

**Report of the Fairfax County  
Consumer Protection Commission**

**Review of City of Falls Church Water System:  
Rates and Capital Improvements**

**September 20, 2011**

## EXECUTIVE SUMMARY

The City of Falls Church water system provides service to approximately 34,000 accounts (FY2010). Almost 30,000 of these accounts – about 90 percent – are located in Fairfax County. It is estimated that these accounts serve at least 100,000 persons in the County.

During the period 1981-2008, the City transferred over \$58 million in surplus water revenues to its general fund. This practice was enjoined in a January 2010 court opinion and decree, and the City was prohibited from building any surplus into its water rates. In May 2010, the City contracted with a consultant to perform a water rate study to review its water rates. The consultant provided the City with two different rate studies in 2011 – the first one designed for a for-profit utility and which includes revenue elements expressly prohibited under the January 2010 court decree, and the second one designed for a municipal utility – but each recommended the same set of retail rate increases over the period FY2012-FY2016. Cumulatively, these rate increases would increase quarterly service charges and commodity charges 30 percent as compared to FY2011 water rates. On September 12, 2011, approximately five months after initially taking up these recommendations, the City Council adopted an eight percent increase in retail water rates for FY2012, effective October 1, 2011.

On April 26, 2011, shortly after the Falls Church City Council initially proposed to increase water rates, the Board of Supervisors (Board) directed the Consumer Protection Commission (CPC) to undertake a comprehensive review of the City's water ratemaking process and report back to it on four issues. The CPC's findings regarding these issues are detailed in this report, and summarized below:

(1) *What are the reasons for the recommended increases?* According to the City's water rate study, rate increases are needed to establish three new reserve funds, fund capital improvements for operating and system expansion projects, and meet rising operating costs. The rate study allocates the system's revenue requirements almost entirely to the water commodity charge.

- *Reserve funds:* The rate study does not explain why the City's prior water rates, which were sufficient to generate excess water revenues in the millions of dollars annually, are not sufficient to fund the reserves. It also does not explain why reserve funding is identified as a permanent rate element rather than a temporary rate element that expires upon funding of a given reserve fund.
- *Capital improvements:* As compared to the City's capital improvements program (CIP), the water rate study apparently under-allocates system expansion costs to new customers and over-allocates these costs to existing customers. As a result, commodity and service-charge rates applied to existing customers must be increased to absorb these excess costs. In other words, rather than fully recovering system expansion costs through availability fees, the City's existing water service customers will be subsidizing system expansion through inflated commodity and service charges.
- *Operating costs:* Projected expenditures have been added to the system's costs as established in years past. In preparing the water rate study, the consultant appears to have made no effort to determine whether it was reasonable to use those costs – which were used to generate millions in surplus revenues – as a starting point.

(2) *Has the City complied with the water ratemaking principles adopted by the Board in 2010?* The CPC's review relied on publicly available information, as the City declined to meet with CPC staff or answer any of its questions. This public information is insufficient to conclude that the City complied with all principles. Given a number of outstanding questions, the CPC cannot conclude that the City set reasonable water rates on a well-substantiated cost basis. For example:

- Are water revenues understated, thus inflating recommended rate increases?
- Why does the new \$4.3 million operating and maintenance (O&M) reserve fund begin with a negative \$5.5 million balance?
- What do various O&M costs in the water rate study represent, and how were they determined?
- How does the City reconcile a planned FY2012-FY2016 \$21.875 million system expansion with billable water consumption growth of just 0.35 percent per year over the period FY2012-FY2020?

(3) *What is the nature and cost of capital improvements in the FY2007-FY2011 period, and how were they funded?* During this period, the Falls Church water system took on \$30,859,000 in debt to fund a number of projects, the largest of which appears to have been improvements at the Dalecarlia water treatment plant, from which it obtains water. One hundred percent (100%) of this existing debt has been allocated to operating expenses for recovery via retail rates.

(4) *What is the nature and cost of capital improvements planned in the FY2012-FY2016 period, and how does the water system propose to fund them?* According to the City's Capital Improvements Program, an additional \$33.325 million in capital improvement projects are planned for the upcoming five year period, with about two-thirds of the cost (\$21.875 million) attributable to system expansion projects planned to meet demand in Fairfax County, particularly the Tysons Corner area. The water rate study shows a lower figure of \$27.96 million, and attributes only about one-third of the cost (\$9.38 million) to system expansion projects; as noted above, this approach over-allocates system expansion costs to existing retail customers.

The City of Falls Church City Council has not been responsive to the concerns voiced by Fairfax County customers of the City's water system. While the City Council asserts that rate increases are warranted due to rising costs and the need to ensure system safety and reliability, the CPC finds that the publicly available information does not support these assertions. Consequently, so that residents and businesses obtaining water service from the City of Falls Church pay only fair and reasonable rates, the CPC recommends that the County exercise its authority under Section 15.2-2111 of the Virginia Code and:

- Fix rates and charges for water service so that no Fairfax County customer of the City's water system will be charged rates and charges that exceed those of Fairfax Water, unless the City can demonstrate the need for higher rates and charges to the County's satisfaction; and
- Establish Fairfax Water as the exclusive water service provider for all new development and redevelopment in Fairfax County, unless Fairfax Water determines that it is unable to furnish water service to a given location.

**TABLE OF CONTENTS**

**Executive Summary ..... i**

**Table of Contents ..... iii**

**I. Background and Task ..... 1**

**II. Chronology ..... 2**

**III. Key Elements of Review and Analysis..... 4**

    A. The rate review focused on the May 27, 2011, water rate study ..... 4

    B. Staff was unable to obtain additional information about the 19 schedules that comprise the Appendix to the May 27, 2011, water rate study ..... 6

    C. AWWA ratemaking principles provided guidance ..... 7

    D. Staff recognized legal constraints on the City’s transfer of funds from its water fund to its general fund..... 7

    E. Staff also reviewed materials related to the City’s budgets and capital improvements programs ..... 8

**IV. Projected Water Rate Increases: FY2012-FY2020 ..... 9**

**V. Issues Identified by the Board ..... 11**

    A. What were the bases underlying the City’s proposal to increase its water commodity charges in FY2012 and beyond?..... 11

    B. In determining its water rate increases for FY2012 and beyond, did the City faithfully comply with all of the water ratemaking principles adopted by the Board on May 25, 2010?..... 14

    C. What was the precise nature, total cost, and exact locations of the capital improvements that the City of Falls Church made to its water system during the past five years, and how were those improvements funded when made? ..... 18

    D. What is the precise nature, total cost, and exact locations of all projected capital improvements to the City of Falls Church’s water system that formed the basis for the City’s projected water rate increases for Fiscal Years 2012, 2013, 2014, 2015, and thereafter, and do any such improvements involve anything other than the maintenance, improvement, and/or upgrading of the City’s existing water system? ..... 21

**VI. Consumer Protection..... 24**

    A. The City has not been responsive to the Fairfax County customers of its water system..... 24

    B. Fairfax County customers of the City’s water system can be protected ..... 26

**FINDINGS ..... 28**

**RECOMMENDATIONS..... 31**

**ATTACHMENTS**

## **I. BACKGROUND AND TASK**

On May 25, 2010, the Board had adopted a series of sound principles for water ratemaking, which were to be applied and adhered to by all entities providing water service within the County. These principles were derived from the comprehensive study of water rates charged to County customers undertaken by the Consumer Protection Commission (CPC) and included as part of the CPC's final report to the Board at the May 25, 2010, meeting.

During its April 26, 2011, public meeting, the Board of Supervisors (Board) expressed its ongoing concern regarding the water rates charged by the City of Falls Church (City) to the approximately 100,000 water customers who reside or have businesses in Fairfax County. The Board also expressed concerns regarding the City's proposal to increase its water commodity charges from \$3.03 to \$3.27 per 1,000 gallons of water effective July 1, 2011, as well as planned annual increases of eight percent (8%) in fiscal years (FY) 2013 and 2014 and planned increases of an additional three percent (3%) per year in FY2015 and FY2016. The City asserts that these increases are needed due to extensive past and projected system infrastructure improvements.

The Board deemed it imperative to determine whether the water ratemaking principles it adopted in May 2010 were applied by the City during its ratemaking process. The Board therefore unanimously directed the CPC to undertake a comprehensive review of the City's water rate-making actions, with findings and/or recommendations regarding the following questions:

- What were the bases underlying the City's proposal to increase its water commodity charges in FY 2012 and beyond?
- In determining its water rate increases for FY2012 and beyond, did the City faithfully comply with all of the water ratemaking principles adopted by the Board on May 25, 2010?
- What was the precise nature, total cost, and exact locations of the capital improvements that the City of Falls Church made to its water system during the past five years, and how were those improvements funded when made?
- What is the precise nature, total cost, and exact locations of all projected capital improvements to the City of Falls Church's water system that formed the basis for the City's projected water rate increases for Fiscal Years 2012, 2013, 2014, 2015, and thereafter, and do any such improvements involve anything other than the maintenance, improvement, and/or upgrading of the City's existing water system?

The Board directed the Department of Cable and Consumer Services (DCCS) to assist the CPC in this review.

DCCS advised the CPC of the Board directive at the CPC's May 17, 2011, meeting, which was the CPC's first regularly-scheduled public meeting after the Board's April 26, 2011, meeting.

## II. CHRONOLOGY

- July 21, 2008 Board directs CPC to investigate water rates paid by County residents to the water systems providing water service in Fairfax County.
- January 6, 2010 Judge R. Terrence Ney of the Fairfax County Circuit Court enters a decree and issues a letter opinion holding that Falls Church's long-standing practice of transferring the profit derived from the sale of water and related service into its general fund amounts to an unconstitutionally void tax on non-residents. The City is enjoined from transferring any moneys from its water fund to its general fund for purposes unrelated to the water system. The opinion expressly requires that City water rates equal expenses; that is, it prohibits the City from making a profit from its water system.
- January 12, 2010 City of Falls Church releases Request for Proposal No. 1015-10-FRS requesting proposals for a cost of service analysis and proposed water and wastewater rate and fee schedule design or adjustments to existing rates and fees as needed.
- April 20, 2010 In response to the July 21, 2008, Board directive, the CPC unanimously approves the staff water report, including principles of water ratemaking. Report is submitted to the Board.
- May 2010 City of Falls Church City Manager contracts with Municipal and Financial Services Group (MFSG) in the amount of \$59,500 to perform a comprehensive rate study for the City's water and sewer funds. (Purchase order amount subsequently increased to \$86,000.)
- May 25, 2010 Board unanimously adopts CPC principles of water ratemaking.
- March 28, 2011 1) MFSG presents the results and recommendations of its utility-basis ratemaking study to the City of Falls Church City Council. The underlying report is not made public.  
2) The City Council adopts TO11-07, *Ordinance to Amend Water Rates as of July 1, 2011*, on first reading and schedules second reading and public hearing for April 11, 2011. TO11-07 would increase water commodity charge and service charges for existing customers eight percent (8%) each year over the three-year period FY2012-FY2014, effective July 1, 2011.
- April 11, 2011 City Council defers second reading of TO11-07 until April 25, 2011.
- April 25, 2011 City Council defers action on TO11-07 until June 27, 2011. (According to the City's June 27, 2011, Agenda materials, TO11-07 was deferred on March 28, 2011, until June 27, 2011.)

April 26, 2011	Board directs CPC to conduct a comprehensive review of the City's water ratemaking actions and report to the Board by September 27, 2011, with findings and recommendations regarding four specific items.
May 9, 2011	City Council authorizes City Manager to increase the purchase order for the MFSG contract by \$20,500, to a total of \$106,500, for the cost of additional work on water rate options requested by the City, as well as for several additional meetings. In addition, the City Council authorizes extension of the contract from June 30, 2011 to December 31, 2011.
May 17, 2011	CPC is advised of the Board's directive regarding a comprehensive review of the City of Falls Church water ratemaking actions.
May 27, 2011	Date of City of Falls Church Water Rate Study, <i>Final Report</i> , prepared by MFSG using the cash-basis ratemaking methodology. <sup>1</sup>
June 27, 2011	<p>1) City Council tables TO11-107, <i>Ordinance to Amend Water Rates as of July 1, 2011</i>.</p> <p>2) MFSG presents the May 27, 2011, cash-basis water rate study to the City.</p> <p>3) The City Council adopts TO11-15, <i>Ordinance to Amend Water Rates as of August 1, 2011</i>, on first reading and schedules second reading for July 11, 2011. TO11-15 would increase non-peak commodity charges eight percent (8%), from \$3.03 to \$3.27 per 1,000 gallons. Quarterly service charges and peak commodity charges also would increase by eight percent (8%). Rate increases recommended for future years in the May 27 water rate study to be evaluated on their own merits at future meetings.</p>
July 11, 2011	TO11-15, <i>Ordinance to Amend Water Rates as of August 1, 2011</i> , is scheduled for second reading but consideration is deferred until September 12, 2011. Deferral is intended to give the City time to obtain Fairfax Water's concurrence that the adoption of the proposed rate increase would comply with Judge Ney's January 6, 2010, opinion letter and decree.
July 19, 2011	CPC commissioners provide guidance to staff regarding the direction of the report, findings, and recommendations.
August 16, 2011	DCCS staff presents preliminary findings regarding the May 27, 2011, water rate study to CPC.
September 12, 2011	City of Falls Church City Council adopts TO11-15 on a 6-0 basis (one absence), increasing service charges and water commodity rates eight percent (8%) effective October 1, 2011.

---

<sup>1</sup> The report is posted on the City's website at [http://www.fallschurchva.gov/Content/Government/Departments/EnvironmentalServices/WaterRateStudy\\_Final2011.pdf?cnlid=3823](http://www.fallschurchva.gov/Content/Government/Departments/EnvironmentalServices/WaterRateStudy_Final2011.pdf?cnlid=3823).

### III. KEY ELEMENTS OF REVIEW AND ANALYSIS

#### A. The rate review focused on the City's May 27 water rate study

At its August 16, 2011, meeting, the CPC received a presentation from DCCS staff that described staff's preliminary findings regarding the City's proposed water rate increases. Staff's preliminary findings reflected its review, to that point, of the May 27, 2011, City of Falls Church Water Rate Study, *Final Report*, prepared by the City's rate consultant, Municipal and Financial Services Group (MFSG) (hereinafter May 27 water rate study). This rate study used the "cash-needs" or "cash" ratemaking methodology to determine the water system's revenue requirements over the period FY2012-FY2020 and included a financial plan with recommended rate increases over the period FY2012-FY2016. The May 27 water rate study was presented to the City Council at its June 27, 2011, meeting as support for City Ordinance TO11-15, *Ordinance to Amend Water Rates as of August 1, 2011*.

Staff advised the CPC that the May 27 water rate study was in fact the City's second water rate study presented by MFSG to the City of Falls Church City Council in 2011. The first study used the "utility basis" ratemaking methodology to determine the water system's revenue requirement and recommended rate increases. The utility-basis water rate study was presented by MFSG at the City Council's March 28, 2011 meeting as support for City Ordinance TO11-07, *Ordinance to Amend Water Rates as of July 1, 2011*. The results of this study were summarized in a March 28, 2011 presentation to the City Council, but the study itself was not released to the public.

