



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY Board of Directors

Meeting of the
Environmental Quality and Operations Committee

Thursday, April 21, 2022
9:30 a.m.

Microsoft Teams

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Phone Conference ID: 142 812 080#

- | | | | |
|------------|-------|--|---------------------------------|
| 9:30 a.m. | I. | Call to Order | Sarah Motsch
Chair |
| | II. | Roll Call | Linda Manley
Board Secretary |
| 9:35 a.m. | III. | AWTP Status Update | Akile Tesfaye |
| | | 1. BPAWTP Performance | |
| 9:55 a.m. | IV. | The Department of Occupational Safety and Health (DOSH) | David Gill |
| 10:10 a.m. | V. | Lead-Free DC Update | John Deignan |
| 10:25 a.m. | VI. | Action Items | Joel Grosser |
| | | <u>Joint Use</u> | |
| | | 1. Contract No. 18-PR-DDCS-03 - Tank and Reservoir Cleaning | |
| | | <u>Non-Joint Use</u> | |
| | | 1. None. | |
| 10:30 a.m. | VII. | Procurement Transformation Update | Dan Bae/Rudy Gonzalez |
| 10:50 a.m. | VIII. | Other Business / Emerging Issues | |

10:55 a.m.	IX.	Executive Session*	Sarah Motsch
11:00 a.m.	X.	Adjournment	Sarah Motsch

Follow-up Items from Prior Meetings:

1. Mr. Matthew Brown, Chief Financial Officer & EVP, to forward list of 'Other (PI)' users listed in the estimated user share information tables for Joint Use Action Item 1. **[Forwarded to BOD Secretary, March 21, 2022]**
2. Ms. Kishia Powell, Chief Operating Officer & EVP to report back to the Committee on DC Water's commitments related to the maintenance and repair of private hydrants after discussions with DC FEMS. **[Forwarded to BOD Secretary, April 08, 2022]**

The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(2); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4)(A); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10); proprietary matters under D.C. Official Code § 2-575(b)(11); train and develop members of a public body and staff under D.C. Official Codes § 2-575(b)(12); decision in an adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14), and other matters provided in the Act.



Wastewater Operations

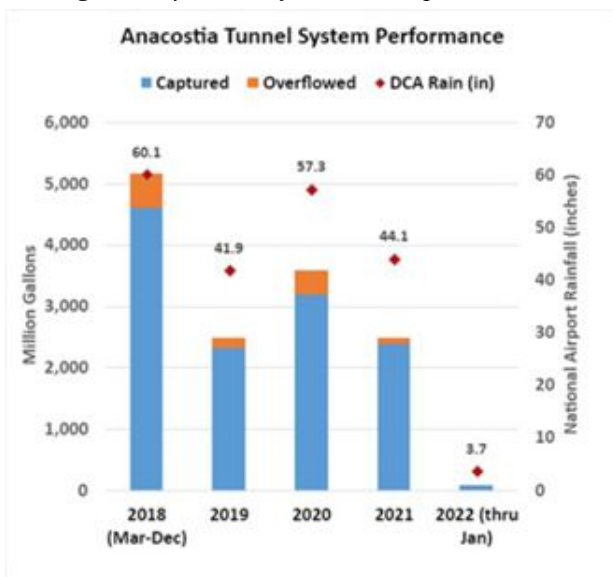
Blue Plains Advanced Wastewater Treatment Plant – March 2022

Accomplishments & Priorities

Wet Weather Treatment Facility Performance Monitoring Report

As part of the commissioning of the Blue Plains and Anacostia River Tunnels and the Wet Weather Treatment Facilities (WWTF), DC Water has submitted to EPA a 180-day performance monitoring plan. The purpose of this plan is to provide a summary of the operation and treatment optimization of the newly commissioned facilities. The graph below provides a summary of the capture performance of the tunnel system each year since facility start-up in March of 2018.

Figure 1. System Performance Captured Flows



**Accomplishments
& Priorities**

Figure 2. Wet Weather Treatment Facility Aerial View



The monitoring report provides the EPA with data to document that the facilities as commissioned are meeting the stated assumptions of the Long-Term Control Plan (LTCP). The period covered by this report is from May 11, 2020, through October 31, 2020, this corresponds to the period with which DC Water staff controlled the operations of the treatment facilities. A summary of the overall operation with regards to flows and capture for the system is shown in Table 1 below.

Table 1. System Operation Parameters - Summary

Parameter	Value
Rainfall, avg 4 gages (inches)	68.6
Volume captured by tunnel (mil gal)	4,737
Volume overflowed (mil gal)	358
% Capture	93%
# of Wet Weather Events	43
# Wet Weather Events where 100 percent of WWTF influent flow received complete treatment	19
% of volume receiving complete treatment	76%
% of volume discharged to Outfall 001	24%
Volume discharged to Outfall 001 (mil gal)	1,158

Of particular note is during the reporting period, approximately 4.7 billion gallons of flow were captured by the tunnel system and only 358 million gallons of CSOs were reported. This is a CSO capture rate of 93% which is significantly greater than the 80% design assumption for this phase of the

**Accomplishments
& Priorities**

project. Also, of the 4.7 billion gallons captured, 76% received treatment at the WWTF and then was directed to the back to Blue Plains complete treatment facilities and discharged to Outfall 002. Only 24% of the captured flow was treated though the WWTFs and discharged to Outfall 001. The fact that the majority of the captured flow can receive complete treatment though the plant has led to high levels of pollutant removals.

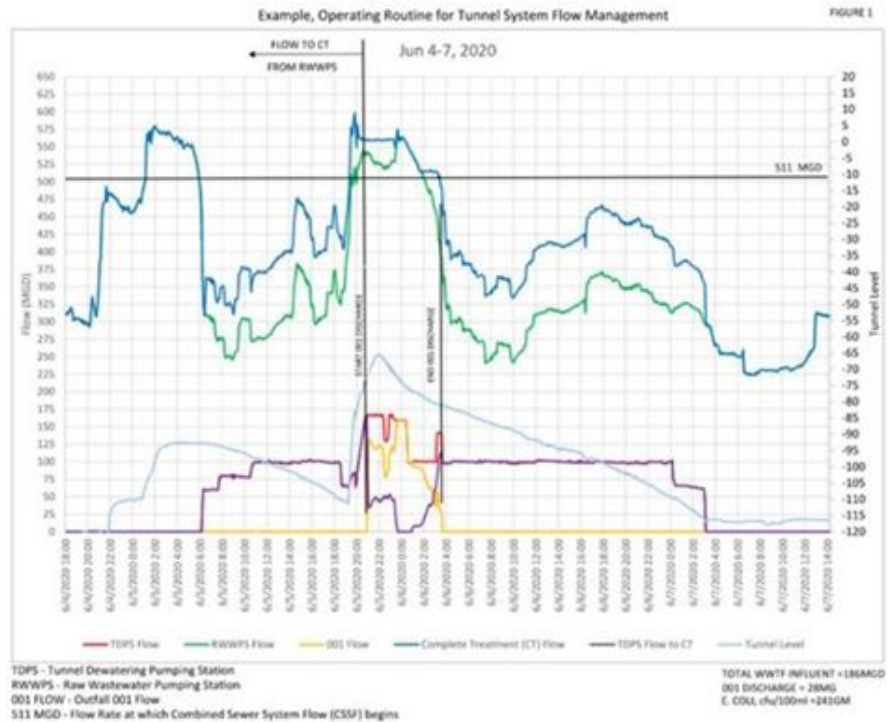
Table 2. Pollutant Removals from Captured Combined Flows

Pollutant Removals for Captured Wet Weather Flows		
Pollutant	Lbs Removed	% Removal
TSS	3,865,000	97 %
cBOD	900,000	87 %
TN	227,000	83 %
TP	35,000	96 %

Part of the goal of the report and process assessment was to provide EPA draft process operational parameters for potential inclusion in the future NPDES Permit language. These include flow management routines and process treatment operational targets. A flow management routine which balances working to limit discharge to Outfall 001 (thus maximizing flows to Outfall 002) while at the same time working to maintain available storage volume in the Tunnel System has been developed with operational experience. This system needs to be flexible enough to address significant variations in a storm event and the potential for increasing variability due to climate change. See Fig. 3 below for an example of flow management during a two-day storm event.

Accomplishments & Priorities

Figure 3. Two-day Flow Management Example



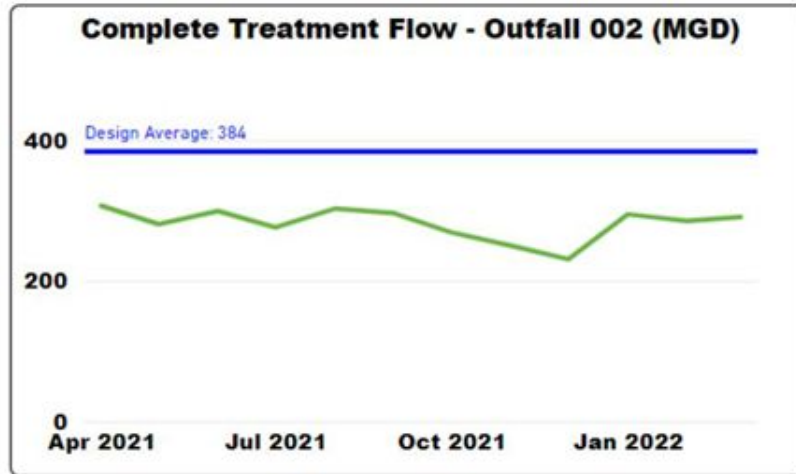
Additionally draft parametric parameters that when met would be indicators of good treatment performance for the WWTF and the discharge to Outfall 001 were provided to EPA for potential inclusion in the future NPDES Permit. These parametric parameters provide operational targets for the addition of ferric chloride (pollutant removal) and sodium hypochlorite (disinfection) during system operation and discharge to Outfall 001.

