M-NCPPC

Energy Management
Recycling & Solid Waste Management
Sustainability Plan

Energy Resource Conservation Plan
Annual Recycling & Solid Waste Report
Sustainability Plan
Energy Management

Resource Conservation Plan

County Council Transportation, Infrastructure, Energy, and Environment Committee
### Results Fiscal Year 2016
July 2015 to June 2016

<table>
<thead>
<tr>
<th>Department</th>
<th>FY 2016 Costs</th>
<th>Budget FY 2016</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTERPRISE</td>
<td>$941,966.49</td>
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<tr>
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<td>$169,860</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td><strong>$3,068,133.18</strong></td>
<td><strong>$3,494,545</strong></td>
<td><strong>$426,412</strong></td>
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</tbody>
</table>
Accomplishments in 2016

- **North Chevy Chase Recreational Center** - Upgraded air conditioning system to high efficiency 18 SEER with 95% efficiency gas furnace
- **Wheaton Maintenance Yard Offices** – Upgraded air conditioning system to high efficiency 18 SEER with 95% efficiency gas furnace
- **Clarksburg Neighborhood Park** – Upgraded air conditioning system to a high efficiency 18 SEER system including an air handler with variable speed fan system
- **Water Heater Replacements** – Installation of energy saver heaters
- **Exterior Lighting** – Parking Lots Lighting replacement with LED Fixtures at 21 locations
Tilden Woods Local Park

- Exterior Parking Lot Lighting replacements with LED fixtures
## Cost to Date – Fiscal Year 2017
July 2016 to December 2016

<table>
<thead>
<tr>
<th>Department</th>
<th>Cost update as of December 31, 2016</th>
<th>Projection</th>
<th>Budget FY 2017</th>
<th>Difference</th>
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<tbody>
<tr>
<td>ENTERPRISE</td>
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<td>PROPERTY MANAGEMENT</td>
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<td>$224,915</td>
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Projects Underway in 2017

- Agricultural History Farm Park – Activity Building – Replaced 32 perimeter through the wall air conditioners with Goodman through the wall heat pumps with a high efficiency SEER rating of 11
- Brookside Gardens Conservatory - Replaced the existing Fulton boilers with four Laars Might Therms boilers creating a load redundancy
- Rockwood Skyview Building – Upgraded the air conditioning system to a high efficiency 18 SEER system with a 95% efficiency gas furnace
- Tilden Woods – Upgraded the toilets to low consumption toilets and installed Bradley AV30 hygienic hands free combination .38 GPM faucet, soap dispenser and hand dryer
- Exterior Parking Lot Lighting Replacements with LED fixtures
  - Capital View Homewood
  - Indian Springs
  - Sligo – Dennis
  - Pilgrim Hill Local Park
  - Valley Mill Special Park
  - Olney Family Neighborhood Park
  - Stoneybrook Local
Agricultural History Farm Park

- Activity Building - Replaced 32 perimeter through the wall air conditioners with Goodman through the wall heat pumps with high efficiency SEER rating of 11
Brookside Gardens Conservatory

- Replaced the existing Fulton boilers with four Laars Might Therm boilers, creating load redundancy
Tilden Woods Local Park

- Installed Bradley AV30 hygienic hands free combination .38GPM faucet, soap dispenser and hand dryer
Goals for Fiscal Year 2018

- Complete the implementation of solar renewable energy projects by December 31, 2017
- Complete the exterior lighting retrofit program to use LED technology
- Identify Gray Water re-use pilot projects for irrigation
- Institute pilot program to collect rain water to use for irrigation
- Identify & implement small scale solar applications
- Conduct a comprehensive audit of the utility bills being tracked by E-CAP to validate data entered and reported for primary locations
Selected Solar Photovoltaic System Sites

South Germantown Recreation Park

Rock Creek Regional Park
# Proposed Budget – Fiscal Year 2018

**July 2017 – June 2018**

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>Proposed Budget 2018</th>
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<tr>
<td>ENTERPRISE</td>
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<td>DEPARTMENT OF PLANNING</td>
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<td>PROPERTY MANAGEMENT</td>
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<td>DEPARTMENT OF PARKS</td>
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<td><strong>TOTALS</strong></td>
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**The Proposed budget for Fiscal Year 2018 assumes the following:**

