**Talking Points re Completion of Initial In-Water Construction Phase of Oyster Restoration in Harris Creek, Maryland**

As of 8/25/15

**Overview**

* One of the world’s largest oyster restoration projects, right here in Harris Creek, has just passed a major milestone: The initial “construction” phase, in which more than 350 acres of oyster reef habitat have been planted, has just come to a close.
* Work on this significant restoration project has been built in accordance with the Harris Creek Oyster Restoration Tributary Plan, developed by the Maryland Interagency Oyster Restoration Workgroup.
* Chaired by NOAA, the Workgroup includes the U.S. Army Corps of Engineers/Baltimore District, Maryland Department of Natural Resources, and Oyster Recovery Partnership. Partners include: the University of Maryland Center for Environmental Science’s Horn Point Oyster Hatchery, the Chesapeake Bay Foundation, the National Fish and Wildlife Foundation, The Nature Conservancy, and consulting scientists and the public.
* Since the project started in 2011, the partners have collectively planted 2 billion seed onto 350+ acres of reefs in Harris Creek. A minimum of 5 feet of navigational clearance was left overtop of every reef, to avoid interfering with navigation. Seeded reefs now cover 8 percent of the 4,500-acre Harris Creek oyster sanctuary.

**Restoration Process**

* The Tributary Plan outlined how more than 350 acres in Harris Creek would be restored, consistent with standards for restoration success known as the Chesapeake Bay Oyster Metrics. Detailed habitat analysis, based on data acquired by the NOAA Chesapeake Bay Office and Maryland Geological Survey, helped identify locations in Harris Creek where restoration efforts were most likely to be fruitful.
* Two different kinds of restoration took place in order to achieve the restoration of the 350+ acres. In some places, habitat analysis identified existing oyster reefs that simply weren’t very well populated by live oysters. These locations were simply “seeded” with spat-on-shell oysters to achieve the Oyster Metrics minimum standard of 50 oysters per square meter.
* In other locations, conditions were suitable for oysters to survive, but there wasn’t an intact reef for them to build on. In these sites, hard substrate was placed on the bottom (generally up to a foot of material to produce a three-dimensional hard surface) and then spat-on-shell were seeded on top of the new substrate.
* Multiple levels of scientific review were built into the process, including:
* **Map** potentially restorable bottom by synthesizing information on salinity, dissolved oxygen levels, and sonar surveys to determine where restoration project would be likely to succeed.
* **Build** reefs; plant spat-on-shell (oyster seed) on existing and newly constructed reefs.
* **Monitor** constructed reefs to ensure they match plans and to track the health of the oyster reef and population.

**Benefits**

* + Restoring oyster reefs and native oyster populations not only boosts numbers of this important species—it helps create habitat that in turn supports other species like blue crabs and rockfish, both important commercial and recreational fisheries.
  + Oysters also help filter the water and remove nitrogen (which can lead to algae blooms, dead zones, and fish kills).
  + Jump-starting the oyster population in one tributary can have benefits for neighboring rivers as well, as oyster larvae travel with the currents to settle there. Computer models show, for example, larvae from Harris Creek traveling into neighboring tributaries that are open for harvest, thus boosting those populations as well. An animated video showing where computer models indicate Harris larvae will land is at https://www.youtube.com/watch?v=8g1yagcdGXU

**Next Steps**

* Harris Creek was one of the first areas selected for large-scale restoration under the Chesapeake Bay Watershed Agreement (2014), which calls for restoration of native oysters to 10 Bay tributaries by 2025. Harris Creek is a sub-tributary of the Choptank River on Maryland’s Eastern Shore. Oyster restoration projects are also under way in the Tred Avon and Little Choptank Rivers in Maryland. Efforts are also under way in several tributaries in Virginia, including the Lynnhaven, Lafayette and Piankatank Rivers.
* While we mark the end of the initial construction phase in Harris Creek, significant work in the river will continue, however, as scientists monitor the health of the reefs and study the benefits the reefs bring to the river—and to the people who live and work here. In some areas, smaller maintenance plantings may be required, depending on monitoring results.