



Meeting with Mr. Wentworth

Agenda:

- Introduction
- DC Water CIP Planning Process
- RCMI
- Creekbed Projects

December 4, 2019

DCWATER.COM

- DC Water's capitalization policy determines how expenditures will be recognized and accounted.. The following guidelines are used to categorize items as capital, capital equipment or operating (innovations and maintenance):
 - Capital Project – has a long life (average of 30 years), a minimum cost of \$500,000, and is financed with 30 year bonds.
 - Capital Equipment – has a life of at least 3 years, a cost exceeding \$5,000 and is financed with short-term debt or cash.
 - Innovations – has uncertain future benefit to organization and is expensed as incurred.
 - Maintenance – are routine, cost under \$5,000, and do not extend the life of the item more than 3 years.
- CIP Budget Allocation Priority
 - 1. Mandates (Agreements, Regulatory standards, Court orders, Issues and Permits requirements, Stipulated Agreements, Etc.)
 - 2A. Health and Safety (Required to address Public Safety)
 - 2B. Board Policy (Undertaken as a result of the Board's commitment to outside agencies)
 - 2C. Potential Failure (Related to Facilities in danger of failing, or critical to meeting permit Requirements)
 - 2D. High Profile/Good Neighbor (Address Public Concern)
 - 3A. Good Engineering/High Payback (Need to fulfill Mission and upgrade Facilities)
 - 3B. Good Engineering/Lower Payback (Lower priority projects)

LoS Categories:

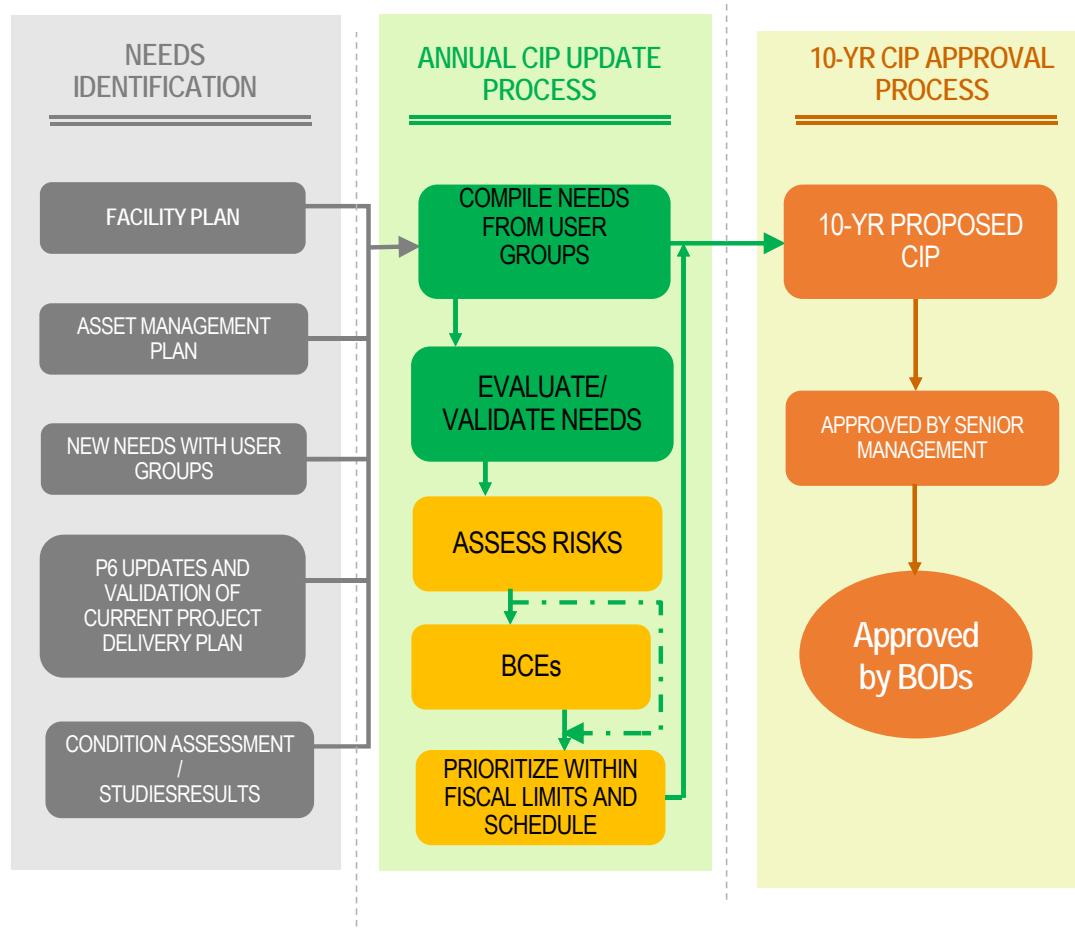
1. Health and Safety
2. Public Confidence
3. System Reliability
4. Regulatory Compliance and Environmental Impact
5. Fiscal Impacts

	Category	Target Level
System Reliability	Wastewater Treatment	No loss of treatment or system effectiveness
	Sewer System / Stormwater System	No loss of capacity No SSOs or dry weather CSOs
	Water Distribution System	No loss of capacity ≥35 psi at customers' meters No outage
Regulatory Compliance and Environmental Impact	Wastewater Treatment	Full compliance with regulatory requirements and permits
	Sewer System / Stormwater System	Full compliance with regulatory requirements, consent decree, and permits
	Water Distribution System	Primary and Secondary drinking water standards met



DC WATER

CIP PLANNING CYCLE OVERVIEW





Need Identification & Validation

Project Justification



AMP, Facility Plans, Condition Assessment Reports, Board Policy, Studies, Memos, Needs List, Changes to Approved Projects

