



Educational community outreach

APPROVED BUDGETS



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Section VIII GLOSSARY AND ACRONYMS

GLOSSARY

ACCRUAL BASIS: The method of accounting under which revenues are recorded when they are earned (whether or not cash is received at that time) and expenditures are recorded when goods and services are received (whether or not cash disbursements are made at that time).

ADVANCED METERING INFRASTRUCTURE (AMI): Also known as Smart meters, are updated, digital versions of the traditional electrical meter attached to the outside of your home. Smart meters are also designed to transmit pricing and energy information from the utility company to the consumer (two-way communication).

ADVANCED RESEARCH & TESTING PROGRAM: Specialized wastewater treatment services to outside entities

A/E CONTRACT: Architectural and Engineering Contracts

AERATION: The process that forces compressed air into wastewater. The oxygen keeps the microorganisms alive and sets off a chain reaction; live, eat, and work. Oxygen is an essential ingredient in “activating” sludge.

ALTERNATIVE FUELED VEHICLE: An alternative fuel vehicle is a vehicle that runs on a fuel other than traditional petroleum fuels (petrol or Diesel fuel); and also refers to any technology of powering an engine that does not involve solely petroleum.

AMERICAN RECOVERY AND REINVESTMENT ACT: Is an economic stimulus package enacted by the 111th United States Congress in February 2009. The stimulus was intended to create jobs and promote investment and consumer spending during the recession.

ANAEROBIC DIGESTION: A biological process that uses microorganisms to reduce the volume of biosolids.

APPROPRIATION: An authorization by Congress, which permits officials to incur obligations and expend Authority resources. Appropriations are usually made for fixed amounts, which extend for a fiscal year. Appropriations for capital improvement projects, however, extend until completion, usually beyond the current fiscal year.

ARBITRAGE: The simultaneous purchase and selling of an asset in order to profit from a differential in the price. This usually takes place on different exchanges or marketplaces. Also known as "riskless profit".

ASSETS: Property with monetary value owned by the Authority.

AUDIT: An independent systematic examination of resource utilization concluding in a written report. It is a test of management’s internal accounting records. It also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statements.

AUTOMATED METER READING (AMR): System that automatically read customers' meters using radio frequencies, allowing for more accurate and frequent meter readings and transfer of data to a central database for billing and analysis. It is an older technology that only collects electrical energy consumption and transfers that data from the electric meter on the home to the utility (one-way communication).

BALANCED BUDGET: A budget in which the income equals expenditure.

BIOCHEMICAL OXYGEN DEMAND (BOD): An indicator of the amount of biodegradable contaminants in wastewater.

BIOSOLIDS: Sludge that has been treated to reduce pathogens, organics, and odors, forming a reusable agricultural product.

BLUE PLAINS ADVANCED WASTEWATER TREATMENT PLANT: Located in Washington, DC, Blue Plains is the world's largest advanced wastewater treatment plant, and has a permitted capacity of 370 million gallons per day.

BOARD OF DIRECTORS: DC Water's governing board (the Board), which includes 11 primary and 11 alternate members; six members from the District of Columbia, two members each from Montgomery and Prince George's Counties in Maryland, and one member from Fairfax County, Virginia.

BLOOM: a soil conditioner made from Class A biosolids.

BOND: An obligation issued by DC Water promising to pay a specified sum of money (called principal or face value) at a specified future date (called the maturity date) along with periodic interest paid at a specified percentage of the principal (interest rate). Bonds are typically issued to fund specific capital improvement expenditures.

BUDGET: A plan of financial operations including an estimate of proposed expenditures and revenues for a fiscal period. The budget establishes funding levels for continuing service programs, operation and maintenance of public facilities, and principal and interest payments on bonded indebtedness. Recurring replacement of capital outlay and minor new capital outlay items are included.

CAPACITY MANAGEMENT OPERATION and MAINTENANCE (CMOM): A standard framework for municipal sewer collection systems to identify and incorporate widely-accepted wastewater industry practices to meet regulatory compliance.

CAPITAL BUDGET: A plan for investment in long-term assets such as buildings, plant, and equipment. DC Water's capital budget includes project schedules and funding needed to acquire, improve or construct properties or facilities to enhance water and sewer services to our customers.

CAPITAL EQUIPMENT: A capital asset with a useful life of at least 3 years, a cost exceeding \$5,000 and is financed with short-term debt or cash. Examples include rolling stock and computer equipment.

CAPITAL IMPROVEMENT PROGRAM (CIP): A plan, which identifies the nature, schedule and cost of long-term improvements to DC Water's infrastructure.

CERIDIAN: DC Water’s fully integrated payroll and personnel system designed to accommodate a variety of pay, leave, and work rules and to provide a comprehensive set of human resource applications.

CHLORAMINATION: The process of adding chloramines to drinking water. Chloramine, a form of chlorine and ammonia, is used as a disinfectant by the Washington Aqueduct.

CLEAN RIVERS IMPERVIOUS AREA CHARGE:(CRIAC): DC Water uses information contained in the District of Columbia’s GIS plainmetric database, which includes tax and property records to determine impervious surface areas. (All surfaces are classified as either pervious or impervious). An impervious charge is billed to DC Water customers based on Equivalent Residential Unit (ERU). This is the amount of impervious surface area measured in square feet based on a statistical median for a single family residential property.

CLEAN WATER ACT (CWA): Act passed by the U.S. Congress in 1972 to control water pollution.

COMBINED HEAT AND POWER FACILITY (CHP): The facility provides steam necessary for the thermal hydrolysis process that uses intense heat and pressure to treat wastewater solids, producing a much cleaner biosolids, and onsite generation of up to one third of Blue Plains’ electricity needs.