The utility basis of determining utility revenue requirements is typically used by investor-owned utilities, not municipalities. This methodology requires (1) establishing a rate base, defined as the value of the assets on which the utility is entitled to earn a return; and (2) setting a fair rate of return on the rate base. MFSG, which chose this methodology after discussions with City staff, included as a revenue element in its utility-basis water rate study a 7.8 percent return on equity (ROE) that it described to the Falls Church City Council as "conservative."<sup>2</sup> No attempt was made to reconcile the methodology or inclusion of the ROE with Judge Ney's January 6, 2010, letter opinion and decree, which expressly required the City to set water rates "with 'receipts equal to expense,' without building any surplus or 'return on equity' into the rates themselves."<sup>3</sup>

In April 2011, Fairfax Water formally requested a copy of the rate study from the City, but the City declined to provide it. Fairfax Water also explained to the City that Judge Ney's letter opinion and decree precluded the City's use of the utility basis ratemaking methodology. The City tabled consideration of Ordinance TO11-07 at its June 27, 2011 meeting, effectively ending its reliance on the utility-basis rate study.

MFSG's May 27 water rate study noted differences in the two rate study methodologies, as shown in the table below.

---

<sup>2</sup> March 28, 2011 City of Falls Church Council Meeting video webcast at 2:16:40 of 2:56:21.

<sup>3</sup> Opinion Letter, *Fairfax County Water Authority v. City of Falls Church*, Case No. CL-2008-16114 (Jan. 6, 2010) at 4.

Table 3.1

<i>Building Blocks of Utility Revenue Requirement<sup>4</sup></i>		
<b>Cost Element</b>	<b>Included in Rates</b>	
	<b>Utility Basis (3/2011)</b>	<b>Cash Basis (5/2011)</b>
Operating and Maintenance Costs	X	X
Return on Equity	X	
Depreciation	X	
<i>Debt Service</i>		
Principal		X
Interest		X
Return on Debt	X	
<i>Reserves</i>		
Operating Reserve		X
Repair / Replacement / Rehabilitation Reserve		X
Debt Service		X

The two rate study methodologies, as applied by MFSG, resulted in slightly different net revenue requirements for the City water system:

Table 3.2

<i>Net Revenue Requirement (in Millions)<sup>5</sup></i>					
	<b>FY2012</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>
Utility basis (A)	\$20.05	\$20.58	\$21.44	\$21.88	\$22.67
Cash basis (B)	\$19.24	\$20.53	\$20.50	\$22.02	\$21.92
<i>Difference (A-B)</i>	\$ 0.81	\$ 0.05	\$ 0.94	(\$ 0.14)	\$ 0.75

Despite their differing approaches, however, both the utility-basis and cash-basis rate studies reached the same conclusions regarding recommended rate increases:

<sup>4</sup> May 27 water rate study at 5.

<sup>5</sup> City of Falls Church Water Rate Study, Findings and Recommendations (March 28, 2011) (hereinafter March 28 presentation) at 12; City of Falls Church Water Rate Study, Findings and Recommendations (June 27, 2011) (hereinafter June 27 presentation) at 4.

Table 3.3

<i>Recommended Rates – Inside and Outside City<sup>6</sup></i>						
<b>Rate</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>
Quarterly service charge	\$7.47	\$8.07	\$8.73	\$9.42	\$9.69	\$9.99
Commodity charge (per 1,000 gallons)	\$3.03	\$3.27	\$3.53	\$3.82	\$3.93	\$4.05
Peak charge (per 1,000 gallons) (additive)	\$4.62	\$4.99	\$5.39	\$5.82	\$5.99	\$6.17
<i>% Rate Increase</i>	--	8.0%	8.0%	8.0%	3.0%	3.0%

At its September 12, 2012, meeting, the Falls Church City Council adopted the recommended eight percent (8%) rate increase for FY2012, effective October 1, 2011. The City anticipates revisiting water rates on an annual basis.<sup>7</sup>

Schedule 16A of the May 27, 2011, cash-basis water rate study, *Rate Projections*, forecasts rate increases for each year through FY2020. Non-peak commodity increases are shown below. Greater detail about each of the rate increases is provided in Section IV.

Table 3.4

<i>Non-Peak Commodity Rate Projections: FY2012-2020 (per 1,000 gallons)<sup>8</sup></i>									
	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>
Rate	\$3.27	\$3.53	\$3.82	\$3.93	\$4.05	\$4.17	\$4.21	\$4.25	\$4.30
% Increase	8%	8%	8%	3%	3%	3%	1%	1%	1%

Because the City did not release the utility-basis water rate study, it cannot be determined whether that study also envisioned rate increases beyond FY2016.

**B. Staff was unable to obtain additional information about the 19 schedules that comprise the Appendix to the May 27 water rate study**

The May 27 water rate study includes an Appendix comprised of 19 schedules addressing eight topics: (1) global inputs and assumptions; (2) operating and capital expense (revenue) data; (3) asset management and reinvestment plan; (4) revenue requirements and financial plan; (5) customer and consumption analysis; (6) rate analysis and projections; (7) customer impact and customer sample bills; and (8) cash flow statements and bond coverage calculations. The City Manager initially expressed his willingness to cooperate with the staff’s review but declined to meet with staff when staff attempted to obtain responses to questions regarding these 19 schedules.

<sup>6</sup> March 28 presentation at 15; June 27 presentation at 7.

<sup>7</sup> September 12, 2011, City of Falls Church Council Meeting video webcast at 1:20:00 of 2:32:59.

<sup>8</sup> May 27 water rate study, Appendix, Schedule 16A.

A number of issues impeded a comprehensive review of the City's water rate study. These issues included water rate study schedules posted on the City's website that are difficult to read, the use of undefined terms, and the need for supplemental information not available in the schedules themselves. Staff therefore submitted 58 questions to the City (including a request for legible copies), or about three questions per schedule. The questions to the City are provided as Attachment 1. The City Manager objected to the request, characterizing staff's comprehensive review as "something more along the lines of rate case discovery process" than the simple review he had originally contemplated. Ultimately, staff received from the City neither legible copies of the schedules nor information responsive to its questions. The email exchanges documenting the City's refusal to respond are provided as Attachment 2.

### **C. AWWA ratemaking principles provided guidance**

In addition to the Board's water ratemaking principles, staff's analysis reflects the policy principles found in the American Water Works Association Manual of Water Supply Practices, *Principles of Water Rates, Fees, and Charges* (AWWA M1).

Use of the AWWA M1 helped staff ensure that it recognized and understood, to the extent possible, issues that the City may have encountered in the rate-setting process and the options available to it. These uses are consistent with the stated purpose of the manual, which is "to describe and present issues associated with developing water rates and charges, to enumerate the advantages and disadvantages of various alternatives, and to provide information to help users determine water rates and charges that are most relevant to a particular solution."<sup>9</sup> The AWWA M1 provides guidance; it does not prescribe solutions and does not endorse or recommend data or assumptions.

### **D. Staff recognized legal constraints on the City's transfer of funds from its water fund to its general fund**

Staff's analysis recognizes that the City is operating under certain constraints as a result of the January 2010 opinion letter and decree in Case No. CL-2008-16114, *Fairfax County Water Authority v. City of Falls Church*. In his January 6, 2010, opinion letter, Judge R. Terrence Ney of the Fairfax County Circuit Court enjoined the City of Falls Church from transferring any moneys from its water fund to its general fund for purposes unrelated to the water system.

Evidence introduced at trial in the litigation between the City of Falls Church and Fairfax Water established that during the period 1981 through 2008, the City transferred nearly \$59 million in surplus revenues from its water fund to its general fund. The trial exhibit listing each year's transfer is provided as Attachment 3. In concluding that injunctive relief was warranted, Judge Ney explained that:

. . . the Falls Church City Manager's Memorandum of May 13, 2005, made clear that the then-existing rates were more than sufficient to operate the water system and pay for all capital improvements. It also showed that the rate increase was

---

<sup>9</sup> AWWA M1, *Foreword*, at xv.

needed simply in order to transfer more money to the general fund. As in *Marshall*, the positive difference between expenses and revenues constitutes a tax.

The City . . . imposes this tax primarily on persons who do not elect representatives or themselves sit on the City's governing board. Indeed, ninety-two percent of that transfer was funded by Fairfax County customers who are not represented on the Falls Church City Council. The Court finds that the profits derived from the rates charged to Fairfax County residents violate the principle of no-taxation-without-representation and, thus, amount to an unconstitutional tax.<sup>10</sup>

Under the terms of the court's decree, the City may transfer from the water fund to the general fund only that amount "corresponding to compensation for *reasonable* direct and indirect costs associated with operating the water system, and a *reasonable* payment in lieu of taxes (PILOT) with regard to water system property owned by the City within its corporate limits."<sup>11</sup> As discussed in more detail in Section V, below, the reasonableness of the City's payments requires more information than is available solely in the May 27 water rate study and schedules.

**E. Staff also reviewed materials related to the City's budgets and capital improvement programs**

As part of the CPC's comprehensive review of the water ratemaking actions of the City of Falls Church, staff reviewed various financial and planning materials available on the City's website. These materials included:

- the City's adopted budgets and five-year capital improvements programs for FYs 2006 through 2011;
- the City's proposed FY2012 budget and five-year capital improvements program; and
- presentations related to the proposed FY2012 budget, including the April 7, 2011, City Manager Proposed Budget presentation regarding utility funds.

Several of the City's financial and planning documents refer to a Falls Church Water System Master Plan and Supplement, but neither the Master Plan nor Supplement could be located on the City's website or by an on-line search.

In addition to the City materials, staff reviewed numerous letters and email exchanges between Fairfax Water and the City of Falls Church that are posted on the Fairfax Water website. Topics addressed in these letters and exchanges include Fairfax Water's request for a copy of the March 2011 utility-basis rate study and Falls Church's refusal to produce that report, as well as Fairfax Water's opposition to the City's proposed water rate increases.

---

<sup>10</sup> Opinion Letter, *Fairfax County Water Authority v. City of Falls Church*, Case No. CL-2008-16114 (Jan. 6, 2010) at 5 (footnote omitted).

<sup>11</sup> *Id.*, Final Decree on Count V Concerning the City's Water Rates and Water Fund Transfers, at ¶ 2 (emphasis added).

**IV. PROJECTED WATER RATE INCREASES: FY2012-FY2020**

According to its website, the City of Falls Church water system serves approximately 35,000 residential and commercial accounts in the City and Fairfax County. Schedule 11 of the May 27 water rate study provides an FY2010 Actual number of 33,756 retail accounts. Schedule 11 provides details regarding the number of retail quarterly single family and townhome (residential) accounts and the number of monthly and quarterly apartment, commercial, industrial, and municipal (other) accounts billed for water service provided by the City of Falls Church’s water system:

<u>Customer Class</u>	<u>Inside City</u>	<u>Fairfax County</u>	<u>Total</u>
Quarterly residential	3,409	27,518	30,927
Quarterly other	551	2,137	2,688
Monthly other	<u>19</u>	<u>122</u>	<u>141</u>
Total	3,979	29,777	33,756

It is estimated that Falls Church provides water service to at least 100,000 Fairfax County residents and businesses through these approximately 30,000 Fairfax County accounts.

The May 27 water rate study projects increases in the water service charge, non-peak commodity charge, and peak commodity charge for each year in the period FY2012-FY2020 for existing retail customers. The following table illustrates the expected increase for the three categories of water rates charged to residential and other customers billed on a quarterly basis:

*Table 4.1*

<i>Projected Water Rate Increases for Quarterly Water Service: FY2012-2020 (per 1,000 gallons)<sup>12</sup></i>									
	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>
Service chg.	8%	8%	8%	3%	3%	3%	1%	1%	1%
Non-peak commodity	8%	8%	8%	3%	3%	3%	1%	1%	1%
Peak commodity	8%	8%	8%	3%	3%	3%	3%	3%	3%

**Non-peak commodity rate.** The May 27 water rate study projects a cumulative increase of 36 percent in the non-peak commodity rate by FY2020 as compared to the FY2011 rate of \$3.03 per 1,000 gallons:

<sup>12</sup> May 27 water rate study, Appendix, Schedule 16A.

Table 4.2

<i>Non-Peak Commodity Rate Projections: FY2012-2020 (per 1,000 gallons)<sup>13</sup></i>									
	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>
Rate	\$3.27	\$3.53	\$3.82	\$3.93	\$4.05	\$4.17	\$4.21	\$4.25	\$4.30
% Increase	8%	8%	8%	3%	3%	3%	1%	1%	1%

**Peak commodity rate.** The May 27 water rate study projects a cumulative increase of 42 percent in the peak commodity rate by FY2020 as compared to the FY2011 rate of \$4.62 per 1,000 gallons. The peak rate is an additive rate – that is, consumption during peak periods is charged both the non-peak and peak rates – and applies when a customer’s consumption exceeds the sum of that customer’s winter-quarter use, plus an allowance. The charges are seasonal and apply only during the six month June – November period.

Table 4.3

<i>Peak Commodity Rate Projections: FY2012-2020 (per 1,000 gallons)<sup>14</sup></i>									
	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>
Rate	\$4.99	\$5.39	\$5.82	\$5.99	\$6.17	\$6.36	\$6.55	\$6.75	\$6.95
% Increase	8%	8%	8%	3%	3%	3%	3%	3%	3%

**Service charge.** For single family/townhome customers, the May 27 water rate study projects a cumulative increase of 36 percent in the quarterly service charge by FY2020 as compared to the FY2011 charge of \$7.47 per quarter:

Table 4.4

<i>Service Charge (Single Family/Townhome) Rate Projections: FY2012-2020<sup>15</sup></i>									
	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>
Rate	\$8.07	\$8.73	\$9.42	\$9.69	\$9.99	\$10.29	\$10.39	\$10.50	\$10.60
% Increase	8%	8%	8%	3%	3%	3%	1%	1%	1%

<sup>13</sup> May 27 water rate study, Appendix, Schedule 16A, “Current Rate Structure – Alternative 4.” Although Alternative 4 appears to apply only to customers located inside the City, it has been used as a source for two reasons: (1) Schedule 16A does not provide another alternative; and (2) the City is not proposing that customers located outside the City pay different rates than those located inside the City. Schedule 16A does not explain the meaning of “Alternative 4.”

<sup>14</sup> Id.

<sup>15</sup> Id.