Operational Performance

Blue Plains Complete Treatment Performance: The plant performance for the month of March 2022 was excellent with all effluent parameters well below the seven-day and monthly NPDES permit requirements. The monthly average flow through complete treatment (Outfall 002) was 284 MGD. There was no treated captured combined flow directed to Outfall 001 from the Wet Weather Treatment Facility (WWTF).

Operational Performance

Figure 4. Monthly Average Influent Flow Trend to Complete Treatment (MGD)



Wet Weather Treatment Facility (WWTF) Performance: In March 2022, a total of 112 MG of combined wet weather flow, captured in the tunnel system, was treated through the plant. There was no measured overflow that took place this month (Table 1).

Table 3. Wet Weather Treatment Facility (WWTF) Performance

	March 2022*	Calendar Year 2022 (Through March)
Total Precipitation, inches (DCA gauge)	2.77	8.76
Total Volume Captured in the Anacostia Tunnel, MG	111	345
Measured Overflow, MG	0	0
Percent Captured**	100%	100%
Screenings and Grit Capture, tons		

Note: *Based on preliminary data.

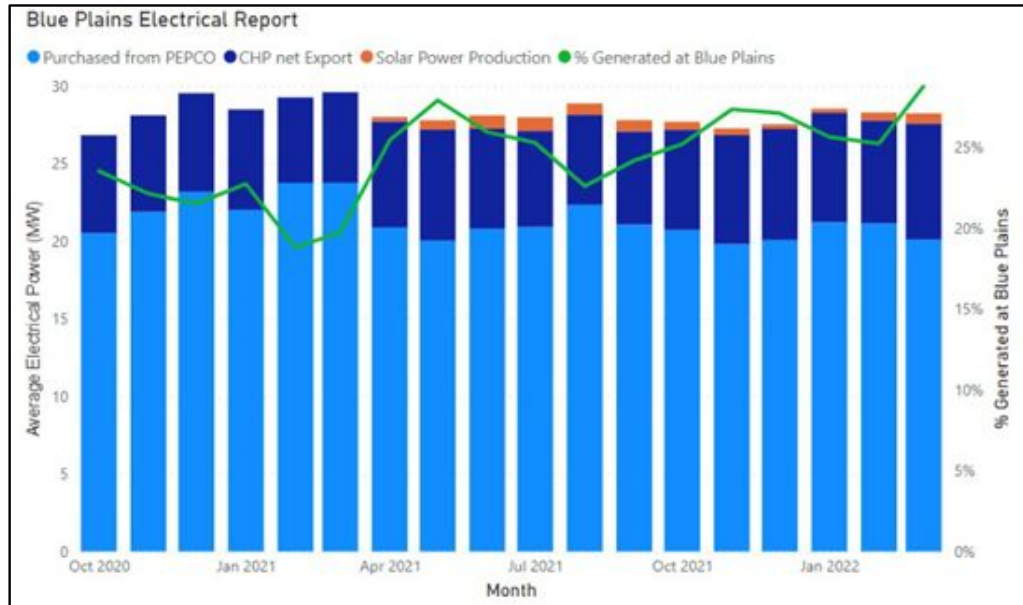
**Expected Capture ~80%

Blue Plains Electrical Energy Use and Generation: The Combined Heat and Power (CHP) facility produced an average of 8.9 megawatts (MW) of renewable electricity during this month. Contractually, the CHP performance is evaluated based on the net electricity export to the Blue Plains grid, which averaged 7.5 MW as shown in Figure 4 below. The solar system produced an additional 0.7 MW of power on average. The total electricity consumption at Blue Plains averaged 28.2 MW. Out of total electrical consumption, 29% of electricity was generated onsite between CHP and solar panels, which

Operational Performance

surpassed the plant performance metrics of 20%. DC Water purchased an average of 20.1 MW of electricity from PEPCO as shown in the graph below.

Figure 5. Blue Plains Energy Report – Average Electricity Purchased from PEPCO (light blue), Net Export from CHP (dark blue), Solar Power Production (orange) and % of Total Plant Electricity Use Generated Onsite (green line on right Y-axis)



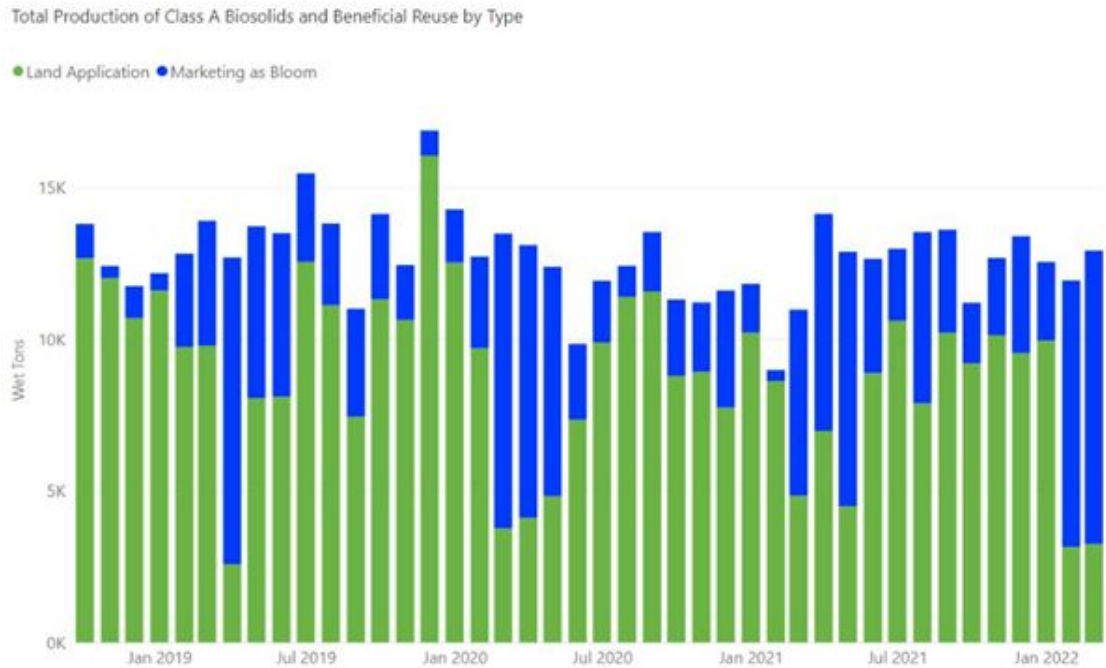
Class A Biosolids Production: In March, biosolids hauling averaged 426 wet tons per day (wtpd). All biosolids produced during the month met Class A Exceptional Quality (EQ) requirements required by EPA. Fecal Coliform values on daily process monitoring samples remained below the 1,000 MPN*/gram required for Class A biosolids - consistent with the low levels measured historically.

*Most Probable Number (MPN) per gram measures statistical probability of number of organisms

Bloom Marketing: The average quantities of Class A biosolids transported and applied on farms and the quantities marketed as Bloom are shown on the graph below. In March, Blue Drop sold 9,678 wet tons of Bloom (Figure 6). This is a sales record for March. Blue Drop did an excellent job of marketing, and high fertilizer prices drove more farmers to our product. The remaining 3,243 wet tons not sold into the market were land applied through WSSC contracts.

Operational Performance

Figure 6. Tons of Class A Biosolids Produced - October 2018 to March 2022 Marketed as Bloom (blue) and Land Applied (green)



Progress Report

Water Quality and Pretreatment: DC Water received final approval from EPA Region III on March 29 for modifications to the local limits submitted to EPA Region III in July 2021 and published as a Final Rulemaking in the DC Register on January 21, 2022. Staff also submitted the 2021 Annual Pretreatment Program Report to EPA Region III on March 30 as required for permit compliance.

Research and Development:

Three main research projects were submitted to WRF unsolicited research program. The Unsolicited Research Program funds novel, transformative research and innovation projects that can significantly advance the science of water and increase our ability to protect and preserve water in a sustainable and cost-effective manner. This program considers proposals that would take existing research to the next level of completion, resulting in practical solutions to water quality challenges. The program routinely receives 10% of WRF’s allocated research budget each year. Timeline: pre-proposal was submitted on March 31, 2021. When selected in the first round, a full proposal will need to be submitted by June 13th. It is envisioned that when awarded, research can be started in fall 2022.

