

## DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

### Board of Directors

*Meeting of the  
Environmental Quality and Sewerage Services  
Committee*

*5000 Overlook Avenue, SW, Room 407  
Thursday, October 15, 2015  
9:30 a.m.*

**I. Call to Order**

James Patteson  
Chairperson

**9:30 a.m. II. AWTP Status Updates**

Aklile Tesfaye

1. [BPAWTP Performance](#)

**9:45 a.m. III. Status Updates: Potomac Interceptor Sewer**

Liliana Maldonado

1. [Odor Abatement Project](#)

**10:00 a.m. IV. Action Items – Joint Use**

Dan Bae/Len Benson

1. [Contract No. WAS-12-033-AA-RE – Centerra](#)
2. [Contract No. WAS-12-035-AA-RE – Centerra](#)
3. [Contract No. 120030, Cynergy Electric Company, Inc.](#)
4. [Contract No. 130240, Anchor Construction Corp](#)
5. [DCFA #429–WSA, ARCADIS District of Columbia, P.C.](#)

10:15 a.m. V. [Blue Horizon 2020 Progress](#)

Sarah Neiderer

10: 25 a.m. VI. **Other Business/Emerging Issues**

Len Benson

1. Asset Management Program (AMP) Update – November Joint Committee (JC) Meeting
2. Advancing Research and Technology (ART) Pilot Update – Nov JC Meeting
3. FY 16-25 Capital Improvement Plan (CIP) – Nov JC Meeting

10:35 a.m. VII. **Executive Session\***

10:35 a.m. VIII. **Adjournment**

James Patteson

\* 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)(1); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4); 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); 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.

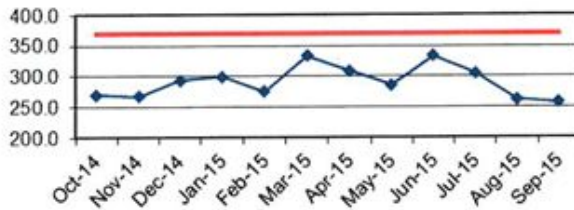
**Follow-up Items from Prior Meetings:**

1. Provide the committee with several option dates to tour of the First Street Tunnel project and work in the vicinity in the months of October/November 2015.
2. Provide a future briefing on anticipated profit margins for the DC Water Advancing Research and Development (ART) pilot. *{to be discussed at the November Joint Committee Meeting}*
3. Develop progress updates to the committee for the DC ART Supporting Documents. *{to be discussed at the November Joint Committee Meeting}*
4. Provide clarification on evaluation of the merits and benefits of a non-compete provision pertaining to the DC Water ART pilot. *{to be discussed at the November Joint Committee Meeting}*
5. Provide periodic reporting on the in-house transition status of the Asset Management Program (AMP). *{to be discussed at the November Joint Committee Meeting}*
6. Determine what, if any, additional assets (e.g. IT) might be appropriate for consideration as part of the efforts of the AMP. *{to be discussed at the November Joint Committee Meeting}*
7. Provide metrics for the AM program. *{to be discussed at the November Joint Committee Meeting}*

## DEPARTMENT OF WASTEWATER TREATMENT September 2015

Average plant performance for the month was excellent with all effluent parameters well below the seven-day and monthly NPDES permit requirements. The monthly average influent flow was 258 MGD. There was 31 MG of Excess Flow during this reporting period. The following Figures compare the plant performance with the corresponding NPDES permit

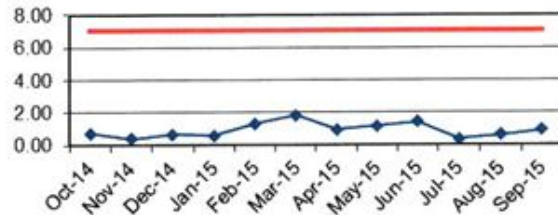
**Plant Influent Flow (mgd)**



■ Influent Flow    — Average Design Capacity

This graph illustrates the monthly average influent flow to the plant. The design average flow is 370 MGD. Blue Plains has a revised 4-hour peak flow capacity of 511 MGD through complete treatment. Flows up to 336 MGD in excess of the 511 MGD peak capacity receive primary treatment, disinfection and dechlorination.

**TSS (mg/l)**



■ Effluent TSS    — Permit Limit

Effluent Total Suspended Solids (TSS) is a measure of the amount of solid material that remains suspended after treatment. The effluent TSS concentration for the month averaged 0.90 mg/L, which is below the 7.0 mg/L permit limit.

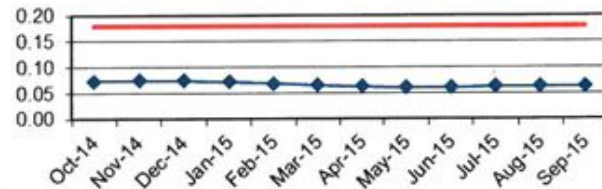
**Ammonia (mg/l)**



■ Effluent NH3    — Permit Limit

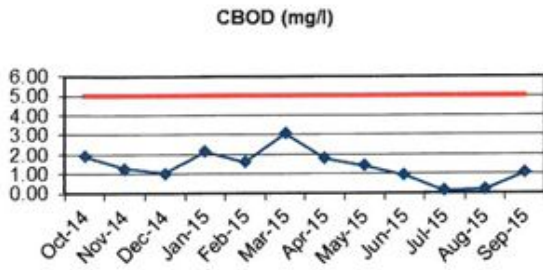
The Ammonia Nitrogen (NH<sub>3</sub>-N) is a measure of the nitrogen found in ammonia. For the month, effluent NH<sub>3</sub>-N concentration averaged 0.20 mg/L and is below the average 4.2 mg/L limit.

**Total Phosphorus Annual Average (mg/l)**



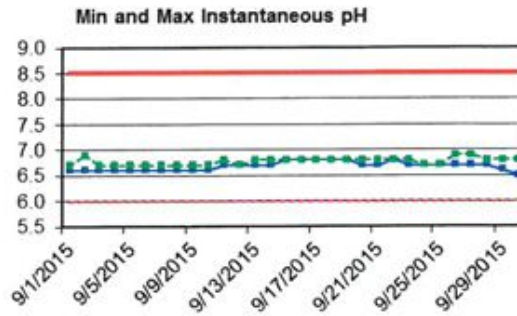
■ Effluent TP    — Permit Limit

The Total Phosphorus (TP) is a measure of the particulate and dissolved phosphorus in the effluent. The annual average effluent TP concentration is 0.06 mg/L, which is below the 0.18 mg/L annual average limit.



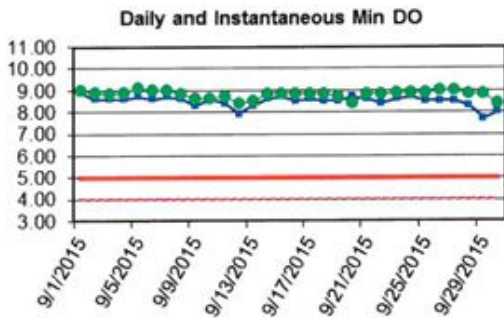
■ Effluent CBOD — Permit Limit

Carbonaceous Biochemical Oxygen Demand (CBOD) is a measure of the amount of dissolved oxygen required for the decomposition of organic materials. The effluent CBOD concentration averaged 1.05 mg/L (partial month) which is below the 5.0 mg/L limit.



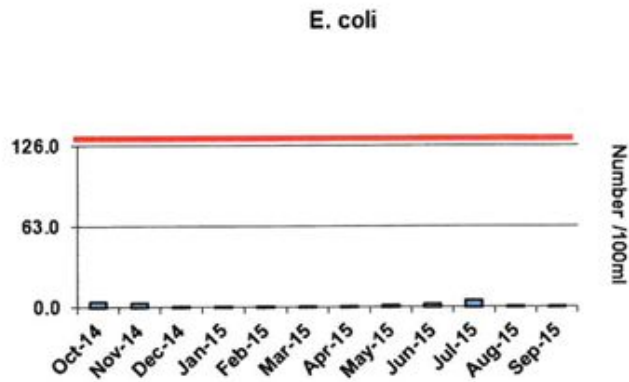
● MAX pH ■ MIN pH — Upper Limit - - Lower Limit

pH is a measure of the intensity of the alkalinity or acidity of the effluent. The minimum and maximum pH observed were 6.5 and 6.9 standard units respectively. The pH was within the permit limits of 6.0 and 8.5 for minimum and maximum respectively.



● MIN Daily Average ■ Instant MIN DO  
— MIN Daily Average Limit - - Instant MIN Limit

Dissolved Oxygen (DO) is a measure of the atmospheric oxygen dissolved in wastewater. The DO readings for the month are within the permit limits. The minimum daily average is 8.4 mg/L. The minimum instantaneous DO reading is 7.7 mg/L. The minimum permit limits are 5.0 mg/L and 4.0 mg/L respectively.

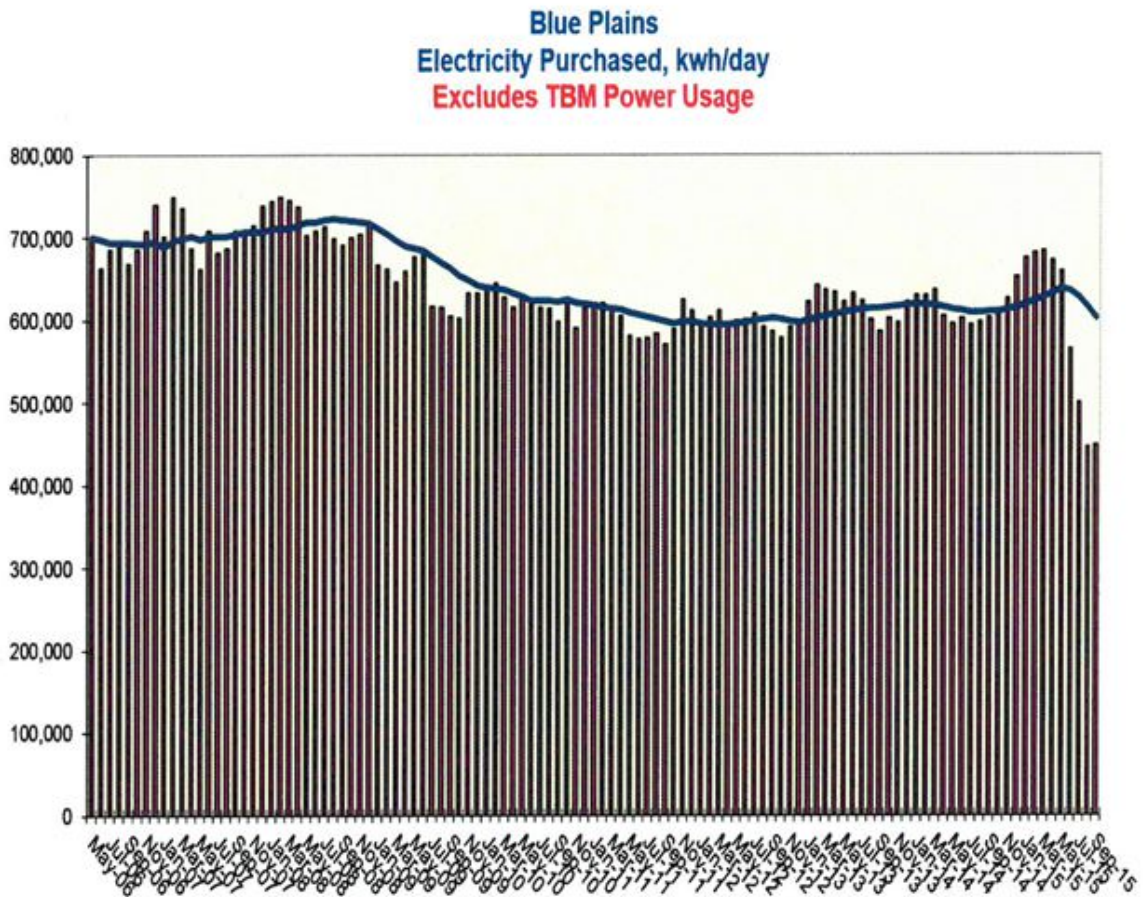


■ E. Coli Geomean — Permit Limit

E.coli is an indicator of disease causing organisms (pathogens). The E.coli permit limit is 126/100mL. The E coli geometric mean is 1.3/100mL, and well below the permit limit.