**V. ISSUES IDENTIFIED BY THE BOARD**

**A. What were the bases underlying the City’s proposal to increase its water commodity charges in FY2012 and beyond?**

The City’s May 27 water rate study attributes the need for substantial rate increases in both commodity and service charges to an increasing system revenue requirement over the period FY2012-FY2020. According to the water rate study, the estimated system revenue requirements for FY2012 through FY2020 are significantly greater than system revenue requirements that might have been determined in prior years due principally to: (1) the establishment of three new reserve funds; (2) capital improvement expenditures; and (3) increases in operating expenses. It should be noted that *projected expenditures have been added to the system’s costs as established in years past; MFSG appears to have made no effort to determine whether it was reasonable to use those costs as a starting point.*

**New Reserve Funds.** MFSG proposes that the City establish three new reserve funds: (1) an operating and maintenance (O&M) reserve; (2) a repair, replacement, and rehabilitation (3R) reserve; and (3) a debt service reserve. MFSG explains that for accounting and financial statement purposes the reserves would constitute a council-imposed restriction on Fund Balance in the Water Fund’s Operating Fund.<sup>16</sup> The cost of contributions to these new reserve funds for the period FY2012-FY2016 is shown in millions of dollars below:

*Table 5.1*

<i>MFSG – Reserve Fund Contributions (in Millions)<sup>17</sup></i>						
<b>Reserve Fund</b>	<b>FY11</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>
O&M	-	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50
3R	-	\$0.20	\$0.20	\$0.21	\$0.21	\$0.21
Debt service	-	\$0.26	\$0.57	\$0.00	\$0.66	\$0.00
<b><i>Contributions</i></b>	<b>-</b>	<b>\$1.96</b>	<b>\$2.27</b>	<b>\$1.71</b>	<b>\$2.37</b>	<b>\$1.71</b>

As a review of Attachment 3 will show, these reserve contributions are comparable in magnitude to many of the transfers made by the water system to the City’s general fund over the period 1981-2008. They also are comparable to the FY2009 transfer of \$2.54 million (subsequently reversed in response to the court decree) and the planned but enjoined FY2010 transfer of \$2.2 million.

Among other things, the rate study does not explain why its prior rates, which were sufficient to generate excess water revenues in the millions of dollars annually, are not sufficient to fund the reserves. It also does not explain why reserve funding is identified as a permanent rate element rather than a temporary rate element that expires upon funding of the reserve fund.

**Capital improvement expenditures.** The May 27 water rate study identifies 10 major operating and system expansion projects in the City’s current capital improvements program (CIP) at a

<sup>16</sup> May 27 water rate study at 10.

<sup>17</sup> See May 27 water rate study, Table 2.4 at 12.

total cost of \$27.96 million over the period FY2012-FY2016.<sup>18</sup> The City’s proposed FY2012-FY2016 CIP – which was released prior to the rate study – identifies eight major projects at a total cost of \$33.325 million; the projects are described in more detail in Section V.D, below.

	<u>MFSG Study</u>	<u>Falls Church CIP</u>
McLean pumping station (PS) improvements	X	X
Water main replacement program	X	X
Kirby Rd. water main replacement (Chain Bridge PS to Chesterbrook PS)	X	X
Kirby Rd. water main replacement (Chesterbrook PS to Westmoreland St.)	X	X
Tysons Tank No. 2	X	X
Tysons Tank No. 1 to Tank No. 2 water main	X	X
Chain Bridge PS to Merchant Ln. water main	X	X
Dolley Madison to McLean PS water main	X	X
FY10 Seven Corners system improvements	X	
Storage shed replacement and paving	X	

As shown in the chart below, the capital improvements projects discussed in the May 27 water rate study and FY2012-FY2016 CIP differ not only in terms of overall cost, but in terms of projects designated “operating” and “system expansion:”

Table 5.2

<i>Comparison of Capital Improvement Plan Funding by Fund (in Millions)<sup>19</sup></i>						
	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>Total</b>
<i>Operating Fund</i>						
MFSG Rate Study	\$2.14	\$4.52	\$3.25	\$4.41	\$4.25	\$18.57
Proposed FY12 CIP	\$2.45	\$2.90	\$2.10	\$2.00	\$2.00	\$11.45
<i>System Expansion Fund</i>						
MFSG Rate Study	\$0.88	\$1.26	\$3.85	\$2.64	\$0.75	\$ 9.38
Proposed FY12 CIP	\$1.20	\$3.03	\$7.00	\$4.65	\$6.00	\$21.88
<b>Total</b>						
MFSG Rate Study	<b>\$3.03<sup>20</sup></b>	<b>\$5.78</b>	<b>\$7.10</b>	<b>\$7.05</b>	<b>\$5.00</b>	<b>\$27.96</b>
Proposed FY12 CIP	<b>\$3.65</b>	<b>\$5.93</b>	<b>\$9.10</b>	<b>\$6.65</b>	<b>\$8.00</b>	<b>\$33.33</b>

As the chart demonstrates, MFSG and the City’s CIP allocate FY2012-FY2016 capital expenses to the Operating and System Expansion funds in opposite manners:

<sup>18</sup> May 27 water rate study at 8. These ten projects include two that are not included in the City’s FY2012-FY2016 CIP but are included in prior CIPs.

<sup>19</sup> May 27 water rate study, Table 2.3, at 9; City of Falls Church Capital Improvements Program, Utility Funds Fiscal Year 2012-2016, City Manager Proposed Budget, Work Session (April 7, 2011) at 3.

<sup>20</sup> It is assumed that MFSG’s FY2012 total of \$3.03 million is due to rounding.

	<u>Total</u>	<u>Operating Fund</u>	<u>System Expansion Fund</u>
MMSG Rate Study	\$27.96M	\$18.57M = 66%	\$ 9.38M = 34%
City FY2012-FY2016 CIP	\$33.33M	\$11.45M = 34%	\$21.88M = 66%

Under assumptions and guidelines developed by MMSG with the assistance of City staff, “[e]xpenses and capital costs will be evaluated for allocation between the Operating Fund (Existing Users) and the System Expansion Fund (New Connections).”<sup>21</sup> The rate study explains that the System Expansion Fund “includes costs associated with serving new customers and is offset by revenues collected via water availability fees paid for by new customers when they connect to the water system or when they pre-pay availability fees in advance of actually connecting to the system.”<sup>22</sup> System expansion costs typically include the costs of constructing lines and facilities to dedicate, expand, or extend service capability and to connect new properties to a water system.

When a system charges cost-based availability fees, as Fairfax Water does, growth pays for the facilities necessary to provide service for that growth. It cannot be determined to what extent growth in the City of Falls Church water system pays for growth. The May 27 water rate study does not address the City’s availability fees and charges and, although availability fees and charges have not increased since 1996, the study does not recommend any change in them.<sup>23</sup> The City declined to respond to questions from staff regarding availability fees.

The allocation differences shown in Table 5.2 indicate that the May 27 water rate study apparently underallocates system expansion costs to new customers as compared to the City’s CIP, and overallocates these costs to existing customers, of which approximately 90 percent reside or are located in Fairfax County. As a result, commodity and service-charge rates charged to existing customers must be increased to absorb these excess costs. *In other words, rather than fully recovering system expansion costs through availability fees, under the May 27 water rate study the City’s existing water service customers subsidize system expansion through inflated commodity and service charges.*

**Increases in Operating Expenses.** According to the May 27 water rate study, the third major cost driver for the recommended rate increases is increasing system operating expenses. Operating expenses include costs related to the following categories: (1) water administration; (2) customer service; (3) source of supply; (4) water distribution; (5) water connection; (6) transfers; (7) debt service; and (8) other post-employment benefits (OPEB). The May 27 water rate study projects an increase of approximately 27 percent in operating expenses over the period FY2012 to FY2020, as shown below:

---

<sup>21</sup> May 27 water rate study at 3.

<sup>22</sup> *Id.* at 2.

<sup>23</sup> See June 14, 2011 letter of Philip Alin, Chairman, Fairfax Water, to City of Falls Church Mayor Nader Baroukh, at 4.

Table 5.3

<i>Increases in Operating Costs FY2012-2020 (in Millions)<sup>24</sup></i>								
<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>
\$17.858	\$18.393	\$18.945	\$19.513	\$20.099	\$20.702	\$21.323	\$21.963	\$22.621

Factors contributing to this increase include an overall operating expenses inflation rate of three percent (3%).<sup>25</sup> The City declined to respond to questions regarding its operating expenses.

**Impact on commodity rates.** According to Schedule 2 of the May 27 water rate study, and as shown below, system revenue requirements are allocated almost entirely to the commodity charge. The City declined to respond to questions regarding its allocation process.

Table 5.4

<i>Water Rate Study Cost Allocation: Determination of Commodity Charges<sup>26</sup></i>			
<b>Cost Category</b>	<b>Existing Customers</b>		<b>New Customers</b>
	<b>Commodity Charges</b>	<b>Service Charge</b>	<b>Availability Fees</b>
Administration	80%	20%	N/A
Customer service	0%	100%	N/A
Source of supply	100%	0%	N/A
Water distribution	100%	0%	N/A
Water connection	100%	0%	N/A
Reserves	100%	0%	N/A
Debt service	100%	0%	N/A
OPEB	100%	0%	N/A

**B. In determining its water rate increases for FY2012 and beyond, did the City faithfully comply with all of the water ratemaking principles adopted by the Board on May 25, 2010?**

On May 25, 2010, the Board adopted seven water ratemaking principles, which are provided in their entirety as Attachment 4. Pursuant to these principles, water systems serving Fairfax County customers should:

1. Periodically undertake a condition, integrity, and valuation study to fully assess the system, evaluate critical factors, and to update cost estimates;
2. Fund and maintain adequate reserves in a segregated fund;

<sup>24</sup> May 27 water rate study, Appendix, Schedules 2 and 7.

<sup>25</sup> May 27 water rate study at 7.

<sup>26</sup> May 27 water rate study, Appendix, Schedule 2.

3. Establish water rates that are reasonably based and set on a well-substantiated cost basis that reflects the direct and indirect costs of the water system, as well as necessary contributions to Water Fund reserves;
4. Charge all similarly-situated customers the same rates;
5. Not transfer water revenues or reserves to the municipality's general fund to be applied towards expenditures unrelated to water utility services;
6. Routinely update water system study findings and cost estimates, which should be reflected in budget documents with details described on a segregated basis in supporting budget documents; and
7. Attain, at a minimum, water utility distribution system integrity rates that are at or near nationwide median standards as published by the American Water Works Association.

As discussed below, there remain significant questions about the City's ratemaking process. Consequently, at this time it cannot be concluded that the City of Falls Church faithfully complied with all of the Board's ratemaking principles, particularly Principle 3.

**Principle 1:** The Board's ratemaking principles recognize that a water utility should periodically undertake a condition, integrity, and valuation study to fully assess the system, evaluate critical factors, and to update cost estimates. It cannot be determined when, if ever, the City last conducted such a study.

MFSG apparently did not conduct such a study as part of its ratemaking efforts. According to the May 27 water rate study, MFSG's scope of work for the City was limited to three tasks: (1) identifying and addressing certain policy objectives; (2) developing a financial model to determine system revenue requirements; and (3) creating a financial plan for the City to ensure adequate revenues.<sup>27</sup>

**Principle 2:** Funding and maintaining adequate reserves in a segregated fund, as contemplated by the second principle, protects against commingling and ensures that reserves funds are used only for stated purposes. While the water rate study schedules included in the Appendix identify the funds on an individual basis, it appears that the reserves will not be funded on a segregated basis.

As structured by MFSG, reserve funding is considered an element of the revenue requirement, with costs recovered from water revenues collected from existing users' service-charges and commodity charges. Unlike a surcharge that expires once the reserves are fully funded, this rate approach ensures that – absent a future rate decrease – ratepayers will continue to pay for the establishment of reserve funds even after they are fully funded.

The water rate study does not discuss the segregation of funds and provides no guidance regarding use and replenishment.

---

<sup>27</sup> May 27 water rate study at 2.

**Principle 3:** Pursuant to the third principle, a water provider should establish water rates that are reasonably based and set on a well-substantiated cost basis that reflects the direct and indirect costs of the water system, as well as necessary contributions to Water Fund reserves. Compliance with this principle requires transparency on the part of the provider, so that the County can ensure that costs are in fact substantiated and reasonable. In this case, transparency is particularly important, as various actions on the part of the City or its rate consultant have called into question the reasonableness of the City's recommended water rate increases. These actions include: (1) the City's long history of setting water rates at levels that generated millions in surplus water revenues; (2) the use of system costs and rates from preceding years as the apparent starting point for the water rate study; (3) the exclusion of availability fees from the scope of the water rate study; and (4) the City's refusal to make publicly available the utility-basis water rate study presented to the City Council in March 2011. Nonetheless, the City declined the opportunity to respond to staff's questions and explain its water ratemaking process. *Given numerous unanswered questions regarding the City's water rate study, it cannot be concluded that the water rates charged by the Falls Church water system are reasonably based and set on a well-substantiated cost basis.*

The following are examples of the types of questions that remain unanswered:

- Does the water system's transfer of administrative costs to the General Fund comply with Judge Ney's decree that the transfer be limited to compensation for *reasonable* direct and indirect costs associated with operating the water system? For example, Schedule 2 of the water rate study, regarding operating and maintenance (O&M) expenses, identifies a transfer of administrative costs to the City's General Fund in the amount of \$1,200,000 in FY2012, increasing to \$1,520,124 by FY2020. How were these amounts determined?
- Does the water rate study underestimate revenues, resulting in recommended rate increases that may not be warranted? For example, the rate reconciliations and rate analyses provided in Schedules 12, 13, 14, and 15 appear to underestimate revenues associated with peak consumption by treating the peak rate as a stand-alone rate, not as an additive rate. In Schedule 15, correctly calculating revenues attributable to peak consumption increases FY2011 total variable (commodity) charge revenue by \$869,034 ( $286,810 \times \$7.65 = \$2,194,097$ , not \$1,325,063).
- In establishing the \$4.3 million O&M reserve, why did MFSG begin with a negative \$5.558 million balance for FY2011, thereby increasing the cost to ratepayers over time to about \$9.8 million? ( $-\$5.5M - \$4.3M = -\$9.8M$ ) How can this negative beginning FY2011 balance as shown on Schedule 7 be reconciled with the system's plans, until enjoined, to transfer \$2.2 million in surplus water revenues to the City's general fund in FY2010?
- Are operating costs reasonable? Most cost categories in Schedule 2, regarding O&M expenses, include a number of cost subcategories, including those for "salaries and wages," "materials, supplies, and other," and "professional/contractual" expenses. Schedule 2 lacks adequate information to assess the reasonableness of the costs, however. For example, in the Source of Supply category, reported FY2012

professional/contractual costs for “repairs/maintenance” are \$950,000, increasing to \$1,203,432 by FY2020. What do these costs represent? How are they determined?

- Why has the City chosen to raise rates to establish its reserves, rather than using available cash balances? According to Schedule 19, Cash Balance, the water system held \$19,560,376 in total available cash balances in Budget FY2011. The available cash balance is forecast to increase to \$34,551,073 by FY2020.
- Are existing water customers subsidizing wholesale service to Vienna through their commodity charges and service charges? The City currently provides wholesale service to the Town of Vienna. The water rate study includes wholesale revenues in determining the system’s net revenue requirement but does not appear to separately identify the expenses associated with providing wholesale service. What are the expenses associated with providing wholesale water service, and how do they compare to wholesale revenues? What would be the impact to existing customers if the City terminated its provision of wholesale service to Vienna?
- Schedule 11 projects total billable water consumption to grow system-wide by just 0.35 percent per year during the period FY2012 through FY2020. How does the City reconcile this minimal expected growth in water consumption with the \$21.88 million in planned system expansion projects described in the City’s FY2012-FY2016 CIP and discussed in Section V.A, above?

**Principle 4:** Under the fourth principle, a water service provider should charge all similarly-situated customers the same rates. With respect to existing residential customers with comparable meter sizes, the City’s water system complies with this principle by charging the same service charge and commodity rate regardless of location inside or outside City limits.

