA FISHPass and CA Passage Assessment Database.
- Hold local/regional training events for green collar workforce.
  - Leverage county conservation districts and NRCS due to local connections to train municipal officials. (E.g. Canaan Valley Institute green collar workforce event.)
- Leverage NFHP and other regional associations of fish and wildlife agencies to receive and re-distribute money.
- Use contracts that group multiple tasks/ projects, release task orders (ACOE).
- Develop guidance on Build America/Buy America.

Grants

- Explore how and where grants can be used to build grants that more explicitly allow for capacity expenditures/building. Indirect costs aren't enough to cover capacity.
  - This needs to be consciously and consistently, so no single entity appears to be "less cost effective" because it has funded significantly more capacity costs.
- Use MOUs to combine funds between agencies, and award fewer grants.
- Check assumptions about legislation not including administrative support.
  - Educate political appointees about need for this type of funding.
- Allow applicants to apply to tribal-specific funding opportunities (when in direct partnerships with tribes).
- Avoid sending notices and letters to the tribal chairperson when it is not known who the correct contact should be. This creates a long delay in an already long process.
- Work with existing partners who help grantees through application process. The Native American Fish & Wildlife Society developed a weekly webinar series to help tribes apply for America the Beautiful grants that have been well attended; a similar series could be developed for IIJA fish passage funding (some, not all grants).
- Develop guidance for how to make applying for and managing federal grants easier.
- Reduce or eliminate funding match requirements that might otherwise apply to make access to grants easier.

Technical and Engineering Expertise

- Expand opportunities for design-build contracts.
- Develop detailed and consistent design guidelines to help practitioners create efficiency in design review and permitting processes.
- Train technical staff across various agencies using centralized teams or training programs.
- Create MOUs to "borrow" engineering expertise from other Federal Agencies (or environmental reviews, etc.).
- Hold technical trainings for non-federal restoration practitioners.

- Develop an online library of experts to assist with various aspects of a project.

Permitting/Environmental & Cultural Compliance

- Create centralized teams for NEPA process to collectively work through aggregated sets of projects.
- Use IIJA funding to hire contractors for NHPA Sec 106.
- Build categorical environmental compliance into higher level planning documents such as Forest Plan reviews, Hazard Mitigation Plans, etc.
- Include costs for permit reviews in the grants, including allowing the use of contracts to develop environmental compliance, prior to federal agency sign-off
- Use fellows/interns for NEPA processes and looking at climate impacts

Communication and Community Engagement

- Develop a database of case studies of various types of success stories and positive impacts of AOPs to leverage when communicating with communities and individuals.
  - Engaging University students to write case studies, CCAST
  - Understanding the communications needs and the story to be told, before collecting information.
- Foster a paradigm shift with state and local agencies to move from reservoir/fish stocking to streams and fish habitat preservation. This could be done by relating this to community engagement on related issues that concerns the community: economic benefits, safety.
- Develop communications toolkits/guidelines with messages.
- Create a central reporting database/story map to show decision-makers what has been accomplished. This could leverage USGS existing tools, with additional funding/QA.
- Use paid coordinators with short-term contracts to support community champions.

Monitoring and Evaluation

- Engage University students to conduct follow up monitoring activities and impact studies.
- Allow for grants to funding post-project monitoring and evaluation.
- Specifically target where effectiveness monitoring is most needed to reduce resources needed.
- Develop a centralized database for fish passage study results.
- Explore the use of “no-year” money for monitoring.
- Tie monitoring to permitting/ environmental compliance, so monitoring is required in order to meet the terms of the permit.

Potential Approaches for Involving/Targeting Disadvantaged Communities

- Develop guidelines to support outreach to underserved communities
  - FWS Urban Wildlife Program has new guidelines out that could be leveraged.
- Earmark funding to support project management, coordination, and in-house capacity for Tribes and small communities
- Exercise caution when combining funds into larger awards that could impact equity and the ability for new applicants to become involved.