COMBINED SEWER OVERFLOWS (CSO): Discharge of untreated wastewater (a mixture of storm water and sanitary waste) directly to waterways during periods of significant rainfall.

COMBINED SEWER OVERFLOW LONG-TERM CONTROL PLAN (CSO LTCP): This Program encompasses projects designed to reduce overflows into the local waterways by 98%, and is now known as the Clean Rivers Project.

COMBINED SEWER SYSTEM LONG-TERM CONTROL PLAN (CSS LTCP): Final plan submitted by DC Water in July 2002 and approved by EPA in March 2005 to control Combined Sewer Overflow (CSO’s) to the Districts waterways.

COMMERCIAL PAPER: Short-term (less than 270 days) notes issued by DC Water to provide interim financing of its capital improvement program. Commercial paper typically carries lower interest rates than long-term debt and is issued on a subordinate basis.

CUSTOMER CLASS-BASED VOLUMETRIC RATES: Rate differentiation based on the peaking demands of each customer class (residential, multi-family and non-residential).

CUSTOMER INFORMATION SYSTEM (CIS): System which DC Water utilizes for customer billing and information and other related services.

DC CLEAN RIVERS PROJECT: New name for the COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN (CSO LTCP), which is a program that encompasses projects designed to reduce overflows into the local waterways by 98%.

DC WATER WORKS: local hiring initiatives for DC Water projects.

DEAMMONIFICATION: Involves Anammox bacteria working synergistically with Ammonia Oxidizing Bacteria to oxidize ammonia without organic carbon to produce nitrogen gas.

DEBT RATING: An independent opinion, based on a comprehensive quantitative and qualitative evaluation, of a company's financial position, operating performance, business profile and management. Specifically, the debt rating reflects a company's ability to meet its obligations to repay interest and principal on outstanding obligations to investors. DC Water's bond ratings provided by Moody's Investors Service, Standard & Poor's and Fitch Ratings are Aa2, AA, and AA+, respectively.

DEBT SERVICE: Amount of money necessary to pay principal and interest on senior outstanding notes and bonds in any given fiscal year.

DEBT SERVICE COVERAGE: Requirement of DC Water's master trust indenture and Board policy that provides that annual revenue available to pay debt service must exceed annual debt service by a certain percentage. DC Water's master trust indenture requires 120 percent senior debt service coverage; DC Water Board policy requires 140 percent senior debt service coverage.

EFFLUENT: Treated wastewater discharged from the Blue Plains Advanced Wastewater Treatment Plant.

ENABLING ACT: Legislation which established DC Water and defined its purpose and authority. DC Water's enabling legislation was initially enacted in 1996.

ENCUMBRANCES: Obligations in the form of purchase orders, contracts or salary commitments which are chargeable to an appropriation and for which a part of the appropriation is reserved. They cease to be encumbrances when paid or when an actual liability is released.

ENHANCED CLARIFICATION FACILITY (ECF): This facility is part of DC Water's proposed Total Nitrogen-Wet Weather plan, which addresses the requirements of the Long Term Control Plan, as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged in the Chesapeake Bay.

ENHANCED NITROGEN REMOVAL FACILITY: This Program Area represents the new name for the Total Nitrogen Program (BTN) which includes projects for new facilities and upgrades to existing facilities needed at Blue Plains to meet the total nitrogen discharge limit that has been included in DC Water's 2010 NPDES permit.

ENTERPRISE FUND: A fund established to finance and account for the acquisition, operation, and maintenance of governmental facilities and services, which are entirely or predominantly self-supporting by user charges. This type of fund uses the accrual basis of accounting. DC Water is responsible for two enterprise funds:

- 1) Water and Sewer Enterprise Fund
- 2) The District of Columbia Stormwater Enterprise Fund

ENVIRONMENTAL PROTECTION AGENCY (EPA): Federal agency responsible for environmental regulations and enforcement.

EXPENDITURES: Payment for goods and services received.

EXTENDABLE MUNICIPAL COMMERCIAL PAPER PROGRAM (EMCP): A money-market security issued by large organizations to obtain funds to meet short-term debt obligations, and is backed only by an issuing bank or corporation's promise to pay the face amount on the maturity date specified on the note.

EXTRACT, TRANSFORM and LOAD (ETL) refers to a process in database usage and especially in data warehousing that:

- Extracts data from homogeneous or heterogeneous data sources
- Transforms the data for storing it in proper format or structure for querying and analysis purpose
- Loads it into the final target (database, more specifically, operational data store, data mart, or data warehouse)

FABRIDAM: A dynamic weir (or dam) that inflates and deflates depending on the structure set point. Set points vary from structure to structure.

FILTRATE TREATMENT FACILITY (FTF): Also known as the Centrate Treatment Facility and is a part of the Total Nitrogen Removal Wet Weather plan, provides a new treatment system that will remove nitrogen from the recycle stream of solids processing at Blue Plains. The facility uses six sequencing batch reactors to treat a nitrogen-rich system from the Final Dewatering Facility's belt filter presses.

FISCAL YEAR: The twelve-month period used by DC Water, which begins October 1 and ends September 30 of the following calendar year.

FIXED ASSET: Long-lived property owned by an entity used by an entity in the production of its income. Tangible fixed assets include real estate, plant, and equipment.

GENERAL OBLIGATION DEBT: This is money that DC Water still owes the District of Columbia for bond issuance prior to the enabling act that created DC Water

HYBRID PLUG-IN VEHICLE: A hybrid electric vehicle that utilizes rechargeable batteries, or another energy storage device, that can be restored to full charge by connecting a plug to an external electric power source (usually a normal electric wall socket)

IMPERVIOUS SURFACE: an area that impedes or retards the percolation of water into the subsoil and impedes plant growth. Impervious surfaces include but are not limited to the following: roofprints, footprints of patios, driveways, private streets, other paved areas, tennis courts, and swimming pools, and any path or walkway that is covered by impervious material.

