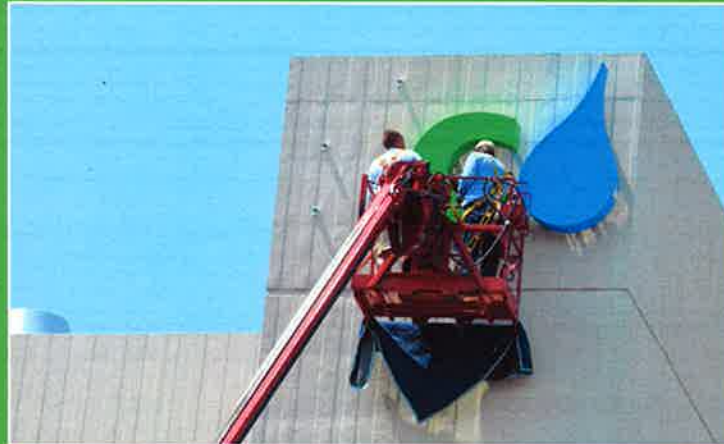


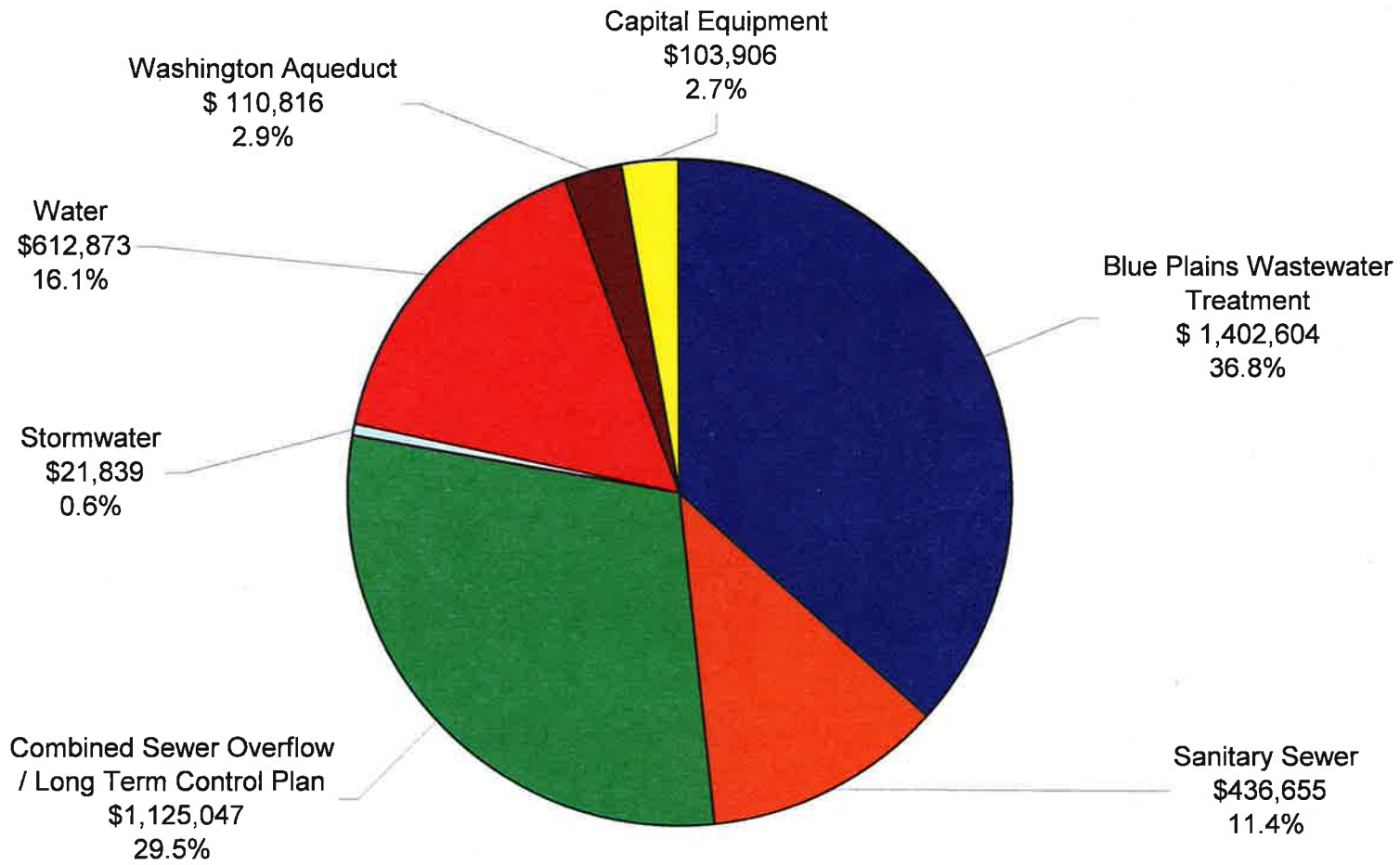


DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
CAPITAL IMPROVEMENT PROGRAM
APPROVED BY **2010-2019**



SECTION II
Capital Improvement
Projects Overview

FY 2010 - FY 2019 Capital Improvement Program (\$ in 000's)



Total \$3.8 billion (Cash Disbursements)

FY 2010 – FY 2019 CAPITAL IMPROVEMENT PROGRAM OVERVIEW

District of Columbia Water and Sewer Authority's ("DC Water") ten-year capital improvement program (CIP) totals \$3.8 billion (cash disbursements basis), approximately the same amount as last year's plan. As mentioned in Section I and discussed in more detail later throughout this document, although the total disbursements for the plan stayed the same, there has been a shift among the Service Areas. The Wastewater Treatment Area disbursements decreased by \$170.1 million over the ten year period as a result of the completion of major projects in the out-years of the plan such as the Enhanced Nitrogen Removal Facilities (formerly BTN - Total Nitrogen Facilities) and digesters. This decrease was offset by increases in the Water, Sanitary Sewer, CSO and the Washington Aqueduct. The increases in the Water and Sanitary Sewer Areas (combined total of approximately \$99 million) were the result of the continuation of the ramp-up through 2015 of the service life restoration programs in these areas. The increase in the CSO/Clean Rivers Project (aka CSO/LTCP) of \$45 million is primarily the result of the addition of FY 2019 and the dropping of FY 2009 within the ten year plan. An \$18 million increase for the Washington Aqueduct represents the funding needed for infrastructure improvements at their facilities over the next ten years.