- Maximize public benefits, beyond fish passage (to avoid concerns about cost and lack of habitat benefit).
- Provide training and technical assistance: Give the power to communities, through peer-to-peer training.
- Pair up with state/regional economic development groups because they've already identified who needs assistance.
  - Explore Arkansas efforts as a potential model.
- Work with NGOs on relationship-building to determine communities' needs.
- Change/reducing cost-share.
  - This may take significantly educating legislators as some cost share requirements are statutory.
- Have broad definitions for underserved communities, when there's legal flexibility in order to bring in more people.
  - Look to current USACE efforts on defining "economically disadvantaged" which recently went out for public comment.
- Include requirements for certain types of communities in construction.
  - Include in the contact language for grant recipients.
- Use congressional delegations to help with outreach. Get on the Agenda when elected officials are hosting meetings.
- Establish a federal clearinghouse of these communities, so that Requests for Information can target these groups.

Breakout Session Four: Frameworks for Collaboration/Implementation

BREAKOUT PROMPT

Fish passage and barrier removal work is conducted at a variety of scales and across many different types of public, private, and non-profit entities. This session will explore opportunities to develop new, or expand existing, frameworks for collaboration to support IIJA implementation. The follow questions will guide the conversation:

1. Describe existing national, state, or regional frameworks for collaboration. How might federal agencies with IIJA funding participate in these frameworks (e.g., FEMA, USACE, FHWA)?
2. To what degree can these frameworks be replicated or used elsewhere?
3. What are the pros/cons of expanding existing frameworks to support IIJA implementation?
4. Are there other approaches to a collaborative framework for IIJA fish passage funding that could be considered?
5. What tools exist, or should be developed, to support collaborative implementation

BREAKOUT SUMMARY

Ideas for expanding frameworks

- Federal Highway Administration
  - Need better coordination between FHA Headquarters and State Departments of Highways to promote focus of improved culverts including technical manual/ guidance. Many decisions are delegated to the states so useful to engage with AASHTO (American Association of State Highway Transportation Officials) as they develop manuals for culvert design.

– Jesus M from FWS could provide sample package for technical manual for updated surveys.

– States of Maine and Alaska have Programmatic Agreements with USFWS that could be useful as a model for culverts.

- Involve FHA in Aquatic Connectivity Teams
- FHA to cooperate with NMFS on anadromous fish
- FWS/NMFS already consulting with FHA to develop BIL funding approach and NOFO
- Invite DOTs to U.S. Forest Service culvert training
- DOT could collect barrier and aquatic organism information coordinated with other surveys (e.g., doing it now for white nose bat syndrome)

- U.S. Army Corps of Engineers
  - Water Resources and Development Act language already being drafted asking USACE to develop/expand inventory of dams in the nation to include smaller dams
  - Corps Water Infrastructure Financing Program – loans; could dam removal be eligible?
- Federal Emergency Management Agency
  - Disaster funding is the big player, works to not only remove dams through the National Dam Safety Program, but work to change post-disaster policies to consider fish passage (e.g., culverts). Examples include: BRIC, Public Assistance, and Flood Mitigation Assistance
  - Identify list of dams that owners want to walk away from (National Dam Safety Program and through the Association of State Dam Safety Officials). Can also be done through the National Fish Partnership at a state or regional level – already being done in South Carolina.
- Federal Energy Regulatory Commission
  - List of dams that owners want to walk away from. Might there be DOE money for those?
  - Relicensing process triggers reconsideration of fish passage (consider this in long term strategy for fish passage)
  - BIL (Section 247) has incentives for hydro industry to take steps to improve fish passage. It is an open question about whether eligible if not in existing license or only on relicense. DOE still trying to figure out how to structure the program
- Department of Defense
  - Sikes Act- Military Lands Conservation Program- applies to all bases. Could this be a potential funding source for aquatic connectivity
- Environmental Protection Agency
  - Geographic programs (e.g., Chesapeake Bay) and National Estuary Program are place based approaches that may overlap with geographic focus areas.
  - Section 319 of the Clean Water Act – grants to states, territories and tribes for non-point source pollution, some connections could be made
  - State Revolving Loan Fund – some activities may be eligible

- USDA/DOI/DOD Sentinel Landscapes program – connects private landowners with federal assistance programs that help them adopt and maintain sustainable management practices

