Performance Oversight Questions
DC Water

A. ORGANIZATION AND OPERATIONS

1. Please provide a complete, up-to-date **organizational chart** for the agency and each division within the agency. Please include an explanation of the roles and responsibilities for each division and subdivision within the agency.
    - Please include a list of the employees (name and title) for each subdivision and the number of vacant positions.
    - Has the agency made any organizational changes in the last year? If so, please explain.

See page VII-11 "Departmental Summaries"

2. Please list each **new program** implemented by the agency during FY 2015. For each initiative please provide:
    - A description of the initiative.
    - The funding required to implement the initiative.
    - Any documented results of the initiative.

The DC Water Asset Management Program is in its second year of development with concurrent implementation. The Asset Management Program involves establishing effective and efficient business and operational processes to guide decision-making for the full lifecycle of infrastructure assets: From planning, design, construction and commissioning, through the years of operation, maintenance and renewal. As such, the Asset Management Program is not restricted to just the infrastructure assets themselves, but addresses the technologies needed for delivering reliable service, and engages DC Water staff throughout the Authority to learn new skills and adopt new methods for stewardship of the infrastructure.

To date, the Asset Management Program has increased the Authority's knowledge of its infrastructure assets by capturing additional information and incorporation that information into a computerized maintenance management system. DC Water staff has been trained in new concepts, such as preventive maintenance optimization and failure mode and effects analysis (FMEA), to optimize maintenance costs and maximize assets' useful lives. The implementation of these concepts on a pilot basis has achieved a documented savings of approximately 5,000 labor hours per year which can be reallocated to other critical activities. A risk framework has been established for assessing the risk of asset failure and guiding the selection of the best risk mitigation actions either through capital investment or through enhancement of operations and maintenance. The risk framework has already been applied to asset systems at the Blue Plains Plant as well as in both the water and sewer. An updated

performance management system is being created with concurrent participation of the Authority in the international asset management benchmarking program conducted by the Water Services Association of Australia. Additionally, the development of standard approaches for conducting business case evaluations and prioritizing capital projects are nearing completion, and will allow for a more robust and repeatable methodology for choosing the most cost-effective and innovative solutions to address aging assets, new regulations, capacity demands, and other needs.

3. Please provide a complete, up-to-date **position listing** for your agency, which includes the following information for each position:
    - Title of position.
    - Name of employee or statement that the position is vacant, unfunded, or proposed.
    - Date employee began in position.
    - Salary and fringe benefits, including the specific grade, series, and step of position.
    - Job status (continuing/term/temporary/contract).

    Please list this information by program and activity

See "Position Inventory"

4. Does the agency conduct annual **performance evaluations** of all of its employees? Who conducts such evaluations? What steps are taken to ensure that all agency employees are meeting individual job requirements?

The Authority conducts both Interim and Annual Performance Evaluations for union and non-union employees. The Performance Evaluations are conducted by the employee's immediate supervisor/manager and reviewed by the next level of management, and ultimately the Department Head. It is the responsibility of each employee's first-level supervisor/manager to ensure that they are meeting their individual job requirements as detailed in the job description for the employee's job title.

5. Please provide the Committee with:
    - A list of all employees who receive cellphones, personal digital assistants, or similar communications devices at agency expense.

See "Cell phones"

    - A list of all vehicles owned, leased, or otherwise used by the agency and to whom the vehicle is assigned.

See "Fleet"

- A list of employee bonuses or special award pay granted in FY 2015 and FY 2016, to date.

Bonus/Award	Amount Paid	# of Employees
Administrative Professional Awards	$1,221.21	1
Taxable Gift Cards (FY 2015)	$19,074.04	313
Taxable Gift Cards (FY 2016)	$2,505.00	65
Edu. Asst. Reimbursement over IRS Limit	$0.00	0
Housing Assistance	$0.00	0
Union Bonus (FY15)	$787,923.01	652
Non Union Bonus (FY15)	$732,642.49	344
Non Union Bonus (FY 16)	$727,100.64	371
Total Bonuses	**$2,176,601.02**	

- A list of travel expenses, arranged by employee.

See "Travel"

- A list of the total overtime and worker's compensation payments paid in FY 2015 and FY 2016, to date.

Total Overtime & Workers' Compensation Payments

Overtime Payments

FY 2015 (10/01/14 - 09/30/15)	**$ 7,481,933**	123% of the FY 2015 overtime budget
FY 2016 (10/01/15 - 12/31/15)	**$ 1,683,940**	25.4% of the FY 2016 overtime budget

Workers' Compensation

FY 2015 (10/1/14 - 9/30/15)	**$ 1,597,140**	medical, indemnity, vocational rehabilitation and expenses
FY 2016 (10/1/15 - 1/31/16)	**$ 672,786**	medical, indemnity, vocational rehabilitation and expenses

6. Please identify all **electronic databases** maintained by your agency, including the following:
   - A detailed description of the information tracked within each system.
   - The age of the system and any discussion of substantial upgrades that have been made or are planned to the system.

- Whether the public can be granted access to all or part of each system.

See "databases"

7. What has the agency done in the past year to make the activities of the agency more **transparent** to the public? In addition, please identify ways in which the activities of the agency and information retained by the agency could be made more transparent.

We continue to live stream our Board of Directors meetings and publish all meeting materials and agendas on our website. We are in the process of updating information on our website and reorganizing sections to make it easier for ratepayers and customers to find what they are looking for. This year DC Water partnered with a local firm to update the dcwater.com website with much more user-friendly features.

In the spring, the General Manager – supported by every DC Water department – co-hosted budget town hall meetings in every ward of the city to meet with ratepayers, explain the proposed rate increases and budget, and to hear their concerns. These meetings were attended by several hundred customers.

8. How does the agency solicit **feedback** from customers? Please describe.
   - What is the nature of comments received? Please describe.