The following sections summarize major projects and changes in each service area, with additional details for each project included in each service area section. Please note that all dollar amounts are presented on a project lifetime basis, except where noted otherwise.

WASTEWATER TREATMENT

The lifetime budget for the Wastewater Treatment Service Area is \$2.7 billion, an increase of \$69.2 million from last year's budget. This increase results primarily from the inclusion of the Raw Wastewater Pump Station 2 (\$27.5 million) and the increase funding for the Enhanced Nitrogen Removal-North (\$29.4 million) formerly named Plantwide Fine Bubble Aeration System. The Raw Wastewater Pump Station Upgrade is necessary to replace equipment that is beyond its useful life and to relocate sensitive equipment to a less corrosive environment to maintain the investment in the remaining equipment. The Enhanced Nitrogen Removal-North replaces the existing coarse bubble diffusers in the Secondary Treatment process with fine bubble diffusers. Conversion to a fine bubble aeration system provides the capability to transfer more oxygen to the process while saving overall energy consumption.

As previously indicated, the decrease in the ten year disbursements in this service area is primarily due to the completion of major projects in the out-years of the plan.

Also, this Area continues to reflect the implementation of the Biosolids Management Plan including the costs of construction of the Combined Heating and Power Plant (CHP) and Digesters with estimated completion in FY 2014. The benefits of this plan include producing a Class A biosolids product which can be more widely disposed of at reduced costs; reduction in the carbon footprint of the existing lime stabilization process; and, the on-site production of an estimated 10MW of power that can be utilized at Blue Plains. An

interim method of financing this project has been used in the Financial Plan to mitigate the impact on customers' rates and to better match the financing costs with the benefits that will be received over the life of these facilities

Other long-term upgrade projects now under construction include:

- Nitrification-Denitrification Facilities Upgrade - to upgrade the process and/or replace equipment that is at the end of its useful life.
- Raw Wastewater Pump Station 1 - Upgrade to the Raw Wastewater Pump Station to replace equipment that is at the end of its useful life, and improve reliability.
- Process Control System – will provide automated monitoring and control for the nitrification-denitrification process that will improve treatment, control and optimize chemical and power costs, and increase reliability of the facilities.
- Biological Sludge Thickening Facilities- will upgrade the existing dissolved air floatation thickening units to restore integrity to this system and reduce sludge processing and chemical costs through improved efficiency.

COMBINED SEWER OVERFLOW

The lifetime budget for the Combined Sewer Service Overflow (CSO) Service Area is \$2.7 billion, which includes the twenty-year Clean Rivers Project (aka CSO/LTCP). The benefits of this plan are significant. When fully implemented, combined sewer overflows will be reduced by a projected 96 percent (98 percent on the Anacostia River), resulting in improved water quality. There was a net decrease of about \$23 million in this service area resulting from a transfer of funds to a variety of Land-use Projects offset by the addition of necessary combined sewer projects scheduled to begin in FY 2018 as part of the continued ramp-up of the Sewer Facility Rehabilitation Plan. The disbursements, however, increased primarily as a result of the addition of FY 2019 (\$83.5 million) and the dropping of FY 2009 (\$30.9 million) within the ten year plan.

As was noted last year there are additional risks and contingencies associated with the 20-year LTCP program that exist and need to be evaluated over time. Given the long time frame of this project and the uncertainties associated with tunneling projects, we are continually monitoring the costs and risks with the expectation of updating the budget projections when certain milestones have been reached. One major milestone will occur in the spring of FY 2011 with the awarding of the first construction contract for the Blue Plains Tunnel Project. As a result, we are elevating the Congressional Authority Request to mitigate any unknown risks on this project -neither the Lifetime Budget nor the Disbursements have been adjusted at this time.

STORMWATER

The lifetime budget for the Stormwater Service Area is \$62 million, an increase of \$3.2 million from last year primarily due to the funding of FY 2019 in the current ten year plan. Over the past few years, extensive dialogue among stormwater task force members resulted in a better definition of roles, responsibilities and funding sources for the activities required to enhance DC stormwater management. The DC Department of the Environment (DDOE) entered into agreements with various offices to provide services in support of the District's MS4 permit in accordance with funding availability from the Enterprise Fund. DC Water provides for the

maintenance and replacement of certain public facilities that convey stormwater runoff to the Anacostia and Potomac Rivers, Rock Creek, and other receiving streams within certain areas of the District of Columbia, specifically the areas of the District served by combined sewers. Various other agencies have responsibility for a variety of other stormwater activities. Discussion of other matters, such as the turnover of stormwater pumping facility maintenance and planned capital replacement of infrastructure in areas managed by the District under the MS4 permit continues. DDOE maintains the central responsibility for managing stormwater activities under the MS4 permit and has worked to coordinate with all agencies, the activities and funding mechanisms necessary to ensure full compliance.

While DC Water has the Clean Rivers Project to address these issues within the combined sewer areas, DC Water's staff continues to participate in the MS4 task force and to monitor the impact of other MS4 NPDES requirements on DC Water and its ratepayers. Significant progress has been made throughout the District. Since 2001, DC Water collected the MS4 stormwater fees on behalf of the District, and acted as the Stormwater Administrator until the creation of DDOE and the transfer of duties in early 2007. DC Water continues to collect those fees on behalf of the District and transfer them to DDOE quarterly. In FY 2009, we worked closely with DDOE to share our impervious surface area database. Along with DC Water, DDOE believes that this new rate structure can help to equitably allocate costs of services provided to the cost causers and influence future behavior through education.