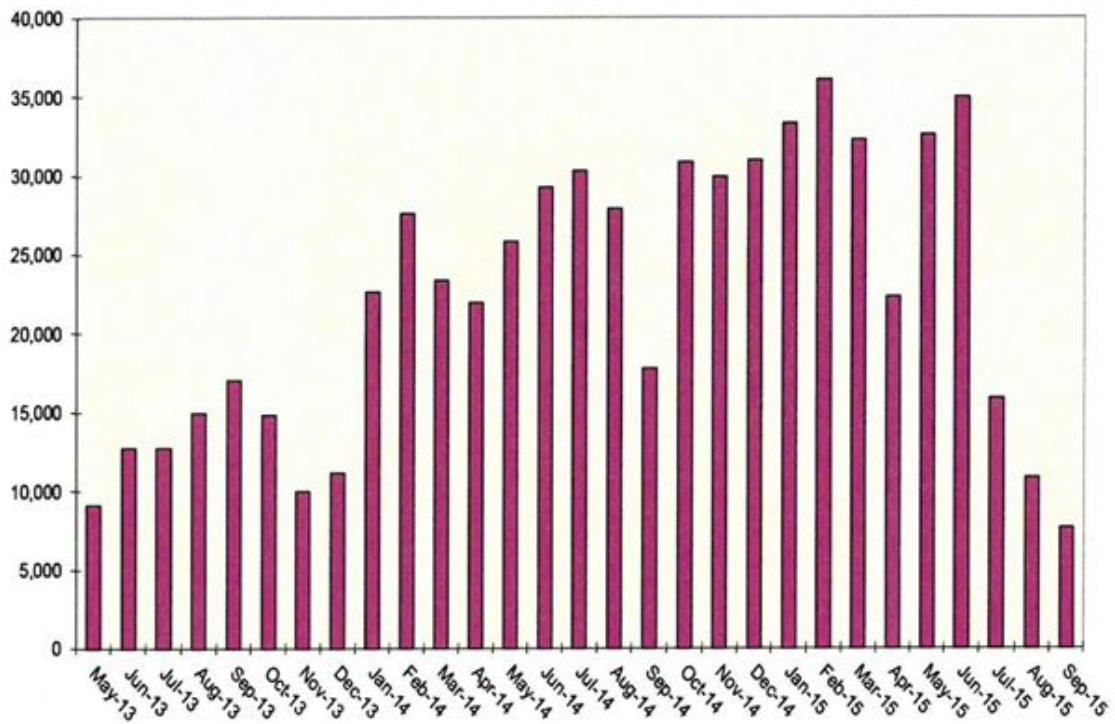
## BLUE PLAINS ELECTRICITY USAGE

Blue Plains AWWTP has installed Power Monitors at critical points within the power distribution system to monitor power usage. The graph below is based on the installed power monitors and reflects grid power purchased at Blue Plains. As new processes are brought on line, the plant power requirements have increased. As CHP power is fed into the system, the net power purchased from the grid has decreased.

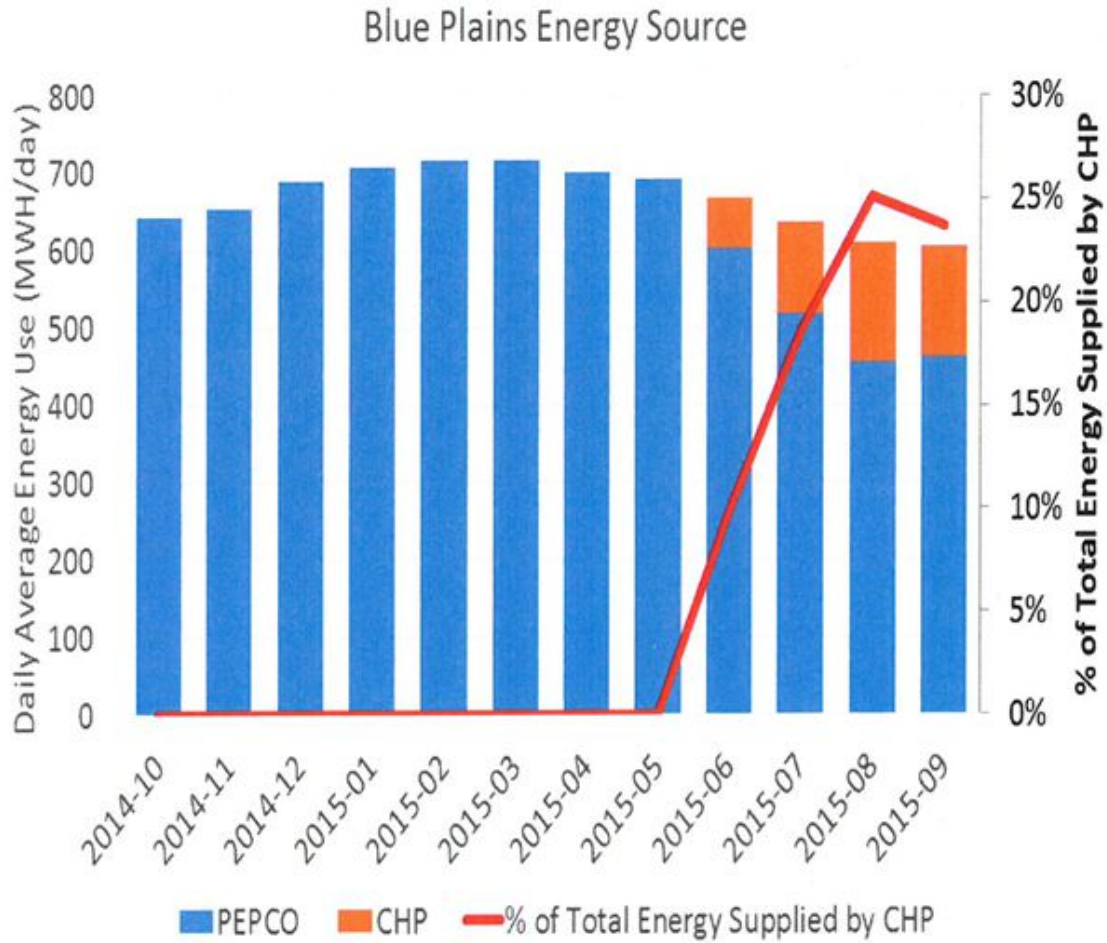


As the Blue Plains Tunnel nears completion, the power usage for the site has decreased as is seen from the graph below.

**TBM**  
Electricity Used, kwh/day



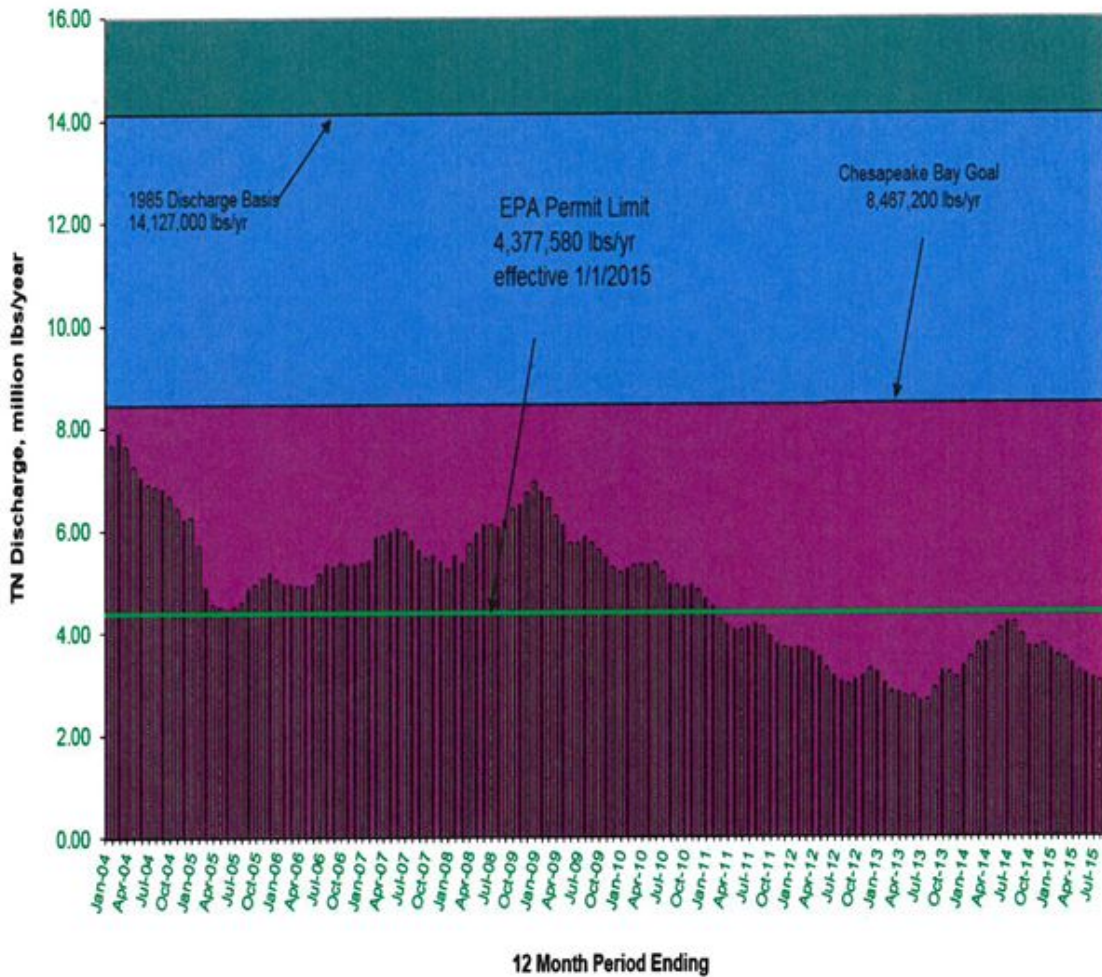
As CHP is brought on line (still in testing phase), the percent of Blue Plains power purchased from the grid decreases. This is shown in the graph below.



