



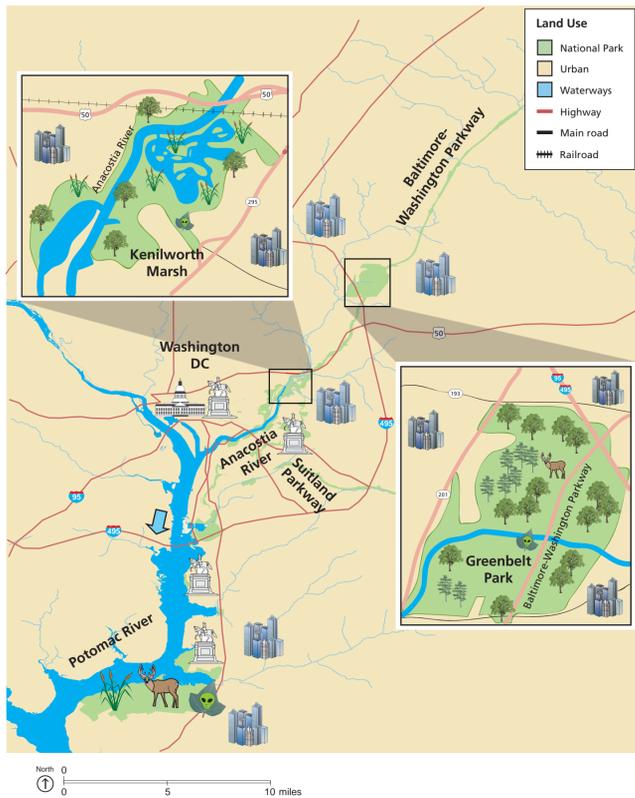
# National Capital Parks-East

District of Columbia and Maryland



## Enhancing the Scenic Setting of the Nation's Capital

National Capital Parks-East includes 14 major sites covering over 8,000 acres within Washington, DC and three nearby counties in MD. The parks lie entirely within the Coastal Plain physiographic region and are managed for a variety of natural, cultural, and recreational resources. Significant natural features of the parks include sand and gravel beaches, shoreline bluffs, flood plain and upland forest, shell marl ravine forest with its associated fossil outcrops, two large river systems, and numerous streams, seeps, and wetlands. Major threats include those associated with its urban setting: overabundant deer populations, exotic species invasion, and stormwater and boundary management issues.

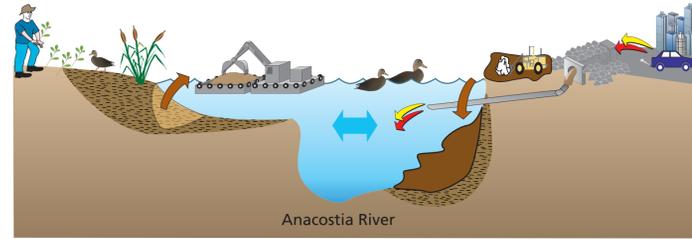


Oxon Hill Farm (top) and lotus flowers (bottom).



## Water Quality and Hydrology

*Restoring wetland habitat along a troubled river*



The Anacostia River is a tidal freshwater tributary flowing through Maryland and the District of Columbia to the Potomac River. Tidal wetlands within Washington, DC are rare. Restoration at Kingman Lake and Kenilworth Marsh has re-created ~110 acres of emergent tidal wetland, providing habitat for many species including migratory waterfowl and native plants. Historic dredging and filling operations have impacted wetlands, along with landfills, dumping, and large inputs of nutrients from combined stormwater and sewer discharges.



## Biodiversity

*Parks serve as species refugia and migratory corridors*



National Capital Parks-East provide protection for many species. The parks have rare habitats such as sand and gravel beaches, floodplains, upland forests, and various wetland systems. The parks host many unusual plants and animals, including the lamp mussel and bald eagle, and create migratory corridors for birds and butterflies. Urban pressures, such as encroaching development and invasive plant species, make park lands critical resources to preserving native species.

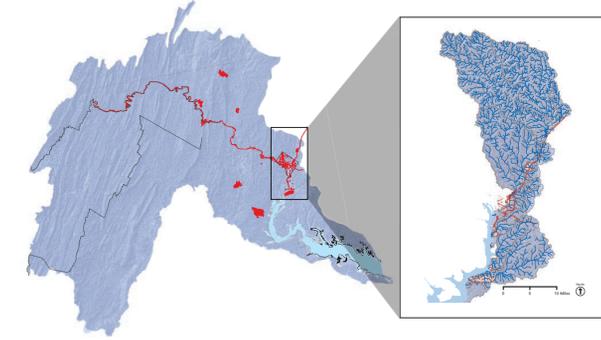


Park staff monitoring vegetation.

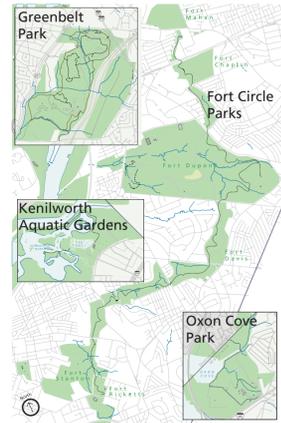


Bay magnolia blossom, a native species.

## National Capital Parks-East Watershed



(Above left) Potomac River watershed and National Capital Region Network parks (red). (Above right) National Capital Parks-East watershed and boundary.



Park map showing major roads and waterways.



## Vital Signs Monitoring

*Assembling the puzzle*

Park vital signs monitoring is designed to inform managers of the condition of water, air, plants and animals, and the various ecological, biological, and physical processes that act on those resources. This site-specific data will provide parks the information needed for ecologically sound management of the natural resources.

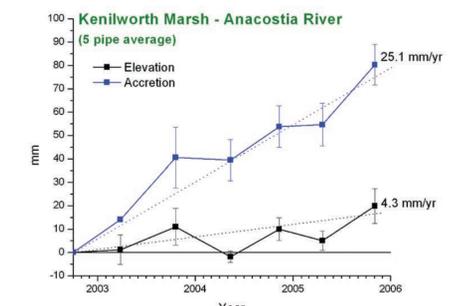
In National Capital Parks-East, data are being collected on **Water Quality and Hydrology** and **Biodiversity** with reference to park specific concerns as well as understanding regional issues.



Quantifying shoreline change is an important component of monitoring global climate change. Shoreline change is being studied at National Capital Parks-East in order to document the area of land lost or gained in the tidal portions of the Potomac and Anacostia Rivers. U.S. Geological Survey scientists Richard Hammerschlag and Cairn Krafft have assisted with the restoration of Kenilworth and Kingman Lake marshes along the Anacostia River. The unpublished data (below right) shows the success of their efforts to restore the shoreline of the Anacostia River. Their work has re-created 110 acres of emergent tidal wetland.



Restoration project at Kingman Lake.



### Resource Values

- Freshwater flow: Potomac River
- Historical/cultural sites: monuments
- Wetlands

### Resource Stressors

- Development: urban and suburban
- White-tailed deer: overpopulation
- Invasive/exotic plants