**Principle 5:** The fifth principle prohibits the transfer of water revenues or reserves to the municipality’s general fund to be applied towards expenditures unrelated to water utility services. In compliance with the January 6, 2010 opinion letter and decree, the City’s water budgets no longer include a line item for the transfer of a management fee to the City’s general fund. As noted in the discussion of Principle 3, based solely on publicly-available information, it cannot be determined whether the City’s transfer of compensation from the water fund to the general fund is limited to *reasonable* direct and indirect costs associated with operating the water system.

**Principle 6:** The sixth principle directs providers to routinely update water system study findings and cost estimates, and to reflect the information and material in budget documents. Under this principle, the City should have a process by which it periodically reviews its findings and cost estimates. No publicly-available information indicates that the City has any such process or plans to implement such a process.

**Principle 7:** The seventh and last principle encourages service providers to attain, at a minimum, water utility distribution system integrity rates that are at or near nationwide median standards as published by the American Water Works Association. The CPC was not asked by the Board to review the integrity of the City of Falls Church water system.

**C. What was the precise nature, total cost, and exact locations of the capital improvements that the City of Falls Church made to its water system during the past five years, and how were those improvements funded when made?**

Although it appears to be a straight-forward question, this issue cannot be readily addressed, primarily because the capital improvements program (CIP) documents that are available on the City’s website for the period FY2006-FY2011 identify planned capital improvements for the period, but neither describe them nor provide the total cost of each project.

The City’s CIP documents for the period FY2006-FY2011 list 17 capital improvement projects. These projects and the fiscal years in which expenditures were planned are shown below:

Table 5.5

<i>FALLS CHURCH WATER SYSTEM IMPROVEMENTS – FY2012-2016 (CIPs)<sup>28</sup></i>						
<b>Project</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>
Arlington special pump station	X	X				
SCADA system improvements	X	X				
Water utility security	X	X				
Meter replacement program	X	X	X			
Water main replacement (Rte 50)	X	X	X			
Seven Corners system improvements	X	X		X	X	
Wash Aqueduct residuals disposal	X	X	X	X		
Water main replacement program	X	X	X	X	X	X
Property yard relocation		X	X	X	X	
Chesterbrook pump station upgrade		X	X			
Telephone system replacement			X			
McLean pump station improvements			X	X	X	X
Pump station control center			X	X		
Document management system				X		
Kirby Rd water main (Chain Bridge-Chesterbrook)					X	X
City Hall West Wing improvements					X	X
Storage shed replacement/paving						X

Attachment 5 provides reported planned expenditures for each of these projects during each of the fiscal years.

Of these 17 projects, the largest during the five-year period FY2007-FY2011 appears to have been that relating to Washington Aqueduct Residuals Disposal, which had planned expenditures

<sup>28</sup> City of Falls Church Adopted Budgets and Capital Improvements Program, FY2006, FY2007, FY2008, FY2009, FY2010, and FY2011. As noted, the City documents do not describe the nature of the improvements. As a result, the nature of the City Hall West Wing improvements cannot be determined. Planned expenditures for this project were \$75,000 in FY2010 and \$100,000 in FY2011.

of \$10,600,000. The City’s water main replacement program was the next largest project, with planned expenditures totaling approximately \$6,000,000. The City expected to spend \$5,000,000 on its Route 50 water main replacement project.<sup>29</sup>

Although the CIPs do not provide descriptions of these projects, the Washington Aqueduct Residuals Disposal project appears to have been related to federally-mandated changes at the Dalecarlia Treatment Plant. As noted in several CIP narratives during this period,

[t]he principal challenges to both the Water and the Sewer Utility Funds are capital costs incurred by our regional partners, which we must pass through in our rate schedules. With respect to the Water Fund, changes at the Dalecarlia Treatment Plant will put an added strain on our ability to finance the long-term capital needs of the system.<sup>30</sup>

**Pay-as-you-go financing.** It appears that the City may have relied on current revenues to finance capital improvements prior to FY2006. Even beyond this period, the City’s Water Fund operating and maintenance (O&M) budgets include some capital costs. For example, in pre-FY2009 City budget documents, the “source of supply” O&M cost category includes a subcategory, “COE – Capital Costs.” Although undefined, presumably the acronym “COE” refers to the Baltimore District, U.S. Army Corp of Engineers, which operates the Washington Aqueduct. According to Water Fund budgets, COE – Capital Costs have been included as an O&M cost item for years:

Table 5.6

<i>City of Falls Church Water Fund COE-Capital Cost – FY2002-FY2008 Budgets<sup>31</sup></i>						
Actual			Revised	Actual	Original	Adopted
FY02	FY03	FY04	FY05	FY06	FY07	FY08
\$822,986	\$1,212,696	\$832,778	\$1,156,554	\$1,365,206	\$843,000	\$967,000

MFSG’s May 27 water rate study includes COE – Capital Costs in the water system revenue requirement through FY2020:

<sup>29</sup> City of Falls Church 2006-2007 Annual Expenditure and Five-Year Capital Improvements Program at 270.

<sup>30</sup> City of Falls Church Adopted 2007-2008 and Adopted 2008-2009 Annual Expenditure and Five-Year Capital Improvements Program at 239 and 199, respectively.

<sup>31</sup> City of Falls Church 2005-2006 and Adopted 2007-2008 Annual Expenditure and Capital Improvements Program, at 207 and 214, respectively.

Table 5.7

<i>City of Falls Church Water Fund COE-Capital Cost – May 27 water rate study<sup>32</sup></i>						
<b>Adopted</b>	<b>Budget</b>	<b>Projected</b>				
<b>FY11</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY20</b>
\$1,077,000	\$2,100,000	\$2,163,000	\$2,227,890	\$2,294,727	\$2,363,569	\$2,660,217

**Debt financing.** In FY2007, the City issued general obligation funds to finance its share of the Dalecarlia water treatment plant renovation by the U.S. Army Corps of Engineers. In FY2009 and FY2010, the City began issuing general obligation bonds for water system improvement projects, but at this time it cannot be determined which projects were funded with these bonds.<sup>33</sup>

The Water Fund began separately identifying its interest and principal payments in FY2008. The following table provides debt service figures as reported in City budget documents. Budgets beginning in FY2009 refer to “net expenditures supported by general revenues” instead of “total.” Beginning in FY2010, a line item for “professional/contractual” (P/C) was added to the water fund debt service category.

Table 5.8

<i>City of Falls Church Water Fund Debt Service – FY2005-FY2012<sup>34</sup></i>							
	<b>Actual</b>	<b>Actual</b>	<b>Actual</b>		<b>Actual</b>	<b>Adopted</b>	<b>Proposed</b>
	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12</b>
P/C		-	-	\$650	45,394	\$1,000	\$1,000
Principal	\$0	\$136,870	-	-	-	\$925,000	\$1,369,104
Interest	\$0	-	\$433,234	\$549,914	\$684,781	\$763,101	\$919,703
<b>Total</b>	\$0	\$136,879	\$433,234	\$550,564	\$730,175	\$1,689,101	\$2,289,807

According to Schedule 3 of the May 27 water rate study, the water system has \$30,859,000 in existing debt, comprised of \$22,022,115 in principal and \$8,856,885 in interest. One hundred percent (100%) of the debt is allocated to operating expenses for recovery through charges to existing users. Zero (0%) is allocated to system expansion or water purchases.

2006 (GO) Bond (Water)	Principal	\$ 4,150,000
2006 (GO) Bond (Water)	Interest	\$ 879,603
2007 VRA Water Bond	Principal	\$ 7,975,000
2007 VRA Water Bond	Interest	\$ 4,170,546

<sup>32</sup> May 27 water rate study, Schedule 2.

<sup>33</sup> City of Falls Church Adopted FY2010 Annual Expenditures and Revenues and Five-Year Capital Improvements Program at 165.

<sup>34</sup> City of Falls Church budget documents, generally referred to as Annual Expenditures and Capital Improvements Program. See Adopted FY2008 at 219, Adopted FY2009 at 189, Adopted FY2010 at 165, Adopted FY2011 at 177, and Proposed FY2012 at 172.

2009 VRA Water Bond	Principal	\$ 5,385,000
2009 VRA Water Bond	Interest	\$ 2,436,977
DC Loan	Principal	\$ 1,150,555
DC Loan	Interest	\$ 891,019
U.S. Treasury Loan	Principal	\$ 3,341,560
U.S. Treasury Loan	Interest	<u>\$ 478,740</u>
Total Existing Debt		\$30,859,000

**D. What is the precise nature, total cost, and exact locations of all projected capital improvements to the City of Falls Church’s water system that formed the basis for the City’s projected water rate increases for Fiscal Years 2012, 2013, 2014, 2015, and thereafter, and do any such improvements involve anything other than the maintenance, improvement, and/or upgrading of the City’s existing water system?**

According to Proposed FY2012 budget documents presented at the City Council’s April 7 and April 25, 2011, meetings, the City of Falls Church proposes eight water system capital improvement projects during the period FY2012-FY2016. Two of these projects are maintenance projects. The remaining six are system expansion projects, several of which were recommended by the consultant to the City’s 2005 Water System Master Plan and 2010 Supplement (hereinafter Master Plan). The estimated cost of these eight projects during the five-year planning period is approximately \$33.325 million.

The following descriptions, statements of need, project costs, and schedules are excerpted from materials presented during the City Council’s April 25 FY2012 Budget Meeting:

*Maintenance:*

- 1) McLean Pumping Station Improvements Total estimated cost: \$4,200,000  
 The McLean Pumping Station was constructed in the early 1970s, and some of the equipment in the facility is the originally-installed equipment. A study to evaluate the structure, mechanical equipment, control, and electrical equipment is needed. It is possible that the station will need to be replaced with a new facility having a greater capacity.
- |                                     |                            |
|-------------------------------------|----------------------------|
| Engineering and Design (\$450,000): | January 2011 to April 2012 |
| Construction (\$3,750,000):         | May 2012 to May 2013       |

- 2) Water Main Replacement Program Total estimated cost: \$17,000,000  
 The City is pursuing a systematic approach to water main replacement. Replacement is based on factors including main break history, impact to customers, and traffic impacts. The list of water main replacements is reevaluated annually and priority projects selected for construction.
- |  |          |
|--|----------|
| Engineering and Design (\$200,000/year): | On-going |
| Construction (\$1,800,000/year):         | On-going |

*System Expansion:*

1) Kirby Road Water Main Replacement (#1) Total estimated cost: \$10,200,000  
The Master Plan consultant recommended that several water main projects be completed by 2014 or 2015 to meet future demand. This Kirby Road project consists of approximately 15,500 feet of 36-inch water line along Kirby Road from the Chain Bridge Pumping Station to the Chesterbrook Pumping Station. Route selection, permitting, and engineering on this project began in 2010.

Engineering and Design (\$1,050,000): January 2011 to September 2012  
Construction (\$9,150,000): November 2012 to November 2014

2) Kirby Road Water Main Replacement (#2) Total estimated cost: \$3,750,000  
The Master Plan consultant recommended that several water main projects be completed by 2015 to meet future demand. This second Kirby Road project consists of 5,700 feet of 36-inch water main in Kirby Road from the Chesterbrook Pumping Station to Westmoreland Street. Engineering was to have begun in July 2011 to meet the project's 2015 completion date.

Engineering and Design (\$400,000): July 2011 to April 2013  
Construction (\$3,350,000): June 2013 to June 2015

3) Chain Bridge P.S. to Merchant Lane Water Main Total estimated cost: \$1,300,000  
This project consists of 1,700 feet of new 48-inch water main in Dolley Madison Boulevard from the Chain Bridge Pumping Station to Merchants Lane. The need for this facility is based largely on projected future demand in the Tysons Corner and surrounding area.

Engineering and Design (\$130,000): January 2013 to January 2015  
Construction (\$1,170,000): March 2014 to January 2015

4) Dolley Madison to McLean P.S. Water Main Total estimated cost: \$1,400,000  
The project consists of 2,100 feet of proposed 36-inch main in Dolley Madison Boulevard from Old Dominion Drive to the McLean Pumping Station. The project was recommended by the City's Master Plan consultant to meet future projected demands. The project location and scope will be re-evaluated upon completion of the preliminary engineering study of the McLean Pumping Station.

Engineering and Design (\$200,000): August 2012 to June 2013  
Construction (\$1,200,000): July 2013 to April 2014

5) Tysons Tank No. 2 Total estimated cost: \$6,000,000  
The Master Plan consultant recommended a second water storage tank at Tysons Corner, with a proposed capacity of 3 million gallons. The City owns a site intended for this purpose on Old Courthouse Road, which can accommodate the proposed tank. The need for this facility is based on projected future demand in the Tysons Corner and surrounding area.

Engineering and Design (\$500,000): January 2014 to March 2015  
Construction (\$5,500,000): May 2015 to November 2016

6) Tysons Tank No. 1 to Tank No. 2 Water Main Total estimated cost: \$1,325,000  
As noted above, the Master Plan consultant recommended a second water storage tank at Tysons Corner. Along with this new tank, approximately 3,800 feet of 16-inch water main

will be required to connect the two Tysons area storage tanks. The need for this facility is based on projected future demand in the Tysons Corner and surrounding area.

Engineering and Design (\$150,000): January 2014 to March 2015  
 Construction (\$1,175,000): May 2015 to November 2016

All eight projects will be debt-financed.<sup>35</sup> Projected expenditures for each of the projects during the period FY2012 – FY2016 are provided in the table below.

Table 5.9

<b>FALLS CHURCH WATER SYSTEM IMPROVEMENTS – FY2012-2016 (in Millions)<sup>36</sup></b>							
<b>Improvement</b>	<b>Project Cost</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>Totals</b>
<i>Maintenance Projects</i>							
McLean P.S.	\$4.200	\$0.450	\$0.900	\$0.100			\$1.450
Water main replacement program	\$17.000	\$2.000	\$2.000	\$2.000	\$2.000	\$2.000	\$10.000
<b>Subtotal</b>	<b>\$21.200</b>	<b>\$2.450</b>	<b>\$2.900</b>	<b>\$2.100</b>	<b>\$2.000</b>	<b>\$2.000</b>	<b>\$11.450</b>
<i>System Expansion Projects</i>							
Kirby Rd. water main replacement (#1)	\$10.200	\$1.000	\$2.500	\$3.000	\$2.100		\$8.600
Kirby Rd. water main replacement (#2)	\$3.750	\$0.200	\$0.200	\$1.950	\$0.900	\$0.500	\$3.750
Chain Bridge P.S. to Merchant Ln	\$1.300		\$0.130	\$0.600	\$0.570		\$1.300
D.Madison - McLean P.S.	\$1.400		\$0.200	\$1.200			\$1.400
Tysons Tank No. 2	\$6.000			\$0.100	\$0.400	\$5.000	\$5.500
Tysons Tank #1 to #2 water main	\$1.325			\$0.150	\$0.675	\$0.500	\$1.325
<b>Subtotal</b>	<b>\$23.975</b>	<b>\$1.200</b>	<b>\$3.030</b>	<b>\$7.000</b>	<b>\$4.645</b>	<b>\$6.000</b>	<b>\$21.875</b>
<b>TOTAL MAINTENANCE AND SYSTEM EXPANSION</b>							
<b>Total</b>	<b>\$45.175</b>	<b>\$3.650</b>	<b>\$5.930</b>	<b>\$9.100</b>	<b>\$6.645</b>	<b>\$8.000</b>	<b>\$33.325</b>
<i>Sources of Funds</i>							
Debt Financed		\$3.650	\$5.930	\$9.100	\$6.645	\$8.000	\$33.325

Attachment 6 is the chart presented to the Falls Church City Council by its City Manager at the City's April 7, 2011, budget work session, from which this information was derived.

