NOAA FISHERIES

2018 NOAA Fish Passage Program Review: Agency Response

Background

On May 21-24, 2018, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) Office of Habitat Conservation (OHC) convened an independent review panel to obtain external input into two agency programs that work to improve the ability of fish to move upstream or downstream within a river or stream, referred to as fish passage. The two programs reviewed were the Community-based Restoration Program (CRP) and the Hydropower Program. The Community-based Restoration Program, administered by the NOAA Restoration Center within OHC, provides funding and technical assistance for dam removals and other fish passage projects across the country. The Hydropower Program, coordinated by OHC's Habitat Protection Division, is executed by the NOAA Fisheries Regional Offices through consultation and conditioning of Federal Energy Regulatory Commission (FERC) licenses under the Federal Power Act.

This document shares the panel's key findings and recommendations, NOAA Fisheries' response to those recommendations, and identification of those recommendations which we prioritized for implementation. More details are available through the program review synthesis report prepared by Consensus Building Institute and the individual panelist reports. All are posted on the OHC website at https://www.fisheries.noaa.gov/feature-story/noaa-seeks-improve-fish-passage-through-2018-program-review.

Recognition of the Panel

We, at NOAA Fisheries, are grateful to the fish passage review panelists. We provided a significant amount of background materials to review in a short amount of time, and requested a quick turn around on their individual reports. The reports offer a thorough and thoughtful reflection of our programs and a wealth of recommendations from which to strengthen and improve our programs.

Key Findings and Recommendations from Panelists and NOAA Priority Actions

The Terms of Reference for the program review sought input from the panel through a series of questions in five key areas: 1) mission and goals; 2) prioritization; 3) coordination; 4) evaluation of effectiveness; and 5) engagement. This section outlines the broad themes and primary recommendations NOAA Fisheries received from the panelists. It is not laid out by the specific questions asked of our panel in the Terms of Reference as we found that several themes overlapped during the review. The priority actions will be initiated in the next 1-2 years; however, the length of time required to complete the action will vary.

Key Recommendation: Increase internal coordination

The need for increased coordination across NOAA's fish passage-focused programs was a clear and strong recommendation. Panelists recommended that NOAA develop a forum or working group that would meet regularly to coordinate on projects, policy issues, lessons learned, and to conduct a periodic review of aspects of the fish passage programs. Suggested participants include key OHC and Regional Office staff who participate in the Hydropower Program, CRP, Office of Protected Resources, NOAA Fisheries Science Centers, and the Damage Assessment Remediation and Restoration Program. Other NOAA Fisheries offices may be invited to join the group throughout implementation. Better coordination with the Protected Resources Program was specifically identified as a gap that NOAA needs to address in order to leverage program strengths, improve early coordination on FERC licensing, and seek opportunities for watershed approaches. Other recommendations include broadening the CRP grants to consider Hydropower Program priorities and needs, more regular coordination between the Hydropower and CRP programs at the headquarters level, and improving our effectiveness by applying the lessons learned through internal coordination surveys conducted in preparation for this program review. Panelists thought that more robust, earlier coordination among programs was needed to identify watershed opportunities and "projects on the horizon" that could benefit from increased project and stakeholder momentum in the watershed.

Priority Actions:

NOAA Fisheries will improve coordination by convening key staff who work on our fish passage programs at the headquarters and regional levels, with the goals of improved coordination, identification of new opportunities, improved fish passage outcomes, leveraging program authorities, sharing innovative ideas, and continued learning. The first in-person meeting of this NOAA Fisheries Fish Passage Team is expected in the fall of 2019. The Team will be responsible for determining how to advance the priority actions noted in this agency response.

NOAA will include Hydropower Program staff and NOAA fish passage engineers in CRP proposal review. The CRP will lead a discussion of grants criteria and priorities with the NOAA Fisheries Fish Passage Team, prior to drafting future funding opportunities.

Key Recommendation: Focus on staff development

Universally, the reports recognized our staff and leadership's commitment to our programs and applauded the innovations and successes that have been achieved with limited resources. With this in mind, the panelists recommended NOAA Fisheries continue to build our staff capacity in areas including succession planning, staff training, and creating opportunities for temporary staff assignments that would facilitate cross-program and cross-regional learning. There were further recommendations for how we might build staff morale, improve recognition, and increase capacity.

Priority Actions:

NOAA will advance organizational excellence through added emphasis on staff development. Creating staff exchanges, cross-learning, individual or group trainings, and mentorships along with creating meaningful engagement opportunities will be important first steps towards succession planning. The Hydropower Program will develop a training course for new staff or those with cross-program interest that will be initiated at the fall 2019 meeting.

