

# Fund 30015: Environmental and Energy Program

## Focus

Fund 30015, Environmental and Energy Program, supports projects that advance the County's Environmental Vision and Operational Energy Strategy. The Environmental Vision focuses on seven core service areas: Land Use, Transportation, Water, Waste Management, Parks and Ecological Resources, Climate and Energy, and Environmental Stewardship. The Operational Energy Strategy, first adopted in 2018 and then updated in 2021, is intended to further the objectives of the Board's



Environmental Vision by providing goals, targets, and actions in each of the following 11 focus areas: Greenhouse Gas Emissions Reductions, Energy Use and Efficiency, Water Use and Efficiency, Green Buildings, Renewables, Fleet Electrification, Goods and Services, Waste Management and Recycling, Awareness and Engagement, Utility Cost Management, and Reporting and Collaboration. The Energy Strategy is designed to help the County achieve its goal of energy carbon neutrality by 2040, as stated in the Board's July 2021 Carbon Neutral Counties Declaration, by mandating interim emissions reductions, reducing energy use in County facilities, establishing ambitious green building standards for County facilities, meeting renewable energy targets, transitioning to an electric fleet for vehicles and buses by 2035, and targeting to be

Zero Waste by 2030, along with other goals. Furthermore, it promotes cost-effective solutions and an energy-conscious culture for County government agencies and employees. The resulting reductions in energy use and associated greenhouse gas emissions will help mitigate escalating energy costs and promote a more sustainable future for Fairfax County. Overseeing implementation of the Energy Strategy is Fairfax County's Office of Environmental and Energy Coordination (OEEC) officially launched in FY 2020. Operating under the Office of the County Executive, the OEEC is responsible for the cross-organizational development and implementation of numerous other environmental and energy policies, goals, programs, and projects.

Fund 30015 was created to consolidate all projects associated with the Environmental and Energy Strategy Programs, including projects funded by the Environmental Improvement Program (EIP). Funding of \$1,298,767 is included in FY 2023 for the EIP and is consistent with the [FY 2022 Adopted Budget Plan](#) level. FY 2023 EIP projects were selected based on a process supported by the Environmental Quality Advisory Council (EQAC) and provide for a variety of environmental initiatives. The EIP selection process includes the submission of project proposals by County agencies, review of those proposals pursuant to program criteria, and identification of projects for funding. Energy Strategy projects have typically been funded using one-time savings available at budget quarterly reviews. Specific EIP projects and funding levels in FY 2023 include:

- An amount of \$363,250 is included for a new urban green space in an underutilized portion of County property in central Annandale, located in the Annandale Commercial Revitalization District. The development of this green space is the result of significant community and inter-departmental collaboration, and will promote numerous objectives, including addressing the disproportionate impacts of heat island effect through enhancements of existing County property into a more environmentally sustainable and usable community asset. Enhancements include a civic plaza, a multi-functional and flexible lawn area, a children's educational garden, native landscaping, a reduction in impervious surface and stormwater improvements, and a network of accessible paths that will connect residential neighborhoods and the commercial core of central Annandale. The goals and objectives of this urban green space strongly align with numerous County priorities, including the Environmental Vision, the policies of One Fairfax, and the long-range development vision for Annandale. Further, this initiative positively addresses

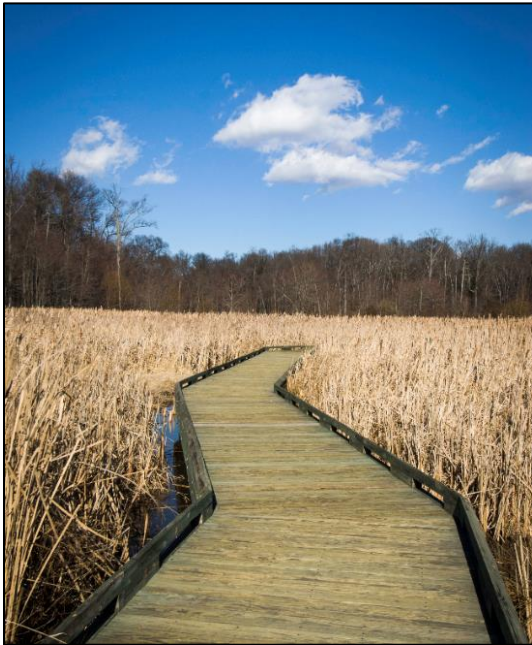
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County priorities related to stormwater management, tree canopy coverage, and climate resilience.

