PF 1-1 [Ref. –See pp. 5-7 of Joint Petition for Settlement of Phase 2 of the [FY 2013-2015] Rate Proceeding, attached to this set of Interrogatories] In the Phase 2 settlement of the last rate-setting proceeding, PWD committed to evaluate and develop cost effective stormwater incentive programs that may reduce or eliminate the need for the Enhanced CAP program. Please describe PWD's efforts to evaluate and develop each of the following types of programs:

- A. Stormwater retrofit project financing programs
- B. Offsite mitigation programs
- C. Aggregation programs
- D. Pay for performance instrument programs
- E. Loan programs
- F. Grant programs

In describing PWD's efforts regarding any of the types of programs listed above that were not implemented, please explain why they were rejected. For any that were implemented, please describe the effect they are expected to have on the reduction or elimination of the need for the Extended CAP program.

Response:

PWD explored each of the programs listed in items A through F, and through its consideration of those programs, launched the Greened Acre Retrofit Program (GARP) in 2014. GARP combines program elements contained in aggregation programs, pay for performance instrument programs and grant programs. Prior to launching the Stormwater Management Incentives Program (SMIP) Grant in 2012, PWD offered SMIP Loans. However, there was little interest in loans once grants became available, and PWD shifted its focus to SMIP and GARP grants. PWD also explored offsite mitigation programs, but there are implementation limitations in the context of stormwater billing credits. Offsite mitigation programs were explored and discussed with PWD's Development Services Committee, but the committee members suggested that PWD not pursue such a program.

PF 1-2 [Ref. – See pp. 9-13 of Scott Rubin's Direct Testimony from FY 2013-2015 Rate Proceeding, attached to this set of Interrogatories]

- A. Did PWD consider the alternative mitigation approach for non-residential customers proposed by Scott Rubin (on behalf of PennFuture) in the last rate case, or other alternatives?
- B. If Mr. Rubin's proposed approach was considered, why was it rejected?
- C. If it was not considered, please explain why not.
- D. If other alternatives were considered, what were they, and why were they rejected?

Response:

A. Yes.

B. We considered numerous proposals regarding the implementation of rate assistance in the stormwater program. The change in billing methodology had very significant impacts on businesses throughout the City. Therefore, after considering numerous approaches and consulting with businesses throughout the City, PWD developed its current program which it believes is fair, equitable and would allow for a smooth transition to parcel-based stormwater billing.

C. See B above.

D. Numerous options were discussed based on income, percentage of stormwater charge increase, total stormwater charge increase, period of storm water bill phase in, etc. Each of these factors were considered in the implementation of the customer assistance program currently used by PWD.

Response Provided By: David Katz and Erin Williams, Philadelphia Water Department

PF 1-3 [Ref. – PWD Statement 1, Testimony of Debra McCarty, Page 3- In response to the last question on page 3] - What are the programmatic expenditures (amounts by program and annual total) that the Department plans to include as part of its total revenue requirements over the next five years (FY2017 to FY2021) to satisfy the requirements of the Consent Order and Agreement dated June 1, 2011 ("COA")?

Response:

Please refer to response to PA-EXE-136.

PF 1-4 [Ref. – PWD Statement 3, Testimony of Stephen Furtek, page 2] – You list the total Capital Improvement Program projection for the next six years (FY 2016 to FY 2021) to be \$1,783,700,000. On average this translates to about \$357,000,000 each year. And, you state that the LTCP expenditures represent 17.2% of the total CIP over those years, which translates to a total of \$308.6 million for LTCP projects over those five years or about \$61.4 million each year. Please specify where in the Department's Final Notice documents these programs and amounts can be separately identified on an annual basis (at a minimum for the two test years).

Response:

The FY 2016-2021 Capital Program is \$1,783,700,000 which averages \$297,283,333 per year, not \$357,000,000 as stated in the question. The amount attributable to the LTCP over the 6-year period is \$333,100,000 or 18.67% of the total capital program. The testimony excluded \$26.1M of interceptor lining work which was viewed as infrastructure rehabilitation resulting in the lower 17.2% for the LTCP component. Interceptor lining is, however, part of the LTCP requirements and included in the table below.

