

Fairfax County Park Authority

LOB #341:

NATURAL RESOURCE MANAGEMENT

Purpose

Part of the purpose of this LOB is “to set aside public spaces for, and assist citizens in, the protection of environmental values and diversity of natural habitats...” To fulfill this portion of its mission, the agency implements Policy 201 – Natural Resources and the Fairfax County Park Authority Natural Resource Management Plan.

Description

This LOB is provided through four programs. The four programs include: Inventory and Planning, Protecting Natural Capital, Managing Wild Populations and Restoring Ecosystems, and Fostering Stewardship and Expanding Natural Capital. All four programs are implemented County-wide and are bundled based on subject matter—natural resource management. The services provided by each program are, typically, provided during normal working hours both in-person and virtual. Each program is described below.

The Inventory and Planning program collects natural resource data and integrates this information into park planning and decision-making. This program is implemented by County staff, volunteers, and contractors.

The Protecting Natural Capital program ensures that adverse activities are avoided to the greatest extent possible. Where adverse activities cannot be avoided, the program ensures that mitigation, compensation, and restoration and rehabilitation are adequately addressed to prevent degradation of natural resource quality and long-term health of the County’s natural capital. This program is implemented by County staff.

The Managing Wild Populations and Restoring Ecosystems program implements natural resource projects and activities to achieve management goals or outcomes. The main goal is to manage and restore natural resources, and associated natural capital, on parklands and easements in order to provide an integrated network of natural resources, retain representative species and communities, maintain ecological processes, and protect rare or unusual resources. This program is implemented by County staff, volunteers, and contractors.

The Fostering Stewardship and Expanding Natural Capital program focuses on natural resource outreach, education, involvement, partnership, and inter-agency environment and natural resource policy alignment. This program is implemented by County staff and volunteers.

The Natural Resource Management LOB has been operational since 2004 and the adoption of the first agency-wide Natural Resource Management Plan. This LOB was restructured in 2014 with the revision and publication of the Fairfax County Park Authority Natural Resource Management Plan.

Benefits

This LOB ensures the long-term protection, preservation and sustainability of County wide natural resources in accordance with adopted park standards and adherence with natural and heritage resource management guidelines and Countywide Policy Plan obligations. Through outreach and education, tens of thousands of residents, including school children, are provided life-long learning opportunities related to the protection of natural resources. This LOB directly benefits nearly 17,000 acres of natural area, and indirectly benefits nearly 7,000 acres of developed area that is managed by the Park Authority.

Fairfax County Park Authority

This LOB ensures the availability of natural capital for County residents and visitors. Natural capital includes the living organisms such as plants and wildlife; non-live components such as air, water, and soil; the ecosystems they form; and the services they provide such as climate and air quality regulation, water flow regulation, nutrient cycling, and pollination.

Mandates

The Natural Resource Management LOB adheres to its mandated policy and plan:

- Park Authority Policy 202, Wildlife Conflict Resolution
<http://www.fairfaxCounty.gov/parks/parkpolicy/park-policy-manual.pdf>
- Park Authority Policy 201, Natural Resources
<http://www.fairfaxCounty.gov/parks/parkpolicy/park-policy-manual.pdf>
- Park Authority Natural Resource Management Plan
<http://www.fairfaxCounty.gov/parks/resource-management/nrmp.htm>

Staff complies with the following laws and resulting regulations:

- Federal Endangered Species Act
<http://www.fws.gov/endangered/laws-policies/>
- Federal Clean Water Act
<http://www2.epa.gov/laws-regulations/summary-clean-water-act>
- Federal Migratory Bird Treaty Act
<http://www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtintro.html>
- Federal Bald and Golden Eagle Protection Act
<http://www.fws.gov/midwest/MidwestBird/EaglePermits/bagepa.html>
- Virginia Prescribed Fire Law
<http://dof.virginia.gov/fire/prescribed/index.htm>
- Virginia State Water Control Law
<http://www.deq.virginia.gov/LawsRegulations/Laws.aspx>
- Virginia Endangered Plant and Insect Species Act
<http://www.vdacs.virginia.gov/plant&pest/endangered.shtml>
- Virginia Wildlife Laws and Regulations
<http://www.dgif.virginia.gov/wildlife/laws/> and <http://www.dgif.virginia.gov/permits/>
- Virginia Pesticide Control Act
<http://www.vdacs.virginia.gov/pesticides/laws.shtml>
- Fairfax County Chesapeake Bay Preservation Ordinance
<http://www.fairfaxCounty.gov/dpwes/environmental/cbay/>
- Fairfax County Fire Prevention Code for Controlled Burning
<http://www.fairfaxCounty.gov/fr/prevention/fmopenburning.htm>
- Fairfax County Subdivision and Zoning Ordinance for Tree Conservation
<http://www.fairfaxCounty.gov/dpwes/publications/pfm/>
- Fairfax County Subdivision and Zoning Ordinance for Storm Drainage
<http://www.fairfaxCounty.gov/dpwes/publications/pfm/>

Fairfax County Park Authority

- Fairfax County Wetlands Zoning Ordinance
<http://www.fairfaxCounty.gov/dpz/environment/wetlands/permitshow.htm>

Trends and Challenges

Increasing urbanization of the County increases the need for managed natural resources and open space. Associated environmental pressures of urbanization also make it harder for natural resource managers to ensure that high quality ecosystems, and the ecosystem services they provide, are maintained. Project-level, alternative sources of funding to complete this LOB's activities have slowly increased over-time, but some program activities are not eligible for these types of funds. There is also an increased need to educate the public on what this LOB does and how the public can participate. Increased demand continues to stress available resources. The Natural Resource Management LOB is currently funded at \$148.31 per acre annually to manage the 17,000 acres of natural area owned by the Park Authority. The typical range of unit costs for maintaining natural areas at a predominately low service standard in a temperate climate zone of North America is \$3,000-\$6,000 per acre annually (based on the benchmark information obtained as a result of the latest Park and Recreation Needs Assessment done for Fairfax County). So, this LOB's funding is approximately \$2,351.69 below the typical annual unit costs per acre. Failure to maintain quality natural resources, and achieve at least a low service standard, will likely result in degradation and eventual loss of natural capital over time. The degradation and loss of natural capital will increase the need for engineered replacements at a much greater cost to the tax payers.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #341: Natural Resource Management			
FUNDING			
<u>Expenditures:</u>			
Compensation	\$417,021	\$467,608	\$572,447
Benefits	9,356	9,592	15,634
Operating Expenses	68,750	67,312	44,920
Total Expenditures	\$495,127	\$544,512	\$633,001
General Fund Expenditures	\$466,941	\$513,809	\$590,936
Total Revenue	\$0	\$0	\$0
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
<u>Positions:</u>			
Regular	8 / 8.5	8 / 8.5	8 / 8.25
Total Positions	8 / 8.5	8 / 8.5	8 / 8.25

Fairfax County Park Authority

Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Parkland acres cataloged for natural resource inventory	No data available	6,000	8,720	10,720	15,220
Development plans reviewed for natural resource impacts	No data available	328	325	325	325
Acres actively managed to improve natural resources	No data available	13,118	14,499	15,000	15,750
Volunteer hours dedicated to improve natural resources	No data available	\$544,452 value based on 23,600 hours	\$553,680 value based on 24,000 hours	\$565,215 value based on 24,500 hours	\$576,750 value based on 25,000 hours

In January 2014, the Park Authority Board adopted a revised agency-wide Natural Resource Management Plan. All metrics are expected to increase as the agency performs new actions recommended within the agency-wide plan. The number of parkland acres cataloged is expected to increase throughout the reporting period as the agency inventories more acreage to inform non-native invasive vegetation management, deer management, and natural vegetation community classification efforts.

Acres under natural resource management increases in FY 2014 and FY 2015 resulted from deer management activities, which should be somewhat stable in FY 2016 and FY 2017. The increases in FY 2016 and FY 2017 are expected from non-native invasive vegetation management and ecosystem restorations.

Volunteer hours increased from deer management activities through FY 2015. Expected increases in FY 2016 and FY 2017 will likely occur from natural vegetation community classification activities. Non-native invasive vegetation management activities are expected to be stable during the reporting period for this metric.