- An amount of \$96,000 is included for the “HomeWise” energy education and outreach program at low- and moderate-income housing in Fairfax County. This funding level represents an increase of \$8,000 from the FY 2022 Adopted Budget Plan. HomeWise is intended to educate, empower, and enable low- and moderate-income residents to lower their utility bills by reducing their energy and water use. The program emphasizes relationship-building between qualified volunteers and specific communities in the County where energy-efficiency improvements and changes to daily behaviors are likely to have the greatest impact. The program also includes an educational component focused on school-age children to help them make smart choices about their resource use starting at a young age.
- An amount of \$11,800 is included for the Composting Program at Fairfax County government offices managed by an employee volunteer group. Each participating department receives a compost bin to place in its office kitchenette, which is removed on a weekly basis for off-site composting.
- An amount of \$97,290 is included to upgrade 38 water fountains at over 25 Park Authority locations. The upgrades will address several issues including false sensor activation and the need for bottle-filling for the public. Upgrading the water fountains will conserve both water and the electricity used to operate the stations. The installation of bottle-filling stations encourages the use of reusable water bottles, thereby reducing the amount of waste associated with single-use plastic water bottles at park sites. Additionally, with their downward-facing nozzles, the bottle-filling stations reduce the potential for contaminants in the water stream.
- An amount of \$350,000 is included to support the Invasive Management Area (IMA) Program. The Park Authority manages this volunteer program which supports invasive plant removal initiatives. These initiatives restore hundreds of acres of important natural areas, protect tree canopy, and reach thousands of volunteers. Approximately 20,000 to 22,000 trained volunteers have contributed between 67,000 and 80,000 hours of service annually since the program’s inception in 2005, improving over 1,000 acres of parkland. These activities ensure ecological integrity of natural areas and prevent further degradation of their native communities. This funding level represents an increase of \$50,000 from the FY 2022 Adopted Budget Plan and will help continue to implement portions of unfunded treatment areas and control non-native invasive vegetation in natural areas.
- An amount of \$40,000 is included for the Parks program, “Watch the Green Grow” (WTTG). This education and outreach program aims to protect and expand park buffer zones by encouraging residents to adopt green yard care practices on private property, including erosion control, the removal of invasive plants, reductions in fertilizer and pesticide use, and the planting of native plants and trees. WTTG also teaches 4<sup>th</sup> and 5<sup>th</sup> grade students about watersheds, native and invasive plants, and biodiversity.

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- An amount of \$102,927 is included for the first phase of a three-year project to fund a multi-agency water chestnut early detection rapid response control program. This project is intended to suppress the spread and reduce the fruiting of an invasive species commonly known as water chestnut. This plant grows in dense, unsightly mats and impacts the functionality and aesthetics of ponds, including stormwater facilities. EIP funding will support engagement efforts with private pond owners and operators and the suppression of water chestnut plants at up to 30 infested ponds on property owned by the Park Authority, Homeowners Associations, or places of worship.



- An amount of \$59,500 is included for the printing and distribution of 85,000 full vinyl stickers to be applied to recycling bins and carts that will help residents to make sustainable choices when recycling unwanted items. This outreach program will provide stickers to residents, multi-family buildings, and Homeowner Associations throughout the county, and will help residents quickly check to see if the items being discarded are recyclable. The stickers use pictures to illustrate what should and should not be placed in the recycling receptacle and include explanatory text in both English and Spanish. This educational program is expected to help reduce the amount of garbage in the recycling stream, thereby reducing costs and leading to higher prices for cleaner recycled material.
- An amount of \$178,000 is included to continue to support the Electric Vehicle (EV) Charging Stations Program. The County continues to install EV stations and this infrastructure will be available for use by employees, patrons, and the public. The specific number of charging stations funded will depend on the needs of the sites and the types of charging stations selected. The purchase of EV stations supports the Board's updated Environmental Vision, Carbon Neutral Counties Declaration, and Operational Energy Strategy, which envision the transition from gasoline-powered passenger vehicles to hybrid-electric and electric vehicles. This funding level represents an increase of \$31,808 from the FY 2022 Adopted Budget Plan; however, the majority of infrastructure support for this program is provided at year-end.