Fiscal Years 2015-2021 Capital Improvement Program Budget and COA LTCP Expenditures

Capital Budget Summary	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 2016-2021
Collector System/Flood Relief	\$30,660,000	\$50,660,000	\$55,660,000	\$55,660,000	\$55,660,000	\$55,660,000	\$55,660,000	\$328,960,000
Collector System CSO LTCP Related	\$40,000,000	\$34,300,000	\$41,300,000	\$46,300,000	\$46,300,000	\$46,300,000	\$46,600,000	\$261,100,000
Conveyance System	\$36,060,000	\$49,060,000	\$49,060,000	\$49,060,000	\$49,060,000	\$49,060,000	\$49,060,000	\$294,360,000
Engineering Admin. & Material Support	\$28,633,000	\$40,128,000	\$37,342,000	\$38,605,000	\$39,919,000	\$41,286,000	\$42,708,000	\$239,988,000
Water & Watewater Facilities	\$120,000,00 0	\$97,893,000	\$97,889,000	\$97,885,000	\$97,880,000	\$97,875,000	\$97,870,000	\$587,292,000
Wastewater Treatment Facilities CSO LTCP Related	\$5,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$72,000,000

Sub Total Non CSO	\$215,353,00	\$237,741,00	\$239,951,00	\$241,210,00	\$242,519,00	\$243,881,00	\$245,298,00	\$1,450,600,0
LTCP	0	0	0	0	0	0	0	00
Sub Total CSO LTCP *	\$45,000,000	\$46,300,000	\$53,300,000	\$58,300,000	\$58,300,000	\$58,300,000	\$58,600,000	\$333,100,000

	\$260,353,00	\$284,041,00	\$293,251,00	\$299,510,00	\$300,819,00	\$302,181,00	\$303,898,00	\$1,783,700,0
Total	0	0	0	0	0	0	0	00

* COA LTCP expenditures represent 18.67% of the Capital Improvement Program budget for Fiscal Years 2016 through 2021

Response Provided By: Stephen J. Furtek, Philadelphia Water Department

PF 1-5 [Ref. – PWD Statement 4, Testimony of Dahme and Williams, page 3] - On page 3 you list the four categories of interim milestones that the City is required to achieve according to the 2011 COA.

- A. What are the levels achieved by the City for each of those four categories through the second quarter of FY 2016?
- B. Please provide the City's best estimate of the levels it expects to achieve for each of the four categories through the end of the first five year period, which concludes with the end of FY 2016.

Response:

PWD is in the process of compiling data for its Year 5 report to the Pennsylvania Department of Environmental Protection. PWD expects to meet the targets as outlined in the COA. Last year's report is available for review and provides performance standard levels through Year 4. This information can be found in Appendix A: Green City, Clean Water 2015 Annual Report, of the linked document below:

http://phillywatersheds.org/doc/FY15CSO_MS4AnnualReport_ForWebsite_ERRATA_2015_01_13.pdf

PF 1-7 [Ref. – PWD Statement 4, Testimony of Dahme and Williams, Page 5] – In your answer to the second question on page 5 you provide three examples of programmatic expenditures related to the stormwater management that are supported by the proposed revenue requirements during the two test years.

- A. What annual amounts for each of those three examples are included in the revenue requirements for each test year?
- B. What are the other stormwater management programs, if any, that are supported by the proposed revenue requirements during the two test years?
- C. What annual amounts for each of these other programs are included in the revenue requirements for each test year?

Response:

A. The annual expenses related to Fairmount Waterworks are detailed in the FY2016 Water Department Budget, specifically Division 42 (Public Affairs). These amounts are included in the revenue requirements for the test year. Budget detail can be found on the Office of the Director of Finance's website, under financial reports, budget detail. http://www.phila.gov/finance/reports-BudgetDetail.html

The annual expenses related to public education and partnerships are detailed in the FY2016 Water Department Budget, Division 42 and Division 40. Partnership and education funding includes and is not limited to the following:

TTF Watershed Partnership \$240,000 Partnership for the Delaware Estuary \$250,000 East Falls Development Corporation \$32,000 Pennsylvania Environmental Council \$150,000 Fairmount Park Conservancy \$300,000 Community Design Collaborative \$150,000 Conservation Matters LL \$32,000 Schuylkill Navy \$32,000 Urban Roots \$32,000

B & C. Programs are detailed in JD-2 and are included in the revenue requirements.

