



## **AGENDA**

### **Environmental Policy Commission REGULAR MEETING**

**Monday, April 18, 2016**

**7:30 - 9:30 PM**

**City Hall, Room 2000 (Second Floor)**

- |                    |  |
|--------------------|--|
| <b>7:30 – 7:35</b> | <b>Welcome and Public Comments</b>   |
| <b>7:35 – 7:50</b> | <b>Staff Consent items and EPC updates</b>                                     |
| <b>7:50 – 8:15</b> | <b>Earth Day Report/EPC Activity (Natasha Andersen/Maureen Sturgill, RPCA)</b> |
| <b>8:15 – 9:00</b> | <b>Combined Sewer Overflow Planning (Lalit Sharma/Bill Skrabak)</b>            |
| <b>9:00 – 9:15</b> | <b>Urban Forestry Letter to Council (Susan Gitlin)</b>                         |
| <b>9:15 – 9:25</b> | <b>Agenda for next Work Session and full meeting</b>                           |
| <b>9:30</b>        | <b>Adjourn</b>   |



**Environmental Policy Commission April 18, 2016 Meeting  
Consent Item Reports**

**Staff Report/Prepared by Lisa Goldberg**

The Metropolitan Washington Airports Authority (MWAA) Community Working Group on National Airport Noise (Working Group) met on April 14 to review preliminary proposed changes to aircraft procedures prepared by the Federal Aviation Administration (FAA) for redirecting south flow aircraft departures. The proposed changes would direct flights departing National Airport to the south from the main runway 19 to maintain 2.9 additional miles southward over the Potomac River before turning inland. The changes are intended to mitigate noise impacts to Alexandria and Fairfax County residents located directly below the present south flow procedures. The Working Group voted to forward the preliminary proposed changes to FAA as a project for further feasibility analysis. FAA would need to perform additional analysis and convene a working group to assess all impacts from the proposed changes before recommending if the proposed procedure changes could be implemented, a process that could take up to 24 months.

The American Planning Association recognized the City of Alexandria's Eisenhower West Small Area Plan with a 2016 Excellence in Sustainability Award for the best sustainable urban design plan or project in the country. The Plan was adopted by City Council in November 2015 after a two-year community engagement effort, and incorporates a revitalized and connected open space network, a finer grid of complete streets, a focus on neighborhood-serving retail, and an enhanced transit system centered on an existing Metrorail station. For more information about the Eisenhower West Small Area Plan, visit the project webpage at [www.alexandriava.gov/EisenhowerWest](http://www.alexandriava.gov/EisenhowerWest).

Staff from the Department of Transportation and Environmental Services will be presenting the proposed framework of the Long Term Control Plan Update for the Combined Sewer System. Residents are invited to give written or oral comments at the public meeting regarding the plan update on Thursday, April 21, from 7-9 p.m., in City Hall, Sister Cities Conference Room 1101, 301 King St. For more information about the Long Term Control Plan Update, visit the City's combined sewer system website, [www.alexandriava.gov/Sewers](http://www.alexandriava.gov/Sewers). In addition, feedback on the proposed framework can be provided by visiting [AlexEngage](#), the City's online engagement forum. For questions, contact Erin Bevis-Carver, P.E., Sanitary Section Lead, Transportation & Environmental Services at [Erin.BevisCarver@alexandriava.gov](mailto:Erin.BevisCarver@alexandriava.gov).

The Earth Day Proclamation was declared by City Council at the April 12, City Council meeting. At the same meeting, staff presented the Oral Progress Report on Eco-City Alexandria and the 2015 Eco-City Progress Report and Key Environmental Indicators (attached).

The student art work from the Earth Day logo contest will be displayed in the Vola Lawson Lobby of city Hall from April 12-May 2, 2016.

Staff is planning to represent the City of Alexandria at the USPTO annual green fair at the United States Patent and Trademark Office (USPTO) Building in Alexandria on April 21.

### **Strategic Plan Community Meeting and Next Steps/Kyle Winslow**

I attended Saturday, April 9 Community Meeting, which consisted of several small roundtables with City staff soliciting feedback from members of the community on some of the broad “Vision Themes” that currently makeup the framework of the draft plan. These Vision Themes currently include: Safe, Well-Managed, Economically Vibrant, Healthy, Inclusive, Connected and Mobile, Enhance its Unique Identity, and Help Children and Youth Thrive. Slide 15 of this presentation from Saturday includes the Vision and Vision Themes:

<https://www.alexandriava.gov/uploadedFiles/council/info/StrategicPlan/CSPRefiningVisionMtgPres04092016FINAL.pdf>

There are aspects of environmental issues and sustainability woven throughout these themes, but there are not many specifics on our issues within these themes to date. City staff gave the impression that these themes are not final.

I provided feedback based on some EPC values and related goals of the EAP during several of Vision Theme roundtable discussions. City staff is supposed to post results of this engagement on AlexEngage and solicit additional feedback, though as of 4/14 this information was not available.

City staff will be checking in with City Council on the Strategic Plan in June, most likely at their legislative meeting either on June 14th or the 28th. There should be two additional Community Meetings, one in May and one in June, and another opportunity for online engagement in June.

I would recommend that the Commission:

- Decide whether we address the structural issue of whether the Plan as envisioned thus far reflects in its organization a solid commitment to issues important to the Commission and called for in the EAP, OR if we should focus our attention on providing feedback within this framework;
- Provide feedback on AlexEngage when City staff posts this opportunity, which should be soon;
- Write a letter to Council before early June highlighting our concerns with the framework as it currently stands, unless our comments yield results by then in which case we should write a letter highlighting our priorities within the Plan.

### **Waterfront Commission/Ryan Wojtanowski**

At the last Waterfront Commission meeting, the Waterfront Governance Sub-Committee presented its findings; the gist of which is the recommendation that an independent Community Improvement District (hereafter CID) be established. The CID would administer, and through taxes on businesses (and possibly real estate) within the district, fund the maintenance, management and marketing of the new waterfront.

As I understand it, the principle advantage of the CID would be to divorce the waterfront from the funding vagaries of the City budget. While the plan, such as it is, calls for governing input from the entire city, I expect it would still increase the influence of stakeholders living within the

district; who would of course be most likely to represent themselves in the process. At this point it appears all funding would come on the backs of the businesses located in the CID. Clearly I have a vested interest here, however, it seems to me, if the new waterfront is the great boon it has been sold as, than the entire city, enjoying the fruits, should bear the costs.

Rather than create a separate governing body, I would argue that the Waterfront Manager Position, written out of the 2017 budget should be reinstated. My gut feeling is, with that position filled and RCPA, T&ES and the Waterfront Commission we would have sufficient governance in place; and even if we have to reuse and repurpose a little, the external environmental costs of establishing and maintaining a separate governing body would probably outweigh any eco benefits such a body might provide. How many pounds of GHGs do we emit and trees do we put to the saw every year just to keep the little EPC going? This is my opinion at present, however, I am there representing the EPC. I think this is a suitable topic of discussion for the EPC.