Progress Report

The following proposals were submitted:

- 1. Effects of post-processing on stabilization and mobility of per- and polyfluoroalkyl substances (PFAS) and PFAS precursors in biosolids.**
 - a. PI: Hossain Azam (University of the District of Columbia). Role DC Water: CO-PI (Chris Peot, Haydee De Clippeir, James Fotouhi)
 - b. Objective: investigate the impact of curing and blending of biosolids on PFAS transformation and leachability of PFAS through the soil column.
 - c. Value to DC Water: This will provide understanding of PFAS transformation during post-processing and will identify products that can help minimize PFAS transport to groundwater once land applied.
- 2. Developing a process-based prediction of sludge settleability**
 - a. PI: Belinda Sturm (University of Kansas), role DC Water: Co-PI (Haydee De Clippeir)
 - b. Objective: develop prediction tool of settleability that can help prediction of settling behavior as a result of process changes.
 - c. Value to DC Water: This tool can help to predict the impact of capital investments on process performance and effluent quality. In addition, it can help with virtual piloting of different options to enhance settling and effluent quality in our secondary treatment system
- 3. Optimizing and Understanding Micro-Aeration and H₂ Supplementation to Enhance Anaerobic Digestion**
 - a. PI: Mathew Higgins (Bucknell University), role DC Water: technical advisor (Haydee De Clippeir)
 - b. Objective: this project will investigate methods for dosing and control of microaeration and H₂ supplementation and to better characterize their impacts on the AD process, including process chemistry, biogas quality, conditioning, dewatering and cake quality.
 - c. Value to DC Water: the approaches studies will increase the methane content in the biogas. This work can help evaluate biogas upgrading alternative for Blue Plains.

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District of Columbia Water and Sewer Authority



Briefing on:

Wet Weather Treatment Facility Post Construction Monitoring

Briefing for:

Environmental Quality and Operations Committee

April 21, 2022

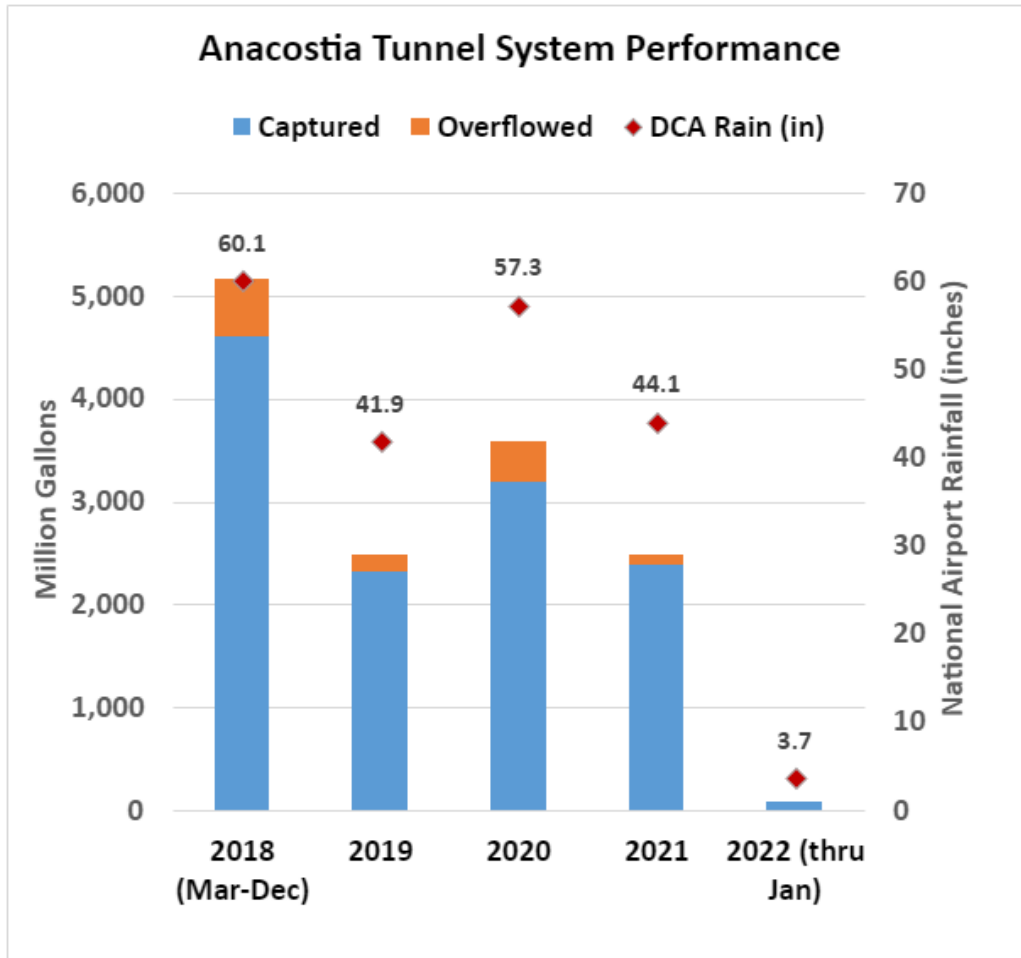
DCWATER.COM

Agenda

- Background
- NPDES Permit Requirements
- Performance Assessment Results
- Proposed NPDES Permit Conditions
- Next Steps



Background - Performance Since Commissioning



- Nearly 12.6 billion gallons captured Mar 2018 – Dec Jan 2022
- Over 7,900 tons of trash, debris, and other solids captured
- Exceeding predicted capture rate (90%>80%)

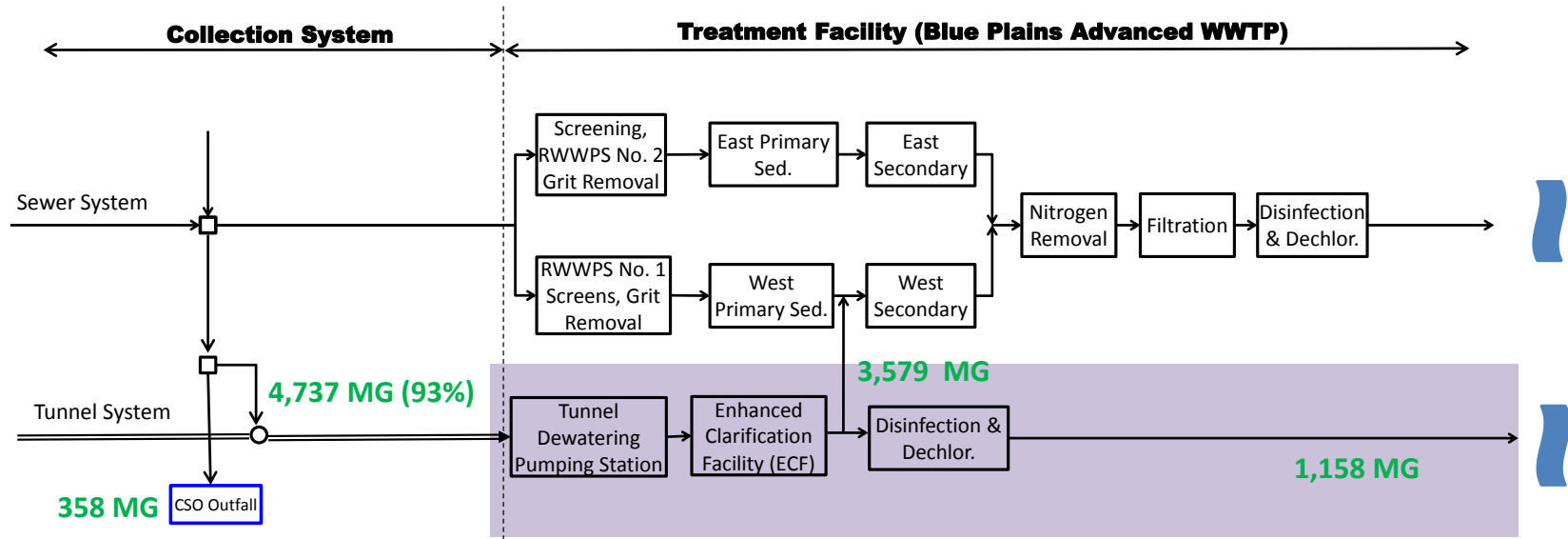
NPDES Permit Requirements - Post Construction Monitoring

Post-Construction Condition	Status
DC Water has submitted and EPA has approved a Monitoring Plan to demonstrate that the WWTF is meeting the assumptions of the LTCP regarding the level of control and develop Parametric Limits for the WWTF to ensure compliance	Monitoring plan submitted on 7/12/2017 and EPA approved on 6/6/2018
Conduct monitoring according to the approved monitoring plan	Monitoring and data collection May 2020 through October 2021
Submit for EPA review and approval of Performance Assessment. Correlate Operational Parameters including Flow management Routines to effluent quality and Propose Process Unit Operational Parameters	Overview of WWTF Operations and Performance and Proposed Operational Parameters for the WWTF submitted on December 22, 2021

Performance Assessment Results – Highlights May 11, 2020 to Oct 31, 2021

Parameter	Value
Rainfall, avg 4 gages (inches)	68.6
Volume captured by tunnel (mil gal)	4,737
Volume overflowed (mil gal)	358
% Capture	93%
# of Wet Weather Events	43
# Wet Weather Events where 100 percent of WWTF influent flow received complete treatment	19
% of volume receiving complete treatment	76%
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Volume discharged to Outfall 001 (mil gal)	1,158

