

Minutes
Herring River Restoration Committee (HRRC)
Cape Cod National Seashore Headquarters
Wellfleet, MA
March 12, 2014
9:30 am-4:00 pm

Members Present: Tim Smith, Steve Spear, Hillary Greenberg, Hunt Durey and Steve Block (Eric Derleth and Charleen Greenhalgh joined the meeting in the afternoon)

Others Present: Margo Fenn, Don Palladino, Martha Rheinhardt (Alan Platt, David Smith, Jack Whalen, and Nils Wiberg joined the meeting in the afternoon). Melanie Gange also participated by phone during the morning session.

Administration/Coordination:

Communications/Coordination with Friends of Herring River (FHR): Don Palladino updated the Committee on FHR activities as follows:

- The annual Herring Count will begin on April 1, 2014
- The annual meeting has been scheduled for August 19, 2014
- FHR was awarded a Massachusetts Bays Program (MBP) grant of \$20,000 for survey work and conceptual design for replacement of culverts at Old Kings Highway and Patience Brook.
- FHR also received a grant from the Corporate Wetlands Restoration Partnership to undertake hydrodynamic modeling for installing tide gate control at Pole Dike Creek Road.
- FHR is working with two affected landowners to explore flood-proofing options for their properties. The Louis Berger Group will provide survey and engineering analysis for these properties.
- FHR is developing a brochure to update the public on the Restoration Project.
- The FHR Facebook page has generated considerable interest. FHR plans to issue press releases regarding the recent grant awards and soil borings in Mill Creek.

Martha Rheinhardt reported that she had conducted a site visit with Fuss & O'Neill and its geotechnical subcontractor to plan the needed soil boring work in Mill Creek. That work is expected to begin March 17, 2014. The National Park Service Fire Corps and Americorps performed needed brush and tree clearing in order to allow for the drilling equipment to access to the site.

Don Palladino reported that FHR has obligated \$256,000 of the Year 1 NOAA grant funds. FHR has provided a Year 2 request to NOAA totaling \$1.3 million. This is under review.

Approval of Minutes: The Committee voted unanimously to approve the minutes of the February 13, 2014 meeting.

Meeting Schedule: The Committee approved the following schedule for upcoming meetings:
April 10, 2014 HRRC regular meeting

May 15, 2014 HRRC regular meeting

June 19, 2014 HRRC regular meeting

Tim Smith noted that the Committee might need to have 2-day meetings in May and June. The Committee agreed to set aside the May 14 and June 18 dates, in the event that two-day sessions are needed.

Project Updates:

Consultations with State Agencies: Hunt Durey reported that he had spoken again with MA Department of Environmental Protection (DEP) officials to seek clarification about how they would interpret their proposed new regulations for ecological restoration projects. The new regulations have not yet been promulgated. The Committee discussed how to proceed with completion of the Final DEIS/EIR and permitting, noting that many questions about Project impacts cannot be answered until the adaptive management process begins. The group agreed that there needs to be further refinement of how the Project elements will be phased, in coordination with the adaptive management process.

Tim Smith noted that he spoke with CACO Historian Bill Burke about the process for preparing the scope of work for needed cultural resources investigations and suggested that, given staffing limitations at the NPS regional archeology program, a consultant could assist with preparing a scope of work and seeking a field permit from MHC. Bill Burke is looking into this possibility.

MOU Working Group: Don Palladino reported on the March 11, 2014 meeting of the MOU Working Group with the Anderson & Kreiger legal team. Anderson & Kreiger's January memorandum recommended the formation of a private, non-profit entity to manage the Restoration Project. The Working Group proposed structuring the new management entity in a different way, with an intergovernmental oversight committee that would engage a non-profit entity to carry out the restoration activities (engineering design, permitting, fundraising, construction and adaptive management, etc.). This is similar to the current arrangement that the Herring River Restoration Committee has with the Friends of Herring River, however there is no current funding mechanism between these parties.