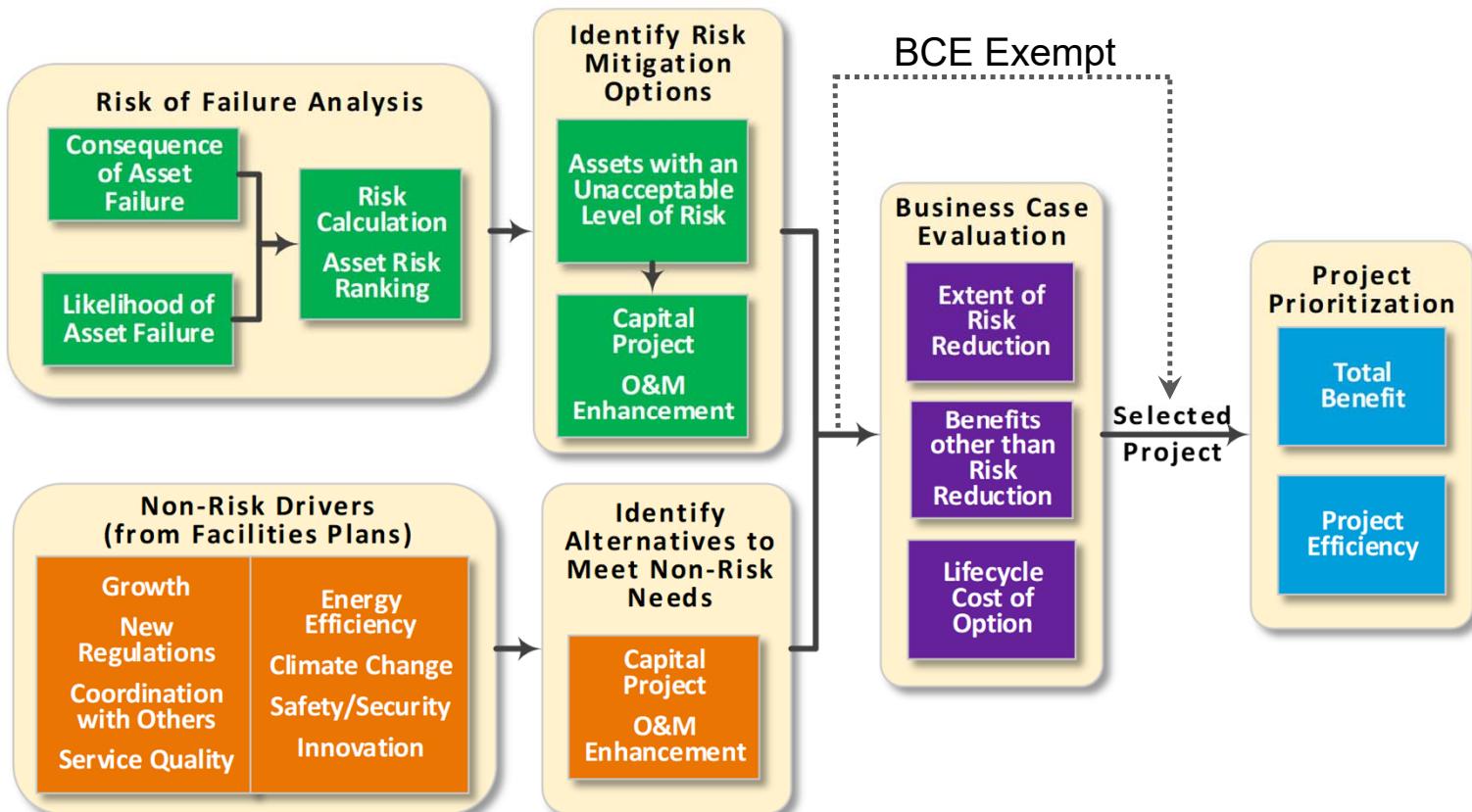
New Project Request

NEW PROJECT																							
Project ID & Title: _____																							
Proposed Lifetime Budget: \$ _____ Year Start: FY###																							
Design	\$#####																						
Construction (including Paving)	\$#####																						
Construction Management	\$#####																						
DDOT	\$#####																						
Total:	\$#####																						
Description:																							
Justification:																							
Impacts:																							
Uncertainties:																							
Impact on Operations:																							
Projected Disbursements by Fiscal Year (\$000s) <table border="1"> <thead> <tr> <th>Prop. Project</th> <th>FY19</th> <th>FY20</th> <th>FY21</th> <th>FY22</th> <th>FY23</th> <th>FY24</th> <th>FY25</th> <th>FY26</th> <th>FY27</th> <th>FY28</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>\$###</td> <td>\$###</td> <td>\$###</td> <td>\$###</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>		Prop. Project	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	0	\$###	\$###	\$###	\$###	0	0	0	0	0	0
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FY 2019 – FY2028 Water CIP																							