Performance Assessment Results – Highlights May 11, 2020 to Oct 31, 2021



Rainfall, DCA Gauge, (in)	Volume Captured by Tunnel (MG)	Measured Overflow, MG	% captured	Volume Discharge to 001 (MG)	% of Captured Volume to 001
68.6	4,737	358	93%	1,158	24%

- 24% of volume captured by tunnel has been treated and discharged from outfall 001
- 76% has been treated and discharged from outfall 002 (complete treatment)

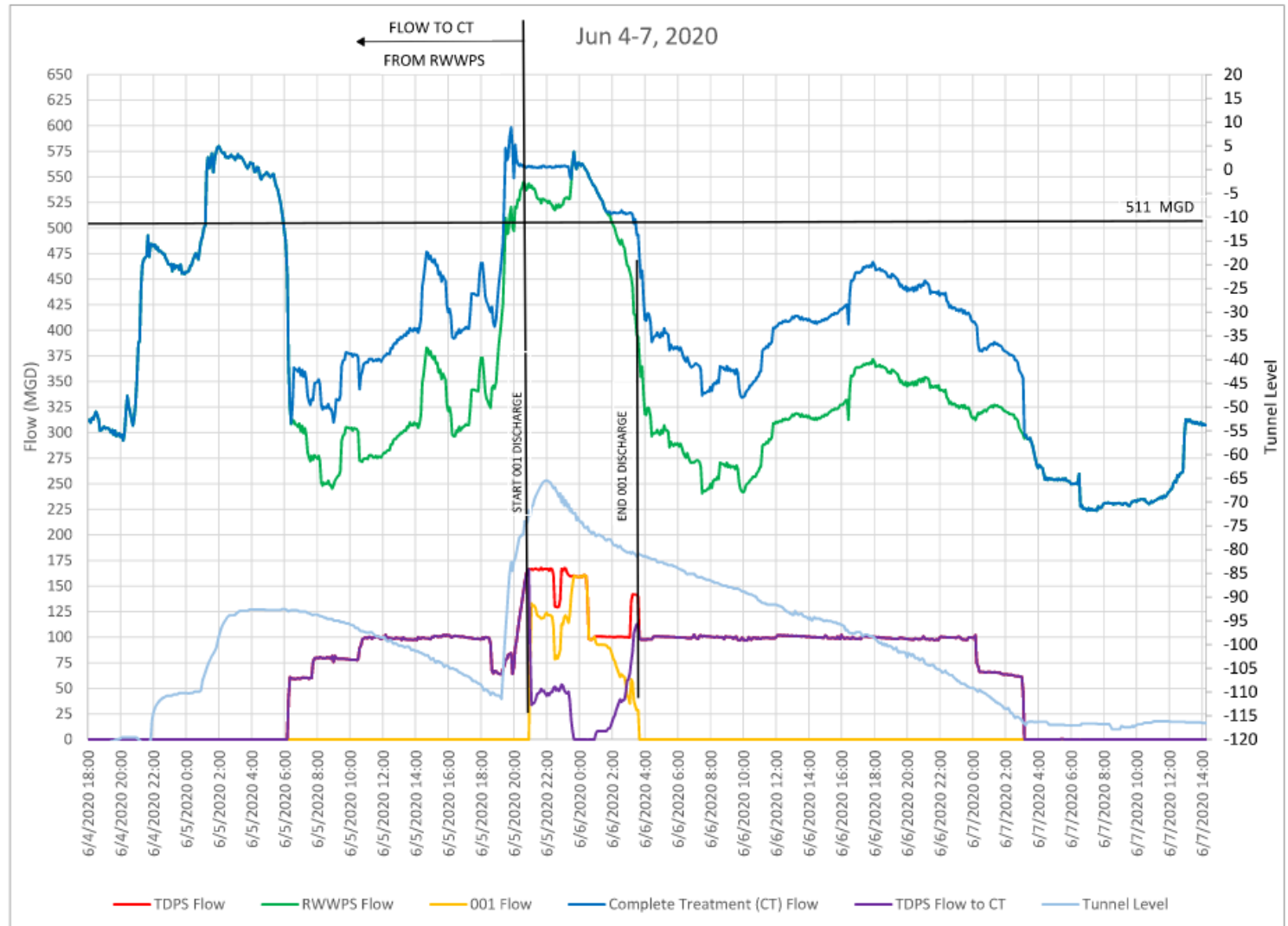
Performance Assessment Results – Highlights May 11, 2020 to Oct 31, 2021

- Flow management by operations staff successful
- Operated based on specific nature of events and anticipated rain

- Maximize flow through complete treatment
- Maximize available tunnel volume to minimize CSOs

Example, Operating Routine for Tunnel System Flow Management

FIGURE 1



TDPS - Tunnel Dewatering Pumping Station
 RWWPS - Raw Wastewater Pumping Station
 001 FLOW - Outfall 001 Flow
 511 MGD - Flow Rate at which Combined Sewer System Flow (CSSF) begins

TOTAL WWTF INFLUENT =186MGD
 001 DISCHARGE = 28MG
 E. COLI, cfu/100ml =241GM

Performance Assessment Results – Highlights May 11, 2020 to Oct 31, 2021

Pollutants Removed from Captured Combined Flows	
Parameter	Pounds Removed (Lbs.)
Total Suspended solids (TSS)	3,865,000
Carbonaceous Biochemical Oxygen Demand (cBOD)	900,000
Total Nitrogen (TN)	227,000
Total Phosphorus (TP)	35,000

Performance Assessment Results – Highlights May 11, 2020 to Oct 31, 2021

- Existing Operating Routines Included in the Permit: Flow Management Routines
- Proposed Additional Routines: To demonstrated Performance in Solids Removal and Disinfection

Item	Finding
Ferric Chloride Dosage Management	<ul style="list-style-type: none"> • Maintain ferric chloride dosage (event average) of 15 to 35 mg/l (as Fe or Iron) • Produces effluent TSS from 5 to 20 mg/l (typically)
E-Coli Geometric Mean Effluent Concentration	<ul style="list-style-type: none"> • Maintain hypochlorite dosage (event average as Cl₂) of not less than 5 mg/l with good chlorine contact tank mixing and contact • Produces effluent E. Coli geometric mean of 250 cfu/100 ml or less. • In-stream water quality standard of 126 cfu/100 ml 20 day max, 5 samples minimum, can be expected to be met under such conditions

Existing and Proposed NPDES Permit Conditions

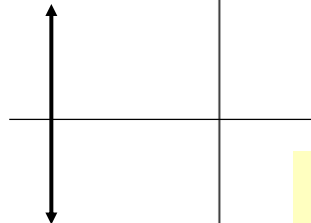
Table – Existing and Proposed Operating Routines

(1) Conditions and limitations for Influent Flow discharged from Outfall 001 shall be as follows:

FLOW CONDITION AND PERIOD	TIMES	MEASURED FLOW RATES FOR OUTFALL 001
A. DWF	All times	No discharge permitted
B. CSSF		
1. From effective date of permit and lasting until the WWTF is placed in operation.	All times	Up to and including 336 MGD above rates to receive complete treatment under Part 1.B for Outfall 002
2. Following the WWTF being placed in operation for filling and dewatering the Tunnel System under operating routines that provide for:	All times	Up to a maximum of 225 MGD
a. Conveying flow from the Tunnel System through the WWTF or transfer to Complete Treatment;		
b. Regulating the discharge of WWTF effluent to maintain a rate of 511 MGD through complete treatment while optimizing conditions for maintaining the availability of the storage volume in the Tunnel System such that the occurrence of CSOs is minimized;		
c. No discharge of flow from the Tunnel System from Outfall 001 when DWF conditions exist; and		
d. Limiting discharge of WWTF effluent from Outfall 001 to a maximum rate 225 MGD; provided that any discharge of WWTF effluent from Outfall 001 shall not occur except for the purpose of maintaining the availability of storage volume in the Tunnel System to the extent that the occurrence of CSOs is minimized (11).		
e. Maintaining Ferric Chloride dosage to the WWTF High-Rate Clarification Process in a range of 15 to 35 mg/l as iron (Fe). (12)		
f. A Hypochlorite dosage of not less than 5 mg/l as chlorine (Cl ₂) with good Chlorine Contact Tank mixing and contact procedures. (12)		

Existing conditions

Proposed conditions



(12) Report event average dosages for the period discharging to Outfall 001 where such discharges last 2-hours or longer of continuous discharge.

Next Steps

- Obtain EPA comments and approval of Performance Monitoring and Assessment
- Operating routines are being utilized by DC Water
- NPDES permit expires Aug 23, 2023, reapplication due Feb 23, 2023. Consider including operating routines as part of permit reissuance

EXTRA SLIDE

NPDES Permit Fact Sheet, pages 15 and 16

... As Outfall 001 is a CSO-related bypass, there is significant variability in the influent quality and quantity, and its discharge frequency. This, when coupled with sample analysis lag time does not allow real time analysis of the facility's compliance status. Consequently, EPA has concluded that numeric effluent limitations are infeasible for Outfall 001. Therefore, pursuant to 40 CFR 122.44(k), EPA intends to require best management practices in the form of parametric operation and monitoring requirements to control discharges from Outfall 001. However, since the WWTF will not be operational until 2018, EPA lacks the data needed to establish the parametric monitoring and operation requirements for Outfall 001 in this permit. Therefore, in order to collect the data needed to establish the parametric operation and monitoring requirements for Outfall 001, this permit establishes a requirement in Part III.D.2 requiring the permittee to conduct a monitoring and operation analysis ...