- Customer Service Center at (202)354-3600
- 24-hour Command Center at (202) 612-3400
- Email address in every customer bill: gmsuggestions@dcwater.com
- Online comment and report-a-problem form
- Mobile report-a-problem form (includes photo upload and GPS location capabilities)
- Town hall meetings in every ward each spring (participants solicited by outgoing robo-call)
- Door-to-door notification of affected addresses before planned construction work
- Follow-up surveys after major construction work concludes
- Participation in more than 120 community meetings, events and festivals
- Twitter: @dcwater
- Facebook
- YouTube
- Instagram
- Routine monitoring and responses to DC Water mentions in blogs, on Twitter and in conventional media

We receive feedback from our customers about the quality of our work; service and billing concerns; questions about jobs and contracting, and many other topics.

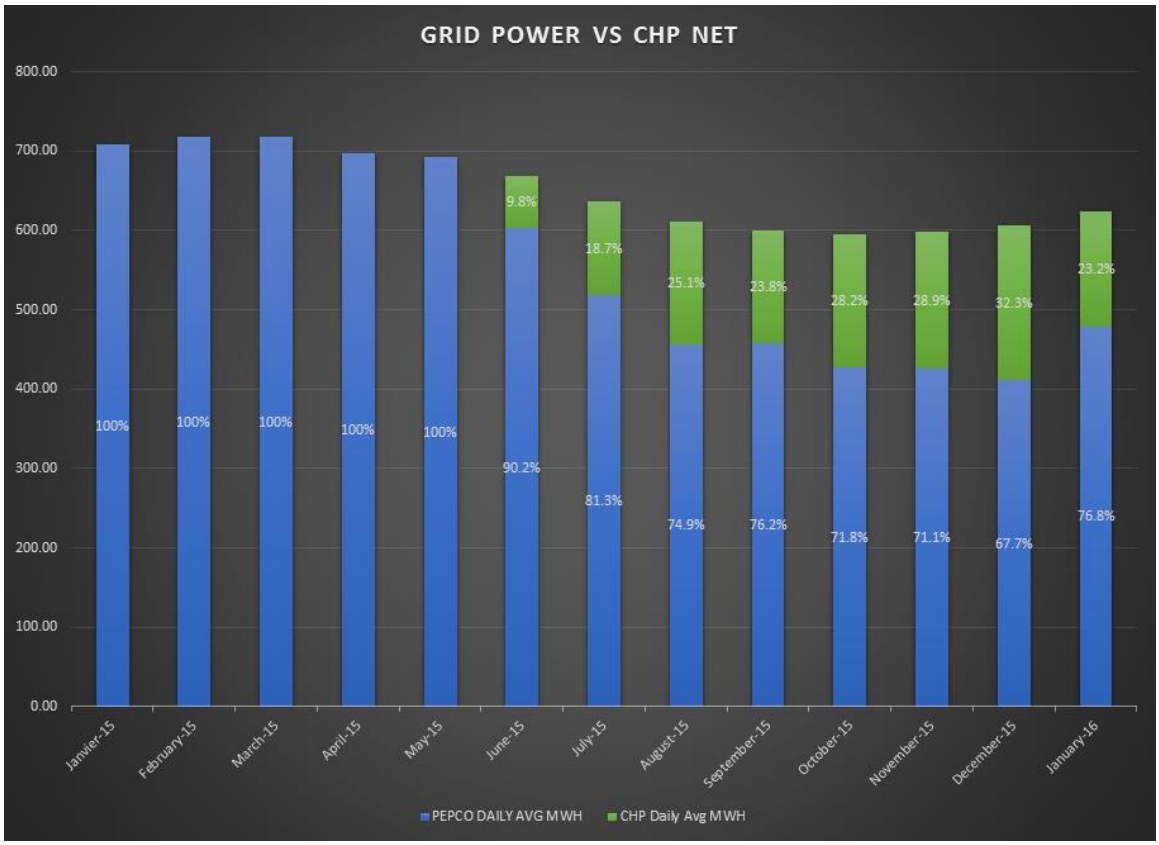
- How has the agency changed its practices as a result of such feedback?

DC Water continually seeks ways to improve customer service, especially hard to reach customers. In FY 2015, DC Water conducted a large customer service survey that included residential, non-residential, and government stakeholders. DC Water is planning to use the data from this survey in FY 2016 to improve its communications with customers and better educate the public on the importance of the Authority's work.

9. How has the agency tried to reduce agency **energy use** in FY 2015?

As part of the biosolids management program, DC Water commenced commissioning operation of the combined heat and power plant in June 2015. The commissioning process will continue for approximately 12 months. We are pleased to share that with use of biogas generated through the CAMBI process, we have generated a substantial part of our electrical need at Blue Plains as opposed to purchasing from the grid.

The graph below demonstrates the amount of power generated at Blue Plains (green) versus purchased from the grid (blue). We anticipate that approximately 1/3 of the total energy needs at Blue Plains will be met from combined heat and power plant in the future.



	PEPCO DAILY AVG MWH	CHP Daily Avg MWH	%PEPCO	% Electricity generated by CHP
January-15	708.83		100.0%	
February-15	718.31		100.0%	
March-15	718.49		100.0%	
April-15	697.16		100.0%	
May-15	692.13		100.0%	
June-15	603.44	65.80	90.2%	9.8%
July-15	518.27	118.87	81.3%	18.7%
August-15	457.10	153.28	74.9%	25.1%
September-15	457.33	142.45	76.2%	23.8%
October-15	427.96	167.84	71.8%	28.2%
November-15	425.40	172.93	71.1%	28.9%
December-15	411.12	195.81	67.7%	32.3%
January-16	479.22	144.98	76.8%	23.2%

B. BUDGET AND FINANCE

10. Please provide a chart showing your agency's **approved budget and actual spending**, by division, for FY 2015 and FY 2016, to date. In addition, please describe any variance between fiscal year appropriations and actual expenditures.

