Capital IMPROVEMENT Program

Fiscal Year 2010-11 update

Orange County Sanitation District

We're here for you.

Orange County Sanitation District

We're here for you.

Mission

Protect public health and the environment by providing effective wastewater collection, treatment, and recycling.

From the Director of Engineering

As the 2010-11 fiscal year ends, I'm pleased to share with you the significant milestones we have achieved. Earlier this year, we completed construction and began operating the Trickling Filter Project at our Huntington Beach facility two months earlier than required by our Consent Decree. This is a major accomplishment for the Orange County Sanitation District. We are now producing a higher quality effluent, meeting a commitment that we made seven years ago when we entered into a voluntary Consent Decree to meet secondary treatment standards.

The Consent Decree requires that OCSD complete seven milestones by the end of 2012. Our project teams have worked expeditiously, meeting five Consent Decree deadlines thus far. The two remaining milestones are also planned for completion on or ahead of schedule.

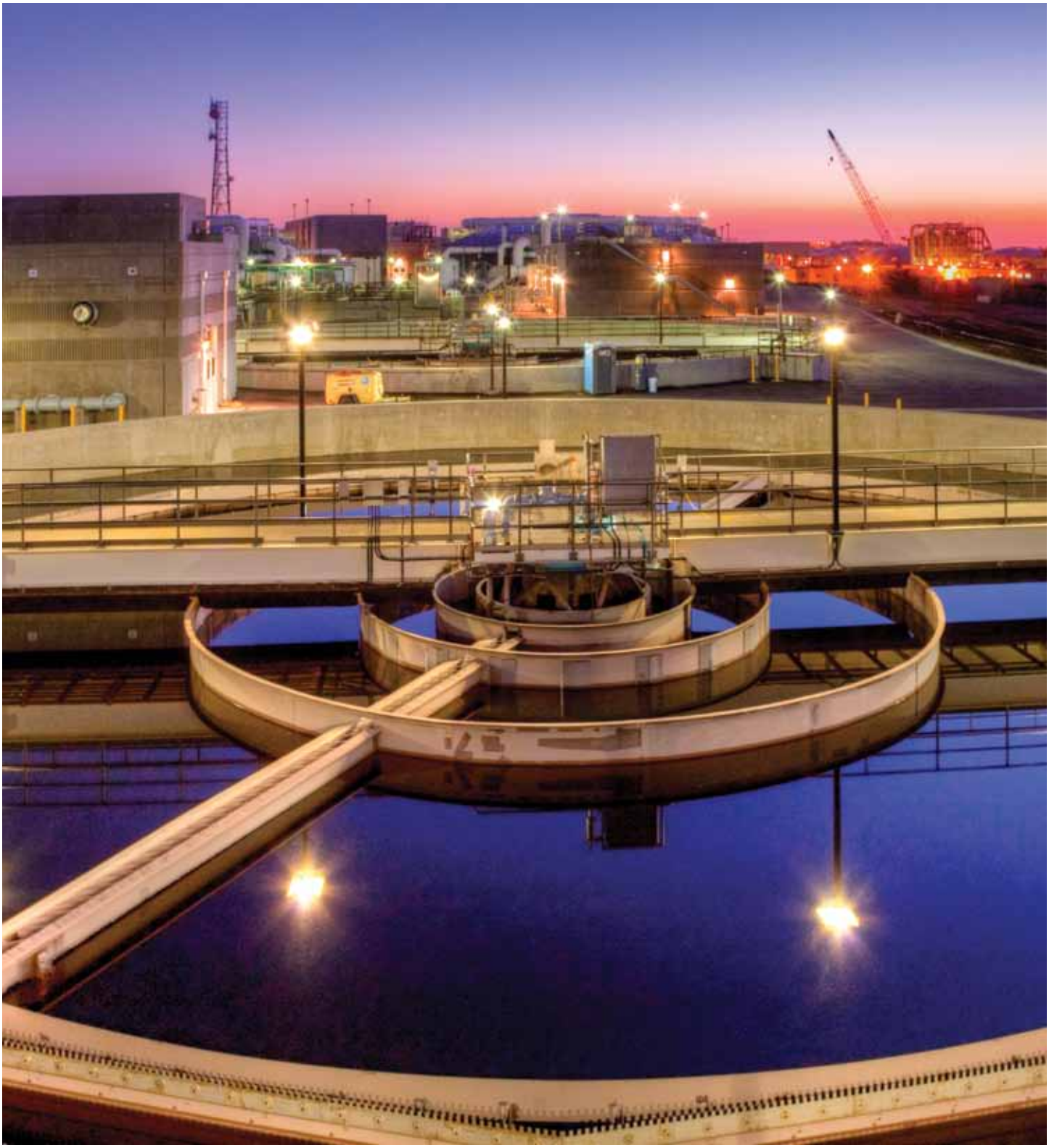
Our Capital Improvement Program started as a concept that is materializing into finished projects that are fully operational. We made a plan, a commitment to the public and the regulators, and we are now seeing the outcome.

As we complete our secondary treatment program, our future efforts will focus on rehabilitating aging facilities to continue to deliver on our mission to protect public health and the environment.

On behalf of the Engineering Department, I would like to extend our appreciation for the efforts of past and present members of the Board of Directors for their significant support of the Capital Improvement Program.

Respectfully submitted,

James D. Herberg, P.E., BCEE
Assistant General Manager / Director of Engineering
Orange County Sanitation District



Orange County Sanitation District's staff together with over 30 design firms and 20 contractors is working to provide safe, reliable, and efficient facilities, with good value and minimal impacts to the public. Significant progress has been made this year toward our commitment to secondary treatment with new facilities online and more on the way. We continue to deliver a quality Capital Improvement Program with an eye on managing our assets and planning for the future.

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1 Introduction and background

Agency information

The Orange County Sanitation District is responsible for collecting, treating, and disposing or reclaiming of wastewater generated by central and northern Orange County. As the third largest wastewater agency west of the Mississippi River, OCSD collects an average of 207 million gallons of wastewater per day, releasing a portion into the ocean and reclaiming the rest.

Our service area covers over 480 square miles and 21 cities. We have two treatment plants and 15 pump stations that are operated 365 days a year. Our round-the-clock process allows us to continuously meet the needs of the 2.5 million people living in the area. We strive to provide them with reliable sewer service that helps them maintain their quality of life.

Our dedicated staff of over 600 people ensure we meet our mission of protecting public health and the environment on a daily basis. We have dedicated staff monitoring the water that comes into our plant as well as the water that leaves to ensure it meets the stringent state and federal standards. We take our role as environmental stewards very seriously and regularly work toward improving our process.

Capital improvement program overview

OCSD is working toward completion of the $2.9 billion Capital Improvement Program (CIP). It's a program that has faced many challenges and has successfully completed many projects.

In early 2002, our Board of Directors made the commitment to increase our level of service to meet full secondary treatment standards. As such, new facilities were needed. One of the biggest challenges we've had to face is keeping our system operational throughout construction. We have to stay in compliance with regulatory permit requirements as major upgrades and improvements are taking place.

Our capital improvement program consists of three parts: 1) rehabilitation and replacement of existing facilities; 2) upgrades in levels of service; and, 3) new capacity for planned developments within our service area.

In the past several years, much of our focus was on our secondary treatment expansion projects. As we near completion of those projects we are now shifting gears to rehabilitation and replacement of existing facilities. This shift is critical for the success of our program. In order to meet our commitment we need to upgrade the facilities that support secondary treatment.

Our projects go through a comprehensive planning process to ensure they are prioritized, properly budgeted, scheduled at the appropriate time, and given adequate resources. This CIP validation process takes place every year to account for cash-flow projections and planning efforts. Our Facilities Master Plan was updated in 2009 to determine the future needs of the agency through 2030.