Project Validation

CIP Project Evaluation Form																																																												
Part I: General Project/Job Information. Form Completed at: <input type="checkbox"/> Program Level <input type="checkbox"/> Project Level <input type="checkbox"/> Job Level <table border="1"> <tr> <td>Project ID:</td> <td>Project Name:</td> </tr> <tr> <td>Job ID:</td> <td>Job Name:</td> </tr> <tr> <td><input type="checkbox"/> New Project</td> <td><input type="checkbox"/> Existing Project</td> <td><input type="checkbox"/> Project Budget</td> </tr> <tr> <td><input type="checkbox"/> Consent Decree Project</td> <td><input type="checkbox"/> Permit Required</td> <td><input type="checkbox"/> Project Schedule</td> </tr> <tr> <td>Initiating Department:</td> <td colspan="2">Business Case Evaluation (BCE) Approval:</td> </tr> <tr> <td>CIP Service Area:</td> <td colspan="2">Business Case Evaluation (BCE) Completion:</td> </tr> <tr> <td>Project Identified in Facilities Plan</td> <td colspan="2">C. Major Tasks Budget and Schedule</td> </tr> <tr> <td>Fiscal Year Introduced to CIP:</td> <td>Task</td> <td>Budget</td> </tr> <tr> <td rowspan="4">Project Status:</td> <td><input type="checkbox"/> Planning</td> <td>Current Approved per P6</td> </tr> <tr> <td><input type="checkbox"/> New Need</td> <td>Change Requested</td> </tr> <tr> <td><input type="checkbox"/> (Other)</td> <td>Planning</td> </tr> <tr> <td></td> <td>Design</td> </tr> <tr> <td></td> <td>Construction</td> </tr> <tr> <td></td> <td>Engg Services during Const</td> </tr> <tr> <td></td> <td>Other</td> </tr> <tr> <td></td> <td>Other</td> <td>\$ 0</td> </tr> <tr> <td></td> <td>Total</td> <td>\$ 0</td> </tr> <tr> <td colspan="3">2. Project Overview</td> </tr> <tr> <td colspan="3"> A. Project Description. Provide a brief project, describe the assets effected if <table border="1"> <tr> <td><input type="checkbox"/> Planning</td> </tr> <tr> <td><input type="checkbox"/> New Need</td> </tr> <tr> <td><input type="checkbox"/> (Other)</td> </tr> </table> </td> </tr> <tr> <td colspan="3"> B. Project Justification. Provide support and/or issues are being addressed, ex: goals, and major assumptions. <p>3. Justification for Project Budget, Schedule or Scope Change – if applicable</p> <p>Provide additional supporting detail, including project scope and reason for the project (e.g., problem to be addressed), project drivers, past problems/issues, expected impacts, analysis performed, data reviewed, alignment with organizational goals, and major assumptions and tasks.</p> </td> </tr> <tr> <td colspan="3"> Constraints/Dependencies. Describe any major project constraints, dependencies, uncertainties, permitting issues, or potential operational impacts that may impact implementation. </td> </tr> </table>			Project ID:	Project Name:	Job ID:	Job Name:	<input type="checkbox"/> New Project	<input type="checkbox"/> Existing Project	<input type="checkbox"/> Project Budget	<input type="checkbox"/> Consent Decree Project	<input type="checkbox"/> Permit Required	<input type="checkbox"/> Project Schedule	Initiating Department:	Business Case Evaluation (BCE) Approval:		CIP Service Area:	Business Case Evaluation (BCE) Completion:		Project Identified in Facilities Plan	C. Major Tasks Budget and Schedule		Fiscal Year Introduced to CIP:	Task	Budget	Project Status:	<input type="checkbox"/> Planning	Current Approved per P6	<input type="checkbox"/> New Need	Change Requested	<input type="checkbox"/> (Other)	Planning		Design		Construction		Engg Services during Const		Other		Other	\$ 0		Total	\$ 0	2. Project Overview			A. Project Description. Provide a brief project, describe the assets effected if <table border="1"> <tr> <td><input type="checkbox"/> Planning</td> </tr> <tr> <td><input type="checkbox"/> New Need</td> </tr> <tr> <td><input type="checkbox"/> (Other)</td> </tr> </table>			<input type="checkbox"/> Planning	<input type="checkbox"/> New Need	<input type="checkbox"/> (Other)	B. Project Justification. Provide support and/or issues are being addressed, ex: goals, and major assumptions. <p>3. Justification for Project Budget, Schedule or Scope Change – if applicable</p> <p>Provide additional supporting detail, including project scope and reason for the project (e.g., problem to be addressed), project drivers, past problems/issues, expected impacts, analysis performed, data reviewed, alignment with organizational goals, and major assumptions and tasks.</p>			Constraints/Dependencies. Describe any major project constraints, dependencies, uncertainties, permitting issues, or potential operational impacts that may impact implementation.		
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Internal Stakeholder Engagement



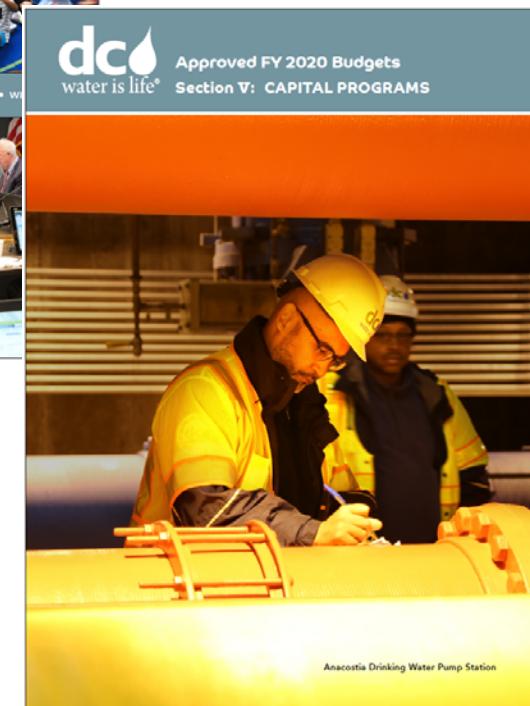
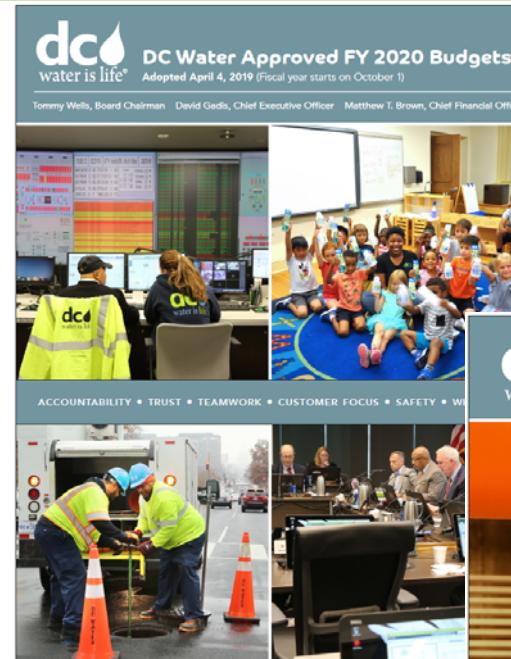
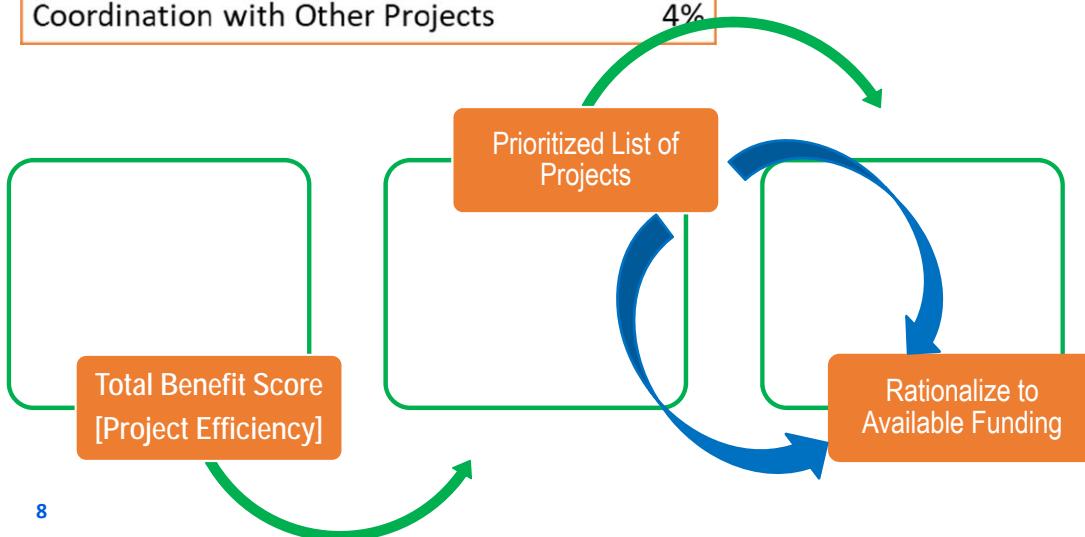
- Risk is calculated as a product of COF & LOF based on DC Water defined criteria
- Consequence of Failure (COF):

