

BEFORE THE
PHILADELPHIA WATER COMMISSIONER

FY 2009-2012 Philadelphia Water Department :
Water and Wastewater Rate Proceeding :

DIRECT TESTIMONY OF JOANNE DAHME

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is Joanne Dahme. My business address is 1101 Market Street, Fifth Floor, Philadelphia, Pennsylvania.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Philadelphia Water Department (“Department”) as its Watersheds Programs Manager. In such capacity, I manage, coordinate and implement projects and programs to carry out the objectives of the Office of Watersheds’ Strategic Plan.

Q. WHAT ARE YOUR JOB RESPONSIBILITIES?

A. As the Philadelphia Water Department’s Watersheds Programs Manager, I am responsible for the development and implementation of regional watershed partnerships, working with a team of Water Department engineers and scientists. The mission of these partnerships is to create watershed management plans in the various sub-watersheds in Philadelphia that will result in the improvement of stream water quality and measurable improvements to the quality of our parks and neighborhoods. Watershed management issues are to be communicated and shared with a diverse group of stakeholders including regional municipal partners, elected officials, the general public and the media, to gain local support for the implementation of regulatory-driven initiatives and community-based projects. I am responsible for ensuring that stormwater management as it is related to land-based practices will also be incorporated into final best management practices.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I have a Bachelor’s Degree in Civil Engineering from Villanova University. I have also earned Master’s Degrees in Journalism and Creative Writing from Temple University. See attached resume (Exhibit JD-1) for a more detailed description of my educational background and work experience.

Q. PLEASE DESCRIBE YOUR RELEVANT WORK EXPERIENCE WITH THE DEPARTMENT.

A. My resume details my various work assignments with the Department where I have served in positions of increasing responsibility since 1980. In that year, I began my tenure with the Department as a Civil Engineer, supervising construction contractors during the renovation and reconstruction of one of the Department's wastewater treatment facilities. I served in that position until 1986. At that time, I was appointed to the position of Public Relations Manager with responsibilities for the development, editing and production of Department publications. I served in that position from 1986 to 1993. In 1993, I was promoted to the position of General Manager – Public Affairs which expanded my duties to oversee five responsibility centers in Public Affairs, including Public Relations, Public Education, Assistance Programs, Government Affairs and Customer Service and included duties to develop and run public information campaigns related to environmental education mandates and customer service functions. I served in that position from 1993-1999. Thereafter, I was appointed to my present position as the Department's Watersheds Program Manager.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe the stormwater cost reallocation program.

Q. PLEASE DESCRIBE THE STORMWATER SYSTEM.

A. The City's stormwater management system components include the City's 619 miles of separate storm sewers, 1,599 miles of combined sewers, and approximately 75,000 storm water inlets. In 1987, the Clean Water Act was amended to address discharges from municipal separate storm sewer systems. Municipal separate storm sewer systems collect storm water from homes, businesses, streets, and other sources and convey it directly to rivers and creeks without treatment. Cities whose separate storm sewer systems serve a population of over 100,000 were required under these amendments to obtain a NPDES permit for their discharges. The Clean Water Act requires dischargers to reduce any contaminated flow in the storm sewer system to the maximum extent practicable. PaDEP issued the City its initial storm water permit on September 29, 1995. The permit requires the City to implement four management programs to reduce the discharge of pollutants from its municipal separate storm sewer systems. The management programs require the City to reduce pollution from (1) commercial and residential areas; (2) illicit connections; (3) industrial facilities; and (4) construction sites.

PWD's stormwater management program addresses both the quantity and quality of stormwater runoff and its effects on the natural environment. It encompasses both separate urban stormwater drainage systems and the City's combined sanitary/stormwater sewerage facilities. The mission of the stormwater program is

also associated with flood protection along major waterways and our receiving streams and rivers. In approximately 40 percent of the City, stormwater flows into, through and is discharged from separate storm sewers to receiving waters. In the remaining 60 percent of the City, combined sewers carry both sanitary wastewater and, during and following storm events, stormwater runoff. Stormwater entering the combined sewer system impacts both the conveyance and treatment plant components. A majority of the flow capacity provided in the combined sewers and the operating practices of treatment facilities are predicated on the demands of stormwater entering the systems.

Q. PLEASE GENERALLY DESCRIBE HOW STORMWATER COSTS HAVE BEEN TRADITIONALLY ALLOCATED BY THE DEPARTMENT?

A. For many years, the Department has recovered the costs for the operation and maintenance of its stormwater system through a service charge related to customer meter size. This method uses meter size to approximate the contribution of a property to stormwater runoff. Properties with larger meters are generally larger parcels with impervious land generating runoff.

Q. HAS THE DEPARTMENT RE-EXAMINED ITS APPROACH TO STORMWATER COST ALLOCATION IN RECENT YEARS WITH THE ASSISTANCE OF OUR CUSTOMERS?

A. Yes. Beginning in 1994 the Department convened a diverse group of stakeholders to make recommendations to improve stormwater cost allocation. This group became known as the Citizens Advisory Committee ("CAC") and included representatives of large and small businesses, universities, parking lots, transportation utilities, civic groups, senior citizens, realtors and water only customers.