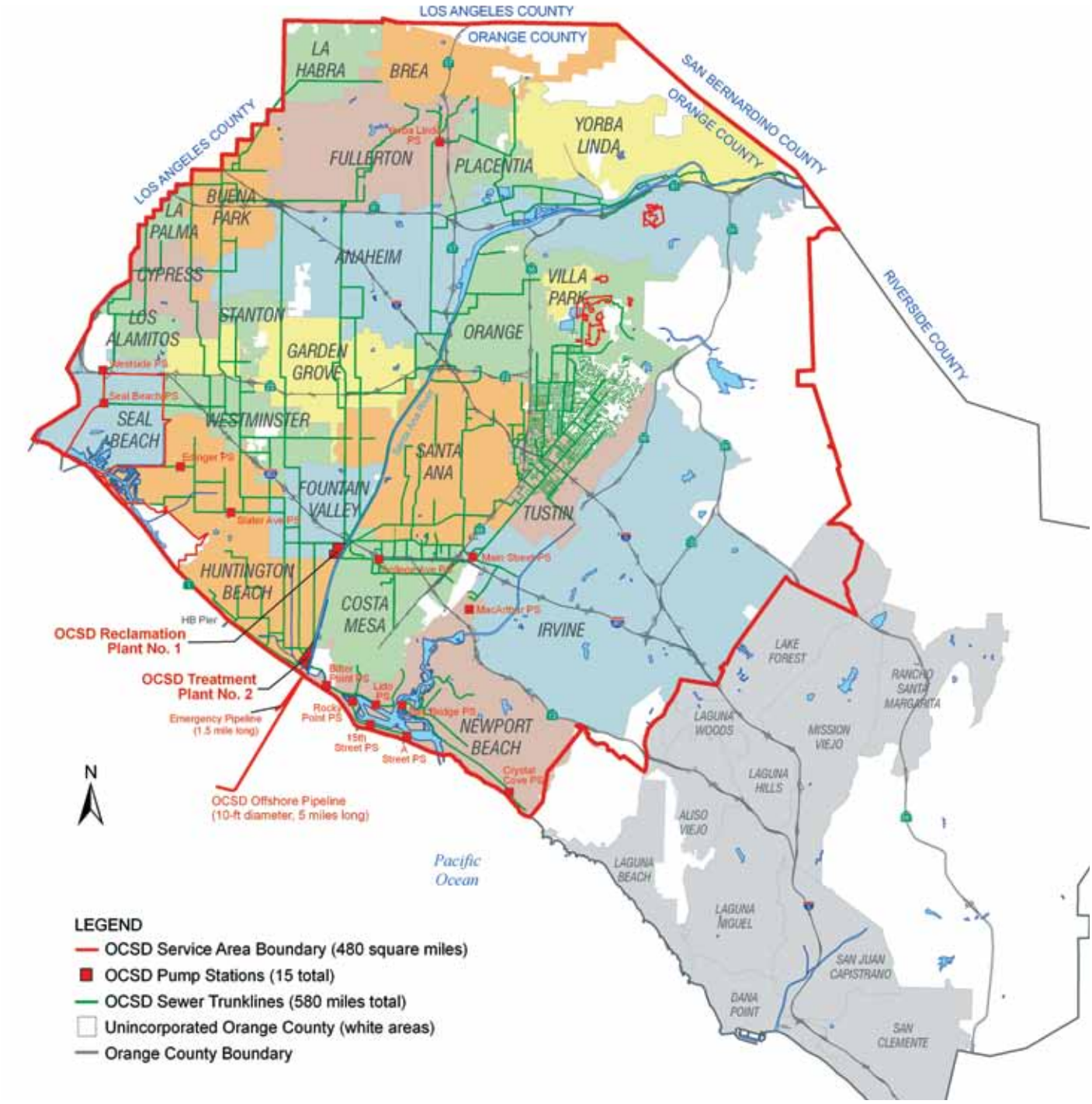
As part of our commitment to upgrade our level of service, a community outreach program was also developed to keep our ratepayers informed of our activities. Great effort is placed on building relationships with the neighborhoods we come into contact with during construction. We take a proactive approach by reaching out early in the process to explain the purpose and importance of the work we do. We focus on keeping residents, businesses and local agencies informed of our projects prior to and during construction. Our team makes a point of responding quickly to concerns and finding solutions that help achieve our project while minimizing impacts to the community. Part of the outreach program consists of identifying a potential issue ahead of time to reduce the probability of it surfacing as the work is taking place. One of our goals is to be good neighbors; as such, we consistently evaluate our outreach program to ensure we are providing the best service we can and make improvements as needed.

For information regarding our CIP and outreach program, please visit our web site at www.ocsd.com/construction. We can also be reached via e-mail at: constructionhotline@ocsd.com or at 714-378-2965.

Highlights and accomplishments for Fiscal Year 2010-11

The CIP is nearing completion as the largest projects are concluding. The program for 2010-11 included 62 active projects. These projects were projected to expend $167 million during the fiscal year and closed the year with an actual expense of $133 million. In this program, ten new projects were initiated and six projects were completed, including some very difficult rehabilitation projects. This all totaled over $56 million in contracts. Construction contract change orders for those completed projects were within projected goals at 4.7 percent of the contract value. Non-construction costs for the program remained below the goal threshold of 35 percent of the constructed value.

- Secondary Treatment Expansion Milestones
  During the last year, significant progress was made on the two major Secondary Treatment Expansion projects that make up the outstanding Environmental Protection Agency Consent Decree Milestones. The Tricking Filters at Plant No. 2 successfully completed construction, satisfying the fifth of seven EPA Consent Decree Milestones. The facility is online and treating wastewater to quality levels better than secondary treatment standards. The last remaining milestone date relates to the completion of the Secondary Treatment System at Plant No. 1. The project is 97 percent complete and currently in the commissioning and testing phase of the project.



OCSD Service Area

The Orange County Sanitation District collects, treats, and recycles wastewater from 21 cities, Costa Mesa Sanitary District, Midway City Sanitary District, part of Irvine Ranch Water District and unincorporated County of Orange. OCSD owns, operates, and maintains approximately 580 miles of sewer trunk lines across 480 square miles of Orange County, including some local, smaller-diameter sewers in Tustin and neighboring unincorporated areas. OCSD's collection system includes 15 pump stations that lift and push water in low areas to one of our two wastewater plants in Fountain Valley and Huntington Beach, California. OCSD treats an average of 207 million gallons per day of wastewater. Approximately enough water to fill Anaheim stadium two and a quarter times each day. After the wastewater is treated, it is either sent to the Orange County Water District (100 million gallons per day) for reclamation or released out of a five-mile ocean pipeline where it disperses into the seawater at a depth of 200 feet through 502 small portholes.

- Design-Build Project
  OCSD's first project to be contracted under the design-build project delivery method was very successful over the last year. The design portion was completed in a very short period and construction began within five months of awarding the contract. While no project is perfect and there were some difficulties in responding to odor complaints due to higher levels of odor contaminants than originally thought, the team worked cooperatively to overcome these obstacles and deliver the project ahead of schedule and with minimal contract changes. Overall, this is a successful project and it is expected to be complete in October 2011.

- SARI Line Relocation Status
  During the last year several major milestones were completed on the critical Santa Ana River Interceptor pipeline project. This is a cooperative project between the County of Orange, the Santa Ana Watershed Project Authority and OCSD. The project is comprised of two distinct portions, the Yorba Linda Spur and the Main Line. The Yorba Linda Spur completed design, was bid and awarded a construction contract in the amount of $7,321,200. This portion is expected to complete construction in May 2012. The Main Line portion of the project completed design was bid and awarded a construction contract in the amount of $41,850,000. The Main Line is expected to complete construction in June 2013.

- Safety Program
  In 2009, the Engineering Department developed a comprehensive Safety Program to reinforce safety as a priority across the CIP Program. The focus was to improve work practices for staff, as well as take a more active safety role with contractors and consultants working on OCSD projects. This was done to make OCSD sites as safe as possible while also supporting the OCSD Owner Controlled Insurance Program (OCIP). The OCIP is continuing into its fourth year and safety indicators continue to improve.

- Environmental Compliance
  The Engineering Department was reorganized this year to include the Environmental Compliance division. The move will help the Capital Improvement Program improve alignment with environmental regulations, with improved efficiency in meeting those needs both in executing the projects through permitting as well as long-term operation of these facilities.

- IPMC Staffing Support Contract
  The Integrated Program Management Consultants (IPMC) support staffing contract for the CIP completed the year $1,392,000 under budget with an actual support level of 37 positions, five less than the authorized 42 positions. For the 2011-12 fiscal year, the number of support positions will decrease as the contract comes to an end at the close of the fiscal year. A transition plan has been developed to ensure that our CIP performance will continue at a high level after the IPMC support contract has ended.

The new Headworks facility at Plant No. 2 pumps all of the wastewater from the collection pipelines into the treatment plant. This facility is currently in testing and being placed into service.

New Plant 2 Headworks Pumps will be able to handle all of the influent for Plant No. 2, even for high-flow events and future capacity.

2 Highlighted capital projects

Collection system projects by city

OCSD's service area consists of 21 cities, three special districts, and unincorporated areas of the County of Orange which includes approximately 2.5 million people. Every day the people who live and work in these cities depend on the reliability of our regional sewer system.

As such it is our duty to provide the service and ensure our infrastructure is up to the challenge. Our collection system projects are extremely important because they allow us to do just that. We upgrade, replace, and rehabilitate our sewer lines and pump stations to continue maintaining that level of service. We take extra care in assessing the projects to ensure we identify and mitigate the potential construction impacts.

Our Community Outreach Program focuses on reaching out to residents, businesses, schools, city staff and any other group who may be impacted by our construction. We strive to maintain a positive working relationship with our rate payers by openly communicating about the work, the schedule and the potential impacts they may encounter. It is of great importance to us that our rate payers understand the long-term benefit of our projects so keeping them apprised of our activities is essential.

Information regarding our CIP and outreach program is available on our web site at www.ocsd.com/construction. Sign up for e-notify to receive alerts directly to your inbox. For questions or comments, contact us at constructionhotline@ocsd.com or at 714-378-2965.

Construction of the masonry walls for the electrical building for the Bitter Point Pump Station.

Below are highlights from our active collection system projects.

Newport Beach

Bitter Point Pump Station Replacement (Project No. 5-49)

The Bitter Point Pump Station is one of six stations in the city of Newport Beach. The 70 year-old station is too small to handle future wastewater flows, and needs to be replaced with a new facility that also meets current safety, electrical and building codes. The new pumps are 35-feet below ground with only the mechanical equipment above ground. This design reduces the odor and noise generated from the station.

The new pump station is currently under construction in the West Newport Oil field near Pacific Coast Highway, just west of Superior Avenue. The architectural features were designed with input from local homeowners. The design includes drought tolerant trees and plants such as catalina ironwood, wild lilac, and mimulus pumpkin.

Construction is scheduled for completion in spring 2012.

Installation of beams for an overhead travel crane at Bitter Point Pump Station. The crane is used for maintenance or repair purposes.

