

Promoting Sustainable Cities and Urban Watersheds Throughout the Bay

*Proposal for the
Principals' Staff Committee and Executive Council
from the DC Chair*

*Principals' Staff Committee Meeting
June 27, 2013*

The Challenge

go from this...



to this...



...challenging, but possible.

Challenges

- Increased development makes stormwater runoff the fastest-growing source of pollution to the Bay and its rivers.
- Current pace to reduce urban pollution may not achieve Bay Partnership's 2017 and 2025 goals.
- Despite 30+ years of effort, urban loadings continue to grow and threaten to undermine progress in other sectors.



Challenges

- High cost of urban retrofits, complex permitting process, and limited financing tools impede local governments.
- \$15 billion estimate to implement state and local stormwater pollution strategies.

—*Chesapeake Bay Blue Ribbon Finance
Panel Report of 2004*—

- 60% (or \$9 billion) of this estimate is to retrofit stormwater management facilities in already-developed areas.



Innovative Leadership Examples

Learn from Others in the Bay Watershed

- Comprehensive Stormwater Management Program
District of Columbia
- Green Streets Legislation
Prince George's County, MD
- Green Streets/Green Towns/Green Jobs
Bay Trust and EPA Region 3
- Green Infrastructure Plan - linked to CSO control strategies
Lancaster, PA
- Greening Capitols
Richmond, VA

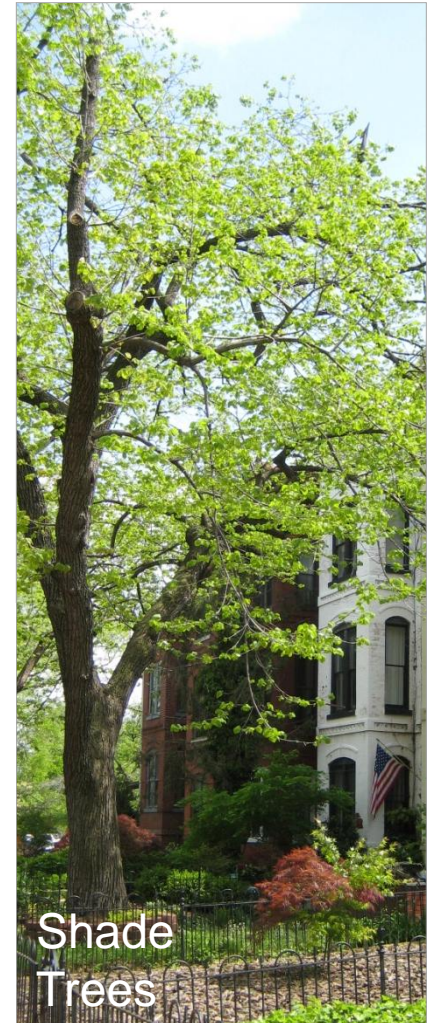
District's Implementation Strategy

- Voluntary Programs
- Financial Incentives
- Innovative Regulations
- Green Area Ratio