How to Address Capacity Issues

- Consultants: engineering design, permitting, Section 106
- IPAs, MOUs: loaning from other agencies, hiring other agencies to do work (USGS, USACE)
- PCSRF plussed up- granting programs to states- it is underfunded and could be added to
- MOU between feds and others to share and coordinate expertise
- Local jurisdiction may have engineering or other resources available
- Use USGS for monitoring/eval packaged as research study
- Service first agreements within DOI
- Internship and Fellowship Programs (e.g., NOAA Hollings)
- Combine common activities – coordinated grant review among agencies
- Train / utilize tribal personal, archeology, indigenous knowledge
- Academia (research and synthesis panels

Pros/Cons of Expanding Existing Networks for Implementation

- NFHP could be good way to move money from feds to do on-the-ground, but capacity could be limited at the partner level as well.
- Entities need long-term funding (several years) to allow making hires. Uncertainty in funding staff is a big challenge (can't attract good people, can't retain as no job security with temporary positions, limits institutional knowledge) – there may be challenges in how federal funds may be spent.
- Recovering America's Wildlife (RAWA) – could this help states with long-term funding?

Breakout Session Five: Developing an Inclusive Approach to Fish Passage

BREAKOUT PROMPT

For the most part, fish passage projects exist in the landscape alongside other human and community needs. To ensure that barrier removal, fish passage, and aquatic connectivity are viewed as positive, engaging in meaningful dialogue with communities to understand their interests is helpful. The following questions will guide the conversation:

1. What are common community concerns regarding fish passage projects? Who tends to have these concerns (e.g., homeowners, community officials, businesses, other interests)? Do we understand the concerns of disadvantaged communities?
2. What are some models or examples of how concerns have been addressed (especially for disadvantaged communities)?
3. What benefits might you articulate to communities from fish passage/barrier removal projects (e.g., access to nature, fishing, recreation, etc.)
4. How might we better engage disadvantaged communities in fish passage work?

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BREAKOUT SUMMARY

Takeaways

- Each project will have a unique set of impacts/benefits to community and thus, each community has unique concerns and will require specific strategies or approaches for engagement
- Continue to increase awareness and learn the community
- Communities need transparent information and assurances of the benefits
- Engagement
  - Early and often, transparently
  - Throughout planning process including following project completion
  - Develop outreach and engagement plans
  - Utilize local information and trusted community members
  - Incorporate community concerns into decisions
- Utilize existing expertise and capacity – this work is already happening, capitalize on it!

NEXT STEPS

- Develop top-line common messaging across federal and state agencies to amplify our goals and ensure the benefits resonate within key communities
- Establish processes for engagement and agency collaboration

What are common community concerns regarding fish passage projects?

- Stakeholders are concerned with:
  - Costs
  - Their immediate environment
  - Safety
  - Prioritizing fish over people
  - Cultural significance - loss of traditions and identities of the communities

Who tends to have these concerns (e.g., homeowners, community officials, businesses, other interests)?

- Recreators
- Government (all levels: local/municipal to federal)
- The public (landowners, families, members of the public resistant to change)
- Private industry
- Financiers

Do we understand the concerns of disadvantaged communities?

- Disadvantaged communities
  - Who are the communities?
  - How do we identify them?
  - Do we acknowledge their self-identification?
  - How do we purposefully make disadvantaged communities a focal point?
  - How do we ensure project benefits are directed to them?

    Fish passage isn't necessarily benefitting disadvantaged communities but barrier removal more specifically (through job creation, reductions in safety hazards, etc.) may – this is the message that needs to be communicated.

  - Need to identify communities before we can identify their needs

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- Non-disadvantaged communities
  - Understanding varies (i.e., yes, no, maybe, sometimes, sporadically) and generally is better at the local scale

    No two communities/projects will have the same set of needs – need a local perspective to truly understand

  - Utilize existing system of capacity and local knowledge and expertise

    How do we ensure they are prepared for effectively engaging these communities?

- Many of them are well prepared and their existing skills should be capitalized on
- Is community engagement a priority for the agency/organization?
  - If not, how do we integrate this priority into their mission?
  - Utilize existing expertise

What are some models or examples of how concerns have been addressed (especially for disadvantaged communities)?