<sup>35</sup> City of Falls Church Capital Improvements Program, Utility Funds Fiscal Year 2012-2016, City Manager Proposed Budget, Work Session (April 7, 2011) at 3.

<sup>36</sup> Presentation, City of Falls Church Capital Improvements Program, Utility Funds, Fiscal Year FY2012-2016, City Manager Proposed Budget, Work Session (April 7, 2011) at 3; Presentation, City of Falls Church FY2012 Budget Council Meeting (April 25, 2011).

According to Schedule 5 of the May 27 water rate study, regarding Operating Fund projected debt, the City plans debt issuances totaling \$38,150,000 for the period FY2012-FY2020, and \$40,650,000 for the period FY2011-FY2020. As noted previously, operating fund expenses are recovered from existing users in retail rates, primarily commodity charges.

The Water System Master Plan and Supplement may describe capital projects planned for the period beyond FY2016. The Master Plan and Supplement do not appear to be publicly available, however. Staff asked the City about future improvements but, as previously noted, the City declined to respond to staff's questions.

## **VI. CONSUMER PROTECTION**

### **A. The City has not been responsive to the Fairfax County customers of its water system**

Currently, approximately 90 percent of the City's water system customers are located in Fairfax County, outside City limits. In his January 6, 2010 opinion letter, Judge Ney noted that 92 percent of the transfer deemed unconstitutional was funded by Fairfax County customers who are not represented on the Falls Church City Council. These numbers will only grow over time. The May 27 water rate study assumes no growth (0.0%) in customers located inside City limits, but a one percent (1%) annual increase in customer growth outside City limits.<sup>37</sup>

Fairfax County customers have voiced concerns to the City Council about its proposal to increase water rates, both in writing and in appearances before the City Council.<sup>38</sup> Included as Attachment 7 is a copy of a June 25, 2011, letter sent to the City of Falls Church City Council by a Fairfax County customer of the City's water system, Mr. Kirk Randall. Mr. Randall was one of numerous County residents who spoke before the City Council at its July 11, 2011, second reading of TO11-15, *Ordinance to Amend Water Rates as of August 1, 2011*. Attachment 8 is a copy of a September 12, 2011, letter signed by 18 Fairfax County customers of the City's water system opposing the City's water rate increases. A signatory of that letter, Mr. Ryan Scarborough, spoke before the Council that same date in opposition to the proposed rate increases.

A recurring theme in these complaints is the belief that Fairfax County customers of the City of Falls Church water system have paid rates that essentially fund the system twice: they have paid both for the cost of the system's operating and capital expenses to date and for the approximately \$58 million in surplus revenues that, as shown on Attachment 3, the water system transferred to the City's general fund since 1981. While City residents benefitted from those transfers in the form of subsidized tax rates, County customers did not. Some customers note that despite the court ruling deeming these transfers unconstitutional, the City has not volunteered to refund the transferred revenues to the water system and its customers.

---

<sup>37</sup> May 27 water rate study at 3-4.

<sup>38</sup> The City of Falls Church posts video recordings of its City Council meetings on its website. The June 27, 2011, July 11, 2011, and September 12, 2011, recordings include the comments made by Fairfax County customers of the Falls Church water system to the City Council, as well as the Council's responses.

Fairfax County customers also express concerns over the City's plans over the next several years to issue debt to cover costs associated with a significant system expansion to meet projected future demand in Fairfax County. As shown in Table 5.9, City budget documents estimate the total cost of six water system-expansion improvements to be \$23.975 million, with costs during the FY2012-FY2016 period estimated at \$21.875 million. Fairfax County customers, who are not represented on the City Council, will shoulder in excess of 90 percent of the cost of these and future debt issuances, in addition to the system's reserve requirements and routine operating and capital expenses.

The City has dismissed the complaints of its Fairfax County customers, contending that it has not increased its water rates since 2005, and that rate increases are warranted to cover increasing costs and to ensure system safety and reliability. The City's dismissal of Fairfax County customer complaints on these grounds cannot be supported by the information the City has presented to the public on its website.

Contrary to the City's suggestion, a water rate increase is not necessarily warranted simply because of the passage of time. A rate increase should be implemented only if the service provider can demonstrate that current rates are insufficient to cover costs. For the reasons described in this report, the Consumer Protection Commission cannot conclude that the City's FY2011 water rates are or were insufficient to cover the system's costs. As Judge Ney concluded in his January 6, 2010 opinion letter, even the water rates the City charged prior to 2005 "were more than sufficient to operate the water system and pay for all capital improvements. . . . [T]he [2005] rate increase was needed simply in order to transfer more money to the general fund."<sup>39</sup>

The Commission finds the City Council's claims regarding system safety and reliability similarly indefensible. Falls Church does not contend that its current system is inadequate to provide safe service to existing customers. Rather, its claims relate to its perceived inability to satisfy projected growth within Fairfax County – growth that, according to Schedule 11 of its own rate study, is projected at no more than 0.50 percent per year over the period FY2012-FY2020. It is to serve this projected demand that the City's water system proposes six system expansion projects in the FY2012-FY2016 period. It is of concern that the City intends to undertake these capital improvement projects using only debt financing, thereby increasing its debt load from \$30.859 million to an anticipated \$64.184 million by FY2016. Also troubling is the City's proposal to recover its debt service costs through commodity and service charges assessed on its existing customer accounts – approximately 90 percent of which, as Fairfax County customers, have no electoral recourse in response to City actions – when it may be more appropriate to recover the costs of some or all of its planned system expansion through availability charges. Indeed, if any City water rate warrants examination and update, it is the City's water service availability fees, which were last revised in 1996. The sufficiency of availability fees is an issue that was excluded from the scope of the May 27 water rate study, however.

---

<sup>39</sup> Opinion Letter, *Fairfax County Water Authority v. City of Falls Church*, Case No. CL-2008-16114 (Jan. 6, 2010) at 5 (footnote omitted).

**B. Fairfax County customers of the City’s water system can be protected**

Sixty years ago, water service was provided to Fairfax County residents and businesses through a patchwork of mostly private water systems, and a limited number of public systems, including the system operated by the City of Falls Church. There was no standardization between systems and each system maintained its own rate schedule and level of service. To improve water service reliability, establish equitable rates, and provide effective fire protection throughout Fairfax County, the Fairfax County Board of Supervisors created Fairfax Water in September 1957 for the express purpose of “acquiring, constructing, operating and maintaining an integrated water system for supplying and distributing water.” Fairfax Water is governed by a ten-member Board of Directors, composed of Fairfax County citizens, appointed by the elected Board of Supervisors of Fairfax County.

Today, Fairfax Water provides water service to approximately 233,000 mostly residential accounts in Fairfax County, comprising about 55 percent of the County’s total water sales, and charges its customers the lowest retail water rates in the region.<sup>40</sup> Fairfax Water charges substantially less in water commodity charges than the City of Falls Church:

*Table 6.1*

<i>Residential Water Rate Comparison (October 2011): City of Falls Church and Fairfax Water<sup>41</sup></i>			
<i>Water System</i>	<i>Commodity Charge (per 1,000 gallons)</i>		<i>Service Charge</i>
	<i>Non-Peak</i>	<i>Peak</i>	
Fairfax Water	\$ 2.04	\$ 2.95	\$ 8.35
City of Falls Church	\$ 3.27	\$ 4.99	\$ 8.07

In October, a typical residential customer who uses 19,000 gallons of water per quarter will be charged \$38.76 by Fairfax Water in commodity charges, but \$62.13 in commodity charges – or more than 60 percent – by the City of Falls Church water system. The disparity between these two customers, both Fairfax County residents, will grow over time, assuming the City of Falls Church implements the recommendations in the May 27 water rate study beyond FY2012. Aside from the very real economic cost associated with the City’s higher water rates, this disparity frustrates County customers of the City’s system when they compare water rates with Fairfax Water customers who are their neighbors.

The CPC, which is charged with advising the Board of Supervisors on issues regarding consumer protection, has considered how best to end the disparity and ensure that Fairfax County consumers pay only just and reasonable rates for their water service. The CPC is aware that Section 15.2-2111 of the Virginia Code authorizes the County to “exercise its powers to regulate

<sup>40</sup> Comparison of Local Water Rates (as of August 1, 2011) at <http://www.fcwa.org/rates/rate%20comparison%202011%20for%20web.pdf>

<sup>41</sup> See Fairfax Water Rates at <http://www.fcwa.org/rates/index.htm>. Fairfax Water is proposing a rate increase effective April 2012. It proposes to increase its non-peak commodity charge from \$2.04 to \$2.16 per 1,000 gallons and its peak commodity charge from \$2.95 to \$3.20 per 1,000 gallons. It does not propose an increase in its quarterly service charge.

. . . water service notwithstanding any anticompetitive effect. Such regulation may include the establishment of an exclusive service area for any sewage or water system, including a system owned or operated by the locality, the fixing of rates or charges for any sewage or water service, and the prohibition, restriction or regulation of competition between entities providing sewage or water service.” A complete copy of this statutory provision is provided in Attachment 9.

To that end, the Commission proposes that the Board exercise its authority under Section 15.2-2111 of the Virginia Code and:

- Fix rates and charges for water service provided to customers located in Fairfax County so that no Fairfax County customer of the City of Falls Church water system will be charged rates and charges that exceed those of Fairfax Water, unless the City can demonstrate the need for higher rates and charges to the County’s satisfaction; and
- Establish Fairfax Water as the exclusive water service provider for all new development and redevelopment in Fairfax County, unless Fairfax Water determines that it is unable to furnish water service to a given location.

Together, these two recommendations ensure that Fairfax County customers of the City of Falls Church water system are protected against the imposition of unreasonable rates and charges by a City Council that does not represent them.

Benchmarking the City’s rates to Fairfax Water’s rates achieves the goal of rate equity that helped spur Fairfax Water’s creation. The Commission recognizes that a water system may have costs that differ from Fairfax Water and so recommends providing a mechanism that will allow the service provider to charge different rates if it can establish, to the County’s satisfaction, the need to do so. It is imperative that the burden be on the service provider to demonstrate the need for higher rates and charges. Any other approach rewards the lack of transparency exhibited by the City’s ratemaking process and the non-cooperation it demonstrated in this review.

The establishment of Fairfax Water as the presumptive exclusive water service provider in Fairfax County is a key and essential safeguard. It removes all rationale for the City of Falls Church to expand its water system in Fairfax County to serve projected demand, saving the City’s 34,000 water ratepayers approximately \$33.325 million over just the next five fiscal years. All customers of the City’s water system, whether located inside or outside City limits, will benefit from the avoidance of this substantial debt. Fairfax Water’s continuing role ensures high-quality, reliable service and furthers Fairfax Water’s stated purpose of constructing, operating and maintaining an integrated water system for supplying and distributing water in Fairfax County.

## FINDINGS

1. On April 26, 2011, the Board of Supervisors (Board) directed the Consumer Protection Commission (CPC) to undertake a comprehensive review of the water ratemaking actions of the City of Falls Church (City) and to report its finding and/or recommendations regarding four specific issues to the Board by September 27, 2011.
2. The City of Falls Church water system provides service to approximately 34,000 accounts (FY2010). Almost 30,000 of these accounts – about 90 percent – are located in Fairfax County. It is estimated that these accounts serve at least 100,000 persons in the County.
3. During the period 1981-2008, the City transferred over \$58 million in surplus water revenues to its general fund. This practice was enjoined in a January 2010 court opinion and decree, and the City was prohibited from building any surplus into its water rates. In May 2010, the City contracted with a consultant, Municipal and Financial Services Group (MFSG) to perform a water rate study to review its water rates.
4. In March 2011, MFSG provided the City with a rate study using the utility-basis ratemaking methodology, which is primarily used by investor-owned (for profit) utilities and includes a return or profit component. In May 2011, MFSG provided the City with a rate study using the cash-basis ratemaking methodology, which is used primarily by municipal utilities and does not include a return component. Although the rate studies used different methodologies, each recommended the same set of retail rate increases over the period FY2012-FY2016. Cumulatively, the recommended water rate increases over the period FY2012-FY2016 would increase quarterly service charges and commodity charges 30 percent as compared to FY2011 water rates.
5. Neither the March 2011 nor the May 2011 water rate study proposed changes to the water system's availability fees. The City's availability fees were last revised in 1996.
6. On June 27, 2011, the City tabled its proposed ordinance TO11-07, regarding an increase in water rates effective July 1, 2011. This ordinance was supported by MFSG's March 2011 utility-basis water rate study. On that same date, the City adopted on first reading ordinance TO11-15, regarding an increase in water rates effective August 1, 2011. Ordinance TO11-15 was supported by MFSG's May 2011 cash-basis water rate study (May 27 water rate study).
7. On September 12, 2011, approximately five months after initially taking up these recommendations, the City Council adopted Ordinance TO11-15 and increased retail water rates eight percent, effective October 1, 2011.
8. A number of issues impeded a comprehensive review of the City's water ratemaking actions. A copy of the March 2011 water rate study, which used the utility-basis ratemaking methodology and upon which the City relied in support of proposed City Ordinance TO11-07, was not made available to the public. Staff was able to review the May 27 water rate study, which uses the cash basis ratemaking methodology and upon which the City relied in support of City Ordinance TO11-15. However, the schedules accompanying the May 27 water rate study that were posted on the City's website are difficult to read, use undefined

terms, and require supplemental information not available in the schedules themselves. Staff requested but the City did not provide either legible copies of the schedules or responses to questions asked by staff regarding the schedules.