The Department of Occupational Safety and Health (DOSH)

Briefing for the Environmental Quality & Operation Committee

April 21, 2022

David Gill SMS, CHST, STS-C
Director (Acting)



Briefing Agenda

- DC Water Occupational Safety & Health
- Strategic Context - **Healthy, Safe & Well** Imperative
- Initiatives
- Communications and Engagement

DC Water Occupational Safety & Health



- DC Water Occupational Safety & Health **supports the Authority's mission** by using our professional knowledge and experience to help the DC Water community **demonstrate behaviors that promote safety as a way of life.**
- Current focus of DOSH:
 - Development and implementation of an updated Plan and Program for Occupational Safety & Health
 - Updating safety policies, programs and procedures to reduce or eliminate accidents/injuries through planning, inspection, and education
 - Promoting a cultural change – working as a collaborator and champion to build trust – “Safety Differently”
- Commitments:
 - **Dedication** – see things through to the end
 - **Collaboration** – work with all internal and external partners/colleagues
 - **Integrity** – uphold honesty and strong moral principles
 - **Consistency** – apply the same process to maintain accuracy and fairness
 - **Communication** – share information and be transparent
 - **Concern for people** – have people return home just as they left

Healthy, Safe & Well Imperative Strategic Context



- 💧 In partnership with People & Talent, DOSH will advance programs of work as part of the **Healthy, Safe and Well Imperative** under the following themes:
 - A safe DC Water for all, above all else
 - Ensuring together we thrive
- 💧 Eight KPIs focused on safety audits, tracking incident data, observations, corrective actions, training and risk assessment/mitigation

KPI	Calculation	Notes	Frequency
Percentage of completed of executive Leadership Audits (Directors and up)	(# of audits completed by Senior Management) divided by the (# of audits planned by Senior Management)	Directors up through EVPs are required assess their area of responsibility (AOR) once on a monthly basis. Audit their area of repsonsibility to the conformance of stated goals & expectations.	Monthly
Percentage of completed Management Audits (General Foreman, Supervisors, Managers)	(# of audits completed by Management) divided by the (# of audits planned by Management)	Management (General Foreman, Supervisors, Managers) are required assess their area of responsibility (AOR) twice on a monthly basis. Audit their area of responsibility to the conformance of stated goals & expectations.	Monthly
Total Recordable Incident Rate (TRIR)	Incidence rate = (Total number of recordable incident) x 200,000 / (Total manhour worked for one year).	Rate of OSHA Recordable Incidents using the calculation from OSHA in conjunction w/ our manhours & number of recordable incidents.	Monthly
Lost Time Recordable Incident Rate (LTRIR)	LTRIR=([number of lost time injuries in the reporting period] x 200,000)/(total hours worked in the reporting period).	Rate of OSHA Recordable Incidents using the calculation from OSHA in conjunction w/ our manhours & number of lost time incidents	Monthly
Safety Observations (near misses, good catches, observations)	1/30,000 man hours	Near miss, good catches and safety observations.	Monthly
Percentage of corrective actions closed out in the Safety Risk System.	Total Corrective Actions Reported/Total Corrective Actions Closed)	Correctvie actions from Incident investigations Inspections, Audits, Good Catches, Near Misses, etc..	Quarterly
Percentage OEM, Security and Safety training completed	Percentage of required trainings completed	Mandatory and required trainings	Annually
Percentage of Risk Assessment developed	2 per month per department	Ongoing and pro active process to identify hazards and assess risks	Monthly

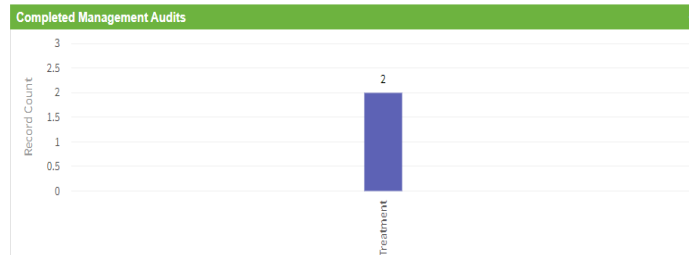
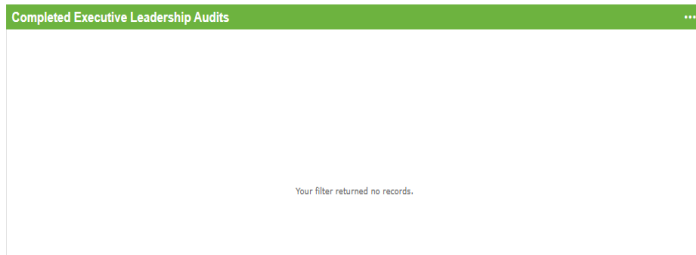
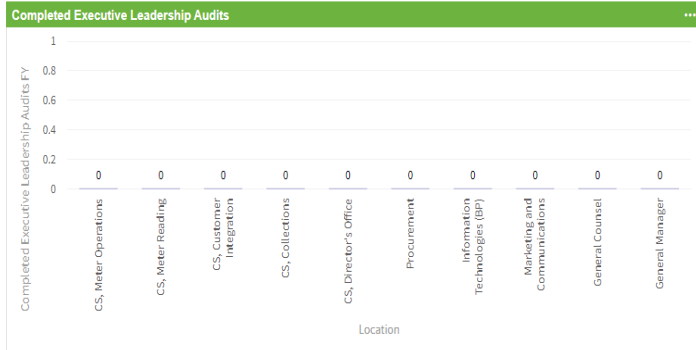


Healthy, Safe & Well Imperative Key Performance Indicators and development of Safety Scorecard



Executive Leadership Audi...	Managers Audits	Observations	Closed Correctives	TRIR	LTIR	Risk Assessments	Completed Trainings
0	2	5		2.86	1.90	8	326

Completed Audits



💧 Safety Scorecard under development to track KPIs

DOSH Initiatives



Communications – DOSH maintains active communications throughout the Authority and engages employees to promote safety as a way of life. Strategic communications include:

- Monthly meetings with Union management (Union Management Safety Committee meeting)
- Monthly Safety Bulletin focused on current safety issues (How to Prepare for Driving in Inclement Weather, How to Prevent Heat Stress, etc.)
- Weekly Toolbox Talk topic, updated each month on DOSH Pipeline page.



DOSH Initiatives



- **Engagement** – Union Management Safety Committee (monthly)
 - COVID Updates
 - Worker’s Compensation and Risk Updates
 - Open safety discussion- issues, concerns, items of interest.
- **Safety Committee walks (under development)** – Increase engagement, educate representation on hazard identification.
- **Safety Policies** – Reviews and updates underway
 - 4 policy reviews completed and 12 underway