Response Provided By: Melissa La Buda, Philadelphia Water Department

PF 1-8 [Ref. – PWD Statement 4, Testimony of Dahme and Williams, page 3 and top of page 6] – In your response to the first question on page 6 you indicate that it costs the Department more to effectuate a COA greened acre than it costs a customer receiving a grant through the Stormwater Management Incentives Program. Please provide all assumptions, analysis and calculations used to support this assertion.

Response:

Based upon awarded and completed projects to date under the Stormwater Management Incentives Program (SMIP) and Green Acres Retrofit Program (GARP), the average cost for a private greened acre is \$90,000. The average public project cost per greened acre is \$300,000, based upon PWD construction/design contracts to date. Please also refer to the previously provided response to PA-EXE-156 (b).

PF 1-9 [Ref. – PWD Statement 4, Testimony of Dahme and Williams, page 3] You state that the cost per private greened acre is approximately one-third the cost of a public greened acre executed by PWD. Please provide all assumptions, analysis and calculations that support this one-third cost ratio.

Response:

As noted in the response to PF 1-8, the average cost for a private greened acre, under the SMIP/GARP program, is \$90,000, whereas the average cost for a public greened acre is \$300,000. Therefore, the cost of the private greened acre is approximately one-third the cost of public greened acre as stated in the "Supplemental Direct Testimony of Black & Veatch Corporation" – PWD Statement-9b. Please also refer to the previously provided response to PA-EXE-156 (b).

PF 1-10 [Ref. –PWD Statement 4, Exhibit JD-2] For each of the programs listed in Exhibit JD-2, please provide the revenue requirements for each test year considered in this proceeding. In your response, please also include any additional programs that are to be added in either of the test years.

Response:

The PWD Exhibit JD-2 was compiled by PWD staff to provide an estimate of the magnitude of annual financial impact due to various types of assistance and incentive programs. Therefore, that Exhibit includes four types of line items:

- (a) Contra Revenue Estimates for Discounts, WRAP, and Stormwater CAP
- (b) <u>Contra Revenue</u> Estimates for Stormwater Credits
- (c) <u>O&M Expense</u> projection for Stormwater Incentive Program (SMIP/GARP)
- (d) <u>O&M Expense</u> projection for Other Assistance Programs (All others listed in JD-2)

The Appendix BV-S2 titled *Cost of Service Recovery of Fee Reductions Discounts, Credits, Incentives and City Grants,* in PWD Statement – 9B, Supplemental Direct Testimony of Black & Veatch Corporation, presents the financial estimates for FY 2017 and FY 2018 for line items associated with (a), (b), and (c) above.

The O&M expense projections for FY 2017 and FY 2018 for all line items associated with (d) are not delineated at an individual line item level. The costs associated with these line items are an integral part of "Class 200 – Purchase of Services" O&M budget of the Planning & Environmental Services; Public Affairs; and Operations divisions.

PF 1-11 [Ref. – PWD Statement 4, Testimony of Dahme and Williams, second answer page 6] - Please provide the basis for the recommended level of rate mitigation proposed (Enhanced CAP Program) for non-residential customers that would receive increases significantly above average levels. In your response, include all assumptions, calculations, and analysis used to determine the threshold level for implementation (10% or more increase in stormwater charges from the preceding year) and the level of reduction to be applied (the amount above the 10% increase).

Response:

Please refer to the response provided for PF 1-2.

<u>**PF 1-12**</u> [Ref. – the preceding question PF 1-11] – For participants currently enrolled in the Enhanced CAP program, will these reductions or subsidies continue indefinitely or will they end at some point in the future? If indefinitely, please explain in detail the justification or rationale for not limiting the duration. If there is an end date, why was that particular duration chosen, and not a shorter one? Please be specific.

Response:

For participants currently enrolled in the Enhanced CAP program, the fee reductions or subsidies will not continue indefinitely. Customers already enrolled will remain in the program only as long as they meet the assistance requirements as defined in Philadelphia Water Department Regulations, Chapter 2 § 204.0(B). Consequently, there is no single end date for the CAP program. Each currently enrolled CAP customer will reach an end date when that customer no longer meets the CAP eligibility requirements, and therefore transitions to a full parcel area based stormwater charge.