## BIOLOGICAL NUTRIENT REMOVAL PERFORMANCE

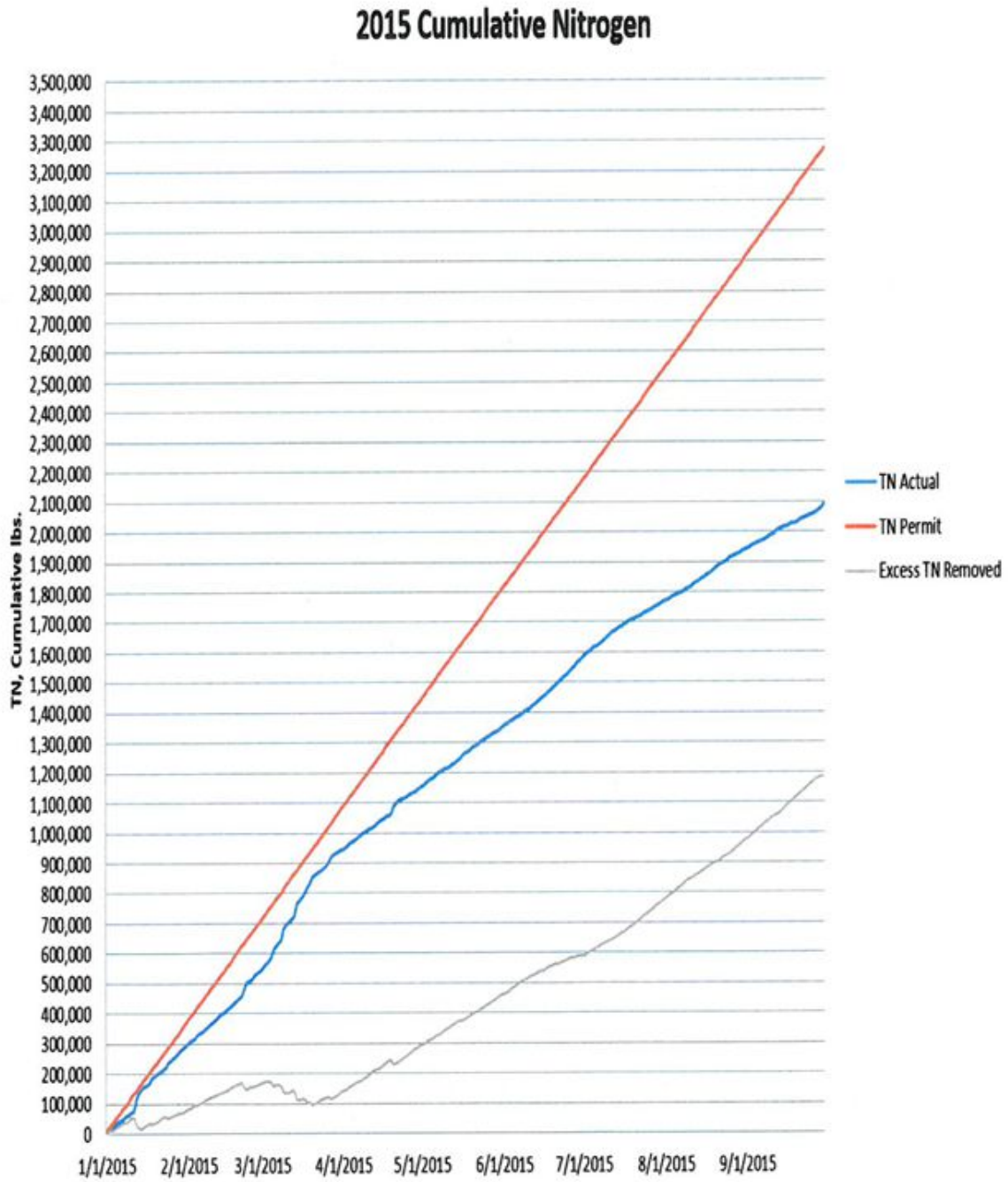
During the month the full-scale BNR process produced an effluent with average total nitrogen concentration of 2.32 mg/l. The figure below shows Blue Plains effluent total nitrogen (TN) since the implementation of full scale BNR.

### Annual Total Nitrogen Load, lbs/yr





TN Removal at Blue Plains is on target to meet and exceed the limits for 2015 as seen in the graph below.



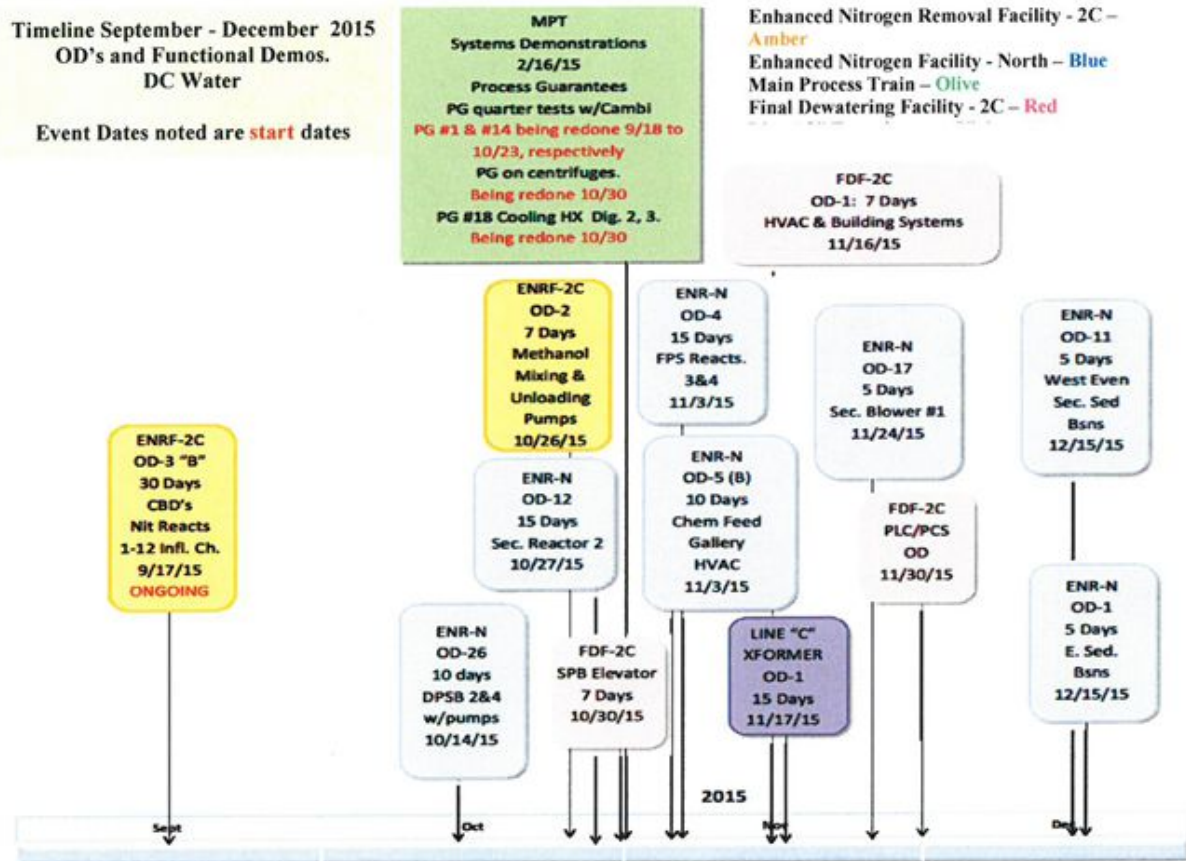
**START-UP AND COMMISSIONING UPDATE**

As some parts of the nearly \$1 billion in construction activities at Blue Plains are winding down, the start-up and commissioning process is moving ahead. This process involves testing the newly built facilities to ensure:

1. the facilities perform as designed,
2. they are completed in accordance with an integrated schedule,
3. interfaces with Blue Plains have been made,
4. capture all new assets,
5. identify and order critical spare parts,
6. develop standard operating procedures, and
7. train personnel to take over the new facilities.

**Operational Demonstrations:**

One part of the construction checkout process is called the Operational Demonstration (OD). The OD process provides a platform for the contractor and DC Water to prove out the newly constructed process under the various design conditions which can last from 5 days to 1 year. Following is the three month OD look-ahead for 2015.



One Operational Demonstration for Coarse Bubble Diffusers for the Enhanced Nitrogen Removal – North contract commenced mid-September and is ongoing. Additionally, the MPT Performance Guarantee for CAMBI Throughput Performance is being retested to ensure proper performance and operations.



### **OPERATIONAL DEMONSTRATION: Coarse Bubble Diffusers - ENRF-2C (OD 3 'B')**

- The Coarse Bubble Diffusers in the influent channel of the nitrification reactors pre-aerates the partially treated wastewater prior to entering the nitrification reactors. In addition, these diffusers ensure that the return mixed liquor and the secondary effluent are well mixed prior to entering the nitrification stage of treatment.
- A 30 day, 24 hour/day Operational Demonstration slated to start mid-September.
- This OD will test all components associated with the diffusers to provide adequate mixing.



### **OPERATIONAL DEMONSTRATION: PERFORMANCE GUARANTEE - Cambi Throughput- MPT (PG 1 & 14)**

- Ensuring proper operations and treatment in the CAMBI process during peak sludge throughput results in both a stable digestion process and operational stability.
- Re-testing of this Process Guarantee, which started mid-September and shall continue to mid-October, requires that 112.5 dry tons per day of 16.5% solids sludge can be properly processed through ¼ of the CAMBI process and subsequent digestion for continuous 14 day period.
- This guarantee will be run on each of the four trains for a period of 14 days each and will be verified using installed, calibrated flow meters and composite sampling of the feed to and product from the CAMBI unit.

#### **Training:**

Successful operation of the new facilities will require significant training of operations and maintenance employees on new processes, procedures and equipment. We are also continuously working with Human Capital Management with the Cornerstone Training program to schedule and track employee training.

Training completed from August 14, 2015 – September 28, 2015:

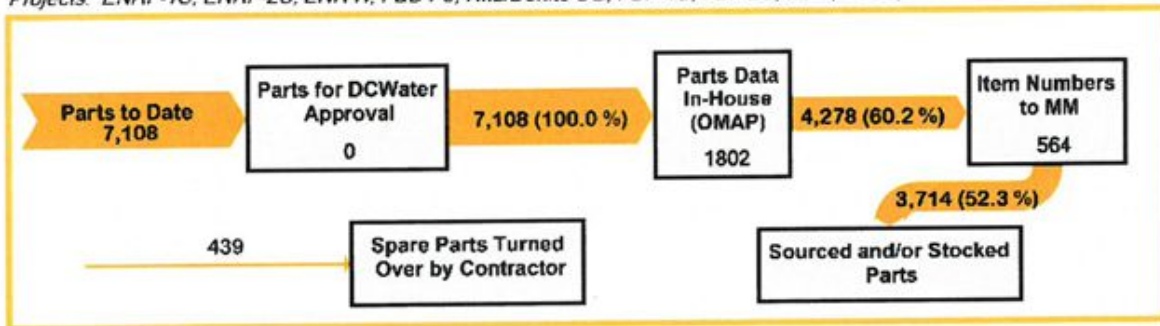
- 1476 hours of vendor training were completed by DC Water personnel.
- 0 hours of other required training were completed by DC Water personnel.