SANITARY SEWER

A majority of the sewers in the DC Water system were constructed more than one hundred years ago and are still in operation. Aging infrastructure is a national issue and can impact the condition and performance of the system. DC Water is responsible for wastewater collection and transmission in the District of Columbia, including operation and maintenance of the sanitary sewer system. DC Water's sanitary sewer system includes approximately 600 miles of large interceptor sewers and smaller gravity collection sewers. DC Water is also responsible for sewer lateral connections from the sewer mains to the property lines of residential, government, and commercial properties. In addition, DC Water is responsible for the 50 mile long Potomac Interceptor System under an agreement with the participating jurisdictions. This provides conveyance of wastewater from areas in Virginia and Maryland to Blue Plains. The existing sanitary sewer system in the District of Columbia dates back to 1810, and includes a variety of materials such as brick and concrete, vitrified clay, reinforced concrete, ductile iron, plastic, steel, brick, cast iron, cast in place concrete, and even fiberglass.

During FY 2009, DC Water completed a Sewer System Assessment and the Water Facility Plan ("Study"). This document culminated a five year effort involving sewer inspection and condition assessment, development of a sewer GIS and database, hydraulic monitoring and modeling to assess system capacity and the development of prioritized activities for system improvement. This Study identified a significant increase in funding needed for specific sewer infrastructure improvements. As recommended by the Study, the current CIP includes funds for an ongoing, annual sewer inspection program, which may identify the need for additional work.

Key Findings of the 2009 Sewer Facilities Plan:

- Generally speaking, major sewer pipe infrastructure can meet current and future population needs; however, continued investment in upgrades to major infrastructure elements is needed.
- 88% of the sewers inspected had some defects, 60% of which could be addressed using localized repair and the remaining require, mainly, lining.
- 94% of the manholes inspected were found to have one or more defects
- The number and severity of pipe defects indicates an expected increase in problems in pipes greater than 75 years old. Older pipes can be in good condition (and younger ones can be in poor condition), but at the 75 year mark, DC Water can assume that more extensive and frequent inspection is needed.
- There are approximately 210 miles of sewers in stream valleys and about 12.3 miles of these sewers were found to need some type of repair.
- There are about 316,000 linear feet of sewers with some portion under buildings; of those inspected, a preliminary list has been developed, and approximately 7,000 linear feet of sewers have been found to have multiple and/or significant defects, warranting rehabilitation or replacement.

Key Recommendation of 2009 Sewer Facilities Plan- continue a two-pronged, parallel approach to the CIP program:

- Implement identified projects resulting from ongoing system condition and needs assessment, and an increase in the continued annual sewer pipe renewal program.
- Based on a 20-year planning outlook, this will require a \$1.2 billion increase (2008 dollars) in capital spending to address currently identified projects (\$536 million) and a sewer pipe renewal program (\$664 million).

The lifetime budget in this area has increased by \$134.8 million from last years estimate and the proposed 10-year CIP has been increased by just over \$40 million. Both of these amounts are expected to continue to increase in future years to reflect the ramping-up of this program through FY 2015 as recommended in the facility plan. There is approximately \$232 million related to above referenced - - and already identified - - projects in the lifetime budget for this service area. The remaining amounts (about \$300 million) will be included in future requests as they are analyzed and prioritized with all other funding needed for all service areas.

WATER

The lifetime budget for the Water Service Area (including Meter Replacement / AMR installation) is \$1.4 billion, an increase of \$197.3 million from last year's CIP. This is primarily driven by the continuing ramping-up through FY 2015 of the Water Facility Plan that was completed in FY 2009 to achieve the replacement of one percent of the small diameter water main infrastructure per year.

Major water projects include construction of new storage facilities; water main replacements, rehabilitations and extensions; lead service replacements; fire hydrant replacements; and valve replacements.

Projects in the Water Service Area are designed to maintain an adequate and reliable potable water supply to customers, and fire protection. Categories of projects include the rehabilitation and replacement of water mains, storage facilities, and pumping stations. This area also includes water service line and meter replacement.

WASHINGTON AQUEDUCT

The Washington Aqueduct (Aqueduct), managed by the U.S. Army Corps of Engineers, provides water, in wholesale, to DC Water and its partners in Northern Virginia, Arlington County and Falls Church. DC Water purchases approximately 75 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for nearly 75 percent of the Aqueduct's operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997, DC Water and its Northern Virginia partners have a much greater role in oversight of the Aqueduct's operations and its capital improvement program.

The proposed lifetime budget for DC Water's share of Washington Aqueduct projects totals \$203.1 million or \$16.5 million more than last year's 10-year plan of \$186.6 million. This increase reflects the prioritized need for increased funding for infrastructure improvements over the next ten years.

CAPITAL EQUIPMENT

DC Water's Capital Equipment budget totals approximately \$103.9 million for FY 2010 – FY 2019 plan, an increase of approximately \$5.3 million compared to the last ten-year plan. Approximately sixty percent of spending in the capital equipment area is on major information technology projects, including the document management system (budget of \$4 million) and the asset management system (budget of \$7 million). DC Water continues its commitment to scheduled replacement of its vehicle fleet with a ten year budget of \$11.9 million, representing more than ten percent of the ten-year plan. Finally, maintenance of large equipment totals \$9.4 million, or nine percent of the ten-year plan. Other equipment including pumps, valves, meters and hydrants necessary for maintenance (including that of the District's public fire system) totals \$11.1 million.

The revised FY 2011 budget at \$17.5 million is \$4.2 million more than the currently approved budget. This variance is primarily attributable to increases in budgets for Information Technology projects.

CIP DEVELOPMENT AND APPROVAL PROCESS

DC Water's capital budget review process begins each year in the spring, as part of both our capital and operating budget review process. This process includes a review of major accomplishments, priorities, status of major projects and emerging regulatory and related issues impacting the capital program. Projections of changes in project lifetime budgets are also included. The review process involves the DC Water departments with responsibility for managing the operations of DC Water Services, the capital projects as well as finance and budget staff and executive management. The CIP is integrated into DC Water's ten-year financial plan; because of its size, it is the primary driver of DC Water's projected rate increases over the current 10 year planning period.