9. The first Board issue that the CPC considered pertained to reasons for the recommended water rate increases. According to the City's water rate study, rate increases are needed to establish three new reserve funds, fund capital improvements for operating and system expansion projects, and meet rising operating costs. The rate study allocates the system's revenue requirements almost entirely to the water commodity charge.
10. With respect to this first issue, the CPC finds that the rate study does not explain why the City's prior water rates, which were sufficient to generate excess water revenues in the millions of dollars annually, are not sufficient to fund the reserves. It also does not explain why reserve funding is identified as a permanent rate element rather than a temporary rate element that expires upon funding of a given reserve fund.
11. With respect to this first issue, the CPC finds that, as compared to the City's capital improvements program (CIP), the water rate study apparently under-allocates system expansion costs to new customers and over-allocates these costs to existing customers, approximately 90 percent of which reside or are located in Fairfax County. As a result, commodity and service-charge rates applied to existing customers must be increased to absorb these excess costs. In other words, rather than fully recovering system expansion costs through availability fees, the City's existing water service customers will be subsidizing system expansion through inflated commodity and service charges.
12. With respect to this first issue, the CPC finds that in preparing the May 27 water rate study, MFSG appears to have used as its starting point the water system's costs as used in years past. MFSG appears to have made no effort to determine whether it was reasonable use these costs – which previously had generated millions in surplus revenue – as a starting point.
13. The second Board issue that the CPC considered pertained to the City's compliance with the water ratemaking principles adopted by the Board on May 25, 2010. The CPC finds that the public information available to it is insufficient to conclude that the City faithfully complied with all of the principles.
14. With respect to this second issue, due to a number of unanswered questions regarding the May 27 water rate study, the CPC cannot conclude that the City set reasonable water rates on a well-substantiated cost basis, as required by the third principle. For example, are water revenues understated, thus inflating recommended rate increases? Why does the new \$4.3 million operating and maintenance (O&M) reserve fund begin with a negative \$5.5 million balance? What do various O&M costs in the water rate study represent, and how were they determined? How does the City reconcile a planned FY2012-FY2016 \$21.875 million system expansion with billable water consumption growth of just 0.35 percent per year?
15. With respect to this second issue, the CPC cannot conclude that the City complied with several other principles. The first principle recognizes that a water utility should periodically undertake a condition, integrity, and valuation study to fully assess the system, evaluate

critical factors, and to update cost estimates. It cannot be determined when, if ever, the City last conducted such a study. MFSG apparently did not conduct such a study as part of its ratemaking efforts. The water rate study does not discuss the segregation of funds, as contemplated by the second principle, and provides no guidance regarding reserve fund use and replenishment.

16. The third Board issue that the CPC considered pertained to the nature and cost of capital improvements in the FY2007-FY2011 period, and the manner in which the improvements were funded. During this period, the Falls Church water system took on \$30,859,000 in debt to fund a number of projects, the largest of which appears to have been improvements at the Dalecarlia water treatment plant, from which it obtains water. One hundred percent (100%) of this existing debt has been allocated to operating expenses for recovery via retail rates.
17. The fourth Board issue that the CPC considered pertained to the nature and cost of planned water system capital improvements in the FY2012-FY2016 period, and the manner in which the improvements will be funded. According to the City's Capital Improvements Program, an additional \$33.325 million in water system capital improvement projects are planned for the FY2012-FY2106 period, with about two-thirds of the cost (\$21.875 million) attributable to system expansion projects planned to meet demand in Fairfax County, particularly the Tysons Corner area. Debt financing is identified as the source of funds for all projects.
18. With respect to this fourth issue, the May 27 water rate study shows a lower figure of \$27.96 million for planned water system capital improvements in FY2012-FY2016, and attributes only about one-third of the cost (\$9.38 million) to system expansion projects. This approach over-allocates costs to existing retail customers.
19. Numerous Fairfax County customers of the City's water system have voiced their concerns to the City Council regarding its planned water rate increases. Fairfax County customers have presented written materials and spoken before the City Council at its June 27, 2011, July 11, 2011, and September 12, 2011 meetings.
20. The City Council asserts that rate increases are warranted due to rising costs since its retail rates were last revised in 2005 and the need to ensure water safety and reliability. The CPC finds that the publicly available information does not support these assertions.
21. In October 2011, a typical residential customer who uses 19,000 gallons of water per quarter will be charged \$38.76 by Fairfax Water in commodity charges, but \$62.13 in commodity charges – or approximately 60 percent more – by the City of Falls Church water system. Assuming the City of Falls Church continues to implement the recommendations in the May 27 water rate study, the disparity between these two customers, both Fairfax County residents, will grow over time.

## **RECOMMENDATIONS**

1. Pursuant to its authority under Section 15.2-2111 of the Virginia Code, the Board of Supervisors should fix rates and charges for water service provided to customers located in Fairfax County so that no Fairfax County customer of the City of Falls Church water system will be charged rates and charges that exceed those of Fairfax Water, unless the City can demonstrate the need for higher rates and charges to the County's satisfaction; and
2. Pursuant to its authority under Section 15.2-2111 of the Virginia Code, the Board of Supervisors should establish Fairfax Water as the exclusive water service provider for all new development and redevelopment in Fairfax County, unless Fairfax Water determines that it is unable to furnish water service to a given location.

ATTACHMENT 1

## QUESTIONS REGARDING WATER RATE STUDY

*The following questions pertain to the City of Falls Church Water Rate Study Final Report (hereinafter Rate Study) (May 27, 2011). The terms "schedule" or "schedules" refer to those schedules provided in the Appendix to the Rate Study.*

1. Please provide legible copies of all rate schedules attached to the Rate Study and a legible copy of Schedule 8 in the electronic format referenced on the schedule.
2. Please explain how a projection period of ten years is consistent with the AWWA *Principles of Water Rates, Fee, and Charges* (hereinafter AWWA M1).
3. Please provide citations supporting the creation of a 90-day Operating and Maintenance (O&M) reserve balance for municipal water utilities using a cash-needs approach, and the standard(s) articulated therein regarding the level of funding.
4. Please provide citations supporting the establishment of a repair, replacement, and rehabilitation (3R) reserve fund for municipal water utilities using a cash-needs approach, and the standard(s) articulated therein regarding the level of funding.
5. Is the 3Rs reserve fund limited to emergency repair, replacement, and rehabilitation? If not, please explain how the 3R reserve fund distinguishes between annual O&M activity and capital improvements and replacements, and provide corresponding amounts.
6. Please provide citations supporting the establishment of a debt service reserve fund that uses 100% of the highest annual debt service payment on each future bond issue as the basis for establishing a debt service reserve fund (Rate Study at 11).
7. Please explain the statement on page 11 of the Rate Study, regarding the debt service reserve, that "[t]his should have no material impact on water rates."
8. Please provide copies of current debt indenture documentation that addresses debt service reserve requirements.
9. Please explain how revenues for each of the three reserve funds will be segregated.
10. Please explain the policies and practices regarding the use and replenishment of the three reserve funds. Who or what entity is responsible for determining those policies and practices?

11. Please explain the reasoning for the decision to increase rates to fund reserves, rather than fund reserves through the use of available cash balances.
12. Please identify the applicable test year used in the financial model developed to support the Falls Church Rate Study. For that test year, please identify adjustments and the reason(s) therefor. If a test year was not used in preparation of the rate study, please explain the basis for cost and revenue projections contained therein.
13. Please provide all pro forma adjustments to historical O&M expenses, and the explanation for each such adjustment.
14. Please provide definitions for each group and subgroup listed in Schedule 2, regarding O&M expenses, included in the financial model developed to support the Falls Church Rate Study.
15. In Schedule 2, the Water Administration group (Group 2111) includes the subgroup "Transfer to General Fund," described as "administrative costs to GF." Please explain what administrative costs are included in this transfer and how the amount was calculated for each fiscal year, including applicable costs and any factors used. If the amount represents a transfer in payment of interdepartmental expenses for services rendered, please specify each service, the department rendering the service, and the cost of that service.
16. Schedule 2 includes costs for the Water Connection group (2132). Please explain the relation between this group of costs and Water Fund Connection Charges listed as miscellaneous revenue on Schedule 6.
17. To the extent that Water Connection expenses are incurred for the benefit of connecting new customers to the system, please explain why it is appropriate to classify 100% of these expenses as variable expenses to be recovered in the commodity rate.
18. In Schedule 2, the Source of Supply group (Group 2121). The subgroup "professional and contractual" includes an amount for "COE-Capital Cost." Please define this cost item and explain how the amount was calculated for each fiscal year, including applicable costs and any factors used. Please provide citations supporting the inclusion of this item in a municipal cash-needs rate study.
19. In Schedule 2, is any amount designated as "Professional/Contractual" in the various subgroups paid to a City of Falls Church employee? If so, for each such individual, identify the department(s) employing the individual(s) and the amount(s) paid to the department(s).

20. For each group listed in Schedule 2 that includes a subgroup for "Professional/Contractual" expenses, please describe the professional/contractual service provided. In particular, explain the bases for the costs of the items described as "Professional Services" in the Water Administration and Water Distribution groups and the items described as "COE-Capital Cost" and "Repairs & Maintenance" (subgroup 0021-2121-33100-) in the Source of Supply group.
21. In Schedule 2, the group Transfers includes the subgroup Transfer to CIP. Please explain the reasons for the FY2011 (Adopted) \$900,000 transfer to water improvement fund (WIF) and the \$4,350,000 transfer to WIF – Bond Proceeds, and why no transfers are planned for the remaining study period.
22. Please explain the basis for the allocations between fixed and variable costs for each group, as set forth in Schedule 2.
23. Does the Rate Study recognize cost differences in providing service to customers based on any of the following characteristics: meter size, billing frequency, customer class, and/or location? If so, please explain how these cost differences are reflected in and accounted for in the Rate Study.
24. Please explain how and where Schedule 2 accounts for costs associated with the provision of water on a wholesale basis to the Town of Vienna. Please provide a copy of any study by the City of its consultant(s) regarding the cost of providing wholesale service to the Town of Vienna.
25. Please explain how the Rate Study accounts for costs that relate both to O&M expenses and capital investment. For example, please explain how the Rate Study accounts for the salaries, wages, and accompanying overhead of employees who devote time to a project that is a capital investment.
26. Please provide a copy of any elasticity study conducted for the purposes of the Rate Study that shows the impact of the proposed rate changes on consumption.
27. Regarding Schedule 3, Existing Debt Expenses, please explain why 100% of the existing debt expenses are included in the column "Operating."
28. Schedule 4 lists various projects in the Capital Improvement Program. Will the improvements listed in the schedule involve anything other than maintenance, improvement, and/or upgrading? If so, please identify the project and purpose.
29. According to the City's FY2010 Comprehensive Annual Financial Report, in June 2010 the City Council designated approximately \$24.9 million of the Water Fund unrestricted net assets to provide for future improvements as needed. Please describe the type of future improvements envisioned and identify any such

- improvement that is not included on Schedule 4. Please explain how the need for such future improvements will be determined.
30. According to the City of Falls Church Adopted FY11 Budget, changes at the Dalecarlia Treatment Plant “will put an added strain on our ability to finance the long-term capital needs of the system.” Please explain this statement, including the nature and expected cost per year of changes at the treatment plant. Please explain how such costs are treated for the purposes of the rate study, including the schedule(s) on which such costs are included and the cost description.
  31. Regarding Schedule 5, Projected Debt, please explain the purpose(s) of future series Bond 0-1 through 06. For each fiscal year, what portion of the projected debt will be classified as “operating” (as that term is used on Schedule 3)?
  32. Regarding Schedule 5, Projected Debt, please explain the purpose(s) of future series Bond E-1 through E-6. For each fiscal year, what portion of the projected debt will be classified as “operating” (as that term is used on Schedule 3)?
  33. Please explain the meaning of “ASSUMES NO RATE INCREASES” as used in Schedule 6, regarding Miscellaneous Revenues, and why no service charges or availability fees are reported for the period FY13 to FY20.
  34. Schedule 6 includes accounts for availability fees. Please define this term as used in the Schedule 6 and provide a copy of any study relating to the cost of providing the service to which these revenues relate.
  35. Please explain why availability fees as provided in Schedule 6 substantially decline from FY09 Actual (\$1,302,956) to FY12 Budget (\$300,000).
  36. Schedule 6 includes an account for water hydrant service charges. Please provide a copy of any study relating to the cost of providing water hydrant service.
  37. Regarding Schedule 7, O&M Reserve, please explain why FY11 Begin Year Balance is a negative \$5,558,365.
  38. Please explain the reasoning for use of a 20-year payoff period in Schedule 7B, regarding 3R Reserve.
  39. Please explain the entries in Schedule 7B regarding “Recommended Additional Reinvestment” and “Recommended Additional Annual Contributions to “3R” Reserves,” including the reasoning underlying the recommendations.
  40. Regarding Schedule 7B, Debt Service Reserves, please explain how use of the 130% “% to contribute to reserve” is consistent with the discussion on page 11 in the Rate Study text.

41. Please provide descriptions and explanations regarding entries in Schedule 9, Contributed Assets. That explanation should include information regarding the first column on the left of the schedule, which lists five percentages: 5%, 22%, 90%, 25%, 97%.
42. Please describe the treatment of total contributed assets for the purposes of the Rate Study.
43. Please explain the item "Annual Additional Increases" in Schedule 10, Cash Basis Revenue Requirements, and its relation to the item "Required Breakeven Increase."
44. Please explain how "fixed" and "variable" are defined for purposes of Schedule 10.
45. Please provide a copy of any study supporting the customer and consumption projections provided in Schedule 11.
46. Please define the term equivalent units as used in Schedules 12, 13, 14, 15, and 16.
47. Schedules 12, 13, 14, and 15 refer to fixed and variable revenues. Please explain how "fixed" and "variable" are used in these schedules.
48. Please explain the basis for the allocation of costs referenced on Schedules 12, 13, 14, and 15. Please provide a copy of each study supporting the allocation of costs between service charges and variable/consumption charges, the allocation of costs between non-peak and peak rates, the allocation of costs between monthly and quarterly accounts, and the allocation of costs to the Town of Vienna.
49. Schedules 14 and 15 include columns entitled 7.83% and 92.17%. Please explain the significance of these columns, including the numbers provided therein.
50. Please explain the basis for the water consumption figures provided in Schedule 16A, regarding rate projections.
51. Schedule 16B provides wholesale rate projections. There appears to be footnote or reference in the FY12 Unit Rate column. Please clarify.
52. Please explain the basis for the modest increase in the unit rate charged to the wholesale customer, from \$2.00 per 1,000 gallons in FY11 to \$2.58 per 1,000 gallons in FY15, with no increase thereafter. In that explanation, please provide the current and projected unit base cost for provision of wholesale service.

53. Please explain why Schedule 16 does not include revenues associated with fixed charges and peak period consumption. What is the impact of the wholesale customer's consumption on the maximum hour demand placed on the water system?
54. Please explain the significance of the term "check" and the use of red font in Schedule 17, Operating Cash Flow.
55. Please explain why Schedule 17 designates all expenses as Capital Expenses.
56. Please explain the significance of Schedule 18, Availability Fee Cash Flow, for the purposes of ratesetting.
57. Schedule 19, Cash Balance, includes substantial total available cash balances. Please explain why the available cash balances were not used to establish reserve funds.
58. Please reconcile the Schedule 11 customer and consumption projections with the Schedule 19 system expansion fund balance.

ATTACHMENT 2

**Hafeli, Susan M.**

---

**From:** Sinclair, Steve D.  
**Sent:** Wednesday, August 31, 2011 5:15 PM  
**To:** 'Wyatt Shields'  
**Cc:** Hafeli, Susan M.  
**Subject:** RE: Questions for reference at our September 1 meeting

Dear Mr. Shields::

I understand from your email earlier today that you wish to postpone our meeting scheduled for tomorrow September 1. You indicated "we can consider rescheduling the meeting after [you] are able to evaluate the County's position."

As I stated in my email to you of August 30, 2011, I am not an attorney, and the question of whether the Board of Supervisors or the Consumer Protection Commission has any regulatory role in the City's water making process is a legal question. Furthermore, in my role as staff to the Consumer Protection Commission, I do not have the authority to state any position on behalf of either the CPC or the County. As I previously stated, I am simply trying to gather relevant and comprehensive information to provide to the CPC to assist it in complying with its directive from the Board of Supervisors.

Should you wish to reschedule our meeting for the week of September 6 through 9, please let me know.

