

**River Herring Technical Expert Working Group (TEWG)
Ecosystem Integration Committee Webinar/Conference Call
March 1, 2016
1:30 p.m. - 3:00 p.m. (EST)**

Summary

I. Overview:

The Ecosystem Integration Committee (EIC) of the River Herring Technical Expert Working Group was established to “ensure that the work of the subgroups is fully integrated to facilitate subgroup and TEWG discussions, as well as conservation planning development.” The EIC is comprised of chairs/co-chairs from the six river herring TEWG subgroups.

Diane Borggaard, a co-chair of the EIC, convened a call on March 1, 2016, to continue discussions with the committee. The draft agenda focused on discussing the conservation plan, as well as providing updates on the cross-cutting and overlapping issues discussed in the subgroup meetings. This meeting summary includes the primary discussion topics and outcomes to contribute to future TEWG discussions. The information provided below reflects individual expert opinion and not consensus.

II. Key Topics:

A list of individual expert opinion provided by EIC members or the public on various overarching topics is presented below:

- *Conservation Plan and TEWG work:* Diane Borggaard explained to the group that NMFS and ASMFC are working on an Executive Summary to show work progress, funding opportunities, and projects completed in 2015 for river herring. The Executive Summary is an outreach effort to communicate progress in a way that is easily accessible and understood. The goal is to develop an annual cycle of executive summaries, as well as annual updates and commitments to the Conservation Plan. Subgroups are asked to develop a method to publish progress annually as well. The chair/co-chairs discussed different frequencies while noting that producing an update at least once a year would be ideal.

Data Collection Standardization Meeting: Kevin, Diane, and Kirby along with state, federal, tribal, and Canadian Government officials met last November to discuss data collection standardization, particularly in fishery independent surveys. Meeting participants provided overviews of their agencies fishery-independent survey programs and discussed best practices for each type of survey program by gear type. Once these were identified, the group tried to develop recommendations on best practices that would help standardize current survey programs and new survey programs. The proposed changes to current programs were categorized by type of financial resources (great need or low cost) for implementing them. The report from this meeting, listing and detailing

the fishery-independent sampling programs and including contact information, will be up on the ASMFC website within the next few weeks, and the TEWG website as well.

- Chairs/co-chairs provided summaries of each of the subgroup's work to-date, including any larger considerations related to the subgroups for committee discussion.¹ Topics with broad implications related to the TEWG and its products included the following:
 - *Dan Hasselman (Genetics Chair)*: DNA SNPs development is completed. Genotyping for blueback is finished, and is progressing for alewife. A manuscript is in final stages before publication, which will allow identification of fish by their river of origin. A manuscript has been submitted to allow assignment of fish caught in bycatch, and the proof will come out in June.
- A meeting was recently held to discuss tissue archiving. There is not enough room to house the tissue in the current archive location. Possible future locations as well as funding required for archiving was discussed.
- *Kevin Sullivan (Stock Status)*: Affirmation that the November fishery-independent survey meeting was a great success from a data sharing standpoint. Requests that a future speaker at a Stock Status Subgroup meeting could discuss data-poor assessments.
 - *Eric Schultz (Species Interactions)*: Requests that ASMFC contact the Species Interactions Subgroup to organize a meeting in March or April, after the second TEWG call on March 14th. There is a need to communicate with a group in Virginia about invasive catfish predation on river herring. Eric is looking to develop ways to aggregate data about the invasive catfish issue to analyze qualitatively and quantitatively.
 - *Jason Didden (Fisheries)*: The MAFMC received a few research proposals for river herring through a recent RFP process, and Jason will inform the TEWG if they are selected by next month.

The MAFMC plans to review later this year whether to take on river herring as a stock in the fishery. This inquiry stems from a current lawsuit against NOAA Fisheries. This will begin at the April meeting, when the Council will review an update to the white paper developed in 2013 which followed the ESA listing decision. In August, there will be a draft decision document, and in October, the Council will decide whether to begin an Amendment to get more involved in river herring management. It is too early to tell if a possible management plan would involve both the MAFMC and NEFMC.