This review process lasts over several months and culminates with the presentation of the updated CIP to DC Water's Board of Directors' Water Quality & Water Services, Retail Services Finance & Budget and Retail Rates Committees in October. The Committees complete their review from October through December. The operating budgets, capital improvement program, and ten-year financial plan are then forwarded to the full Board for its consideration in late winter; usually January. This year, the Board delayed final review and adoption of a new budget until February due to the extraordinary regional economic challenges and rigorous re-investment requirements necessary to maintain safe, reliable services.

After adoption by the Board of Directors, DC Water is required to submit its annual operating and capital budgets to the Mayor and the District of Columbia Council for its review and comment; however, neither has power to change DC Water's annual budgets. Final operating and capital budget numbers, along with the capital authority request will be forwarded to the District for inclusion in the District of Columbia's budget submission to Congress. DC Water's request for capital authority is ultimately made to and approved by the U.S. Congress.

DISBURSEMENTS AND PROJECT LIFETIME BUDGETS

As in the past, we have presented the CIP on both a project lifetime basis and cash disbursement basis. During the CIP review process, we perform an extensive review of the total project, or "lifetime" budgets, which also reflect historical spending prior to the current ten-year period, projected spending beyond the current ten-year period and project contingencies. Project lifetime budgets are our primary area of focus in budget development and day-to-day monitoring. In addition to lifetime budgets, we also develop cash disbursements forecast. Actual cash disbursements are critical to forecasting the anticipated level of rate increases and the amount and timing of capital financings. While cash disbursements are a function of project lifetime budgets, they reflect a more realistic projection of actual "cash out the door" excluding contingencies and taking into account historical and projected completion rates.

As in prior years, the budget document includes a comparison of this year's vs. last year's lifetime project budgets by program area for the Board's review. Changes have been made to some of the project lifetime budgets approved from last year due to a change in project scope, engineering cost estimates, site changes and other related issues. In addition, some projects are either closed or dropped from the CIP. Projects for which all activities have been completed during a given fiscal year are listed as 'Closed' during that fiscal year; these same projects are, then, listed as 'Dropped' in the immediately following fiscal year.

CAPITAL AUTHORITY

As part of DC Water's enabling legislation, Congressional appropriation authority is required before any capital design or construction contract can be entered into. The FY 2012 request totals \$752.5 million, and reflects the following:

- Remaining authority from prior years' appropriations;
- Projected commitments in FY 2011 and FY 2012;

- Planned FY 2013 and FY 2014 commitments, to ensure adequate authority exists, in the event that any projects are accelerated.
- Risk allowance associated with the start of construction for the Blue Plains Tunnel

Due to the timing of the Congressional appropriations process, authority requests must be made well in advance of commitment execution. Including projected FY 2013 and FY 2014 commitments (a 24-month 'look ahead') allows us adequate flexibility to continue with contract commitments in the event that the U.S Congress delays budget approval and allows us to quickly accelerate or reprioritize projects into earlier years as approved by the Board. While this gives us flexibility to reprioritize projects, it should be noted that such changes and execution of any contract still require General Manager's approval, with major projects and contracts requiring Board approval.

MAJOR ASSUMPTIONS

Inflation: All project costs are typically inflated at three percent annually to the mid-point of construction.

Contingency: DC Water capital projects include project contingencies ranging from five to fifteen percent, based on the size of the project.

PROJECT PAGES

This document contains individual sections for each of DC Water's seven service areas. Each service area is made up of specific projects. Within each service area section in this document, there are individual project sheets for each current capital project in that section. The capital project sheets contain general information for each project. The following information is included:

Service Area Title – currently, there are seven defined project service areas in DC Water's CIP. The seven areas are: Wastewater Treatment, Combined Sewer Overflow / LTCP, Stormwater, Sanitary Sewer, Water, Washington Aqueduct and Capital Equipment. The service area categorization groups together similar projects based on facility location and type of work being done in the project. Congressional capital authority is requested at this level.

Program Title – is a further categorization within the Service Area and groups projects by type of process. For example, in the Wastewater Treatment Service Area, there are four programs: Liquid Processing, Plantwide projects, Solids Processing and Total Nitrogen Removal.

Activity Group/Project Title – The activity group is the level at which DC Water manages and monitors projects, including in the financial system and project management system. The project title reflects the descriptive name given to the project.

Service Area Manager – lists which department or organization manages the project. The majority of the projects in DC Water’s CIP are managed by an internal DC Water operating department. DC Water’s CIP also includes some projects which are managed by outside organizations. It is advantageous for DC Water to coordinate some of its capital work on the water and sewer infrastructure with the District’s Department of Transportation (DDOT). The funding required for DC Water’s work is included in the CIP, but those projects are managed by DDOT. Approximately 75 percent of the Washington Aqueduct’s capital program is funded by DC Water, but the U.S. Army Corps of Engineers actually manages those projects.

Priority – DC Water engages in and prioritizes capital projects based on specific criteria. A project comprises of one or more jobs which, in turn, have individual priorities. The Priority mentioned on the capital project-sheets (listed in different sections of this book) is the one that has the largest budgeted dollars associated with it. The following is a list of definitions of the priorities shown on the individual project sheets:

1A. Court Ordered, Stipulated Agreements, Etc.

These are the projects that are undertaken to comply with court orders, stipulated agreements, regulatory issues, and the National Pollutant Discharge Elimination Permit (NPDES).

2A. Health Safety

These are projects that are required to eliminate or mitigate impact on public health or safety. These projects are also required to ensure that there is no failure to comply with DC Water’s NPDES permit requirements.

2B. Board Policy, DC Water’s commitment to outside agencies

These are projects that are undertaken to comply with a policy that the Board may adopt as a result of its commitment to outside Agencies.

2C. Potential Failure/Ability to continue meeting permit requirement

These are projects that are undertaken to construct or rehabilitate Facilities or Equipment that is in danger of failing, and that such failure may potentially endanger DC Water’s ability to continue meeting permit requirements.