Please also refer to the previously provided response for PA-EXE-157 (b).

PF 1-13 [Ref. – PWD Exhibit JD-2] – The bottom half of this Exhibit shows historic and budget numbers for the Stormwater Assistance Programs. Does the second line – "Stormwater Management Incentive Programs Grant (SMIP)" – include only SMIP amounts, or does it also include GARP program amounts? If it does not, where are the GARP amounts and what amounts are proposed to be expended for GARP in FY 2017 and FY 2018?

Response:

The Stormwater Management Incentives Programs Grant (SMIP) line item presented in PWD Exhibit JD-2 represents the total budget designated for both the SMIP and GARP grant programs.

PF 1-14 [Ref. – PWD Exhibit JD-2] What program(s) is/are included in the last line ("Stormwater Credits")? If more than one program is included in this last line, please list each separately along with its corresponding amount in each of the years shown.

Response:

The dollar amounts presented in line "Stormwater Credits" in PWD Exhibit JD-2 is not a budget amount. It is a contra revenue, due to stormwater credits, estimated based upon the actual square footage of Gross Area (GA) and Impervious Area (IA) credits issued in FY 2013, FY 2014, and FY 2015, and square footage of GA and IA credits anticipated for FY 2016. The dollar amounts for each of the fiscal years were calculated by applying the non-residential stormwater rates for each fiscal year (i.e. the \$/500 sf of GA and \$/500 sf of IA) to the square footage of stormwater credits.

The stormwater credits line item in Exhibit JD-2 reflects only the contra revenue impact of credits and not the impact of any other program.

It is important to note that in projecting the annual stormwater revenue requirements, the impact of Stormwater Credits is not included as a "dollar revenue requirement". Instead the impact of stormwater credits is estimated as a reduction in the annual "billable square footage of GA and IA" (Units of Service). Please also refer to the response to Question 7 in PWD Statement-9B – Supplemental Direct Testimony of Black & Veatch Corporation for additional discussion on the Stormwater Units of Service Analysis.

PF 1-15 [Ref. - PWD Statement 9b, Testimony Q4, Page 3] -

- A. What is the "cost of greened acre projects executed by the Water Department (per acre)?"
- B. What is the "cost per private greened acre achieved through these incentive programs?"

Please indicate in the COSS or elsewhere in the Final Notice where these amounts are computed. If these computations/estimates are not contained in the Final Notice, please provide all assumptions, calculations and analysis used to derive each.

Response:

Please refer to the response to PA-EXE-156 (b) and PF 1-9.

PF 1-16 [Ref. – PWD Statement 9b, Testimony Q4, Page 3] - Please provide the basis or rationale for determining that the "annual SMIP/GARP grant amount of \$15.0 million in the FY 2017 through FY 2021 wastewater O&M expenditures" is the appropriate or best level to use. Include any assumptions, analysis or calculations used to derive that amount.

Response:

The PWD in its FY 2017 budget has designated \$15.0 million for the SMIP/GARP program based on PWD's tracking of the cost per greened acre of private and public projects which clearly indicates that the cost of private greened acres is significantly lower than that of public greened acres.

Based on the above rationale, for financial planning purposes, an annual grant amount of \$15.0 million is projected for FY 2018 through FY 2021.

PF 1-17 [Ref. – PWD Statement 4, Testimony of Dahme and Williams, second paragraph page 7] – Please reconcile the amount (\$30.5million) that the PWD has awarded in SMIP and GARP grants to date with the annual amounts shown on Exhibit JD-2. Which lines and which years are included in that total? It appears that about \$22.4 million has been awarded in SMIP grants through FY 2015, and about \$28.6 million has been awarded in Stormwater Credits for the 3 historic years shown.

Response:

The SMIP line item in Exhibit JD-2 represents funds that were transferred to the Philadelphia Authority for Industrial Development (PAID) to support the SMIP and GARP programs from FY 2013 to FY 2015 and the amount budgeted for FY16. The \$30.5 million cited in PWD Statement 4 reflects the total value of SMIP/GARP awards as of the date the statement was published. This value is greater than the total in JD-2 because FY12 awards are not included in JD-2 and some grant funds have yet to be transferred to PAID. Funds are not transferred to PAID until the grant recipient executes a subgrant agreement with the Philadelphia Industrial Development Corporation.

