



**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY**

Board of Directors

DC Retail Water and Sewer Rates Committee

Tuesday September 24, 2013

9:30am

- 1. **Call to Order**Howard Gibbs, Chairman
- 2. **Update on DCGIS 2005 Flyover Information (Attachment A)** April Bingham
- 3. **Review 2013 Potomac Interceptor Cost of Service Study (Attachment B)** Mark Kim
- 4. **Retail Rates Committee Workplan** Mark Kim
 - **FY 2013 Completed Retail Rates Committee Workplan (Attachment C)**
 - **FY 2014 Proposed Retail Rates Committee Workplan (Attachment D)**
- 5. **Other Business** Mark Kim
- 6. **Executive Session**
- 7. **Agenda for November 26, 2013 Committee Meeting (Attachment E)**Howard Gibbs, Chairman
- 8. **Adjournment**

FOLLOW-UP-ITEMS – DC Retail Water and Sewer Rates Committee Meeting (June 25, 2013)

- 1. Calculate average CAP customer monthly bill using higher Ccf per month vs. average residential monthly usage of 6.69 Ccf. (**Mr. Roth**) Status: November 2013
- 2. How does DC Water inform the senior population about our customer affordability programs.(**Ms. Richardson**) Status: November 2013



**Clean Rivers Impervious Surface
Area Charge
Process to Update Non-Residential
Planimetric Information**

Presentation to:

DC Retail Water and Sewer Rates Committee

September 24, 2013



- Background
- Daily Clean Rivers IAC Maintenance Process
- Discussion



Background



- The initial database was created from planimetric data originally created by District of Columbia Geographic Information System (DCGIS) in 1999 and updated in 2005. It was subsequently updated in 2008 and 2010.
- DCGIS is planning a new flyover in late October/early November 2013 with the planimetric data and orthoimagery being available in the Spring of 2014.
- DC Water is planning to begin updating the entire database in the fall of 2014.
- DC Water included \$800k in the proposed FY 2015 capital budget.



Daily Clean Rivers IAC Maintenance Process



DAILY CLEAN RIVERS IAC MAINTENANCE PROCESS

- Typically updates are triggered by new premises being made active by a move in and a meter set but also from customer calls or simple visual inspection of changes in ownership information or orthoimagery.
- All available sources of impervious surface areas are used: orthoimagery, most recent planimetric data and even site plans.