The Revised FY 2015 budget was at the same level as the Approved FY 2015 budget of $516.0 million as adopted by the Board of Directors on December 5, 2014. The actual spending for the Authority for FY 2015 was $446.3 million.

	FY 2015			
	Approved Budget	Revised Budget	Actual Results	Fav/(Unfav)
WWT Process Engineering	$ 8,882	$ 8,472	$ 7,030	$ 1,442
Maintenance Services	21,822	21,971	18,902	3,070
Water Services	55,141	21,959	21,974	(15)
Sewer Services	21,264	14,856	13,978	878
Clean Rivers	2,480	2,720	2,487	233
Engineering and Technical Services	22,811	23,087	23,040	47
Permit Operations	2,251	2,167	2,075	92
Wastewater Treatment Operations	82,504	82,414	73,078	9,336
Customer Service	17,197	16,925	17,009	(84)
Distribution and Conveyance Systems	6,085	46,476	45,543	933
Total Operations	**240,437**	**241,047**	**225,116**	**15,931**
General Manager	2,759	3,043	3,209	(166)
Office of the Board Secretary	635	610	441	169
Internal Audit	859	859	850	9
General Counsel	6,025	6,011	7,014	(1,003)
External Affairs	2,131	2,204	2,164	40
Information Technology	10,301	10,471	10,258	212
Finance, Accounting and Budget	14,751	14,305	11,970	2,335
AGM Support Services	364	356	393	(37)
Human Capital Management	5,362	5,548	6,895	(1,347)
Facilities Management	13,133	7,604	7,712	(108)
Procurement	4,865	4,603	3,479	1,124
Occupational Safety and Health	1,964	1,563	1,437	126
Department of Security	-	5,377	5,219	158
Fleet Management	5,365	5,350	4,813	537
Total Administration	**68,514**	**67,904**	**65,854**	**2,050**
Subtotal O&M Expenditures	**308,950**	**308,950**	**290,970**	**17,981**
Debt Service	160,264	160,264	134,845	25,419
Payment in Lieu of Taxes	21,587	21,587	15,337	6,250
Right of Way	5,100	5,100	5,100	-
Cash financed Capital improvements	20,058	20,058	-	20,058
Total Operating Expenditures	$ 515,959	$ 515,959	$ 446,252	$ 69,707
				-
Personnel Services charged to Capital Projects	(17,266)	(17,266)	(18,702)	1,436
Total Net Operating Expenditures	**$ 498,693**	**$ 498,693**	**$ 427,550**	**$ 71,143**

FY 2015 Revised Budget to Actual Variance Explanation:

Wastewater Treatment – Process Engineering: Underspending primarily in personnel services due to vacancies, supplies due to lower issuances from the warehouse and reduced spending in contractual services associated with preventive and corrective maintenance on field instrumentation contract throughout Blue Plains.

Maintenance: Underspending in supplies due to untimely warehouse issuance and reconciliation. In addition, there was underspending as a result of no expenditures for the denitrification of propeller pumps maintenance contract and maintenance of solids processing, and increased use of in-house staff in both the electrical power distribution equipment and the methanol system maintenance contracts.

Wastewater Treatment: Underspending in chemicals due to lower demand in polymers, sodium hydroxide and methanol for use in the digesters. Additionally, underspending in various contracts for biosolids hauling cost due to reduced volume and production of Class A biosolids from the digesters, delays from the operations and maintenance contract for the Combined Heat and Power (CHP) facility and other professional services.

General Counsel: Overspending is primarily in the areas of environmental matters attributable to significant cases and other legal contingencies.

Finance, Accounting and Budget: Underspending in various professional services and departmental restructuring with the transfer of the workers compensation program to Human Capital Management department.

Human Capital Management: Overspending primarily for the Authority's Workers Compensation Claims program and related liabilities consistent with past spending trends.

Debt Service: Underspending is primarily due to lower than anticipated interest rates on existing debt and refinanced debt. In addition, there was no new debt issuance in FY 2015.

Payment In Lieu Of Taxes: Underspending is attributable to resolution of the MOU with the District of Columbia.

Cash Financed Capital Improvements: This line item of the budget was established for PAYGO financing and to meet unplanned or emergency O&M expenditures. Due to favorable O&M budget position, no budget transfer was executed from this cost category.

FY 2016 Operating Budget

There were no revisions to the Approved FY 2016 budget of $541.6 million as adopted by the Board of Directors on February 5, 2015.

At the end of December 2015, operating expenditures (including debt service and the right of way PILOT fees) totaled $112.3 million or 20.7% of the approved budget. Total operating expenditures were in line with expectation for the first quarter of fiscal year 2016. These numbers include estimated, incurred but unpaid, invoices and are subject to revision in subsequent months.

The following provides DC Water's comparative expenditure by major object areas for the first quarter of the fiscal year as detailed data by department will be available during the second quarter of the fiscal year.

Comparative Statement of Expenditure
As of December 31, 2015
($000's)

	FY 2016		
	Approved Budget	**Actual (YTD) as of 12/31/2015**	**Percent of Budget**
Personnel Services	$ 140,034	$ 34,922	24.9%
Contractual Services	79,244	15,694	19.8%
Water Purchases	30,740	6,291	20.5%
Chemicals and Supplies	35,951	6,610	18.4%
Utilities	35,018	5,850	16.7%
Small Equipment	1,465	76	5.2%
Subtotal O & M Expenditures	322,452	69,443	21.5%
Debt Service	174,766	37,704	21.6%
Cash Financed Capital Improvements	23,644	-	0.0%
Payment in Lieu of Taxes	15,644	3,911	25.0%
Right of Way	5,100	1,275	25.0%
Total O & M Expenditures	$ 541,605	$ 112,334	20.7%
Personnel Services Charged to Capital Projects	(18,993)	(4,344)	22.9%
Total Net Operating Expenditures	$ 522,612	$ 107,990	20.7%

11. Please list any **reprogrammings**, in, out, or within, related to FY 2015 or FY 2016 funds. For each reprogramming, please list the total amount of the reprogramming, the original purposes for which the funds were dedicated, and the reprogrammed use of funds.