2D. High Profile, Good Neighbor Policy

These are projects that are undertaken to remediate concerns expressed by Citizens or Public Officials.

3A. Good Engineering, High pay back, Mission / Function

This category includes projects that are needed for rehabilitation and upgrading of facilities and infrastructure required for DC Water to fulfill its mission and function, as well as projects needed to resolve operational issues and inefficiencies. This category also recognizes cost savings in operation and maintenance.

3B. Good Engineering, Low, M&F over long term

This category includes projects that are needed for rehabilitation and upgrading of facilities and infrastructure, but have a lower priority than projects in 3A above, yet help DC Water to fulfill its mission over the long term.

Project Description – general description of the work to be done within the project.

Impact on Operations – describes the anticipated impact on DC Water's operations when the project is completed.

Design / Construction / Project Completion Dates– anticipated dates are shown.

Effective Funding by User – lists the anticipated project funding, by source and is based on the current Intermunicipal Agreement (IMA) and anticipates EPA funding where grants have been previously approved or in anticipation of that approval. Actual allocations may vary and are reconciled in accordance with applicable funding requirements.

Life Budget – the full project budget is approved and reviewed each year by DC Water's Board of Directors. Proposed increases or decreases to the total project life budget are shown, if applicable. Lifetime budgets for program management have been reduced, and project budgets increased, to reflect the allocation of costs for program management services at the conclusion of the prior fiscal year.

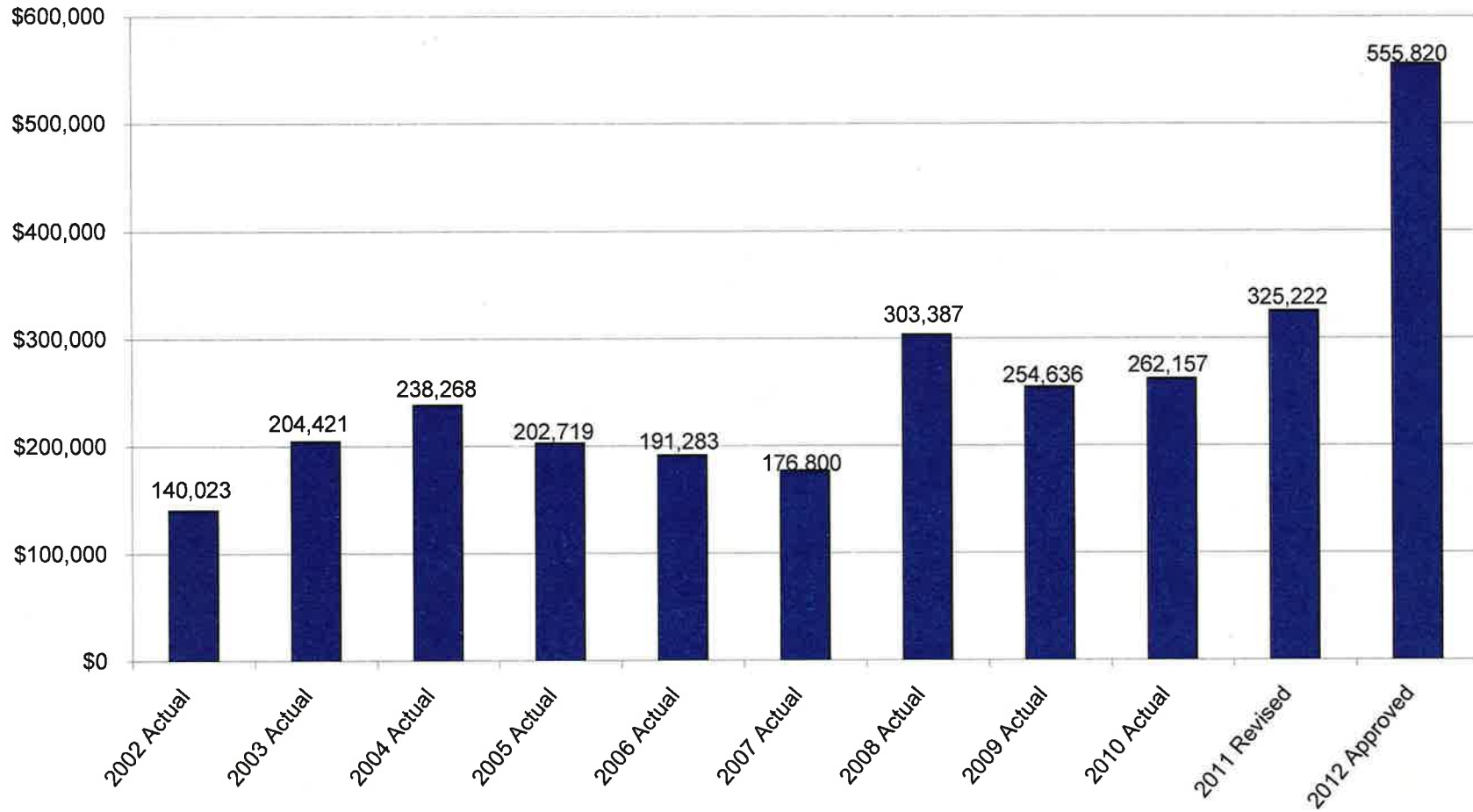
Disbursements / Commitments Budgets – projected disbursements and commitments for various projects are shown by fiscal year in which they are anticipated. Commitments budgets are based on total project budgets, which reflect the fully loaded, anticipated costs of a project, including project contingencies. Contingencies are not included when calculating disbursement budgets.

CAPITALIZATION POLICY

DC Water's capitalization policy determines how expenditures will be recognized and accounted for. Because we also match the financing to the projected useful life of the item, it also determines how projects will be financed. The following guidelines are used to categorize items as capital, capital equipment or operating (maintenance):

- Maintenance related items – are routine, cost under \$5,000, and do not extend the life of the item more than 3 years.
- Capital Equipment – has a life of at least 3 years, a cost exceeding \$5,000 and is financed with short-term debt or cash.
- Capital Project – has a long life (average of 30 years), a minimum cost of \$500,000, and is financed with 30 year bonds.