- Local/regional examples
  - Watershed councils and collaboratives (e.g., Oregon watershed councils – do these similar models exist in other states/ regions?)
  - Stakeholder and community engagement during all project stages

    E.g., Klawock Watershed Action Plan, Hoonah Native Forest Partnership, USDA SE Alaska Sustainability Strategy

  - Fish Habitat Partnerships
  - Land trusts
  - Central PA Stream Improvement Program – this works very well with landowners
  - Upper Columbia River Reintroduction – effective outreach to community and stakeholders
  - Benton Alewife Festival (Maine)
  - Herring Festival in Plymouth – promotional, community engagement
  - Wildlife Action Plan SGCN priority successes
  - Blackfoot Challenge – lessons from landscape collaboratives
  - OR and WA strategic action plan model
  - Partners for Fish and Wildlife model – suggestion to expand to all federal agencies
  - American Rivers (many)
  - Cooperative Watershed Management Program
  - Project Wild (educational opportunity in schools)
  - WA track/tag fish in the classroom that resulted in broad engagement across the community
  - Utah model for engagement
- Other tools or approaches
  - Risk Information Seeking and Processing (RISP) Model
  - Listening sessions
  - Small, targeted group discussions
  - Success stories
  - K-12 involvement
  - Tours – project tours, field tours, float trips (get buy-in from nearby landowners)

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What benefits might you articulate to communities from fish passage/barrier removal projects (e.g., access to nature, fishing, recreation, etc.)

- Benefits provided that need to be communicated effectively to stakeholders:
  - Public works benefits include wastewater treatment costs, reductions in flooding, public health, and others
  - Upstream/downstream benefits
  - Environmental justice
  - Long-term benefits to the public (e.g., generational cost savings)
- Methods/tools for effective articulation:
  - Use visuals (videos, etc.)

    Leverage partners expertise and capabilities to do this
  - Transparency on the work being conducted
  - Know your audience – vary the message and approach according to the needs of the individual community
  - Focus on the positive – what is the community gaining (rather than losing)?
  - Economic benefit/ecosystem services – this information is a tool for community buy-in (e.g., economic value of clean water)

How might we better engage disadvantaged communities in fish passage work?

- Engage early and often to facilitate community buy-in
  - Focus on transparency
  - Engage with them throughout the process from awareness on opportunities, options, and resources available to them as well as during project development and implementation
  - Test methods of engagement (public forum vs. roundtable, involved method) to ensure collaborative approach is facilitated rather than us vs. them attitude
- Local
  - Value and rely on local knowledge and communities
  - Know your audience and implement strategies unique to them
  - Leverage existing relationships/ partnerships/resources (e.g., NRCS offices)
  - Develop a two-way street of communication: seek synergies between stakeholder needs and expected benefits provided by the project
  - Seek input from neighboring (i.e., upstream, and downstream) communities
  - Congressional delegations
  - Field tours
- Listen
  - Ask the community what their concerns and priorities are rather than dictating agency priorities/needs
  - Inform the public of processes, resources, benefits, etc.

    – *Caution: "educating" the public can be perceived as condescending; "informing" is preferred language*

    – *"Outreach is everybody's responsibility." Outreach goes beyond targeted, formalized efforts (individual responsibility as well)*

- Education
- Participatory processes (develop new and utilize existing)
  - Integrate stakeholder community engagement into project planning
  - Recreational events
- Provide information based on their individual and unique needs
  - Simplify information on BIL
  - Social media

    Some communities may not have the capability to benefit from social media resources
  - Develop and communicate historical and natural history information that is relevant to these communities
- Socioeconomic benefits
  - Utilize social scientists to conduct economic valuation studies
  - Identify and communicate specific socioeconomic benefits provided by these projects
- Tribal engagement (also applies to disadvantaged communities more broadly)
  - How do we effectively engage these groups while reducing the burden on them (administratively, etc.) (e.g., consultation fatigue)?

Breakout Session Six: Monitoring and Measuring Success

BREAKOUT PROMPT

This breakout will focus on better understanding existing methods for monitoring success of fish passage projects and the role monitoring and assessment could play in improving barrier removal techniques. The following questions will guide the conversation:

1. What are some current ways that people measure success for barrier removal? Consider ecological and socioeconomic factors.
2. How well do we understand the effectiveness of current barrier removal techniques/efforts?
3. What does/should a good monitoring or maintenance effort look like?
4. How should we best conduct monitoring efforts to better understand effectiveness of fish passage efforts to improve techniques and understand overall success? Project-by-project? Landscape scale?