2005 CONDITIONS AND IMPERVIOUS AREA ASSIGNED IN 2009



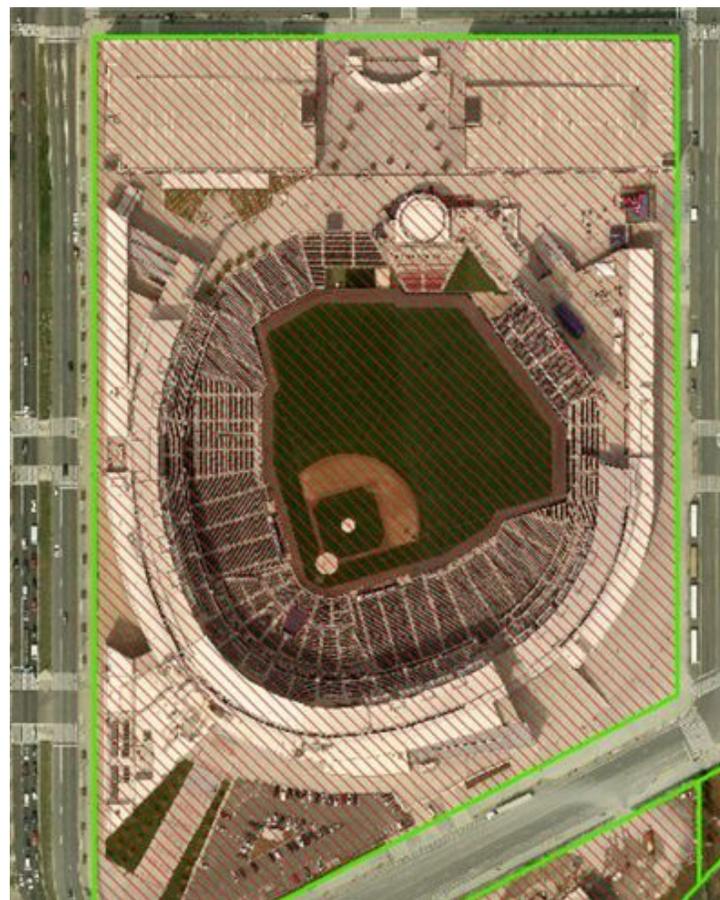
Initial database 2005



Assigned Impervious Area in 2009



2012 Imagery and Combined Lot



Updated Imagery and combined lot



BEFORE CLEAN RIVERS IAC UPDATE: 317.9 ERU
AFTER CLEAN RIVERS IAC UPDATE: 681.5 ERU



Impervious Area Assigned
FY 2009 Before

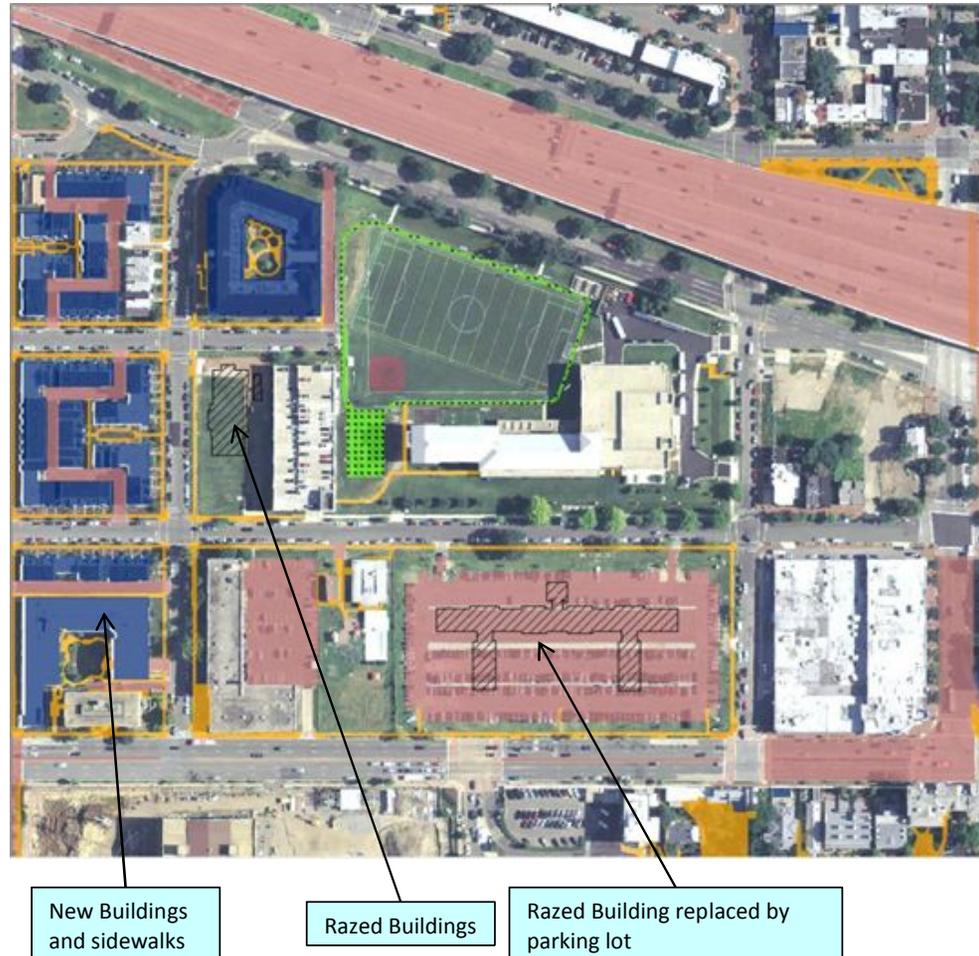


Impervious Area Assigned
FY 2012 After



CHANGE ANALYSIS FOR BUILDINGS

- Between the 2011 Building data and the 2005 data, 7679 buildings were added or updated and 7215 were deleted. Net result is an increase of 6172 ERUs.
