

**Implementation Table
October 27, 2015**

Solid Waste and Recycling						
Goal 1: By June 1, 2016, DPW will provide an Existing Conditions Report						
ID	Strategy	Rationale	Cost	Additional Information and Resources Needed	Primary Responsibility	Target Date: Start (S) Complete(C)
SW 1.A	Identify the composition of the waste stream.	Understanding the disposal habits and trends (for example, how much paper is recycled or thrown away) allows us to identify opportunities and set target goals.	med cost	Comparison of College Park to national and local (comparatively sized) cities. Cost of 3rd party audit.	DPW	S: 11/2015 C: 6/2016
SW 1.B	Identify annual total tonnage and cost of each category of solid waste collected and total cost of recycling collected (including separate total costs for leaf collection and yard trim collection)--allocated on a per household and per ton basis. Costs will include all labor costs and vehicle expenses.	Understanding the disposal costs allows us to prioritize opportunities based on what strategies have the largest returns. Costs will include all labor costs and vehicle expenses.	low cost		DPW	S: 11/2015 C: 6/2016
SW 1.C	Compare College Park tonnage per household to two comparable communities and one community with very low household solid waste tonnage and very high recycling rates.	To better gauge if waste and recycling volumes are higher or lower than comparable municipalities and to set realistic but ambitious goals.	low cost	Data from other municipalities	DPW	S: 11/2015 C: 6/2016
Goal 2: Using 2015 FY tonnage data as a baseline, reduce solid waste per household by 25 percent and increase the recycling rate to 60 percent by July 1, 2018.						
SW 2.A	Examine costs and benefits of code changes, such as prohibiting recyclable material in waste carts; providing larger or additional recycling carts; and limiting or charging for bulk pick-ups.	Evaluate if our current policies encourage actions that make it more difficult to reach the plan goals.	low cost	Model policies/ordinances; potential costs and savings.	City Manager's Office; DPW; DPS	S: 12/2015 C: 09/2016
SW 2.B	Develop a marketing / educational campaign for residents on the environmental and cost savings of reducing solid waste.	Increases transparency and stakeholder buy-in. The guide will be a comprehensive source to living a sustainable lifestyle in College Park.	med cost	Information on cost & savings from reducing solid waste, best-practices for marketing, existing solid waste and recycling regulations. Likely need additional marketing resources.	City Manager's Office; DPW; Council	S: 01/2016 C: 09/2016

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Goal 2: Using 2015 FY tonnage data as a baseline, reduce solid waste per household by 25 percent and increase the recycling rate to 60 percent by July 1, 2018.

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SW 2.C	Create financial incentives for residents and explore the pros and cons of other policies that will change behavior, and consider pledging savings toward a new or popular community programs.	Incentives can be an effective way to change behavior. Cost saving realized by decrease solid waste cost should be directed to improving community life.	low cost	Method of calculating savings; incentives which are appropriate and contribute to related goals. Possibly an intern.	City Manager's Office; Council	S: 01/2016 C: 09/2016
SW 2.D	Reduce or remove food waste from the solid waste stream by promoting home food composting and explore the possibility of a pilot food waste. collection program	Food waste can easily and effectively be composted on-site. Eliminating compostable material from the waste stream can result in lower waste disposal cost.	med cost	Research costs, savings and implementation of similar programs in Maryland or other states. Intern to develop program	DPW; Council	S: 01/2016 C:09/2016
SW 2.E	Suggest that civic associations nominate a Sustainability Ambassador to promote waste reduction and increase recycling in their neighborhood.	Fostering leadership can increase stakeholder buy-in and eliminate barriers to reaching residents.	low cost	Create an application process and training / orientation program for participants.	Sustainability Task Force; Planning	S: 01/2016 C: 09/2016
SW 2.F	Create waste reduction trainings for employees.	This may increase waste reduction and stakeholder buy-in.	low cost	Waste and recycling rates for city buildings.	HR; All Depts.	S: 09/2016 C: 09/2018