**Historical and Projected Capital Spending
FY 2002 - FY 2012
(\$ in 000's)**



FY 2010 - FY 2019 PROJECTED CAPITAL IMPROVEMENT PLAN (CIP) - DISBURSEMENTS BASIS (\$ in 000's)

| | FY 2010 Actuals | FY 2011 Revised | FY 2012 Approved | FY 2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | Total FY '10 -'19 |
|---|--------------------|--------------------|---------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|
| Wastewater Treatment | | | | | | | | | | | |
| Liquid Processing Projects | \$24,815 | \$12,660 | \$37,447 | \$21,959 | \$10,032 | \$3,720 | \$5,429 | \$11,932 | \$6,398 | \$5,356 | \$139,748 |
| Plantwide Projects | 16,540 | 22,894 | 19,478 | 11,882 | 6,458 | 4,277 | 3,901 | 3,823 | 12,924 | 6,982 | 109,160 |
| Solids Processing Projects | 35,420 | 45,849 | 152,259 | 142,664 | 40,388 | 6,917 | 7,224 | 1,271 | 67 | - | 432,061 |
| Enhanced Nitrogen Removal Facilities (formerly BTN - Total Nitrogen Program) | 25,789 | 51,725 | 126,810 | 149,198 | 117,548 | 75,240 | 112,442 | 55,534 | 5,425 | 1,923 | 721,635 |
| Sub-total | 102,564 | 133,129 | 335,993 | 325,703 | 174,426 | 90,154 | 128,997 | 72,561 | 24,815 | 14,260 | \$1,402,604 |
| Sanitary Sewer | | | | | | | | | | | |
| Sanitary Collection Sewers | 367 | 1,293 | 3,534 | 6,949 | 12,070 | 5,249 | 4,144 | 6,027 | 7,675 | 8,205 | 55,513 |
| Sanitary On-Going Projects | 9,521 | 10,281 | 12,902 | 8,257 | 7,657 | 7,809 | 8,037 | 8,267 | 8,530 | 9,007 | 90,267 |
| Sanitary Pumping Facilities | 1,143 | 681 | 557 | 684 | 711 | 39 | - | - | - | - | 3,814 |
| Sanitary Sewer Projects Program Management | 4,020 | 7,328 | 4,326 | 3,927 | 6,657 | 6,774 | 6,347 | 6,594 | 6,556 | 6,491 | 59,018 |
| Sanitary Interceptor/Trunk Force Sewers | 4,343 | 14,413 | 23,081 | 20,520 | 33,721 | 30,515 | 22,386 | 22,086 | 34,427 | 22,551 | 228,043 |
| Sub-total | 19,394 | 33,996 | 44,400 | 40,336 | 60,815 | 50,386 | 40,914 | 42,974 | 57,188 | 46,253 | 436,655 |
| Combined Sewer Overflow / Long Term Control Plan | | | | | | | | | | | |
| CSO Program Management | 1,272 | 3,481 | 1,883 | 1,905 | 2,307 | 1,851 | 1,562 | 1,680 | 2,294 | 2,783 | 21,018 |
| Combined Sewer Projects:Nine Minimum Controls | 33,452 | 24,847 | 5,775 | 2,165 | 291 | 7 | - | - | - | - | 66,537 |
| Combined Sewer Projects:Others | 938 | 3,822 | 4,915 | 10,067 | 14,838 | 13,661 | 19,782 | 15,448 | 13,405 | 10,467 | 107,343 |
| Clean Rivers Project (aka Long-Term Control Plan) | | | | | | | | | | | |
| Anacostia Tunnel | 18,930 | 42,752 | 79,578 | 116,188 | 100,501 | 127,541 | 148,478 | 143,022 | 56,722 | 56,071 | 889,783 |
| Potomac Tunnel | 367 | 753 | 547 | - | - | 1,618 | 5,385 | 5,500 | 9,207 | 12,711 | 36,088 |
| Rock Creek Tunnel | 154 | 430 | 316 | - | - | - | 243 | 811 | 838 | 1,486 | 4,278 |
| Sub-total | 55,113 | 76,085 | 93,014 | 130,325 | 117,937 | 144,678 | 175,450 | 166,462 | 82,465 | 83,518 | 1,125,047 |
| Stormwater | | | | | | | | | | | |
| Stormwater Local Drainage | - | 11 | 92 | 47 | 42 | 63 | 82 | 92 | 95 | 98 | 623 |
| Stormwater On-Going Program | 1,193 | 841 | 686 | 485 | 493 | 494 | 575 | 523 | 542 | 562 | 6,393 |
| Stormwater Pumping Facilities | - | - | - | - | - | - | - | - | - | - | - |
| DDOT Stormwater Program | - | 35 | 8 | 9 | 9 | 19 | 17 | 9 | 10 | 10 | 127 |
| Stormwater Research and Program Management | 380 | 1,157 | 266 | 201 | 243 | 195 | 165 | 172 | 234 | 285 | 3,298 |
| Stormwater Trunk/Force Sewers | 1,341 | 1,446 | 2,974 | 3,603 | 1,987 | 47 | - | - | - | - | 11,398 |
| Sub-total | 2,914 | 3,491 | 4,027 | 4,345 | 2,775 | 818 | 839 | 796 | 880 | 955 | 21,839 |
| Water | | | | | | | | | | | |
| Water Distribution Systems | 29,606 | 26,301 | 24,172 | 31,041 | 32,964 | 31,058 | 33,214 | 40,712 | 38,244 | 36,896 | 324,207 |
| Water On-Going Projects | 8,608 | 6,260 | 8,273 | 6,238 | 6,398 | 6,530 | 6,760 | 8,437 | 7,269 | 7,668 | 72,441 |
| Water Pumping Facilities | 1,742 | 3,270 | 8,748 | 7,141 | 2,936 | 752 | 1,188 | 3,401 | 7,464 | - | 36,642 |
| DDOT Water Projects | 10,402 | 2,298 | 2,412 | 7,110 | 6,033 | 4,871 | 5,149 | 5,388 | 6,006 | 6,090 | 55,758 |
| Water Storage Facilities | 1,119 | 2,577 | 1,250 | 4,815 | 10,534 | 9,224 | 1,838 | 2,680 | 4,335 | 3,359 | 41,731 |
| Water Projects Program Management | 3,981 | 3,963 | 3,779 | 3,170 | 3,187 | 3,890 | 3,854 | 3,856 | 3,905 | 3,930 | 37,516 |
| Water Lead Program | 4,540 | 3,323 | 2,320 | 2,593 | 2,902 | 2,926 | 2,906 | 2,816 | 3,006 | 21 | 27,354 |
| Meter Replacement /AMR Installation | 1,063 | 2,619 | 2,802 | 1,366 | 1,395 | 1,419 | 1,443 | 1,676 | 1,708 | 1,732 | 17,223 |
| Sub-total | 61,061 | 50,610 | 53,755 | 63,474 | 66,349 | 60,671 | 56,351 | 68,967 | 71,938 | 59,697 | 612,873 |
| Washington Aqueduct | 12,110 | 10,449 | 10,470 | 10,654 | 10,801 | 11,076 | 11,340 | 11,649 | 11,244 | 11,023 | 110,816 |
| Capital Equipment | 9,001 | 17,462 | 14,160 | 14,949 | 9,019 | 8,199 | 7,640 | 7,568 | 8,509 | 7,399 | 103,906 |
| Total FY 2012 DC Water CIP | \$262,157 | \$325,222 | \$555,820 | \$589,786 | \$442,122 | \$365,982 | \$421,531 | \$370,976 | \$257,039 | \$223,104 | \$3,813,740 |