- Other impervious surfaces (parking lots, sidewalks, recreational facilities, stairs) were also updated by DCGIS with a new processing rules to include more features to support the DC Water Clean Rivers IAC process.

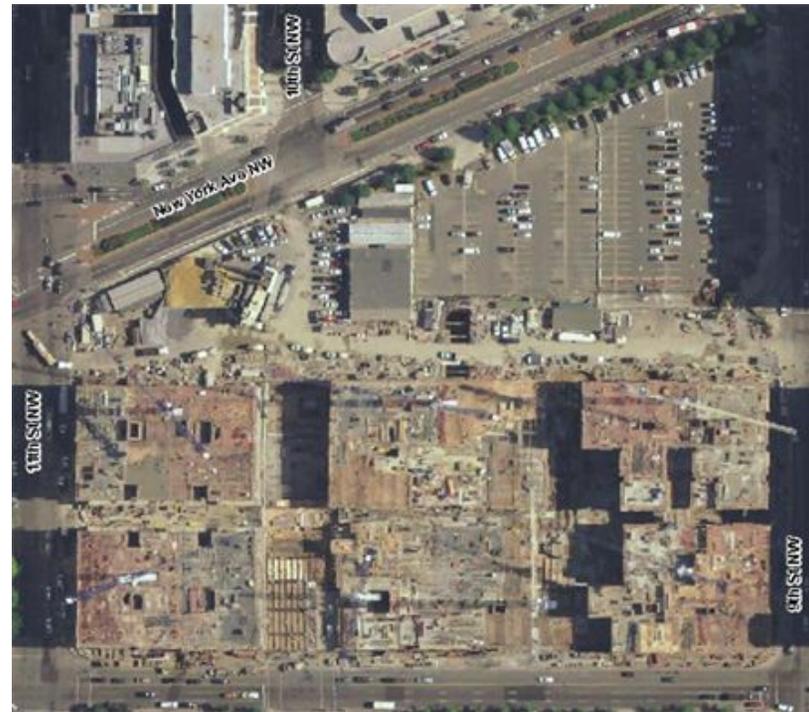




CITY CENTER PROJECT (OLD CONVENTION CENTER)



2005 – No Impervious



2013 – Parking Lot, New Buildings



Planimetric Data is not Perfect



Missing Driveways



Missing Buildings

Using the most recent data available (usually orthoimagery and site plans) including site visits is how we make sure that we assign the Clean Rivers IAC correctly.



Other Updates Needed

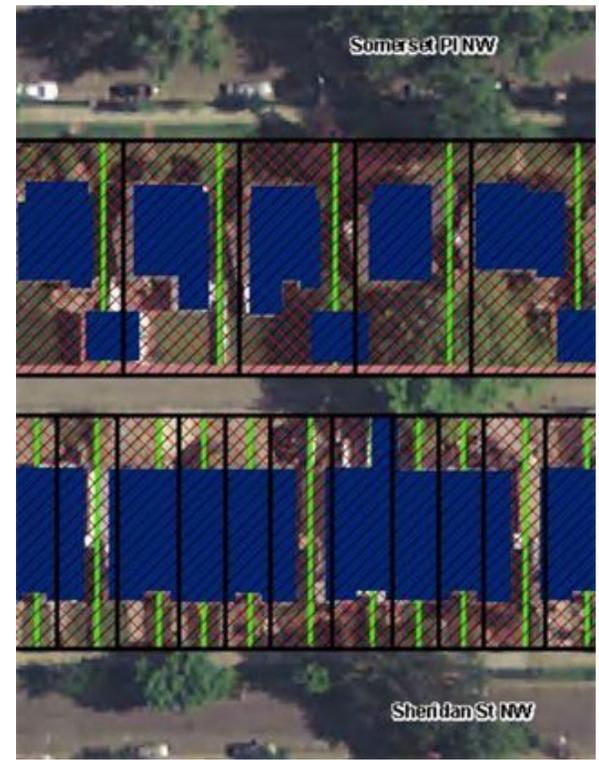
Planimetric Data is not the only cause for updates; Property Data also changes quite a bit.