COF Category	Weighting
Health and Safety	25%
Public Confidence	15%
System Reliability	20%
Regulatory Compliance and Environmental Impact	25%
Fiscal Impacts	15%

- Likelihood of Failure (LOF):

LOF Category	Weighting
Physical Condition	55%
Performance	35%
Maintenance	10%

Criteria	Weight
Regulatory Compliance	27%
Health and Safety	20%
Risk Reduction	18%
Financial Benefits	11%
System Capacity and Growth	8%
Public Image	7%
Supplemental Benefits	5%
Coordination with Other Projects	4%



Rock Creek Main Interceptor (RCMI):

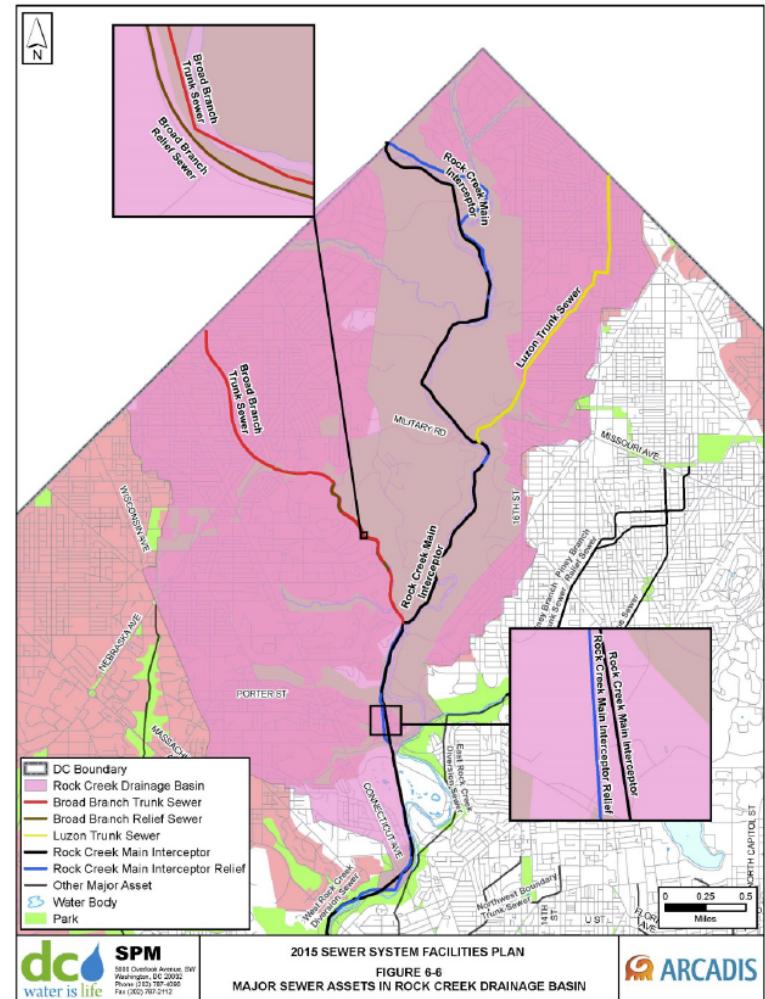
- 36-inch to 66-inch RCP
- 44,000 LF (approx.)

Rock Creek Main Interceptor Relief Sewer (RCMIRS):

- 54-inch to 66-inch
- 12,040 LF (approx.)

Inspections:

- 2006 – RCMI and RCMIRS
- 2011 – RCMI
- 2013 – RCMIRS
- 2014 – 2015 – RCMI and RCMIRS



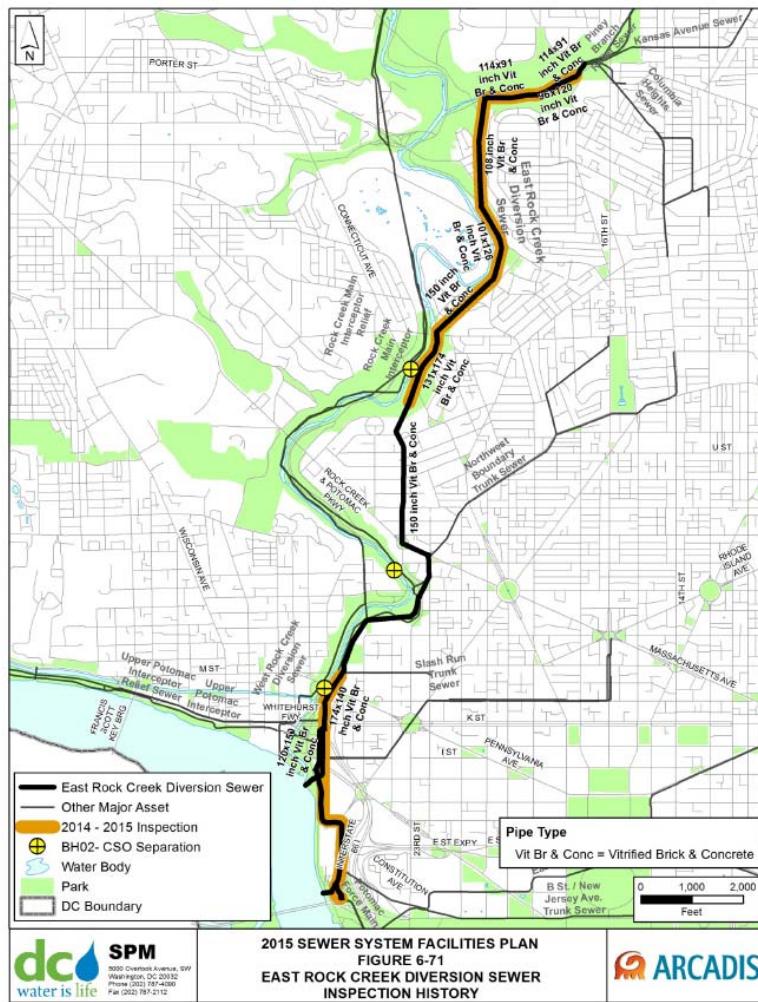


East Rock Creek Diversion Sewer

East Rock Creek Diversion Sewer:

- 18,000 LF (approx.)
- Size varies from 9'-6" x 7'-7 1/4" to 12'-6" x 10'-0"

Inspections: 2014 – 2015



West Rock Creek Diversion Sewer

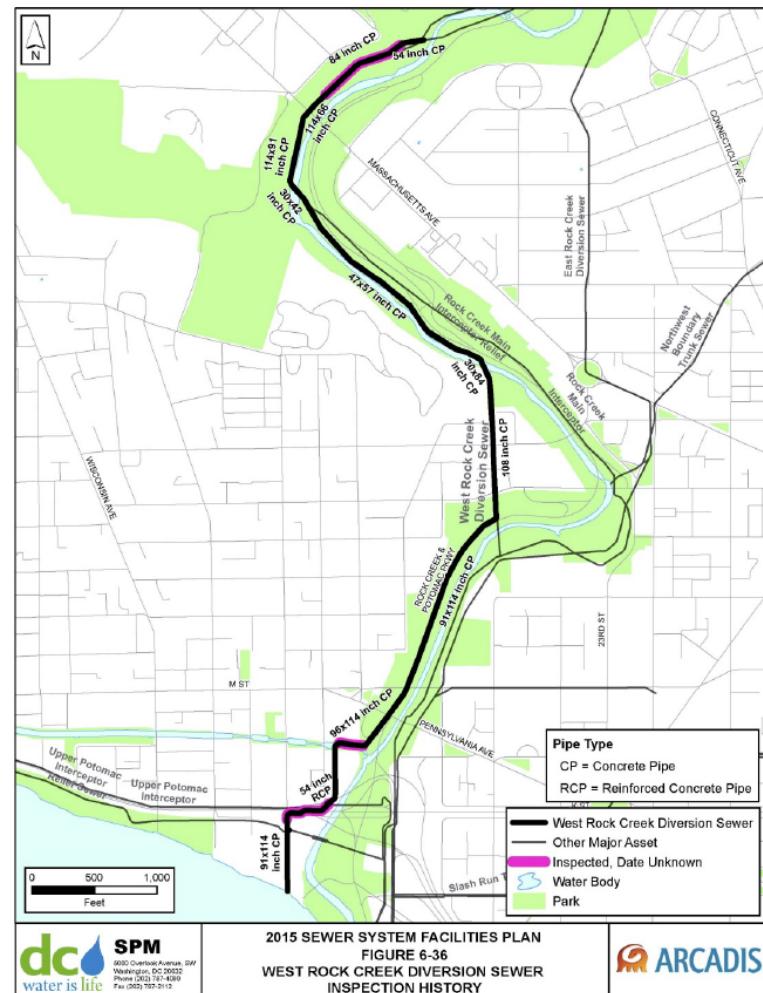
West Rock Creek Diversion

Sewer:

- 18,000 LF
- Size varies from 9'-6" x 7'-7 1/4" to 12'-6" x 10'-0"

Inspections:

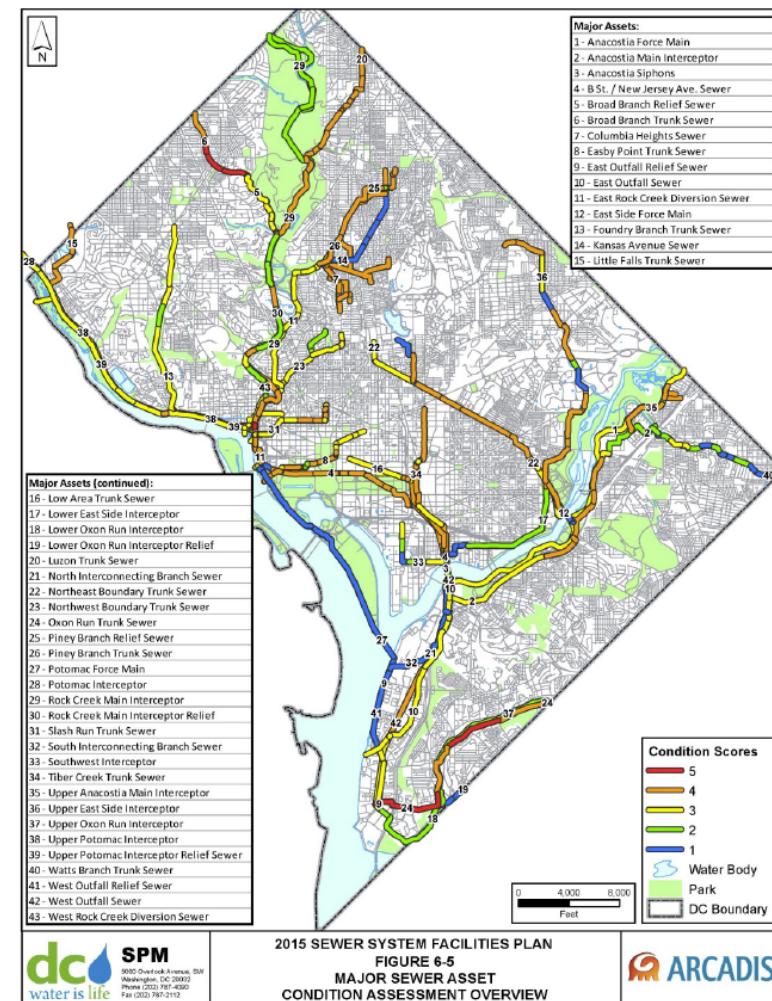
- Before 2006
- 2011 (attempted)





Major Sewers Ranking Based on Average Risk Score (as of 11/2019)