INFRASTRUCTURE: DC Water's facilities, services, and installations needed for its functioning, such as its water, sewer and customer delivery systems.

INTER-MUNICIPAL AGREEMENT OF 1985 (IMA): This agreement outlines the operating and financial responsibilities for wholesale wastewater treatment services at Blue Plains. Signatories to the IMA include the District of Columbia, Montgomery and Prince George's Counties in Maryland, Fairfax County, Virginia, and the Washington Suburban Sanitary Commission.

INTERCEPTORS: The large pipes that convey wastewater from the collection system to DC Water's wastewater treatment plant, Blue Plains.

INTERNAL IMPROVEMENT PLAN (IIP): Operational improvement plans for various operating departments across DC Water that will result in improved service and cost savings to DC Water's customers. Proposed improvements are a function of new capital projects, investments in technology, and new business processes. IIP's have been developed for the Departments of Wastewater Treatment, Maintenance Services, and Customer Service, and are in process for the Departments of Water and Sewer Services.

INVERTED BLOCK RATE STRUCTURES: Is a schedule of rates applicable to blocks of increasing usage in which the usage in each succeeding block is charged at a higher unit rate than in the previous blocks. Generally, each successive block rate may be applicable to a greater volume of water delivery than the preceding block(s).

JOINT USE SEWERAGE FACILITIES: A list of specific facilities identified in the DC Official Code, Section #34-2202.01(4).

LIFELINE RATE: A lifeline rate for the first 4 Ccf of Single Family Residential (SFR) water use to reflect baseline usage by residential customers without peaking cost.

LOCAL SMALL DISADVANTAGED BUSINESS ENTERPRISE (LSDBE): Business entities that are encouraged to do business in the District through supportive legislation, business development programs, and agency and public/private contract compliance.

LOW IMPACT DEVELOPMENT (LID): Integrates ecological and environmental considerations into all phases of urban planning, design and construction in order to avoid encroaching on environmentally fragile or valuable lands, and to decrease runoff volumes and peak flow impacts.

MASTER FACILITIES PLAN: A twenty-year plan that outlines proposed capital improvements across DC Water. This plan is updated every three to five years.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4): A regulatory program for controlling stormwater pollution.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES): A permit issued by the EPA that governs effluent discharges into various rivers and waterways by Blue Plains and DC Water's sewer system.

NINE MINIMUM CONTROLS (NMC): Nine EPA-designated activities that DC Water must undertake to reduce Combined Sewer Overflow (CSO) while implementing its Long Term Control Plan (LTCP).

NITRIFICATION: An aerobic process in which bacteria changes the ammonia and organic nitrogen in wastewater into oxidized nitrogen.

OPERATING BUDGET: The budget that encompasses the day-to-day activities for DC Water. The operating budget includes employee salaries, supplies, and other non-personnel items related to current activities. The operating budget also includes other costs including debt service and payment in lieu of taxes/right of way fees.

OPERATING RESERVE: Reserve established by the Board of Directors equivalent to approximately 120 days of budgeted operating and maintenance expenses with the objective of maintaining at least \$125.5 million.

OPERATIONS & MAINTENANCE (O&M): The activities related to the performance of routine, preventive, and predictive, actions aimed at preventing DC Water's equipment and infrastructure from failure or decline, with the goal of increasing efficiency, reliability, and safety.

OUTFALL: The place or structure where effluent is discharged into receiving waters.

PAYMENT IN LIEU of TAXES (PILOT): Amounts which DC Water pays each fiscal year to the District and institutions in which its facilities are located. Consistent with the provisions of DC Water's Enabling Act, these payments are to be based on services received and certified from the District of Columbia.

PLANT RESIDUALS: In 2003, the EPA issued a revised NPDES permit to the Washington Aqueduct (WAD) and entered into a Federal Facilities Compliance Agreement (the federal agency equivalent of an Administrative Order) requiring WAD, to have in operation, by Dec 31, 2009, a new process, which dewateres the residuals on site and trucks them off-site for disposal.

PLUG-IN ELECTRIC VEHICLE: Any motor vehicle that can be recharged from an external source of electricity, such as wall sockets, and the electricity stored in the rechargeable battery packs drives or contributes to drive the wheels

POTOMAC INTERCEPTOR: Fifty-mile interceptor that carries wastewater from Loudoun and Fairfax Counties in Virginia and Montgomery County in Maryland to Blue Plains.

PRIMARY TREATMENT: A wastewater treatment process that allows those substances in wastewater that readily settles or floats to be separated from the water being treated.

PRINCIPAL: The total amount of money being borrowed or lent.

PROCESS COMPUTER CONTROL SYSTEM (PCCS): Electronically monitors and controls all treatment processes and facilities.

RATE STABILIZATION FUND: A fund established by the Board of Directors, which is used to implement rate increases on a gradual and predictable basis.

RESERVES: An accounting entry that properly reflects contingent liabilities.

REVENUE: An increase in (sources of) fund financial resources other than from inter-fund transfers and debt issue proceeds. Revenues should be classified by fund and source.

REVENUE BONDS: Bonds payable from specific source of revenue and which do not pledge the full faith and credit of the issuer.

RIGHT-OF-WAY FEE (ROW): A permit fee that the District of Columbia Government charges DC Water for water and sewer conduits that it occupies within the District of Columbia.

SAFE DRINKING WATER ACT (SDWA): Act passed by the U.S. Congress (most recently amended in 1996) to control drinking water quality.