The sum of all payments to PAID from FY 12 – FY 15 is \$25,812,909.

PF 1-18 [Ref. – PWD Statement 9a]

- A. Are the 40% and 60% proportionate cost responsibilities for right-of-way flows and customer flows an approximation, or were they derived as part of the COSS or from other analysis contained in the filing?
- B. If these levels were determined in the COSS or elsewhere in the filing, in what pages or schedules can their derivation be found?
- C. If they are only approximations, why weren't they computed within the COSS or elsewhere in the filing?

Response:

- A. The 40% and 60% allocation referenced in Question 57 of PWD Statement 9a does not reflect the proportionate cost responsibilities for right-of-way flows and customer flows. Those percentages reflect the allocation of the FY 2017 and FY 2018 O&M costs for PWD's wastewater collection system between sanitary sewer and stormwater.
- B. These allocation factors are not an approximation and were derived through an analysis of the system-wide ratio of peak wet weather flows to peak dry weather flows. Please see the response Attachment PF1-18 Flow Ratios.

PF 1-19 [Ref. – PWD Statement 9b, page 3] - The FY 2017 stormwater revenue requirement is estimated to be \$153.7 million. What is the comparable stormwater revenue requirement estimate for FY 2018, and is it estimated in the same manner as the FY 2017 estimate? If not, please explain how it was estimated, including all assumptions, analysis and calculations used.

Response:

The stormwater revenue requirement for FY 2018 is \$161.3 million. The revenue requirements for FY 2017 and 2018 were developed in the same manner. The five step cost of service approach used to develop the stormwater revenue requirements for each of the two years – FY 2017 and FY 2018, for which rate increases are being requested, is outlined in Question # 3 in PWD Statement 9B – Supplemental Direct Testimony of Black & Veatch Corporation testimony.

<u>**PF 1-20**</u> [Ref. – PWD Statement 9b, Page 4, Answer to Q6.] - Please provide the detailed calculations used to derive the percentages of the stormwater Revenue Requirement (RR) allocated to GA (20%) and to IA (80%) charge components. If the basis and calculations for these percentages are provided in the COSS or elsewhere in the filing, provide the pages or schedules where they are located in the filing.

Response:

The percentages of stormwater revenue requirements allocated to the gross area (GA) and impervious area (IA) components were developed as part of the recommendations of the 1996 Citizens Advisory Committee (CAC), which was convened by PWD to establish the policies pertaining to the transition to a parcel area based stormwater charge.

The CAC recognized the contribution of both impervious and non-impervious surfaces to stormwater runoff and recommended that stormwater revenue requirements be allocated 20% to GA component and 80% to IA component.

For the current rate proceeding, the GA/IA allocation approach was reviewed with PWD management. These allocation factors were sustained so as to maintain consistency with factors used in the previous rate proceedings.

<u>**PF 1-21**</u> [Ref. – PWD Statement 9b, Page 3, Paragraph before Q4.] – What portion of the revenue requirement of \$153,690,000 for stormwater management was a result of direct allocations to that total? The example of inlet cleaning costs was given on page 2. Please list each such direct allocation along with its total cost. Provide the same information for FY 2018 stormwater revenue requirements.

Response:

The following table presents O&M costs that are allocated 100% to stormwater services. Costs are provided for both FY 2017 and FY 2018.

Line No.	Description		FY 2017	FY 2018		
1	Inlet Cleaning	\$	15,603,000	\$	16,891,000	
2	Stormwater Plan Review	\$	\$ 1,022,704		1,065,796	
3	Totals (Line 1 + Line 2)	\$	16,625,704	\$	17,956,796	

In addition to these two items which are allocated 100% to stormwater services, a number of other functional costs are allocated to stormwater services that amount to the total stormwater revenue requirement of \$153.7 million in FY 2017 and \$161.3 million in FY 2018. These functional cost allocations are described in PWD Statement-9A Direct Testimony of Black & Veatch Corporation and PWD Statement-9B Supplemental Direct Testimony of Black & Veatch Corporation.