Major Asset Name	Risk Average
8 Easby Point Trunk Sewer	60.32
4 B Street New Jersey Avenue	50.47
17 Lower East Side Interceptor	47.56
23 Northwest Boundary Sewer	44.20
34 Tiber Creek	43.90
22 Northeast Boundary Sewer	42.40
11 East Rock Creek Diversion	41.86
10 East Outfall	39.88
Potomac Interceptor Relief Sewer	39.22
31 Slash Run	39.03
43 West Rock Creek Diversion	38.90
42 West Outfall Sewer	38.79
2 Anacostia Main Interceptor	38.28
29 Rock Creek Main Interceptor	37.34
28 Potomac Interceptor - Outside the District	35.28
16 Low Area Trunk Sewer	35.08
39 Upper Potomac Interceptor Relief Sewer	34.77
Combined Outfall Relief Sewer	34.47
38 Upper Potomac Interceptor	34.11
Sanitary Outfall Relief Sewer	33.00
26 Piney Branch	31.40
3 Siphons	31.28
21 North Interconnecting Branch	29.75
40 Watts Branch	29.49
32 South Interconnecting Sewers	29.17
36 Upper East Side Interceptor	28.27
15 Little Falls	27.59
First Street Tunnel	27.28
30 Rock Creek Main Interceptor Relief	26.90
33 Southwest Interceptor	25.10
18 Lower Oxon Run Interceptor	23.35
Blue Plains Tunnel	23.14
5 Broad Branch Trunk Relief	21.74
19 Lower Oxon Run Relief	19.71
24 Oxon Run Trunk	19.33
20 Luzon Trunk Sewer	19.13
6 Broad Branch Trunk	18.83
37 Upper Oxon Run Interceptor	17.64



This is a DOEE Effort

The Department of Energy and Environment (DOEE) is currently working on a National Environmental Policy Act (NEPA) document for Pinehurst.

Please contact Stephen Reiling at (202) 617-4733 or stephen.reiling@dc.gov for any information regarding Pinehurst.



Fenwick – Future, Proposed Project

Proposed scope of work

- Rehabilitation and protection of approximately 2,500 linear feet of sanitary sewer pipe within the project area
- Rehabilitation of manholes
- Rehabilitation of three Municipal Separate Storm Sewer System (MS4) outlets

Future DC Project

Please refer to the following DC Water Website for additional information:

<https://www.dewater.com/projects/sewer-rehabilitation-project-fenwick>



Sewer Rehabilitation Project - Fenwick



Overview

DC Water is performing sewer rehabilitation projects throughout the city as part of its Capital Improvement Program (CIP). The Fenwick Branch Sewer Rehabilitation project would involve the rehabilitation and protection of sanitary sewer (approximately 2,500 linear feet) from the Northernmost corner of the MD/DC border to Redbud Lane. This project area also includes sewer and Municipal Separate Storm Sewer System (MS4) Outfalls rehabilitation at North Portal Drive and West Beach Drive, NW. Benefits of this project would include the rehabilitation of an aging sanitary sewer system, improved structural integrity while maintaining adequate hydraulic capacity, and the reduction of stream and groundwater infiltration and potential sanitary sewer overflows.

In preparation for this project, thorough evaluations including internal inspections of the pipes and manholes and field investigations were conducted to assess the condition of the sewers and inventory the environmental resources present. The project is located within the Pinehurst Branch stream valley within the National Park Service (NPS) property. Because the project will cause impact on NPS land, DC Water is also coordinating with NPS as the lead federal agency on the preparation of a National Environmental Policy Act (NEPA) document during preliminary design studies. Other agencies may also



Overview

The proposed Glover-Archbold Park Sewer project would involve an alternative to address aging and defective sewer pipes from Van Ness Street, NW to Canal Road, NW.

Proposed Scope of Work

- Approximately 20,400 linear feet of sanitary sewer pipe within the project area would be addressed.
- Sixty-seven manholes would be addressed.
- Asset protection would be completed.
- Two Municipal Separate Storm Sewer System (MS4) outlets would be repaired and one MS4 would be extended.





Glover Archbold Park Proposed Rehabilitation

Schedule

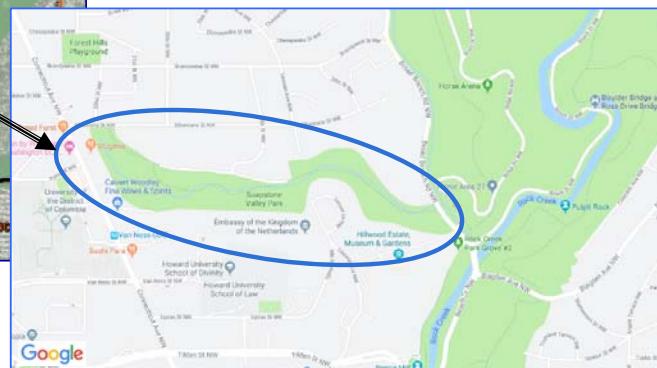
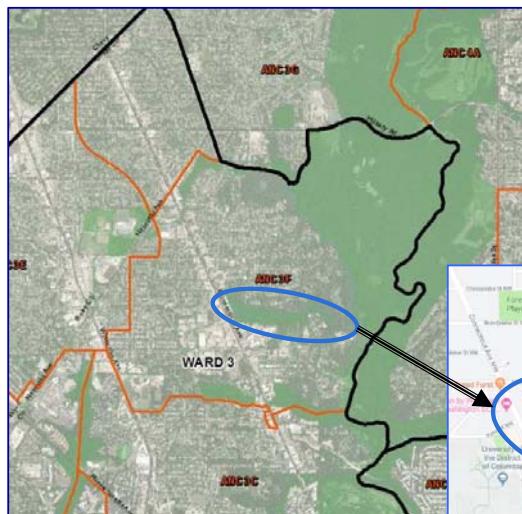
- Draft NEPA document: Submitted to NPS for review on January 30, 2017
- Draft NEPA document is currently being reviewed by the NPS
- NPS and DC Water completed site visits to discuss the Statement of Findings (SOF), March 2017
- NPS and DC Water completed site visits to discuss SOF, November 2017
- A Pump Station Design was considered but dismissed as an alternative, March 2018
- NPS and DC Water conducting preliminary planning walkthroughs of park, fall 2018





