

## Cost of Service Analysis and Rate Setting Methodology

Budgeted expenses are first allocated between treated and untreated water costs, and further allocated to various cost components, and finally aligned to rates and charges. The District's FY18 budget is being used as the basis of the current cost of service analysis. The preliminary results of the cost of service analysis will be presented at the September 6, 2017 Board of Directors meeting. The costs and methodologies being reviewed in the analysis are summarized below:

### Treated Water

**Service and Demand Charge** – The service and demand charge is a fixed charge, which includes the cost of meter reading, billing, and meter maintenance, as well as the costs associated with providing facilities (pumping plants, treatment plants, and transmission mains) to meet peak demand placed on the water system by customers. These costs are allocated based on American Water Works Association's industry method of using meter ratios to link peak capacity to meter size – high water demands require a larger meter. (Changes to service and demand charges to align with fixed cost components may impact all customer classes.)

**Fire Protection Surcharge (Public and Private)** – The District provides adequate water supply and pressures to meet fire-fighting needs at all times throughout the distribution system. Both public and private fire protection costs should be equitably allocated within the cost of service and collected through these surcharges. The public fire protection surcharge has not changed since 1992. The private fire protection surcharge has been adjusted less than inflation over the years. The allocation of costs based on the cost of service analysis may result in changes to these rates. The private fire protection surcharge is billed as a fixed charge to those customers with private fire protection systems. (Changes to private fire protection surcharges may impact commercial and industrial accounts.) The public fire protection surcharge is billed as a fixed charge to all customers. (Changes to public fire protection surcharges may impact all customer classes.)

**Energy Surcharge** – This surcharge is intended to recover the energy costs of pumping water to the eight zones within the treated water service area. The District's zones are successive; for example, water delivered to Zone 3 must be pumped through Zone 1 and then through Zone 2 before reaching Zone 3. The cost of service will use current budgeted energy costs associated with pumping water from the treatment plants to the eight zones. This surcharge has not been increased since 2006. The cost of service analysis is anticipated to result in changes in these rates as energy costs have increased. (Change to energy surcharges may impact all customer classes.)

**Backflow Prevention Device Surcharge** – This surcharge is intended to recover the cost of annual testing, repairs, and replacement for services that require a backflow prevention device. The current methodology allocates costs based on meter size, and that same methodology is being used in the cost of service analysis. However, the methodology for private fire protection systems is currently a flat rate charge. The cost of service evaluation will include equitably allocating the costs among all backflow prevention devices by size and type, and not differ by type of service. (Changes to backflow prevention device surcharges may impact customers with private fire protection systems, who are currently paying a flat rate, the majority of which are commercial and industrial accounts.)

**Quantity Charge** – Two- or three-tier inclining rates are currently being evaluated for single family residential customers. Costs allocated to upper tiers would include more peaking and conservation program costs. A uniform rate is being considered for all other treated water customer classes. The District has the option to consider separate uniform rates by customer class or one uniform rate for all treated water customer classes. (Changes to the quantity charge may impact all customer classes.)

### **Untreated Water**

**Monthly Service Charge** – The monthly service charge is intended to recover the fixed cost of customer service, meter reading, billing, and meter maintenance. The District’s service charge currently varies among customer classes. The rate study is evaluating implementing a consistent monthly service charge for all untreated water customers, with differing rates for metered and unmetered customers. (Changes to the monthly service charge to align with fixed cost components may impact all customer classes.)

**Demand Charge** – The untreated water demand charge is a fixed charge intended to recover costs associated with providing untreated water facilities (pumping plants and transmission mains) to meet peak demand placed on the water system by customers. The current rates include maximum day, maximum hour, and maximum month demand charges. In this rate study, a simplified demand charge is being explored, including collapsing these charges and utilizing a maximum monthly demand charge for all customer classes that would vary depending on each untreated water customer’s peak use pattern. (Changes to the demand charge may impact municipal and irrigation customers with higher peaking patterns during the summer.)

**Quantity Charge** – The quantity charge is anticipated to remain a uniform rate for all untreated water customer classes, with the existing rate structure retained. (Changes to the quantity charge may impact all customer classes.)