BOS-SB Joint Environmental Policy Meeting

Update

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April 2, 2019
BOS – SB Joint Environmental Policy Meeting

Purpose:
• Overview of *Informational Matrix*
• Examples of existing collaboration both in and out of the classroom
• Exploring additional opportunities for collaboration
# Informational Matrix Overview – Part 1

## PART 1: Environmental Vision

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks and Ecological Resources</td>
<td>Parks, trails, and green space provide habitat and other ecological resources that promote the physical and mental well-being of residents through supporting healthy lifestyles and allowing for interaction with our natural environment. A comprehensive county trails system, such as the Cross-County and W&amp;OD Trails, can provide means for environmentally responsible transportation. Ecological resources that include the soil, water, air, plants, animals, ecosystems and the services they provide are considered natural capital and green infrastructure. The public, or ecosystem, services provided by this green infrastructure are often more cost-effective than the engineered alternatives, and thus are managed as any other infrastructure or capital asset through deliberate inventory, planning, maintenance, enhancement, and restoration to ensure healthy, high functioning, and resilient ecosystems and environment. Maintaining healthy, natural ecosystems is a priority of Fairfax County.</td>
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<tr>
<td>Climate and Energy</td>
<td>The county will continue its leadership and commitment to promote and encourage energy efficiency and conservation efforts and renewable energy initiatives by employees, employers and residents. The county will work with local authorities, businesses, and residents to encourage sustainable reductions of the county's geographical emissions that will contribute to achieving the targets as identified by the Cool Counties Climate Stabilization Declaration and the Metropolitan Washington Council of Governments. The county also will continue to support attainment of air quality through regional planning and action.</td>
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<tr>
<td>Environmental Stewardship</td>
<td>An informed community works together with Fairfax County and its partners to care for and responsibly manage our treasured natural resources. In partnership, Fairfax County will continue to coordinate and promote education and outreach programs that encourage personal stewardship and promote initiatives at a countywide level.</td>
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# Informational Matrix Overview – Part 2

## PART 2: Environmental Vision Service Areas

### SERVICE AREA: CLIMATE AND ENERGY

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Goals</th>
<th>Targets</th>
<th>Existing Collaboration</th>
<th>Proposed Collaboration</th>
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</thead>
</table>
| Energy Use and Efficiency | Reduce electricity and natural gas use in existing county facilities and operations. | Reduce kBTU by 20% from 2019 to 2029, equivalent to a reduction of about 2% per year over the 10-year period. | • FCC Environmental Coordinator and FCPS Energy Manager check in periodically.  
• Invitations to FCPS team meetings extended to FCPS Energy Manager.  
• FCPS and FCG are members of VEPGA and NOVEC Customer Group. | Include FCPS Energy Manager on FCPS Energy Team meeting distribution list. |
| Green Buildings       | Ensure that new construction and major renovations of county facilities are energy- and water-efficient. | Achieve LEED Silver on all new facility construction, additions and renovations with an occupied area greater than 10,000 square feet. | • FCPS and FCG use different design standards. FCPS designs to CHPS (Collaborative for High Performance Schools), while FCG designs to LEED.  
• FCPS Office of Design and Construction is the liaison between FCPS and Fairfax County. | No change anticipated. |
| Innovative Energy Solutions | Reduce fossil fuel consumption through the application of innovative concepts and technologies. | Implement a rooftop solar pilot project at the Springfield Warehouse capable of generating electricity equivalent to the warehouse’s expected annual electricity consumption. | • Both FCPS and FCG considering use of solar power purchase agreements (PPAs).  
• FCPS draft PPA RFP, slated for the early 2019 release, provides for FCPS projects.  
• FCPS DPMM has solicited input on draft PPA RFP from FCPS Energy Manager. | • Continue to work with FCPS on solar procurement.  
• Share best practices and training opportunities. |
Existing Collaboration
Wastewater Management

DPWES Wastewater Education
• HS science fair project assistance
• Noman Cole Pollution Control Plant tours
• Lecture workshops
• Educational videos
  • Channel 16 Video Inventory
    ❖ Where Does the Flow Go? (ES)
    ❖ Wastewater Management (HS)
    ❖ Can the Grease (PSA; student-produced)
    ❖ Don’t Flush your Medications (PSA)
    ❖ Preventing Sewer Backups (PSA)
Existing Collaboration
Wastewater Management (Con’t)

Sewer Science Labs
- DPWES ecologists, Noman Cole
  Pollution Control Plant operators
  visit FCPS science classrooms
- Students create and treat
  “wastewater,” and learn about the
  municipal wastewater treatment
  process
- 17,500 HS students, 70 teachers
  have participated
- Expanding to elementary and
  middle schools
Existing Collaboration
Stormwater Management

• Citizen Scientist Floatable Monitoring Program
  • DPWES ecologists train ES students and teachers in data collection and watershed monitoring

• Bioretention planting events
  • DPWES ecologists and ES students plant vegetation on school campuses to reduce stormwater runoff

• Stream Crime Lab Investigation
  • DPWES ecologists teach HS students how to identify and track pollutants in watershed
Existing Collaboration
Urban Forestry

• Students and DPWES staff participate in native tree plantings at FCPS facilities

• DPWES expanding program to include classroom-based education across all FCPS school levels

Mantua ES Students, Urban Forestry Manager Plant Native Trees on Campus
Existing Collaboration
Trades and Labor Recruitment

HS Graduate Pilot Program
• DPWES partnered with Mt Vernon HS Career Specialist to recruit
• Participants assessed and placed in limited-term positions
• Candidates allowed to compete for permanent positions
• Successful pilot program led to workshop to expand program

Program Expansion
• Onsite Workshop with 27 FCPS HS Career Specialists
• Discussed available positions and career opportunities
• Developing protocol for handling referral, assessment, and placement of students in limited-term internships
Proposed Collaboration

Stormwater Management

Increase collaborative efforts on MS4 permit compliance through early engagement and holistic discussions on planned projects to build more sustainable stormwater infrastructure and enhance the future management of runoff from school sites resulting in improved water quality.

Legislation

Identify matching items on the BOS and SB Legislative Agendas, and work together to support these initiatives.
Proposed Collaboration – Climate and Energy

Planning and Coordination

Schedule biannual meetings between the FCPS Energy Manager and the FCG Energy Team.

Procurement

Collaborate on large procurement items, such as the solar PPA and electric vehicle charging stations.

Awareness and Engagement

Cross-promote events, training opportunities, and awareness campaigns between FCG and FCPS staff.
Consideration

Collaboration on more complex issues in areas related to climate, energy and environment, which are still emerging programs in FCG and FCPS, requires leadership direction from both organizations to ensure success.
For More Information

One Fairfax
Fairfax County Environmental Vision
Fairfax County Operational Energy Strategy
Sustainability Initiatives
Green Buildings
Cool Counties
Energy News
DPWES Educational Resources