BREAKOUT SUMMARY

Defining "Monitoring and Measuring Success"

Participants first discussed and generally agreed on a delineation between two different types of monitoring with regard to AOP/fish passage efforts:

Performance monitoring (also called compliance monitoring) – focuses on ensuring successful project delivery.

- Performance monitoring effort will look at whether the structure is functioning as designed, focused on immediate outcomes such as flow volume/rate, structural stability, etc.
- Performance monitoring can be used as the basis for adaptive management.
- Federal agencies already regularly require performance monitoring as part of infrastructure development, and generally

expressed confidence that such requirements could be included as part of AOP contracts and grants.

Effectiveness monitoring – focuses on longer-term outcomes related to habitat restoration for aquatic organisms.

- Effectiveness monitoring is a longer-term monitoring and evaluation effort that looks at broader impacts from direct benefits/impacts such as increases in species population to secondary benefits/impacts such as healthier local economies based on increased eco-tourism opportunities.
- Effectiveness monitoring is potentially scalable depending on the intended outcomes and could implicate multiple AOP structures across a watershed/basin.
- Federal agencies do not generally require effectiveness monitoring as part of infrastructure development, and many expressed concerns about having authority to do so as part of AOP contracts and grants.

Monitoring Objectives

The group discussed what might be some objectives for conducting monitoring and what might determine the "success" of the fish passage effort. The following objectives were suggested:

- To demonstrate to Congress whether there has been a return on the broad investment made in the IIJA. (AKA Did transformational change occur?)
- To demonstrate to communities the benefit and value of AOPs and how they can uplift local communities.
- To determine if there are changes that need to be made to the way funds have been invested in AOPs.
- To determine if whether AOPs have been successful in restoring (and potentially down-listing) species and their habitat.
- To determine if there are benefits from AOP investment beyond species recovery, related to climate resilience, greenhouse gas sequestration/storage, healthier riparian systems, draught resilience, flood hazard reduction, increase water quality and quantity, and more.
- To verify that project prioritization is producing the expected results and shift priorities as needed.
- To verify the efficacy of new technology (i.e. new design approaches), the validity of emerging science and/or the application of existing science and technologies in new conditions. In other words, to specifically focus on seeing whether new design methods or AOP approaches are effective in restoring fish species/ habitat and answer any new or as-yet-unaddressed questions. (AKA It should NOT be the objective of effectiveness monitoring to evaluate already well-tested scenarios.)

Current and Potential Monitoring Approaches and Techniques

- Looking at physical measurements/conditions to assess project performance: hydraulic data, fluvial response, water temperature changes, stream structure profiles, cross section of stream, water quality changes, geomorphic monitoring, bank stabilization, sediment movement, comparison to historical transects.

- Looking at secondary factors to assess project performance: changes to maintenance and repair costs, changes to maintenance frequency
- Conducting visual assessments of species population and habitat impacts to assess restoration benefits: fish counts/species surveys, species location changes (presence above a former barrier), water quality changes, temperature changes, sediment changes, changes to other related species (food source changes).
- Using technologies to look at fish population increases, species health and range expansion: telemetry, PIT tagging, eDNA sampling.
- Looking at potential negative impacts: introduction of non-native species (plants, fish), fish disease.
- Looking at economic data to determine secondary impact/benefits of fish passage: construction and maintenance jobs created, increase recreational use, increased ecotourism and related job-creation, and potentially even increased real estate valuations.
- Looking at other socio-economic factors to determine secondary impact/benefits of fish passage: public attitude, acceptance, human dimensions, perspective.

Considerations/Suggestions for the Development of Monitoring Approach(es) for the AOPs under IIJA:

- Monitoring should always be tailored to specific project objectives
- Effectiveness monitoring will need to be otherwise incentivized/supported if it cannot be paid for within grants/contract vehicles.
- Effectiveness monitoring does not need to be not comprehensive, but rather can be based on a representative sample or projects. There should be an emphasis on innovative designs, do not need to monitor every project when we know what works.
- Will need to come up with creative solutions for WHO can monitor long-term:
  - Monitoring could be conducted by citizen volunteers or paid citizens (Native Alaskan Communities).
  - NRCS, EQUIP, EPA, CRP, NFWF, NFHAP trust may have programs or resources to support monitoring by locals.
  - University students, academia could be drawn in to support longer term effectiveness monitoring efforts. (But time scale is an issue because of student turnover.)
- Will need to consider resources for long-term monitoring efforts:
  - Would benefit from having a standard protocol or set of best practices for monitoring and and/or a template for developing a monitoring strategy.
  - Would be helpful to have monitoring case studies – a repository of successes and failures, repository.