Lots added



Lots subdivided



Lots shifted



Discussion



FY 2013 Potomac Interceptor Customer Rate Update

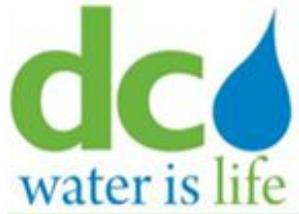
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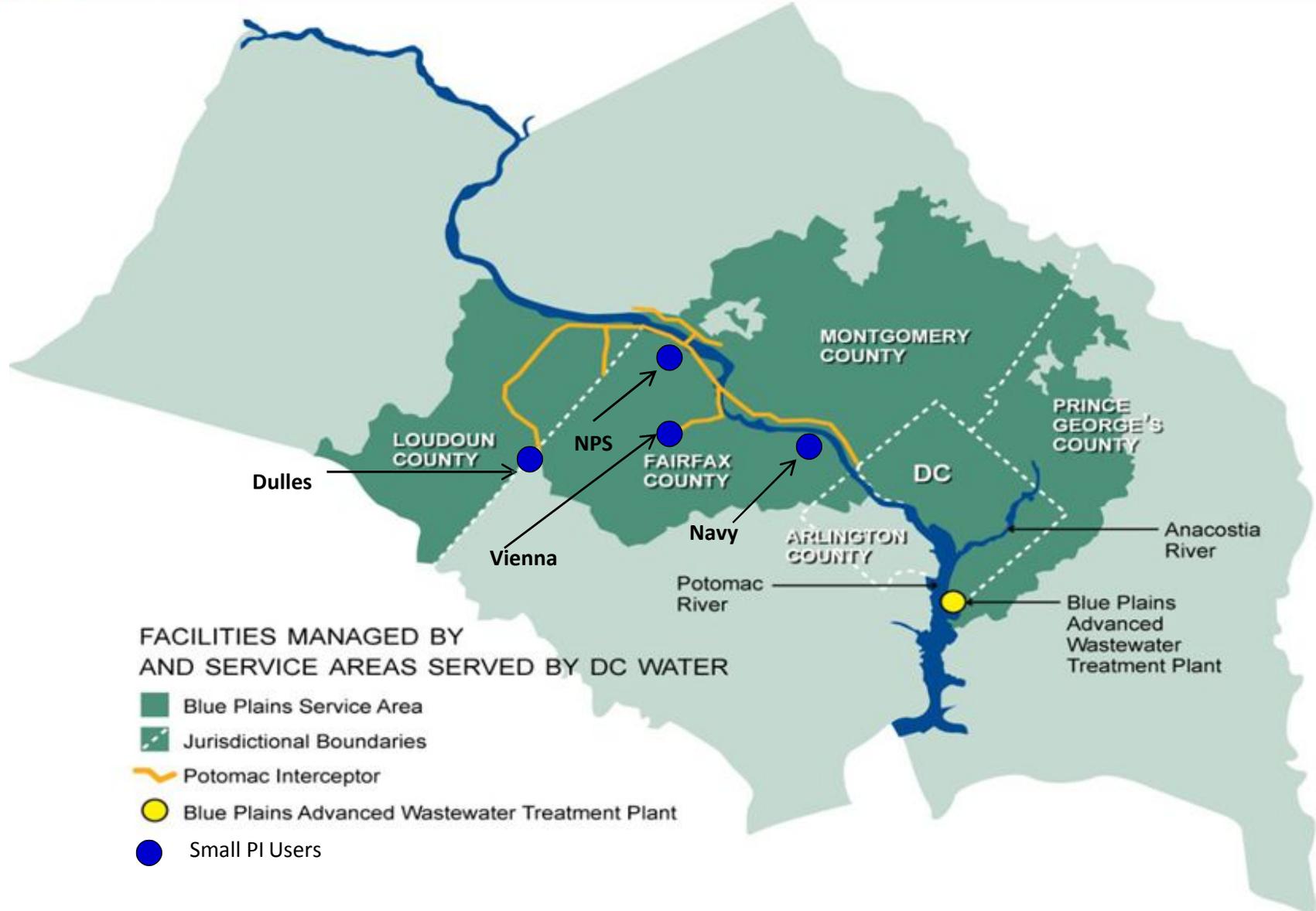
September 24, 2013