Voluntary and Incentive Programs

District of Columbia

RiverSmart Homes



Green Roof Incentive and Stormwater Fee Discount

District of Columbia



Single-family row house in Dupont Circle



Department of Interior, first of a six-wing plan



American Society of Landscape Architects



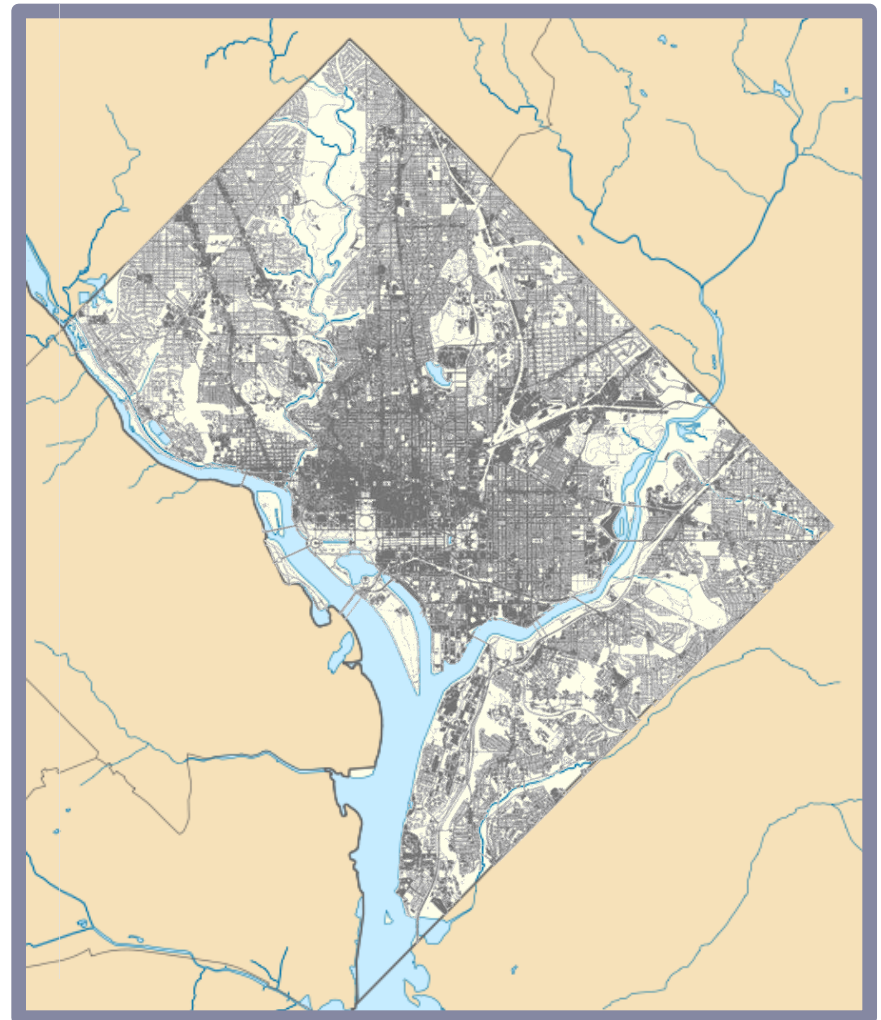
Pepco Utility Building near Whitehurst Freeway

Innovative Regulations

District of Columbia

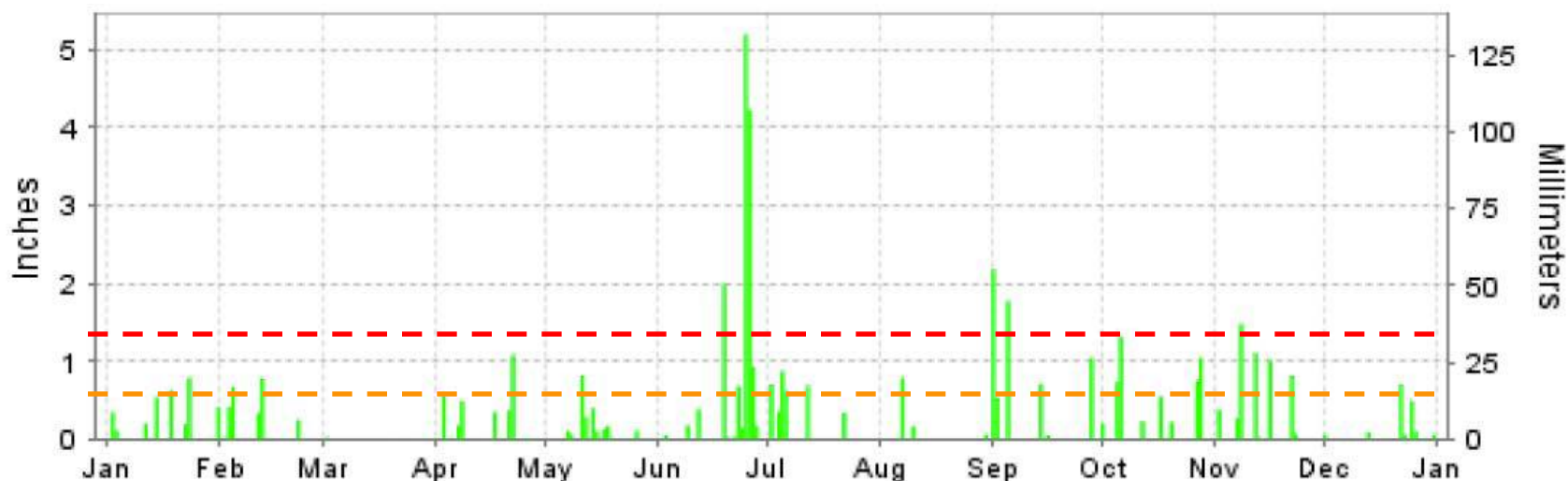
Turn stormwater management from a challenge into an asset.