Rocky Point Pump Station Replacement (Project No. 5-50)

After 70 years of service it was time to retire the underground Rocky Point Pump Station located in the Balboa Bay Club parking lot in the city of Newport Beach. The station is too small and out of compliance for electrical and safety codes so rehabilitation was not an option. A larger station was constructed across the street to sustain current and future wastewater flows, as well as meet new safety, electrical, and building codes. There are two above ground structures, one for the electrical equipment and the second for the standby emergency generator. The pumps have been placed underground to minimize the odor and noise generated from the facility.

The pump station is located on West Coast Highway. The high volume of traffic and close proximity to businesses posed quite a challenge for the contractor and project team. Every effort was made to minimize impacts as much as possible. Traffic control was modified throughout the project to expedite work, activities were sequenced in a way that would reduce time, and work hours were at times rearranged to avoid impacting the businesses and residents nearby. We are extremely grateful for the patience and understanding of the neighboring community as well as the cycling community who often saw the bike lane impacted with construction activities.

The project is currently in the commission phase and scheduled to be completed in fall 2011.

Stand-by generator for the Rocky Point Pump Station is used to keep the station running in the event of electrical outage.

Newport Trunk Sewer and Force Main (Project No. 5-58)

In May 2010, we completed installation of 8,600 feet of 36-inch diameter force main extending from the Bitter Point Pump Station, across an existing oil field and under the Santa Ana River into OCSD's Treatment Plant No. 2 in Huntington Beach.

Upon completion, soil settlement occurred along the tunnel alignment. A partial restoration was initiated immediately to successfully secure the Santa Ana River levees in November 2010, prior to the rains. The design for additional repairs to complete the restoration is currently underway with completion estimated for fall 2011. Construction will commence in spring 2012 once the required permits and environmental documents are acquired.

Dover Drive Trunk Sewer Relief (Project No. 5-63)

This project consists of replacing a major sewer line along Dover Drive between Irvine Avenue and Pacific Coast Highway in the city of Newport Beach.

The purpose is to increase the hydraulic capacity for over 7,300 feet of existing 15 to 21 inch diameter sewer line. In order to minimize impacts to the neighborhood and commuters, OCSD is working with city staff to address those concerns and plan accordingly. The preliminary design has been completed and final design is estimated to be completed by February 2012.

Newport Force Main Rehabilitation (Project No. 5-60)

Last fiscal year, the Newport Force Main was assessed to evaluate the condition of the force mains and determine the level of repair needed. The condition assessment indicated that the north and south force mains running beneath Pacific Coast Highway between 61st Street and Dover Drive need to be rehabilitated and manholes need to be installed for future inspections.

With the high traffic on Coast Highway, it will be necessary to use "trenchless" construction techniques to rehabilitate the force main pipes. The project is currently in design with construction anticipated for 2014.

Multi-city Projects:

Anaheim/Yorba Linda

Santa Ana River Interceptor Realignment Project (Project No. 2-41)

As a cooperative project, OCSD, the County of Orange and the Santa Ana Watershed Project Authority (SAWPA) are relocating approximately four miles of pipeline currently located within the floodplain of the Santa Ana River between Weir Canyon and the Orange/Riverside/San Bernardino County line. The project will protect and relocate the Santa Ana River Interceptor (SARI) which has been threatened by high storm water releases from Prado Dam in major flood events. The County of Orange is currently leading the project, with OCSD and SAWPA providing technical support.

Construction is scheduled to begin in fall 2011 and estimated to be completed by June 2013.

Costa Mesa/Newport Beach

Southwest Costa Mesa Trunk (Project No. 6-19)

This new sewer will service the cities of Costa Mesa and Newport Beach and allow the cities to abandon their respective pump stations which would otherwise need to be rehabilitated. This new trunk sewer will also relieve flows on the Fairview Trunk Sewer and save construction costs for upsizing that trunk sewer.

The first phase of the project is to produce an alignment study and environmental documentation to select the preferred alignment for design and construction of the new gravity sewer. The consultant is expected to be on board in fall 2011.

Fountain Valley/Santa Ana

Santa Ana Trunk Sewer Rehabilitation (Project No. 1-17)

The Santa Ana Trunk Sewer carries approximately 15 million gallons of wastewater per day to Plant No. 1. The 56 year-old sewer and manholes are deteriorating due to corrosive gases. To extend the life of the sewer by 25 to 30 years, the pipe will be relined and the manholes will either be coated with a protective liner or replaced. Rehabilitating the 42 to 60 inch diameter sewer, instead of replacing it, will reduce the impact to the neighboring communities as construction time will be significantly reduced.

The project will focus on over 17,000 linear feet of pipe, 39 manholes and three siphons from the intersection of Bristol Street and Alton Avenue in the city of Santa Ana to Plant No. 1 in Fountain Valley.

In the past year, a thorough assessment of the sewer was conducted in which the line and the manholes were inspected, odor levels were monitored, flow monitoring took place and rehabilitation options were evaluated and recommended.

Construction for this project is estimated to commence in fall 2014.

Fountain Valley/Westminster

Magnolia Trunk Sewer Rehabilitation (Project No. 3-58)

Excavation of installation pits allows existing underground piping to be rehabilitated in OCSD's design-build project.

Five miles, three streets and two cities - that's the area this project covered as it rehabilitated the Magnolia Trunk Sewer by inserting pipe through 13 access pits. In an effort to reduce construction time and impact to the community, pits were dug to insert the pipe instead of doing the traditional open-cut method which would have required a greater work area.

A great amount of effort was placed on reaching out to the community prior to and during construction. The project covered a large area so we knew the impact would extend to a large group of people. A Community Liaison was assigned to the project to ensure residents always had a direct point of contact. A project specific hotline was also created to ease the communication process. We worked closely with the cities to coordinate efforts and ensure our various projects didn't overlap and create a greater disturbance to the communities.

This was the first design-build project for OCSD. A contract was awarded to Malcolm Pirnie, Inc. and Kiewit Infrastructure West to jointly design and build the project. Construction commenced in December 2010 and is scheduled for completion in October 2011.

Los Alamitos/Rossmoor

Westside Pump Station Rehabilitation (Project No. 3-52)

After nearly two years of construction, rehabilitation of the Westside Pump Station was completed in December 2010. The pump station required upgrades to increase capacity and bring

A four-mile segment of the Santa Ana River Interceptor pipeline will be rerouted out of the riverbed to protect the sewer system from erosion.

At our Westside Pump Station, landscaping was added along the perimeter walls of the property to screen views of the pump station from neighboring homes.

it into compliance with electric and safety codes. The station is situated between two homes which made for tight quarters and required much patience from the neighbors during construction. The landscaping in front of the pump station was completely redone to make the station blend in with the neighborhood. A trellis and flowers were added to both sides (east and west) of the station to create a shield for the neighbors. The roof was also replaced and a new gate with a screen was installed to minimize the view from the street.

Tustin/Irvine

Gisler Redhill System Improvements (Project No. 7-37)

Over three miles of sewer in the cities of Tustin and Irvine need to be assessed to determine if repairs are needed to improve flow and increase capacity. The project extends along Redhill Avenue from Mitchell Avenue in the city of Tustin to McGaw Avenue in the city of Irvine.

Portions of this project were included in recent construction projects by the cities of Irvine and Tustin as well as Irvine Ranch Water District. This was done not only to minimize impacts to residents but to reduce cost by doing similar work in similar areas as the opportunities arose.

The project is currently in the design phase with construction anticipated for fall 2012.

Secondary treatment expansion projects at OCSD

For the past nine years we have been working toward the goal of treating 100 percent of our wastewater to full secondary treatment standards. In 2002 our Board of Directors made the commitment to produce higher-quality water consistent with our mission of protecting public health and the environment.

Four projects were developed to help meet the Consent Decree that OCSD voluntarily entered into in October 2004 with the Environmental Protection Agency and the Regional Water Quality Control Board. Today, five out of the seven milestones stipulated in the Consent Decree have been met and the two remaining are scheduled to be met ahead of the December 2012 deadline.

Consent Decree milestone dates and current status for each project are as follows:

Job No.	Consent Decree Milestone	Due Date	Status
P1-76	Complete Construction	03/15/2006	Completed
P1-102	Advertise for Construction	11/15/2006	Completed
P2-90	Advertise for Construction	01/15/2007	Completed
P2-74	Complete Construction	01/15/2009	Completed
P2-90	Complete Construction	02/15/2011	Completed
P1-102	Complete Construction	11/15/2012	On schedule
Full Compliance with Consent Decree		12/31/2012	On schedule

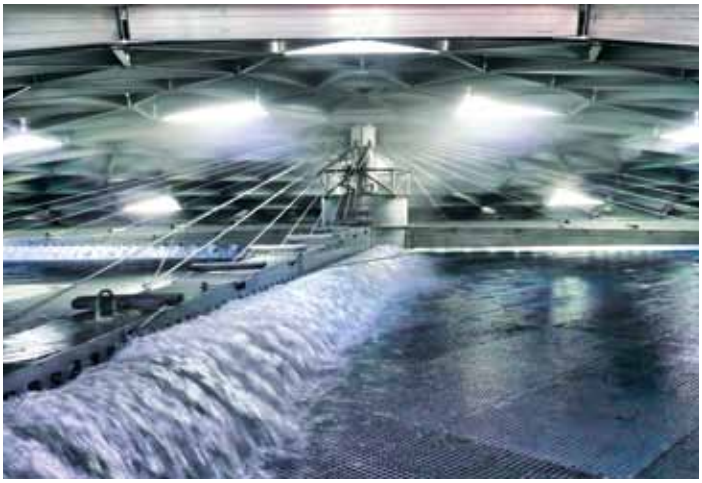
Trickling Filter Rehabilitation and New Clarifiers (Project No. P1-76) – *completed*

In 2006 the first milestone was reached with the completion of the Trickling Filters Rehabilitation and New Clarifiers project at Plant No. 1. The project was completed 16 days ahead of schedule which set the pace for all the other projects to reach their completion date well in advance of the milestone date.