In addition, an amount of \$58,140 is provided in Fund 10030, Contributory Fund, to continue partnering with two non-profit agencies to support tree planting efforts throughout the County.

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### **Changes to FY 2022 Adopted Budget Plan**

*The following funding adjustments reflect all approved changes in the FY 2022 Revised Budget Plan since passage of the FY 2022 Adopted Budget Plan. Included are all adjustments made as part of the FY 2021 Carryover Review, FY 2022 Mid-Year Review, FY 2022 Third Quarter Review, and all other approved changes through April 30, 2022.*

#### **Carryover Adjustments**

**\$30,616,477**

As part of the *FY 2021 Carryover Review*, the Board of Supervisors approved an increase of \$30,616,477 due to the carryover of unexpended project balances in the amount of \$12,387,240 and an adjustment of \$18,229,237. This adjustment included an increase to the General Fund transfer in the amount of \$18,200,000 and the appropriation of revenues received in FY 2021 in the amount of \$29,237. The General Fund transfer of \$18,200,000 included \$15,000,000 to support the investment needed to begin reducing carbon emissions consistent with the Board's Energy Carbon Neutral Declaration, the goals and targets of its updated Operational Energy Strategy (OES), and the goals of the Community-wide Energy and Climate Action Plan (CECAP). To achieve the goal of energy carbon neutrality in county government operations by 2040, the Board endorsed a transformational approach to energy use in its operations, including building efficiency retrofits in existing buildings, the design and construction of net zero energy buildings, electrification of both the vehicle fleet and existing buildings, and an increasing reliance on renewable energy and alternative technologies. It will require substantial investment over decades to transform county government operations, as well as work with the community in reducing its emissions. Funding of \$1,400,000 was also included to support Electric Vehicles and Charging Stations at County facilities. This program supports the transition of the County's fleet to electric and plug-in hybrid vehicles. Funding allows for the design, construction, installation, and activation of 15 EV charging stations at up to three different locations and the purchase of eight electric Nissan LEAFs. Finally, an amount of \$1,800,000 was included for the third year of a 5-year LED streetlight conversion plan. The goal of the plan is to convert more than 56,000 existing mercury vapor, high pressure sodium and metal halide fixtures to Light Emitting Diodes (LED) streetlights. The conversion plan is estimated to cost a total of \$9 million, which will be partially offset by projected savings in utility costs.

A Fund Statement and a Summary of Capital Projects are provided on the following pages. The Summary of Capital Projects may include some projects without a Total Project Estimate amount. These projects are considered "continuing" projects or projects for which funding is necessary on an ongoing basis (e.g., a contingency or planning project).

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## FUND STATEMENT

| Category                                                        | FY 2021<br>Actual   | FY 2022<br>Adopted<br>Budget Plan | FY 2022<br>Revised<br>Budget Plan | FY 2023<br>Advertised<br>Budget Plan | FY 2023<br>Adopted<br>Budget Plan |
|-----------------------------------------------------------------|---------------------|-----------------------------------|-----------------------------------|--------------------------------------|-----------------------------------|
| <b>Beginning Balance</b>                                        | <b>\$0</b>          | <b>\$0</b>                        | <b>\$12,416,277</b>               | <b>\$0</b>                           | <b>\$0</b>                        |
| <b>Revenue:</b>                                                 |                     |                                   |                                   |                                      |                                   |
| Miscellaneous Revenues <sup>1</sup>                             | \$29,237            | \$0                               | \$0                               | \$0                                  | \$0                               |
| <b>Total Revenue</b>                                            | <b>\$29,237</b>     | <b>\$0</b>                        | <b>\$0</b>                        | <b>\$0</b>                           | <b>\$0</b>                        |
| <b>Transfers In:</b>                                            |                     |                                   |                                   |                                      |                                   |
| General Fund (10001)                                            | \$9,116,615         | \$1,298,767                       | \$19,498,767                      | \$1,298,767                          | \$1,298,767                       |
| General Construction and<br>Contributions (30010) <sup>2</sup>  | 1,588,292           | 0                                 | 0                                 | 0                                    | 0                                 |
| Infrastructure Upgrades and<br>Replacement (30020) <sup>2</sup> | 6,723,312           | 0                                 | 0                                 | 0                                    | 0                                 |
| <b>Total Transfers In</b>                                       | <b>\$17,428,219</b> | <b>\$1,298,767</b>                | <b>\$19,498,767</b>               | <b>\$1,298,767</b>                   | <b>\$1,298,767</b>                |
| <b>Total Available</b>                                          | <b>\$17,457,456</b> | <b>\$1,298,767</b>                | <b>\$31,915,044</b>               | <b>\$1,298,767</b>                   | <b>\$1,298,767</b>                |
| <b>Total Expenditures<sup>3</sup></b>                           | <b>\$5,041,179</b>  | <b>\$1,298,767</b>                | <b>\$31,915,044</b>               | <b>\$1,298,767</b>                   | <b>\$1,298,767</b>                |
| <b>Total Disbursements</b>                                      | <b>\$5,041,179</b>  | <b>\$1,298,767</b>                | <b>\$31,915,044</b>               | <b>\$1,298,767</b>                   | <b>\$1,298,767</b>                |
| <b>Ending Balance<sup>4</sup></b>                               | <b>\$12,416,277</b> | <b>\$0</b>                        | <b>\$0</b>                        | <b>\$0</b>                           | <b>\$0</b>                        |