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Buildings and Public Areas						
Goal 1: Reduce electricity and natural gas use by 15 percent per square foot by 2018 FY and by 25 percent by 2022 FY from the per square foot levels in 2014 FY baseline year (per Council Resolution 13-R-26)						
ID	Strategy	Rationale	Cost	Additional Information and Resources Needed	Primary Responsibility	Target Date: Start (S) Complete(C)
B&PA 1.A	Complete energy audits for Davis Hall, the Fleet Garage, and the Youth and Family Services buildings in 2015 and complete a lighting analysis and upgrade for the Parking Garage in 2015.	Energy audits allow building managers to identify areas of energy savings.	low cost	Data and recommendations from MEA Grant.	Planning	S: Ongoing C: May 2016
B&PA 1.B	Conduct Energy Star Treasure Hunts in City Hall, Public Services, Fleet Garage, Davis Hall, YFS, and Old Parish House and educate staff on best practices.	Including staff increases buy-in and may smooth implementation process of new recommendations. A rewards program also incentivizes behavior.	low cost	MEA Grant and report from Treasure Hunt	Planning	S: Ongoing C: 11/2015
B&PA 1.C	Examine the cost-benefit analyses from the energy audits and evaluate the recommendations for efficiency improvements.	Recommended improvements identified in the energy audit should be implemented to prioritize the highest energy saving over the shortest time with the fastest payback.	med cost	Economic costs and saving from energy saving measures	DPW; Planning	S: 11/2015 C: 05/2016
B&PA 1.D	Develop a building operations and maintenance plan; emphasize low cost and no cost measures such as those recommendations in the Pepco Commercial & Industrial Energy Savings Program.	Ensure that all preventive maintenance is done and staff are trained to maintain all systems not contracted to outside companies.	med cost	Identify resources needed to implement low cost/ no cost measures	DPW	S: 11/2015 C: 6/2016
B&PA 1.E	Use Portfolio Manager (www.energystar.gov) to calculate and prominently post monthly energy usage on all buildings, and hold competition for greatest reduction in usage.	Visible reminders of energy usage may encourage efficiency.	low cost	determine most efficient way to gather and maintain data	Planning; Finance	S: 11/2015 C: Ongoing
B&PA 1.F	Create Green Office standard that includes practices regarding lighting, computer shut-down (see UMD example).	This reiterates the City's commitment to sustainability and can increase stakeholder buy-in.	low cost	Example standards	HR; City Manager's Office	S: 11/2015 C: 3/2016
B&PA 1.G	Create employee rewards program based on energy savings.	Including staff increases buy-in and may smooth implementation process of new recommendations. A rewards program also incentivizes behavior.	low to med cost	Cost of energy savings must be calculated. Policy should consider the "value" of reduction, not necessarily what the city pays for electricity	HR	S: 12/2015 C: Ongoing

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ID	Strategy	Rationale	Cost	Additional Information and Resources Needed	Primary Responsibility	Target Date: Start (S) Complete(C)
B&PA 1.H	Adopt a LEED or equivalent standard for new city buildings and major renovations when feasible.	Adhering to a LEED standard ensures a minimum level of environmentally responsible city development.	high cost	Example standards	Council; City Engineer	S: 12/2015 C: Ongoing
B&PA 1.I	Adopt a policy to install LED (or more efficient) lighting for all new or replacement pedestrian lights.	Newer technology should be energy efficient and cost-efficient.	low to med cost	Monthly data is available through Pepco. Baseline measurements must be established. Compare cost and usage of new Berwyn pedestrian lights compared to pedestrian lights on Lackawanna.	Planning	S: 11/2015 C: 06/2016
Goal 2: Generate 20 percent of electricity for City facilities by renewable sources by 2018 (per Council Resolution 13-R-27: see Appendix 3)						
B&PA 2.A	Evaluate DPW buildings, YFS building, and Parking Garage for best locations to install solar power and explore funding via an MEA grant or long- term lease arrangement.	Potential area of energy and cost savings. Existing grants could be used to finance city energy savings.	low cost	Completed energy audit, recommendations and cost/benefit analysis of recommendations; Obtain quotes from vendors.	Planning	S: Ongoing C: 11/2016
B&PA 2.B	Evaluate feasibility of geo-thermal for major renovations and new City facilities.	Potential area of energy and cost savings. Innovative practice could serve as a demonstrative project.	low cost	Feasibility study, department feedback.	Planning	S: Ongoing

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Buildings and Public Areas

Goal 3: Maintain or increase the City's maintained tree canopy by planting in appropriate street and park locations and investigate incentivizing additional plantings on private property in order to compensate for the removal of large trees.