**Asset Integration:**

The process of asset integration involves capturing and identifying over 15,000 unique assets associated with the new projects coming on-line. This is done to facilitate ordering of critical spare parts through Maximo, identify qualified vendors, and to develop standard operating procedures. Efforts up through the month of August 2015 include:

- Asset attributes based on approved service manuals continue to be logged into the Maximo maintenance program,
- Working with Materials Management (MM) to identify vendors for critical spare parts.
- Parts work flow is as follows:

*Projects: ENRF-1C, ENRF-2C, ENR-N, F&D P3, Nite/Denite SG, FDF-1C, FDF-2C, MPT, ASS6, and E&W Odor Ctl*

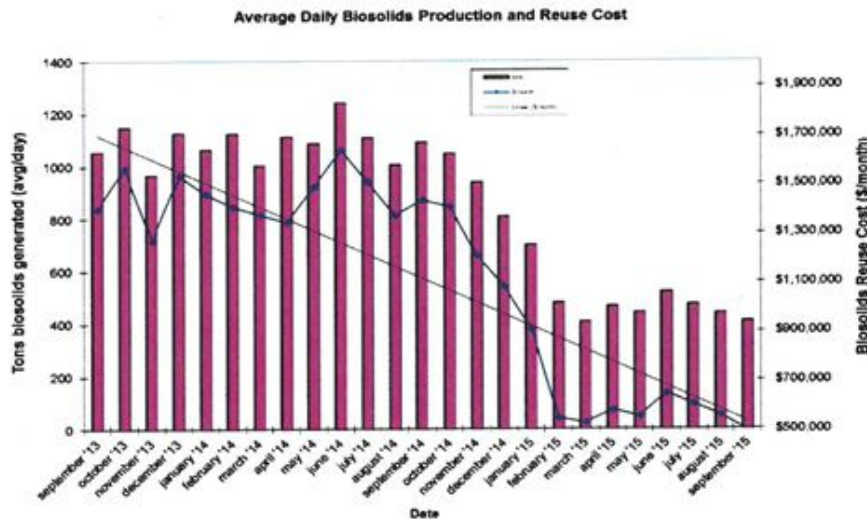
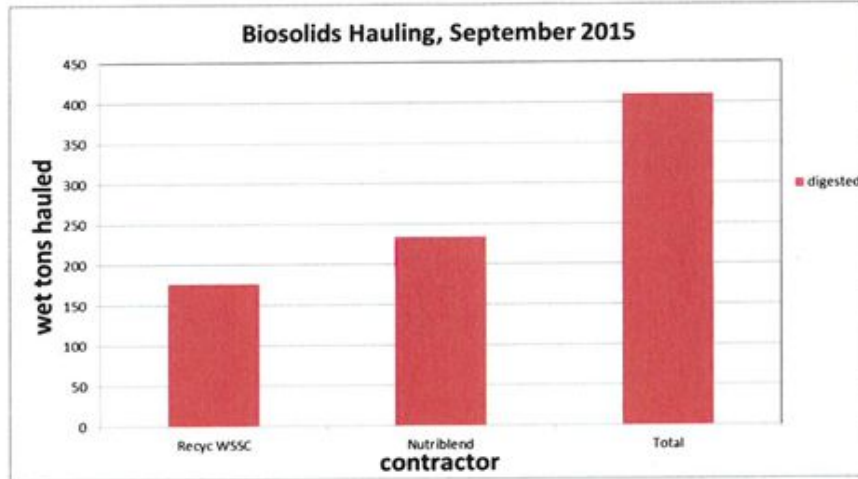


**Project Acronym Key:**

- ENRF-1C: Enhanced Nitrogen Removal Facility 1<sup>st</sup> Contract
- ENRF-2C: Enhanced Nitrogen Removal Facility 2<sup>nd</sup> Contract
- ENR-N: Enhanced Nitrogen Removal – North
- F&D P3: Filtration and Disinfection Electrical Upgrades Phase 3
- Nite/Denite SG: Nitrification/Denitrification Electrical Upgrades
- FDF-1C: Final Dewatering Facility 1<sup>st</sup> Contract
- FDF-2C: Final Dewatering Facility 2<sup>nd</sup> Contract
- MPT: Main Process Train
- ASS6: Area Substation #6
- E&W Odor Ctl: East and West Odor Control

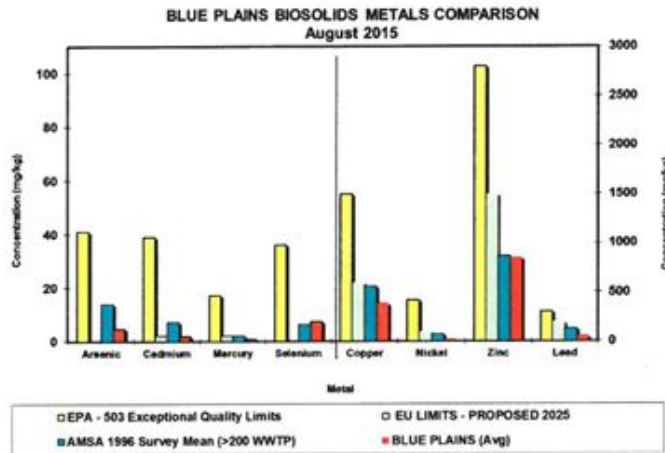
### BLUE PLAINS RESOURCE RECOVERY REPORT

In September, biosolids hauling averaged 410 wet tons per day (wtpd). The graph below shows the total hauling by contractor for the month of September. The average percent solids for the digested material was 30.8%. At the end of September the Cumberland County storage pad had approximately 2000 tons (~25,000 tons capacity), Cedarville lagoon had approximately 2026 tons of Blue Plains biosolids (~30,000 tons capacity), and Fauquier lagoon had 2355 tons (~15,000 tons capacity).

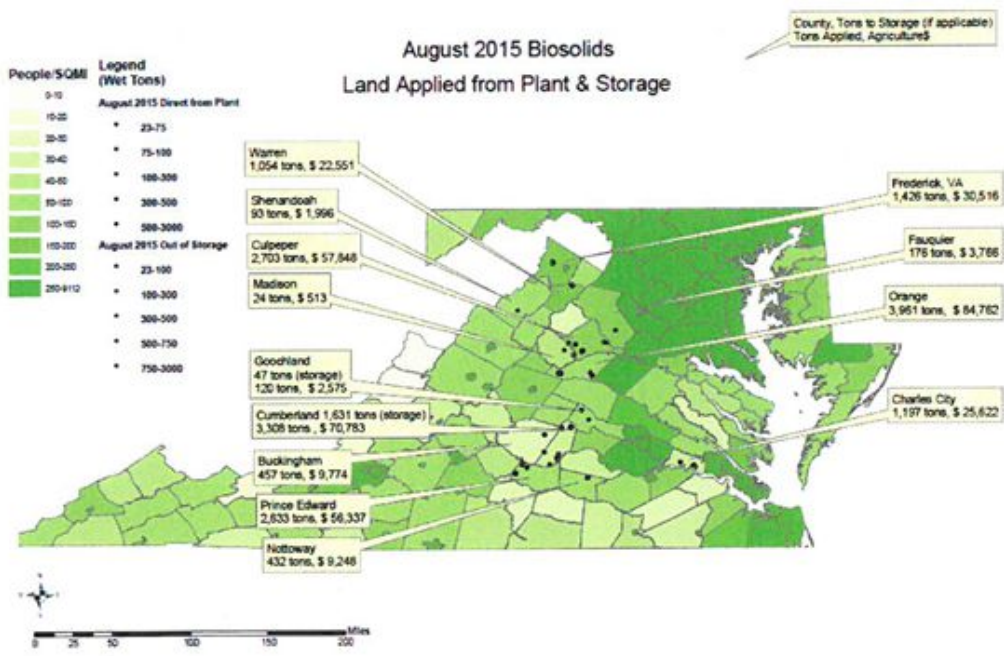


Please note the drop in biosolids management costs (second graph below, right vertical axis) due to the reduction in solids production since digesters came on line, and also due to the drop in fuel costs. In September, diesel prices averaged \$2.67/gallon and with the contractual fuel surcharge the weighted average biosolids reuse cost in September for the two contracts (DC Water and WSSC) was \$40.29/wet ton. For comparison, in September 2014 the average diesel price was \$3.90/gal and the average contract cost was \$43.66/wet ton.

The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of August 2015. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the national average levels surveyed in 1996, and the European Union (EU) limits. The EU limits are more conservative than the USEPA limits, and Blue Plains biosolids metals content is lower than the EU standards as well.



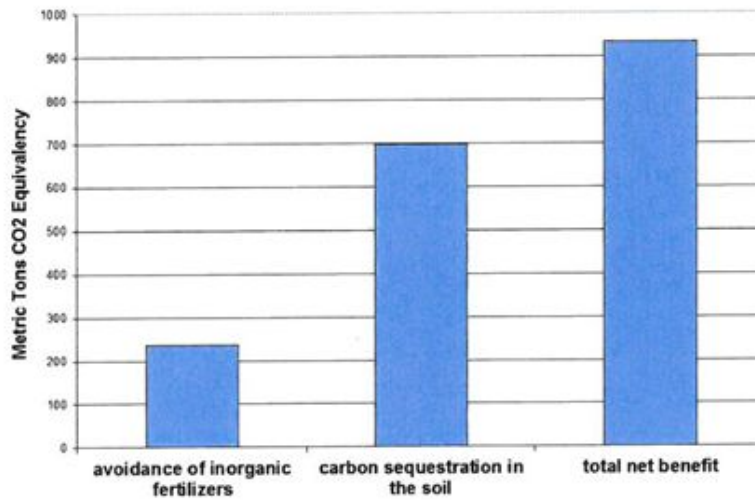
**Map of Blue Plains Biosolids Applications and Agricultural \$'s for August 2015**



### Environmental Benefits

The quantity land applied in August coming directly from the plant and from storage facilities equaled 17,583 tons. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 9331227 metric tons CO<sub>2</sub> equivalent avoided emissions. This is equivalent to taking 2,500,215 car miles off the road in the month of August (assumes 20 mpg, 19.4 lb CO<sub>2</sub> equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since December, 2006 is 142,000 metric tons CO<sub>2</sub> equivalent.

**DCWater Biosolids Recycling Program  
Greenhouse Gas Balance Benefits  
August 2015 Totals**



## Clean Water Quality and Technology

The Blue Plains Pretreatment Program staff of two manages the Industrial Pretreatment Program, including temporary dischargers from construction activities, as well as the Hauled Waste Program. Additional responsibilities include providing specialized sampling and program management support for the Blue Plains NPDES permit and facilitating the quarterly Blue Plains Storm Water Committee meetings.

### Industrial Pretreatment Program

DC Water currently manages fifteen (15) Significant Industrial User (SIU) permits and fifteen (15) Non-Significant Industrial User (NSIU) wastewater discharge permits. The permit renewed for Amtrak in July 2015 consolidated two facilities (Amtrak and Amtrak High Speed Rail) into one permit. DC Water administratively extended the NSIU permit for Joint Base Anacostia Bolling (JBAB) last month, due to a delay in obtaining the permit renewal fee payment from JBAB. As soon as payment is received, this permit will be re-issued.

Inspections were conducted at two SIUs this month: Bureau of Engraving and Printing and Dulles Airport. Compliance monitoring was also conducted at two SIUs this month: Bureau of Engraving and Printing and WMATA Shepherd Parkway Bus Division. The following enforcement actions were issued:

- A Notice of Violation (NOV) was issued to Amtrak on August 24, 2015, for a second zinc violation from the High Speed Rail train wash outfall 003 collected on July 30, 2015. This was a split sample with Amtrak and the zinc average for the two samples was 4.85 mg/L, which exceeded the limit of 3.4 mg/L. As a result of this second violation, Amtrak proceeded to pump out their train wash vault. Additional resamples were collected by Amtrak on September 1, 2, and 3, 2015 and were in compliance with the discharge limit for zinc. A resample was also collected by DC Water on September 8, 2015, and was in compliance. Additional follow-up monitoring is also being conducted in September by Amtrak in accordance with the NOV.
- An NOV was issued to the Capitol Power Plant on August 25, 2015, for a brief temperature violation. On August 12, 2015, staff reported an exceedance of the temperature limit of 140°F for a two minute period. Maximum temperature during this two minute period was 145°F.
- A Notice of Infraction and Proposed Order was issued to Naval Support Facility (NSF) Carderock on August 17, 2015, for a mercury violation on June 30, 2015. The mercury result of 0.0023 mg/L exceeded the discharge limit of <0.001 mg/L. Due to the sample being collected the last day of the monitoring period, the facility is in Significant Non-compliance for the January to June reporting period and required assessment of a fine (which was then waived due to Federal Facilities having sovereign immunity). A Final Order was issued on August 26, 2015, to correct the due date for the mercury resample. The resample collected by NSF Carderock on July 28, 2015, showed the discharge to be back in compliance. Additional follow-up monitoring for mercury conducted in August was also in compliance.
- A Directive Letter was issued on August 28, 2015, for Atlantic Richfield Company/British Petroleum to extend the due date another six months to address the groundwater contamination at Adams Row Condominium located at 2301 Champlain St., NW, due to difficulties in obtaining design information and accessing the existing storm water management unit to evaluate sources of incoming water and the unit's overall operation and effectiveness. A three month progress report was also required.