water is life

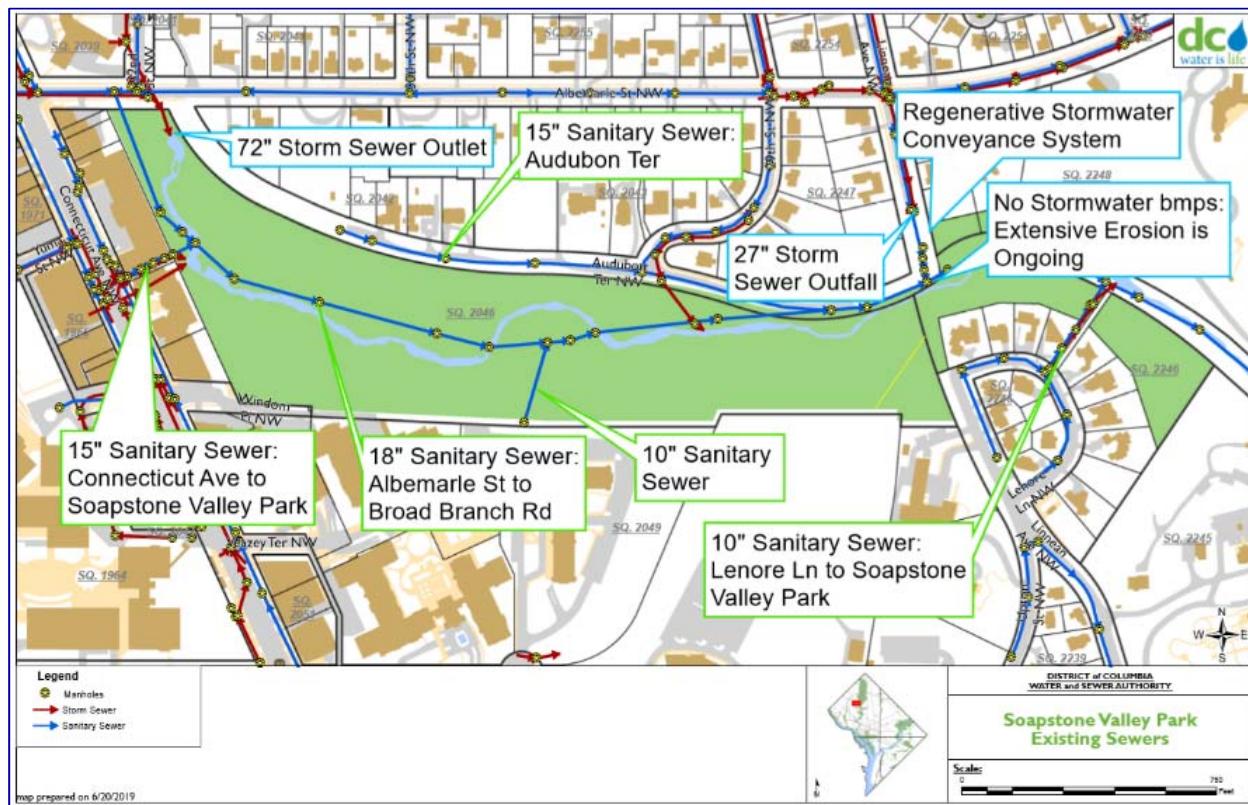
Soapstone Valley Park





Soapstone Valley Park Background Existing Sewers

water is life





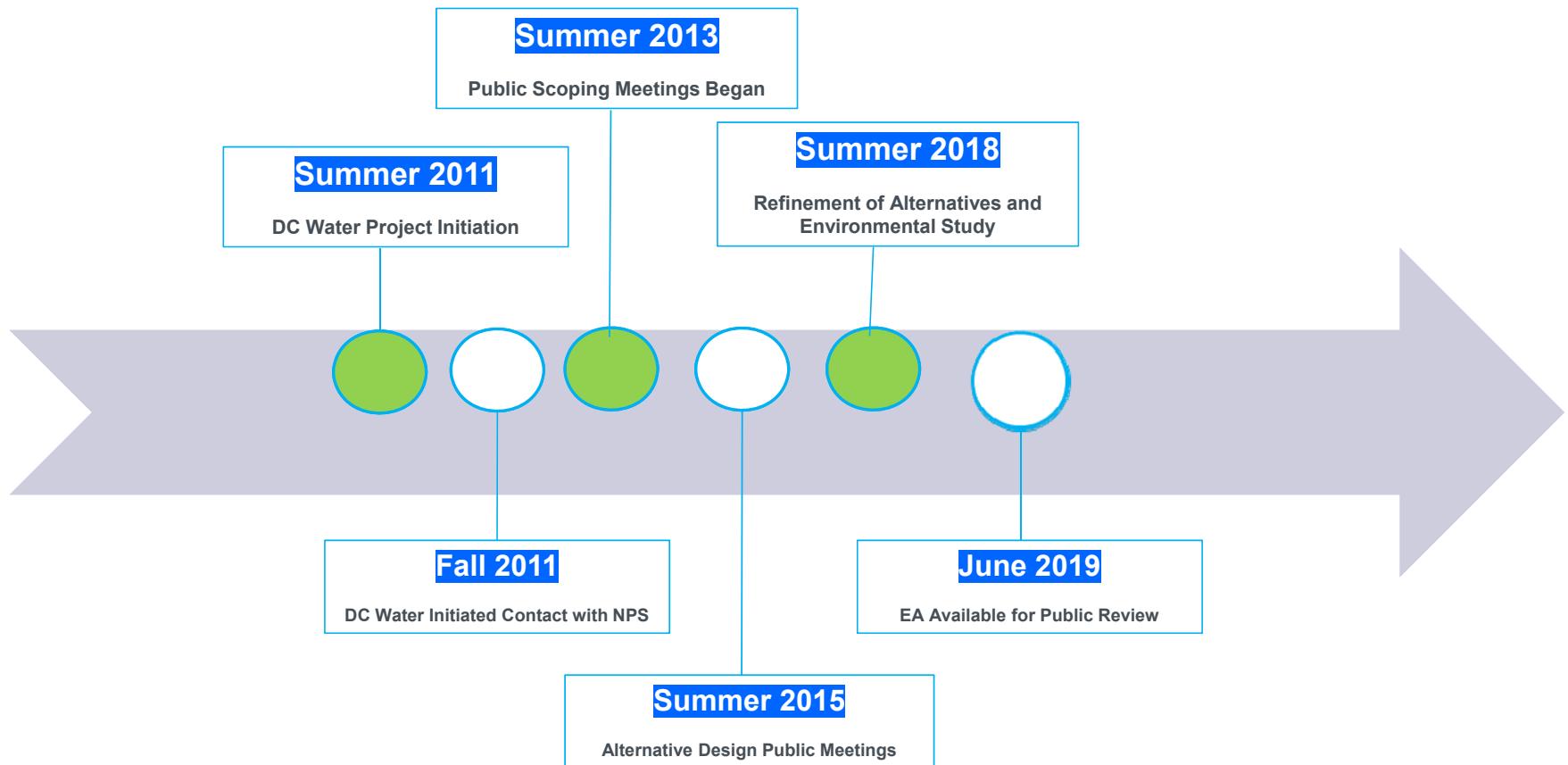
Current Status

Public Review and Comment

- 60-day Public Review from June 4th to August 2nd, 2019
- The public was encouraged to review and comment :
 - <https://parkplanning.nps.gov/soapstonesewer>