DOSH Initiatives

Engagement - KASK Helmet Pilot Program



DOSH Initiatives

Engagement - Increased Trust and Learning



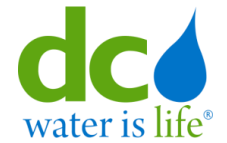
Confined Space Training

- ❖ WWT- Operations, DMS and Process engineering

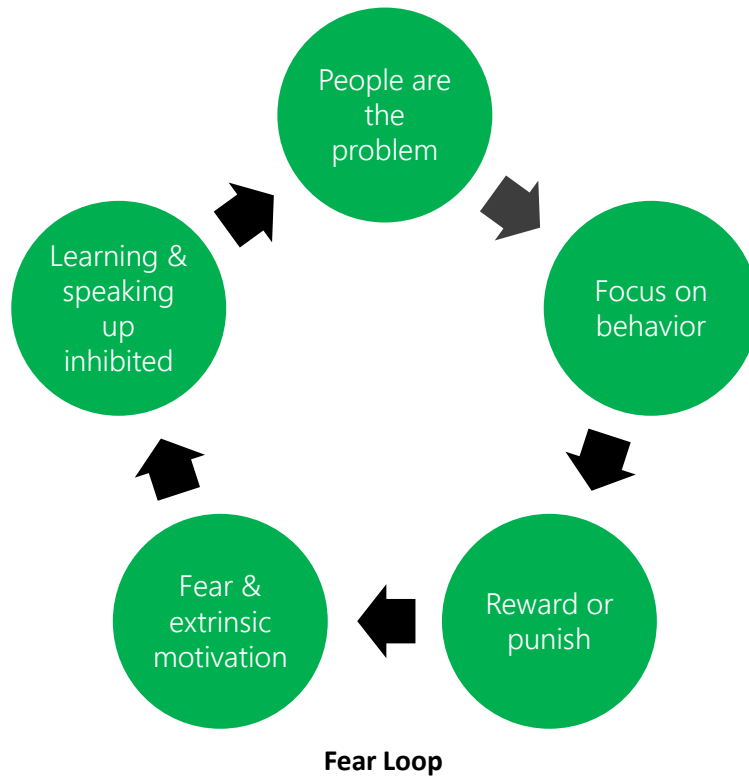


DOSH Initiatives

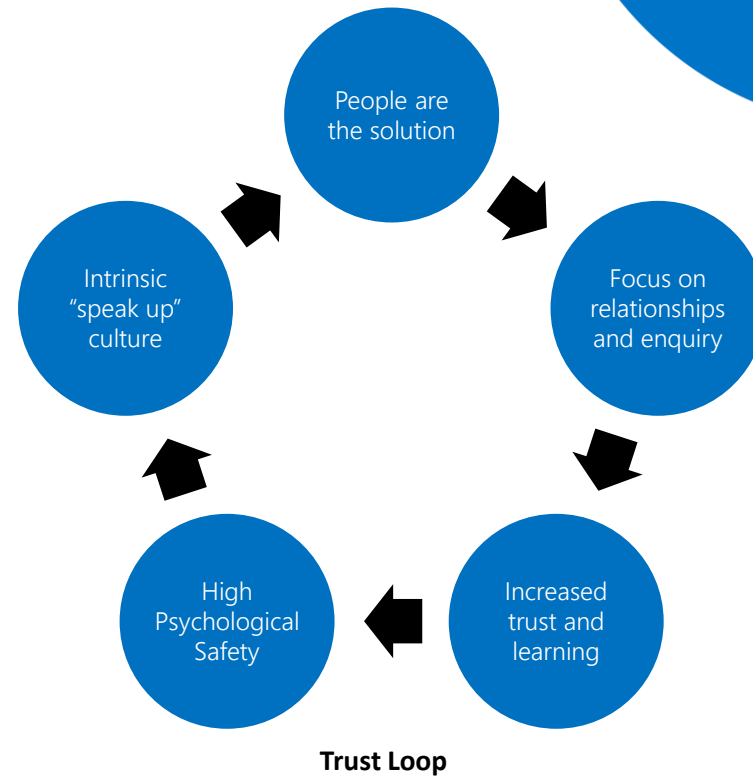
"Safety Differently"

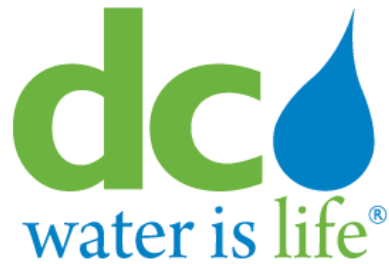


Traditional Safety



Safety Differently





Lead Free DC – Status Update

April 21, 2022

Agenda

1. Progress & Highlights
2. By-Block Project Status
3. Construction Outreach
4. Marketing
5. Stakeholder Coordination





Highlights & Progress

- Construction is underway on half of the 150 blocks planned this year.
- Refined construction strategy and interagency coordination efforts to ramp up execution.
- Implementing expanded outreach and promotion campaign to maximize customer participation.

FY22 Lead Service Line Replacements by Program Area

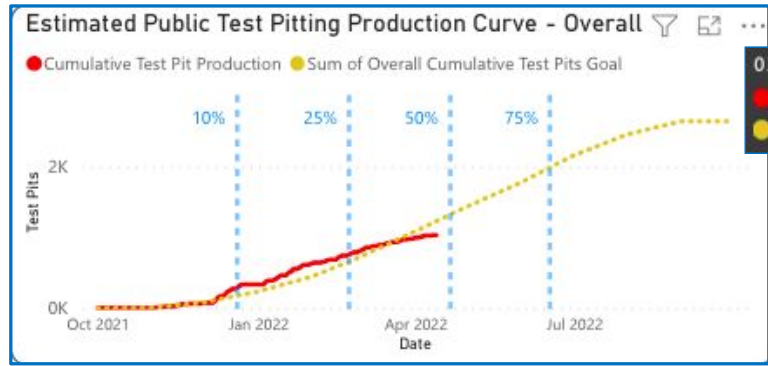
Program Area	FY22 LSRs (thru 3/31)	FY22 Goal	% Achieved
CIPERR	299	1623	18%
VFRP	167	300	56%
LPRAP	123	400	31%
Total	589	2393	25%



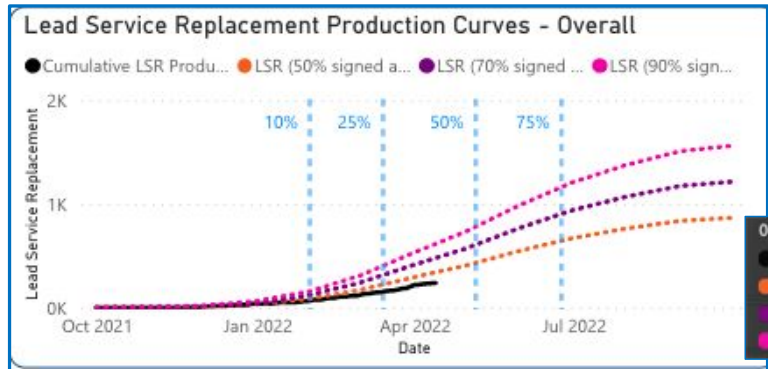


CIPERR By-Block Project Status

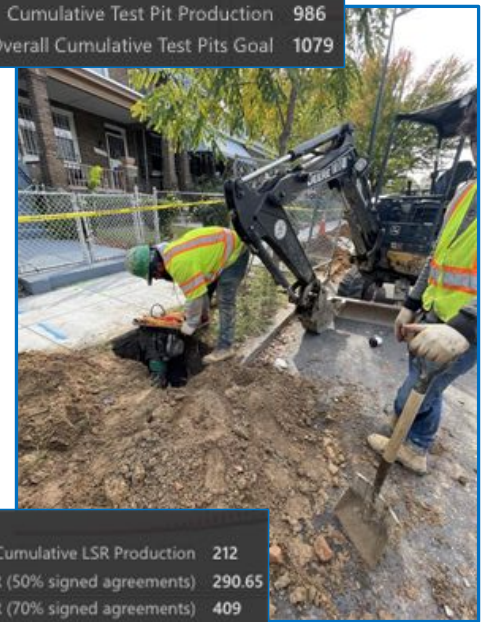
- Test-pitting to verify service line material and improve inventory is on track with about 40% of public-side test pits complete.
- Lead service line replacement is ramping up – homeowner participation remains critical.



03/31/22
 Cumulative Test Pit Production 986
 Sum of Overall Cumulative Test Pits Goal 1079



03/31/22
 Cumulative LSR Production 212
 LSR (50% signed agreements) 290.65
 LSR (70% signed agreements) 409
 LSR (90% signed agreements) 526

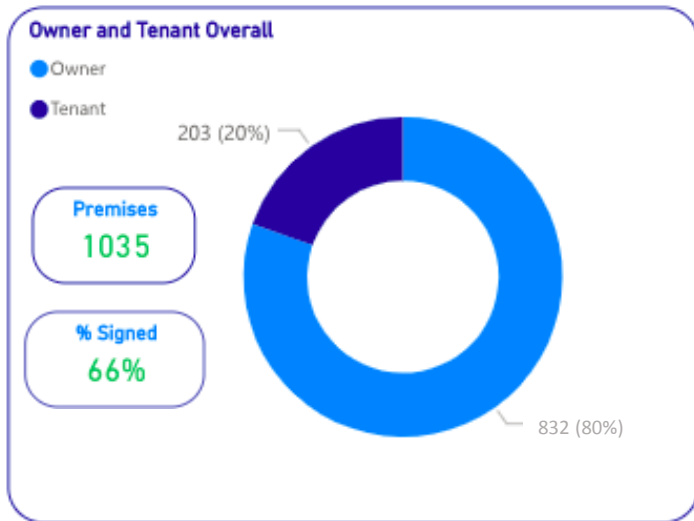


Impact Areas	Status	Comments for March Status Report
Test Pits	AMBER	The contractors are required to perform both public and private test pits to verify service material. 2,650 homes are expected to be test pitted this year. About 40% of public-side test pitting is complete.
LSR Replacements	AMBER	Backlog is available to both contractors to perform LSRs. Homeowner participation (return of signed agreements) is most significant constraint on critical path.
Cashflow	AMBER	Both contractors are currently below the estimated cash flow spending. This rate is expected to pick up as final restorations of block begin in April and additional crews are brought in to ramp up production

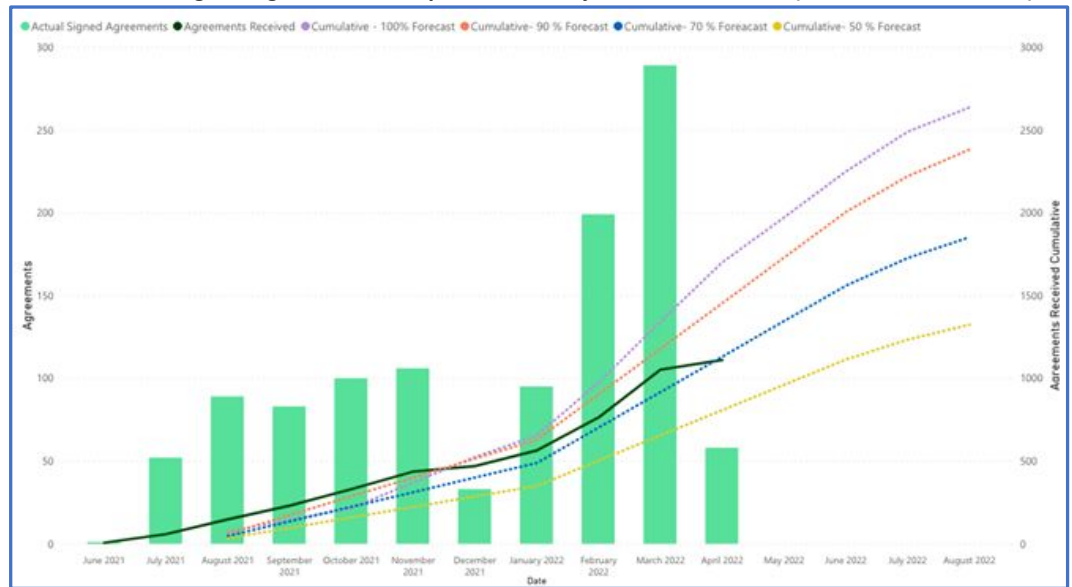


Construction Outreach & Agreement Status

- 66% of private-side agreements have been returned on blocks currently under construction (40% return rate overall).
- Percentage of properties participating is closely aligned with percentage of properties where the homeowner is occupant.