- 43% of the District's land area is impervious.
- A single 1.2-inch storm produces about 525 million gallons of stormwater runoff.
- Regulated development is a critical part of the solution.



2006 Precipitation

District of Columbia



-- MS4 Requirement = 90th percentile event = 1.2-inches

-- Half of the Requirement = 0.6 inches

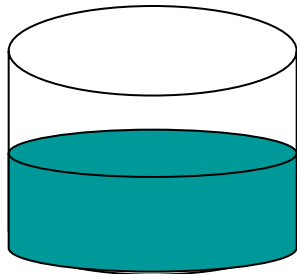
Precipitation Data, NOAA, Reagan National Airport, Arlington VA

Trading's Potential to Increase Retention

- 90% of storms in the District are less than 1.2 inches.
- Trading provides greater retention for small and average storms.

Example: 0.6-inch storm:

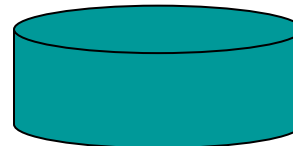
Strict On-site



5,000 gallons

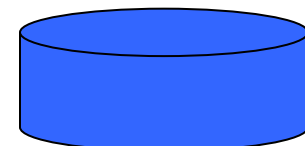
Trading

On-site



5,000

Off-site



5,000

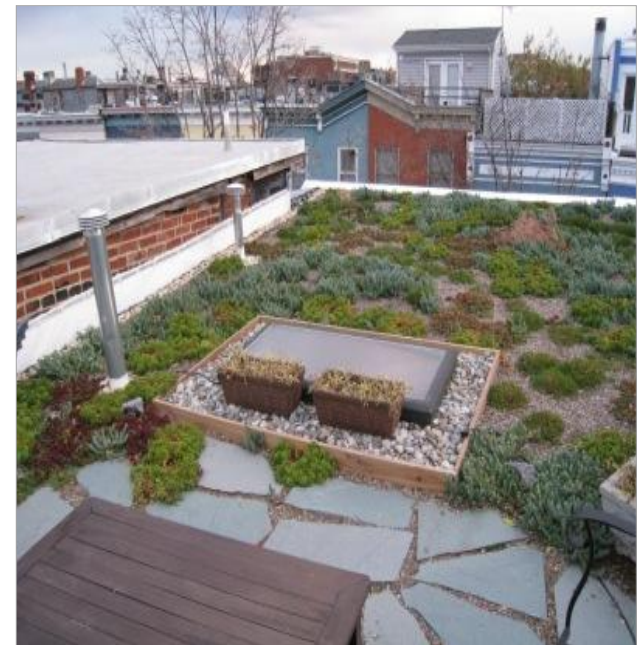
+ =
10,000 gallons

This scenario yields a 57% increase in annual retention.