SECONDARY TREATMENT: Usually following primary treatment, secondary treatment employs microorganisms to reduce the level of biochemical oxygen demand (BOD) in wastewater.

SENIOR DEBT: Debt whose terms in the event of bankruptcy require it to be repaid before subordinated debt receives any payment.

SLUDGE: Solid residue from wastewater treatment, also known as Biosolids.

SUBORDINATED DEBT: Debt over which senior debt takes priority. In the event of bankruptcy, subordinated debtholders receive payment only after senior debt claims are paid in full.

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA): Equipment and computer technology used to monitor and control the water distribution and wastewater conveyance systems.

SUPPLEMENTAL ENVIRONMENTAL PROJECT (SEP): A project DC Water is funding as part of its nine minimum control (NMC) CSO consent order.

SYSTEM AVAILABILITY FEE (SAF): Fee assessed to new development (or redevelopment) to recover the investment in available system capacity, based on meter size.

TUNNEL DEWATERING PUMP STATION (TDPS)/ENHANCED CLARIFICATION FACILITY (ECF): The TDPS facility starts where the DC Clean Rivers Project tunnels end at Blue Plains. The TDPS will pump millions of gallons of combined sewer overflows and the ECF will treat the captured wet-weather flows, previously flowed into the District's waterways during heavy rain storms.

WASHINGTON AQUEDUCT: A division of the U.S. Army Corps of Engineers which owns and operates the water treatment facilities for DC Water, Arlington and Falls Church, Virginia. DC Water purchases treated drinking water on a wholesale basis from the Washington Aqueduct, and is responsible for approximately 73 percent of the Aqueduct's costs.

WATER SYSTEM REPLACEMENT FEE (WSRF): A fixed monthly fee designed to fund the 1 percent renewal and replacement of aging water infrastructure for residential, multi-family and non-residential customers.

WET WEATHER TREATMENT FACILITY: A wet weather event is deemed to start when plant influent is greater than a rate of 511 mgd and deemed to stop four hours after plant influent drops to a rate of 511 mgd or a period of 4 hours has elapsed since the start of a wet weather event, whichever occurs last.

