

**Minutes  
Herring River Restoration Committee (HRRC)  
Cape Cod National Seashore Headquarters  
Wellfleet, MA  
December 12, 2017**

**Members Present:** Tim Smith, Hunt Durey, Steve Spear, Steve Block (by phone), Gary Joseph, Eric Derleth, Peter Herridge, 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 October 19, 2017 SLAMM Workshop and the November 15, 2017 HRRC Meeting.

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

Wednesday, January 10, 2018	HRRC regular meeting
Thursday, February 8, 2018	HRRC regular meeting

The group noted that the Herring River Executive Council plans meet with the newly appointed Stakeholder Group in late January or early February 2018.

**Communications/Coordination with Friends of Herring River (FHR):**

**Public Outreach:** Carole Ridley briefed the Committee on recent public outreach efforts. FHR sent out a fall newsletter to all Wellfleet and Truro residents to update them on Phase 1 of the Project. Update letters will also be sent to Project abutters and to those property owners who would be included in the Phase 1 restoration area. There are approximately 566 acres proposed for Phase 1 restoration; 535 acres (95%) are owned by the National Park Service. There are 31 acres of private land affected, including:

- 10 acres owned by the Chequessett Yacht and Country Club (CYCC)
- 8.7 acres owned by the Wellfleet Conservation Trust
- 12.3 acres on private residential properties, all which is currently regulated wetlands, subject to the jurisdiction of the MA Wetlands Protection Act and town environmental bylaws.

FHR is also planning several educational workshops for 2018. Potential topics include water quality monitoring, blue carbon and wildlife benefits of restoration.

**Discussion and Updates:**

**NPS Presentation on Water Quality and Sediment Modeling:** Sophia Fox and Katie Lavallee presented the results of some recent National Park Service scientific research. Katie Lavallee described a bed sediment sampling program in Wellfleet Harbor. NPS

scientists conducted this work in 2004, 2010 and 2017, looking at five different locations including Indian Neck, Mayo Beach, Egg Island, Powers Landing and the Town Propagation site. They took shallow core samples and analyzed both grain size and organic content. They found that medium grain sand is the dominant sediment type. There is very little organic material in the sand. While fine sediments collect in low-energy areas of the harbor, there are no indications that Herring River contributes to sedimentation in the harbor. It appears that sediment characteristics are relatively stable. This information will provide a good baseline for monitoring sediment movement in the Restoration Project's adaptive management process.

Sophia Fox, Aquatic Ecologist at Cape Cod National Seashore described NPS water quality monitoring efforts in Herring River. NPS established monitoring locations in the upper basin (Bound Brook), mid-basin, lower river and downstream of the Chequessett Neck Road dike, near Egg Island. Monitoring parameters include phytoplankton, nutrients (nitrogen and phosphorus), salinity, water clarity, temperature, pH, dissolved oxygen and water levels. Results to date show that nitrogen concentrations are highest in freshwater areas of the estuary; they are much lower in the saline downstream waters.

NPS scientists are tracking carbon and nitrogen isotopes to determine sources of nutrients in the estuary. They are also tracking the health of oysters planted in several locations within the estuary and the harbor to evaluate the effects of differing levels of salinity.

The Committee discussed how this type of information could be used in the adaptive management process. The group also discussed organizing a monitoring workshop for the public in 2018.

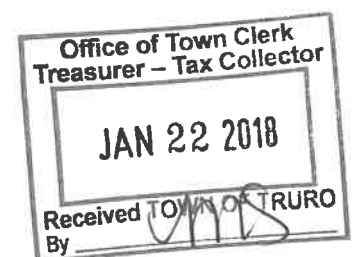
**Permitting:** The Committee reviewed the status of the draft Project of Community Benefit/Hardship Exemption application to the Cape Cod Commission and discussed the timeline for completing it.

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

**Cultural Resource Assessment:** Steve Spear reported that the Public Archaeology Lab (PAL) would begin additional site investigations in the Mill Creek area next week.

**Preconstruction Monitoring:** The Committee discussed scheduling an update from USGS regarding its ongoing groundwater monitoring efforts. The group agreed that HRRC should set up a special session for this, perhaps in conjunction with its January meeting.

**Hydrologic Modeling:** The modeling subcommittee is developing scopes of work for additional hydrologic model runs and other groundwater analysis.



**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 Committee reviewed some LIDAR data for the lower Herring River, showing surface elevations of the marsh and existing vegetation. This information could be helpful in illustrating how incremental restoration of tidal flow will affect vegetation change in the lower basin of the river, and achieve the transition back to healthy salt marsh.

**Documents Referred to in the Meeting:**

-Minutes of the 10/19/17 SLAMM Workshop

-Minutes of the 11/15/17 HRRC Meeting