FY 2010 - FY 2019 Capital Improvement Plan

Project Lifetime Budgets by Program Area (\$ 000's)

| | FY 2011 Approved | FY 2011 Revised / FY 2012 Approved | Variance |
|--|---------------------|---|-----------------|
| <u>Wastewater Treatment</u> | | | |
| Liquid Processing Projects | 588,541 | 612,749 | 24,208 |
| Plantwide Projects | 339,356 | 337,671 | (1,685) |
| Solids Processing Projects | 689,665 | 688,806 | (859) |
| Blue Plains Total Nitrogen Removal (BTN) | 977,333 | 1,024,855 | 47,522 |
| Sub-total | 2,594,895 | 2,664,081 | 69,186 |
| <u>Sanitary Sewer</u> | | | |
| Sanitary Collection Sewers | 115,686 | 133,906 | 18,220 |
| Sanitary On-Going Projects | 129,867 | 142,067 | 12,200 |
| Sanitary Pumping Facilities | 25,898 | 25,898 | - |
| Sanitary Sewer Projects Program Management | 100,235 | 103,150 | 2,915 |
| Sanitary Interceptor/Trunk Force Sewers | 328,671 | 430,144 | 101,473 |
| Sub-total | 700,357 | 835,165 | 134,808 |
| <u>Combined Sewer Overflow</u> | | | |
| CSO Program Management | 55,239 | 55,239 | - |
| Combined Sewer Projects: Nine Minimum Controls | 215,387 | 215,387 | - |
| Combined Sewer Projects: Others | 263,276 | 240,013 | (23,263) |
| Long-Term Control Plan- Total | | | |
| Anacostia Tunnel | 1,673,325 | 1,672,282 | (1,043) |
| Potomac Tunnel | 418,700 | 418,700 | - |
| Rock Creek Tunnel | 70,342 | 70,342 | - |
| Sub-total | 2,696,269 | 2,671,963 | (24,306) |
| <u>Stormwater</u> | | | |
| Stormwater Extensions/Local Drainage | 15,799 | 17,999 | 2,200 |
| Stormwater On-Going Program | 8,863 | 9,658 | 795 |
| Stormwater Pumping Facilities | 0 | 0 | - |
| DDOT Stormwater Program | 4,846 | 5,066 | 220 |
| Stormwater Projects Program Management | 10,630 | 10,630 | - |
| Stormwater Trunk/Force Sewers | 18,605 | 18,605 | - |
| Sub-total | 58,743 | 61,958 | 3,215 |

FY 2010 - FY 2019 Capital Improvement Plan

Project Lifetime Budgets by Program Area (\$ 000's)

| | FY 2011 Approved | FY 2011 Revised / FY 2012 Approved | Variance |
|--|---------------------|---|----------------|
| <u>Water</u> | | | |
| Water Distribution Systems | 618,425 | 666,933 | 48,508 |
| Water Lead Program | 200,000 | 191,000 | (9,000) |
| Water On-Going Projects | 68,432 | 112,121 | 43,689 |
| Water Pumping Facilities | 133,342 | 150,149 | 16,807 |
| DDOT Water Projects | 39,222 | 95,892 | 56,670 |
| Water Storage Facilities | 49,562 | 71,862 | 22,300 |
| Water Projects Program Management | 51,107 | 51,107 | - |
| Meter Replacement /AMR Installation | 42,833 | 61,151 | 18,318 |
| Sub-total | 1,202,923 | 1,400,215 | 197,292 |
| Washington Aqueduct | 186,634 | 203,138 | 16,504 |
| Capital Equipment | 98,546 | 103,906 | 5,360 |
| Total WASA CIP Lifetime (see notes) | 7,538,367 | 7,940,426 | 402,059 |

Notes:

1 Lifetime budgets shown here represent total budgets for projects that are active during the current 10-year CIP. Lifetime budgets include historical spending prior to the beginning of the current 10-year plan, spending during the 10-year plan, and projected spending beyond the current 10-year plan. Projects completed in FY 2010 will be dropped from the CIP next year.