There are rumblings of a possible up or down vote regarding the Sub Committee's recommendation at the next Waterfront Commission meeting on 4/19. If, a) you can find room on the agenda for our meeting on the 18th, and b) we (EPC) reach a consensus, then fine, I'll vote accordingly. If only one or none of those things happens (and I understand this is short notice) then, on behalf of the EPC and other organizations, I will move to table the Waterfront Commission's discussion, until we, and other concerned parties have had a chance to come to an opinion. If a vote is forced on me, unless I hear some convincing new information I intend to vote no.



Environmental Policy Commission Minutes  
March 21, 2016 Regular Meeting

**EPC Members in Attendance**

x	Jim Kapsis (Chair)		Susan Gitlin	x	Scott Barstow
<input checked="" type="checkbox"/>	Tyler Orton		Jed Bullock		Annika Moman
<input checked="" type="checkbox"/>	Aaron Karty	x	Natasha Anderson	x	Geoffrey Goode
x	Ryan Wojtanowski	x	Steve Milone	x	Jessica Lassetter
x	Kyle Winslow				

X= Present

**City Staff**

Khoa Tran, Bill Skraback, Lisa Goldberg  
Tony Gammon - Deputy Director Dept. of Project Implementation

**Other Attendees**

Councilman Chapman

**Begin 7:35 PM**

**Welcome and Introductions**

-

**Public Comment**

- None

**Staff Consent Items/EPC Updates**

- Kyle Winslow will represent the EPC on the Transmission Line working group

**Earth Day Report/EPC Activity, Natasha Anderson**

- The Earth Day celebration has been moved to the Ginny Harris fields near George Washington School
- There has been concern from residents of Cameron Station about the Earth Day Event being moved.

**Fitzgerald Square Proposed Plan, Tony Gammon**

- Feedback can be provided through April 3rd on Alex Engage
- The site can not be turned into green space due to trying to reserve these credits for later use when redoing the site later on
- Two schemes were presented, currently feedback is being requested on the decision between the two of them

**City Resource Recovery Program**

- The Environmental Policy Commission will work closely with T&ES over the course of the next 4-6 months.
- About 30% of the waste sent to Covanta is shared by Arlington and Alexandria
- The \$0 tipping fee expires when the Covanta facility out lives its useful life

- The commission recommends that the city uses the EAP to guide the process of creating a long term strategic plan led by staff and consultants
- The City has to provide household hazardous waste disposal. Arlington, Alexandria, and Fairfax County, have their own disposal facilities.
- T&ES will present again to the EPC in the summer

#### **Old Town North Small Area Plan Update**

- Scott will work on a draft letter before our next regular meeting on April 4th.
- Staff Feels that the Eco-District Governance structure wouldn't be worth pursuing to create the district. However, they believe that doing more in this area to improve environmental impacts may be the best option
- City staff would like to make this region of the city an area where the sustainability/environmental goals would be more strictly enforced

#### **Eco City Update**

- The T&ES department will present to City Council on April 12th to give an update on Eco-City progress

#### **Next Meeting/Work Session Potential Topics**

- Waterfront recommendation/Letter
- The next work session on April 4th will be a regular meeting in order to discuss the Old Town North Plan and the Budget letter to council
- Eco-District Letter
- Earth Day

Environmental Policy Commission Minutes  
 April 4, 2016 Regular Meeting

**EPC Members in Attendance**

x	Jim Kapsis (Chair)	<input checked="" type="checkbox"/>	Susan Gitlin		Scott Barstow
<input checked="" type="checkbox"/>	Tyler Orton	<input checked="" type="checkbox"/>	Steve Milone	<input checked="" type="checkbox"/>	Jessica Lassetter
<input checked="" type="checkbox"/>	Aaron Karty		Natasha Anderson	x	Geoffrey Goode
	Ryan Wojtanowski	x	Kyle Winslow		

X= Present

**City Staff**

Khoa Tran, Bill Skrabak, Lisa Goldberg

**Other Attendees**

**Begin 7:40 PM**

**Welcome and Introductions**

**Public Comment**

- None

**Staff Consent and EPC Updates**

- MWCOG is developing an action plan for the region to reduce Greenhouse Gas. Alexandria is involved, but whatever agreements are made are non-binding. Alexandria currently has their own goals for Greenhouse Gas emissions and does their own inventory every 3 years.

**Strategic Plan Process**

- There is another meeting on 4/9/16 from 10am - 12pm at George Washington Middle School on the vision and goals for the Strategic Plan. It's encouraged that EPC members attend the next meeting and write a letter to City Council with our priorities
  - Some EPC members will attend the next meeting
  - The EPC will try to solicit more responses on the Alexandria Engage online tool

**Earth Day Report/EPC Activity**

- Volunteers from the EPC will be needed at a similar volume as in past years. They, and others, can signup online.
- Tyler has suggested a "Mythbusters" activity to talk about recycling myths
- Jim moves to have Tyler send a proposal to the group on the framework and general content for the Earth Day Activity
- Roles, responsibilities, and attendance will be discussed at the next meeting

### **Budget Guidance to Council**

- A draft letter on the budget was reviewed and discussed by the EPC. The main topics in the letter are recommendations the Sustainability Coordinator, The Resource Recovery Programs, and EAP and Long Range Work Program.
- The Commission moves to send the revised letter, with recommended additions to The Mayor, Council, and The City Manager.

### **Urban Forestry Letter to Council**

- A discussion was held on the Implementation of The Environmental Action Plan and the Urban Forestry Management Plan letter intended to go to City Council
- The letter is going to be tabled to see if The Planning Commission will be able to review and approve the letter before the add/delete sessions and will be discussed in our next meeting.

### **Old Town North SAP Eco-District Letter**

- A draft letter to the Chair of the Old Town North Small Area Plan Advisory Group was reviewed by the commission.
- The commission approved the letter with recommended changes made.