The CAC met over a two year period, during which time they examined the Department's stormwater operation and maintenance expenses, capital related requirements and overall cost allocation guidelines. The CAC also reviewed how other utilities were recovering their stormwater costs. In the end CAC recommended changes to stormwater cost allocation that are summarized below:

- The Department should implement a reallocation formula based upon the gross size of a customer's property and the imperviousness of the property, as these two factors are most important in determining the stormwater runoff contribution of individual properties. This reallocation should be completed for both residential and commercial properties.
- Because the impervious factor is the most dominant factor in calculating stormwater runoff, CAC recommended that 80 percent percent of the stormwater costs should be allocated and recovered

based on a property's impervious area and 20 percent of the storm-water costs should be based on the property's gross area.

- The City's 450,000 residential properties should be treated as a single entity with total gross area and imperviousness area factors. The total costs would be divided among all residences. This recommendation was implemented in the FY 2002 tariff and resulted in a decrease in the allocation of costs to residences.
- The City should also seek to recover the cost of managing stormwater from properties that do not have water meters, e.g., parking lots, utility right-of-ways, vacant land, etc.

Q. DOES THE DEPARTMENT PLAN TO CONTINUE IMPLEMENTING CITIZEN ADVISORY GROUP RECOMMENDATIONS IN THIS PROCEEDING?

- A. Yes. The initial implementation of CAC recommendations began in FY 2002 with changes for smaller meter customers (largely the residential customer base). The Department proposes to reallocate stormwater costs among its larger meter, non-residential customer base over a three year period beginning in FY 2010. This reallocation will result in more equitable stormwater charges that more closely match the cost of managing stormwater runoff from each property. Current calculations show that the majority of large meter customers will see a reduction or otherwise minor impact on the stormwater component of their water and wastewater bills. For those customers that will see noticeable increases in charges, the Department will identify opportunities on their properties to decrease the amount of impervious area and thus decrease stormwater fees.

Q. DOES THE DEPARTMENT PLAN TO CHARGE STORMWATER FEES TO NON-CUSTOMERS?

- A. Yes. The Department is evaluating properties that do not presently have a water/sewer account that contribute to stormwater runoff. The current non-customers including parking lots, utility rights-of-way and vacant land. The Department is applying the same 80/20 impervious area/gross area formula to these properties to determine the appropriate stormwater costs to be borne by them. This approach is appropriate to equitably spread the costs associated with stormwater management over a larger customer base.

Q. DOES THE DEPARTMENT PLAN TO OFFER STORMWATER CREDITS TO EASE THE BURDEN OF STORMWATER COSTS ON LARGER CUSTOMERS?

- A. The CAC encouraged the Department to provide a means for larger customers to ease the burden of reallocated stormwater costs. Customers who have the ability

to decrease the amount of directly connected impervious area on their property do so using any number of stormwater management practices (e.g., rain gardens, infiltration islands, porous asphalt and sidewalks, vegetated swales, green roofs). Once a property has been retrofitted with any of these features, the Department can reevaluate its stormwater charges consistent with applicable regulations being promulgated in connection with this case.

Q. ARE CHANGES TO THE DEPARTMENT'S REGULATIONS PLANNED REGARDING STORMWATER COST ALLOCATION CHANGES?

A. Yes. The Department is proposing stormwater regulations which are included with this rate filing.

Q. WHY IS IT IMPORTANT AS A POLICY MATTER TO MAKE STORMWATER COST ALLOCATION CHANGES AT THIS TIME?

A. During the FY2005 Rate Process, the department was encouraged to implement a similar reallocation for its non-residential customer base by a representative group of commercial customers under the Commercial Customer Consortium. The department pledged to move forward with this initiative as soon as it had the appropriate technology to charge these larger, unique parcels in an accurate way. Since that time, we have acquired this technology and have analyzed the affected customer parcels to a degree that we are confident represents their true cost of service to the stormwater collection system. Additionally, stormwater management is the fastest growing component of the department's state and federally permitted wet weather programs. The department anticipates a potential capital cost between \$2-\$3 billion over a 20 year horizon to rehabilitate and add new infrastructure to its combined and separate stormwater sewer systems to meet Clean Water Act obligations. To meet these goals, the department is using public lands, in addition to its infrastructure, to identify opportunities to manage stormwater on the surface through low impact development (green infrastructure practices), thereby infiltrating and/or detaining stormwater during a rain event and thus providing additional capacity to our systems while also providing an environmental benefit to our waterways and communities. PWD's 2006 Stormwater Regulations and the proposed Stormwater Reallocation process allow us to encourage similar best practices on privately owned lands, as privately owned lands account for approximately 50% of the city's land surface. If private property owners voluntarily make changes to their parcels to take advantage of credits offered for such good practices, the cost to the City and its ratepayers overall will incrementally decrease with every parcel that is managing its own runoff. Everyone, including the environment, is a winner under this scenario once embraced.