The project consisted of removing four shallow trickling filters and replacing them with two new taller trickling filters and two new clarifiers. This new facility added 30 million gallons per day of secondary capacity to Plant No. 1. Also included were the construction of a new power building to support the increased electrical demand, as well as two effluent lines including one to the Groundwater Replenishment System inlet structure and one to the 66-inch interplant line. Several junction structures were also installed to allow flexibility of flow distribution.

Rehabilitation of Activated Sludge Plant at Plant No. 2 (Project No. P2-74) – *completed*

As a continued effort to reach full secondary treatment standards at Plant No. 2, the activated sludge plant was rehabilitated. Included in the work were replacement of major mechanical equipment such as gates, valves, impeller blades, and piping that had begun to fail or was at the end of its useful life. The project also called for relining large diameter pipes, adding odor control to the aeration basin splitter box, installing bleach pipelines and injection points, and replacing and upgrading instrumentation and controls. The project was completed in 2008, over 200 days ahead of the January 15, 2009 Consent Decree milestone deadline.



Recently completed Trickling Filter at Plant No. 2 which is now in service.

Trickling Filters at Plant No. 2 (Project No. P2-90) – *completed*

Earlier this year the Trickling Filters at Plant No. 2 project completed construction two months ahead of schedule. More importantly, this facility was placed into operation in May 2011 and we are now able to treat all of the wastewater at Plant No. 2 to secondary treatment standards well ahead of the Consent Decree date. This project included construction of three trickling filters, a solids contact basin, six clarifiers, odor control scrubbers, and a pump station for additional secondary treatment capacity of 60 mgd at Plant No. 2. There are two milestone dates associated with this project, the first is for advertisement for construction which was reached in 2007 and the second is for construction completion which was met two months ahead of the February 2011 deadline.

Since the project was placed into service, we have significantly improved the quality of the effluent being discharged to the ocean.

Installation of new 90-inch secondary effluent pipeline in the P1-102 Secondary Treatment Facilities at Plant No. 1.

New Secondary Treatment System at Plant No. 1 (Project No. P1-102) – *in commissioning*

Six aeration basins, six clarifiers, a blower building, and return sludge and waste pumping stations make up the New Secondary Treatment Systems at our Fountain Valley plant. After four years of construction the facility is finally fully constructed and is being readied for operation. The project is 97 percent complete and in the electrical and instrumentation test phase which should wrap up in the next few months. By November 2011 the facility is scheduled to begin treating wastewater, one year ahead of the November 15, 2012 consent decree milestone deadline. Final completion is anticipated for February 2012 which is four months ahead of the contract completion date.

Once completed, the project will increase secondary treatment capacity at Plant No. 1 by 60 million gallons per day.

Aerial view of our Huntington Beach Treatment Plant.

OCSD Reclamation Plant No. 1 projects

Reclamation Plant No. 1, located in Fountain Valley, California, has several projects currently underway that are focused on improving our infrastructure and securing our ability to achieve our mission of protecting the environment.

The plant currently treats an average influent of approximately 95 million gallons per day.

Below are the most significant, current and future construction projects.

Headwords Rehabilitation and Refurbishment (Project No. P1-71)

In March 2011, the Headworks Rehabilitation and Refurbishment project was completed at Plant No. 1. The project consisted of replacing the variable frequency drive (VFD) units for the headwork pumps. The pumps are critical pieces of equipment as they move wastewater into the plant and prevent flooding in the collection system. The VFDs control the speed of the pump motors to accommodate various flow conditions.

Sludge Digester Rehabilitation at Plant No. 1 (Project No. P1-100)

Expanding to full secondary treatment standards will result in an increase in solids processing. As such, this project focuses on improving solids handling capacity by rehabilitating ten digesters. The rehabilitation consists of cleaning and removing the grit from all digesters as well as demolishing and replacing existing equipment such as pumps, sludge grinders, heat exchangers, and piping. The liners and insulation to the domes will also be removed and replaced. Updates will also be made to the electrical and instrumentation control systems.

The project started construction a year ago and is approximately 21 percent complete. Final project completion is scheduled for spring 2014.

Sludge Dewatering and Odor Control at Plant No. 1 (Project No. P1-101)

This project also supports the upgrade to full secondary treatment standards. This project will focus on optimizing the use of the existing digesters and replace the current sludge handling facilities which have reached the end of their useful life. The new dewatering equipment will increase the amount of water removed from the biosolids, thus reducing the hauling cost to remote sites.

The project will construct a new dewatering/thickening building, chemical storage and feed facilities, improvements to existing sludge load out facility and odor control measures. The four-year construction project is currently in design with an estimated construction start date of spring 2012.

Title 24 Access Compliance and Building Rehabilitation Project (Project No. P1-115)

To improve accessibility to existing support service buildings at Plant No. 1, they will be retrofitted to comply with California Code of Regulations Title 24 requirements for disabled person accessibility. In addition, the buildings will undergo upgrades to the lighting, heating and air conditioning units, and roofing materials while complying with other portions of the building code.

Once the improvements are made, the Collections and Facilities Maintenance Staff will relocate their equipment and staging area to Plant No. 1. The building and office space modifications include Administration, Human Resources, Laboratory, Maintenance Shops, Fleet Services Facilities, Purchasing Offices and Conference Room, and other supporting office trailers. The preliminary design started in September 2011.

OCSD's Reclamation Plant No. 1 covers 100 acres and borders Ellis Avenue, Ward Street, Garfield Avenue, and the Santa Ana River. The main entrance is off Ellis and the 405 Freeway. It is called the"reclamation" plant because secondary treated wastewater from Plant No. 1 is routed to the neighboring Orange County Water District (outlined in red) where it is further purified for reuse. Treated wastewater from Plant No. 2 is safely released into the ocean 4.5 miles off of Huntington Beach.

Project P1-100 will update existing digester facilities to handle the thicker solids produced by the new centrifuge facilities. Thicker solids result in better digester efficiency, as well as reduced handling costs.

OCSD Treatment Plant No. 2 projects

Treatment Plant No. 2, located in Huntington Beach, California., has been receiving major renovations and upgrades to help OCSD meet full secondary treatment standards. Maintenance projects for existing facilities are currently in design and scheduled to commence shortly in order to maintain the high quality operation we've committed to.

Plant No. 2 currently treats an average influent of 110 million gallons per day.

Headworks Improvements at Plant No. 2 (Project No. P2-66)

Currently the Headworks Replacement Project is 95 percent complete and the main facility is being tested with live wastewater. This new facility will take over as the prime influent facility allowing for the demolition of the existing 50-year old Headworks. While this facility is just five percent shy of completion, this is the largest and most complex project OCSD has ever constructed. Still outstanding is the construction of the seven junction boxes associated with the influent sewers and primary treatment modules, as well as construction of the Waste Sidestream Pump Station and demolition of the existing facilities.

The Headworks Improvement project replaced the influent pumps with new 700 hp pumps capable of raising the water almost four stories to allow treatment.

The state-of-the-art odor system will enable the Headworks facility to perform at an optimal level. It will significantly reduce odor emissions by providing two-stage (biofilters and chemical) scrubbers, and it will improve the efficiencies of the solids handling processes, as well as provide a safer working environment for staff.

Solids Thickening and Processing Upgrades (Project No. P2-89)

As part of our commitment to reach full secondary standards, modifications need to be made to existing facilities to accommodate an increase in solids. This project will provide sludge thickening treatment to handle the current Activated Sludge Plant solids as well as the additional solids that will be generated from the new secondary treatment process.

Work includes upgrades to the existing Dissolved Air Flotation Thickeners (DAFTs) and conversion of the "holding" digesters into "working" digesters. There will be a new electrical building and the existing DAFT odor control system will be replaced.

The three-year construction is scheduled to commence in summer 2012.

The new state-of-art odor control system at Plant No. 2 uses biofilters to clean the air and save on chemical costs.

OCSD's Treatment Plant No. 2 spans 100 acres and borders Brookhurst Street, the Santa Ana River, and Pacific Coast Highway in Huntington Beach, CA.

Sludge Dewatering and Odor Control at Plant No. 2 (Project No. P2-92)

As a follow up to the Trickling Filters project, primary sludge thickening facilities need to be constructed to improve solids handling capacity at Plant No. 2. The project also replaces the sludge dewatering facilities and the solids handling odor control facilities which have reached the end of their service life.

To support the Long Range Biosolids Master Plan, centrifuges will be utilized to replace the existing belt presses as a new dewatering technology to reduce the amount of water in the Biosolids hauled off site and thus reduce management disposal costs.

The project is currently in design with expected construction to commence in early 2014.

Digester Ferric Chloride System Rehabilitation (Project No. P2-105)

Corrosion, age, and cost savings have led to the development of this project. Project No. P2-105 will demolish the existing ferric chloride facility including concrete pad, pumps, piping, and electrical and flow monitoring systems and construct a new ferric chloride facility at the same location. Part of the project consists of adding new controls and electrical equipment to the ferric chloride systems that are currently operated manually.