Trading Maximizes Sustainability

Problem of imperviousness is an opportunity for trading to:

- Maximize cost savings and flexibility for regulated sites.
- Increase retention and accelerate restoration of waterbodies.
- Increase socioeconomic benefits through increased LID installations (health, aesthetics, environmental justice, green jobs).
- Create private market efficiencies to achieve other water quality requirements and goals.



Green Area Ratio



The Vision

Sustainable Cities Driving Sustainable Urban Watersheds

Chair Mayor Gray proposes an Urban Sector Sustainability Initiative, modeled on the *Sustainable DC Plan*, to install green infrastructure on a larger scale throughout the Bay watershed.

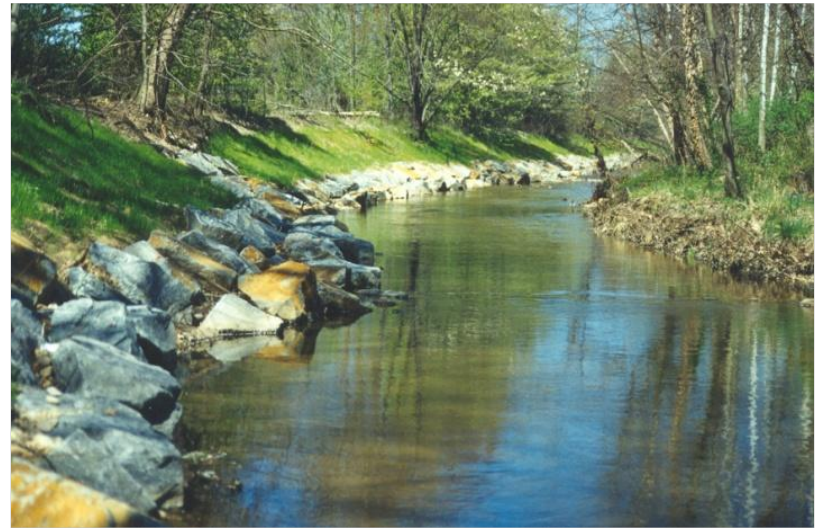
Municipalities will

1. Partner with EPA through the local government advisory committee to share successes and lessons learned.
2. Work with the Bay Program to adopt innovative approaches and develop new programs.
3. Engage local stakeholders to develop affordable solutions to meet local WIPs and TMDLs.

Sustainable Urban Watershed Initiative

Specific Goals

- Meet urban sector pollution-reduction commitments.
- Identify and support affordable and sustainable stormwater management techniques, especially for urban areas.
- Provide cities and towns with alternative financing tools.
- Create local benefits tied to Bay restoration: jobs, water quality, air quality, flood control.



Specific Actions

Sustainable Urban Watershed Initiative

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 - Share alternative financing tools—including full exploration of public-private partnerships.
 - Engage the Finance Center at UMD and others.

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Sustainable Urban Watershed Initiative