Lastly, the MAFMC has included work on river herring in its 2016 implementation plan. The implementation plan stems from the Visioning and

¹ See TEWG meeting and subgroup summaries for additional information on subgroup progress: <https://www.nero.noaa.gov/protected/riverherring/tewg/index.html>

Strategic Planning process the Council undertook in 2012. For 2016, the Council will review current river herring catch caps in the Atlantic mackerel fishery and possibly make changes for the 2017 fishing year.

- *Janet Nye (Climate Change)*: The subgroup reviewed and prioritized available research, and concluded that they needed more data. There is a need for standardization across different river systems. Janet was tasked with developing data on the effects of climate change on river herring, though since river herring is faced with a multitude of threats, she concluded that examining only climate change is not very useful. A better approach would be to build on Kristen Curti's work to look at climate change in conjunction with other stressors as covariates and determine if certain factors are affecting groups of river systems. A student or postdoc with modeling skills would be useful for this task.
- *Alison Bowden (Habitat)*: The Subgroup has been engaged with the habitat tool which ACFHP and others have been working on. The tool can be found at www.Fishhabitattool.org. The purpose of the tool is to help in the organization of restorations projects through compiling reliable information in a central database. The tool will hopefully assist with communication and coordination on restoration projects. Updates continue from the peer review, and based on the upcoming stock assessment, a broad update will occur in a few years' time.

Alison plans to write a discussion on the impacts of energy development on river herring, and will adapt an article in the recent publication of Habitat Hotline to do so. The goal is to develop a document to upload to the habitat subgroup page. One thing that is needed is presence/absence data of river herring near wave energy sites in Canada, and will follow up with Eric (TNC) on whether that data is available or if it must be requested from Canada DFO.

- The EIC discussed the addition of another category to the overlapping issues document specific to river herring mortality at sea. There was some confusion on whether this was a separate issue than time varying natural mortality which was already listed. It was pointed out that mortality from energy/power plants is already assumed to be accounted for in time varying natural mortality, at least in stock assessment modeling context. For the purposes of the EIC and broader TEWG, there is benefit in having it as a stand alone data item for further discussion and research among the subgroups. **Follow-up:** Diane and Kirby will consider chair/co-chairs comments on the topic and send a proposed approach to the committee for comment.

III. Key Outcomes

A list of individual expert opinions provided by participants related to specific threats, data gaps, research projects, conservation actions, information to be considered and/or monitoring (i.e., the identified research projects and/or conservation actions) is provided below. These outcomes are listed in no particular order and are related to cross-cutting and/or overlapping subgroup issues. See the background document and table for the full list of cross-cutting and overlapping issues at:

<https://www.nero.noaa.gov/protected/riverherring/tewg/ecosystem/index.html>

- Research Projects

- Further investigate impacts of energy development on river herring (see Alison Bowden's update above).
- Investigate climate change in conjunction with other stressors as covariates and determine if certain factors are affecting groups of river systems (see Janet Nye's update above).

IV. Next steps:

The EIC discussed the following next steps:

- Diane and Kirby will make the suggested changes to the overlapping issues document, and send the edited document to the EIC for comment.
- The Subgroups will develop a method to annually publish progress toward TEWG goals. Diane and Kirby will send a proposed timeline for development of white papers for consideration.
- Kirby will reach out to the Species Interactions Subgroup to schedule a call following the TEWG call on March 14th.
- Dan will share with the group a published article when it's available.
- Janet and Eric will coordinate about a possible research project.
- Alison will complete a write up of the impacts of energy development on river herring.
- Diane and Kirby will consider chair/co-chairs comments on the overlapping issues discussion and send a proposed approach to the committee for comment.
- The next TEWG call is on March 14th.

V. Participants

- Committee Members

The affiliation of each member can be found on the TEWG EIC website (see below):

Dan Hasselman
Janet Nye
Kevin Sullivan
Eric Schultz
Jason Didden
Allison Bowden

- Staff:

Diane Borggaard
Kirby Rootes-Murdy
Amy Hirrlinger

VI. Meeting Materials:

The following materials were provided to support the meeting. Additional information can be found at the TEWG EIC website:

<https://www.nero.noaa.gov/protected/riverherring/tewg/ecosystem/index.html>

- Draft Agenda
- Draft Background Document
- Draft Table of Overlapping Subgroup Issues