Cumulative Signed Agreements compared with Projected Return Rates (50%, 70%, 90%, 100%)

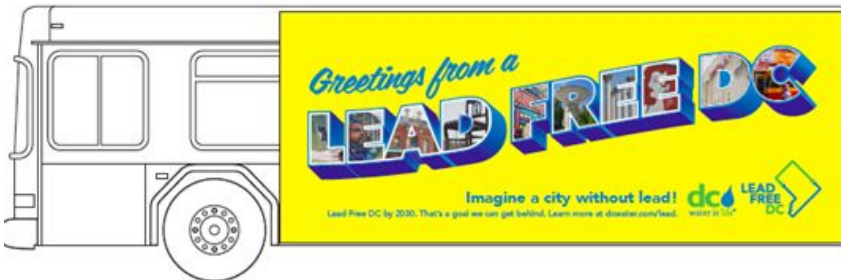
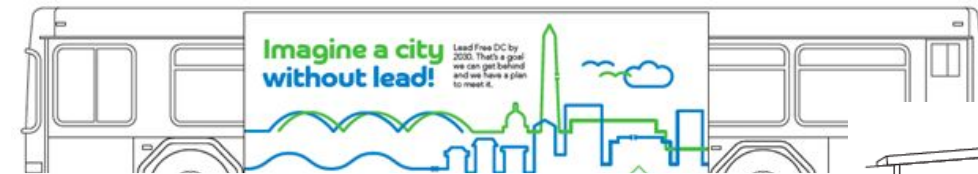


- *Graph takeaway: Baselines based on homeowner participation rates (50%, 70%, 90%) have been developed in coordination with construction schedule and planned outreach efforts. Currently forecasting 70% of agreements will be returned.*

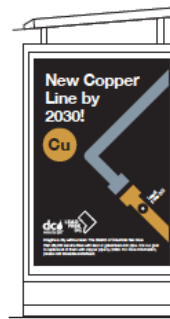


Communication & Marketing

- **Lead Free DC General Advertising Campaign** - including WMATA bus, bus shelter, social media and digital ads – started last month.
 - Campaign will use geo-fencing to target customers in areas where we have projects underway



METRO BUS AD



METRO BUS SHELTER AD



METRO BUS SHELTER AD

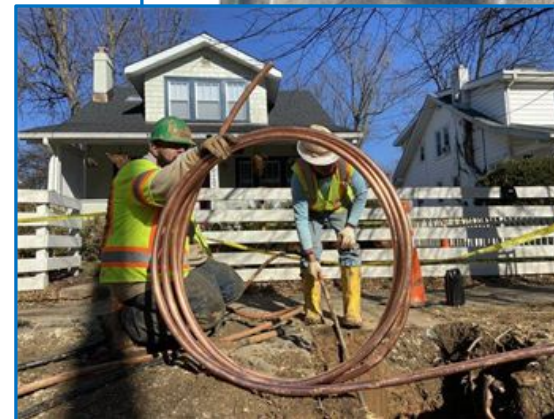
wusa9.com
VERIFY: Where
Lead pipes can
before they ca





Stakeholder Coordination

- District Agency Coordination:
 - DDOT: Identifying future project overlap, restoration requirements and paving coordination.
 - DCRA: Same-day inspection commitment and permit processing.
 - DOEE & DMOI: Support for interagency coordination, MOA development, and funding opportunities.
 - DC Health: Discussions about data to further prioritize vulnerable populations.
- Lead Task Force:
 - Council established task force to evaluate path to 2030 goal and will deliver report on 6/23 with recommendations.
 - Council 3rd party [RFP](#) for cost estimate analysis underway. Updated program cost estimate developed based on actual bids received for lead service line replacement work and other associated line items like water main replacement.





Questions/Discussion



**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

**GOODS AND SERVICES CONTRACT AWARD
Tank and Reservoir Cleaning
(Joint Use)**

Approval to add funding to OY 4 for Tank and Reservoir Cleaning for the Department of Pumping and Sewer Operations in the amount of \$300,000.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: Jet Blast, Inc. 6800 Fort Smallwood Baltimore, MD. 21226	SUBS: N/A	PARTICIPATION: N/A
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DESCRIPTION AND PURPOSE

Base Period Contract Value:	\$370,000.00
Base Period Contract Dates:	03-01-2018 – 02-28-2019
No. of Option Years in Contract:	4
Prior Modifications OY1-OY4:	\$511,263.16
Prior Option Year Dates:	03-01-2019 – 02-28-2023
Add funding to OY 4 (This request):	\$300,000.00
Option Year 4 Dates:	03-01-2022 – 02-28-2023

Purpose of the Contract:

DC Water requires the services of a qualified supplier, licensed in Washington DC Metropolitan area to provide Tank and Reservoir Cleaning work for the Department of Pumping and Sewer Operations, with tanks and reservoirs located throughout the Authority.

Scope of the Contract:

Provide all labor, materials, tools, and equipment required to complete the thorough cleaning (via water blasting), waste disposal, and disinfection work, including site mobilization, staging, and demobilization of various DC Water underground water storage reservoirs and water storage tanks and appurtenances at various locations throughout the Washington, DC area.

Spending Previous Year:

Cumulative Contract Value:	02-28-2019 to 03-31-2022	\$881,263.16
Cumulative Contract Spending:	02-28-2019 to 03-31-2022	\$766,254.12

Contractor's Past Performance:

According to the COTR, the Contractor's quality of services, conforms to DC Water's policies, procedures, and contract terms: and invoicing all met expectations and requirements.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Best Value
Commodity:	Tank and Reservoir Cleaning	Contract Number:	18-PR-DDCS-03
Project Area:	Open		

BUDGET INFORMATION

Funding:	Operating	Department:	Pumping and Sewer Operations
Project Area:	Other	Department Head:	Kenrick St. Louis

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	70.05%	\$210,150.00
Washington Suburban Sanitary Commission	21.95%	\$65,850.00
Fairfax County	5.15%	\$15,450.00
Loudoun Water	2.54%	\$7,620.00
Other (PI)	0.31%	\$930.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$300,000.00

Kenrick St. Louis / 4/13/2022
 Kenrick StLouis Date
 VP, Pumping and Sewer Operations

_____/_____
 Dan Bae Date
 VP, Procurement and Compliance

_____/_____
 Matthew T. Brown Date
 CFO and EVP, Finance and Procurement

_____/_____
 David L. Gadis Date
 CEO and General Manager



Environmental Quality & Operations Committee

April 21, 2022

Ms. Sarah Motsch, Chair

Procurement Transformation Update



DC Water Headquarters from the Anacostia River

- 1. Procurement Transformation Objectives & Scope**
- 2. Challenges**
- 3. Transformation Process**
- 4. What's Accomplished**
- 5. Governance and Continuous Improvement**
- 6. Credits**
- 7. Q&A**



Procurement Transformation Objectives & Scope

❖ Objectives

- The CEO and General Manager announced in 2019 an objective for centralized procurement operations centered on transparent and collaborative processes to increase value, manage risk, and address customer affordability.