All other SIUs and permitted NSIUs are in compliance with discharge standards for the current month.



DC Water currently manages 82 Temporary Discharge Authorization (TDA) permits, primarily for construction site discharges of groundwater and/or surface runoff in the combined sewer area. Five new TDA permits were issued this month. All TDA discharges are currently in compliance with pretreatment standards.

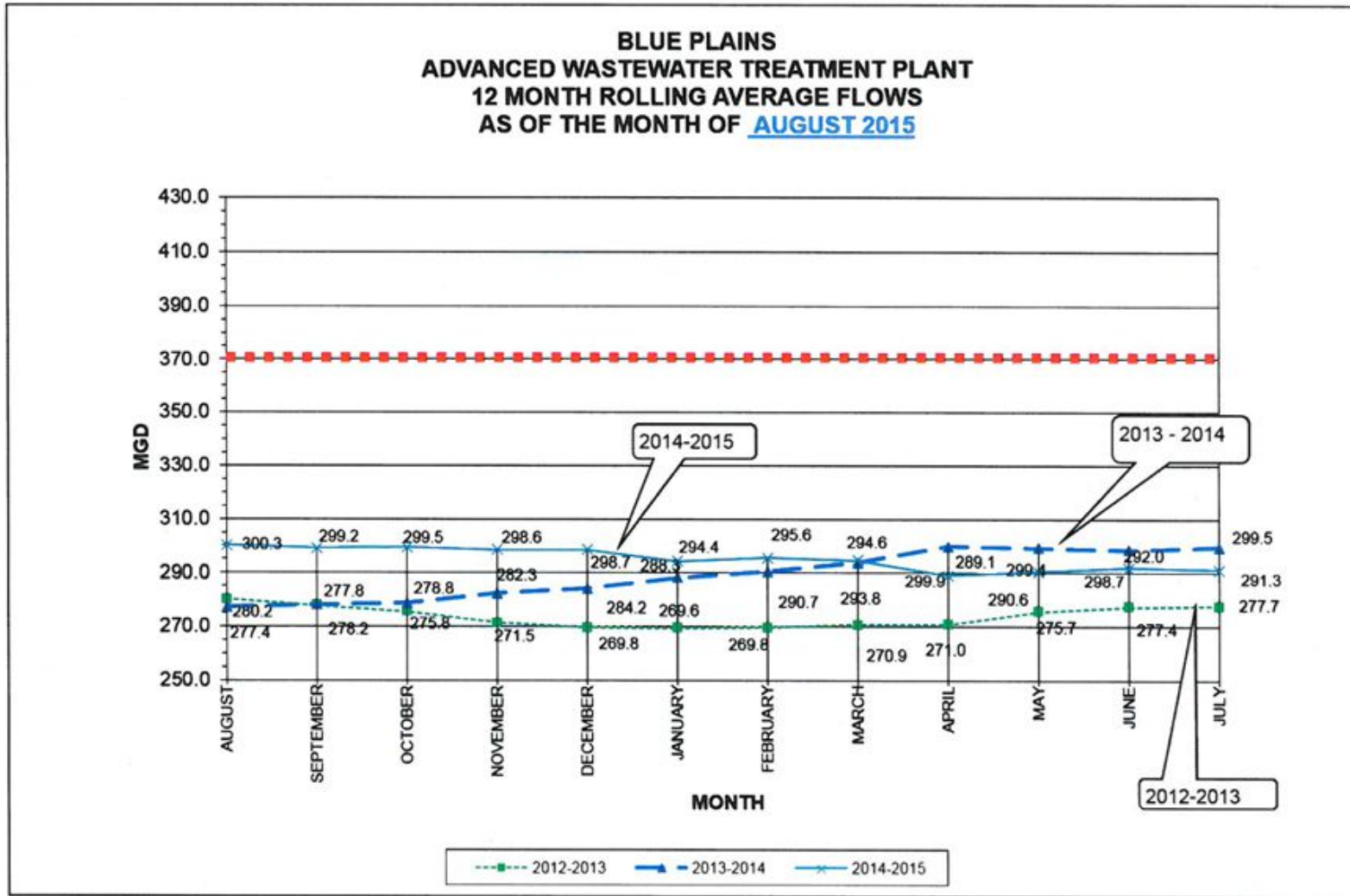
#### **Hauled Waste Program**

As of the end of the current month, the hauled waste program had 21 permitted haulers authorized to discharge domestic septage, portable toilet waste, grease trap waste, groundwater or surface runoff, and other types of waste, if approved in advance and have been characterized and meet pretreatment standards. One new waste hauler permit was issued this month and one permit was renewed. DC Water collected fees from six waste haulers this month, including those on a monthly payment plan option.

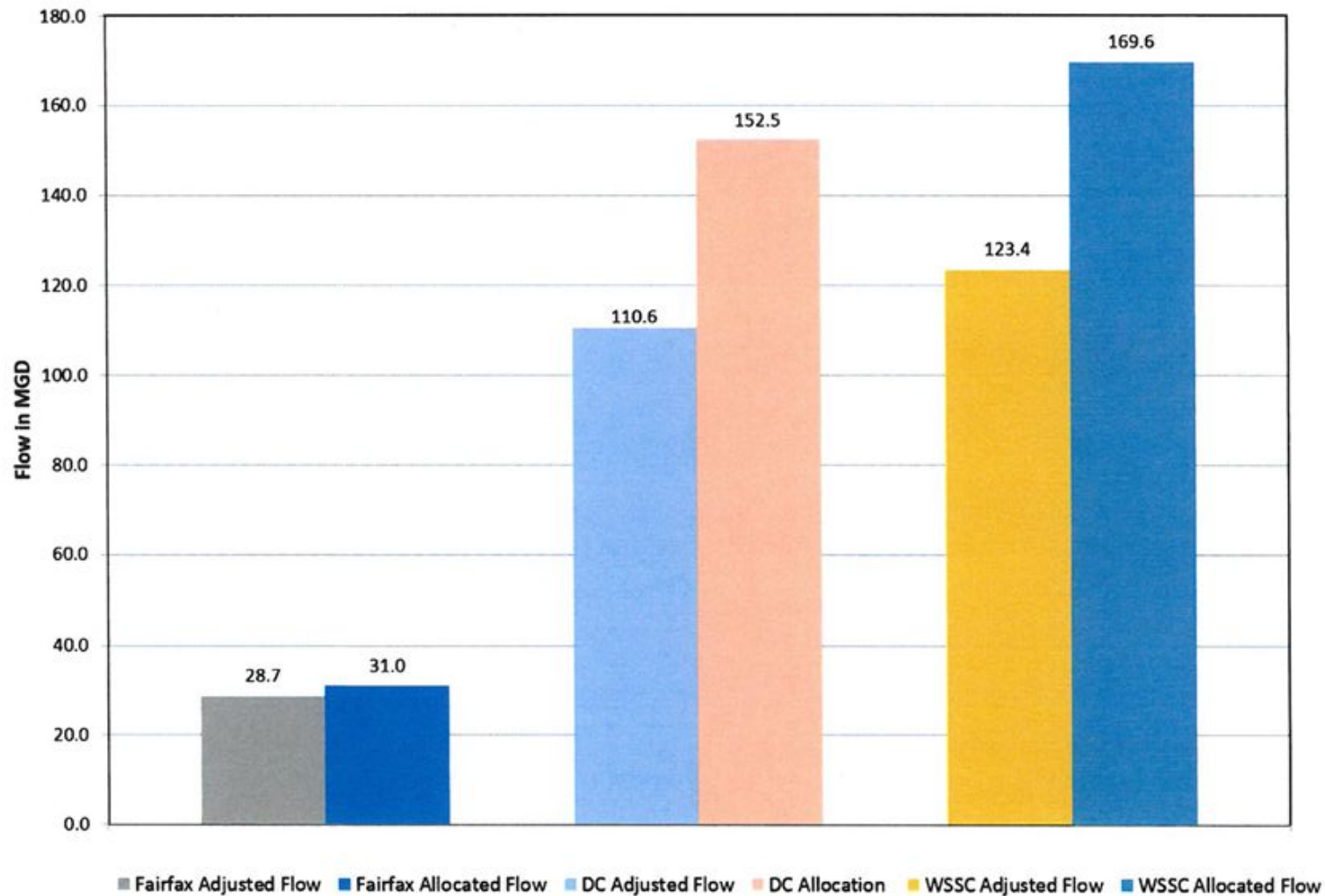
DC Water received 336 hauled waste loads (819,190 gallons) from permitted haulers this month. Manifest forms from each truck entering the plant are collected by the security guards and picked up daily by Pretreatment staff. Data is entered into an Excel spreadsheet to track the volume and type of loads being discharged daily and the results of sampling. One random (R.F. Beale) and one targeted (Magnolia Plumbing) hauled waste samples were collected this month, both were grease trap loads. The grease trap load collected on August 13, 2015, from Magnolia Plumbing, exceeded discharge standards for pH, copper, and zinc. The pH was 4.52 (limit is 5.0 to 10.0), copper concentration was 6.4 mg/L (limit is 2.3 mg/L), and the zinc concentration was 62.6 mg/L (limit is 3.4 mg/L). A Notice of Violation was issued on August 31, 2015. Follow-up monitoring from one source within that load, showed the Harris Teeter in Purcellville to be in compliance with discharge standards, suggesting that frequency of grease trap pump-out is critical to achieving compliance with discharge standards. The other grease trap load, collected from R.F. Beale on August 25, 2015, exceeded the discharge standard for zinc. The zinc was 4.8 mg/L (limit is 3.4 mg/L). A Notice of Violation was issued on September 11, 2015.

#### **NPDES Permit Sampling**

Pretreatment staff collected two dry weather 24-hour composite samples at outfall 002 for low level PCB analysis using EPA Method 1668 this month.



### Adjusted Flows vs Allocated Flows - AUGUST 2015



**Potomac Interceptor Long-Term Odor Abatement  
Status Report September 2015**

Project Description: This project provides for the long-term abatement of odors generated by the Potomac Interceptor by constructing six ventilation buildings along the main sections of the sewer. The six sites are located in the District of Columbia (Site 1995), Montgomery County, MD (Sites 4, 17 and 27), Fairfax County (Site 31) and Loudoun County (Site 46), VA. The constructed system draws gases from the sewer, treats the gas stream with specialized media and discharges the treated air to the atmosphere.

Project Construction Status: Construction at the DC and three Maryland sites is complete. Construction at the two Virginia sites is ongoing and nearing completion. Project Specific details for each site are provided below.

1. DC Site (Site 1995):

- The valve actuator was repaired on September 16<sup>th</sup>, and the facility is operational. Due to odors observed on September 2<sup>nd</sup> during a DC Water odor survey, the facility is currently being run at night time to mitigate potential odor complaints. The media is currently scheduled to be replaced during the week of October 19<sup>th</sup>.