### **Next Meeting/Work Session 12/7/15**

- Strategic Plan Process, Letter, and Indicators
- Urban Forestry Letter

City of Alexandria, Virginia

# Combined Sewer System Permit and Long Term Control Plan Update

## Environmental Policy Commission April 18, 2016

Lalit Sharma, P.E., Division Chief, Sanitary  
Infrastructure

Department of Transportation and Environmental  
Services



City of Alexandria, Virginia

## AGENDA

- Long Term Control Plan Update Process
- City's Combined Sewer System and Regulatory Requirements
- Proposed Long Term Control Plan Framework
  - Overall Strategy
  - Infrastructure Sizing
  - Infrastructure Siting
  - Implementation Plan (Schedule, Costs, Rate Impacts)
- Public Participation and Input

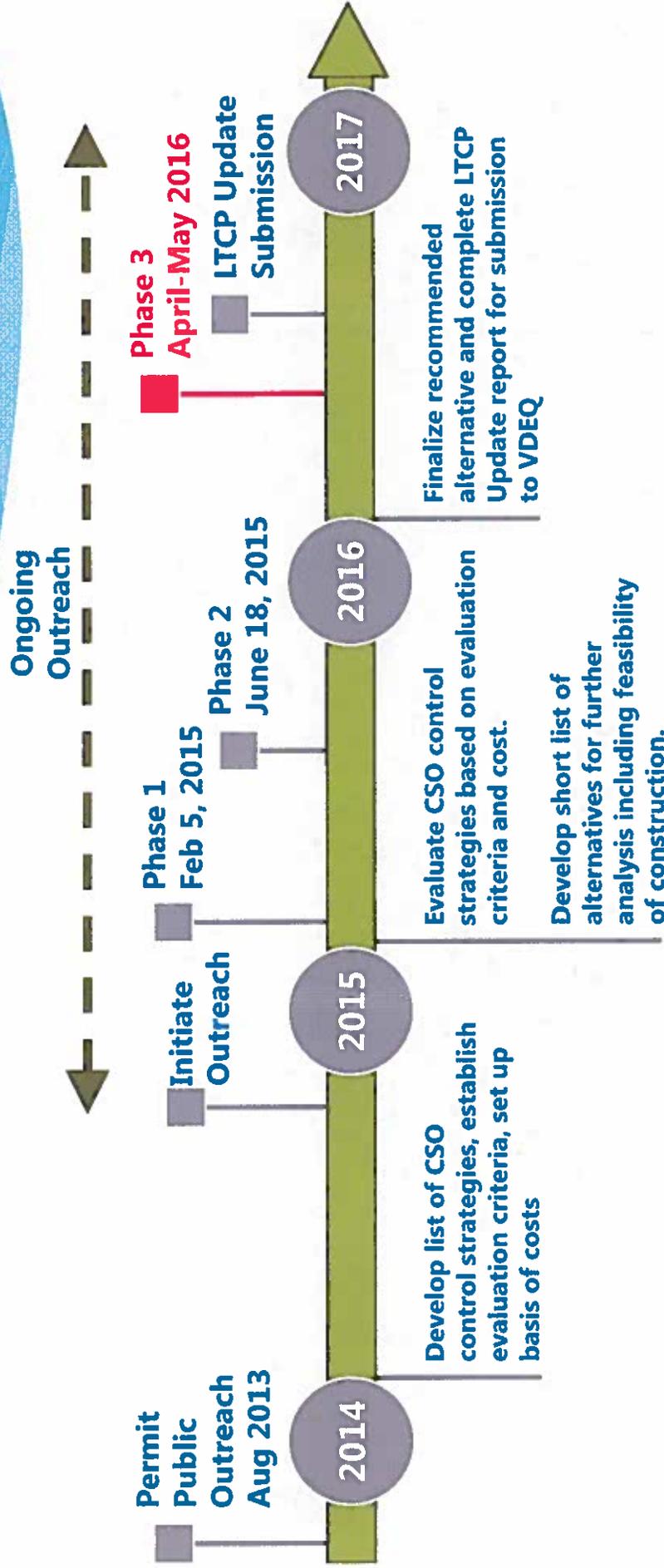


City of Alexandria, Virginia

# Long Term Control Plan Update Process



# Planning Timeline



CSO: Combined Sewer Overflow

LTCP: Long Term Control Plan

VDEQ: Virginia Department of Environmental Quality

# Outreach to Date

Date	Audience	Date	Audience
8/5/2013	Public Meeting (through EPC)	2/5/2015	LTCPU Phase I Public Meeting
10/30/2013	Federation of Civic Associations	2/11/2015	Old Town Civic Association
11/13/2013	Old Town Civic Association	3/18/2015	NorthEast Citizens' Association
11/14/2013	West Old Town Citizens Association	5/18/2015	Environmental Policy Commission
1/28/2014	City Council Work Session	5/19/2015	Waterfront Commission
5/19/2014	Environmental Policy Commission	5/26/2015	City Council Work Session
9/18/2014	Porto Vecchio Condominium Association	6/11/2015	West Old Town Citizens Association
10/21/2014	AlexRenew Board	6/18/2015	LTCPU Phase II Public Meeting
10/27/2014	Agenda Alexandria	10/7/2015	CSS Stakeholder Meeting #1
1/27/2015	City Council Legislative Session	11/2/2015	CSS Stakeholder Meeting #2
1/28/2015	Federation of Civic Associations	1/7/2016	CSS Stakeholder Meeting #3
2/2/2015	Environmental Policy Commission	2/4/2016	CSS Stakeholder Meeting #4
		3/3/2016	CSS Stakeholder Meeting #5
		4/7/2016	CSS Stakeholder Meeting #6

# Ad Hoc Combined Sewer System Plan Stakeholder Group

- \* Established by City Council June 2015
- \* 13-members appointed by the City Manager
- \* Charged with advising Staff during development of Long Term Control Plan Update
  - Consideration of impacts to the community while meeting City's environmental goals
  - Consideration of regulatory issues, engineering and analysis of potential locations of future sewer infrastructure facilities
  - Consideration of implementation plan schedule and cost
  - Receive input from the public

City of Alexandria, Virginia

# City's Combined Sewer System and Regulatory Requirements



# Combined Sewer System

≈540 acres (6.4% of total City area)

## Four Combined Sewer Overflow Outfalls permitted by VDEQ

- Outfall 001 discharges into Oronoco Bay
- Outfall 002 discharges into Hunting Creek
- Outfall 003 discharges into Hooff's Run
- Outfall 004 discharges into Hooff's Run