ACRONYMS

ADA: AMERICANS WITH DISABILITY ACT

AED: AUTOMATED EXTERNAL DEFIBRILLATOR

AFV: ALTERNATIVE FUELED VEHICLE

AMI: ADVANCED METERING INFRASTRUCTURE

AMR: AUTOMATIC METER READING

AMSA: ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES

ANC: ADVISORY NEIGHBORHOOD COMMISSION

ART: ADVANCED RESEARCH TESTING

AWWTP: ADVANCED WASTE WATER TREATMENT PLANT

BAB's: BUILD AMERICA BONDS

BOD: BIOCHEMICAL OXYGEN DEMAND

BP: BLUE PLAINS

CAFR: COMPREHENSIVE ANNUAL FINANCIAL REPORT

CAP: CUSTOMER ASSISTED PROGRAM

CC&O: CUSTOMER CARE & OPERATIONS

CCTV: CLOSED CIRCUIT TV

CFCI: CASH FINANCED CAPITAL IMPROVEMENTS

CHP: COMBINED HEAT AND POWER

CIP: CAPITAL IMPROVEMENT PROGRAM

CIPP: CRITICAL INFRASTRUCTURE PROTECTION PLAN

CIS: CUSTOMER INFORMATION SYSTEM

CMF: CENTRAL MAINTENANCE FACILITY

CMOM: CAPACITY MANAGEMENT OPERATION AND MAINTENANCE

COBRA: THE CONSOLIDATED OMNIBUS BUDGET RECONCILIATION ACT OF 1985

COF: CENTRAL OPERATIONS FACILITY

COG: METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

COOP: CONTINUITY OF OPERATIONS PLAN

CRIAC: CLEAN RIVERS IMPERVIOUS AREA CHANGE

CSO: COMBINED SEWER OVERFLOWS

CSO LTCP: COMBINED SEWER OVERFLOW LONG-TERM CONTROL PLAN

CSP: COMPREHENSIVE SAFETY PROGRAM

CSRS: CIVIL SERVICE RETIREMENT SYSTEM

ACRONYMS

CSS LTCP: COMBINED SEWER SYSTEM LONG-TERM CONTROL PLAN

CWA: CLEAN WATER ACT

CWSFR: CLEAN WATER STATE REVOLVING FUND

DCFEMS: DC FIRE AND EMERGENCY MEDICAL SERVICES

DCRA: DISTRICT OF CONSUMER AND REGULATORY AFFAIRS

DOEE: DEPARTMENT OF ENERGY & ENVIRONMENT

DDOT: DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION

DETS: DEPARTMENT OF ENGINEERING AND TECHNICAL SERVICES

DEMON: DEAMMONIFICATION PROCESS

DMRQA: DISCHARGE MONITORING REPORT QUALITY ASSURANCE

DRBCP: DISASTER RECOVERY AND BUSINESS CONTINUITY PLAN

DSLFL: DEWATERED SLUDGE LOADING FACILITY

DSS: DEPARTMENT OF SEWER SERVICES

DWS: DEPARTMENT OF WATER SERVICES

DWE: DEPARTMENT OF WASTEWATER ENGINEER

EBU: EQUIVALENT BILLING UNIT

ECF: ENHANCED CLARIFICATION FACILITY

EDMC: ENGINEERING DOCUMENT MANAGEMENT AND CONTROL

EEOC: EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

EMA: EMERGENCY MANAGEMENT AGENCY

EMCP: EXTENDABLE MUNICIPAL COMMERCIAL PAPER PROGRAM

ENRF: ENHANCED NITROGEN REMOVAL FACILITIES

EOC: EMERGENCY OPERATIONS CENTER

EIS: ENVIRONMENTAL IMPACT STATEMENT

EPA: ENVIRONMENTAL PROTECTION AGENCY

ERDMS: ENTERPRISE RECORDS AND DOCUMENT MANAGEMENT SYSTEM

ERP: ENTERPRISE RESOURCE PLANNING SYSTEM

ERU: EQUIVALENT RESIDENTIAL UNIT

ESF: EMERGENCY SUPPORT FUNCTION

ETL: EXTRACT, TOOL, LOAD

FCPA: FOREIGN CORRUPTION PRACTICES ACT

FDL: FINAL DEWATERING FACILITY

FEMA: FEDERAL EMERGENCY MANAGEMENT AGENCY

ACRONYMS

GMP: GUARANTEED MAXIMUM PRICE

HPEV: HYBRID PLUG-IN VEHICLE

HPRP: HIGH PRIORITY REHABILITATION PROGRAM

HUNA: HIGH USAGE NOTIFICATION APPLICATION

HVAC: HEATING VENTILATION AND AIR CONDITIONING

HQO: HEAD QUARTERS OFFICE

I&C: INSTRUMENTATION AND CONTROL

IAC: IMPERVIOUS AREA CHARGE

IOT: INTERNET OF THINGS

IFB: INVITATION FOR BID

IIP: INTERNAL IMPROVEMENT PLAN

IMA: INTER-MUNICIPAL AGREEMENT

IR&R: INFRASTRUCTURE REPAIR & REPLACEMENT

IVR: INTERACTIVE VOICE RESPONSE

JBAB: JOINT BASE ANACOSTIA-BOLLING

JUDD: JOINT UTILITY DISCOUNT DAY

KPI: KEY PERFORMANCE INDICATORS

LDWMR: LARGE DIAMETER WATER MAIN REHABILITATION

LID: LOW IMPACT DEVELOPMENT

LOTO: LOG OUT TAG-OUT

LSDBE: LOCAL SMALL DISADVANTAGED BUSINESS ENTERPRISE

LSR: LEAD SERVICE REPLACEMENT

LTCP: LONG TERM CONTROL PLAN

MBE: MINORITY BUSINESS ENTERPRISE

MGD: MILLION GALLONS PER DAY

MJUF: MULTI-JURISDICTIONAL USE FACILITY

MOU: MEMORANDUM OF UNDERSTANDING

MPT: MAIN PROCESS TRAIN

MS4: MUNICIPAL SEPARATE STORM SEWER SYSTEM

MTA: MESSTECHNIK ASSOCIATES

MW: MEGA WATT

NEB: NORTH EAST BOUNDARY

NMC: NINE MINIMUM CONTROLS

NPDES: NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NPFMP: NON-PROCESS FACILITIES MASTER PLAN

NWBSO: NORTHWEST BOUNDARY SEWER OVERFLOW

O&M: OPERATIONS & MAINTENANCE

ACRONYMS

PLC: PROGRAM LOGIC CONTROL

PM: PREVENTIVE MAINTENANCE

PPA: POWER PURCHASE AGREEMENT

PPM: PARTS PER MILLION

PRT: POTOMAC RIVER TUNNEL

PRV: PRESSURE RELEASE VALVE

PS: PUMPING STATION

PSA: PUBLIC SERVICE ANNOUNCEMENT

PSSDB: PRIMARY SCUM SCREENING DEGRATING BUILDING

PZIP: PRESSURE ZONE INCREASE PROJECT

QMS: QUALITY MANAGEMENT SYSTEM

RFP: REQUEST FOR PROPOSAL

RFQ: REQUEST FOR QUOTATION

RSF: RATE STABILIZATION FUND

RWWP: RAW WASTEWATER PUMP STATION

SAF: SYSTEM AVAILABILITY FEE

SCADA: SUPERVISORY CONTROL AND DATA ACQUISITION

SDWA: SAFE DRINKING WATER ACT

SDWMR: SMALL DIAMETER WATER MAIN REPLACEMENT

SEP: SUPPLEMENTAL ENVIRONMENTAL PROJECT

SOP: STANDARD OPERATING PROCEDURE

SOX: SARBANES OXLEY ACT

SPLASH: SERVING PEOPLE BY LENDING A SUPPORTING HAND

SSO: SANITARY SEWER OVERFLOW

3PP: THIRD PARTY PORTAL

TEAMS: TOTAL ENTERPRISE ASSET MANAGEMENT SYSTEM

TMDL: TOTAL MAXIMUM DAILY POLLUTANT LOADS

TN: TOTAL NITROGEN

UAMI: UPPER ANACOSTIA MAIN INTERCEPTOR

ULSD: ULTRA LOW SULFUR DIESEL

VAV: VARIABLE AIR VOLUME

VEP: VALVE EXERCISE PROGRAM

VIT: VEHICLE INFORMATION TRANSMITTER

WAD: WASHINGTON AQUEDUCT

WaSSP: WATER AND SEWER SENSOR PROGRAM

Presented and Adopted: March 1, 2018
Subject: Approval of Proposed Fiscal Year 2018 - 2027 Capital Improvement Program

#18-21
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority, ("DC Water") at its meeting on March 1, 2018, upon consideration of a joint-use matter, decided by a vote of eleven (11) in favor and none (0) opposed, to take the following action with respect to the Fiscal Year 2018 - 2027 Capital Improvement Program (10-Year Disbursement Plan and Lifetime Budget).