During FY 2015, a total of $15.1 million was reprogrammed to meet operational and maintenance needs within the Authority's approved operating budget as follows:

a) Personnel Services ($4.3 million):
Interdepartmental reprogrammings were effected within personnel services as a result of increased hiring efforts, departmental restructurings, wage adjustments, higher overtime costs during the extreme cold season and associated health benefits.

b) Non-Personnel Services ($10.8 million):
Interdepartmental reprogrammings were effected using savings from within O&M and PILOT line items of the budget. The underspending in PILOT ($6.2 million) is attributable to the resolution of the MOU with the District of Columbia. Reprogrammings were effected to:

- meet required funding for alignment of functions arising from departmental restructurings ($7.3 million)
    - Workers Compensation claims program and related funding shortfall ($1.7 million)
    - High voltage electrical maintenance work performed outside of the Blue Plains' Plant for proper IMA billing ($1 million)
    - Incorporation of Risk Management functions within Finance, Accounting & Budget department ($4.4 million)
    - SCADA support program outside the Blue Plains' Plant ($0.2 million)
- provide funding to support the customer satisfaction survey program in line with the Board's Strategic Plan ($0.2 million), mailing costs for letters to all DC Water customers regarding the implementation of new rate design and related rate increases for FY 2016 ($0.4 million)
- fund the higher than anticipated costs for legal matters and year-end contingencies ($1.8 million)
- accommodate projected shortfall for water purchased from Washington Aqueduct ($0.4 million)
- cover the cost of Oracle software renewals for DC Water's Contract Manager and P6 programs ($0.2 million)
- meet other various shortfalls for items such as temporary staffing due to unanticipated vacancy, repairs and maintenance of vehicles and other operational needs throughout the Authority ($0.5 million)

FY 2016 Reprogramming

As of January 2016, a total of $3.5 million has been reprogrammed within the Non-Personnel Services line item of the Authority's operating budget to complete the incorporation of the Risk Management function within Finance, Accounting and Budget department.

12. Please provide a list of all projects for which your agency currently has **capital funds** available. Please include the following:

    - A description of each project, including any projects to replace aging infrastructure (e.g., water mains and pipes).
    - The amount of capital funds available for each project.
    - A status report on each project, including a timeframe for completion.
    - Planned remaining spending on the project.

The Capital programs section of the document is a brief summary of the major activities followed by the detailed project listing by service area. A brief summary of the major activities and a detailed listing for each project in DC Water's Approved FY 2016 - FY 2025 Capital Improvement Program is found in Section V (page V-5) of the FY 2017 Approved Budget Book.

Below is a link to the document:

https://www.dcwater.com/investor_relations/budget_sections/2016/capital_program.pdf

13. Please provide a complete accounting of all **federal grants** received for FY 2015 and FY 2016, to date.

As of February 10, 2016 no federal grants have been received for FY 2016. However, note that in FY 2016, DC Water received $14 million in federal appropriations to be used for the DC Clean Rivers Project. The following table provides a summary of all federal grants received in FY 2015.

DC Water
Federal Grants Received for FY 2015

FY 2015	Name	Award Date	Federal Grant Award Amount
HOMELAND SERCURITY	DCWASA Quick Connect and 1 Portable Generator	12/22/2014	877,302.00
HOMELAND SERCURITY	14th Street Bridge Storm Water Pumping Station	7/1/2015	1,228,268.25
HOMELAND SERCURITY	DC Water Generator Project	7/8/2015	383,288.00
HOMELAND SERCURITY	DCWASA Install 3 permanent generator with transfer switch	6/15/2015	415,285.00
SAFE-DRINKING WATER	Small Diameter Water Main Repl. Contract 11	9/29/2015	8,808,666.00
SAFE-DRINKING WATER	Large Valve Replacements, Contract 12	9/14/2015	1,347,325.00
		Total	**$13,060,134.25**

14. Please list each contract, procurement, lease, and grant ("**contract**") awarded, entered into, extended and option years exercised, by your agency during FY 2015 and FY 2016, to date. For each contract, please provide the following information, where applicable:
    - The name of the contracting party.
    - The nature of the contract, including the end product or service.
    - The dollar amount of the contract, including budgeted amount and actually spent.
    - The term of the contract.
    - Whether the contract was competitively bid or not.
    - The name of the agency's contract monitor and the results of any monitoring activity.
    - Funding source.

See "Contracts – Goods and Services" and "Contracts – Capital"

15. Please provide the details of any **surplus** in the agency's budget for FY 2015, including:
    - Total amount of the surplus.
    - All projects and/or initiatives that contributed to the surplus.

DC Water utilizes operating cash in excess of the Board's reserve requirement and any other significant one-time cash infusions for capital financing or for repayment of higher cost debt. In FY 2015, the projected **cash** surplus of **$59.8 million** was approved to be disbursed as follows:

- $17.5 million Transfer to Rate Stabilization Fund
- $22.3 million Additional Transfer to PAYGO
- $20.0 million Ending Cash Balance over Target

The following items contributed to the surplus:

- The revenue receipts were higher at $546.1 million or 100.6 percent of the Revised FY 2015 budget primarily due to increase in Fire Protection Fee in FY 2015 by approximately $4 million based on the February 2015 Cost of Service Study.

- The operating expenditures were at 88.8 percent of the budget due to lower spending mainly for chemicals, supplies and contractual services.

- The Debt Service was lower on account of lower interest rates on existing debt and the issuance of additional debt later in calendar year (FY 2016) than originally planned.

