

Minutes
Herring River Restoration Committee (HRRC)
Cape Cod National Seashore Headquarters
Wellfleet, MA
January 10, 2018

Members Present: Tim Smith, Hunt Durey, Steve Spear, Steve Block, Gary Joseph, Eric Derleth, Hillary Greenberg

Others Present: Margo Fenn, Martha Craig, Carole Ridley, Christine Odiaga

Administration/Coordination:

Approval of Minutes: The Committee voted to approve the minutes of the December 12, 2017 HRRC Meeting.

Meeting Schedule: The Committee approved the following schedule for upcoming meetings:

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| Thursday, February 8, 2018 | HRRC regular meeting |
| Thursday, March 8, 2018 | HRRC regular meeting |

The group noted that the Herring River Executive Council plans meet with the newly appointed Stakeholder Group, probably in February 2018.

Communications and Coordination with Friends of Herring River (FHR):

Public Outreach: Carole Ridley reported that a newsletter was sent out to Truro and Wellfleet residents to update them on the status of the Project. Letters were also sent to floodplain property owners. FHR is planning several educational events including a workshop on environmental monitoring, one on blue carbon, and another on wildlife.

Fundraising: HRRC and FHR representatives will meet with federal and state partner agencies to discuss the approach for fundraising for Project construction and implementation.

Discussion and Updates:

USGS Presentation on Adaptive Management: Dave Smith and Mitch Eaton of the U.S. Geological Survey and Jon Katz of the Woods Hole Group (WHG) provided a presentation on a computer application that they have been developing for the Herring River adaptive management plan. This application (the “shiny app”) integrates data and objectives from multiple sources to create a flexible decision-making tool. The initial goal of this effort is to determine an optimal tide gate management policy for implementing the Restoration Project, and the tool can be used throughout the adaptive management process to refine management strategies.

Mitch Eaton presented the components of the application, including more than 40 adaptive management objectives and sub-objectives. There are measurable attributes for each objective, and the application evaluates numerous different tide gate management approaches to determine how well they achieve each of the objectives. Measurable attributes (for example, dissolved oxygen as a measure of water quality) can be analyzed for specific sub-basins of the river, as well as for the estuary as a whole. The application uses both model predictions (such as the EFDC hydrodynamic model) and expert predictions to populate a detailed consequence table for each objective. The objectives can be weighted according to stakeholder priorities. The policies can then be scored and ranked against each other to determine which approach best achieves the overall restoration goals over time.

This tool also allows decision-makers to evaluate tide gate management policies and determine when and where secondary management activities (such as vegetation and/or sediment management) might be needed. Further expert elicitation is needed to refine predictions about selected scientific and socio-economic effects of the different tide gate management policies.

The Committee discussed next steps in the adaptive management planning process and how to present the consequence table and decision-making tool to public officials and stakeholders. Dave Smith is preparing a technical report that documents the process that was used to develop the “shiny app”, and Tim Smith will incorporate that information into the permit-level adaptive management plan. The Committee reviewed the proposed outline for the adaptive management plan and discussed monitoring protocols.

Other Adaptive Management Activities: Tim Smith provided the Committee with an overview of the proposed approach to coordinating vegetation management with incremental tide gate openings. Using GIS data, it is possible to map different vegetation cover types and determine where and when trees and shrubs will need to be removed as tidal flow is incrementally increased.

Low-lying property survey/engineering: The Committee discussed draft mitigation plans for several private properties included in the Phase 1 restoration area. The group reviewed some questions raised by property owners and discussed how to address their concerns. The group also discussed alternative approaches to flood prevention for these properties.

Hydrodynamic Modeling: The modeling subcommittee is developing scopes of work for additional hydrologic model runs and other groundwater analysis. The Committee discussed a planned update from USGS regarding its ongoing groundwater monitoring efforts.

Legal Issues: The Committee discussed the process for seeking needed property owner permissions for filing permit applications, and other legal matters.

Cultural Resource Assessment: The Public Archaeology Lab has completed its latest

fieldwork. Results will be made available to National Park Service officials.

Documents Referred to in the Meeting:

-Minutes of the December 12, 2017 HRRC meeting