WHEREAS, the Board's financial policies require an annually updated 10-Year Financial Plan, which includes a 10-Year Capital Disbursement Plan; and

WHEREAS, on January 4, 2018, the Interim Chief Executive Officer and General Manager, Chief Engineer, Chief Operating Officer, and Chief Financial Officer, at the budget workshop briefed Board members on the Proposed 10-Year Disbursement Plan totaling \$4,002,125,000; and

WHEREAS, on January 18, 2018, the Environmental Quality and Operations Committee, reviewed the budget proposals and discussed in detail the alternative budget scenarios, budget drivers, strategic budget decisions, budget assumptions, customer and operational impacts; and

WHEREAS, on January 23, 2018, the Finance & Budget and DC Retail Water & Sewer Rates Committees, in a joint meeting, reviewed the budget proposals and discussed in detail the alternative budget scenarios, budget drivers, strategic budget decisions, budget assumptions, customer and operational impacts; and

WHEREAS, on February 15, 2018, the Environmental Quality and Operations Committee, reviewed the budget proposals and discussed in detail the budget drivers, strategic budget decisions, budget assumptions, customer and operational impacts and recommended that the Board adopt the Proposed 10-Year Disbursement Plan totaling \$4,002,125,000, related Lifetime Budget, which totals \$11,131,895,000; and

WHEREAS, on February 22, 2018, the Finance & Budget Committee, reviewed the budget proposals and discussed in detail the budget drivers, strategic budget decisions, budget assumptions, customer and operational impacts. The Finance & Budget Committee recommended that the Board adopt the Proposed 10-Year Disbursement Plan totaling \$4,002,125,000, and related Lifetime Budget, which totals \$11,131,895,000.

NOW THEREFORE, BE IT RESOLVED THAT:

The Board hereby approves and adopts DC Water's Fiscal Year 2018 – 2027 Capital Improvement Program with the 10-Year Disbursement Plan totaling \$4,002,125,000, related Lifetime Budget which totals \$11,131,895,000 (Attachment A-1), and as further detailed in the Interim Chief Executive Officer and General Manager's Proposed Fiscal Year 2019 Budget, presented on January 4, 2018 and accompanying materials.

This resolution is effective immediately.


Secretary to the Board of Directors

Presented and Adopted: March 1, 2018

SUBJECT: Approval of Fiscal Year 2018 - 2027 Ten-Year Financial Plan

**#18-22
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("DC Water") at its meeting held on March 1, 2018 upon consideration of a joint-use matter decided by a vote of eleven (11) in favor and none (0) opposed, to take the following action with respect to the Fiscal Year 2018 - 2027 Financial Plan.

WHEREAS, prudent utility financial management requires a long-term financial plan that integrates common elements of the ten-year capital improvement program, future capital financing plans, projected operating and maintenance budgets, revenue requirements and projected rate increases to support long-term capital and operating needs; and

WHEREAS, the Board, in Resolutions 11-10 and 13-57, adopted a series of financial policies in the areas of capital financing, long-term financial planning, and rate-setting to assure the short-term and long-term financial health of DC Water; and

WHEREAS, adherence to these financial policies has allowed the DC Water to receive strong bond ratings that will reduce debt service costs over the ten-year planning period; and

WHEREAS, consistent with the Board policies, the General Manager has prepared a ten-year financial plan in conjunction with the proposed FY 2019 operating and capital budgets; and

WHEREAS, the ten-year financial plan is based on assumptions detailed in the proposed Fiscal Year 2019 Operating and Capital Budgets; and

WHEREAS, the ten-year financial plan is consistent with projections appearing in the attached Schedules A, B and C of this resolution; and

WHEREAS, on January 23, 2018, the DC Retail Water and Sewer Rates Committee met and reviewed the proposed ten-year financial plan, but did not recommend the plan to the Board and asked staff to review the proposed \$4.0 billion Capital Investment Plan (CIP) baseline and alternative CIP scenarios; and

WHEREAS, on February 20, 2018, and February 22, 2018, the DC Retail Water and Sewer Rates Committee and Finance and Budget Committee, respectively, met and reviewed the proposed ten-year financial plan, and recommended that the Board adopt the plan as recommended by the General Manager.

NOW THEREFORE BE IT RESOLVED THAT:

1. The Board hereby accepts and approves the proposed Fiscal Year 2018 - 2027 Financial Plan that is supported by the attached Schedule A, B and C and the proposed Fiscal Year 2019 Operating and Capital Budgets.

This resolution is effective immediately.


Secretary to the Board of Directors

District of Columbia Water & Sewer Authority

FY 2018 - FY 2027 Financial Plan

(In 000's)