Q. IS THE DEPARTMENT REQUIRED TO FUND STORMWATER MANAGEMENT INITIATIVES?

- A.** Yes. As part of this same shift in regulatory emphasis toward non-point sources of water pollution, stormwater management has emerged as a new area for environmental regulation. By way of background, in 1995, the City received its first stormwater permit, as required under the EPA rules for cities with populations over 100,000. The permit required multiple improvements in stormwater management. The Department has successfully negotiated with federal authorities to combine the goals of its stormwater permit into its watershed based programs. Needless to say, this approach is beneficial to ratepayers. It also is a sound approach to lowering non-point sources of water pollution.

It should be noted that other major cities are having a significantly different experience. The City of Atlanta will likely see their sewer bills triple over the next five years as the City tries to pay for \$3 billion in improvements in this area. Likewise, the City of Indianapolis expects to triple rates prospectively to pay for a \$1 billion upgrade in their system. The City of Providence, Rhode Island, has raised rates four times in four years, in part, to fund the first phase of a \$700 million project to effect system improvements. The point of the foregoing is that the Department's comprehensive management approach has enabled it to satisfy regulatory agencies at comparatively lower costs than other cities. Stated differently, the funds necessary to support capital improvements in this area are effectively spent to protect the environment, recognizing the need to minimize the economic impact of these mandated programs on our customers. The stormwater initiative, however, will be at peril without the rate relief requested in this proceeding.

The Department continues to expand our GIS system to include our underground infrastructure. This will allow us to more efficiently operator the water and sewer systems through hydraulic monitoring, better maintenance practices, and system knowledge.

The Department will also expand our computerized maintenance management system (CMMS) from our plants to our street infrastructure.

The Sewer Assessment Program will go from a study and pilot program to a full fledged program. This program will help define maintenance practices and push towards a proactive maintenance program rather than a reactive maintenance program.

Q. DOES THIS CONCLUDE YOUR PREPARED TESTIMONY?

- A.** Yes, it does.

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Work History

*March 2000
to present*

Watersheds Programs Manager

As the Philadelphia Water Department's Watersheds Programs Manager, I am responsible for the development and implementation of regional watershed partnerships, working with a team of Water Department engineers and scientists. The mission of these partnerships is to create watershed management plans in the various sub-watersheds in Philadelphia that will result in the improvement of stream water quality and measurable improvements to the quality of our parks and neighborhoods. Watershed management issues are to be communicated and shared with a diverse group of stakeholders including regional municipal partners, elected officials, the general public and the media, to gain local support for the implementation of regulatory-driven initiatives and community-based projects. I am responsible for ensuring that stormwater management as it is related to land-based practices will also be incorporated into final best management practices.

1993- 1999

General Manager, Public Affairs, Philadelphia Water Department

As a member of the PWD's Executive Staff, I reported directly to the Water Commissioner. All tasks which involved interaction with our customers, including emergency phone service, public meetings, public participation mandates, school programs, media, correspondence with City Council and elected officials, assistance to low-income customers, and the development and production of the department's brochures and publications, were my responsibility. As GM, I ensured that the five responsibility centers in Public Affairs, including Public Relations, Public Education, Assistance Programs, Government Affairs and Customer Service - each met the PWD's customer service and public participation goals. I developed and worked with my staff to create a variety of public information campaigns, some required to meet state and federal environmental education mandates, and others to improve the department's customer service functions. The most recent campaigns, including those I developed, were focused on drinking water quality issues, e.g., EPA Public Right-To-Know rules (Consumer Confidence Report), Cryptosporidium in drinking water, lead and copper sampling, and the new Risk Management Program (RMP), as required under the Clean Air Act. These campaigns were developed and produced, for the most part, with the talents and expertise of the Public Affairs staff. I created and facilitated two citizens advisory committees -- one whose mission is to improve drinking water quality communications and the other designed to improve community relations in the neighborhood of one of the PWD's operating facilities. My staff managed two others. Our public education curriculum development focused on the urban water cycle, watersheds, and stormwater pollution prevention. I worked with the media one to one to keep them up-to-date on PWD issues, and hosted a number of workshops, for both print and broadcast media, to familiarize local reporters on local and national water resource issues.

1986-1993

Public Relations Manager, Philadelphia Water Department

As Public Relations Manager, I was responsible for the development, copywriting, editing and production of the PWD's publications, which include: billstuffers, brochures, newsletters, press releases and annual reports. I also represented the PWD at community meetings and represented the Public Affairs Division on PWD operations committees. I also responded to media inquiries.

1980-1986 Civil Engineer, Philadelphia Water Department

With a team of civil, mechanical and electrical engineers, I supervised the work of PWD contractors during the renovation and reconstruction of one of the department's wastewater treatment plants

EDUCATION

1999-2001 Master's of Creative Writing, Temple University

1983-1986 Master's of Journalism, Temple University

1976-1980 Bachelor's of Civil Engineering, Villanova University

PROFESSIONAL AND COMMUNITY MEMBERSHIP

Society of Women Environmental Professionals

Vice-Chair, Philadelphia Local Emergency Planning Committee (PLEPC)

Fairmount Water Works Interpretive Center Advisory Board

Board Member, North Light Community Center

Friends of Laurel Hill Cemetery

Tookany/Tacony-Frankford Watershed Partnership