ID	Strategy	Rationale	Cost	Additional Information and Resources Needed	Primary Responsibility	Target Date: Start (S) Complete(C)
B&PA 3.A	Support the Tree & Landscape Board's update of the <i>City's Tree Inventory</i> (last updated in 2013). Provide resources to maintain a GIS database of trees maintained by the city, city right of way boundaries, and location of underground and above ground utilities, and other information that should be considered in identifying appropriate tree locations.	Update will help determine where to plant new trees. Urban tree canopy benefits include: managing storm water runoff, reducing heat island, providing shade and improving health.	med cost	Develop position description for intern one semester per year and recruit from UMD.	DPW; Tree and Landscape Board	S: Ongoing C: Ongoing

Goal 3: Maintain or increase the City's maintained tree canopy by planting in appropriate street and park locations and investigate incentivizing additional plantings on private property in order to compensate for the removal of large trees.

B&PA 3.B	Utilize data from the Tree Inventory update to develop a five-year plan to increase the number of new street trees in appropriate locations.	Plan will ensure that city meets goals set in the update to Vegetation Management Plan	med cost	Best practices to increase and maintain urban tree canopy	DPW	S: 07/2016 C: Annually until 2020
B&PA 3.C	Develop incentive plan to help residents plant new trees and maintain significant trees and / or policy protecting significant trees on private property.	Policies may help maintain the City's tree canopy and meet goals of the update to the Vegetation Management Plan	low cost	Best practices to increase and maintain urban tree canopy; Sample tree ordinances in surrounding communities and Tree City USA requirements.	DPW; Tree and Landscape Board; Council	S: 01/2016 C: 12/2016

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Buildings and Public Areas						
Goal 4: Work with State, County and University resources to improve City Storm water quality and reduce the occurrence and impact of flooding events.						
ID	Strategy	Rationale	Cost	Additional Information and Resources Needed	Primary Responsibility	Target Date: Start (S) Complete(C)
B&PA 4.A	Educate residents and businesses about existing subsidies to reduce stormwater runoff from private property, thereby reducing volume in the public stormwater infrastructure.	Educational material and incentives raise awareness of environmental issues and increase stakeholder buy-in.	low cost	Information needs to be compiled in a user-friendly format. Possible work for an intern.	Planning; City Engineer	S:01/2016 C: Ongoing
B&PA 4.B	Partner with schools or environmental groups to conduct annual water quality testing of main streams in the City.	Capturing water quality data in the short term will allow the City to measure the effectiveness of SWM policies in the future.	low cost	Collaborate with University to identify resources available to complete this task	Planning; City Engineer	S:01/2016 C: Ongoing
B&PA 4.C	Identify existing stormwater facilities within the City that are in need of maintenance and work with the owners (usually the County) to resolve issues. Consider use of Green Street infrastructure to improve infiltration and water quality.	Reducing flood risk, standing water and other facility failure has potential cost savings and environmental benefit	high cost	Existing gaps in storm water infrastructure; identify priority areas to target investment	DPW	S:01/2016 C: Ongoing
B&PA 4.D	Identify specific areas in the Paint Branch and Indian Creek watersheds that need stormwater improvements and seek funding partners to implement them.	Addressing flood events, standing water and other facility failure has potential cost savings and environmental benefit	high cost	Existing gaps in infrastructure; identify priority areas to target investment. Identify grant resources.	DPW; City Engineer; Planning	S:01/2016 C: Ongoing
Goal 5: Develop a plan for removal of invasive plants from certain public areas.						
B&PA 5.A	Request the Tree and Landscape Board or the Committee for a Better Environment identify a public area for a pilot invasive plant removal project, and develop a plan to clear the area of invasive plants.	High levels of invasive plants reduce the diversity and health of plants and animals in public areas	med cost	Research successful programs in the area; outreach to volunteers to assist with the project on an on-going basis.	DPW; Community Development	S: 03/2016 C: 12/2016