<sup>1</sup> Miscellaneous revenue represents rebates and refunds received during FY 2021.

<sup>2</sup> Represents transfers from Fund 30010, General Construction and Contributions, and Fund 30020, Infrastructure Upgrades and Replacement, to consolidate all Energy and Environmental Projects within Fund 30015.

<sup>3</sup> In order to account for revenues and expenditures in the proper fiscal year, an audit adjustment has been reflected as an increase of \$200.05 to FY 2021 Total Expenditures to record an expenditure accrual. There was an offsetting adjustment to the *FY 2022 Revised Budget Plan* as a result of this adjustment. The project affected by this adjustment is 2G51-046-000, EIP – Parks Invasive Management Area Program. The Annual Comprehensive Financial Report (ACFR) reflects all audit adjustments in FY 2021. Details of the audit adjustments were found in Attachment VI of the *FY 2022 Mid-Year Review*.

<sup>4</sup> Capital projects are budgeted based on the total project costs. Most projects span multiple years, from design to construction completion. Therefore, funding for capital projects is carried forward each fiscal year, and ending balances fluctuate, reflecting the carryover of these funds.



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### SUMMARY OF CAPITAL PROJECTS

| Project                                                     | Total Project Estimate | FY 2021 Actual Expenditures | FY 2022 Revised Budget | FY 2023 Advertised Budget Plan | FY 2023 Adopted Budget Plan |
|-------------------------------------------------------------|------------------------|-----------------------------|------------------------|--------------------------------|-----------------------------|
| Community - Annandale Urban Park (PR-000149)                | \$363,250              | \$0.00                      | \$0.00                 | \$363,250                      | \$363,250                   |
| Community - CECAP (2G02-033-000)                            | 1,675,740              | 269,554.37                  | 1,406,185.21           | 0                              | 0                           |
| Community - Energy Action Fairfax (EAF) (2G02-030-000)      | 319,723                | 0.00                        | 319,722.66             | 0                              | 0                           |
| Community - HomeWise Outreach Program (GF-000057)           | 280,000                | 247.00                      | 183,753.00             | 96,000                         | 96,000                      |
| Community - NVSWCD Intern Program (2G02-031-000)            | 7,115                  | 7,115.00                    | 0.00                   | 0                              | 0                           |
| Contingency (2G02-034-000)                                  |                        | 0.00                        | 120,518.08             | 0                              | 0                           |
| EIP - Composting Pilot (2G02-027-000)                       | 104,600                | 945.00                      | 91,855.00              | 11,800                         | 11,800                      |
| EIP - DPMM Green Intern (2G02-028-000)                      | 25,000                 | 0.00                        | 25,000.00              | 0                              | 0                           |
| EIP - DPMM Supply Chain GHG Emissions (2G02-037-000)        | 50,000                 | 0.00                        | 50,000.00              | 0                              | 0                           |
| EIP - DVS Pollinator Meadow (GF-000060)                     | 45,515                 | 45,295.18                   | 219.82                 | 0                              | 0                           |
| EIP - DVS Water Fountains (GF-000067)                       | 36,400                 | 0.00                        | 36,400.00              | 0                              | 0                           |
| EIP - Green Bank Initiatives (2G02-039-000)                 | 300,000                | 0.00                        | 300,000.00             | 0                              | 0                           |
| EIP - Natural Landscaping (GF-000058)                       | 335,000                | 43,879.77                   | 291,120.23             | 0                              | 0                           |
| EIP - NVSWCD CAP Program (2G02-036-000)                     |                        | 75,000.00                   | 75,000.00              | 0                              | 0                           |
| EIP - Park Bottle Filling Stations (PR-000150)              | 97,290                 | 0.00                        | 0.00                   | 97,290                         | 97,290                      |
| EIP - Parks Bike to Parks Pilot (PR-000140)                 | 60,000                 | 57,942.00                   | 2,058.00               | 0                              | 0                           |
| EIP - Parks Invasive Management Area Program (2G51-046-000) |                        | 298,416.27                  | 416,329.26             | 350,000                        | 350,000                     |
| EIP - Parks Magnolia Bog Restoration (PR-000130)            | 86,000                 | 0.00                        | 86,000.00              | 0                              | 0                           |
| EIP - Parks Meadow Restorations (PR-000131)                 | 269,328                | 90,244.12                   | 179,084.24             | 0                              | 0                           |
| EIP - Parks Pool UV Replacement (PR-000143)                 | 46,400                 | 0.00                        | 46,400.00              | 0                              | 0                           |
| EIP - Parks Solar Panels Support (2G51-047-000)             | 50,000                 | 0.00                        | 50,000.00              | 0                              | 0                           |
| EIP - Parks Sully Woodlands Center (PR-000139)              | 250,000                | 0.00                        | 250,000.00             | 0                              | 0                           |
| EIP - Parks Watch the Green Grow (2G51-045-000)             | 81,500                 | 6,739.77                    | 34,760.23              | 40,000                         | 40,000                      |
| EIP - Parks Water Chestnut Control (2G51-048-000)           | 102,927                | 0.00                        | 0.00                   | 102,927                        | 102,927                     |
| EIP - Parks Water Smart Controls (PR-000138)                | 138,000                | 0.00                        | 138,000.00             | 0                              | 0                           |
| EIP - Permeable Athletic Courts (GF-000059)                 | 156,000                | 0.00                        | 156,000.00             | 0                              | 0                           |