# Combined Sewer System Permitting

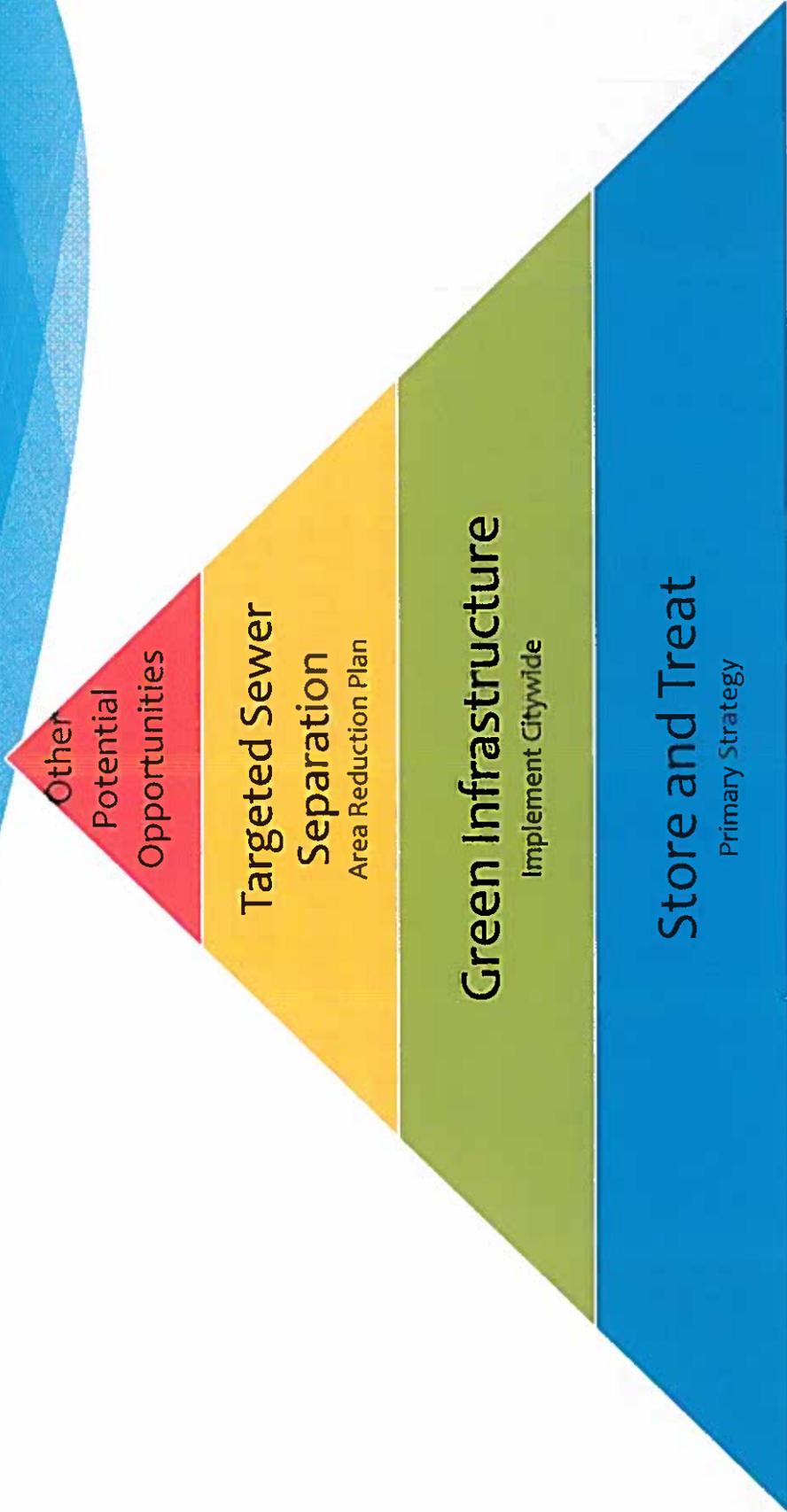
- \* Previous Combined Sewer System Permits:
  - Requires best practices for operation and maintenance of combined systems
  - Proactive sewer separation as part of Area Reduction Plan
  
- \* Current and Future Combined Sewer System Permits:
  - Must address the Hunting Creek Total Maximum Daily Load (TMDL)
  - TMDL requires overall bacteria reduction from CSO discharges of 86%
    - 99% reduction from Outfalls 003 and 004 (Hooffs Run)
    - 80% reduction from Outfall 002 (Hunting Creek)
  - **Current permit requires City to address TMDL by updating its Long Term Control Plan and submit new plan to State by August 2016**

City of Alexandria, Virginia

# Proposed Long Term Control Plan Update Framework



# Long Term Control Plan Update Overall Strategy



# Primary Strategy Recommendation

- \* **Primary Strategy Recommendation: Separate storage tunnel for Hooffs Run (CSO-003/004) and storage tank for Royal Street (CSO-002)**
  - Most cost effective alternative
  - Fewer construction impacts
  - Potential opportunities to improve embayment
  - Supported by members of the Combined Sewer System Stakeholder Group

# Infrastructure Sizing Recommendation

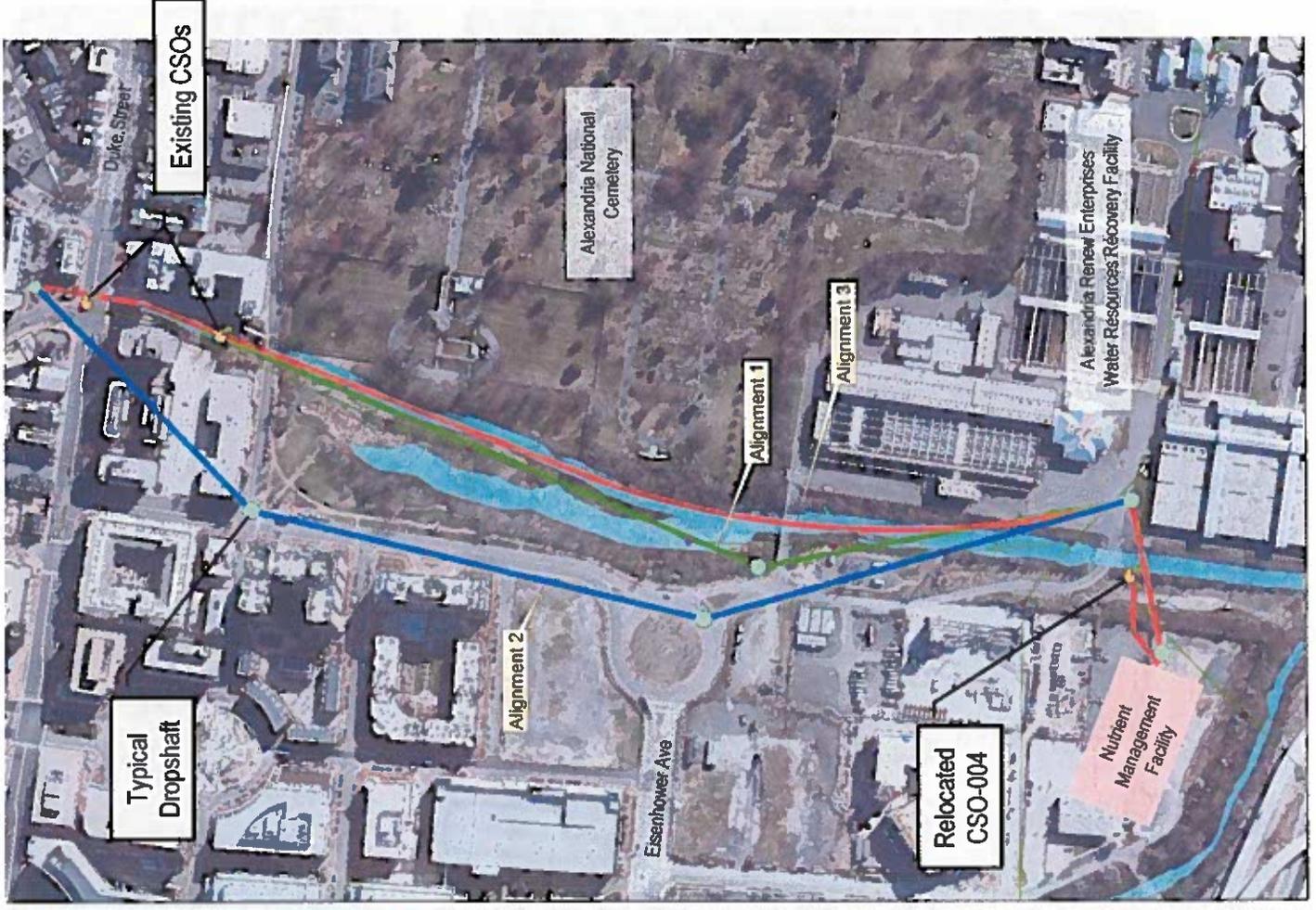
- \* **10-foot diameter tunnel for Hooffs Run and 3-million gallon tank for Royal Street**
  - More than the minimum required per the EPA Combined Sewer Overflow Policy (less than 4-6 overflows per year in average rainfall year)
  - Helps to mitigate future regulatory uncertainty and requirements
  - Helps to mitigate climate change
  - General support among the majority of the members of the Combined Sewer System Stakeholder Group