- Potomac Interceptor Update
- Methodology
- Rate Study Results
- Next Steps
- Questions

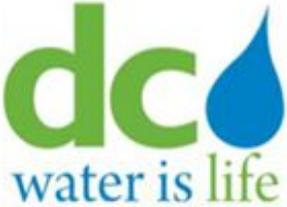


LOCATION OF POTOMAC INTERCEPTOR (PI)





- The 86th U.S. Congress authorized the design and construction of the Potomac Interceptor (PI) on June 12, 1960
- DC Water charges the “Small PI Customers” (Dulles, National Park Service (NPS), Navy, Vienna) for wholesale wastewater treatment services pursuant to separate but similar Agreements signed in the 1960s
 - These Small PI Customer Agreements are separate from the IMA agreements and the Loudon County Sanitation Authority Agreement – no duplication of cost recovery
 - Under the Agreement, the Small PI Customers’ rates are to be adjusted periodically (three year or greater intervals)
 - Charges are based on a proportionate allocation of capital and operating costs and are to be recovered through a rate per million gallons of wastewater flow
 - Small PI Customers are billed quarterly, based on measured flow



FY 2014 – 2016 COS STUDY OBJECTIVES

- Determine costs of providing services to the PI Customers for FY 2010 – 2013 and true-up balances

- Estimate costs of services and PI Customer flows for FY 2014 through 2016

- Establish a rate for cost recovery for the FY 2014 through 2016 period



METHODOLOGY – RATE MODEL

- ❑ Capital costs are allocated based on reserved capacity:
 - Original Blue Plains costs
 - Debt Service
 - New capital cost amortized

- ❑ Operating and Maintenance costs are allocated based on wastewater flow

- ❑ Total Capital and Operating and Maintenance costs divided by projected wastewater flow is equal to the rate in dollars per million gallons

Note: See slide 9 for explanation of rate model components



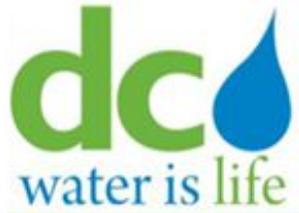
METHODOLOGY – RATE MODEL, CONT.

- ❑ *Original Cost of Blue Plains Facilities*, recovers a share of the costs incurred in building the Blue Plains plant prior to the connection of the Potomac Interceptor (PI). It captures the cost of “purchasing” a dedicated share of the in-place capacity at Blue Plains at the time the PI was completed. The PI was completed in 1964.

- ❑ *Debt Service on PI and Project “C” Loans*, recovers a share of the debt service associated with loans used to construct the PI and the Project “C” sewer. Debt service responsibility is assigned to each customer according to allocated capacity.