2. Maryland Sites:

- *Site 4 (Little Falls PS)* – The facility is running.
- *Site 17 (Beltway)* – The facility is running.
- *Site 27 (Old Angler’s Inn)* – The facility is running and has been continuously operating since July 31, 2015. A carbon media blend that addresses both H<sub>2</sub>S and DMS has been placed in the existing vessel. No odor has been detected and no complaints have been received since July 31, 2015. Additionally, lab samples were collected to determine the concentrations of odorous sulfur compounds in the exhaust after treatment. Lab analysis of the exhaust discharge has confirmed the removal of odorous sulfur compounds by the new media.

3. Virginia Sites:

- *Site 31 (Fairfax)* – Under Construction; 97% complete. The facility is running but not relinquished to DC Water. The media is currently scheduled to be replaced during the week of October 19<sup>th</sup> to manage risk associated with the sensitive receptors in the area. The facility passed the system inspection by the Fairfax County Fire Marshall, and the final drawings will be submitted to the Fire Marshall by the end of the week for the official stamp of approval. The grout test report is being developed. The landscaping and ground cable work are expected to be finished by the end of the week. The heater installation is expected to be complete by mid-November.
- *Site 46 (Loudoun)* – Under Construction; 99% complete. The facility is running. Landscaping work is complete. However, interior building work is ongoing for punch list items. The building will be delivered to DC Water upon training of operations personnel, production of O&M manuals and completion of punch list work items. No odor complaints were received during this period.

Design & Construction Activities	Projected		Actual		Status
	Start	End	Start	End	
Fire Marshall inspection of Site 31 (Fairfax)	9/15/15	9/15/15	9/15/15	9/15/15	Inspection passed; submit final plans on 10/9/15.

Note: Daily observation for odor will continue to be conducted along the Interceptor.

Monthly PI Odor Control Facility (OCF) Status Dashboard  
September 2015

Operational Status:

Site 4 (MD)	Facility is running
Site 17 (MD)	Facility is running
Site 27 (MD)	Facility is running with new media blend since July 30, 2015. No odor complaints have been received
Site 31 (VA)	Facility is running. Media replacement scheduled for week of October 26th
Site 46 (VA)	Facility is running
Site 1995 (DC)	Facility is running at night to reduce potential for odor complaints. Valve actuator has been replaced 9/16/15. Media replacement scheduled for week of October 26th

Milestones and Accomplishments:

1. Final System Operations Plan submitted 9/21/15
2. Media Replacement Justification Memo submitted 10/2/15
3. Site 31 passed system inspection by the Fairfax County Fire Marshall

Legend - Operational Status

Facility is running  
Status update  
Issues to be resolved

Key Points:

1. Actuator manufacturer to provide proposal to perform failure analysis and conduct site visits to verify installation at each OCF
2. Punch list items, O&M manuals, and Training activities remain for Sites 31 and 46
3. Site 31 is 97% complete. Site 46 is 99% complete

Construction Status:

PI Odor Control Facilities	Site 1995 - DC	Site 4 - MD	Site 17 - MD	Site 27 - MD	Site 31 - VA	Site 46 - VA
Completion of Sealing Vent Structures	May 22, 2013	November 21, 2013	November 22, 2013	May 2, 2013	June 4, 2015	June 4, 2015
Completion of Sealing Manholes	March 28, 2013	March 28, 2013	March 28, 2013	May 2, 2013	September 30, 2015	September 30, 2015
OD Completion Date	March 28, 2013	July 8, 2013	July 8, 2013	October 15, 2013	July 29, 2015	May 6, 2015
Service Manuals Complete or Forecast	July 16, 2015	July 16, 2015	July 17, 2015	July 17, 2015	October 30, 2015	October 30, 2015
Training Completion or Forecast	April 11, 2013	April 11, 2013	April 11, 2013	April 11, 2013	November 15, 2015	November 15, 2015
Substantial Completion Date or Forecast	June 17, 2013	December 27, 2013	December 9, 2013	October 15, 2013	December 1, 2015	December 1, 2015
Final Completion Date or Forecast	June 5, 2015	June 5, 2015	June 5, 2015	June 5, 2015	November 30, 2015	November 30, 2015
Media Change out status	October 26, 2015	TBD	TBD	July 30, 2015	October 26, 2015	TBD

Dates: Green represents completed activity, Blue represents status update, Red represents delay

**DC WATER AND SEWER AUTHORITY  
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

**ACTION REQUESTED**

**GOODS AND SERVICES CONTRACT OPTION  
FLEET MANAGEMENT SERVICES  
(JOINT-USE)**

**PURPOSE**

**Approval to execute option year three (3) for fleet management services in the amount of \$1,816,900.00.**

**CONTRACTOR/SUB/VENDOR INFORMATION**

<b>PRIME:</b>	<b>PARTICIPATION:</b>	<b>SUBS:</b>	<b>PARTICIPATION:</b>
Centerra Integrated Services, LLC. 4800 Overton Plaza Suite 380 Ft. Worth, TX 76109		Apex Petroleum 3190 Fairview Drive Falls Church, VA 22042	<b>2%</b>
		MBI, LLC 725 Gleneagles Drive Ft. Washington, MD 20744	<b>15%</b>
		R.REA Core 331 H Street, NE Washington, DC 20002	<b>10%</b>
		Washington Supply Network 1235 Kenilworth Avenue, NE Washington, DC 20019	<b>3%</b>

**DESCRIPTION AND PURPOSE**

<b>Actions</b>	<b>Value</b>	<b>Period</b>
Original Contract	\$1,368,819.54	11/01/12 - 10/31/13
Number of Option Years: 4		
Option Year 1 and 2	\$3,573,285.75	11/01/13 - 11/15/15
Contract Modifications	\$0.00	
Cumulative Contract Value	\$4,942,105.29	11/01/12 - 11/15/15
Cumulative Contract Spend	\$3,723,285.33 *	11/01/12 - 07/21/15
	(* Total expected spend by 11/15/2015 is \$670,406.00)	
<b>NEW ACTION:</b>		
Exercise Option Year 3	\$1,816,900.00	11/16/15 - 11/15/16
<b>New Cumulative Contract Value Total</b>	<b>\$6,759,005.29</b>	

**Purpose of the Contract:**

To contract for fleet management services for the District of Columbia Water & Sewer Authority's (DC Water) Department of Fleet Management.

**Contractor's Past Performance:**

The contractor's past performance has been satisfactory.

**PROCUREMENT INFORMATION**

<b>Contract Type:</b>	Fixed Price	<b>Award Based On:</b>	Highest Score Vendor
<b>Commodity:</b>	Goods and Services	<b>Contract Number:</b>	WAS-12-033-AA-RE
<b>Contractor Market:</b>	Open Market with LBE/LSBE Preference Points		

**BUDGET INFORMATION**

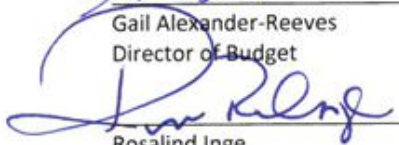
<b>Funding:</b>	Operating	<b>Department:</b>	Department of Fleet Management
<b>Service Area:</b>	125 O Street, NE WDC	<b>Department Head:</b>	Timothy Fitzgerald

**ESTIMATED USER SHARE INFORMATION**

User	Share %	Dollar Amount
District of Columbia	84.40%	\$ 1,533,463.60
Washington Suburban Sanitary Commission	11.41%	\$ 207,308.29
Fairfax County	2.87%	\$ 52,145.03
Loudoun County	1.16%	\$ 21,076.04
Other Potomac Interceptor	0.16%	\$ 2,907.04
<b>Total Estimated Dollar Amount</b>	<b>100.00%</b>	<b>\$ 1,816,900.00</b>

 / 10/6/15  
 Dan Bae Date  
 Director of Procurement

 / 10/8/15  
 Gail Alexander-Reeves Date  
 Director of Budget

 / 10/9/15  
 Rosalind Inge Date  
 Assistant General Manager, Support Services

\_\_\_\_\_/\_\_\_\_\_  
 George S. Hawkins Date  
 General Manager

**DC WATER AND SEWER AUTHORITY  
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

**ACTION REQUESTED**

**GOODS AND SERVICES CONTRACT MODIFICATION  
PARTS SUPPLY MANAGEMENT  
(JOINT-USE)**

**PURPOSE**

**Approval to execute a modification to add funding and to exercise option year three (3) for parts supply in the amount of \$1,670,000.**

**CONTRACTOR/SUB/VENDOR INFORMATION**

<b>PRIME:</b>	<b>PARTICIPATION:</b>	<b>SUBS:</b>	<b>PARTICIPATION:</b>
Centerra Integrated Services, LLC 4800 Overton Plaza Suite 380 Fort Worth, Texas 76109		Apex Petroleum 3190 Fairview Drive Falls Church, VA 22042	2%
		MBI, LLC 725 Gleneagles Drive Ft. Washington, MD 20744	15%
		R.REA Core 331 H Street, NE Washington, DC 20002	10%
		Washington Supply Network 1235 Kenilworth Avenue, NE Washington, DC 20019	3%

**CONTRACT ACTIONS**

<b>Actions</b>	<b>Value</b>	<b>Period</b>
Original Contract	\$ 660,000.00	11/01/12–10/31/13
Number of Option Years: 4	4	
Option Year 1 and 2	\$ 1,527,500.00	11/01/13 - 10/31/15
Contract Modifications	\$ 600,000.00	12/19/14 - 07/31/15
Cumulative Contract Value	\$2,787,500.00	11/01/12 - 10/31/15
Cumulative Contract Spend	\$1,989,371.72*	11/01/12 - 08/31/15
	(*Total expected spend by 10/31/2015 is \$2,779,000.00)	
<b>NEW ACTIONS:</b>		
Modification (Additional Funding)	\$820,000.00	10/01/15 - 11/14/15
Exercise Option Year 3	\$850,000.00	11/15/15 - 11/14/16
New Cumulative Contract Value Total	\$4,457,500.00	

**Purpose of the Contract:**

To contract for parts supply for the District of Columbia Water & Sewer Authority's (DC Water) Department of Fleet Management.

**Contractor's Past Performance:**

The contractor's past performance has been satisfactory.



**PROCUREMENT INFORMATION**

<b>Contract Type:</b>	Fixed Price/Requirements Contract	<b>Award Based On:</b>	Highest Rated Offeror
<b>Commodity:</b>	Parts Supply Management	<b>Contract Number:</b>	WAS-12-035-AA-RE
<b>Contractor Market:</b>	Open Market with Preference Points for Local and Local Small Business Enterprise		

**BUDGET INFORMATION**

<b>Funding:</b>	Operating	<b>Department:</b>	Fleet Management
<b>Service Area:</b>	DC Water Wide	<b>Department Head:</b>	Timothy Fitzgerald

**ESTIMATED USER SHARE INFORMATION**

User	Share %	Dollar Amount
District of Columbia	84.40%	\$ 1,409,480.00
Washington Suburban Sanitary Commission	11.41%	\$ 190,547.00
Fairfax County	2.87%	\$ 47,929.00
Loudoun County	1.16%	\$ 19,372.00
Potomac Interceptor	0.16%	\$ 2,672.00
<b>Total Estimated Dollar Amount</b>	<b>100.00%</b>	<b>\$ 1,670,000.00</b>

 / 10/6/15  
 Dan Bae Date  
 Director of Procurement

 / 10/8/15  
 Gail Alexander-Reeves Date  
 Director of Budget

 / 10/9/15  
 Rosalind R. Inge Date  
 Assistant General Manager  
 Support Services

\_\_\_\_\_/\_\_\_\_\_  
 George S. Hawkins Date  
 General Manager

**DC WATER AND SEWER AUTHORITY  
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

**ACTION REQUESTED**

**CONSTRUCTION CONTRACT CHANGE ORDER:  
Main Substation Line C Transformer Replacement  
(Joint Use)**

Approval to execute Change Order No. 03 not to exceed \$883,055.00. The modification exceeds the General Manager's approval authority.