The chemicals used in the 20-year old facility are corrosive and equipment is at the end of its useful life so replacement is necessary. Recent optimization efforts of the chemical dosing systems at Plant No. 2 have shown that it is more economical to directly control hydrogen sulfides in the digesters compared to increased dosing of primary influent that carries over into the digesters. This is because the system can optimize the ferric usage based on a continual monitoring of hydrogen sulfides in the digester gas.

The project is currently in design with construction expected to begin in summer 2012.

Joint OCSD treatment plant projects

Our two plants work jointly to keep our entire operational system functioning. As such, there are many projects that extend across plant boundaries that benefit both plants. These projects focus on mechanical, electrical, instrumentation and control systems as well as the buildings that contain these systems.

Listed below are a few joint projects.

Interplant Gas Line Rehabilitation (Project No. J-106)

Transporting digester gas between Plant No. 1 and Plant No. 2 is important for us to do to avoid flaring gas at Plant No. 1 and wasting a valuable resource that is otherwise used to create electricity to run the facilities. The existing line is suffering from corrosion, so a liner will be installed to protect the pipe and prevent future failures. In certain areas it will be necessary to replace the pipe instead of lining.

The work will take place adjacent to the Santa Ana River trail in a pipeline utility corridor. Navigating through that corridor is a tight fit as it shares this space with several large pipes ranging between 60 and 120-inches in diameter as well as a concrete encased fiber optic duct bank. The trail will remain open and accessible during the work.

The project is currently in the design phase and scheduled for construction in spring 2012.

Permanent Upgrades to Plant Security Barriers (Project No. J-108)

Improved access, visibility, and added security led to the installation of an 8-foot tall wall in front of the Fountain Valley facility. The wall starts at the entrance of Plant No. 1 and

As part of the J-108 security project, new signage was added to the front entrance to clearly identify the plant.

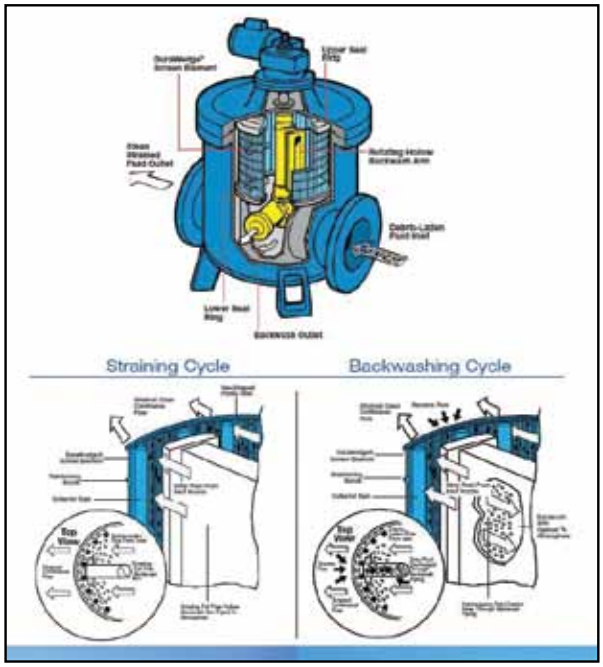
continues 1,300 feet down Ellis Avenue. This improvement was done in conjunction with the city of Fountain Valley in order to add pedestrian access along Ellis Avenue.

The front entrance was reconfigured to ease entrance into the plant and prevent a back-up of cars while checking in with Plant security. A new pedestrian access gate and emergency access gate were also installed that connect to the Control Center via a camera and intercom system. The entrance is ADA (Americans with Disabilities Act) compliant and with the new sidewalk the city of Fountain Valley recently installed, it is now easier for pedestrians to safely access our facility. A second gate was also installed for emergency access. A camera and intercom system connects to our Control Center.

The project was completed earlier this year and with the new sign installed at the front, the facility is now easily identified.

Central Generation Cooling Water System Replacement (Project No. J-109)

This project solves two problems. First, the Sanitation District's agreement with the Orange County Water District to purchase reclaimed water for cooling the Central Generation engines expires next year. This project changes to a new source for this water. Second, this project will significantly reduce cost and improve operation by locally sourcing in-plant water that is



New high efficiency strainers will replace the existing strainers to improve treatment and save cooling water costs.

cheaper and more reliable.

OCSD Operator Skip Berner conceived the idea which was tested and proved to be very effective. Thanks to Skip, OCSD will use approximately 19 percent less purchased water a year, which in turn can save thousands of dollars annually while improving operations.

The project is scheduled for construction in fall 2011.

Power Monitoring and Control Systems (Project No. J-33-3)

Keeping the plant powered is crucial to our operation. This project will focus on increasing our power reliability by installing electrical power monitoring and control equipment at Plant No. 1. This will protect the facility from a power outage and increase the recovery time if problems do occur. These systems will continuously evaluate the power supply and adjust the plant electrical systems to prevent power variations and outages from causing process failures. The new system will allow the operation of critical electrical equipment from a single location at Plant No. 1.

This change will not only increase reliability, but will also help ensure the safety of staff by allowing them to operate high voltage electrical equipment from a remote location. As our plants continue to expand, and our demand on Southern California Edison continues, it is imperative that we have a system in place to protect our operation from outages. This project will help us achieve that goal.

The construction contract was awarded in June 2011 and is scheduled for completion in 2014.

Central Generation Automation (Project No. J-79-1)

Just months away from final completion, the Central Generation Automation project is replacing the engine control systems at Plant Nos. 1 and 2. This new system will significantly improve operating communications between the plants, as well as improve control of the electrical load management and the exhaust emissions. The existing system doesn't provide emissions monitoring feedback signals to the engines for the control of exhaust emissions nor does it effectively manage electrical loads, so this is a significant improvement. This new control system will allow the engines to operate more efficiently and effectively, and will increase the capacity of the existing equipment while still meeting all regulatory emissions requirements.

The last segment of work is testing of the heat recovery system and the interplant communication system. This work is scheduled to be completed by November 2011.

For more than 30 years OCSD has used digester gas (also called biogas, a natural by-product of the treatment process) to fuel our plants to save energy. The Central Power Generation System uses this fuel to power most of the facilities at both plants saving millions in power costs.

The new Headworks has an extensive power system that incorporates several back-up power options to ensure reliable power delivery to protect the public under unforseen circumstances.

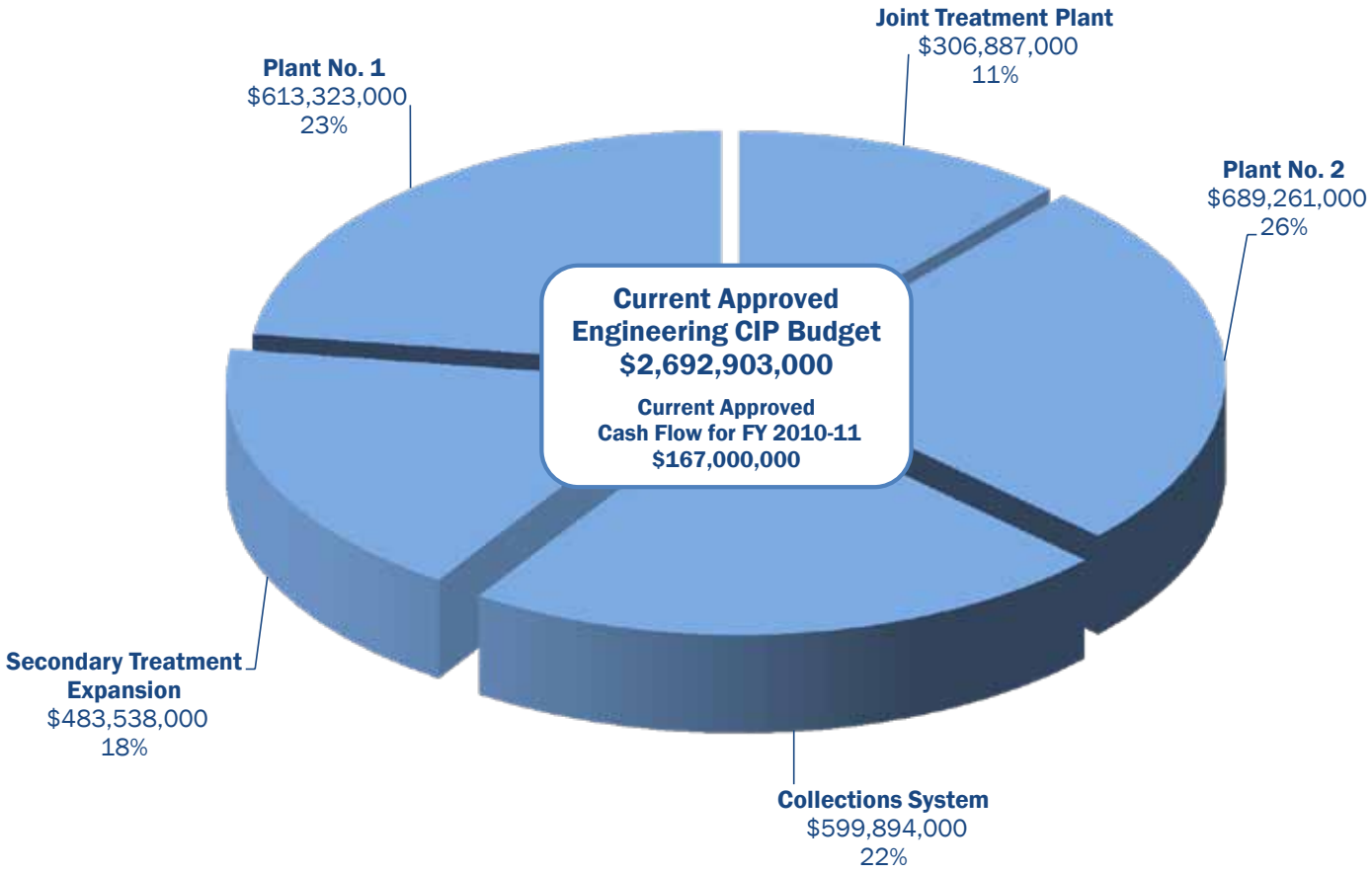
3 Financial data and contract activity

Financial data and contract activity

The Capital Improvement Program budget is approved annually as part of the overall agency budget. This yearly budget includes the total budget of all projects currently in progress through all phases of development, design, and construction. Also approved during this process is the proposed annual cash flow forecast of the expenditures attributed to those projects.