- County Refunds in FY 2015 were substantially lower than the projected amount.

C. LAWS, AUDITS, AND STUDIES

16. Please identify any **legislative requirements** that the agency lacks sufficient resources to properly implement.

N/A

17. Please identify any statutory or regulatory **impediments** to your agency's operations.

DC Water has filed a lawsuit in the United States District Court for the District of Columbia against the U.S. Environmental Protection Agency (EPA) to correct technical mistakes in a recent regulatory action that may force unreasonable mandates on its Blue Plains Wastewater Treatment Facility. Specifically, DC Water is seeking corrections to the Total Maximum Daily Load (TMDL) for E. coli. Without the corrections, DC Water could be forced to spend as much as a billion dollars of ratepayer money for additional controls that would not measurably improve water quality.

The lawsuit in no way alters DC Water's commitment to doing its part to help improve the Chesapeake Bay, the Potomac and Anacostia Rivers and Rock Creek. To date, DC Water has met or exceeded every one of its discharge requirements and will continue to do so. Since January 1, 2015, DC Water has removed over 1.1 million pounds of nutrients beyond what is required for protection of the Chesapeake Bay.

EPA's 2014 TMDL, establishes maximum daily allocations for E. coli that can be discharged by the Blue Plains Wastewater Treatment Facility. These allocations are based on flawed methodology that does not account for normal and expected variations in flow and effluent concentration at Blue Plains. DC Water made numerous attempts to engage EPA to revise the flawed allocations to no avail. Although DC Water provided substantial comments to draft versions of the TMDL, EPA made material changes to the TMDL in the final published rule and failed to provide DC Water and the public with an opportunity to comment. DC Water would have preferred to comment prior to the final rule to solve these technical mistakes without litigation.

18. Please explain the impact on your agency of any **federal legislation or regulations** adopted during FY 2015 that significantly affect agency operations.

See above

19. Please provide a list of all studies, research papers, and analyses ("**studies**") the agency requested, prepared, or contracted for during FY 2015. Please state the status and purpose of each study.

See "Studies"

20. Please list and describe any ongoing **investigations**, audits, or reports on your agency or any employee of your agency, or any investigations, studies, audits, or reports on your agency or any employee of your agency that were completed during FY 2015 or FY 2016, to date.

See "Audits"

D. PROGRAM-SPECIFIC QUESTIONS

21. Please describe the agency's three biggest challenges from 2015.

The principal challenge facing DC Water remains raising the funds necessary to support our operations and massive capital program from our existing ratepayers. DC Water, like so many water authorities, is simultaneously

facing increased maintenance costs for aging infrastructure, replacement costs for that infrastructure, and hugely expensive capital projects mandated by federal law. DC Water needs to demonstrate to our ratepayers that we have a legitimate need for additional funds, and must also be able to demonstrate that we are more productive with every dollar raised. Even so, we have challenges explaining the rate increases to customers used to paying almost exclusively for operational costs of infrastructure installed decades (or even a century) ago. Our enterprise otherwise faces categories of challenges: a) continual and diverse nature of incident and emergency response; b) how to encourage innovation within a public agency structure; and c) how to generate revenue from our expertise from non-ratepayer sources to help reduce pressure on our customers.

22. Please describe the agency's major goals for 2016.

Below are the revised goals as of Dec. 2015 as adopted by DC Water's Board of Directors.

- Develop, Maintain and Recruit a High Performing Workforce
- Collaborate Locally, Regionally, Nationally, and Internationally
- Increase Board Focus on Strategic Direction
- Enhance Customer and Public Confidence, Communications, and Perception
- Promote Financial Sustainability and Responsible Resource Allocation
- Assure Safety and Security
- Maximize water quality treatment, compliance and efficiency
- Optimally Manage Infrastructure
- Enhance Operating Excellence Through Innovation, Sustainability, and Adoption of Best Practices

23. Please describe any challenges that the agency has experienced in working with the District government in 2015.

DC Water continues to collaborate with District agencies on infrastructure projects in public space. We have participated in numerous meetings with DDOT leadership to help accelerate the performance of our work and plan to work with the Director's office in 2016. We look forward to working with DDOT and its new underground utility division to coordinate electrical undergrounding work in public space that may conflict with our water assets.

DC Water continues to work with the District to identify funding to support the Memorandum of Understanding concerning a portion of costs undertaken by the Authority to achieve the Mayor's goals in Bloomingdale. DC Water

also is working intensively with the District to enhance our efforts to support local hiring of District companies and workers.

24. Please describe the status of the fire hydrant inspection and maintenance program, including:

There are approximately 9,450 public fire hydrants within the District of Columbia, all inspected annually and repaired and maintained by DC Water.

In addition to inspecting, repairing and maintaining the existing inventory of public fire hydrants, DC Water is responsible for the fire hydrant replacement, upgrades and flow testing fire hydrants for flow test capacity. The replacement and upgrade program standardizes public fire hydrant models and requires upgrading the pumper nozzle size of the hydrant to 4.5 inch nozzles with 4 threads per inch, which is the National Standard Thread (NST) set by the NFPA.

- The current number of known mechanically defective hydrants in the District.

While DC Water strives to ensure all public fire hydrants are operable for fire suppression needs, unforeseen circumstances can cause a fire hydrant to be rendered out of service. Recognizing these circumstances, DC Water has set goals to ensure the number of out of service hydrants do not exceed 1% of the inventory of public fire hydrants. As of February 4, 2015, 35 hydrants are out of service due to defects.

- The number of hydrants replaced in the District in FY 2015.

For FY 2015, 112 hydrants were installed meeting the national standards as agreed upon in the MOU with DC FEMS.

- The frequency of fire hydrant inspection in the District.

Per the MOU with DC FEMS, DC Water conducts an annual inspection of every public hydrant.

- The frequency of fire hydrant inspection for pressure in high elevation areas in the District.