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### SUMMARY OF CAPITAL PROJECTS

| Project                                            | Total Project Estimate | FY 2021 Actual Expenditures | FY 2022 Revised Budget | FY 2023 Advertised Budget Plan | FY 2023 Adopted Budget Plan |
|----------------------------------------------------|------------------------|-----------------------------|------------------------|--------------------------------|-----------------------------|
| EIP - Recycling Education (2G02-040-000)           | 59,500                 | 0.00                        | 0.00                   | 59,500                         | 59,500                      |
| EIP - Zero Waste Initiatives (2G02-032-000)        | 100,000                | 0.00                        | 100,000.00             | 0                              | 0                           |
| Energy - Energy Contracts (ESCO) (2G02-035-000)    | 12,363,823             | 0.00                        | 12,363,823.00          | 0                              | 0                           |
| Energy - EV Stations (GF-000063)                   | 3,224,192              | 49,770.75                   | 2,996,421.19           | 178,000                        | 178,000                     |
| Energy - FMD Retrofits (GF-000064)                 | 8,995,668              | 1,404,473.97                | 7,591,193.79           | 0                              | 0                           |
| Energy - LED Streetlights (GF-000065)              | 4,095,496              | 2,116,798.15                | 1,978,697.59           | 0                              | 0                           |
| Energy - Parks Historic Houses (PR-000128)         | 127,500                | 0.00                        | 127,500.00             | 0                              | 0                           |
| Energy - Parks Lighting (PR-000135)                | 381,609                | 127,253.55                  | 254,355.78             | 0                              | 0                           |
| Energy - Parks Retrofits (PR-000136)               | 797,151                | 447,498.44                  | 349,652.79             | 0                              | 0                           |
| Energy - Parks Unstaffed HVAC Controls (PR-000129) | 45,000                 | 0.00                        | 45,000.00              | 0                              | 0                           |
| Reserve for JET Recommendations (2G02-038-000)     | 1,850,000              | 5.48                        | 1,849,994.52           | 0                              | 0                           |
| <b>Total</b>                                       | <b>\$36,919,727</b>    | <b>\$5,041,178.82</b>       | <b>\$31,915,044.39</b> | <b>\$1,298,767</b>             | <b>\$1,298,767</b>          |