# Infrastructure Sizing – Impact on Overflows

- \* **For An Average Rainfall Year:**
  - **CSO-003/004 (Hooffs Run) Storage Tunnel**
    - Reduce number of overflows by 96%
    - Reduce volume of overflows by 96%
    - Capture rate of 99% of combined sewage during wet weather
  - **CSO-002 (Hunting Creek) Storage Tank**
    - Reduce number of overflows by 96%
    - Reduce volume of overflows by 91%
    - Capture rate of 96% of combined sewage during wet weather

# CSO-003/004 Tunnel Alignments

- \* Shafts range in diameter from 20-ft to 30-ft
- \* Shafts range in depth from 60-ft to 100-ft
- \* Alignment 2 eliminated from further consideration
- \* Alignment 3 preferred alignment



# CSO-002 Storage Tank Alternatives



3MG storage shown; all alternatives under consideration

# Complementary Strategy: Green Infrastructure Recommendation

- \* Implement green infrastructure citywide, not just combined sewer area
- \* **\$1-2 million** for implementation of project in next permit cycle (2018-2023) in Capital Improvement Program
- \* Evaluate incentive programs for private property
- \* Evaluate increasing number of street trees (tree canopy) in combined sewer system
- \* Assess effectiveness and based on assessment, consider establishing program and target goals for future permit cycles

# Proposed Conceptual Plan for CSO-001

- \* **CSO-001 Phase I**
  - **Continue Current LTCP**
    - Continue the Nine Minimum Controls (best management practices)
  - **Continue Separation**
    - Continue targeted sewer separation within the CSO-001 (Pendleton) sewershed as a condition of redevelopment and North Old Town Small Area Plan implementation
  - **Continue Stormwater Controls with Redevelopment**
  - **Continue Green Infrastructure**
    - Implement green infrastructure within the Pendleton sewershed, where cost effective
- \* **CSO-001 Phase II**
  - Assess following CSO-001 Phase I and CSO-002/003/004 Projects
  - Implement a plan consistent with the current regulatory requirements

# Long Term Control Plan Update Framework

- \* CSO 003/004 tunnel to be implemented first (approximate timeframe 2019-2025)
- \* CSO 002 tank to be implemented following completion of CSO 003/004 tunnel (2027-2032)
- \* Green infrastructure and targeted sewer separation between 2016-2035

## Preliminary Capital Costs

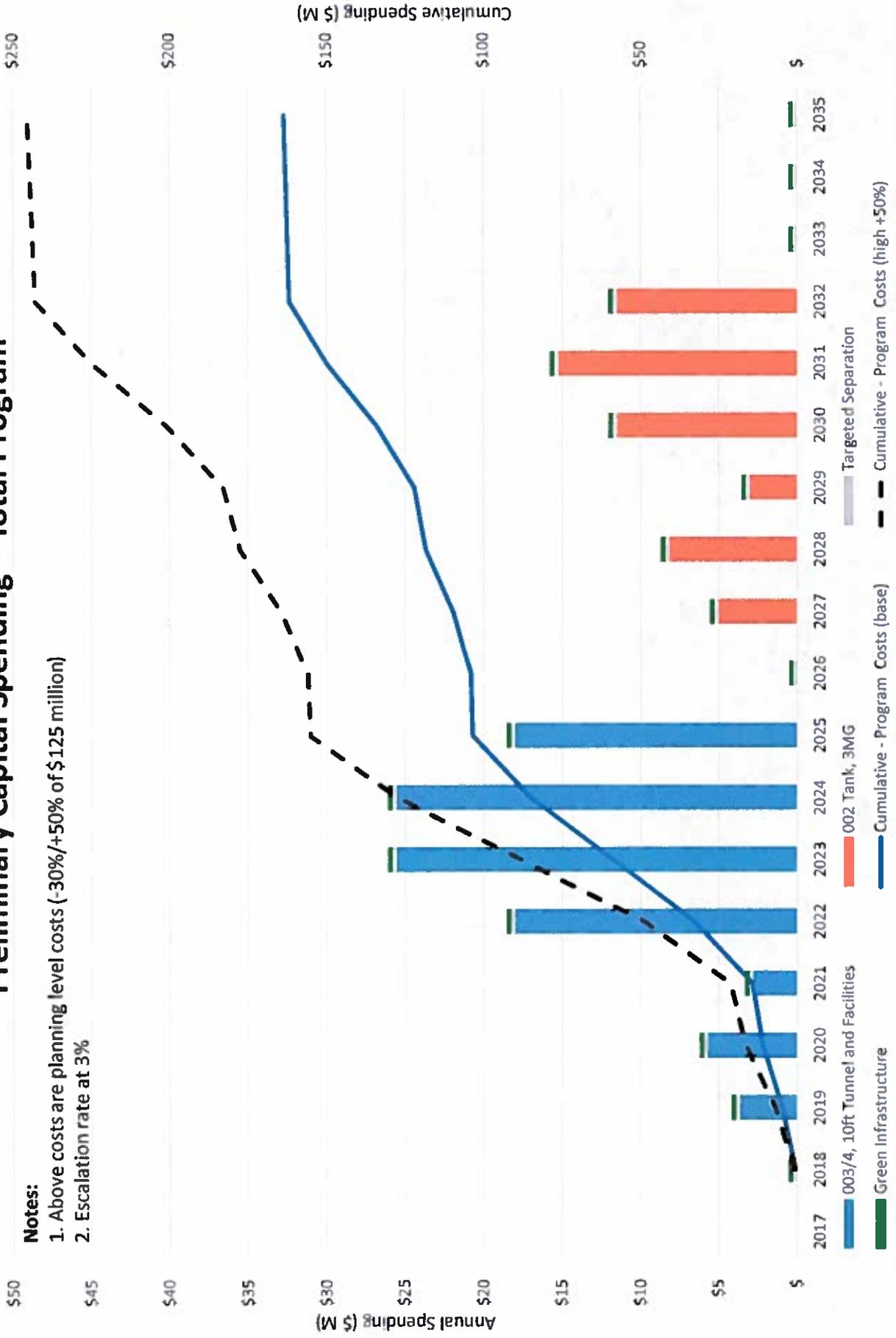
Project	Capital Cost <sup>1</sup>
CSO 003/004 Tunnel	\$80-120 million
CSO 002 Tank	\$35-53 million
Green Infrastructure	\$5-7.5 million
Targeted Sewer Separation	\$5-7.5 million
<b>TOTAL</b>	<b>\$125 - 188 million</b>