Each hydrant, regardless of elevation, is inspected once a year by DC Water in accordance with the MOU with DC FEMS. Each inspection is conducted in

accordance with AWWA M17 standards and the manufacturer's recommendations.

25. Please describe the status of the DC Clean Rivers Project to reduce combine sewer overflows (DC Water's Long Term Control Plan), including:
    - For each Long Term Control Plan project, please provide:
        - A description.
        - The amount of capital funds available.
        - A status report, including a timeframe for completion.
        - Planned remaining spending.

See "Clean Rivers"

26. Please describe how DC Water has worked to increase its hiring of District residents during FY 2015.

In FY 2015, DC Water operated three satellite Job Centers across the District of Columbia to give potential applicants information on job openings with DC Water contracting firms and assistance with resume writing. In FY 2015, 39 individuals were hired through the Job Centers.

DC Water took the extraordinary step of creating a mentorship program where local residents could receive paid entry-level on-the-job training with a local construction firm. The lessons learned from this pilot program are being applied to a broader local employment strategy at DC Water. At the direction of CEO and General Manager George Hawkins and DC Water's Board of Directors, DC Water is developing a program to incentivize contractors to hire residents of the DC Water service area. The comprehensive program, called DC Water Works already made an impact in 2015 when 83% of the 137 newly-hired contractor employees lived in DC Water's user jurisdictions.

FY 2015 local contractor employment numbers:

- Goods and Service projects provided 541 job positions, 343 of which were filled by residents within the user jurisdictions, including 111 District residents.
- Major construction projects provided 2,973 positions, 1,407 of which were filled by user jurisdiction residents, including 338 District residents.

FY 2015 certified business utilization: DC Water awarded a combined $345.5 million in contracts, modifications and change orders. Of this total, $117.7 million in contracts were awarded to certified business enterprises. The details of these totals are:

- Small Purchases, Large Goods and Services, and Non-EPA Construction Awards totaled $98.5 million. Of this amount, certified local and local/small business enterprises were awarded $29.4 million (30%).
- Micro Purchases, Sole Source Awards, Legal, Financial, Benefits and other Exempt Awards totaled $25.6 million. Of this amount, certified local and local/small business enterprises were awarded $5.9 million (23%).
- Non-discretionary/EPA eligible awards totaled $151.3 million. Of this amount, certified minority and women owned businesses were awarded $56.3 million (37%).
- EPA Fair Share Objective awards totaled $70.0 million. Of this amount, certified minority and women owned businesses were awarded $26 million (37%).

27. Please describe the status of the First Street Tunnel project to mitigate flooding in Bloomingdale and LeDroit Park.

The First Street Tunnel project will provide an additional 9.3 million gallons of combined sewer/storm water storage to the Bloomingdale/LeDroit neighborhood. The project is in active construction. The tunnel mining and lining is complete. The construction of the temporary pump station, diversion structures and adits is on-going. The project is currently projected for completion in late spring 2016.

28. Please describe the status of DC Water's Thermal Hydrolysis and Anaerobic Digester Project, including:
    - What are DC Water's plans for growing this program in the future?
    - Is DC Water ready to accept organic matter (i.e., food waste or leaves) from the Department of General Services or the Department of Public Works for inclusion in the anaerobic digesters? If not, when does DC Water expect the digesters will be ready?

DC Water is focused on optimizing the recently-commissioned digester project. We are currently using all four of the constructed digesters for sewage treatment, but there is some capacity for additional flow. With the capacity we have in the existing digesters, there is potential to bring on some outside sources such as food waste to generate additional revenue and power. We are still investigating the feasibility and economics to determine if accepting outside waste is a good fit for DC Water and its ratepayers. There are multiple logistical and financial hurdles such as constructing a receiving station in the limited space available at Blue Plains.

The digesters now produce Class A biosolids that DC Water plans to market as a soil amendment (www.bloomsoil.com). DC Water hopes to have distribution and marketing permits for the product in MD, VA and DC this summer.

29. Please describe the status of the Glover-Archbold Park Sewer Rehabilitation Project.

Due to resource constraints this project has been on hold for several months. Preliminary design options have been prepared, but have not yet been presented to NPS. We will be presenting conceptual alternatives and environmental impacts to National Park Service (NPS) and other stakeholders in the spring of 2016. After addressing federal and District agency comments, DC Water will conduct a Public Scoping Meeting to present preliminary design options to the public. DC Water will conduct a public outreach well in advance of the Public Scoping Meeting. Completion of the above steps will allow DC Water to start our detailed design. This project is currently scheduled for construction in 2019.

30. Please describe the status of the Soapstone Sewer Rehabilitation Project.
    - When does DC Water expect a draft environmental assessment will be shared with the public?

DC Water is currently revising the Environmental Assessment (EA) for the Soapstone Sewer Rehab Project based on comments from the NPS. As of February 2016, we are waiting for clarification on some comments and working to resolve other comments. When comments are resolved, DC Water will submit a revised EA to NPS. Once NPS and DC Water agree the EA addresses all required information, DC Water and NPS will publish the EA to the general public. Publication of the EA will include another 30-day public comment period. We are currently projecting summer 2016 for publication of the EA. Once the EA is published we will be able to complete the 'final design.' We are currently projecting a construction start in 2017.

31. Please identify what measures DC Water has in place to prevent rate increases from disproportionately affecting low-income individuals and families in the District?

Based on the analysis of the peak demand of different customer classes as well as affordability considerations, DC Water has adopted several changes to its existing retail rate structure in FY 2016. These changes are designed to better align the Authority's revenues and expenditures by establishing customer class-based volumetric water rates based upon peaking factors, to create a

more progressive rate structure for its residential customers by establishing lifeline water rates, which discount core consumption.