    Ideal of these could organized or cross-referenced regionally where there are similar resources, topography, and threats are different.
  - Potential to leverage existing SARP database and/or USGS dam removal info portal.
- Grant applications should anticipate issues and require mitigation measures to address

issues, which could help define longer-term monitoring needs.

- Could leverage DOT requirements to monitor AOPs associated with bridges. However staff would need to be trained to assess ecological benefit.
- •Important to bring in States on these discussions as they potentially have more authorities and responsibility related to monitoring and reporting.
  - Need to explore whether language in the award document help ensure that the right things are monitored.
  - States have existing water quality programs that could potentially be leveraged for certain types of sampling.
- Need to determine how long-term monitoring data will be reported and where it will be housed. (What will agencies do with it? How will it be used?)

Breakout Group Session 7: Making Fish Passage a More Mainstream Concern

BREAKOUT PROMPT

To increase the likelihood that fish passage efforts live beyond the IIJA effort, they must be shown to be valuable and its efforts successful. This breakout aims to gather ideas about what a successful effort looks like and how to build momentum for future successes. The following questions will guide the conversation:

1. What does success look like for this effort at a national level (long term goal, short term measures)?
2. How can federal agencies, states and communities take steps to routinely consider fish passage in infrastructure and land use projects/actions?
3. How can we prevent future barriers from coming onto the landscape?
4. How might the power of this collaborative work to make fish passage a more mainstream community concern (e.g., messages, mechanisms)?
5. Would there be/what would be the benefit(s) of a coordinated communication/education approach

BREAKOUT SUMMARY

Overall, success looks like....

- Efficient allocations to happy recipients, and then additional funding
- Creating a new fish passage culture

What does success look like for this effort at a national level (long-term goal, short-term measures?

- Another $1 trillion in funding to continue to address these fish passage issues.
- Demonstrate that we spent all the BIL funds
  - Effectively
  - Efficiently
  - In Local Communities
  - And have happy applicants and recipients
- Leverage the investments with new partners and increased capacity in partners.
- Have a plan for the future—to keep moving forward.
  - New authorities in the future (e.g. FERC resiliency; USACE O&M for fish passage mods
- Demonstrate Administration priorities (tribes and underserved communities)

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- People know where to go for funds, information and assistance (NFHP?)
- Created a culture of barrier removal—normalize it. Change in mindset (design and integrated)- Fish passage and aquatic barriers becomes the norm- just as common as fish stocking for example. Fish passage and habitat work is a regular tool in toolbox for those working on the ground on maintenance too.
  - Become the 'state of practice' in roadway design
  - Dam owners on the tributaries are aware of needs for fish passage
  - Have non-traditional partner support
- Have a plan for the future – keep moving forward beyond the five years of BIL funding.
- A story that captures multiple benefits of the BIL Fish Passage $ and Shows what IIJA bought
  - Take credit for the work; acknowledgment feature to all the multiple partners together (not one agency at a time..)
  - The full community is telling the story (all agencies, tribes, states, Congress, General public etc.)
    - *Educate the full community on the project benefits*
    - *Communicate in a way the community can understand*
  - Identify the story (based on audience- e.g. Congressional story)
    - *Context sensitive aquatic organism passage*
    - *Show difference through before and after pictures*
    - *Aesthetics matter*
    - *Memorable tag-line matters*
    - *Choose signature projects that market/boost the message as your demonstration project*
    - *E.g. Salmon SuperHwy Model from OR (example of a well done campaign)*
    - *Showcase the federal/state/tribal/local collaboration model*
    - *Connect the story to what matters--climate change and resiliency.*
- Increased number of self-sustaining fisheries and a reduced need for hatcheries (long or short term)
  - De-listing species (this is a Congressional/political interest for this BIL funding)
  - Avoid new species listings
- Temperature sensitive fish remain on the landscape (LONG)
- Endemic species present, invasive species are no longer present
- Specific watersheds- move the needle and demonstrate success, priorities
- Barriers are removed, habitat is opened, and species are present upstream
  - Also awareness of state-wide do not remove lists.
- Demonstrate greater/sustained collaboration among agency partnerships
  - Build on coordinated programs funding based on authorities and mission
  - NFHP (National Fish Habitat Partnership)- now an interagency operational plan is in draft