OPERATING	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Retail*	\$ 515,466	\$ 539,982	\$ 571,113	\$ 602,587	\$ 629,109	\$ 656,446	\$ 678,437	\$ 696,598	\$ 718,313	\$ 742,257
Wholesale*	76,028	79,237	81,614	84,062	86,584	89,182	91,857	94,613	97,451	100,375
Other	28,978	30,249	33,041	39,588	42,764	43,199	42,708	42,789	44,418	44,803
RSF										
Operating Receipts (1)	\$ 620,472	\$ 649,467	\$ 685,768	\$ 726,237	\$ 758,456	\$ 788,627	\$ 813,002	\$ 834,000	\$ 860,182	\$ 887,436
Operating Expenses	(320,146)	(338,499)	(348,335)	(358,462)	(368,891)	(379,628)	(390,684)	(402,068)	(413,790)	(427,381)
Debt Service	(184,278)	(199,025)	(214,119)	(232,128)	(245,477)	(258,537)	(267,811)	(275,215)	(283,955)	(292,699)
Cash Financed Capital Improvement	\$ (35,260)	\$ (26,999)	\$ (28,556)	\$ (30,129)	\$ (37,747)	\$ (45,951)	\$ (47,491)	\$ (55,728)	\$ (64,648)	\$ (66,803)
Net Revenues After Debt Service	\$ 80,789	\$ 84,944	\$ 94,758	\$ 105,518	\$ 106,342	\$ 104,711	\$ 107,017	\$ 100,989	\$ 97,788	\$ 100,553
Operating Reserve-Beg Balance	147,212	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000
Other Misc (Disbursements)/Receipts										
Wholesale/Federal True Up	(16,019)	(7,321)	(1,500)	-	-	-	-	-	-	-
Project Billing Refunds	(4,000)	(4,000)	(4,000)	-	-	-	-	-	-	-
Transfers To RSF										
Pay-Go Financing	(67,982)	(73,624)	(89,258)	(105,518)	(106,342)	(104,711)	(107,017)	(100,989)	(97,788)	(100,553)
Operating Reserve - Ending Balance	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000
Rate Stabilization Fund Balance RSF (2)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)	\$ (61,450)
Senior Debt Service Coverage	489%	561%	545%	544%	575%	559%	659%	674%	648%	624%
Combined Debt Service Coverage	164%	161%	165%	168%	168%	167%	166%	166%	166%	166%
Actual/Projected Water/Sewer Rate Increases	5.0%	13.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
*Operating Receipts \$ Increase/Decrease	20,228	24,515	31,131	31,474	26,522	27,338	21,991	18,161	21,715	23,945
Retail	(5,108)	3,209	2,377	2,448	2,522	2,598	2,675	2,756	2,838	2,924
Wholesale										
*Operating Receipts % Increase/Decrease	4.1%	4.8%	5.8%	5.5%	4.4%	4.3%	3.3%	2.7%	3.1%	3.3%
Retail	-5.3%	4.2%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Wholesale										

(1) Includes interest earnings on senior lien revenue bonds, debt service reserve fund
(2) FY 2018 planned transfers of \$0.0 million to Rate Stabilization Fund will maintain the total fund balance at \$61.45 million

Schedule B

**District of Columbia Water & Sewer Authority
FY 2018 - FY 2027 Average Residential Customer Monthly Bill**

Units	Current		Proposed		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	FY 2018	FY 2019	FY 2020	FY 2021								
DC Water Water and Sewer Retail Rates ⁽¹⁾	\$ 60.13	\$ 68.27	\$ 71.73	\$ 75.33	\$ 79.12	\$ 83.10	\$ 87.26	\$ 91.67	\$ 96.27	\$ 101.13		
DC Water Clean Rivers IAC	25.18	23.00	25.58	29.07	31.33	33.62	34.66	34.75	35.45	36.46		
DC Water Customer Metering Fee	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86		
DC Water Water System Replacement Fee ⁽²⁾	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30		
Subtotal DC Water Rates & Charges	\$ 95.47	\$ 101.43	\$ 107.47	\$ 114.56	\$ 120.61	\$ 126.88	\$ 132.08	\$ 136.58	\$ 141.88	\$ 147.75		
Increase / Decrease	\$ 5.82	\$ 5.96	\$ 6.04	\$ 7.09	\$ 6.05	\$ 6.27	\$ 5.20	\$ 4.50	\$ 5.30	\$ 5.87		
District of Columbia PILOT Fee ⁽¹⁾	\$ 3.04	\$ 3.10	\$ 3.16	\$ 3.22	\$ 3.29	\$ 3.35	\$ 3.41	\$ 3.47	\$ 3.53	\$ 3.60		
District of Columbia Right-of-Way Fee ⁽¹⁾	1.12	1.12	1.18	1.18	1.18	1.18	1.24	1.24	1.24	1.24		
District of Columbia Stormwater Fee ⁽²⁾	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67		
Subtotal District of Columbia Charges	\$ 6.83	\$ 6.89	\$ 7.01	\$ 7.07	\$ 7.14	\$ 7.20	\$ 7.32	\$ 7.38	\$ 7.44	\$ 7.51		
Total Amount Appearing on DC Water Bill	\$ 102.30	\$ 108.32	\$ 114.48	\$ 121.63	\$ 127.75	\$ 134.08	\$ 139.40	\$ 143.96	\$ 149.32	\$ 155.26		
Increase / Decrease Over Prior Year	\$ 5.95	\$ 6.02	\$ 6.16	\$ 7.15	\$ 6.12	\$ 6.33	\$ 5.32	\$ 4.56	\$ 5.36	\$ 5.94		
Percent Increase in Total Bill	6.2%	5.9%	5.7%	6.2%	5.0%	5.0%	4.0%	3.3%	3.7%	4.0%		

(1) Assumes average monthly consumption of 6.2 Ccf, or (4,638 gallons)

(2) District Department of the Environment stormwater fee of \$2.67 effective November 1, 2010

(3) DC Water "Water System Replacement Fee" of \$6.30 for 5/8" meter size effective October 1, 2015

District of Columbia Water & Sewer Authority
Retail Rates, Charges and Fees

	Units	Current FY 2018	Proposed FY 2019	Proposed FY 2020
DC Water Retail Rates Water (Residential Lifeline 0 - 4 Ccf)	Ccf	\$ 3.39	\$ 2.91	\$ 3.06
DC Water Retail Rates Water (Residential > 4 Ccf)	Ccf	\$ 4.26	\$ 3.90	\$ 4.10
DC Water Retail Rates Water (Multi-Family)	Ccf	\$ 3.80	\$ 3.37	\$ 3.54
DC Water Retail Rates Water (Non-Residential)	Ccf	\$ 4.40	\$ 4.05	\$ 4.25
DC Water Retail Rates Sewer	Ccf	\$ 6.00	\$ 7.75	\$ 8.14
DC Water Clean Rivers IAC	ERU	\$ 25.18	\$ 23.00	\$ 25.58
DC Water Customer Metering Fee	5/8"	\$ 3.86	\$ 3.86	\$ 3.86
DC Water Water System Replacement Fee	5/8"	\$ 6.30	\$ 6.30	\$ 6.30
District of Columbia PILOT Fee	Ccf	\$ 0.49	\$ 0.50	\$ 0.51
District of Columbia Right-of-Way Fee	Ccf	\$ 0.18	\$ 0.18	\$ 0.19
District of Columbia Stormwater Fee	ERU	\$ 2.67	\$ 2.67	\$ 2.67