<sup>1</sup>Capital Costs in 2015 dollars

# City of Alexandria Long Term Control Plan Update

## Preliminary Capital Spending – Total Program

- Notes:**
- Above costs are planning level costs (-30%/+50% of \$125 million)
  - Escalation rate at 3%



# Monthly Sewer Bill

Items	Value	
AlexRenew Monthly Base Charge - Residential	\$8.38	
AlexRenew Monthly Base Charge – Commercial	Varies based on connection size	
AlexRenew Flow Charge	\$6.44/1,000 gallons	
City of Alexandria Flow Charge	\$1.25/1,000 gallons	
	Additional Monthly Cost <sup>1</sup>	Total Monthly Bill <sup>2</sup>
Existing Sewer Bill	---	\$48.48
Long Term Control Plan Update Implementation	\$10-15	~\$60

**Notes:**

1. Annual rate increases to be implemented over time and provided in the Sanitary Sewer Master Plan Update (2017-2018)
2. Based on average usage of 5,000 gallons per month

City of Alexandria, Virginia

# Public Participation and Input



# For More Information and How to Provide Input

- \* Public Meeting – Thursday April 21, 2016 7:00PM, City Hall,  
301 King Street, Conference Room 1101
- \* Planned City Council Public Hearing – Saturday May 14, 2016  
9:30AM
- \* For more information and to provide feedback, please visit  
[www.alexandriava.gov/sewers](http://www.alexandriava.gov/sewers) or provide comments in writing  
to:

Erin Bevis-Carver, P.E.  
Sanitary Section Lead  
Transportation and Environmental Services  
2900-B Business Center Drive  
Alexandria, Virginia 22314  
[erin.beviscarver@alexandriava.gov](mailto:erin.beviscarver@alexandriava.gov)

# AlexEngage Feedback

**ALEX ENGAGE** Listen, Learn, Join the Conversation

**CITY OF Alexandria VIRGINIA**

**WHAT'S NEXT** **HELP**

## Provide your feedback on the framework of the Long Term Control Plan Update for the City's Combined Sewer System

[Introduction](#) [Feedback](#) [Your Response](#) [Options](#)

### Introduction

#### Long Term Control Plan Update for the City's Combined Sewer System

In order to meet new regulatory requirements, the City is updating its Long Term Control Plan (LTCMP) for the Combined Sewer System. The update must address the [Hudson Creek Basins Local Maximum Daily Load](#), which calls for significant reduction in combined sewer overflows.

The Long Term Control Plan Update framework includes a proposed schedule to meet the required implementation deadline of 2035. Further information on the framework can be found [here](#).

The total estimated capital cost for the Update is between \$125-190 million, which will likely be funded through the sanitary sewer fees as part of the monthly sewer bill. Increases to the sanitary sewer rate will likely be needed to pay for the projects. These increases will happen gradually and it is anticipated that the average monthly sewer bill will increase between \$10-15/month once all projects are completed.

What do you think?... [read more](#)

### Responses

[View All Responses](#)

### Your Response

[View My Responses](#)

Deadline: 11:59 PM on May 31, 2018

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WMA 10-10-2018

1) Do you agree with the selection of a store and treat strategy as the primary strategy, and green infrastructure and targeted sewer separation as complementary strategies?

- Yes
- No
- Don't know/No opinion
- Other

Enter other text here

Characters left: 255

Please provide any comments you have on the Long Term Control Plan Update framework.

2) Do you think the level of combined sewer control proposed is adequate given the cost to implement?

- Yes this is the right amount
- No, additional money should be spend to decrease the number of overflows further
- No, the cost does not justify the benefits
- Don't know/no opinion
- Other

Enter other text here

Characters left: 255

Please provide any additional comments regarding the cost/benefits of the Long Term Control Plan Update.



*Environmental Policy Commission*

April 18, 2016

The Honorable Mayor Allison Silberberg and Members of City Council  
City of Alexandria  
Alexandria, Virginia 22314

**Approval of the Framework for the Combined Sewer System Long Term Control Plan Update**

Dear Mayor Silberberg and Members of Council:

On behalf of the Environmental Policy Commission (EPC), I am writing to convey our support for the approval of the framework of the Long Term Control Plan Update (LTCPU) for the combined sewer system. This plan update is a significant step forward in reducing the amount of pollution from combined sewer overflows (CSOs) into the City's local waterways and the Chesapeake Bay. The framework is consistent with the water quality goals established the City's Environmental Action Plan (EAP). The EPC also advocates full development of the urban forest street trees within the combined sewer area, in accordance with the EAP and Urban Forestry Master Plan goals, as part of robust pursuit of green infrastructure in executing the LTCP.

During the development of the LTCPU, EPC Member Steve Milone participated in the Ad Hoc Combined Sewer System Plan Stakeholder Group, which was charged with providing input to staff regarding the overall strategy of a plan in order to meet the City's combined sewer permit requirements. The EPC was briefed on the progress of the LTCPU and what was discussed during the Stakeholder Group meetings.

As a coastal community, the City of Alexandria remains vulnerable to impacts of climate change. Although the EPC supports the plan framework as presented, we recommend that the City continue to consider the impacts of climate change as the plan is implemented over time. This can be accomplished by continuing to analyze climate change, especially wet weather data and trends and incorporate information learned into the design and execution of future combined sewer infrastructure facilities and green infrastructure mitigation measures the City may take.