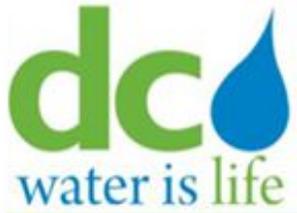
- ❑ *New Capital Costs Amortized over Thirty Years*, recovers a share of the capital costs incurred subsequent to the completion of the PI for expanding or improving Authority facilities that transmit and/or treat wastewater flows from the PI. The amount due from each customer is determined according to capacity allocation and recovered over a thirty-year amortization period.

- ❑ *Operating and Maintenance Costs*, recovers a share of the operating and maintenance costs incurred in transmitting and treating wastewater flows from the PI. Each customer pays a portion of the operating and maintenance costs based on its share of wastewater flow.



RATE SUMMARY

	Vienna	Dulles	NPS	Navy
<u>Period</u>	<u>Rate Per MG</u>	<u>Rate Per MG</u>	<u>Rate Per MG</u>	<u>Rate Per MG</u>
FY2011 - FY2013	\$ 3,880	\$ 3,211	\$ 9,375	\$ 3,210
FY2014 - FY2016	\$ 3,729	\$ 2,158	\$ 6,467	\$ 2,880
Rate Difference	\$ (151)	\$ (1,053)	\$ (2,908)	\$ (330)



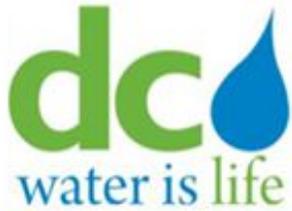
EXPLANATION OF SIGNIFICANT RATE CHANGES

Vienna

- Settlement of prior years disputed amounts during FY 2011 - FY 2013 period and true-up, created a reduction in rates (though partially offset by the effect of the increase in capital costs)
- This resulted in a slightly lower proposed rate for Vienna for the FY 2014 - FY 2016 period

Dulles

- Actual Flows were higher than projected during FY 2011 - FY 2013 period which resulted in the following:
 - Over payments during the period
 - Significant true-up amount
 - Higher flow projections for the FY 2014 – FY 2016 period
- The above created a significant rate reduction for the FY 2014 – FY 2016 period



EXPLANATION OF SIGNIFICANT RATE CHANGES, CONT.

NPS

- Current rate includes significant true-up amount to recover prior underpayments. This high true-up amount is not required for the FY 2014 – FY 2016 period
- This created a significant rate reduction for the FY 2014 - FY 2016 period

Navy

- Current rate includes true-up amount to recover prior underpayments. This true-up amount is not required for the FY 2014 – FY 2016 period
- A credit true-up is required to reimburse overpayments that occurred during the FY 2011 - FY 2013 period (offset by the effect of the increase in capital costs)
- This resulted in a slightly lower rate for the FY 2014 – FY 2016 period



RATE STUDY RESULTS

Vienna					
<u>Year</u>	<u>Total Payment Due (\$)*</u>	<u>2010-2013 (True-up)**</u>	<u>Total Amount to be Recovered</u>	<u>Wastewater Flow (MG)</u>	<u>Derived Rate (\$/MG)</u>
Principal Amt		\$ 166,366	\$ 166,366		
2014	1,011,946	60,254	1,072,200	301	3,563
2015	1,067,477	60,254	1,127,731	301	3,747
2016	1,106,093	60,254	1,166,347	301	3,876
Total	3,185,516	180,762	3,366,278	903	
Average Rate FY 2014-2016					3,729
Dulles					
<u>Year</u>	<u>Total Payment Due (\$)*</u>	<u>2010-2013 (True-up)**</u>	<u>Total Amount to be Recovered</u>	<u>Wastewater Flow (MG)</u>	<u>Derived Rate (\$/MG)</u>
Principal Amt		\$ (918,307)	\$ (918,307)		
2014	1,036,828	(332,591)	704,237	350	2,011
2015	1,094,175	(332,591)	761,584	350	2,174
2016	1,134,642	(332,591)	802,051	350	2,290
Total	3,265,645	(997,773)	2,267,872	1,050	
Average Rate FY 2014-2016					2,158

** Amortized over the 3-year proposed billing period (FY 2014 – FY 2016). Interest rate of 4.27% was taken from Bond Buyer Index

Note: Figures rounded to the nearest whole number



RATE STUDY RESULTS, CONT.