The screenshot shows the PEPC website interface. At the top, there's a navigation bar with links for 'Find a Park', 'Discover History', 'Explore Nature', 'Get Involved', 'Working With Communities', 'Teachers', 'Kids', and 'About Us'. Below the navigation is a banner for 'PEPC Planning, Environment & Public Comment' specifically for 'PEPC Home', 'Documents by Park', 'Policy/Links', 'Park Planning', and 'Search Documents'. A sidebar on the left is titled 'PROJECT LINKS' and includes links for 'Project Home', 'Plan Process', 'Meeting Notices', 'Links', 'Document List', and 'Open For Comment (0)'. The main content area discusses the 'Rehabilitation of Sewer Infrastructure in Soapstone Valley Park' in 'Rock Creek Park'. It details the project's goal to rehabilitate the aging sewer infrastructure within the Soapstone Valley Park sewer system while minimizing disturbances to park resources. The project involves approximately 6,200 linear feet of sanitary sewer pipe, reducing stream and groundwater infiltration, and eliminating exposed pipes and manholes. It also aims to repair stormwater outfalls that are part of the Municipal Separate Storm Sewer System (MS4) outlet. The EA identifies two alternatives: a no-action alternative and a trenchless alternative (DC Water's preferred alternative). The EA also discusses the potential impacts on natural resources and cultural resources. The public review period is from Tuesday, June 4, 2019, through Friday, August 2, 2019. There are three ways to comment: in person at a public meeting on Wednesday, June 26, 2019, from 6 p.m. to 8 p.m. at the Forest Hills of DC Assembly Hall, 4901 Connecticut Avenue NW, Washington, DC 20008; online on the website (see 'Open For Comment' link); or by mail for letters postmarked by August 2, 2019. The EA also provides contact information for the Superintendent of Rock Creek Park, Attention: Soapstone Valley Park Sewer Rehabilitation EA, 3545 Williamsburg Lane NW, Washington, DC 20008. A note states that personal identifying information may be made publicly available at any time, and users are encouraged to withhold such information. DC Water has produced two hard copies of the EA for public review at the following locations: Tenley-Friendship Public Library, Second Floor Information Desk, 4450 Wisconsin Ave. NW Washington, DC 20016 (202) 727-1488; and University of the District of Columbia (UDC) Library, 4200 Connecticut Ave. NW Washington, DC 20008. Note: Contact UDC Reference Librarian Chris Anglim - (202) 274-5843. Contact information for Emanuel D. Briggs, Manager, Community Outreach, Office of Marketing and Communications, District of Columbia Water and Sewer Authority, 1335 Canal Street SE, Washington, DC 20003, (202) 767-2003, Email: emanuel.briggs@dcwater.com.

Scoping – Meeting Timeline



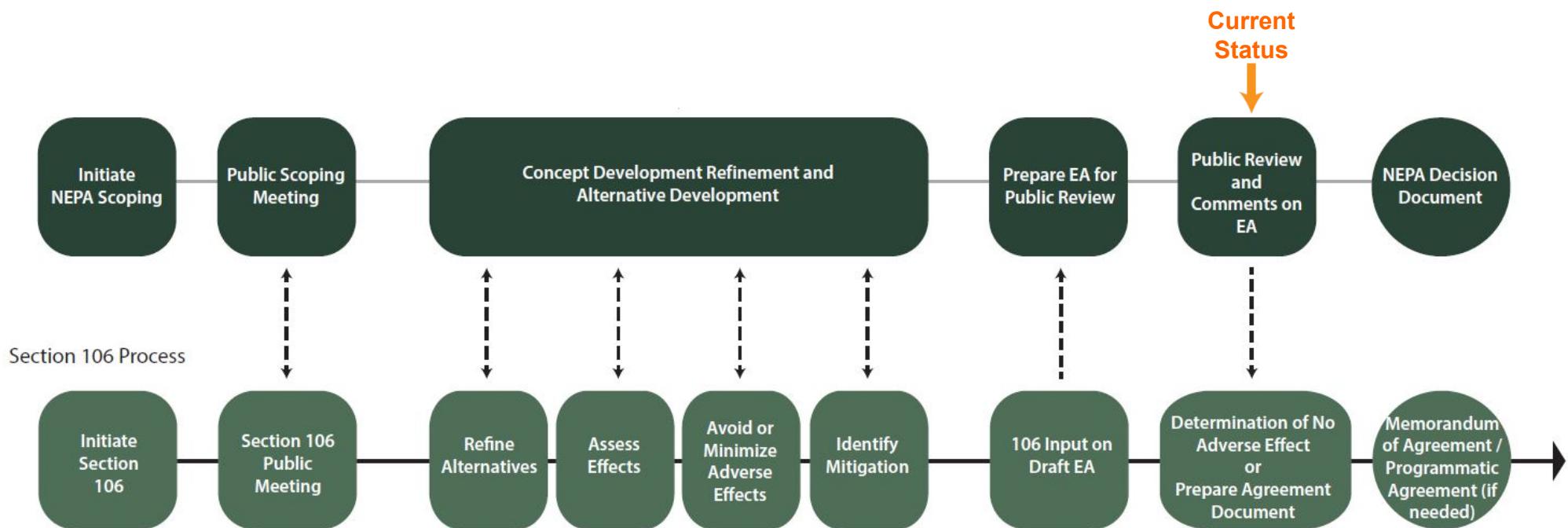


Figure. Outline of NEPA and Section 106 processes. Retrieved from <https://parkplanning.nps.gov/document.cfm?parkID=198&documentID=83443> on June 17, 2019.



Questions & Discussions