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- Demonstrate expansion of academic/ job opportunities in the fish passage field (attract the next generation of practitioners)
- Demonstrated safety improvements- removed hazardous dams
- Demonstrated improved public safety (that can be messaged)
- Demonstrated resiliency (e.g. post-flood culverts)
- Demonstrate that we are better at fish passage
  - That we added to the science
  - That we've increased the efficiencies
  - Get less congressionally hearings on the topic
- Flatten trend line of new barriers
- Improved public perception of the federal government
- Increased engagement in underserved communities
- 2026 World Fish Migration Day Party (May....) Invite Congressional Delegates, elected officials at all levels.

How can federal agencies, states and communities take steps to routinely consider fish passage in infrastructure and land use projects/actions?

At a federal level...

- Feds develop an MOU or Interagency Agreement (if want to move $)
- Develop internal Agency policies that any land management action must do an evaluation of fish passage (FWS, BLM, NPS have done this)
- Develop Interagency level coordination
  - Convene at CEQ level (would change at administration changes) or get into a statute for more permanence)
  - Reduce loopholes (e.g. post emergency actions, betterments) that make it truly temporary.
  - Common technical guidance
  - Leverage existing authoritative interagency groups/committees
  - Recognize beneficial barriers
- Describe the benefits in projects (e.g. USACE comprehensive doc of benefits
- Interagency mentoring/details on fish passage

At the state, tribe and local level...

- Streamline permitting
  - Categorical exclusions (or NWP 27 (wetland restoration) or NWP 53 for low heading dam, or NWP3 (dam removal?)
  - Programmatic Section 7 permitting (FWS NE has done this for example for culvert permitting)
- Interagency connectivity (state, tribal and fed)
  - E.g. DOT engineers – example of Alaska road resurfacing projects: coordinating meetings between state DOT, federal agencies, and communities to talk about these projects has turned them into fish passage projects. A nonprofit hosts a quarterly call (beneficial when nonfed takes on the effort of hosting).
  - Cross-training w/ AOP learn together

- Early coordination across agencies (anti-degradation standards under clean water act worth checking for projects)

All…

- Education from the beginning
  - Embedding/Integrating engineers into Natural Resource Departments
  - Integrated training programs across federal agencies and with multi-disciplinary teams from the beginning
  - Funding needed for communication to do it better (afford the engineers and

How can we prevent future barriers from coming onto the landscape?

- All work should be consistent with State and Tribal Fishery Management Plans (e.g. some land locked western states will have creation of barriers to prevent invasive species from specific movements included in the community reviewed plans)
- Create a common denominator set of minimum design standards that are beneficial to fish passage so that infrastructure destroyed in disaster is not rebuilt to "as was" standards from decades ago.

How might the power of this collaborative work to make fish passage a more mainstream community concern (e.g. messages, mechanisms?)

- Messenger matters—can change for key audiences but a champion for work is needed
  - Find a community based champion to amplify the message
- Specific communication to the audience (focus on co benefits that resonates most with each audience; focus on charismatic species for your messenger)
- Economics: Focus on economic benefits
  - Ecosystem goals & services (simply….cost savings over life cycle of investment is all that's needed- Do not overcomplicate)
  - Recreational benefits/increased recreation
  - Jobs
  - Values of the restoration economy (NOAA report post ARRA is good for reference)
  - Resiliency (safety and maintenance)
- Tell the story of the collaboration (federal, state, tribal, and NGO)
  - Feds – can they tell the story with the communication staff they have?
  - FWS can tell as short story after the meeting
  - FWS does see this as a starting point for collaborating moving forward
  - Tell story through storyboard, pics, videos
  - More kids books on fish passage
  - Target the story to the audience
- Education
  - Fish in the classroom and with elementary schools through college
  - Field days to successful projects
  - Annual events