**CONTRACTOR/SUB/VENDOR INFORMATION**

<b>PRIME:</b>	<b>SUBS:</b>	<b>PARTICIPATION:</b>
Cynergy Electric Company, Inc. 1612 Professional Blvd., Suite H Crofton, MD 21114	Nastos Construction Washington, DC MBE	20.4%
	Baseline & Milestones Saverna Park, MD MBE	0.1%

**DESCRIPTION AND PURPOSE**

Original Contract Value:	\$3,655,285.00
Value of this Change Order:	\$883,055.00
Cumulative CO Value, including this CO:	\$1,177,201.00
Current Contract Value, including this CO:	\$4,832,486.00
Original Contract Time:	958 Days (2 Years, 7 Months)
Time extension, this CO:	0 Days
Total CO contract time extension:	182 Days
Contract Start Date (NTP):	08-12-2013
Contract Completion Date:	09-25-2016
Cumulative CO % of Original Contract:	32.2%
Contract completion %:	68.2%

**Purpose of the Contract:**  
Replacement of the Main Substation Line C Transformer and construction of upgrades to the Main Substation.

- Original Contract Scope:**
- Remove and replace the Main Substation Line C Transformer including the lightning arrestors.
  - Remove and replace the 69kV oil circuit breakers on Lines A, B and C.
  - Remove and replace capacitor banks on Lines A, B and C.

- Previous Change Order Scope:**
- Test Ground Grid System
  - Capacitor Bank Miscellaneous Changes

**Current Change Order Scope:**  
As a result of the independent ground grid testing which showed elevated levels of step and touch voltages at different locations in Main Substation, recommendations were made by the testing company to improve the existing grounding system. The current scope of work is the implementation of the recommendations made by the independent testing company which include adding new ground wire, rods, and copper wire mesh and connecting said grounding equipment to the existing ground grid.

**PROCUREMENT INFORMATION**

<b>Contract Type:</b>	Fixed Price	<b>Award Based On:</b>	Lowest responsive, responsible bidder.
<b>Commodity:</b>	Construction	<b>Contract Number:</b>	120030
<b>Contractor Market:</b>	Open Market		


**BUDGET INFORMATION**

<b>Funding:</b>	Capital	<b>Department:</b>	Engineering and Technical Services
<b>Service Area:</b>	Wastewater Treatment	<b>Department Head:</b>	Liliana Maldonado
<b>Project:</b>	TZ		

**USER SHARE INFORMATION**

User	Share %	Dollar Amount
District of Columbia	41.22%	\$363,995.27
Federal Funds	0.00%	\$0.00
Washington Suburban Sanitary Commission	45.84%	\$404,792.41
Fairfax County	8.38%	\$74,000.01
Loudoun County & Potomac Interceptor	4.56%	\$40,267.31
<b>Total Estimated Dollar Amount</b>	<b>100.00%</b>	<b>\$883,055.00</b>

  
 \_\_\_\_\_, 10/6/2015  
 Gail Alexander-Reeves Date  
 Director of Budget

  
 \_\_\_\_\_, 10/7/15  
 Dan Bae Date  
 Director of Procurement

  
 \_\_\_\_\_, 10-6-15  
 Leonard R. Benson Date  
 Chief Engineer

\_\_\_\_\_, \_\_\_\_\_  
 George S. Hawkins Date  
 General Manager

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

**ACTION REQUESTED**

**CONSTRUCTION CONTRACT CHANGE ORDER:**

**Emergency Sanitary Sewer, Combined & Storm Water Rehabilitation Contract  
for FY14 - FY17  
(Joint Use)**

Approval to execute Change Order No. 01 not to exceed \$9,549,864.00 The cumulative modifications will exceed the General Manager's approval authority.

**CONTRACTOR/SUB/VENDOR INFORMATION**

<b>PRIME:</b>	<b>SUBS:</b>	<b>PARTICIPATION:</b>
Anchor Construction Corp. 2254 25 <sup>th</sup> Place, NE Washington, DC 20018  (MBE)		

**DESCRIPTION AND PURPOSE**

Original Contract Value:	\$ 18,377,428.50
Value of this Change Order:	\$ 9,549,864.00 (Not to Exceed)
Cumulative CO Value, including this CO:	\$ 9,549,864.00
Current Contract Value, including this CO:	\$ 27,927,292.50
Contract Time:	1095 Days (3 Years, 0 Months)
Time Extension, this CO:	0 Days
Total CO Contract Time Extension:	0 Days
Contract Start Date (NTP):	06-23-2014
Contract Completion Date:	06-23-2017
Cumulative CO % of Original Contract:	52.0%
Contract Completion %:	60.0%

**Purpose of the Contract:**

Provide repairs, rehabilitation and extensions to the sewer system on an as-needed basis during normal work hours and provide limited 24-hour emergency work.

**Contract Scope:**

- Sewer cleaning, Sewer repairs/System rehabilitation & Emergency sewer repairs

**Previous Changer Order Scope:**

- N/A

**Current Change Order Scope:**

The Emergency Sanitary Sewer, Combined & Storm water Rehabilitation Contract has been used to undertake some urgent special projects that required immediate action including the Northeast Boundary sewer rehabilitation and the Upper Potomac Interceptor rehabilitation. These projects are larger and more complex than the average, routine emergency repairs and as a result have greatly impacted the contract threshold. In just 15 months from the start of a three-year-term contract, 60% of the contract limit has already been exhausted. The purpose of this change order is to increase the contract cost value to offset the costs associated with these special projects.

**Federal Grant Status:**

- Construction Contract is not eligible for Federal grant funding assistance.

**PROCUREMENT INFORMATION**

<b>Contract Type:</b>	Unit Price	<b>Award Based On:</b>	Lowest responsive, responsible bidder
<b>Commodity:</b>	Construction	<b>Contract Number:</b>	130240
<b>Contractor Market:</b>	Open Market with Preference		

**BUDGET INFORMATION**

<b>Funding:</b>	Capital	<b>Department:</b>	Sewer Services
<b>Service Area:</b>	Sanitary Sewer, Combined Sewer Overflow, Stormwater	<b>Department Head:</b>	Cuthbert Braveboy
<b>Project:</b>	DI, FX and G4		

**ESTIMATED USER SHARE INFORMATION**

User	Share %	Dollar Amount
District of Columbia	100.00%	\$ 9,549,864.00
Federal Funds	0.00%	\$ 0.00
Washington Suburban Sanitary Commission	0.00%	\$ 0.00
Fairfax County	0.00%	\$ 0.00
Loudoun County & Potomac Interceptor	0.00%	\$ 0.00
<b>Total Estimated Dollar Amount</b>	<b>100.00%</b>	<b>\$ 9,549,864.00</b>

\* Work under this contract will be assigned as needed under specific task orders. It is anticipated that Joint Use work may be assigned during the contract period. As tasks are developed for work associated with specific facilities and costs are developed, the individual users will be notified and billed according to agreed cost sharing.

*Gail Alexander-Reeves*, 10/6/2015

Gail Alexander-Reeves  
Director of Budget

*Dan Bae*, 10/7/15

Dan Bae  
Director of Procurement

*Charles Kiely*, 10/6/15

Charles Kiely  
Assistant General Manager, Customer Care and Operations

George S. Hawkins  
General Manager

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

**ACTION REQUESTED**

**ENGINEERING SERVICES SUPPLEMENTAL AGREEMENT:  
Construction Management - Biosolids Management Program  
(Joint Use)**

Approval to execute Supplemental Agreement No. 2 for \$2,416,000. The modification exceeds the General Manager’s approval authority.

**CONTRACTOR/SUB/VENDOR INFORMATION**

<b>PRIME:</b>	<b>SUBS:</b>	<b>PARTICIPATION:</b>
ARCADIS District of Columbia, P.C. 9861 Broken Land Parkway Suite 254 Columbia MD 21054	O'Brien & Gere Engineers, Inc. Landover, MD	20.1%
	HAKS Silver Spring, MD	13.8%
	Delon Hampton & Associates Washington, DC	24.2%

**DESCRIPTION AND PURPOSE**

Original Contract Value:	\$28,385,874
Value of this Supplemental Agreement:	\$2,416,000
Cumulative SA Value, including this SA:	\$5,428,800
Current Contract Value, Including this SA:	\$33,814,674
Original Contract Time:	1,249 Days (3 Years, 5 Months)
Time extension, this SA:	182 Days
Total SA contract time extension:	643 Days (1 Year, 9 Months)
Contract Start Date:	04-26-2011
Contract Completion Date:	6-30-2016

**Purpose of the Contract:**

To provide onsite Construction Management Services for the Biosolids Management Program.  
This work is not required by a Consent Decree.

**Original Contract Scope:**

- To provide construction management (CM) services for three construction contracts that are part of the Biosolids Management Program. The contracts are the Main Process Train (MPT) (thermal hydrolysis/anaerobic digestion), Combined Heat & Power (CHP), and Final Dewatering (FDF); which are being delivered via design-build, design-build-operate and design-bid-build delivery methods, respectively.

**Previous Supplemental Agreement Scope:**

Provide extension of construction management services to accommodate changes in sequence and scope for construction projects that are part of the Biosolids Management Program

**Current Supplemental Agreement Scope:**

- To provide CM services for MPT, CHP and FDF projects. The schedule for each of these three projects has been extended. The MPT and CHP projects are essentially mechanically complete, but both projects have extensive outstanding administrative requirements to be completed by the respective contractors. It is anticipated the MPT project will be completed in April of 2016. The CHP project has been delayed by the Contractor with construction work anticipated through November 2015; and should be administratively closed by approximately April of 2016. Existing conditions, prerequisite interfaces with MPT, coordination with existing operations, and contractor delays have pushed the FDF-2C lime stabilization construction work to April 2016. It is anticipated that administrative close out of the MPT, CHP and FDF projects will extend the Biosolids-CM contract through June of 2016.