Sincerely,

Steve Sinclair

---

**From:** Wyatt Shields [mailto:WShields@fallschurchva.gov]  
**Sent:** Wednesday, August 31, 2011 11:08 AM  
**To:** Sinclair, Steve D.  
**Cc:** Hafeli, Susan M.  
**Subject:** RE: Questions for reference at our September 1 meeting

Dear Mr. Sinclair,

It is puzzling to me that you should claim to have no opinion on this matter. It is necessary that we postpone our meeting of tomorrow to allow you time to obtain clarification. My firm expectation is that you will be able to state very clearly that neither the Board of Supervisors nor the County Commission has any formal regulatory role in the City's water rate making process. I am sure that you would agree that it is not appropriate for us to meet if there exists any misunderstanding on this matter.

As noted earlier, my intention is to assist you in responding to the Board's four questions, out of a spirit of cooperation and courtesy between two independent localities. The long list of questions you have generated goes far beyond what is necessary for that purpose, and is more in the nature of a rate regulation discovery process. It would require our consultants many hours to prepare a response, a cost that I believe is inappropriate for our rate payers to absorb for no apparent purpose. It is natural that the City now requires your affirmation that the County has no formal regulatory role in the City's water rate making process. With that, we can proceed along the lines of the original four questions put forward by the Board of Supervisors, which (with the clarifying assumption I noted in my prior email) are reasonable questions and readily

9/15/2011

answerable. We stand ready to assist you with the information necessary to provide a response, all of which is already in the public realm.

I will await your reply, and we can consider rescheduling the meeting after I am able to evaluate the County's position.

Thank you,  
Wyatt Shields  
City Manager  
City of Falls Church

---

**From:** Sinclair, Steve D. [mailto:Steve.Sinclair@fairfaxcounty.gov]  
**Sent:** Tuesday, August 30, 2011 5:14 PM  
**To:** Wyatt Shields  
**Cc:** Hafeli, Susan M.  
**Subject:** RE: Questions for reference at our September 1 meeting

Dear Mr. Shields:

Thank you for your response today. As you know, the Fairfax County Board of Supervisors has directed the Consumer Protection Commission (CPC) to conduct a comprehensive review of the City of Falls Church water rate studies prepared this year. As staff designated to provide support to the CPC, Susan Hafeli and I have analyzed the publicly-available information regarding the City's water rate studies. As such, we identified a number of questions that impede a response to the Board of Supervisors directive because the information could not be adequately answered from the reports made public. These questions relate to: legibility issues, assumptions, citations, definitions, policies and procedures, cost allocations and forecasts, among others, and comprise the basis of the questions that we provided to you.

In your email letter today, you asked if it was my understanding that neither the CPC nor the Board of Supervisors has any formal regulatory authority over actions by the City Council on the setting of rates, or any other matter. I am not an attorney, and do not profess to be knowledgeable enough to answer that question. I would think that the Fairfax County Attorney's office would be the appropriate venue to obtain an opinion on that matter.

Susan Hafeli and I will be the only persons attending the meeting from Fairfax County. If you could let me know who will be attending on behalf of the City that would be appreciated also.

Susan and I look forward to our meeting with you and your staff on September 1, and to the discussion of your responses to the questions we provided last week.

Sincerely,

Steve Sinclair

---

**From:** Wyatt Shields [mailto:WShields@fallschurchva.gov]  
**Sent:** Tuesday, August 30, 2011 10:05 AM  
**To:** Sinclair, Steve D.

9/15/2011

**Cc:** Hafeli, Susan M.

**Subject:** RE: Questions for reference at our September 1 meeting

Dear Mr. Sinclair:

I am in receipt of the 58 questions that you emailed to me on Wednesday, August 24. I am concerned that the four questions that you were assigned to answer by the Board of Supervisors in April has evolved into something more along the lines of a rate case discovery process. This is not what I contemplated when I reached out to you as a courtesy last spring, to personally offer my assistance to you in your efforts to be responsive to the Board's questions.

The questions the Board of Supervisors asked you to respond to are readily answerable from information already made public. My intention for our meeting on September 1 is to review that information with you to facilitate your response to the Board of Supervisors. To be clear, I am assuming that one of the questions posed by the Board in April regarding whether the City has faithfully complied with all of the water rate-making principles adopted by the Board on May 25, 2010 is understood by the County as not intending to suggest that these principles are binding on the City. Such principles are advisory only. A fair review of the May 27, 2011 rate study will conclude that the City's water rates are consistent with those principles.

Our proposed meeting on September 1 is in the spirit of inter-jurisdictional cooperation and courtesy extended to a customer (the County being a customer of the City Water Utility). Neither the County Consumer Protection Commission nor the County Board of Supervisors has any formal regulatory authority over the actions by the City Council in setting water rates, or any other matter.

Prior to our meeting on September 1, please confirm that this is your understanding as well. I do not think it would serve any useful purpose for us to meet if there is disagreement on such a fundamental point.

Please also let me know who will be attending with you.

Sincerely,

Wyatt Shields,  
City Manager  
City of Falls Church

---

**From:** Sinclair, Steve D. [mailto:Steve.Sinclair@fairfaxcounty.gov]

**Sent:** Wednesday, August 24, 2011 1:12 PM

**To:** City-manager

**Cc:** Hafeli, Susan M.

**Subject:** Questions for reference at our September 1 meeting

Wyatt:

I had indicated to you via Sandy that we would be sending over a list of preliminary questions that we had in preparation for our meeting on September 1. If there are questions that cannot be answered at that meeting, the responses would be appreciated shortly thereafter.

We look forward to our meeting September 1 to discuss water rate issues.

9/15/2011

Thanks,

Steve Sinclair  
Chief, Public Utilities Branch  
Fairfax County Dept. of Cable and Consumer Services  
12000 Government Center Parkway  
Suite 433  
Fairfax, Virginia 22035  
telephone #: 703-324-5955  
fax #: 703-324-3900  
cell #: 703-618-7815

---

DISCLAIMER:

This e-mail message and any attached files are for the sole use of the intended recipient(s) and may contain privileged, confidential or otherwise protected from disclosure information. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

---

DISCLAIMER:

This e-mail message and any attached files are for the sole use of the intended recipient(s) and may contain privileged, confidential or otherwise protected from disclosure information. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

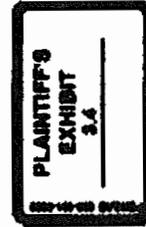
---

ATTACHMENT 3

## History of Falls Church Return/Fee Transferred to General Fund

1981	400,000	1995	1,389,888
1982	440,000	1996	1,543,931
1983	448,631	1997	1,590,312
1984	428,298	1998	1,622,118
1985	1,004,054	1999	1,992,444
1986	1,150,410	2000	3,029,637
1987	1,003,401	2001	4,576,191
1988	927,579	2002	4,878,754
1989	1,283,145	2003	4,625,874
1990	1,290,869	2004	4,625,874
1991	1,391,560 <sup>1</sup>	2005	4,625,874
1992	1,511,614	2006	4,625,874
1993	1,277,828	2007	2,905,121
1994	1,362,636	2008	2,926,174
	<b>Total</b>		<b>\$ 58,878,091</b>

<sup>1</sup> City claims the amount for 1991 was higher -- \$2,070,468 (see City Deposition page 287).



ATTACHMENT 4

## RECOMMENDATIONS

Water systems serving Fairfax County customers should abide by the following principles, which the Commission hereby recommends:

1. Water systems should periodically undertake a condition, integrity, and valuation study to fully assess the system, evaluate critical factors and to update cost estimates.
2. Water systems should fund and maintain adequate system reserves in a segregated fund. The fund should be adequate for future renewals/replacements and capital improvements, including those related to water system infrastructure.
3. Water rates should be reasonably based and set on a well-substantiated cost basis that reflects the direct and indirect costs of the water system, as well as necessary contributions to Water Fund reserves.
4. A water system should charge all similarly-situated customers the same rates. A municipal water system that provides water service to customers located outside its boundaries ("outside customers") should charge its outside customers a higher rate only if that rate reflects a reasonable correlation between the benefit conferred upon its outside customers and the higher cost exacted from them.
5. Neither water revenues nor water system reserves should be subject to transfer by a municipally-owned water system to the municipality's General Fund to be applied towards expenditures unrelated to water utility services.
6. Water system study findings and cost estimates should be routinely updated and discretely reflected in the provider's budget documents, with details described on a segregated basis in supporting budget documents, including:
  - a. annual operating and maintenance budget;
  - b. annual budget for repair and replacement;
  - c. annual budget component for long-term capital improvements;
  - d. annual allocation for long-term reserves; and
  - e. rate-setting to meet current and long-term needs.
7. Water system providers should attain, at a minimum, water utility distribution system integrity rates that are at or near nationwide median standards, as published by the American Water Works Association.

ATTACHMENT 5

**CITY OF FALLS CHURCH WATER SYSTEM IMPROVEMENTS - FY06-FY11**

<b>Improvement</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>Totals</b>
<b>2005-06 CIP</b>							
Arlington special pumping station	75,000						75,000
Meter replacement project	1,500,000	750,000	750,000				3,000,000
Property yard relocation		2,050,000		1,650,000			3,700,000
SCADA system improvements	200,000	500,000					700,000
Seven Corners system improvements	800,000		1,500,000				2,300,000
Wash.Aqueduct residuals disposal	250,000	1,750,000	2,350,000	1,700,000	150,000		6,200,000
Water main replacement (Route 50)	400,000	2,500,000	2,500,000				5,400,000
Water main replacement program	1,000,000		1,000,000	1,000,000	2,000,000		5,000,000
Water utility security	375,000	325,000					700,000
<b>Total</b>	<b>4,600,000</b>	<b>7,875,000</b>	<b>8,100,000</b>	<b>4,350,000</b>	<b>2,150,000</b>		<b>27,075,000</b>
<b>2006-07 CIP</b>							
Arlington special pumping station		115,000					115,000
AMR meter replacement project		3,000,000					3,000,000
Chesterbrook pump station upgrade		325,000	135,000				460,000
Property yard relocation			2,050,000		1,650,000		3,700,000
SCADA system improvements		700,000					700,000
Seven Corners system improvements		200,000	250,000	1,100,000			1,550,000
Wash.Aqueduct residuals disposal		9,000,000	800,000	800,000			10,600,000
Water main replacement (Route 50)		2,300,000	2,860,000				5,160,000
Water main replacement program				2,000,000	2,000,000		6,000,000
Water utility security		325,000					325,000
<b>Total</b>		<b>15,965,000</b>	<b>6,095,000</b>	<b>3,900,000</b>	<b>3,650,000</b>	<b>2,000,000</b>	<b>31,610,000</b>
<b>2007-08 CIP (through FY11)</b>							
Telephone system replacement			80,000				80,000
Chesterbrook pump station upgrade			225,000				225,000
McLean pumping station imprvments			75,000	600,000			675,000
Seven Corners system improvements				385,000	700,000		1,085,000
Wash.Aqueduct residuals disposal			1,800,000	400,000			2,200,000
Water main replacement (Route 50)			2,900,000				2,900,000
Water main replacement program			1,000,000	1,000,000	2,000,000	2,000,000	6,000,000
Pumping station control center			50,000	100,000			150,000
<b>Total</b>			<b>6,130,000</b>	<b>2,485,000</b>	<b>2,700,000</b>	<b>2,000,000</b>	<b>13,315,000</b>

**CITY OF FALLS CHURCH WATER SYSTEM IMPROVEMENTS - FY06-FY11**

<b>2008-09 CIP (through FY11)</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>Totals</b>
Document management system				25,000			25,000
Kirby Rd water main*					700,000	3,000,000	3,700,000
McLean pumping station imprvments				600,000			600,000
Seven Corners system improvements				375,000	700,000		1,075,000
Wash.Aqueduct residuals disposal				400,000			400,000
Water main replacement program				1,000,000	2,000,000	2,000,000	5,000,000
Pumping station control center				150,000			150,000
<b>Total</b>				<b>2,550,000</b>	<b>3,400,000</b>	<b>5,000,000</b>	<b>10,950,000</b>

\* Chain Bridge-Chesterbrook

<b>2009-10 CIP (through FY11)</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>Totals</b>
City Hall West Wing improvements					75,000		75,000
Kirby Rd water main*					600,000	1,000,000	1,600,000
McLean pumping station imprvments					275,000	2,050,000	2,325,000
Seven Corners system improvements					700,000		700,000
Water main replacement program					2,000,000	2,000,000	4,000,000
<b>Total</b>					<b>3,650,000</b>	<b>5,050,000</b>	<b>8,700,000</b>

\* Chain Bridge-Chesterbrook

<b>2010-11 CIP (through FY11)</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>Totals</b>
City Hall West Wing improvements						100,000	100,000
Storage shed replacement/paving						800,000	800,000
Kirby Rd water main*						1,000,000	1,000,000
McLean pumping station imprvments						1,350,000	1,350,000
Water main replacement program						2,000,000	2,000,000
<b>Total</b>						<b>5,250,000</b>	<b>5,250,000</b>

ATTACHMENT 6

**City of Falls Church  
Capital Improvements Program  
*Utility Funds***

**Fiscal Year 2012 - 2016**

**City Manager Proposed Budget**

**Work Session  
April 7, 2011**

# Five Year CIP Details: Water Fund

PROJECT	FY2012	FY2013	FY2014	FY2015	FY2016	Project Totals
McLean Pumping Station Improvements	450,000	900,000	100,000	-	-	1,450,000
Dolley Madison-McLean PS Water Main	-	200,000	1,200,000	-	-	1,400,000
Chain Bridge PS (to Merchant Lane Wtr Main)	-	130,000	600,000	570,000	-	1,300,000
Kirby Rd Water Main (Chain Bridge-Chesterbrook)	\$ 1,000,000	\$ 2,500,000	\$ 3,000,000	\$ 2,100,000	\$ -	\$ 8,600,000
Kirby Rd Water Main (Chesterbrk-Westmoreland)	200,000	200,000	1,950,000	900,000	500,000	3,750,000
Tyson's Tank No. 2	-	-	100,000	400,000	5,000,000	5,500,000
Tyson's Tank No.1 (Tysons to Tank 2 Wtr Main)	-	-	150,000	675,000	500,000	1,325,000
Water Main Replacement Program	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000
<b>Total</b>	<b>\$ 3,650,000</b>	<b>\$ 5,930,000</b>	<b>\$ 9,100,000</b>	<b>\$ 6,645,000</b>	<b>\$ 8,000,000</b>	<b>\$ 33,325,000</b>
<b>SOURCES OF FUNDS</b>						
Total Debt Financed	\$ 3,650,000	\$ 5,930,000	\$ 9,100,000	\$ 6,645,000	\$ 8,000,000	\$ 33,325,000
Total Sources	\$ 3,650,000	\$ 5,930,000	\$ 9,100,000	\$ 6,645,000	\$ 8,000,000	\$ 33,325,000

Maintenance Projects
Expansion Projects

ATTACHMENT 7

June 25, 2011

Kirk F. Randall  
4279 Country Squire Lane  
Fairfax, Va. 22032  
(H) 703-425-0210  
(C) 703-887-4690