Customer Affordability

In the District of Columbia, one-fourth of the residents live below the poverty line, thus rate affordability is of utmost concern in the planning process. DC Water seeks to balance its operating and financial needs with consideration to the financial impact upon its customers. EPA guidelines suggest that fees and charges should be within 4 percent of the medium household income to be considered affordable (2 percent for water and 2 percent for sewer). Using the last available census data (2013), DC Water's rates are well under that target and they are comparable with similar water and wastewater utilities.

DC Water sponsors two programs to assist low income customers in paying their water bills:

Customer Assistance Program ("CAP"): The Authority implemented the CAP in 2001 providing a discount of 4 Ccf per month of water service for single family residential homeowners that meet income eligibility guidelines. In FY 2004, the Authority expanded the CAP to include tenants who meet the financial eligibility requirements and whose primary residence is separately metered by the Authority. In January 2009, the Authority further expanded the CAP to provide a discount of 4 Ccf per month of sewer services to eligible customers. In FY 2011, the discount was expanded to the first 4 Ccf associated with the PILOT/ROW fee in addition to the current discount provided on water and sewer services. In FY 2015, CAP assisted 4,498 customers and provided $1.1 million in discounts to low-income customers. Effective October 1, 2015, DC Water's low income CAP customers will also receive 100% credit for Water System Replacement Fee (WSRF).

Serving People by Lending a Supporting Hand ("S.P.L.A.S.H"): The SPLASH program was implemented in FY 2001 to help families in sudden need avoid termination of critical water and sewer services. The program is administered by the Greater Washington Urban League. Every dollar received by DC Water is distributed to eligible customers. In FY 2015, SPLASH assisted 351 households and provided $115,684 in contributions to low-income customers.

32. Please describe the status of the construction of DC Water's Administrative Headquarters Building.

The Headquarters Project is currently in the final design stage. The PUD was approved by the Zoning Commission on 2/8/16 and a CFA hearing is scheduled for 2/18/16. The next steps include bringing the design to 80% completion by 4/30/16, and negotiate the guaranteed maximum price (GMP) with the design-build contractor. DC Water is still targeting a $55 million budget for the hard construction costs. DC Water's Board of Directors is projected to review and approve the project in May 2016 and construction will begin the same month. More information on the project can be found at https://www.dcwater.com/workzones/projects/headquarters/default.cfm

33. Please describe the status on the formation of the Water Quality Assurance Advisory Panel as per the Water Quality Assurance Amendment Act of 2012.

The research project on endocrine disruptor compounds mandated by the Act, and funded through a DOEE grant, is currently entering its second phase and is expected to be completed by in late 2016.

Per the Act, the panel will consist of nine experts whose task will be to evaluate the research findings of both the endocrine disruptor study and the results of samples taken in the District for EPA's Unregulated Contaminant Monitoring program.

As the endocrine disruptor study nears completion, DC Water will work with the Mayor to identify and appoint members of the Panel.

34. Please describe anticipated improvements to DC Water's High Usage Notification service during 2016.

Our High Usage Notification Alerts (HUNA) are typically sent to approximately 1% of all customers each week (on average we send out about 200-250/week compared to 25,000-28,000 bills a week). In the more than 10 years we have offered HUNA, we have sent out an alert to at least one-third of all buildings in the city. We plan or have already implemented the following changes to improve the system:

- Automatic Meter Reading (AMR) Graph enhanced to accommodate missing meter reads. In the past if for some reason DC Water didn't get a meter reading for a day, the graph made it appear as if no water was used that day.
- AMR Graph enhanced to accommodate compound meters. Compound meters have more than one water measurement register and are

usually installed in larger buildings that have a significant difference in water flows depending on the time of day or day of week.

- Previous requirement of customers Daily Average Consumption > .1 ccfs (75 gallons) to qualify for HUNA. This was lowered to 25 gallons in 2016. This will help us identify variances for customers with typically very small water usage.
- Previous requirement that account must be open & active for 12 months to account for seasonal fluctuations. This will be changed to 6 months for 2016. It will allow us to watch for leaks sooner for new customers.
- HUNA only generates notifications once per day. This will be changed to 4 times per day (every 6 hours) for 2016. It will allow us to notify a customer sooner, especially when there is a sudden event such as a frozen water pipe that bursts.
- Internal HUNA reports will be modified to include start high usage date, end High Usage Date (revert to normal), and actual amount of water measured during the spike. This will allow us to better explain a leak event to a customer and also help determine if they qualify for any financial relief for the higher than expected bill caused by the spike in water use.
- Previous requirement that HUNA phone calls & text messages only go out when DC Water customer service is open. In 2016, HUNA phone calls & text messages will go out 365 days per year (including weekends and holidays). A customer can call our emergency command center and get advice about what to do if they have a leak or got an alert and cannot find a source of the problem.
- Previous requirement that HUNA only notify a customer once every 15 days. In 2016, this was lowered to once every 8 days. This will help us send repeat reminders to customers who may have thought they fixed a leak but a problem continues. This is especially useful for temporarily vacant properties.
- Previous requirement that HUNA notify a customer maximum 4 times per quarter. In 2016, this was increased to 6 times per quarter
- Allow users to set/customize their own HUNA settings.
    - Added User-configured threshold.
    - Users can add 3 additional email addresses to be notified (4 total)
    - Users can add 3 additional phone numbers to be notified (4 total)
    - Users can add 4 mobiles to receive text message alerts (4 total)

    - Users can select any combination of the notification methods not just one or the other.
- Residential vs. commercial differentiation & different rules based on each type so that commercial customers who tend to have greater variance in water use will be notified more frequently than in the past.
- Major Hardware & software upgrades to increase uptime of HUNA, increase calculation speed, and overall increase speed and frequency of notifications.
- Current environment uses a 4-day evaluation period. This will be lowered to a 3-day evaluation period in 2016. This means we will notify a customer of a potential problem a day sooner than in the past.
- Current environment excludes customers with Missing Meter Reads in the evaluation period. This will be changed to not exclude customer as long as we can accurately compute their usage (need 67% of reads minimum).
- Increased ease to opt-out of notifications.
- Email enhancements – html support, and increase information included in the email