Key Recommendation: Integrate prioritization efforts

Many of the panelists acknowledged and applauded NOAA Fisheries' existing prioritization efforts and recommended that these should be dynamic and periodically reviewed to ensure appropriate allocations of time and resources that maximize ecological benefits. One suggested method of improving prioritization efforts is to engage partners and utilize existing external prioritization approaches to build synergy and consistency throughout our programs and regions, as well as ground truth our efforts. The panelists also encouraged us to consider whether prioritization can inadvertently shift funds away from species that are not listed under the Endangered Species Act and smaller projects. The panelists also recommended cross-program prioritization that recognizes both hydropower and non-hydropower barriers within a watershed approach.

Priority Actions:

NOAA Fisheries will review our prioritization approaches on a regular basis, ground truth assumptions and seek to improve integration among programs. Improved internal program coordination and external partner and Tribal engagement will be essential to achieve this action.

Key Recommendation: Strengthen program metrics and develop SMART goals

The majority of panelists recommended that we develop SMART (Sustainable-Measurable-Attainable-Relevant-Time sensitive) goals and objectives for the program, creating goals that are more ambitious, measurable, and can be adaptively managed. There were no specific recommendations about what these SMART goals and objectives might look like; however, a few panelists encouraged NOAA Fisheries to be more proactive in crafting a vision for the future of our programs. It was recommended that we set 10-20 year goals and objectives that would achieve that proactive vision. We also received input from panelists on how we might strengthen the metrics we track. There was a general consensus that one of our current metrics, "stream miles opened", does not fully capture our outcomes or the programs' successes and may not speak to our audience in a meaningful way. The reports outline paths and suggestions to consider for reaching new metrics and suggestions to explore, particularly ecological responses.

Priority Actions:

NOAA Fisheries will articulate a vision for our collective fish passage work. We will also set SMART goals, objectives, targets, and will consider metrics that demonstrate the ecological benefits of our fish passage programs. We will start this effort by reviewing examples from other agencies and organizations, and provide the team with results-based accountability training in 2020 to inform our work.

Key Recommendation: Standardize the Hydropower Program and strengthen the national role

Nearly every panelist recommended increased standardization and a greater need for consistency within the Hydropower Program. Panelists recommend headquarters staff have a stronger role in program coordination, with some going as far as suggesting that the program model itself after CRP and have oversight from headquarters consolidated with central leadership. The recommendations seem to stem from three perceived needs: 1) agency consistency in program management and decisions across regions, 2) improved support for and resources to regional programs, and 3) stronger ability to engage at a national policy level with FERC to address critical program needs. In addition to restructuring, there were additional recommendations to standardize policy, guidance, and tools, while still allowing for regional flexibility in their use. Areas to explore include a watershed policy, climate guidance, and consistent survival standards.

Priority Actions:

NOAA Fisheries will revisit Hydropower Program policies, guidance and tools to seek greater consistency and standardization where there is benefit to the Program nationally, while allowing regional and project specific flexibility, as appropriate. We will also clarify the national role, improve our communication, and increase headquarters' ability to represent the full program at a national level with key agencies. In February 2019, NOAA Fisheries initiated regional hydropower work plan meetings with headquarters to discuss the portfolio of projects that we will be involved in over the next 1-2 years.

Key Recommendation: Focus monitoring efforts

Many of the monitoring recommendations were directed toward CRP as the Hydropower Program does not have a direct role in the monitoring of FERC-licensed facilities. The panel encouraged NOAA Fisheries to utilize partner monitoring, increase citizen science, test new technologies for collecting data, and accept a greater level of uncertainty in monitoring data.

Specific to the CRP, most panelists thought the emphasis should be on project implementation and construction, rather than monitoring, and that the current expenditures on monitoring (10-15% of program funds) are appropriate. The most frequent recommendation was to monitor only a sub-set of projects, and to carefully choose those projects based on where knowledge gaps exist.

Many other comments, such as limiting monitoring to less intensive measurements when documenting project completion, confirmed the panel view is aligned with current CRP practices. There were several recommendations stating that grant recipients are not always the best qualified to carry out intensive or long-term monitoring efforts across projects, and that selecting partners with experience in the sciences, such as academics, would provide better results, incorporate existing partner data sets, and facilitate gathering data during a time frame outside the scope of the original grant.

For the Hydropower Program, NOAA Fisheries was encouraged to develop consistent performance standards and adaptive management approaches for fishway prescriptions. The panel also encouraged the Program to review and track FERC monitoring efforts to ensure monitoring is being performed according to license conditions, that it meets intended needs, and informs future prescriptions.

Priority Actions:

NOAA Fisheries will continue to focus CRP monitoring on projects which address data gaps. We will explore ways to fund effectiveness monitoring in a targeted manner, using partners with scientific expertise. We will also work with federal agency partners to improve the process for sharing FERC and the U.S. Army Corps of Engineers (USACE) monitoring data with the Hydropower Program.