The Engineering CIP budget shown below is limited to the large facility improvement projects completed by the Engineering department. Additional projects included in the agency's CIP budget, such as those in Information Technology and miscellaneous operating and support projects, are not included in the Engineering CIP. The below chart indicates how the Engineering CIP is distributed by project location within the treatment and collection system.

During the course of the fiscal year, two additional projects were approved and added to the CIP Budget. The following pages show the performance during the year regarding expenditures and progress on individual project contracts. Over the fiscal year, all costs were maintained within the total budget, and the yearly cash flow.

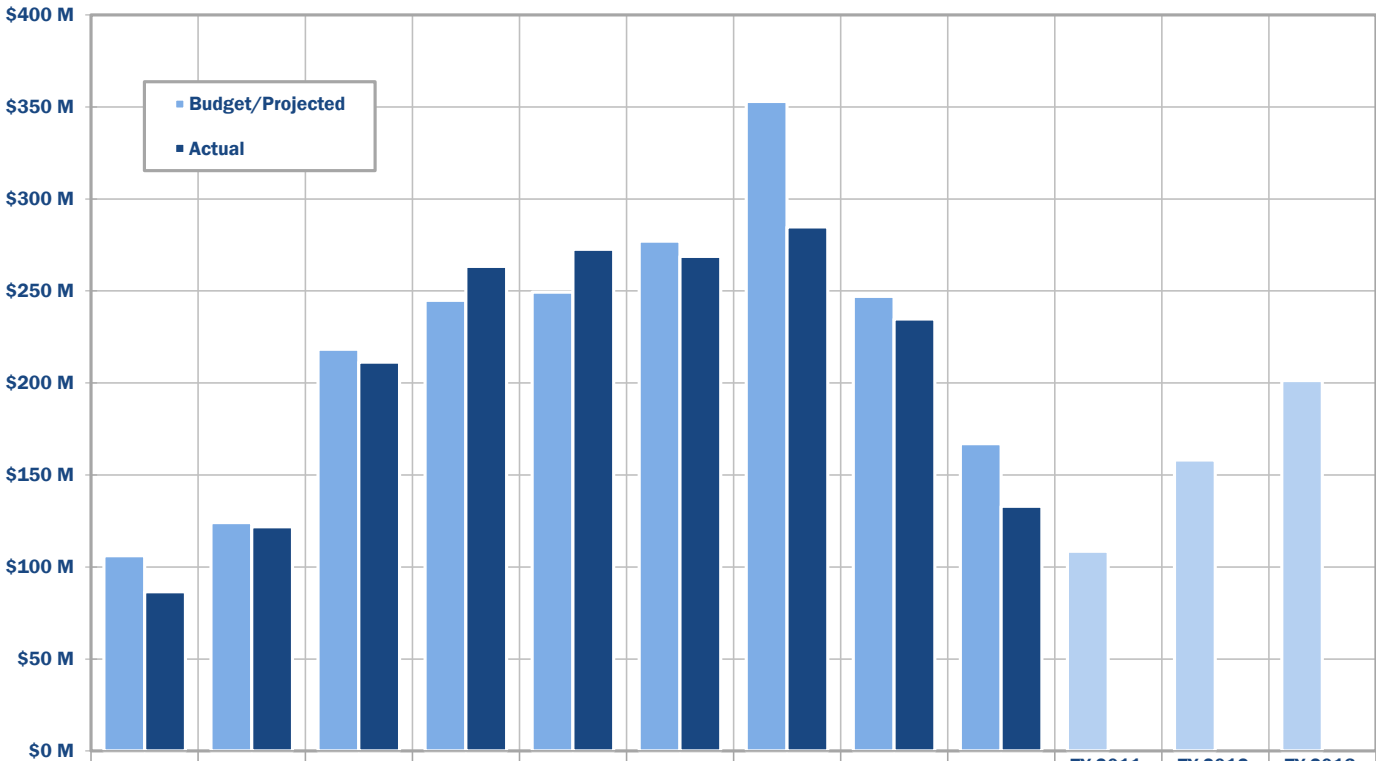


Program cash flows

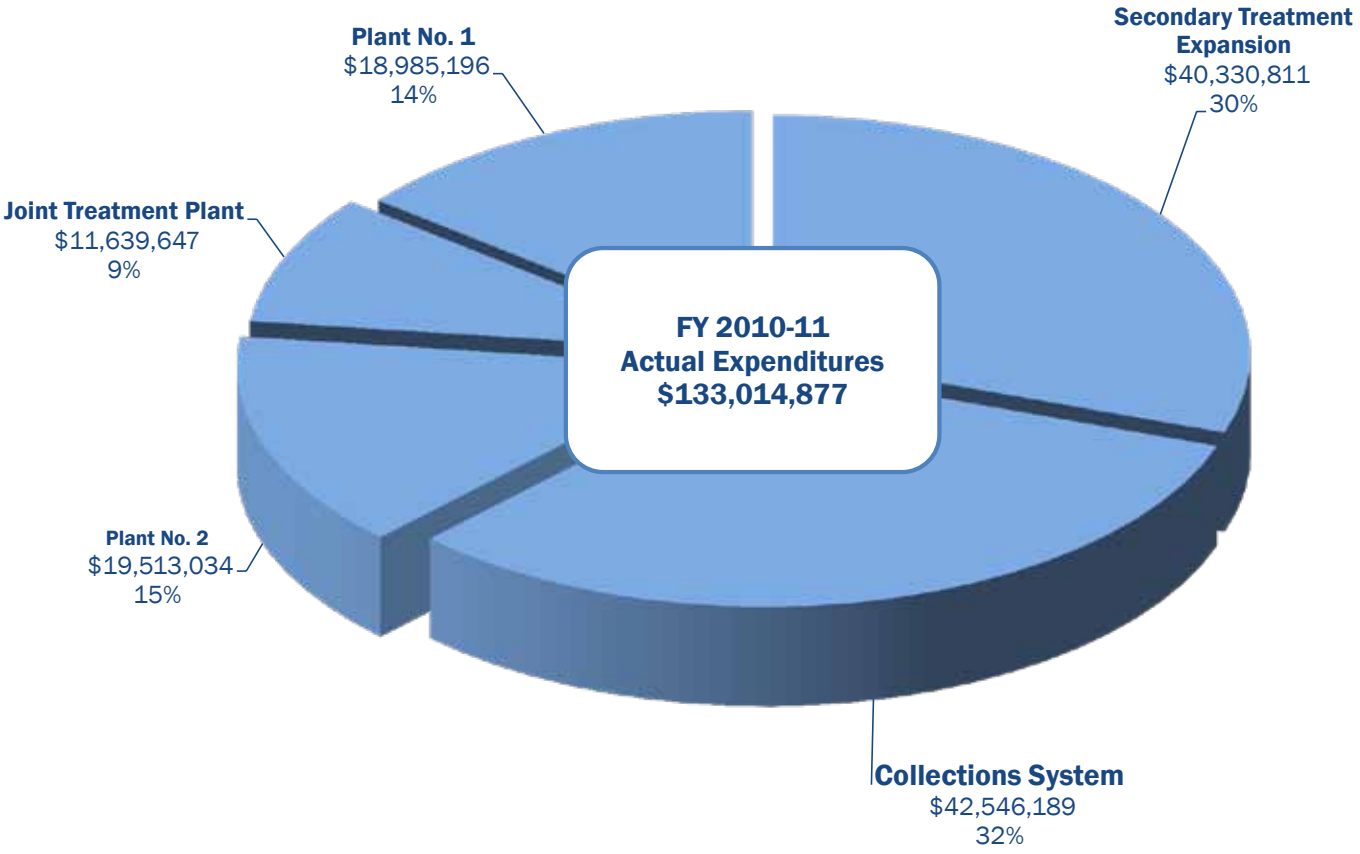
Cash flow reports track actual expenditures compared to the CIP annual budget. At the beginning of each fiscal year, expenditures are forecasted based on the approved project budgets and individual project schedules, which establishes the budgeted cash flow for the current fiscal year and projections for the future years.

The chart below shows the historical trend and projection through Fiscal Year 2013-14. Actual expenditures per subprogram for the reporting Fiscal Year 2010-11 and projections for the next year are on the subsequent pages.