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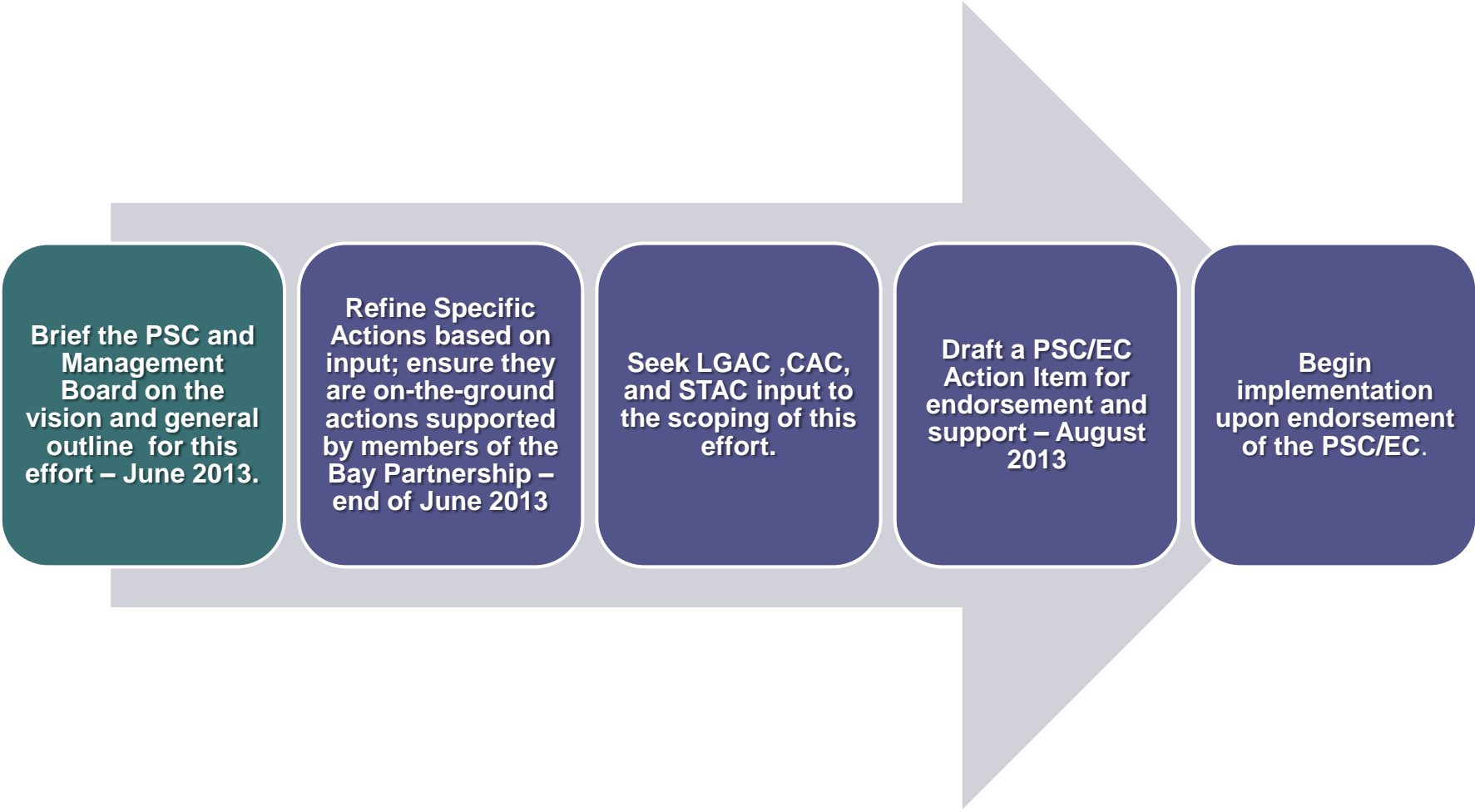
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3. Municipalities engage local stakeholders to develop affordable solutions to meet WIPs and TMDLs, using tools such as
 - Legislation
 - Permits
 - BMP manuals
 - Demonstration projects
 - Staff training
 - Public outreach

BAY PARTNERSHIP PROCESS STEPS:



Brief the PSC and Management Board on the vision and general outline for this effort – June 2013.