NPS					
<u>Year</u>	<u>Total Payment Due (\$)*</u>	<u>2010-2013 (True-up)**</u>	<u>Total Amount to be Recovered</u>	<u>Wastewater Flow (MG)</u>	<u>Derived Rate (\$/MG)</u>
Principal Amt		\$ 10,931	\$ 10,931		
2014	25,175	3,959	29,134	5	6,395
2015	25,955	3,959	29,914	5	6,566
2016	25,385	3,959	29,344	5	6,441
Total	76,515	11,877	88,392	15	
Average Rate FY 2014-2016					6,467
Navy					
<u>Year</u>	<u>Total Payment Due (\$)*</u>	<u>2010-2013 (True-up)**</u>	<u>Total Amount to be Recovered</u>	<u>Wastewater Flow (MG)</u>	<u>Derived Rate (\$/MG)</u>
Principal Amt		\$ (14,120)	\$ (14,120)		
2014	55,717	(5,114)	50,603	18	2,779
2015	58,146	(5,114)	53,032	18	2,912
2016	58,804	(5,114)	53,690	18	2,949
Total	172,667	(15,342)	157,325	54	
Average Rate FY 2014-2016					2,880

** Amortized over the 3-year proposed billing period (FY 2014 – FY 2016). Interest rate of 4.27% was taken from Bond Buyer Index

Note: Figures rounded to the nearest whole number



- Communicate PI rates based on COS to all jurisdiction
 - Mail letter and Cost of Service Study

- Address Concerns

FY 2013 Completed Committee Workplan			
Objective/Activities/Task	Date of Activity	Completed	Responsible Department

1. Develop Realistic Retail Rate Revenue Projections and Alternative Retail Revenue Sources			
<i>a. Propose and establish Retail Rates in FY 2014 and new customer classification</i>			Rates and Revenue
i. Rate Proposal to Joint Committee	October 2012	√	
ii. Review rate design options (customer segmentation)	November 2012	√	
iii. Committee recommendation	December 2012	√	
iv. Board approval	January 2013	√	
v. Publish DCMR	March 2013	√	
vi. Public Outreach	March/April 2013	√	
vii. Public Hearing	May 2013	√	
viii. Committee recommendation on FY 2014 rates	June 2013	√	
<i>b. Review draft Developer Fees</i>	November 2012	√	Rates and Revenue
<i>c. Final FY 2012 Cost of Service Study</i>	November 2012	√	Rates and Revenue
<i>d. Potomac Interceptor Cost of Service</i>	September 2013	√	Rates and Revenue
<i>e. Soldiers Home Negotiations</i>	Monthly	√	General Counsel

2. DC Water Affordability			
<i>a. Revisit CAP program and possible modifications (Expansion and or methodology)</i>			Rates and Revenue
i. Committee review of CAP program with FY 2014 Budget Submission	December 2012	√	Customer Service
ii. Explore CAP water conservation options	Scheduled for November 2013	√	Rates and Revenue
<i>b. Implement LID Incentive Program for customers who utilize Best Management Practice in conjunction with DDOE</i>			
i. Legal evaluation of the DDOE proposed program; and	December 2012	√	
ii. Evaluate alternatives for the Clean Rivers IAC discounts	February/March 2013	√	
iii. Prepare revenue impact analysis	February/March 2013	√	