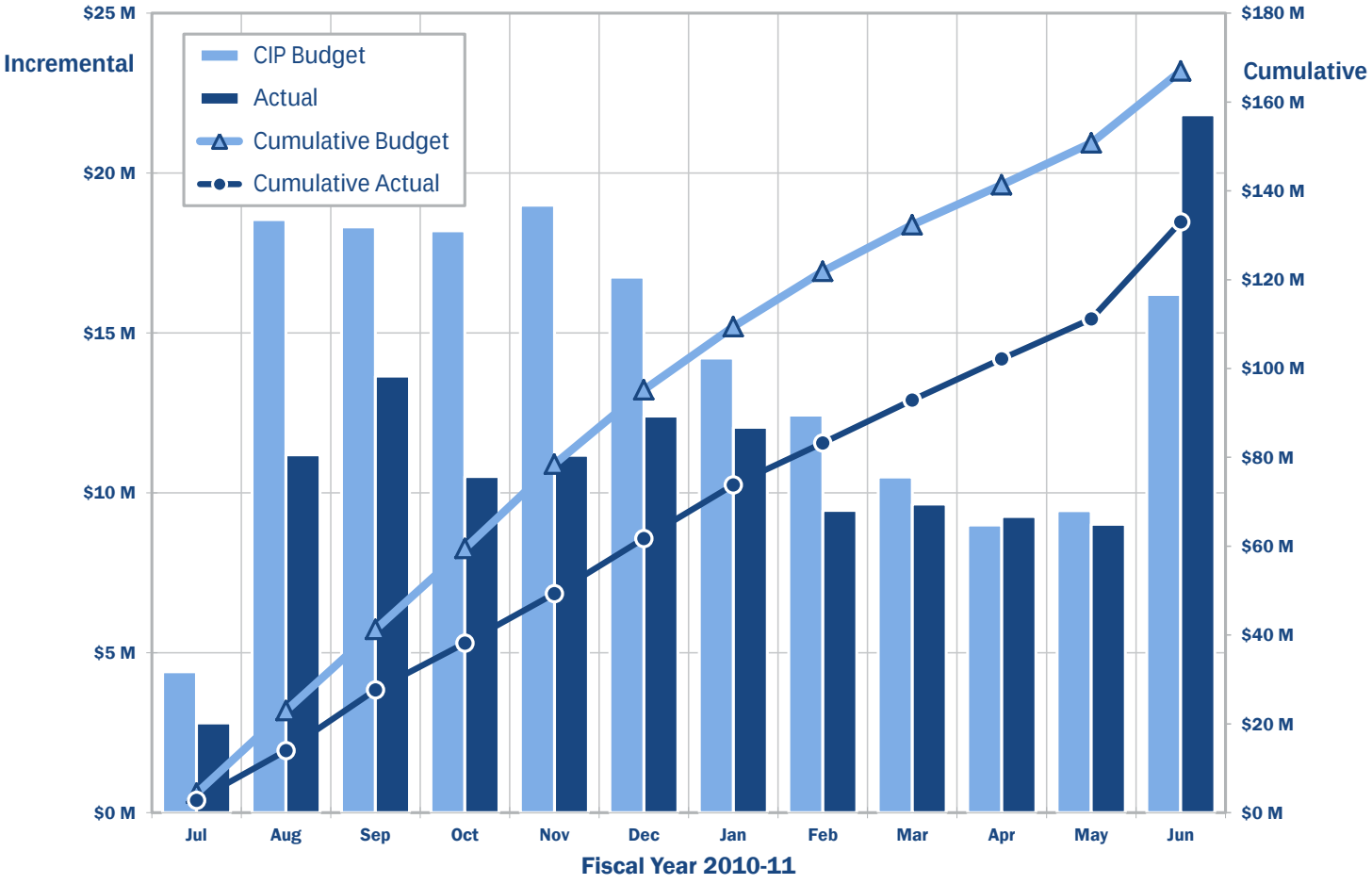
Cash Flow Budget and Actual Totals by Fiscal Year

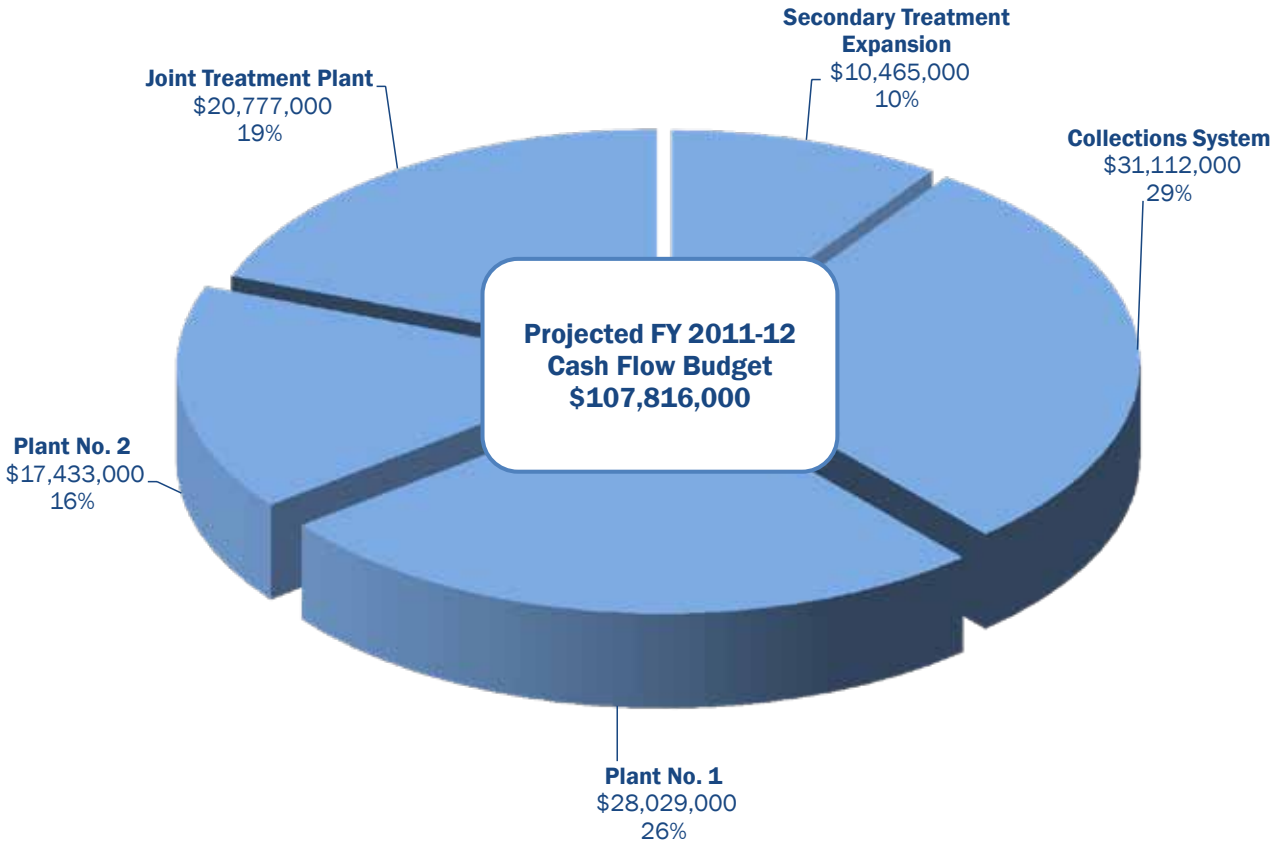


	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12 Projected	FY 2012-13 Projected	FY 2013-14 Projected
Budget/Projected	$106.11 M	$124.17 M	$218.32 M	$244.89 M	$249.34 M	$277.14 M	$353.05 M	$247.04 M	$167.01 M	$108.55 M	$158.10 M	$201.35 M
Actual	$86.57 M	$121.85 M	$211.35 M	$263.42 M	$272.68 M	$268.81 M	$284.80 M	$234.83 M	$133.01 M	$0.00 M	$0.00 M	$0.00 M
Percentage Spent	82%	98%	97%	108%	109%	97%	81%	95%	80%	0%	0%	0%