Margo Fenn described how the management relationships might be structured. MOU III could be rewritten to create an intergovernmental oversight group representing the three key Project Partners: The Towns of Wellfleet and Truro and Cape Cod National Seashore. This group could consist of an executive committee for broad policy oversight (similar to this MOU-3 working group), and a management committee (similar to the existing Herring River Restoration Committee). The Project Partners could then engage a non-profit management entity to perform specific services. Funding sources could drive this process, for example, if the Town of Wellfleet were to receive funding for building the new Chequessett Neck bridge, the Town could engage the non-profit entity to perform specific services related to that grant scope of work (e.g. engineering design, permitting, construction oversight, etc.). Likewise, if Cape Cod National Seashore were to receive funding for construction of the proposed Mill Creek dike, NPS could either directly oversee construction or engage the non-profit entity to do so under a Cooperative Agreement.

The Working Group asked the Anderson & Kreiger team to provide a cost estimate for redrafting MOU III to reflect the management structure discussed in the meeting.

The Committee discussed the role of Friends of Herring River (FHR) in the management scheme: Would it make sense to create a new non-profit management entity or to refocus FHR's organization to take on this role? Hunt Durey stressed that it is critical for the management non-profit to have both the qualifications and the authority to oversee Project construction and implementation. Don Palladino advocated for Friends of Herring River to take on this role. He acknowledged that the mission of FHR and the make-up of the Board might have to change in order to take on the management role, but stressed that there are advantages in having an organization with a track record and experience in the community take on this new role.

Don Palladino and Margo Fenn agreed to follow up with Anderson & Kreiger in consultation with HRRC members.

Final EIS/EIR Issues: Margo Fenn reported that she and Tim Smith had consolidated the DEIS/EIR comment responses prepared by HRRC members and provided that information to Mark Husbands of the NPS Environmental Quality Division (EQD) and to the Louis Berger Group. LBG staff will prepare a draft of the Concern/Response report for the Committee to review. After the Concern/Response report is finalized, then work will begin on necessary modifications to the DEIS/EIR. The HRRC needs to make an inventory of other needed changes, based on internal discussions. For example, numerous references to FEMA mapping need to be corrected. There are other general corrections that will be needed to ensure that the Final EIS/EIR is internally consistent. A conceptual description of the Adaptive Management Plan also needs to be completed for the Final EIS/EIR.

The Committee discussed the timing of completion and release of the FEIS/EIR, noting that the goal is to complete the document for public release in the fall of 2014.

Grants and Funding: Steve Block reported that NOAA might have \$25,000 available to scope out an economic analysis of ecosystem services provided by the Herring River Project. He inquired whether this could be added as a new element to the 3-year NOAA grant to FHR. Don Palladino agreed that this could be added to the grant scope, should the funding become available.

Hunt Durey noted that the MA Department of Fish and Game (DFG) planned to propose some capital funding for the Herring River Project in its upcoming budget request.

Discussion: During the afternoon session of the HRRC meeting, David Smith of the United States Geological Survey (USGS), Jack Whalen of the Chequessett Yacht and Country Club (CYCC), Nils Wiberg of Fuss & O'Neill, and Alan Platt of FHR joined the meeting.

Fuss & O'Neill: Chequessett Neck Road Bridge Design: Nils Wiberg provided a report on a March 7, 2014 meeting with officials from the MA Department of Transportation (DOT). At that meeting Wiberg presented an overview of the Restoration Project and described the alternatives that had been considered by the HRRC and Wellfleet Town officials for the Chequessett Neck

Road bridge and tide gates. Since the new bridge will be a town-owned structure, DOT's review is advisory, but Fuss & O'Neill will need to submit plans at the 25%, 75% and 100% design phases. There is no clear process for DOT review for a town-owned structure, but Fuss & O'Neill will coordinate with DOT's environmental program to facilitate the review. DOT officials estimated that it would take three to four months to complete their review of the 25% design plans. In this initial meeting, they had questions about a number of issues, including pedestrian safety, methods for traffic bypass during construction, impacts to low-lying properties, boater safety, and the management structure for the tide control infrastructure.

Nils Wiberg presented some updated design drawings illustrating lane and shoulder widths, curb and rail design, ADA access, provisions for pedestrian safety, tide gate/frame heights and related features. He suggested that the existing stone armor on the dike could be reused for scour protection under the new bridge. There are number of design issues that should be discussed with Wellfleet town officials.

