Huntley Meadows Park - Wetland Restoration - Project Summary

WHO: Huntley Meadows Park is owned and managed by the Fairfax County Park Authority. Huntley Meadows and other park authority staff, are developing the project plans along with citizen input and will be responsible for implementing the plans and managing the wetlands.

WHERE: The central wetlands (boardwalk/observation tower area) in Huntley Meadows Park

WHAT: The project's major components are:

1. An earthen berm that functions as a dam and holds pipes that will include a water control device, allowing staff to control the wetland's water level. Control of water levels is essential for properly managing the wetland for the health of vegetation and animals over time. The dam will be approx. 600' long, 5' high, 70'wide and have a gradual 10 to 1 slope. It will be vegetated with native meadow and marsh plants and managed as a meadow, mowed once a year by park staff.
2. A storm-water spillway, approx. 150' wide, that acts as an overflow structure during large storm events. When water levels rise above the 33' topo line, excess water will drain out of the wetland via the spillway. This stops water from flowing over the dam, therefore protecting the dam from erosion or failure during very large storm events.
3. An access road, 12' wide or less, made of gravel (and/or a geo-grid fabric) that runs through the woods from the hike-bike trail to the new earthen berm. The road will begin at the end of the hike-bike trail, near the observation platform. A wooded buffer will be left between it and the wetland, excepting the spillway and berm.
4. 3 or 4 shallow wetland pools, excavated approx. 3 feet below current grade and approx. 175' wide. The pools will be located along the edges of the wetland so as to avoid excavating equipment from needing the drive across the wetland. These pools will serve as feeding habitat for wetland wildlife such as pied-billed grebe and otter that need slightly deeper water, as well as refugia for fish and amphibians during periods of drought.
5. Expansion of existing meadows. Soil excavated from the construction of the dam, spillway, and wetland pools will be placed in areas newly cleared to enlarge Huntley's existing meadows. This will create additional habitat for meadow flora and fauna, including yellow-breasted chat, prairie warbler, field sparrow, black racers, box turtles and many vital insect pollinators.
6. Placement of downed trees in the wetland. To both create important habitat and to recycle trees removed in the park during creation of the access road, large dead trees will be placed (laid on their side) at various spots in the wetland. This will return an essential habitat component to the central wetland that used to exist in abundance as many dead trees used to be scattered across the wetland. Logs and fallen trees serve as important perches for numerous birds and beneficial insects, as well as haul-out and sunning surfaces for reptiles, amphibians and aquatic mammals.

WHY: Beaver wetlands are by nature transitory and eventually phase into wet meadows and then back into forests after beavers exhaust the food supply. Beaver may return to the same areas over time, but that often takes several decades or more. Huntley Meadows holds Fairfax County's only large (70+ acres), non-tidal marsh and allowing it to go through these successional changes from marsh, to wet meadow to wet forest would involve a local loss of the plants, animals, and environmental education opportunities connected with this disappearing habitat. To preserve this valuable reservoir of local biodiversity, some level of management is necessary. It's not that succession is bad – wet meadows and wet forests are vital habitats and also excellent sites for education. *However, there are other parks in this county that have wet meadows and wet forests.* Huntley Meadows contains the only large non-tidal marsh in this county.

When you carve up an area like Northern VA into suburbia, with highways, parking lots, houses, and lawns, the few protected natural islands that remain have to some how hold all the biodiversity that the region as a whole once possessed. This means managing certain areas to retain habitats such as marshes, meadows, etc. These habitats used to exist in an ever changing mosaic of successional habitats – as one beaver marsh disappeared, another would spring up somewhere else. This no longer occurs in the suburban sea of asphalt and lawns we have created. The parks that remain have to hold those temporary successional habitats in a more permanent state in order to preserve the area's associated biodiversity, i.e. their native plant and animal communities, as well as the essential educational opportunities they provide.

HOW:

- **Surveys, Site Plans, and Park Visitor Input:** Through the use of historic and recent surveys documenting the hydrology, topography, vegetation, and soils of the central wetland area, we are working with a civil engineering firm to create site and construction plans for the restoration project. Huntley staff have also met and consulted with many of the park's patrons, visitors, and volunteers to get their input and try to understand the changes that have taken place over the last 30 years. In addition, staff have met and consulted with many regional wetland experts and resource management professionals. A rough draft of the minor site plan was on display for four (4) weeks and underwent a public review that included four (4) public programs focused on the plans. Close to 100 visitors commented on the plans. Their input inspired and helped guide several important changes to the project, including removal of the silt basin and reduction of the pools and scope of planting.

- **Construction:** Construction will take place between July and February when the work will be least destructive to the plants, animals, and seasonal cycles of the park. No heavy disturbance will be done from March through June. To minimize harm to the park's flora and fauna, plant and herp (reptile and amphibian) rescues will be performed before construction begins. Plants and animals found on the construction sites will be moved to safe locations in the park. A Fairfax County Park Authority (FCPA) staff member will be on site during construction and, to help minimize costs, we hope to have some portion of the work performed by FCPA staff.

- **Management:** Huntley staff, with consultation from other wetland management professionals, will create a management plan to guide us in caring for the restored wetland. The plan will be as simple, manageable, and naturalistic as possible. Our goal will be to mimic the natural cycles and functions, as well as plant and animal communities of a local, native, non-tidal, fresh water marsh. Beavers will not be removed or trapped from the wetlands and our management plan will always include appreciation and encouragement of beavers as our partners in wetland management. Our goal is *not* to create a pond with permanent, year-round water levels, but rather a marsh ecosystem with seasonal and annual fluctuating water levels. A healthy marsh has an ebb and flow of high and low water levels, including periodic draw-downs with exposure of wetland soils to the sun – *this means there will still be times when water levels are very low.* By opening and closing the pipes in the earthen berm dam, we will be able to manipulate the wetland's water level. Our goal will be to work with local seasonal weather cycles to achieve fluctuating water levels. To maintain healthy marsh soils and plant communities we will plan for a full draining of the wetland approx. every 3 to 7 years, depending on wetland and rainfall conditions.

WHEN (this represents an ideal time line – dates may change due to weather, permitting issues, etc.):

- Site Prep and Delineation, Marking Project Area, etc. – December, 2007 thru April, 2008
- Construction of Dam, Pipes, Spillway, Access Road – July, 2008 thru December, 2008
- Construction Begins on Wetland Pools – To Be Announced, possibly 2009 or 2010

COST (all listed amounts are approx. estimates – costs may change):

- Project Development, 2006-2007 - $250,000.00
- Project Construction phase 1, 2008 (dam, spillway, access road) - $500,000.00
- Project Construction phase 2, date to be determined (wetland pools, augmentation) - $1-$2 million

(We currently have $700,000 from the 2004 park bond plus a $50,000 grant from the Virginia Water Quality Improvement Fund dedicated for this project. The remaining money for the wetland pools may come from future park bonds, grants, fund raising and/or donations.)

CONTACT INFORMATION AND UPCOMING PUBLIC MEETINGS: If you have any questions, suggestions, or concerns please contact Huntley's park manager, Kevin Munroe. Kevin can be reached at 703-768-2526, or by stopping by at the visitor center Tuesday through Saturday. Please ask about upcoming public meetings and programs connected with the project. To learn more about the restoration project please visit our website, http://www.fairfaxcounty.gov/parks/huntley/restorationproject.htm.

If accommodations and/or alternative formats are needed, please call (703) 324-8563, at least 10 working days in advance of the registration deadline or event. TTY (703) 803-3354.

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