Please also see PWD Exhibit 6: Cost of Service Work Papers, SCOS15_2017, RETCOS-25 (PDF Page # 588) for FY 2017 total stormwater revenue requirements.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

PF 1-22 [Ref. - PWD Statement 9b, Testimony Pages 8 and 9] -

- A. Please provide the basis for the CAP Revenue Impact for FY2016, including all assumptions, calculations, and analysis used to determine that specific amount (\$3.517 million), including how the first 3 months of data were used to project the full year amount.
- B. Given that there now are 8 months of actual data from FY 2016, what would the "annualized" amount be if you used the first 8 months (or first 6 months) of FY 2016 instead of just the first 3 months?

Response:

The CAP Revenue Impact for FY 2016 was estimated based upon the average CAP Adjustment for the first 3 months of the fiscal year, as provided by PWD. The annual impact was calculated by multiplying the three-month average CAP Adjustment amount by 12. The following table provides a summary of the monthly CAP Adjustment and the resulting estimate of FY 2016 Revenue Impact as included in the rate filing.

Line No.	Month	Calendar Year	Fiscal Year	 CAP Adjustment Issued
1	July	2015	2016	\$ 342,538
2	August	2015	2016	\$ 257,024
3	September	2015	2016	\$ 279,783
4	3-Month Avera	ge	\$ 293,115	
5	FY 2016 Reven	ue Impact (Line 4 x 12)	\$ 3,517,380	

B. The following table provides the "annualized" CAP Revenue Impact for FY 2016 based upon the first 8 months of the fiscal year as provided by PWD. The annual impact was calculated by taking the monthly average and multiplying it by 12.

Line No.	Month	Calendar Year	Fiscal Year	 CAP Adjustment Issued
1	July	2015	2016	\$ 342,538
2	August	2015	2016	\$ 257,024
3	September	2015	2016	\$ 279,783
4	October	2015	2016	\$ 269,767
5	November	2015	2016	\$ 270,680
6	December	2015	2016	\$ 269,147
7	January	2016	2016	\$ 271,500
8	February	2016	2016	\$ 267,150
9	8-Month Avera	ge	\$ 278,449	
10	FY 2016 Reven	ue Impact (Line 9 x 10)	\$ 3,341,385	

The difference between the initial estimate of \$3.517 million and the updated estimate of \$3.341 million is \$175,995.

It is important to note that only 3 months of the CAP Adjustment amount was available for FY 2016 at the time the cost of service study was performed. Hence, annualizing the three-month average CAP Adjustment was the only feasible approach.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

PF 1-23 [Ref. - PWD Statement 9b, Testimony Pages 8 and 9] -

- A. Please provide the basis for reducing the CAP Revenue Impact by \$100,000 each year after FY2016, including all assumptions, calculations, and analysis used to determine that specific amount.
- B. Does the Revenue Impact stop in FY 2021? If not, when is it expected to be phased out?
- C. Did PWD consider phasing these credits out in a fewer number of years? If not, why not?

Response:

The following answers are provided in response to PF 1-23:

- A. The \$100,000 annual reduction in the CAP revenue impact is an assumed estimate based on the historical reduction in CAP revenue impact. The revenue reduction due to CAP is influenced by three key factors:
 - A customer's continued eligibility in the CAP program
 - Potential receipt of stormwater credits
 - The magnitude of stormwater rate increase

As it is not feasible to precisely determine the level of reduction in CAP revenue impact in future years due to the above referenced influences, a conservative annual revenue reduction of \$100,000 was assumed for each year of FY 2017 through FY 2021.

- B. Please refer to the response for PF 1-12.
- C. Please refer to the response for PF 1-12.

PF 1-24 [Ref. - PWD Statement 9b, Page 10, Top Paragraph labeled "Residential"] -

- A. Has the Department considered weighting the GA factor charge in some manner that would provide some gradation of charges between residential customers based on their individual lot sizes? Please elaborate in your response including any other alternatives the Department considered.
- B. Is there any plan going forward to convert the current residential rate structure to a structure like the one used for non-residential customers (based on parcel size and/or characteristics)?

Response:

- A. The Department has considered charging for residential customers based on individual lot sizes and also by subsets of residential property type (single, twin, row). However, it was determined that the cost to effectively administer such a program would require a large increase in staff, technology and other resources. This increase in necessary resources may negate any potential benefit that would result from a reallocation of the residential class's stormwater charges.
- B. No, not at this time.