2 These budgets do not include inhouse labor costs, estimated to be in the \$8 to \$9 million range, annually, and are applicable to, primarily, the time charged to capital projects by employees in the Departments of Engineering and Technical Services, Sewer Services, and Water Services.

**Fiscal Year 2012 Capital Authority Request
(\$ 000's)**

**Fiscal Year 2012
*Capital Authority Request**

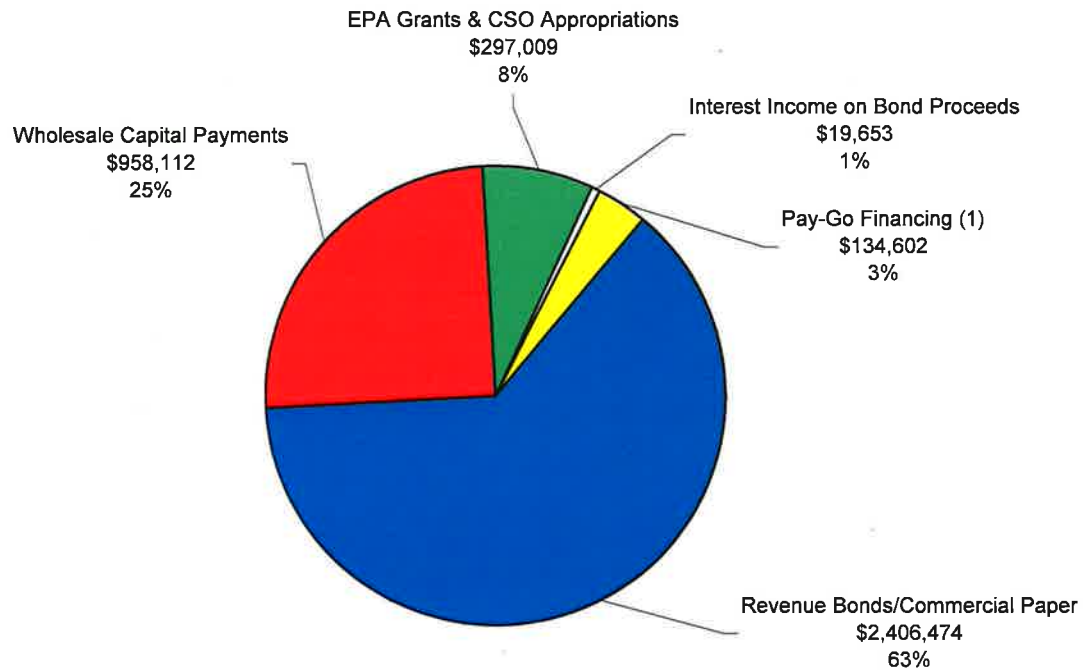
Service Areas

| | | |
|---|---------------------|-------------------------|
| Blue Plains Wastewater Treatment | ¹ | \$72,035 |
| Sanitary Sewer System | | 56,798 |
| Combined Sewer Overflow | ¹ | 513,853 |
| Stormwater | | 1,343 |
| Water System | | 78,279 |
| Washington Aqueduct (DC Water share) | | 17,672 |
| Capital Equipment | | <u>12,500</u> |
| | Total | <u>\$752,480</u> |

* The authority request includes a 24 month look-ahead, i.e., it also takes into account projected commitments for FY 2013 and FY 2014.

¹ Includes Special Risk Allowance of \$20 million, and \$122 million for Total Nitrogen (BTN) and Long Term Control Plan (LTCP) projects, respectively, although not part of their Lifetime budgets.

FY 2010 - 2019 CAPITAL IMPROVEMENT PROGRAM
Sources of Funds
(In \$000's)



(1) Pay-go financing is any funds available after funding the greater of 120 day or 125.5million operating and maintenance reserve, approximately \$125.5million in FY 2011. These transfers reduce the amount of new debt issuance.

| Activity Group | Project Title | Service Area | Cost at Completion |
|-------------------------|---|-------------------------|---------------------|
| Closed Projects | | | |
| A3 | 16 inch Tie-in to McMilliam Plant | Water | \$2,745,275 |
| E3 | FY 2003 - DWS Water Projects | Water | 7,447,102 |
| R1 | FY2000 - DDOT Water Projects | Water | 1,259,221 |
| R2 | FY2001 - DDOT Water Projects | Water | 1,078,874 |
| R3 | FY2002 - DDOT Water Projects | Water | 2,550,092 |
| R4 | FY2003 - DDOT Water Projects | Water | 4,241,277 |
| R5 | FY2004 - DDOT Water Projects | Water | 653,266 |
| R6 | FY2005 - DDOT Water Projects | Water | 452,844 |
| R7 | FY2006 - DDOT Water Projects | Water | 38,532 |
| R8 | FY2007 - DDOT Water Projects | Water | 4,214,954 |
| R9 | FY2008 - DDOT Water Projects | Water | 265,061 |
| DB | Sewer Services Field Facility & Relocation | Sanitary Sewer | 446,197 |
| | | | \$25,392,695 |
| Dropped Projects | | | |
| Q2 | FY2002 - DSS Sanitary Sewer Project | Sanitary Sewer | \$87,074 |
| Q5 | FY2005 - DSS Sanitary Sewer Project | Sanitary Sewer | 4,308,648 |
| Q6 | FY2006 - DSS Sanitary Sewer Project | Sanitary Sewer | 5,426,944 |
| K0 | Replacement of CSO Fabridam | Combined Sewer Overflow | 10,031,175 |
| E6 | FY2006 - DWS Water Projects | Water | 5,293,644 |
| LU | Land Facility for Water Pumping | Water | 0 |
| MJ | 20" Anacostia 1st High Watermain Replacements | Water | 3,742,408 |
| ML | Elimination of Dead Ends (Contract 2) | Water | 4,040,154 |
| NO | Good Hope Elevated Tank - Phase I | Water | 769,137 |
| QP | 4" CI Watermain Replacements | Water | 2,268,184 |
| DC | Fire Hydrant Replacement Program | Water | 4,272,750 |
| | | | \$40,240,118 |