FY 2013 Completed Committee Workplan

Objective/ <i>Activities/Task</i>	Date of Activity	Completed	Responsible Department
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2. DC Water Affordability			
iv. Committee review on CRIAC Incentive Program with FY 2014 Budget Submission	December 2012	√	Rates and Revenue
v. Committee Recommendation	March 2013	√	
vi. Board Approval	April 2013	√	
vii. Publish DC Register	April 2013	√	
viii. Public Outreach	April 2013	√	
ix. Public Hearing	May 2013	√	
x. Committee recommendation on FY 2014 CRIAC Discount Program	June 2013	√	
 c. 2015 Cost of Service Study			
<i>i. Implement Customer Segmentation water volumetric rates by customer class with differentiation based on peaking characteristics</i>	To be incorporated in the FY 2015 Cost of Service Study		Rates and Revenue
<i>ii. Implement Re-Development Impact Fee</i>			Rates and Revenue
<i>iii. High Strength Rate Alternatives</i>			Rates and Revenue

3. Develop Alternative Revenue Sources and Achieve Realistic Revenue Projections (DC Water Strategic Plan Framework)			
a. <i>Identify and evaluate potential revenue generating initiatives annually</i>	To be incorporated within Strategic Planning Initiatives		Rates and Revenue

4. Provide an example of the updating required and quality controls available to reconcile non-residential data found in the DCGIS 2005 flyover information and a more recent update to the flyover data. This example should be provided at a future Retail Rates Committee meeting	September 2013	√	Customer Service
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5. Review of the Potomac Interceptor contracts to see if there are opportunities to modify contracts to be similar to the IMA contracts	June 2013	√	General Counsel
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FY 2014 Proposed Committee Workplan			
Objective/Activities/Task	Date of Activity	Completed	Responsible Department

1. Develop Realistic Retail Rate Revenue Projections and Alternative Retail Revenue Sources			
<i>a. Propose and establish Retail Rates in FY 2015</i> <ul style="list-style-type: none"> i. Budget and Rate Proposal Briefing following Board meeting ii. Committee recommendation iii. Board approval iv. Publish Proposed Rates DCMR v. Public Outreach vi. Public Hearing vii. Committee recommendation on FY 2015 rates viii. Board Approval on FY 2015 rates ix. Publish Final Rates DCMR 	<ul style="list-style-type: none"> November 7th, 2013 November 26th, 2013 December 2013 January 2014 March/April 2014 May 2014 June 2014 July 2014 August 2014 		Rates and Revenue

2. DC Water Affordability			
<i>a. Revisit CAP program and possible modifications (Expansion and or methodology)</i> <ul style="list-style-type: none"> i. Explore CAP water conservation options 	<ul style="list-style-type: none"> November 2013 		Rates and Revenue Customer Service

3. 2015 Cost of Service Study			
<ul style="list-style-type: none"> <i>i. Implement Customer Segmentation water volumetric rates by customer class with differentiation based on peaking characteristics</i> <i>ii. Implement Re-Development Impact Fee</i> <i>iii. High Strength Rate Alternatives</i> 	<ul style="list-style-type: none"> Summer 2014 Summer 2014 Summer 2014 		Rates and Revenue Rates and Revenue Rates and Revenue

FY 2014 Proposed Committee Workplan			
Objective/ <i>Activities</i> /Task	Date of Activity	Completed	Responsible Department
4. Delinquent Accounts			
a. <i>Soldiers Home Negotiations</i>	Monthly		General Counsel



Attachment E

D.C. WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS
RETAIL WATER & SEWER RATES
COMMITTEE MEETING

TUESDAY, November 26, 2013; 9:30 a.m.
AGENDA

Call to Order	Committee Chairman
Monthly Updates	Chief Financial Officer
Committee Workplan	Chief Financial Officer
Other Business	Chief Financial Officer
Agenda for December 20, 2013 Committee Meeting	Committee Chairman
Adjournment	

*Detailed agenda can be found on DC Water's website at www.dewater.com/about/board_agendas.cfm