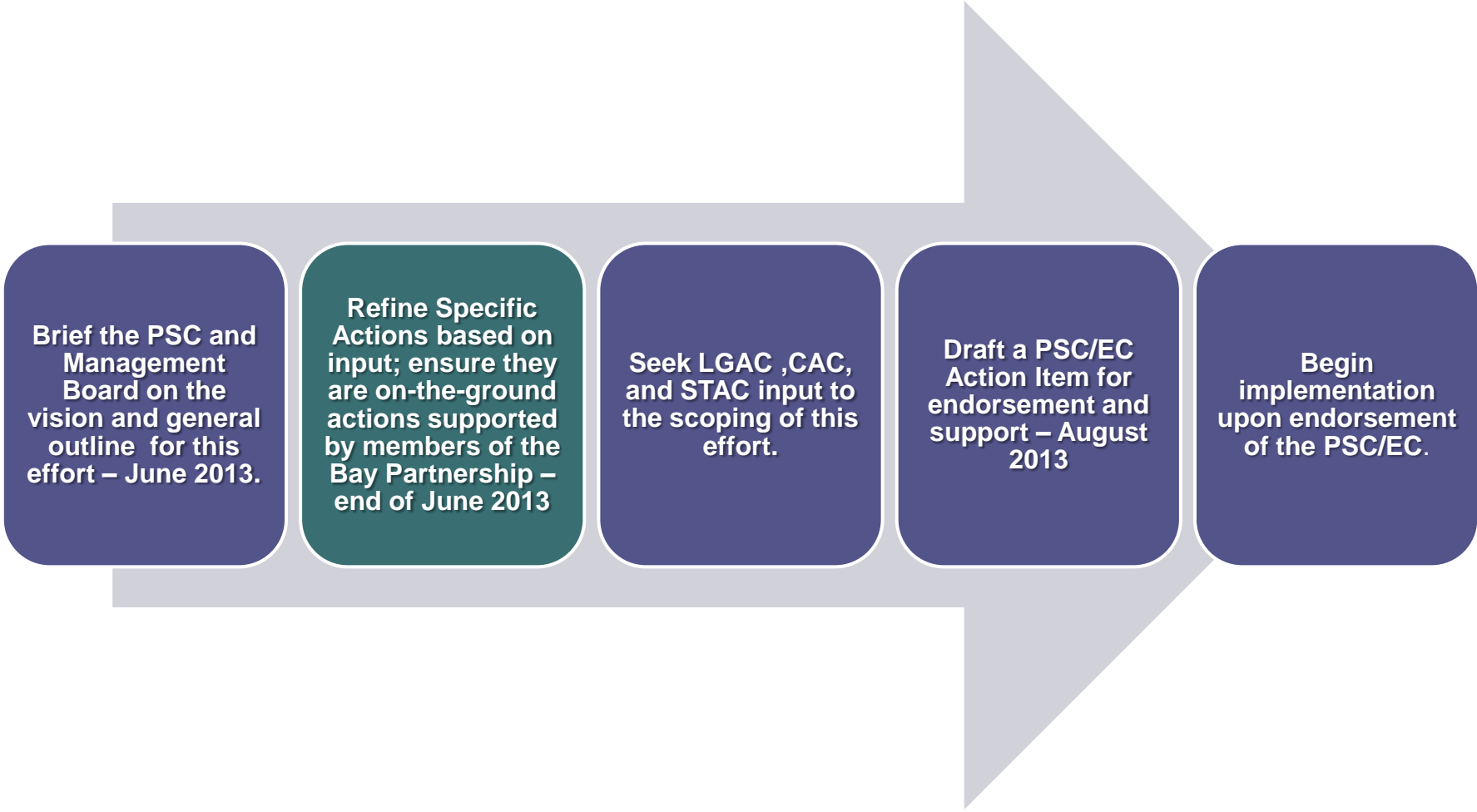
Refine Specific Actions based on input; ensure they are on-the-ground actions supported by members of the Bay Partnership – end of June 2013

Seek LGAC ,CAC, and STAC input to the scoping of this effort.

Draft a PSC/EC Action Item for endorsement and support – August 2013

Begin implementation upon endorsement of the PSC/EC.