Key Recommendation: Formalize a watershed approach

The majority of panelists recommended that NOAA Fisheries develop a more formalized watershed approach and strategy, focused at either the regional level (involving the CRP, Hydropower, Protected Resources, and Science Center Programs) or at the national level (involving other federal agencies and the hydropower industry). Panelists encouraged an increase in internal program coordination and engagement with external partners as part of this effort. Early and more regular coordination, for example at the onset of FERC licensing, would enable the identification of the next key watersheds for multi-program engagement. Panelists also recommended that NOAA Fisheries periodically solicit lessons learned and needs assessments,

more clearly define what is meant by a watershed approach, and consider addressing barriers that are higher in a watershed rather than only lower barriers if appropriate and necessary.

Priority Actions:

NOAA will explore the development of a formal watershed approach based on shared lessons learned from past accomplishments, existing and future watershed opportunities, and as part of our improved program coordination and prioritization efforts. As an example, we are developing a national map overlaying completed fish passage work among the CRP and Hydropower Programs. We will use that map as a foundation for aligning priorities within and among watersheds with other programs engaged in fish passage.

Key Recommendation: Increase NOAA Fisheries Science Center engagement

Six of eight panelists made recommendations for how the organization might expand fish passage science. Most recommended increased collaboration and partnership with the NOAA Fisheries Science Centers, and one encouraged citizen science. A few methods for increasing engagement included data hosting, offering temporary assignments, and hosting post-doctoral research positions focused on fish passage. Specific areas of science suggested include climate change, water quality and quantity, restoration planning and evaluation, development and application of scientific tools, data synthesis, and ecosystem-based fishery management for diadromous fish.

Priority Actions:

NOAA will engage in a national conversation about Science Center support as well as conversations with each Science Center on fish passage science needs, such as life cycle models, and data gaps described in the panelists' recommendations, and will develop strategies for how the Centers can assist with meeting program needs. NOAA Fisheries will also work with stakeholders to ensure transparent approaches for ensuring that best available science informs our program activities. We will also consider developing partnerships with other potential sources of science to fill critical data gaps.

Key Recommendation: Diversify and strengthen partnerships

The panelists recognized NOAA's efforts at partnership engagement and the importance of partnerships in our work. Panelists brought varied perspectives and many commented on the component of partnerships that they were most familiar with, such as agency-to-agency, tribal, state, industry, and NGO partnerships. A general message was that there are gaps in our partnership portfolio, identifying a need to improve engagement and relationships with FERC and the USACE, the hydropower industry, and tribes. They encouraged us to build on the relationships our partners maintain with these groups, and that through increased engagement,

we may develop more creative solutions that would be promoted and well-accepted on the Hill. There were also recommendations to ensure staff have the time available for partnership engagement. Other recommendations included: earlier engagement; more transparency; support for partnerships throughout the life of a project (from scoping to implementation to post-monitoring); and holding of funder forums.

Priority Actions:

NOAA will broaden our partnerships with greater focus on building relationships with FERC, USACE, industry, tribes, permittees, foundations, and affected stakeholders. Agricultural and municipal water users and fishing communities are known affected stakeholders. We will also take specific action to keep state partners better apprised of pending hydropower legislation through the Association of Fish and Wildlife Agencies and similar organizations.

Key Recommendation: Target messaging

In general, the panelists found our outreach and messaging efforts to be haphazard and lacking focus. Many recommended sharpening the rationale for our fish passage work, broadening our messages to be inclusive of multiple benefits, and targeting changing demographics, as well as engaging a public outreach consultant to help us with developing a strategic outreach plan. They also saw a need for more clearly demonstrating our program successes with target audiences, capitalizing on fish passage dedicated campaigns (such as International Year of the Salmon). Other recommendations included creative ideas for information and awareness campaigns with the goal of developing social responsibility for fish passage restoration, noting that NOAA Fisheries should position itself to engage quickly when societal values shift.

Priority Actions:

NOAA will develop messaging to emphasize the multiple benefits of fish passage and its value to society, targeting these messages for stakeholders in watersheds affected by current and prospective fish passage and reintroduction priorities. Updated messaging will draw from revised goals and metrics for NOAA's fish passage work so that we can better showcase the ecological benefits of our work. The Office of Habitat Conservation increased its communications capacity early in 2019 in part to assist with this effort and will also seek internal NOAA partnerships to advance this priority action. We are currently developing an infographic about the importance and value of fish passage that will be used to increase understanding of our work with target audiences. We will continue to share successes and highlight our work through multiple communications platforms such as websites, social media, and electronic newsletters as well at conferences and events.

Conclusion

NOAA thanks the Fish Passage Program Review panelists for their time and effort to assess our fish passage programs and for offering substantive recommendations to improve our work. We look forward to implementing the priority actions identified in this response to help guide the further evolution of our fish passage programs over the coming years.