Herring River Stakeholder Group

Final Summary for Meeting #4

June 19, 2019 | 6:00 PM to 8:00 PM
Wellfleet Council on Aging
715 Old Kings Hwy, Wellfleet, MA 02667

Meeting in Brief

The Herring River Stakeholder Group (HRSG) met for the fourth time on June 19, 2019, from 6:00 to 8:00 PM in Wellfleet. The Meeting included a review of project updates, an update on the Adaptive Management and Decision Analysis process, and a presentation and discussion on the approach to managing risks and liability.

A poll will be conducted of members in August to determine the date of the next meeting. The September Meeting will focus on discussion of potential impacts to shellfishing. Other topics that may be addressed at the meeting include: further discussion of adaptive management perhaps using shellfish-related objectives as examples; discussion of a request to film meetings for public access television; and an update on the new MOU between Wellfleet and the Cape Cod National Seashore.

Action Items

Who	What
HRSG Members	• Take poll for September meeting dates (in August) • Provide a short bio to CBI & the Chair if you have not already • Send comments / corrections for this (June 2019) meeting summary • Send examples of adaptive management and "lower-level" emergency response scenarios to the Chair / facilitator • Send questions on risk management/liability to the Chair / facilitator
Planning Team	• Create and circulate draft meeting summary • Circulate revised MOU to HRSG upon completion along with a memo about the highlights • Update and post answers to outstanding questions from HRSG meetings and the public to include responses to the risk management/liability questions • List published articles about the value of adaptive management (particularly in understanding and managing risk) • Explore development of an Adaptive Management 101 Webinar, and/or other mechanisms to help interested parties understand and access adaptive management data • Provide email address and listserv for interested parties to opt into updates on HRSG

Find details on upcoming HRSG meetings, as well as prior agendas and materials at http://www.friendsofherringriver.org/Herring-River-Stakeholder-Group

HRSG Members in Attendance

Bill Biewenga (Chair)
Mark Borelli
Barbara Carey
Brian Carlstrom
Zack Dixon
R. Paul Faxon
Fred Gaechter
Jake Ketchum
Alfred Kraft
Bob Prescott
Laura Runkel
Gabrielle Sakolsky
Judith Stiles

Tim Smith (Cape Cod National Seashore), Carole Ridley (Herring River Restoration Project), Stacie Smith (The Consensus Building Institute [CBI]), Maggie Osthues (CBI), and multiple members of the public were also in attendance.

Meeting Opening

Welcome and Introductions, Agenda Review, Minutes

Bill Biewenga, HRSG Chair, introduced new facilitator Stacie Smith, who briefly addressed the group and reviewed the agenda and objectives of the meeting. In addition to brief project updates and an update on the Adaptive Management work plan, the primary purpose of the meeting was to help members and the public develop an understanding of the approach employed to manage risks and liability for the project and address committee questions and concerns. The meeting concluded with a public comment and question period.

Motions to pass the July 2018 and October 2018 minutes passed unanimously. They can be found here on the project website.

Chair Updates

The Chair noted that the draft workplan on the website has progressed beyond schedule. To facilitate clear paths of communication between HRSG members and their constituencies, Martha will post HRSG members' names on the website with contact information. A Project newsletter will be going out shortly, and will reference the HRSG and provide a link. Members of the public will be directed to the website for information.

Project Updates
Carole Ridley

Permitting update: The Town of Wellfleet applied to the Cape Cod Commission (CCC) in January 2019 for a Development of Regional Impact Scoping Decision on Phase 1 of the Herring River Restoration Project, and the approval decision was issued in early March. The scoping decision is not a permit approval, but it is an important step. Next steps include the project submitting a full permit application for Phase 1 on behalf of Wellfleet.

Governance issues update: In December 2018, the Truro Select Board voted to remove themselves as a project partner from Phase 1 of the project. Truro affirmed their support for the ecological restoration benefits of the project. The original MOU is still in effect to date. The next step is finalizing and enacting a new MOU executed between Wellfleet and the Cape Cod National Seashore (CCNS), which is expected to occur shortly.

- *A comment was made about the implications of Truro's withdrawl from the MOU, particularly regarding fiscal responsibility if something goes wrong. The participant requested that the revised MOU be circulated to the HRSG and discussed as needed.* [The project team confirmed that the new MOU would be sent to the HRSG upon execution.]