**Implementation Table
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Citywide Policies and Events						
Goal 1: The FY17 budget will include funding for a consultant to lead the City's process to update or acquire software that improves workflow and works across relevant departments.						
ID	Strategy	Rationale	Cost	Additional Information and Resources Needed	Primary Responsibility	Target Date: Start (S) Complete(C)
CP&E 1.A	Create a Workflow Task Force (an inter-departmental group) to conduct a needs assessment for workflow improvements.	To prepare for a consultant identify potential workflow improvements, technology and resource needs	med cost	Specific needs and concerns of department. Identification of common concerns and opportunities streamline work across departments.	City Manager's Office; IT	S: 01/2016 C: 06/2016
1.B	Based on the results needs assessment in CP&E 1.A develop an RFP for a consultant who will develop strategies to improve and integrate workflow.	Current practices do not take advantage of technologies and processes that are more efficient and result in better service.	low cost	Model processes and appropriate technologies. Implementation costs for a consultant and for new technologies will be high in the short-run	City Manager's Office, Workflow Task Force; IT	S:03/2016 C: 07/2016
Goal 2: By January 1, 2016 adopt policies which would encourage higher recycling rates at all City-sponsored or approved events, and purchase a significant percentage of certified "green" office and cleaning products.						
CP&E 2.A	Develop a policy which requires that recycling containers are provided at all City events and are labeled so that it is easy to know what to recycle.	DPW already does this as a best practice but creating a policy reinforces the city's commitment to sustainability.	low cost	Capital cost for implementation.	DPW; City Manager's Office	S: 11/2015 C: 06/2016
CP&E 2.B	Create a recycling vision statement and requirement to recycle which can be added to contracts to rent city facilities or to gain a permit for street closings.	This reinforces the city's commitment to sustainability.	low	Sample statements.	DPW; City Manager's Office	S: 11/2015 C: 06/2016
CP&E 2.C	Adopt a "green preferred" purchasing policy that includes a goal to reduce consumption and establishes standards for "green" products, such as recycled content, appliance efficiency, toxicity, and other criteria.	DPW already does this as a best practice but codifying the practice demonstrates the city's commitment to sustainability.	med cost	Sample policies such as the UMD procurement policy (Appendix). Identify a standard to adopt (i.e. Green Seal), and provide statement to vendors regarding the City policy and standards.	DPW	S: 11/2015 C: 06/2016

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Citywide Policies and Events						
Goal 2: By July 1, 2016 adopt policies which would encourage higher recycling rates at all City-sponsored or approved events, and purchase a significant percentage of certified "green" office and cleaning products.						
ID	Strategy	Rationale	Cost	Additional Information and Resources Needed	Primary Responsibility	Target Date: Start (S) Complete(C)
CP&E 2.D	Develop a list that identifies suppliers for green products, particularly the most frequently purchased items (paper, printer toner, cleaning supplies).	This reinforces the city's commitment to sustainability.	med cost	Feedback from departments about what products they buy and from where.	DPW; City Manager's Office	S: 11/2015 C: 06/2016
CP & E 2.E	Develop and adopt Green Meeting Guidelines.	Green meeting guidelines establish guidance on how to manage printed material, food and beverages, recycling and meeting room selection for departments to green their operations.	low cost	Sample guidelines available from the U.S. Forest Service and others.	HR	S: 11/2015 C: 06/2016
Goal 3: By July 1, 2016 employees will be able to identify specific employee benefits and actions employees can take to help meet the City's goals.						
CP&E 3.A	Develop a standard policy for all buildings regarding: signage reminding employees how they can conserve energy; motion sensors for lights; low-flow devices; signage on office shut down actions. Post energy consumption for prior month and year-to-year for comparisons.	This policy will reinforce existing practices already in place within many departments and develop them in other departments. Sharing energy data may encourage employees to think about their personal stake in energy use.	low cost	Identify best practices to effectively share policies and energy consumption data (for example, using email or paper posting).	DPW; Planning	S: 12/2015 C: 06/2016
CP&E 3.B	Create a database of employee suggestions to improve sustainability and recognize innovative proposals. Add sustainability suggestions to awards program.	Foster employee buy-in and environmental leadership. Allows for a space for employees to share information	low cost	Explore appropriate format to make information accessible but requires low maintenance.	HR	S: 11/2015 C: 6/2016
CP&E 3.C	Identify gaps in the existing transportation benefits program (does not address biking, walking, etc.) so that more employees use it. Consider providing carpool matching, guaranteed ride home or other commuter services to employees. Consider developing a telework policy.	Address limitations of program to increase use	low cost	Look to employees for suggestions and incentives they would like to see.	HR; Finance; City Manager's Office	S: 11/2015 C: 06/2016
CP&E 3.D	Include sustainability as part of new employee orientation.	Fosters employee buy-in and environmental leadership; demonstrates commitment to sustainable city operations	low cost	Craft an orientation policy appropriate for all departments or a flexible policy which can be tailored to Departments	HR	S: 12/2015 C: 06/2015