35. Please describe DC Water's progress with water system upgrades during FY 2015 and FY 2016, to date.

The forefront of the water system upgrades is the renewal of 1% of the small diameter water mains in the system every year – a goal set by the DC Water Board. 1% replacement accounts for about 11 miles of the 1,078 miles of small mains. In FY2015, DC Water exceeded the goal by completing installation of about 16 miles (1.5%), and the projections for FY2016 are for renewal of about 13 (1.2%) miles of water mains. Plans and funding are in place to continue meeting or exceeding the renewal goal, though DC Water periodically reviews whether this goal is appropriate for the District customers and the current infrastructure conditions. These periodic reviews also include investigating the use of more cost-effective methods for renewing water mains. For water mains that are structurally adequate but are unlined, thus having a greater likelihood of discolored water, DC Water has been re-lining these pipes at about ½ the cost of replacement. Renewing water mains with a structural lining is a potential future cost-effective solution, but it is not an appropriate solution for many water mains currently with the highest need, due to sizing and alignment improvement requirements not feasible with lining renewal.

For the larger transmission mains, DC Water performs detailed condition assessments of the pipes to use in the decision making process for the water main rehabilitation of these high cost assets. In FY2015, DC Water conducted detailed condition assessments on 5.8 miles (2.5% of the 230 miles of large mains) of large diameter transmission mains and is planning a similar amount for FY2016. DC Water has rehabbed about 1.5 miles of large mains in FY2015, and 1.8 miles are planned for FY2016. New technologies are being used for both the assessment of large water mains as well as for cost-effective rehabilitation of the mains. This includes electromagnetic surveys of pipe wall strength, acoustical surveys that can be accomplished without taking mains out of service, and computerized permanent leak monitoring equipment that applies statistical algorithms to find smaller leaks more reliably than previously possible. For rehabilitation DC Water is using trench-reducing solutions, to avoid digging in the roadways, such as sliplining new pipes inside old pipes, internal repairs where the workers repair pipes from inside the pipe, and carbon fiber structural products that provide great strength without extensive excavation needs.

In regards to the drinking water pumping stations, upgrading the 16th & Alaska Ave pump station was completed in FY2015, and the Fort Reno pump station is slated to be completed in FY2016. The other two water pumping stations, Bryant Street and Anacostia, underwent major upgrades recently. In addition, upgrade of one of the eight water storage facilities was completed in FY2015 and two others will be completed in FY2016. Three additional storage facilities will be upgraded near term. DC Water is proceeding with the construction of a new elevated storage facility at St. Elizabeths to provide pressure and fire flow improvements in parts of Ward 8 in advance of the District's plans for economic development in the area.

In summary, the capital improvement upgrades for the drinking water system are progressing well and within expectations of plans previously presented to our customers

36. Please describe DC Water's programs to encourage replacement of all public and private lead service pipes in the District.
    - What is the status of lead service pipe replacements in public space and, if available, on private property? Please provide a map, if available, indicating areas where lead service pipe replacements in public space are still needed.

Since 2003, DC Water has replaced 19,895 lead service pipes on public property and 3,782 full (public and private side) replacements. Current records indicate 12,540 known lead service lines remain in public space, and 16,910 service lines with unknown pipe material remain in public space.

- How does DC Water minimize the risk of lead poisoning?

DC Water is strongly committed to working with the U.S. Army Corps of Engineers Washington Aqueduct to minimizing lead release from pipes throughout the District by controlling corrosion. In 2004, the Washington Aqueduct began adding a food-grade corrosion control agent during the treatment process. Orthophosphate has been very effective in limiting the corrosion of lead pipes, and this treatment process is continued today.

DC Water's lead response also includes monitoring for lead at customer taps, replacing lead service pipes, educating our customers on the health impacts of lead, and helping them identify and remove lead sources on their property.

At least 100 homes are tested every 6-months to comply with the EPA's Lead and Copper Rule. The households in our Lead and Copper Rule sampling pool are confirmed to have partial or full lead service lines, based on available records. The compliance monitoring allows us to evaluate drinking water lead levels in a representative sample of homes known to have lead sources. The most recent compliance monitoring results indicate concentrations have reached historically low levels, well below the EPA's action level of 15 ppb.

DC Water and the Washington Aqueduct continuously monitor lead pipe loops that simulate residential water use from the treatment plant and distribution system. This real-time monitoring could indicate an unusual lead release and corresponding change in water chemistry.

DC Water replaces lead service pipes in public space during every main replacement or major construction project. Property owners are strongly encouraged to replace lead service pipes on their private property at the same time for optimal lead reduction. After any repair/replacement work on lead service pipes, DC Water provides a 6-month supply of certified filters to remove lead potentially released by pipe disturbance.

DC Water offers free, easy-to-use lead test kits to customers by request. These test kits help customers identify potential lead sources in their home. Since 2010, DC Water has distributed approximately 2,500 free lead test kits. DC Water strongly encourages each household to determine if they have lead service pipes or plumbing materials. Customers can request information about their service pipe by calling 202-354-3600.

- How does DC Water encourage lead service pipe replacements by DC Water customers?

DC Water offers a voluntary replacement program. At any time, a property owner may opt to replace the portion of lead service pipe on private property and DC Water will concurrently replace the public portion, subject to availability of budgeted funds.

Information about lead service replacements are distributed to residents in advance of scheduled work. Multiple rounds of communication materials are sent to customers in order to provide ample time to review and understand the benefits and requirements of replacement in conjunction with DC Water work. DC Water encourages customers to replace lead service pipes through public engagement efforts, including digital content, community outreach, and print materials like our Brochure, Tips to Reduce Lead in Drinking Water.