- The Department of Planning will remain at the current location in Silver Spring in FY 2018
- Central Offices for the Department of Parks will remain at the current location at the Parkside Headquarters Building in FY 2018
Recycling and Solid Waste Management

Annual Recycling & Solid Waste Management Report

Montgomery County Department of Environmental Protection
Accomplishments in 2016

 ✓ Mandatory Recycling Rate at 55.8% for 2016 - County requirement is 50%
 ✓ Mandatory and Voluntary Recycling Rate is 67% in 2016
 ✓ Voluntary Material Recycling and Reuse Rate decreased in 2016
 ✓ Increase in volume of 30 yard waste disposal
 ✓ Developed Bi-lingual Signage for Exterior Recycling Locations
 ✓ Purchased Dedicated Recycling Pick-up and Disposal Trucks for Pickup of Exterior Recycling in Park Locations
Cabin John Recreational Park

- Installation of pictorial bi-lingual recycling signs
- Pilot Site
Starting Point 2002

Prior to Establishment of a Comprehensive Program

- Refuse 67%
- Recycling and Reuse 33%
Results 2016
January 1, 2016 to December 31, 2016

Recycling
- Paper, Bottles, Plastic 21.6%
  Mandatory
- Yard Waste & Composting 20%
  Mandatory
- Reuse - Scrap Metal 1%
  Mandatory
- Construction Debris - Voluntary 24%

Recycling Mandatory Total as Reported to County 55.8%

Recycling Mandatory & Voluntary Total 67%
Volunteer Clean Up Days

- The Volunteer Services Office, seeks to advance the mission of Montgomery Parks by supporting Park staff in their efforts to facilitate volunteer partnerships that enhance the park system.
- Volunteer Services Office serves as the primary hub for managing the large and complex volunteer contingent.
- Volunteer clean-up includes removing items that have washed into the parks from other locations and is not generated by the people enjoying the parks.
- Volunteers have donated more than 88,000 hours of volunteer service annually. Montgomery Parks is very fortunate to have such generous community support!
Volunteer Clean Up

Tires: 114
Bags of Trash: 2,062
Bags of Recycling: 651

Pounds Trash: 60,098
Pounds Recycling: 16,275
Pounds Tires: 2,508
Total Pounds: 78,881

Projects: 165
Number of Volunteers: 3,410
Hour: 7,437

Data for First Six Months

Stream Clean-up Project
Sustainability Plan

Working for an environmentally sustainable future

The Nature of Our Mission
Accomplishments

- Overall program goals have been maintained by the projects and best management practices underway in the Department of Planning and Department of Parks.
- Leadership was transitioned to the Sustainability Coordinator appointed in the Fall of 2016.
- The program Advisory Committee has provided leadership and guidance to the program committees & workgroups.
- Program Committee Workgroups will be working on implementing the plan strategies.
- Recycling Captains for locations with staff have been appointed to support new efforts to increase recycling rates.
- Pilot projects to enhance recycling, energy management, and water conservation are in the planning process.
Workgroups

- Employee Education, Training, and Engagement
- Community and Patrons Education and Engagement
- Utility/Energy Conservation
- Fleet Management Conservation
- Water Conservation and Management
- Sustainable Acquisition and Use of Agency Supplies
- Recycling and Solid Waste Management
- Sustainable Infrastructure and Natural Areas
- Natural Resources and Habitat Preservation
- Health and Wellness
Montgomery County Sustainability Bi Annual Plan
July 2015 to June 2017

The Bi-Annual Sustainability Plan for the Montgomery County Department of Parks and Department of Planning was completed and approved in July 2015.

Plan review and update is scheduled every two years.

Project and program goals in the Plan are underway based on the efforts of Department-wide workgroup recommendations.

Report and Plan update will be submitted to the Commission Executive Committee in June 2017.
Questions ?