Thank you for your time and consideration, and for your work and commitment to improve the natural environment in Alexandria.

Sincerely,

Jim Kapsis  
Chair, Environmental Policy Commission



DATE: April 18, 2016

TO: THE HONORABLE MAYOR and MEMBERS OF CITY COUNCIL

FROM: THE PLANNING COMMISSION  
THE PARK AND RECREATION COMMISSION  
THE ALEXANDRIA BEAUTIFICATION COMMISSION  
THE ENVIRONMENTAL POLICY COMMISSION

SUBJECT: IMPLEMENTATION OF THE ENVIRONMENTAL ACTION PLAN AND THE URBAN FORESTRY MANAGEMENT PLAN

We are writing to request your support for the implementation of goals contained in two documents that you adopted in 2009: the *Environmental Action Plan (EAP)* and the *Urban Forestry Master Plan (UFMP)*. The UFMP and EAP are excellent resources that reflect extensive research, expertise, and thoughtful input from the Alexandria citizenry and City staff. We seek to increase the implementation of the goals that they contain, particularly those that address:

- Sustaining and enhancing the City's tree canopy coverage and
- Promoting the use of vegetation that provides the greatest benefits to our environment.

Specifically, we are requesting that City Council establish a work group consisting of members from multiple commissions and an inter-departmental staff team to review, update and recommend steps for implementing a key set of goals, policies, and strategies included in the EAP and UFMP. This work group would provide essential input to, among other things, initiatives on the City's proposed Long Range Work Plan for FY17 and FY18, including "Open Space in New Development" and "Landscape Guidelines Update Implementing Urban Forestry Master Plan." We fully support the City's plans to take up those initiatives, but believe it necessary to first revisit the goals in the UFMP and EAP and to provide alignment with the City's current organizational, budgetary, and environmental needs and conditions.

The Environmental Policy Commission would also use the results of this work group's efforts as input to the update of the EAP, which it expects to be completed in FY17.

## BACKGROUND

The state of the City's trees and other plants in its urban forest is of great importance to the citizens of Alexandria. These unsung heroes often are taken for granted, yet they offer innumerable, cross-cutting benefits:

- Their leaves, bark, and blossoms bring beauty to our streets, parks and public places.
- They provide homes and food for our birds, squirrels, bees, butterflies, and other wildlife.
- Their canopies and roots absorb enormous quantities of rainwater – preventing the creation of stormwater runoff that we would otherwise have to manage.
- Their shade protects us from the sun and reduces the energy required to cool buildings.
- They sequester carbon and remove pollutants from the air and from stormwater.
- They are essential to our lives and our ecosystems, and contribute mightily to our bottom line: our UFMP calculated their value at over \$4 million annually.

Since adoption of the EAP and UFMP, the City's Recreation, Parks and Cultural Activities Department (RPCA) has initiated many efforts that improve the extent and health of our trees. Examples include shifting toward a pro-active approach to tree maintenance; initiating an inventory of all trees along City streets and at public facilities; expanding the invasive plant control program; and, thanks to City Council, investing in additional tree care and plantings through a capital improvement program.

Nevertheless, if the City is to achieve the goals in the EAP and UFMP, it will need to address some challenges and obstacles to implementing those two plans. For example:

- A recent three-year baseline study of the City's tree canopy by RPCA's Urban Forestry Section and Planning and Zoning's GIS Division measured Alexandria's tree canopy at 34% (which means that Alexandria falls short of the UFMP goal of 40% by 21,000 oak trees or 104,000 crape myrtles).<sup>1</sup>
- Growth and re-development place extreme pressure on both the health of our trees and the percent of canopy cover.
- The City's *Landscape Guidelines* are important in the review processes for applicants seeking approval of site plans and special use permits. They were last updated in 2007, and do not reflect the recommendations contained in the EAP and UFMP, which were published two years later. Areas in need of revision include deletion of any plants that are known to be environmentally harmful ("invasive") in our area, addition of requirements for care and maintenance during a two- or three-year establishment period for all new plants, an increased emphasis on the use of plants that are native to this area, and a reevaluation of the crown coverage allowances (CCA).<sup>2</sup>

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<sup>1</sup> Estimates of tree quantities are based on tree canopy coverage allowances provided in the City's Landscape Guidelines (see next footnote).

<sup>2</sup> Trees and shrubs are assigned to a CCA group based on the typical canopy size of the particular species at maturity in an urban environment. Planning and Zoning uses these allowances to determine the projected canopy cover of a landscape plan submitted for review. However, as City staff has noted, the

- Their implementation is dependent upon cooperation from a wide array of City departments. (Although measurement of our canopy is the responsibility of RPCA, many other departments throughout the City – from Planning and Zoning to General Services to Alexandria City Public Schools -- have roles with major implications for our canopy.)

## RECOMMENDATIONS

1. City Council establish a nine (9) member work group to review, update, and recommend steps to implement goals and policies of the EAP and UFMP related to the City's tree canopy and plant selection. The proposed charge of this work group is to provide the City Manager with recommendations that would include, but not be limited to:
  - Adjustments to the goals in the EAP and UFMP to reflect City organizational changes and new information made available since 2009.<sup>3</sup>
  - Revisions to make to the City's Landscape Guidelines to align it with the EAP and UFMP goals.
  - Policies, programs, public-private partnerships and future capital and operating budget needs to help implement the EAP and UFMP goals.

Pursuant to City Code Section 2.4.8, the initial term of this temporary work group will be for one year from the date of its initial meeting. If necessary, City Council can extend the term for up to two additional years. It is recommended that the work group be directed to begin its efforts in late spring of calendar year 2016 and complete its recommendations to the City Manager by the end of FY 2017.

2. City Council authorize the City Manager to appoint the nine members of the work group based on the following categories:
  - Two members representing the Environmental Policy Commission
  - One member representing the Park and Recreation Commission

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CCAs are overly optimistic; they over-project the square footage of canopy cover that a tree ultimately will provide. This is particularly problematic in view of the City's desire to achieve a 40% canopy cover: 90% of Alexandria's urban forest is located on private property or property not under direct control of the City (See UFMP), where we continually experience the greatest loss of canopy. Given that we require that site plans under review demonstrate a projected canopy coverage of only 25%, it is very important that we not overestimate the canopy that young trees will ultimately provide.

<sup>3</sup> See Attachment A for a list of the UFMP and EAP components that we recommend be the focus of this effort.

- One member representing the Alexandria Beautification Commission
- One member representing the Planning Commission
- One staff member representing Transportation & Environmental Services
- Two staff member representing RPCA Park Planning and Park Operations
- One staff member representing Planning and Zoning

We thank you for your consideration of this request. If you have questions, please contact Susan Gitlin, Vice Chair, Environmental Policy Commission, at 703-819-8410 or [smcg611@gmail.com](mailto:smcg611@gmail.com).