NERR case study update: The Herring River is a case study in a project coordinated by the Waquoit Bay National Estuarine Research Reserve (NERR) called "Bringing Wetlands to Market." The project has estimated carbon fluxes within the Herring River system since the diking of the river in 1909. The case study was conducted to illustrate the potential value of blue carbon benefits from restoration of tidal wetlands, including reductions in greenhouse gas emissions, carbon storage potential, and carbon offset financing potential. Waquoit Bay NERR will be wrapping up this project in early September 2019. (for more information on potential climate benefits, see this fact sheet)

Social Factors Elicitation for Adaptive Management Plan
Tim Smith

Tim Smith provided a brief presentation to update the Stakeholder Group on progress with the Adaptive Management tool being used to support decision-making for the project. He noted that the group had been sent, as review, the more detailed presentation about the "PrOACT" structured decision-making model that he delivered at last meeting. (Those slides can be viewed here.) The following is a summary of the key points from the presentation.

- The development of this adaptive management framework began in 2013 with the USGS decision analysis program and two ad hoc stakeholder meetings in 2014 and 2015. The purpose of the first ad hoc meeting was to ask stakeholders, "What do you want to achieve?" and "What do you want to avoid?" The second meeting developed those responses into objectives, which the plan ties to specific management actions needed to restore the river.
- The project's main objective, "Restore Herring River Estuary," is broken down into 5 sub-objectives, comprised of many more objective components. The Project Team is collecting data, evaluating effects on the project-based objectives, and using data to

inform subsequent decisions. The Executive Council is the decision-making body for the project, with input from project partners.

- The model needs to incorporate Ecological and Socioeconomic Objectives systematically and quantifiably across the board. This requires an understanding of the pre-restoration baseline and how it might change given actions we are contemplating.
- Prediction methods for Ecological Objectives are categorized either as empirical models or as expert elicitation models.
- Predictions for the Socioeconomic Objectives will be elicited using stakeholder and community input .
- The project is using a web-based survey for expert elicitation for Ecological Objectives.
- Project partners require input from HRSG on the plan to gather community elicitation on Socioeconomic Objectives. At the next HRSG meeting, the project partners would like to present initial plans for HRSG input, and discuss how HRSG can help with community engagement on this process.

HRSG members raised the following questions and comments. Responses and discussion is listed in bullets below:

- *How will project data be accessible to HRSG members and their constituents?*
    - *Many HRSG members expressed interest in being able to easily view the data used by the Project Team in a centralized location and have models explained in user-friendly terms.*
    - *The Project Team's data is not currently kept in a complete state in one place. Moreover, data has to be collected, analyzed, and quality controlled, so it becomes available for consumption in bits and pieces. Some data, specifically output from the hydrodynamic model and real-time water level and water quality data, are currently available on several websites.*
    - *One potential solution to centrally gather the data would be to link to the data and modeling for each objective from the HRSG website with 2-3 paragraphs of explanation for each in laymen's terms.*
    - *To deepen understanding of the adaptive management framework, it was suggested that a future presentation use a specific adaptive management objective, perhaps one involving shellfish, and walk through the framework. Deepening HRSG understanding of the framework and how different objectives interact could enable HRSG members to better educate their constituencies.*
- *How will the project react to emergency scenarios? How will the adaptive management framework come into play in lower-level emergency scenarios?*
    - *Emergency situations and adaptive management are mutually exclusive. If there is a threat because of emergency situation, that would supersede adaptive management measures.*
    - *There are some examples of "lower-level" emergency scenarios, like the 1960s gate failure that greatly affected the river and harbor. HRSG members were invited to send scenarios of concern to the Chair or Stacie to direct to the Project Team for response.*

Risk Management
Carole Ridley

Carole Ridley provided a brief presentation about the Risk Management approach being used for the project. The following is a summary of the key points from the presentation. The slides can be viewed here.