PF 1-25 [Ref. – PWD Statement 9b, Testimony Page 13] –

- A. Please provide the basis for the recommended maximum percentage allowed as a credit (80% without surface discharge) toward parcel based storm water charges applicable to non-residential customers who employ measures to control storm water flows on their properties; including all assumptions, calculations, and analysis used to determine that specific percentage.
- B. Provide the same information for customers with surface discharge (the 90% maximum limit).

Response:

The maximum allowable credits, as presented on Page 13 of PWD Statement 9B – Supplemental Direct Testimony of Black & Veatch Corporation, are not recommendations of this rate proceeding. Rather these are the current maximum allowable credits as defined in Philadelphia Water Department Regulations, Chapter 3 § 304.5(d). The application of these credit policies are further defined in PWD's *Stormwater Service Charge Credit and Adjustments Appeals Manual.*

The credit program including the types of credits, the associated technical requirements, and the maximum allowable credits, for non-surface discharge and surface discharge customers, were defined by PWD in consultation with the Customer Advisory Committee (CAC) that was convened in 2011, and were implemented as part of the 2012 rate proceedings.

Members of the 2011 CAC also emphasized the need for consistency and predictability for the credit program criteria so as to have a reasonable level of certainty on the magnitude of potential fee reduction, should their property be eligible for credit requirements.

PF 1-26 [Ref. – PWD Statement 9b, Testimony Page 12]

- A. Why did you choose 4 years for the period of time at which a customer receiving a stormwater service charge credit would expire?
- B. Were shorter and longer periods (number of years) considered?
- C. If they were, why were they rejected?

If the basis and supporting analysis are in the filing, simply provide the reference to it.

Response:

- A. The stormwater credit program's administrative requirements were defined by PWD staff in FY 2009 prior to the launch of the credit program and the transition to parcel area based stormwater charge. The credit renewal process entails administrative aspects (both for the customer and PWD) including submission of a credits renewal application and fee and potential field verification by PWD staff. To assure the credit program renewal process doesn't become administratively burdensome, a four-year term was deemed reasonable.
- B. A two-year term was considered but was not chosen as such a process would have needed additional staffing resources.

PF 1-28 [Ref. – Green Acres Retrofit Program (GARP)] Please provide the basis for the Award Amount Allocations between Group I (80%) and Group II (20%) Project Categories in FY 2016, including all assumptions, calculations, and analysis used to determine each percentage allocation. Also provide the basis for the Award Amount Allocations between Group I (70%) and Group II (30%) Project Categories for fiscal years 2017 through 2021, including all assumptions, calculations, and analysis used to determine each percentage and analysis used to determine each percentage allocation.

Response:

PWD compiles all SMIP/GARP applications and issues awards each fiscal quarter. Each application is reviewed and ranked based upon the overall quality of the project and the cost to PWD per greened acre. Under this approach, projects with a lower cost per greened acre (i.e. Group I) are given a higher priority than projects with higher costs per greened acre (i.e. Group II).

For FY 2016, the allocation of SMIP/GARP grant awards between Group I (80%) and Group II (20%) was generally based upon the applications received by PWD and the anticipated awards for that fiscal year.

For FY 2017, the allocation of 70% of the available award budget to Group I and 30% to Group II was based upon PWD's anticipated awards for the program based upon prior years' performance using a more conservative cost distribution for FY 2017 through 2021.

PF 1-29 [Ref. - PWD Statement 9a] -

- A. As part of the Cost of Service Study, was PWD's avoided cost (of not having to provide the reductions in storm water flows it would have had to but for the reductions resulting from on-site measures employed by non-residential customers in order to receive reductions in their parcel based storm water charges) determined or estimated?
- B. If this avoided cost was estimated in the cost of service study or elsewhere in the filing, what was that estimate and in what pages or schedules can its derivation be found?
- C. If this avoided cost was not estimated, please explain why not.

Response:

- A. Stormwater management that occurs on private non-residential property is built into PWD's compliance models for its COA and other regulatory obligations. Costs and expenditures projects in the COSS already have taken into account private stormwater management and therefore there are no avoided costs to report.
- B. See above.
- C. See above.

Response Provided By: Erin Williams and David Katz, Philadelphia Water Department