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Goal 3: By July 1, 2016 employees will be able to identify specific employee benefits and actions employees can take to help meet the City's goals.						
ID	Strategy	Rationale	Cost	Additional Information and Resources Needed	Primary Responsibility	Target Date: Start (S) Complete(C)
CP&E 3.E	Host brown-bag conversations/ guest lecturers in sustainability for employees for on-going education.	Allows for on-going sustainability education for all employees; demonstrates commitment to sustainable city operations	low cost	Identify sustainability topics of interest to employees	HR	S: 12/2015 C: 12/2016
CP&E 3.F	Continue the Sustainability Task Force to promote sustainability practices within departments and offices and to periodically review the progress of the goals and strategies in this report	Smooths the implementation process of new recommendations.	med cost	Identify interested parties to participate in the task force. Task force membership should represent all city departments.	City Manager's Office, All Departments	S: 12/2015 C: Ongoing
Goal 4: Track all sustainability goals and outcomes on an annual basis, and track city operations greenhouse gas emissions on a triennial basis.						
CP&E 4.A	Sustainability Task Force (or similar entity) will provide an annual report on all sustainability metrics and a triennial report on greenhouse gas emissions to Council. Post reports on the City's website.	Reporting helps with accountability and enables adjustments to the plan based on results	low cost	Explore appropriate format to make information accessible but requires low maintenance	City Manager's Office	S: 12/2015 C: Ongoing
CP&E 4.B	Provide information regularly to all employees the status of sustainability-related goals, energy-saving tips, and other information.	Employees will better understand the impact of their actions and can help determine better ways to reach the goals	low cost	Identify best practices to effectively share sustainability related information.	HR; Planning	S: 12/2015 C: Ongoing
CP&E 4.C	Work with the University of Maryland to update the GHG inventory every three years using ICLEI (Local Governments for Sustainability) software, and to develop attainable GHG emission reduction goals.	Baseline measurement are needed in order to set cost effective, realistic and measurable goals. Reporting should be verifiable and replicable in later years.	low cost	Utilize the PALS program or interns from UMD to conduct update of GHG inventory every three years.	Planning; City Manager's Office	S: 12/2015 C: Ongoing

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Fleet and Transportation						
Goal 1: By FY17, the City will achieve a 10 percent increase in the average vehicle miles per gallon for all on-road vehicles in the city's fleet (FY15 baseline).						
ID	Strategy	Rationale	Cost	Additional Information and Resources Needed	Primary Responsibility	Target Date: Start (S) Complete(C)
F&T 1.A	Develop policies and practices regarding efficient vehicle operations (idling, route optimization, using the correct vehicle for the task, etc.).	Reduce greenhouse gas emissions.	low cost	Strategies for sensible driving policies and potential cost and fuel savings.	DPW	S: 11/2015 C: 06/2016
F&T 1.B	Ensure all vehicles receive regular maintenance and fuel MPG is monitored.	Preventative maintenance optimizes performance of vehicles.	low cost	Integrate existing software - GasBoy and Manager Plus.	DPW	S: 11/2015 C: Ongoing
F&T 1.C	Develop a green fleet purchasing policy that addresses fuel and energy efficiency as well as lifetime vehicle costs. Recognize that implementation costs could increase.	Reduce greenhouse gas emissions.	high cost	Data on the lifetime cost of vehicles is needed.	DPW	S: 11/2015 C: Ongoing
Goal 2: By July 2016, DPW will recommend the fuel type for heavy-duty vehicles.						
F&T 2.A	Provide a cost-benefit analysis of switching existing diesel vehicles to bio-diesel.	Reduce greenhouse gas emissions and improve air quality.	med cost	Data collection	DPW	S: 01/2016 C: 06/2016
F&T 2.B	Evaluate cost-benefit of purchasing heavy-duty vehicles that use natural gas or other non-petroleum fuels.	Reduce greenhouse gas emissions.	high cost	Data collection	DPW	S: 01/2016 C: 06/2016
Goal 3: By July 2016, DPW will provide the first annual report on the total cost to operate each vehicle, including annual mileage and/or operating hours, preventive maintenance performed, and vehicle downtime in order to optimize the strategic replacement of the City's fleet (including equipment).						
F&T 3.A	Clean up existing data files and formats used to track maintenance and create report templates with the relevant categories for all vehicles.	Enhanced data collection improves decision-making.	med cost	Training; data entry	DPW, IT	S: 11/2015 C: 03/2016