Re: City of Falls Church's Proposed 34% Increase in Water Rates

To: Hon. Nader Baroukh, Mayor, City of Falls Church  
[nbaroukh@fallschurchva.gov](mailto:nbaroukh@fallschurchva.gov)  
Hon. David F. Snyder, Vice Mayor - [dsnyder@fallschurchva.gov](mailto:dsnyder@fallschurchva.gov)  
Hon. Johannah Barry, Council Member - [jbarry@fallschurchva.gov](mailto:jbarry@fallschurchva.gov)  
Hon. Robin Gardner, Council Member - [rgardner@fallschurchva.gov](mailto:rgardner@fallschurchva.gov)  
Hon. Ira Kaylin, Council Member - [ikaylin@fallschurchva.gov](mailto:ikaylin@fallschurchva.gov)  
Hon. Ron Peppe, Council Member - [rpeppe@fallschurchva.gov](mailto:rpeppe@fallschurchva.gov)  
Hon. Lawrence Webb, Council Member - [lwebb@fallschurchva.gov](mailto:lwebb@fallschurchva.gov)  
Mr. Wyatt Shields, City Manager - [city-manager@fallschurchva.gov](mailto:city-manager@fallschurchva.gov)  
Mr. John Foster, Esq., City Attorney - [jfoster@fallschurchva.gov](mailto:jfoster@fallschurchva.gov)

cc: Hon. Sharon Bulova, Chairman, Fairfax County Board of Supervisors  
[chairman@fairfaxcounty.gov](mailto:chairman@fairfaxcounty.gov)  
Hon. John Cook, Supervisor - [braddock@fairfaxcounty.gov](mailto:braddock@fairfaxcounty.gov)  
Hon. John Faust, Supervisor - [dranesville@fairfaxcounty.gov](mailto:dranesville@fairfaxcounty.gov)  
Hon. Cathy Hudgins, Supervisor - [hntmill@fairfaxcounty.gov](mailto:hntmill@fairfaxcounty.gov)  
Hon. Jeff McKay, Supervisor - [lee@fairfaxcounty.gov](mailto:lee@fairfaxcounty.gov)  
Hon. Penelope Gross, Supervisor - [mason@fairfaxcounty.gov](mailto:mason@fairfaxcounty.gov)  
Hon. Gerry Hyland, Supervisor - [mountvernon@fairfaxcounty.gov](mailto:mountvernon@fairfaxcounty.gov)  
Hon. Linda Smyth, Supervisor - [providence@fairfaxcounty.gov](mailto:providence@fairfaxcounty.gov)  
Hon. Pat Herrity, Supervisor - [Springfield@fairfaxcounty.gov](mailto:Springfield@fairfaxcounty.gov)  
Hon. Michael R. Frey, Supervisor - [sully@fairfaxcounty.gov](mailto:sully@fairfaxcounty.gov)  
Mr. Michael Liberman, Director, Department of Cable Communications  
and Consumer Protection - [consumerprotection@fairfaxcounty.gov](mailto:consumerprotection@fairfaxcounty.gov)

Mr. Charles Murray, General Manager, Fairfax Water -  
[GeneralManager@fairfaxwater.org](mailto:GeneralManager@fairfaxwater.org), [cmurray@fairfaxwater.org](mailto:cmurray@fairfaxwater.org)

Falls Church Press - [fcnp@fcnp.com](mailto:fcnp@fcnp.com)  
Falls Church Times - [contact@fallschurchtimes.com](mailto:contact@fallschurchtimes.com)

Note: Printable versions of this email/letter and the June 14, 2011,  
letter from Fairfax Water to the City of Falls Church are attached.

Dear City of Falls Church Officials,

I am heartened that the City of Falls Church will consider customer comments regarding its proposed five-year 34% increase in water rates. City communications director Barbara Gordon recently stated that the City will review recent comments submitted by Fairfax Water "along with any other comments we receive prior to final adoption." This is a big step in opening a dialog between the City and its water utility customers and stands as a positive signal that the City intends to work in a "fully open and transparent" manner, to quote Ms. Gordon.

**My immediate recommendations are summarized as follows:**

**There is no immediate cash crisis facing the City of Falls Church's water utility which requires an immediate rate increase. The consultant's analyses purportedly show a \$2.54 million revenue shortfall in 2012 (15.2%). However, \$1.96 million of that shortfall can be attributed to non-cash accounting provisions, so-called reserve funds. These are "rainy day" funds which represent no immediate cash expense to the City.**

**I urge you to defer your final decision on the first phase of the proposed rate increase until after September 27, 2011, when the Fairfax County Consumer Protection Commission is due to report back to the Fairfax County Board of Supervisors (BOS). I encourage you to consider the Commission's comments at that time, given that 92% of your water business significantly affects county customers. This is most appropriate given Ms. Gordon's comments above.**

**I urge you to immediately develop a series of sound ratemaking "best practices" that the City Council commits to follow during this rate proceeding and those that follow. The BOS urged Falls Church to adopt such practices on May 25, 2010 – over a year ago. Its recommended practices, as well as those adopted by the City of Fairfax earlier this year, can serve as a starting point for this project.**

**Before you vote on the pending rate increase, I urge you to hold open work sessions where your customers can discuss the studies and assumptions underlying the proposed rate increases with City staff and its consultants.**

**I urge the City to re-release the May 27, 2011 Final Report in electronic format such as Excel (for analytical data) and Word (for narratives). This will facilitate customer reviewers to more fully understand the study. This is a common practice in the utility arena. Doing so will facilitate review of the Appendix to the Report which has been released in a font so small as to render it undecipherable.**

Under Virginia law, the City self-regulates its water utility and is, therefore, exempt from regulation by the State Corporation Commission, which regulates traditional monopoly utilities. While I have grave concerns whether such self-regulation has best served the City's utility customers, I reserve that topic for a later date and, instead limit my comments only to your rate study.

The City's proposed rate five-year increase in water rates of 34% is supported by the May 27, 2011 Final Report prepared by its consultant, the Municipal & Financial Services Group. The numbers underlying any utility revenue requirements analysis imply a level of precision, where there may actually be little or none. Underlying the calculations is a number of assumptions that need to be carefully addressed in an open dialog that considers all sides of an issue. Some of these assumptions are listed on pp. 3-4 of the study. For a traditional monopoly utility, this balancing of opinions on study assumptions is traditionally done by a state regulatory agency such as Virginia's State Corporation Commission. Under self-regulation, Falls Church needs to go the extra mile to ensure that all technical and legal issues are carefully addressed in a transparent manner before a rate increase is implemented. This is especially crucial for non-resident customers who have no voice at the ballot box to express their concerns. A prime example of the necessity of carefully reviewing the rate study's underlying assumptions is the fact that two very different approaches to municipal ratemaking were employed within a very short period of time by the City – the Utility model and the Cash Basis model. Both models incorporate widely varying assumptions. This is just one example of a model assumption that could have a significant impact upon the results.

In addition to rate study issues raised by Fairfax Water on June 14, 2011 (attached), further review is needed on the following issues before the rate increases may be adopted. More issues may be discovered upon further analysis.

**The calculation of the \$3+ million Water Administration Fee, which comprises over 17% of the Water Fund's expenses, is not supported.** Since the Utility Department does not operate on a stand-alone basis (this is common for municipal utility systems), it is reasonable that a certain amount of City overhead be recovered through water rates. The City should provide these services on a cost basis. The revenue requirements study provides absolutely no information on the assumptions used in calculating the Administration Fee. Given the prior history of Falls Church using management and administrative fee accounts to transfer water utility customer revenues to the General Fund (for the benefit of City residents only), it is absolutely critical that the City explain in detail the process employed to calculate this fee.

**In order to build up a \$4.5 million Operating and Maintenance Expenses Reserve (i.e., “rainy day” fund), an unsubstantiated \$1.5 million has been included in annual rates.** This amount, which represents one-fourth of current Operating and Maintenance expenses, is supported only by the consultant’s recommendation. Traditional electric utilities charge significantly less, on the order of 2%. Moreover, the calculation of the year-to-year reserve balance starts in FY2012 with \$5.5 million “in the hole,” which means that \$10 million needs to be collected through customer revenues before the \$1.5 million assessment can be discontinued in FY2018. The negative \$5.5 million starting balance is also not explained.

**The Debt Service Reserve component of rates is unsupported.** The consultant asserts that a debt service reserve of 100% of the highest annual debt service payment on each future bond issue “will be required [by lenders] as a condition of borrowing.” This reserve provision collects \$570,000 in revenues in FY2012. The inclusion of this amount of reserve in the revenue requirement is not explained.

**The City’s tap fees may not be cost based, thereby requiring them to be subsidized by higher water usage charges for all customers.** Such cost shifting should be prohibited. See Fairfax Water’s comments on this issue.

**The assumed interest rate for future debt issuances is unsupported.** The consultant’s revenue requirements study assumes that the water fund will pay premium borrowing rates, an assumption which is not supported.

**It is inappropriate to charge significant legal fees to the City’s water customers,** given the history that much of the City’s legal expenses are not for the benefit of its water customers, but rather to facilitate the transfer of customer paid revenues from those customers to the City’s General Fund, which benefits residents only.

Thank you for giving me the opportunity to comment on this important topic. If you have any questions, please don’t hesitate to contact me.

ATTACHMENT 8

September 12, 2011

***Via First-Class Mail***

Falls Church City Mayor, City Council, City Manager  
300 Park Ave.  
Falls Church, VA 22043

**Re: Opposition to Proposed Increase in City of Falls Church Water Rates**

To Whom It May Concern:

We write in opposition to the City's proposal to increase the water rate over the next five years. Presently, the City's water rate is \$3.03 per thousand gallons, which is almost twice that of the Fairfax Water Authority. Last year, Fairfax County Circuit Court Judge R. Terrence Ney found that the City improperly appropriated excess profits and transferred funds from the water renewal fund to its general fund, in violation of the Falls Church City's charter. This action has taken large sums of monies from the water renewal fund that is supposed to be used only for maintenance and replacement of water system facilities, not for its general fund. Judge Ney's Final Decree required the City to comply with its own charter by setting its water rates without building in profits to be transferred to its general fund (water receipts equal to expenses without any surplus or return on equity into the rates themselves).

Notwithstanding the substantial premium already being charged by the City, the City Council is now considering a proposal to dramatically *increase* the water rate – 8% annual increases for the next 3 years, followed by 3.5% annual increases for the following two years. At the end of the five-year period, the City's water rate, if approved, will be almost *three times* that of the Fairfax Water Authority. These increases cannot be justified, particularly given the City's illegal actions of siphoning excess profits and transferring substantial sums from the water renewal fund to the City's general fund.

In essence, the City is asking its customers – 92% of whom reside in Fairfax County and did not obtain any benefit from the City's general fund – to pay twice to build up the water renewal fund. As residents of Fairfax County, we already paid to build up the water renewal fund once; unfortunately, the City chose to ignore its charter when it tapped those reserves for general, non-water-related expenses. The illegality of those actions has already been established by the Fairfax County Circuit Court, and the City's appeal of Judge Ney's decision was rejected. It is not fair to ask Fairfax County residents to pay a second time to rebuild the water renewal fund (whether the funds go to the current water renewal fund or new funds, the purpose and effects are the same). To the extent additional funds are necessary, those monies should come from the City's general fund, which was the improper beneficiary of excess water profits and water renewal funds in recent years, and not from Fairfax County residents. The water renewal fund should have ample funds available, when the City reimburses the fund for the millions of dollars, plus interest, and water revenue profits, unlawful transfers or appropriation to its general fund.

If the City repays the funds improperly transferred from the water profits and renewal fund to the general fund, the City will have ample resources to cover the maintenance and capital costs for its water system. There is no need to create two new water reserve funds unless and until the monies siphoned from the water revenue profits and the water renewal fund are repaid and found to be inadequate.

It is time for the City to be transparent, honest, and accountable to its water customers (both City and County users). The City Council has said that the proposed water rate increases over the next five years are necessary to maintain the system, its customer service and water quality. Since the City water system must operate on a non-profit basis, and the cost to the City's customers (City and County users) will be almost 3 times greater than the Fairfax County Water Authority's at the end of the five-year period, it is in the best interest of the City, its residents, and the residents of Fairfax County who use the City's water system, for the City to sell its water system to the Fairfax County Water Authority. This would amount to a substantial savings to the City from the sale of its water system, as well as tremendous savings to the City's and County's water customers (who would pay far less than they currently pay for water). This is one of those rare instances when there is a win-win solution for everyone involved. Conversely, the City is sure to lose if it continues on its current path and votes to raise water rates, as additional litigation is sure to follow.

Sincerely,

1. Ryan T. Scarborough, 7277 Highland Estates Pl., Falls Church, VA, 22043  
703-249-8247; rscarborough@wc.com
2. Eric C. Kahl, 2413 Franklin Ave., McLean, VA 22101, 703-237-8676  
ekahl@wc.com
3. Darlene G. Hays, 7286 Highland Golf Pk, 703-625-2589  
Falls Church, VA 22043
4. [Signature] 7282 Highland Estates Pl  
Falls Church, VA 22043
5. Stephanie D. Bunkley, 7280 Highland Estates Place  
Falls Church, VA 22043
6. [Signature] 2320 Dale Drive 202-413-6176  
Falls Church, VA 22043
7. [Signature] 2326 Dale Drive, Falls Church, VA 703-533-5667

Cc: Fairfax County Water Authority  
Fairfax County Board of Supervisors

8. William E Dunne 7295 HIGHLAND ESTATES PLACE,  
FALLS CHURCH, VA 22043
9. Pamela M. Dunne 7295 Highland Est. Pl. Falls Church VA  
22043
10. Janice Taylor 7291 Highland Est. Pl Falls Church, VA  
22043
11. Ann Hays 7273 Highland Est. Pl., Falls Church, Va.  
22043
12. Colleen 7276 Highland Estates, Falls Church, VA
13. Marianne R Cassey 7315 Gordons Rd, Falls Church VA
14. Catherine S. Sabatini 7321 Gordons Rd, Falls Church, VA
15. Catherine S. Sabatini 7321 Gordons Rd Falls Church, VA
16. [unclear] 7296 Highland Estates Pl Falls Church, VA 22043
17. Linda Hays 7246 Highland Estates Pl. Falls Church, VA 22043
18. Mary Beth & Marc DeLuca 7297 Highland Estates Pl Falls Church VA  
22043

ATTACHMENT 9

[prev](#) | [next](#)

§ 15.2-2111. Regulation of sewage disposal or water service.

Any locality may exercise its powers to regulate sewage collection, treatment or disposal service and water service notwithstanding any anticompetitive effect. Such regulation may include the establishment of an exclusive service area for any sewage or water system, including a system owned or operated by the locality, the fixing of rates or charges for any sewage or water service, and the prohibition, restriction or regulation of competition between entities providing sewage or water service.

No power herein granted shall alter or amend the powers or the duties of any present or future authority created pursuant to the Virginia Water and Waste Authorities Act (§ [15.2-5100](#) et seq.) nor confer any right or responsibility upon the governing body of any locality which would supersede or be inconsistent with any of the duties or responsibilities of the State Water Control Board.

(1984, c. 525, § 15.1-292.2; 1997, c. [587](#).)

---

[prev](#) | [next](#) | [new search](#) | [table of contents](#) | [home](#)