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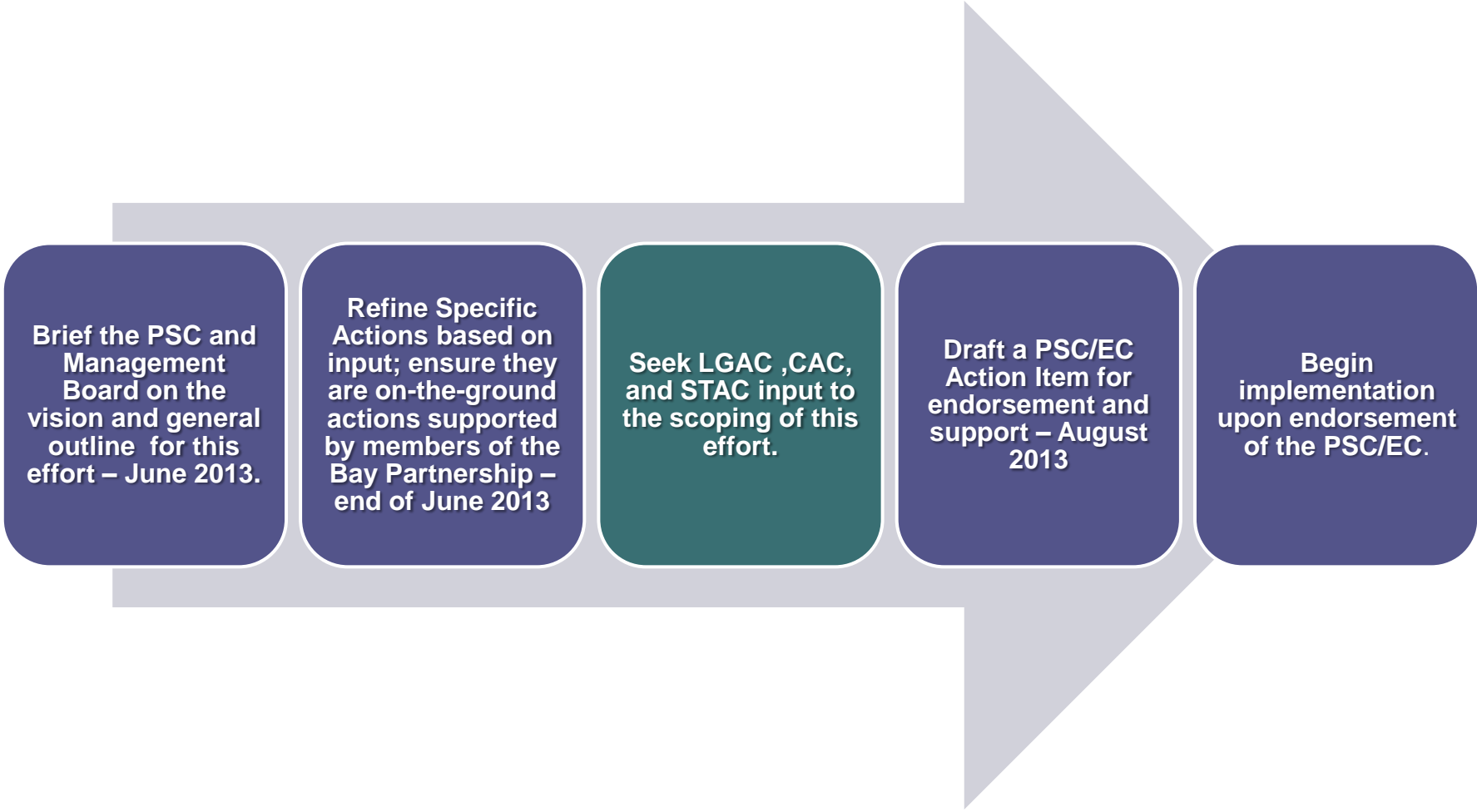
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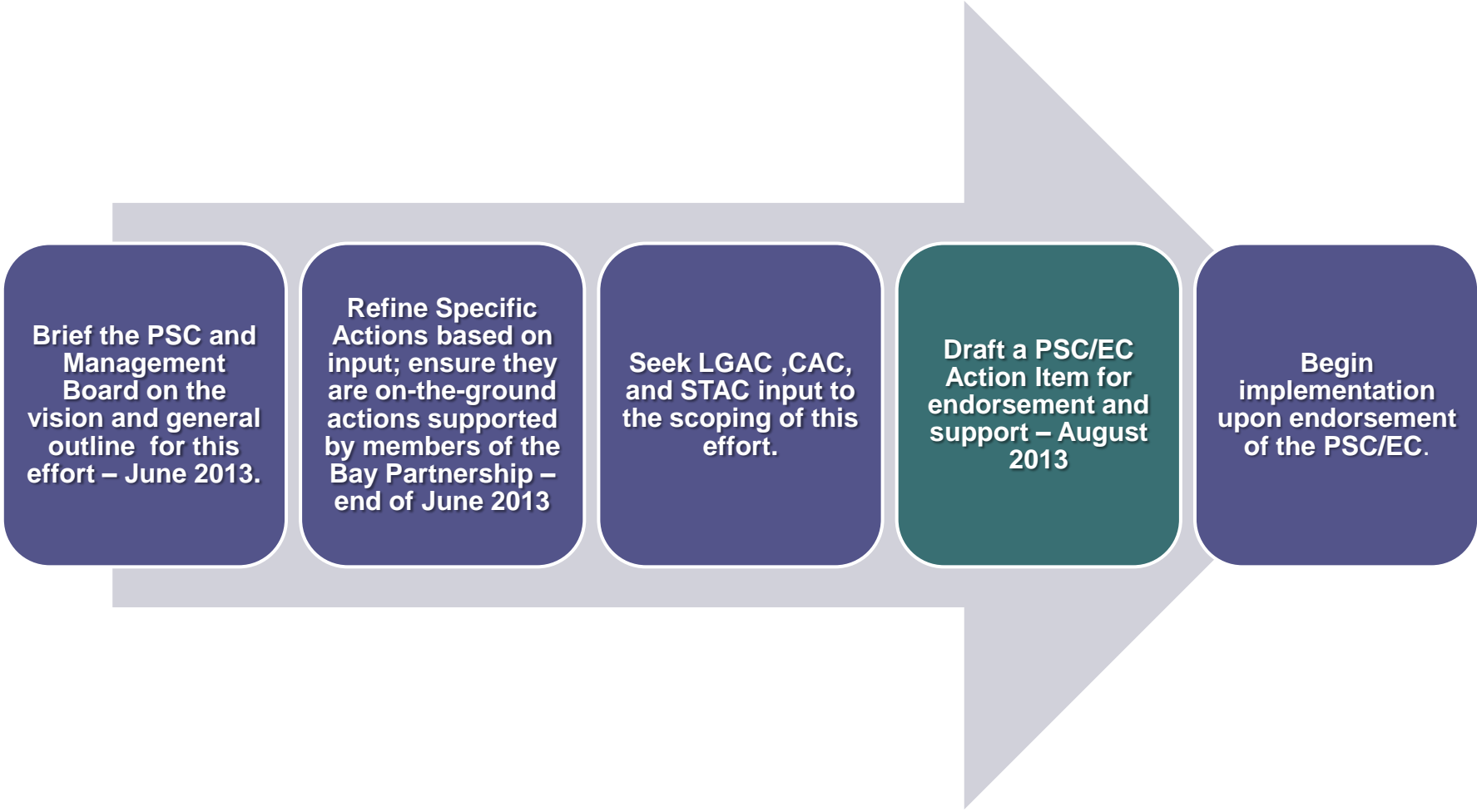
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Hamid Karimi
District Department of the Environment
1200 First Street NE, 5th Floor
Washington, DC 20002
202-535-2277
Hamid.Karimi@dc.gov