Presented and Adopted: March 1, 2018

**SUBJECT: Intent to Reimburse Capital Expenditures with Proceeds
of a Borrowing**

**#18-23
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("DC Water"), at the Board meeting held on December 1, 2016, upon consideration of a joint-use matter, decided by a vote of eleven (11) in favor and none (0) opposed, to take the following action.

WHEREAS, DC Water intends to acquire, construct and equip the items and projects set forth in Exhibit A hereto (collectively, the "Projects"); and

WHEREAS, plans for the Projects have advanced and DC Water expects to advance its own funds to pay expenditures related to the Projects ("Expenditures") prior to incurring indebtedness and to receive reimbursement for such Expenditures from proceeds of tax-exempt bonds or notes or taxable debt, or both.

NOW THEREFORE BE IT RESOLVED THAT:

1. DC Water utilizes the proceeds of tax-exempt bonds, taxable bonds or notes (the "Bonds") or other debt in an amount not currently expected to exceed \$410,000,000 to pay costs of the Projects. These costs include amounts heretofore unreimbursed pursuant to Resolution 16-95 of the Board adopted on December 1, 2016, plus amounts projected to be reimbursed during Fiscal Year 2018 – 2019.
2. DC Water intends to use the proceeds of the Bonds to reimburse itself for Expenditures with respect to the Projects made on or after the date that is 60 days prior to the date of this Resolution. DC Water reasonably expects on the date hereof that it will reimburse the Expenditures with the proceeds of the Bonds or other debt.
3. Each Expenditure was or will be, unless otherwise supported by the opinion of bond counsel, either (a) of a type properly chargeable to a capital account under general federal income tax principles (determined in each case as of the date of the Expenditure), (b) a cost of issuance with respect to the Bonds, (c) a nonrecurring item that is not customarily payable from current revenues, or (d) a grant to a party that is not related to or an agent of DC Water so long as such

grant does not impose any obligation or condition (directly or indirectly) to repay any amount to or for the benefit of DC Water.

4. DC Water makes a reimbursement allocation, which is a written allocation by DC Water that evidences DC Water's use of proceeds of the Bonds to reimburse an Expenditure, no later than 18 months after the later of the date on which the Expenditure is paid or the Project is placed in service or abandoned, but in no event more than three years after the date on which the Expenditure is paid. The DC Water recognizes that exceptions are available for certain "preliminary expenditures," costs of issuance, certain de minimis amounts, expenditures by "small issuers" and expenditures for any construction, the completion of which is expected to require at least five years.
5. The Board adopts this resolution confirming the "official intent" within the meaning of Treasury Regulations Section 1.150-2 promulgated under the Internal Revenue Code of 1986, as amended.

This resolution is effective immediately.


Secretary to the Board of Directors

EXHIBIT A — LIST OF PROJECTS

Blue Plains Plantwide Projects
Blue Plains Enhanced Nitrogen Removal Facilities
Blue Plains Liquid and Solids Processing Projects
Sanitary Sewer System Projects
Combined Sewer System Projects
DC Clean Rivers Project
Stormwater Sewer System Projects
Water Pumping, Distribution and Storage Projects
Metering and Capital Equipment
Washington Aqueduct Projects

Presented and Adopted: March 1, 2018
Subject: Approval of Proposed Fiscal Year 2019 Operating Budget

#18-24
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority, ("DC Water") at its meeting on March 1, 2018, upon consideration of a joint-use matter, decided by a vote of eleven (10) in favor and one (1) opposed, to take the following action with respect to the Fiscal Year 2019 Proposed Operating Budget.

WHEREAS, on January 4, 2018, the Interim Chief Executive Officer and General Manager, Chief Engineer, Chief Operating Officer, and Chief Financial Officer, at the budget workshop briefed Board members on the Proposed FY 2019 Operating Budget that totaled \$582,781,000; and

WHEREAS, on January 18, 2018, the Environmental Quality and Operations Committee reviewed the budget proposals and discussed in detail the alternative budget scenarios, budget drivers, strategic budget decisions, budget assumptions, customer and operational impacts; and

WHEREAS, on January 23, 2018, the Finance and Budget Committee and the DC Retail Water and Sewer Rates Committee, in a joint meeting, reviewed the budget proposals and discussed in detail the alternative budget scenarios, budget drivers, strategic budget decisions, budget assumptions, customer and operational impacts; and

WHEREAS, on February 22, 2018, the Finance and Budget Committee further reviewed the budget proposals, budget drivers, strategic budget decisions, budget assumptions, customer and operational impacts, and recommended that the Board adopt the FY 2019 Operating Budget that totals \$582,781,000.

NOW THEREFORE BE IT RESOLVED THAT:

The Board hereby approves and adopts DC Water's Proposed Fiscal Year 2019 Operating Budget totaling \$582,781,000 and as further detailed in the Interim Chief Executive Officer and General Manager's Proposed Fiscal Year 2019 Budget presented on January 4, 2018 and accompanying materials.

This resolution is effective immediately.


Secretary to the Board of Directors