Sincerely,

Jim Kapsis  
Chair, Environmental Policy Commission

and on behalf of

Jennifer Atkins  
Chair, Park and Recreation Commission

Mary Lyman  
Chair, Planning Commission

Denise Tennant  
Chair, Alexandria Beautification Commission

**ATTACHMENT A:**  
**RECOMMENDED FOCAL AREAS IN THE ENVIRONMENTAL ACTION PLAN AND**  
**THE URBAN FORESTRY MASTER PLAN**

**From the EAP, all in Principle 7: Land Use & Open Space, beginning on p.41:**

**Targets:**

- 1) By 2015, ensure that all plantings on City property are non-invasive and incorporate native plants.
- 2) By 2020, achieve 40% tree canopy coverage.

**Goal 3 actions (beginning on p. 44):**

- 1) The City will lead by example by utilizing low impact landscape practices where possible, such as perennial and native plant species, rain gardens, reduced fertilizer and pesticide usage, and encouraging the removal of invasive species.
- 2) Set minimum standards for open space and green space in Small Area Plans and other City plans that can be met in part through green roofs, green decks over underground parking, or green surface lots.
- 3) Seek authority to require all new developments, including single family homes, to provide 40% crown coverage on site. Require no less than 40% crown cover when sites are developed or redeveloped, within these parameters:
  - When trees are cleared from a site, increase replacement requirement for removal of large caliper trees.
  - Change crown coverage assumptions in City requirements to reduce the credit allocated for younger, smaller trees.
  - Set a minimum amount of the total crown coverage to be achieved through on-site trees and require payment to Living Landscape Fund for failure to achieve full requirement.
- 4) By 2015, ensure that all plantings by Recreation, Parks, and Cultural Activities Department (RPCA) are non-invasive, flood- and drought-tolerant, 80% perennial plants, and that native plants are used wherever possible.

**From the UFMP:**

**Goal: Increase Alexandria's Tree Canopy, and its supporting recommendations, particularly:**

Recommendation 1: Adopt American Forests' recommended tree canopy coverage goal of 40% and develop a citywide strategy to meet this goal.

Recommendation 5: Actively seek ways to increase Alexandria's tree canopy on private property.

Recommendation 9: Achieve and maintain a species diversity where no single genus comprises 15% and no single species comprises 5% of the total population.

**Goal: Improve stream corridors and other natural areas through urban forest management, and its supporting recommendations, particularly:**

Recommendation 28. Encourage the establishment and healthy growth of native tree species through planting and maintenance.

Recommendation 29. Control invasive plant species.

Goal: Strengthen Alexandria's ability to protect and increase its tree canopy as permitted by State and local regulation, and its supporting recommendations:

Recommendation 37. Evaluate, update, and enforce the City's existing rules and regulations.

Recommendation 38. Increase and maximize the amount of tree canopy coverage required for Development Special Use Permits.

**4-15-2016 DRAFT letter to OTN SAP AG**

{date}

Maria Wasowski  
Chair  
Old Town North Small Area Plan Advisory Group

Dear Chair Wasowski:

I am writing on behalf of the Alexandria Environmental Policy Commission (EPC) to recommend that your Advisory Group designate Old Town North an “Eco-District” and include clearly defined environmental policy objectives in the Small Area Plan (SAP) that set a new standard for sustainability in Alexandria. We were pleased to learn that City staff have been exploring the idea of establishing Old Town North as an "Eco-District", and that the Advisory Group’s members have been broadly supportive.

Designating Old Town North as an “Eco-District” must entail helping Alexandria meet its goal of reducing greenhouse gas emissions to 80% below 2005 levels by the year 2050, as identified by the City’s 2009 Environmental Action Plan (EAP). Accomplishing this goal will require an unprecedented effort to maximize the energy efficiency of our buildings and transportation options to dramatically reduce the overall energy demand for our community. Residents and businesses will also need more renewable and alternative energy options to meet this goal.

While Alexandria has made significant progress on many environmental actions recommended in the City’s EAP, the Old Town North SAP (OTN SAP) provides an opportunity to accelerate their realization. As you may know, in June of 2015 Alexandria's Planning and Zoning staff and the EPC agreed to pilot new green building policies in the OTN SAP. These new policies would also inform the broader update of the City’s green building policy, currently planned for 2018. Much more can be done in Old Town North.

To help the City define the “Eco-District” and set a new standard for future small area plans, we recommend that the OTN SAP:

- Set a goal, as consistent with the EAP, for OTN that by 2050 at least an 80% reduction from 2005 levels in emissions. Include specific actions and/or programs that will enable the achievement of these goals;
- Ensure that by 2020, as consistent with the EAP, all new buildings will achieve LEED Gold certification standards; that 60% of all existing buildings will achieve a 20% energy consumption reduction by 2025; that by 2025 all new buildings will achieve LEED Platinum standards; and that by 2030 all new buildings will be carbon neutral;
- Establish a schedule of specific FAR (floor area ratio) increases and other incentives (expedited approval, property tax rebates, etc.) for buildings in exchange for

achieving exceptional performance beyond the City's current Green Building minimum requirements;

- Establish a new voluntary green building policy, including incentives, for new residential construction and renovation;
- Ensure that all new construction, especially in the area of affordable housing, maximizes future potential solar energy production and includes energy choice for buyers and renters so that they have the option to purchase natural gas, solar power, or other low or zero emission alternatives to meet their household energy needs;
- Set a goal to ensure that all multifamily buildings in OTN are individually metered for both electricity and gas so that tenants receive accurate, personalized information about their energy use;
- Prioritize green infrastructure over grey infrastructure when pursuing investments to meet the City's storm water goals in OTN;
- Require buildings to have stormwater management systems meeting ASHRAE 189.1 or LEED standards;
- Achieve progress within the Old Town North area toward meeting the City's goals for tree canopy coverage and open space;
- Improve the resilience of areas of natural environment and increase investments in ecosystem services such as through use of native plants, pollinator habitat, and shade trees, and consider use of Green Area Ratio or similar metrics;
- Complete one or more "stretch" goals for the area, such as piloting a property-assessed clean energy (PACE) program for new and existing residents/businesses, or developing a Passive House project for affordable housing.

We have identified several additional EAP provisions (see appendix) that we think are relevant to OTN, which we encourage your Advisory Group and staff to use as a guide in developing the small area plan and defining the "Eco-District."

The Environmental Policy Commission appreciates the opportunity to help develop the OTN SAP. We would appreciate the opportunity to provide additional information, consultation, and input on "Eco-District" criteria as the Advisory Group continues its work.

Sincerely,

Jim Kapsis  
Chair  
Environmental Policy Commission