**Future Supplemental Agreement Scope:**

N/A

**PROCUREMENT INFORMATION**

<b>Contract Type:</b>	Cost Plus Fixed Fee	<b>Award Based On:</b>	Highest Ranking Score
<b>Commodity:</b>	Engineering Services	<b>Contract Number:</b>	DCFA #429-WSA
<b>Contractor Market:</b>	Open Market		

**BUDGET INFORMATION**

<b>Funding:</b>	Capital	<b>Department:</b>	Engineering and Technical Services
<b>Service Area:</b>	Wastewater	<b>Department Head:</b>	Liliana Maldonado
<b>Project:</b>	XA		

**ESTIMATED USER SHARE INFORMATION**

User	Share %	Dollar Amount
District of Columbia	41.22%	\$995,875.20
Washington Suburban Sanitary Commission	45.84%	\$1,107,494.40
Fairfax County	8.38%	\$202,460.80
Loudoun County & Potomac Interceptor	4.56%	\$110,169.60
<b>Total Estimated Dollar Amount</b>	<b>100.00%</b>	<b>\$2,416,000.00</b>

  
 Gail Alexander-Reeves  
 Director of Budget  
 Date: 10/6/2015

  
 Dan Bae  
 Director of Procurement  
 Date: 10/7/15

  
 Leonard R. Benson  
 Chief Engineer  
 Date: 10-6-15

\_\_\_\_\_  
 George S. Hawkins  
 General Manager  
 Date: /

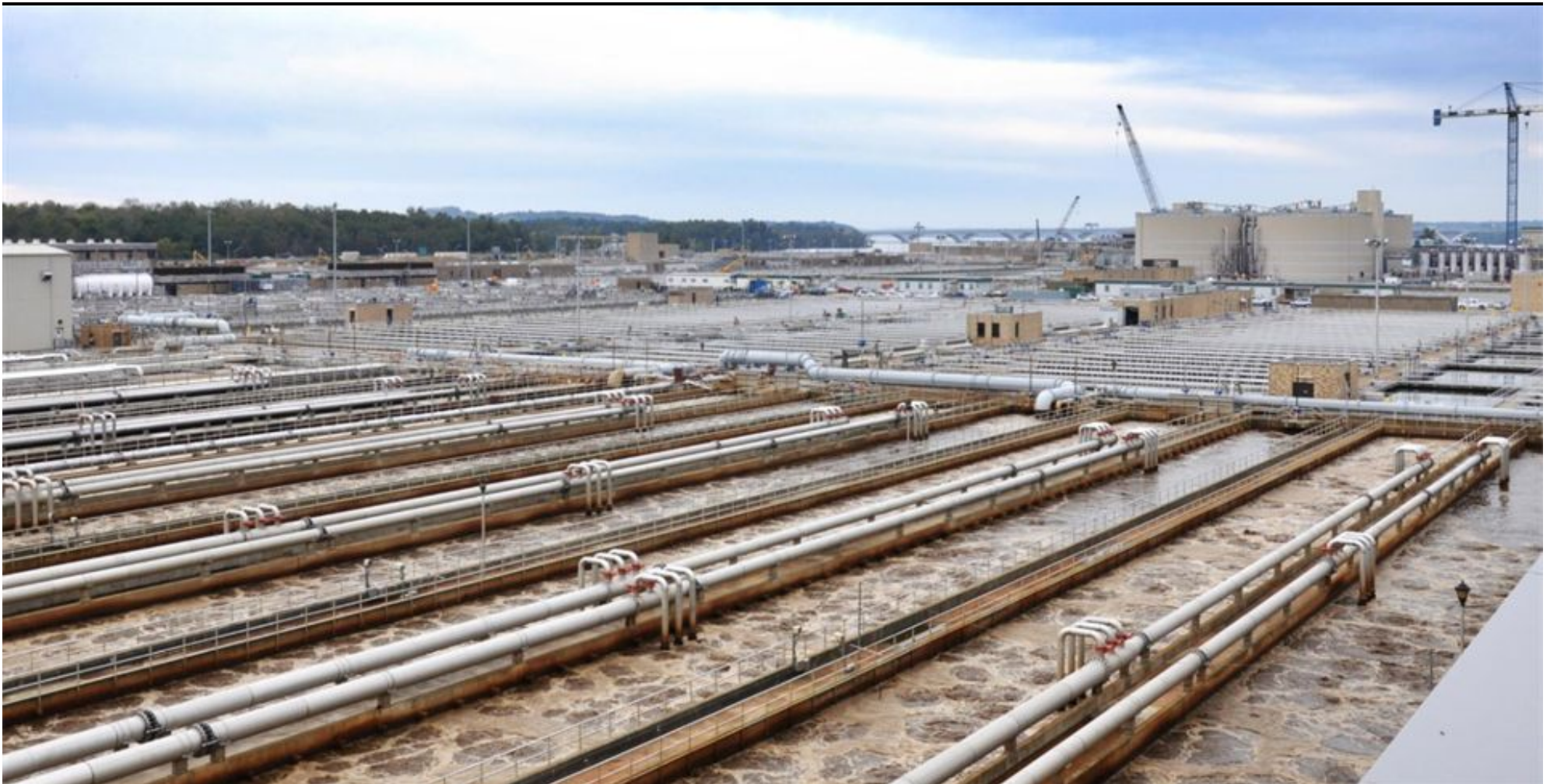


## **BLUE HORIZON 2020 STRATEGIC PLAN**

### **Implementation Progress Report and Proposed Revisions**

*Presentation to the DC Water Environmental Quality and Sewerage Services Committee*

*October 15, 2015*







# Agenda

---

- Blue Horizon 2020 Overview
- Goal 8: Implementation Progress
- Goal 8: Proposed Revisions



# DC Water's Strategic Direction

---

## Vision

To be a world-class utility

## Values

Respect, Ethics, Vigilance and Accountability

## Mission

Exceed expectations by providing high quality water services in a safe, environmentally friendly, and efficient manner



LEADERSHIP



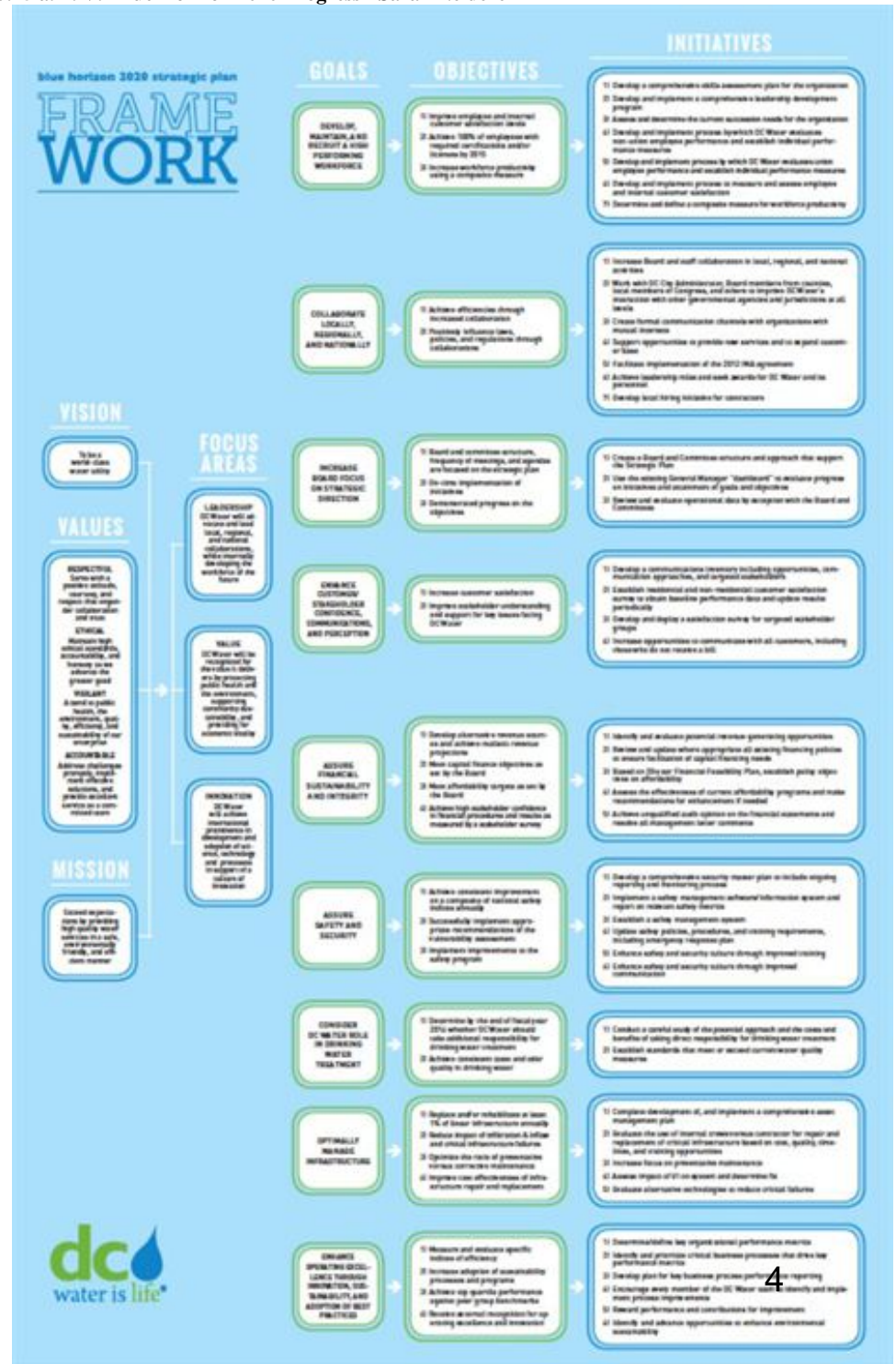
VALUE



INNOVATION



- 9 Goals
- 27 Objectives
- 44 Initiatives
- 146 Milestones





## Blue Horizon 2020 Goals

GOAL		COMMITTEE	GOAL CHAMPION
1	Develop, Maintain and Recruit a High Performing Workforce	Human Resources/Labor Relations	Rosalind Inge
2	Collaborate Locally, Regionally, and Nationally	Governance	John Lisle
3	Increase Board Focus on Strategic Direction	Strategic Planning	Randy Hayman
4	Enhance Customer/Stakeholder Confidence, Communications, and Perception	Water Quality and Water Services	Charlie Kiely
5	Assure Financial Sustainability and Integrity	Finance and Budget/DC Retail Water and Sewer Rates	Mark Kim
6	Assure Safety and Security	Human Resources/Labor Relations	Aklile Tesfaye
7	Consider DC Water Role in Drinking Water Treatment	Water Quality and Water Services	Charlie Kiely
8	Optimally Manage Infrastructure	Environmental Quality and Sewerage Services	Len Benson
9	Enhance Operating Excellence Through Innovation, Sustainability, and Adoption of Best Practices	Audit	Biju George



# Implementation Progress

---

## *Goal 8*

### *Optimally Manage Infrastructure*

8	<b>Optimally Manage Infrastructure</b>	% COMPLETE
8.1	<b>Replace and/or rehabilitate at least 1% of linear infrastructure annually</b>	
8.2	<b>Reduce impact of infiltration &amp; inflow and critical infrastructure failures</b>	<b>75</b>
8.2.1	Assess impact of I/I on system and determine fix	75
8.3	<b>Optimize the ratio of preventative versus corrective maintenance</b>	
8.3.1	Complete development of, and implement a comprehensive asset management plan	85
8.3.2	Increase focus on preventative maintenance	10
8.4	<b>Improve cost effectiveness of infrastructure repair and replacement</b>	
8.4.1	Evaluate the use of internal crews versus contractor for repair and replacement of critical infrastructure based on cost, quality, timelines and training opportunities	95
8.4.2	Evaluate alternative technologies to reduce critical failures	100



# Proposed Revisions

---

*Goal 8*

*Optimally Manage Infrastructure*



# Goal 8

---

*Adopted in 2013*

- **Goal**
  - Optimally Manage Infrastructure
- **Objectives**
  - Replace and/or rehabilitate at least 1% of linear infrastructure annually
  - Reduce impact of infiltration & inflow and critical infrastructure failures
  - Optimize the ratio of preventive versus corrective maintenance
  - Improve cost effectiveness of infrastructure repair and replacement





# Goal 8 Initiatives

---

## **8.1 Replace and/or rehabilitate at least 1% of linear infrastructure annually**

## **8.2 Reduce impact of infiltration & inflow**

- Assess impact of I/I on system and develop action plan

## **8.3 Optimize the ratio of preventive versus corrective maintenance**

- Complete development of, and implement a comprehensive asset management program
- Increase focus on preventive maintenance

## **8.4 Improve cost effectiveness of infrastructure repair and replacement**

- Evaluate the use of internal staff versus contractors for repair, rehabilitation, and replacement of critical infrastructure based on cost, quality, timelines and training opportunities
- Perform Phase II evaluation of emerging technologies and methods for water and sewer infrastructure



# Questions?

---