❖ Scope

Design and implement a new Capital Procurement Team and Process to:

- Establish the Industry Leading Best-In-Class Procurement Practice at DC Water
- Implement a New Delegation of Authority (DOA)
- Improve Integrity, Fairness, Transparency, and Competition
- Streamline Process, Reduce Lead Times, and Improve Efficiency
- Clearly establish the Segregation of Duty
- Improve Business Diversity and Inclusion Through Vendor Development and Relationship Management

❖ Change Management

- New roles and duties, job security
- Changing processes and culture
- Procurement processes were deeply embedded in many Engineering SOPs and documents
- Inconsistent application of procurement process across DC Water departments
- Consultant staff enmeshed in the procurement process
- Changes to the process prompted vendor concerns / complaints
- Two predominant solicitation types (IFB for construction and SOQ for Engineering)
- Manual award and contract execution process with multiple hand-offs (brown folder process)

❖ COVID-19

- Transformation occurred during major pandemic
- Changed to online meetings

❖ Resources

- Hiring freeze due to revenue impact created by COVID-19
- Hiring the right team members with unique skillset including public & private procurement, engineering, construction, utilities experience, strategic sourcing, negotiation, and ERP expertise

❖ Other major projects

- Same resources on:
 - Oracle Cloud ERP implementation
 - Oracle Cloud P6 & Unifier implementation



Transformation Process

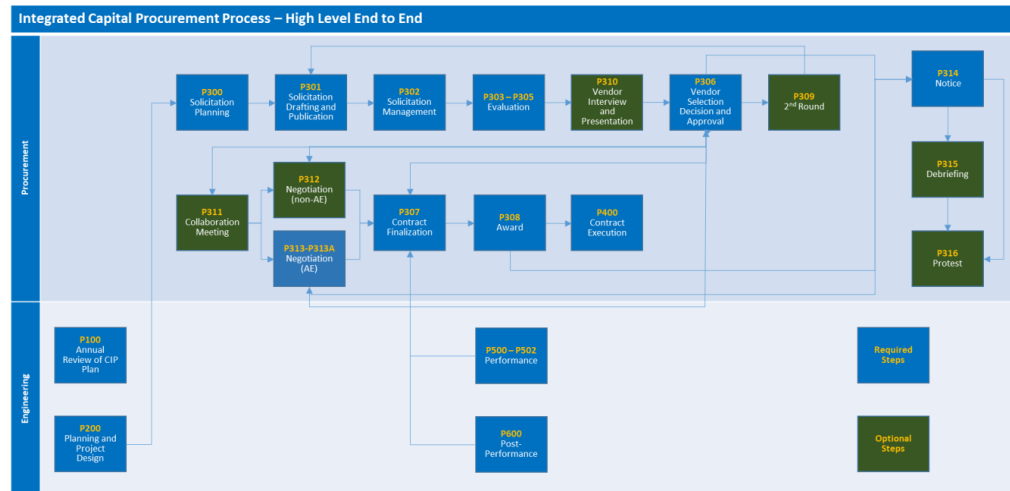
❖ Process

- Very close partnership by Engineering & Procurement
- 10 Milestones, 15 months, 2 weekly meetings, 30+ people, +6,000 hours

Milestones	Timeline
1. Roles and Responsibilities	Jan 2021
2. Procurement SOP	Feb- Apr 2021
3. Implementation Plan	Feb – May 2021
4. Identify core working group	May 2021
5. Implementation Schedule	May 2021
6. Information Sessions: Overview of Procurement SOP	May – Jun 2021
7. Contract Execution & Performance Phase SOP	Jul - Oct 2021
8. Sourcing Phase SOP	Oct – Nov 2021
9. Post-Performance (Close-out) Phase SOP	Dec 2021
10. Training of staff	Jan – Mar 2022

❖ Key transformation concepts:

- **Segregation of duties:** Separation of roles and responsibilities between Engineering and Procurement departments
- **Transparency:** Early and timely engagement of key stakeholders from other departments (i.e., Procurement, Compliance, DGLA, Safety, Risk, etc.)
- **Speed and Efficiency:** Minimize handoffs between departments while simplifying the procurement process and documentations





What's Accomplished

❖ Completed

- New Capital Procurement Team
- New Procurement Delegation of Authority (DOA)
- New SOPs that adopted the strategic sourcing concept
- Established Procurement Steering Committee (PSC) and Procurement Leadership Council (PLC) for governance and transformation decisions
- Completed implementation of Oracle ERP and Primavera P6

❖ Results

- Generated negotiated savings using the strategic sourcing process:
 - \$18 million in FY21
 - \$17 million in FY22 as of February 2022
- Increased the number of Certified firms bidding as primes or JV
- Awarded \$3 million Program Manager BOA to WBE prime
- Developed value-based, inclusive approach to Restoration IRR, LFDC, SDWMR, and Microgrid Program Management contracts
- New Capital Procurement approach recognized by ACEC/MW's 2021 Engineering Leadership Award
- Reduced solicitation, award & contract execution lead times

❖ Expected Benefits

- Apply consistent procurement process run by procurement subject matter experts across DC Water
- Engage Procurement, Compliance, Legal, Safety, Risk, and other stakeholders early during planning and design phases
- Increase transparency, accountability, agility and flexibility of the procurement processes
- Expanded Outreach allows additional business development time for Certified and Local firm participation
- Stronger competition and negotiation utilizing the strategic sourcing process
- Empower end-users in decision making
- Reduce dependence on outside consultants
- Mitigate potential conflicts of interest, project risks, and potential liabilities
- Actively manage supply chain risks like (pipe, valves)
- Create value / beat budget estimates thru structured negotiations



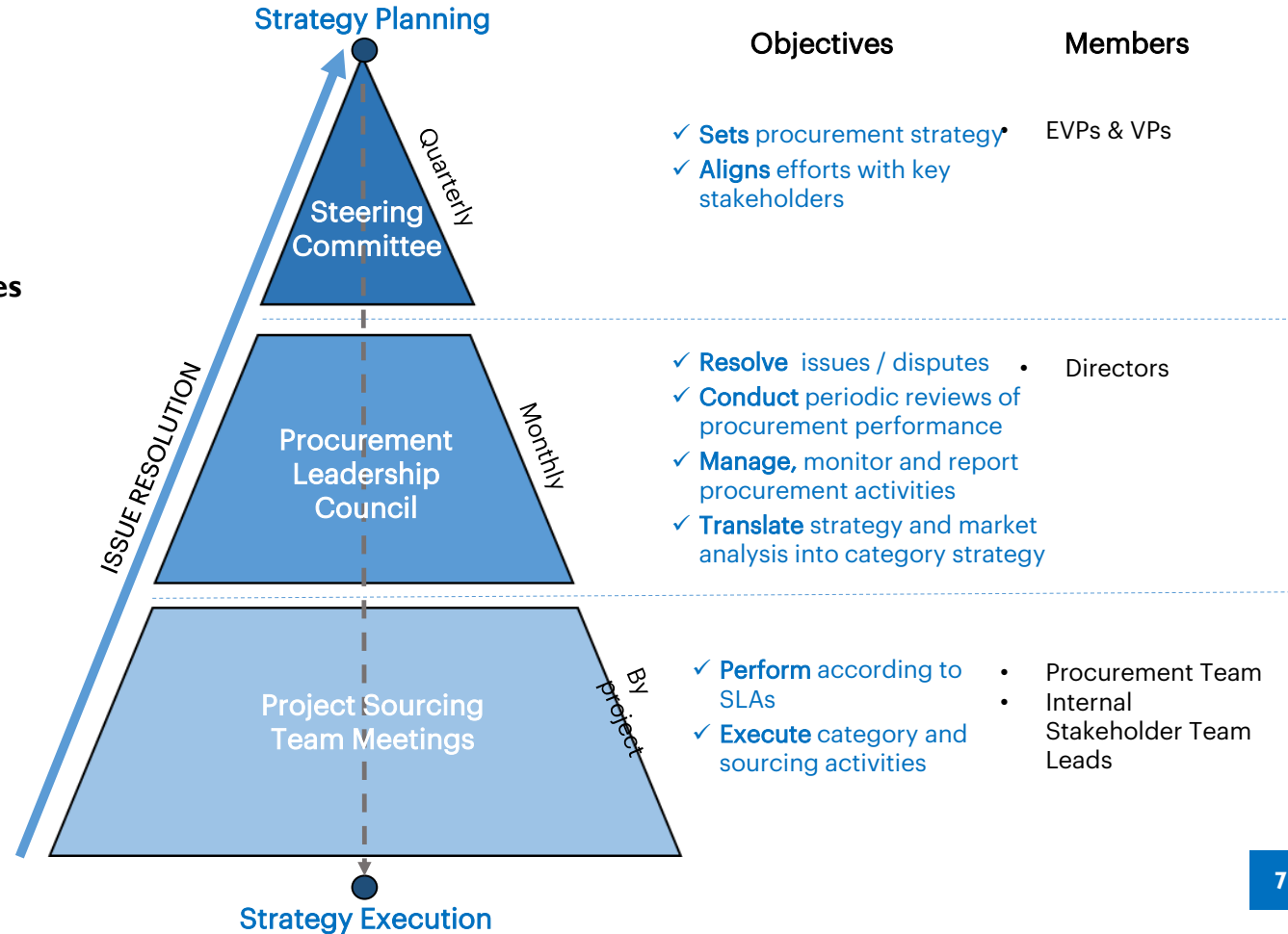
Governance and Continuous Improvement

❖ Procurement Steering Committee (PSC)

- Policies and procedures
- Major projects
- Major procurement strategies and initiatives

❖ Procurement Leadership Council (PLC)

- PLC for Capital Projects
- PLC for G/S
- Continuous process improvement
- Acquisition Planning
- Project review
- Procurement strategies and initiatives





Credits

PSC Team	PLC Team	Procurement	Ad-Hoc Members
Matt Brown	Brent Christ	Kevin Bellamy	Andria Bagwell
Kishia Powell	Will Elledge	Reggie Scott	Tsedale Berhanu
Wayne Griffith	Korey Gray	Ma Kainnayi Kosun	Rhonda Green
Dan Bae	Paul Guttridge	Ines Eden	Kimberly Isom
Rudy Gonzalez	Kathleen Kharkar	Dalila Perla	Michael Marchant
Francis Cooper	Getachew Melsew		Ogechi Okpechi
Salil Kharkar	Daniel Nguyen		
David Parker	Nick Passarelli		
	Deidre Saunders		
	Mark Babbitt		
	Moussa Wone		

PSC: Procurement Steering Committee
 PLC: Procurement Leadership Council



Q & A