- The Herring River Restoration Project uses a conservative risk management approach built on four pillars to limit the potential of risk and claims of liability:
    1. Assessing risk comprehensively (using evidence and facts)
    2. Minimizing risk through design and operation
    3. Addressing risk effectively
    4. Ongoing risk assessment
- The scope of potential liability is small: All low-lying public and private structures are protected from project impacts, and only a small portion of Phase 1 has potential for liability. All of the Phase 1 restoration area is currently regulated wetlands. 2% of the footprint of the Phase 1 restoration area is private property that will experience impacts of restoration (i.e., portions of private property that are already regulated wetlands could experience tidal influence, and the increase in salinity could lead to vegetation changes); this 2% will receive support from restoration partners on impacts to vegetation and will not be subject to any changes in flood insurance requirements.
- It is the opinion of the Wellfleet Town Counsel that the risk potential and likelihood for liability has been significantly reduced through this conservative risk management approach and adaptive management framework.
- There are known risks to no action, such as loss of the resiliency functions of the saltmarsh as a floodplain, ecological impacts, recreational impacts, and poor conditions of the tidal gates.
- Risk management protections are built into the conservative risk management approach, and it will continue to be adapted and refined with new data.

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Discussion centered around two main themes: risk perception and liability.

- *Risk Perception: What constitutes a risk? Do we agree on the actual level of risk? Can we be better aligned in our understanding?*
    - *Some constituencies' perceptions of risk do not align with that of the Project Team.*
    - *Cognitive biases exist that limit human ability to accurately gauge risks. HRSG members may be able to educate their constituencies on actual risks to better align the community's risk perception.*
    - *For risks that will have to be managed throughout the project, such as traffic impacts due to construction, there will be management plans discussed with the community and public safety stakeholders. Contractors will be required to be bonded, as with all public construction projects.*

    - *There are also mitigating factors to weigh against risks, such as how the project will repair and replace roads, saving Wellfleet millions of dollars over the normal repair cost.*
- *Liability: Who is liable to pay if something goes wrong? What will be the process for responding to a claim?*
    - *The process for filing and responding to a claim will be finalized closer to the implementation stage, which will be similar to how claims are filed in more typical projects today. The claim would need to be credible and have adequate documentation to trigger discussions about liability. The party responsible for paying would depend on who is at fault.*
    - *Liability should also be considered in terms of legal costs, in case a property owner had the resources to engage in a prolonged legal battle over a claim.*
    - *The question was asked, would a failure of the existing dike and tide gates pose risk and potential liability? To better contextualize Wellfleet's liability during implementation of Phase 1, it would be helpful to know the Town's current level of exposure and insurance if no action is taken.*
    - *It was suggested that HRSG members send the questions about specific risk scenarios they are receiving from their constituents to the Chair and CBI, and the project team can try to help clarify level of risk, liability, process, and communication protocols for those scenarios.*

Public Comment

Many members of the public provided comments, and most reacted positively to the progress of the project thus far and the adaptive management framework. Specific comments are summarized below:

A comment on communication between the public and project partners: FOHR has found it effective to meet with members of the public one-on-one to talk about how their property will be affected by the project, finding that people are re-assured by understanding the project maps and scope in terms of their own property. FOHR asked HRSG members to invite their constituencies to speak with FOHR and go through the project maps.

A comment on the decision-making process for altering the dike or gates: Any decision altering the dike or the gates has to be made by HREC. Wellfleet will not be making decisions by itself that will affect the entire region. HREC's decision to alter the gate will have to align with any permitting restrictions.

A comment on transparency into the adaptive management process: It would be helpful to have a list for the public of what impacts the Project Team is going to monitor, how frequently each impact will be monitored, what monitoring devices will be used, and what thresholds will be set up to help the HREC make decisions. The public are laypeople and need to be provided a roadmap to better understand the many elements of the adaptive management plan and what data will be used and how to impact HREC's decisions.

- *Stacie suggested that the vast amount of information in the adaptive management plan will be difficult to convey in short meetings, and webinars may be an effective forum where everyone could join and gain a deeper understanding of the adaptive management plan.*

A question about project insurance: Is it illegal for projects involving federal and state money, such as this one, to not have liability insurance?

- *Liability insurance may relate to contractors, for example, public works project contracts generally have standard liability insurance built into the contract. The Muddy Creek restoration project did not have liability insurance beyond the standard contractor insurance.*

A question about supporting documentation: Responding to Carole's risk management presentation, would it be possible to share citations of peer-reviewed articles discussion adaptive management as a risk reduction tool? Would it be possible to share the Department of Transportation report cited about the current condition of the dike?

A question about data modeling: In the adaptive management framework, if conclusions are model-dependent, to what extent would looking at alternative models lead to ambiguity?

- *The adaptive management framework relies not only on modeling but also human analysis to lend greater clarity and salience to the data.*

The meeting adjourned at 8:00pm.