Nils Wiberg offered to send a list of key design issues to Hillary Greenberg. Greenberg will consult town officials including the DPW Director and Town Administrator about these questions. HRRC will schedule another meeting with interested town officials to review the proposed 25% designs. This could be a part of the May HRRC meeting.

The Committee briefly discussed design considerations and asked that Fuss & O'Neill consult with Ted Castro-Santos about guidelines for effective fish passage. The Committee discussed the placement of the tide gates within the bridge structure, asking if clustering the gates in the middle of the structure might provide better water depths for fish passage. Hunt Durey suggested that Fuss & O'Neill review the storm water protection standards in the MA Wetlands Protection Act (WPA) to make sure that the design complies with these requirements. A suggestion was also offered to integrate innovative stormwater management BMPs (i.e. constructed wetland cells, vegetated swales, etc.) with landscaping/revegetation of the rebuilt structure.

The Committee discussed options for the tide gate designs, weighing the trade-offs between ease of operation and maintenance versus the aesthetic appearance of the different gate frames and stem heights. The group also discussed manual versus electric operating systems for the tide gates, noting that this also needs to be discussed with Wellfleet town officials.

The Committee discussed the question of whether the gates should be actively managed or designed to work passively. Tim Smith noted that there are two different phases of Project implementation- adaptive management and the long-term condition. While the long-term goal is for the system to work passively, it could be important to be able to actively manipulate tide gate settings during the adaptive management phase and that the most convenient means for this is preferable.

The Committee discussed again the effects of extreme storm tides on water levels within the estuary. Steve Spear advocated for adding extra "freeboard" to the dikes and low-lying property flood protection infrastructure to accommodate for storm tides above those analyzed in the WHG hydro model. Steve Spear offered to prepare a list of questions to discuss with Kirk Bosma of the Woods Hole Group (WHG) regarding hydrodynamic modeling and the design of the flood

protection infrastructure. The modeling committee will review these questions with WHG.

The Committee agreed to formulate its recommendations about the Chequessett Neck Road bridge and tide gate design elements and then meet with Wellfleet Town officials to review this.

The Committee reviewed the options for traffic bypass during construction of the new bridge and discussed potential locations for storing equipment and materials for the bridge construction. Some level of cultural and natural resource analyses are needed to determine what areas would be preferable as construction staging locations.

Adaptive Management: Tim Smith introduced Dave Smith from USGS, who will be working with the HRRC on the development of the Adaptive Management (AM) Plan for the Project. USGS is seeking to hire a post-doctoral employee to assist in this effort. Dave Smith gave the Committee a presentation on the Structured Decision Making (SDM) process, using an example of resource management in Delaware Bay to illustrate the steps. He noted that for the Herring River Restoration Project, there are different kinds of decisions that will need to be made during adaptive management; these will include decisions about incremental tide gate openings and decisions about other needed marsh management actions. He briefly reviewed the Project's draft AM objectives and the stakeholders who should be included in the process. He laid out a general timeline for preparing the Adaptive Management Plan as follows:

- 2014: -Develop a prototype AM Plan
 - Incorporate existing predictive modeling
 - Evaluate existing monitoring
- 2015: -Incorporate details into AM framework
 - Analyze the sensitivity of decisions to uncertainty and variations in stakeholder risk tolerance
 - Complete design of the AM monitoring program
- 2016: -Complete the set-up phase for the AM Plan
 - Develop decision-support tools
 - Prepare final report

The Committee discussed the process and noted that the Technical Working Group (TWG) should be updated as the AM Plan proceeds. HRRC members will participate in an ecosystem modeling framework workshop for the Herring River on March 13, 2014 with other resource experts to begin development of the predictive models needed for the AM Plan.

Project Management Associate: Martha Rheinhardt provided the Committee with an update on her activities during January and February. Margo Fenn noted that it has been very helpful to have some additional staff capacity. Ms. Rheinhardt will be taking the lead on coordinating the outreach, survey and engineering efforts for low-lying properties, as well as overseeing other engineering contracts and grants.