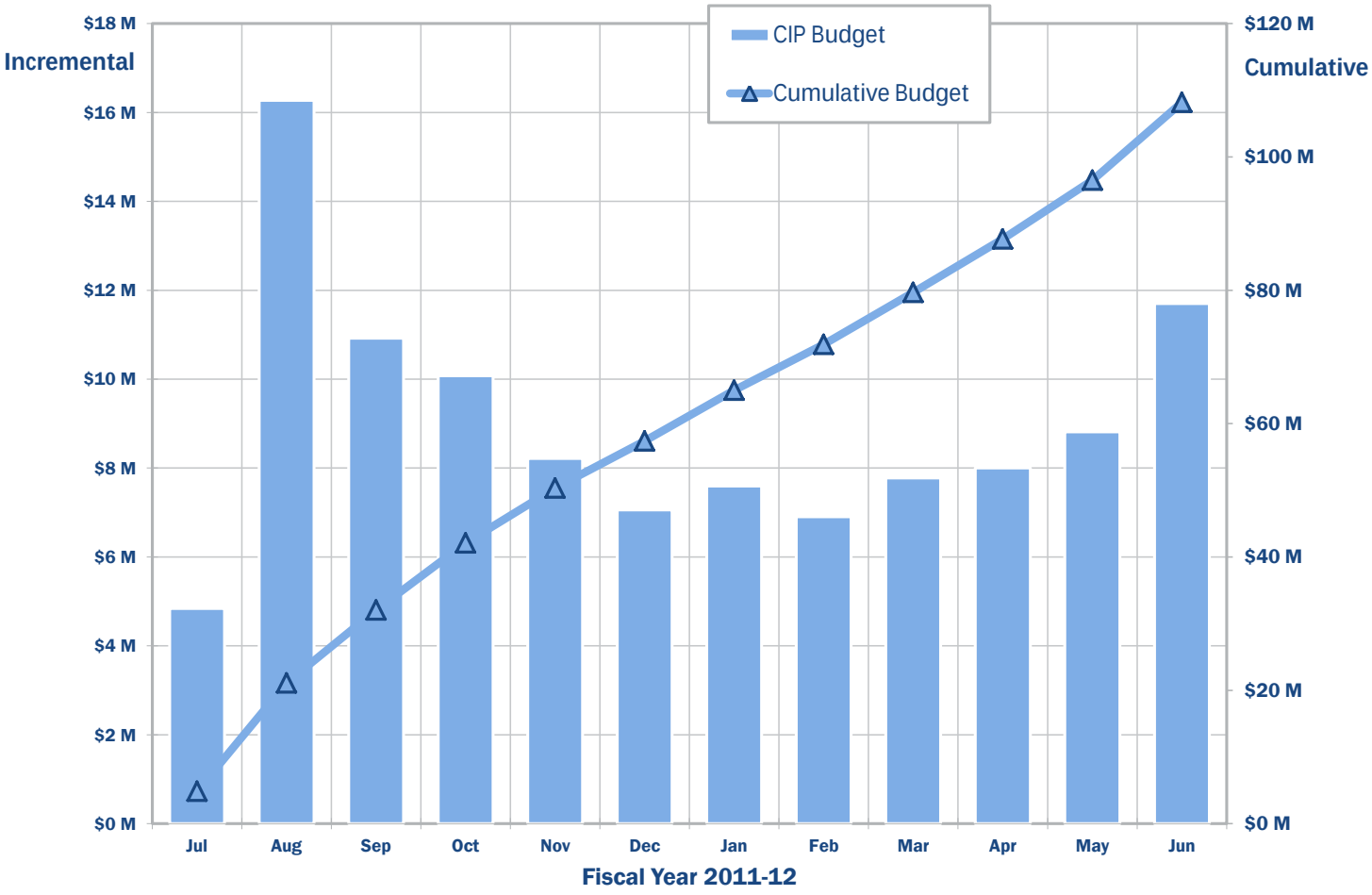


FY 2010-11 Cash Flow Budget and Actual Totals by Month





FY 2011-12 Forecasted Cash Flow by Month



Contract activity

In a collaborative effort between Engineering and the Contracts Administration division, OCSD awarded close to $3.7 million in professional services agreements and construction contracts during the fiscal year.

Six construction contracts were completed in FY 2010-11. The completed projects table below refers to projects whose physical construction was completed; testing and close-out were still pending.

Contracts awarded this fiscal year

City	Project No.	Project Name	Professional Services Agreement Awarded to	Amount of Award	Date of Award
HB	P2-106	Chemical Scrubber Conversions and Piping System Improvements	Dudek & Associates, Inc.	$ 165,559	07/07/10
FV, CM, Santa Ana	1-17	Santa Ana Trunk Sewer Rehabilitation	Brown and Caldwell	$ 801,850	07/28/10
NB	5-58	Newport Trunk Sewer & Force Main Rehabilitation	Black & Veatch	$ 1,200,000	09/22/10
FV	P1-116	Primary Clarifiers 6-31 Evaluation and Optimization Study	Carollo Engineers	$ 285,445	11/17/10
HB	SP-129	Oxygen Plant Rehabilitation at Plant 2	DWG Associates, Inc.	$ 48,625	12/14/10
FV, HB	J-33-3	Power Monitoring and Control Systems	Black & Veatch	$ 691,851	12/15/10
HB	P2-105	Digester Ferric Chloride System Rehabilitation	AECOM Technical Services, Inc.	$ 478,548	2/23/11

City	Project No.	Project Name	Construction Contract Awarded to	Amount of Award	Date of Award
NB	5-58 A	Newport Trunk Sewer & Force Main Rehabilitation	Geo-Solutions Inc. DBA Pennsylvania Geo-Solutions	$ 1,144,600	09/22/10
NB	5-58 B	Newport Trunk Sewer & Force Main Rehabilitation	Jamison Engineeering	$ 670,000	09/22/10

Construction contracts completed

City	Project No.	Project Name	Contractor	Amount of Award
CM	7-47	Replacement of College Pump Station	Olsson Construction	$ 6,120,332
Los Alamitos/Rossmoor	3-52	Rehabilitation of Westside Pump Station	Olsson Construction	$ 6,487,763
NB	5-61	Bayside Dr. Improvement	Colich and Sons	$ 1,448,548
FV	P1-71	Headworks Rehabilitation - Refurbishment	Helix Electric, Inc.	$ 3,644,057
HB	P2-80	Primary Treatment Rehabilitation Refurbishment	Shimmick Construction	$ 21,679,574
HB	P2-91	Plant No. 2 Primary Sludge Feed System Project	Shimmick Construction	$ 16,454,165

4 Engineering capital improvement projects

Engineering capital improvement projects

Project status

Projects labeled as complete and/or on schedule refer to physical construction only; testing and final completion are still pending. Estimated at completion refers to the allocated funds for the entire project; this includes project development, assessments, design, construction, testing, etc.

Current phase of projects

Phase	Number of Projects
1 - Project Development	15
2 - Preliminary Design	9
3 - Design	16
4 - Construction and Installation	13
5 - Commissioning	1
6 - Closeout	8
Active Projects as of June 30, 2011	**62**

Number of projects

At Program Inception (FY 2003-04)	125
Added as of June 30, 2011	147
Cancelled as of June 30, 2011	(72)
Not Started or On Hold	(65)
Closed/Completed	(73)
Active Projects as of June 30, 2011	**62**

Joint treatment plant projects at OCSD

	City	Project No.	Project Name	Current Phase	OCSD Project Manager	Consultant	Contractor	✓ On Schedule Construction Finish Date	✓ On Budget Estimate Total Project Cost at Completion	Project Decription in Report
1.	All Cities	FE-C	Facilities Engineering Projects - Collections	4	Derek Davis	Varies	Varies	TBD	✓ $ 8,412,795	
2.	FV, HB	FE-J	Facilities Engineering Projects - Joint Works	4	Derek Davis	Varies	Varies	TBD	✓ $ 23,910,000	
3.	FV, HB	FE-P1	Facilities Engineering Projects - Plant 1	4	Derek Davis	Varies	Varies	TBD	✓ $ 21,104,212	
4.	HB	FE-P2	Facilities Engineering Projects - Plant 2	4	Derek Davis	Varies	Varies	TBD	✓ $ 20,942,013	
5.	FV	J-33-3	Power Monitoring and Control Systems	3	Wendy Sevenandt	Black & Veatch	Morrow Meadows Corp./Sachs Electric	✓ 11/21/14	✓ $ 13,049,857	pg. 19
6.	FV	J-36-1	Joint GWRS Microfiltration Backwash Redirection	1	Wendy Sevenandt	TBD	TBD	✓ 09/18/12	$ 1,311,000	
7.	FV	J-71-8	Rehabilitation of Control Facilities	3	Steven Schock	Camp Dresser & McKee Inc.	TBD	03/24/15	✓ $ 44,124,005	
8.	FV	J-79	Air Quality Improvements	3	Dave MacDonald	Malcolm Pirnie Inc.	Olsson Construction	✓ 9/1/05 completed	✓ $ 11,597,180	
9.	FV, HB	J-79-1	Central Generation Automation	4	Dave MacDonald	Black & Veatch	Morrow Meadows/ Sachs Electric	10/14/11	✓ $ 23,261,288	pg. 19
10.	FV, HB	J-106	Interplant Gas Line Rehabilitation	3	Martin Dix	M.J. Schiff & Assoc.	TBD	03/11/13	$ 5,271,226	pg. 18
11.	FV	J-108	Permanent Upgrades to Plant Security Barriers	4	Victoria Pilko	RBF Consulting Inc.	L. H. Engineering Company, Inc.	07/07/11	$ 3,245,709	pg. 18
12.	FV	J-109	Cengen Cooling Water System Replacement Project	3	Victoria Pilko	Malcolm Pirnie Inc.	TBD	✓ 04/29/13	✓ $ 12,765,838	pg. 18
13.	HB	J-110	Final Effluent Sampler and Building Area Upgrades	1	Alberto Acevedo	TBD	TBD	09/19/17	✓ $ 12,585,000	
14.	FV, HB	J-111	Cengen Emissions Control Project	1	Dave MacDonald	TBD	TBD	✓ 06/26/15	✓ $ 30,279,000	
15.	HB	J-112	Outfall Land Section and OOBS Piping Rehabilitation	2	Pamela Koester	Black & Veatch	TBD	01/04/13	✓ $ 21,739,000	
16.	HB	J-119	Outfall Beach Box Rehabilitation Evaluation	1	James Burror	TBD	TBD	TBD	✓ $ 338,564	
17.	HB	J-122	Operations Center Entrance/Building Repairs	2	Christopher MacLeod	TBD	TBD	02/04/14	✓ $ 2,325,000	
18.	FV, HB	J-123	Fall Protection Improvements at Plant Nos. 1 and 2	3	Steven Schock	TBD	TBD	✓ 09/25/13	✓ $ 3,399,000	
19.	HB	SP-129	Oxygen Plant Rehabilitation at Plant 2	3	Christopher MacLeod	DWG Associates, Inc.	TBD	✓ 12/07/12	✓ $ 2,500,000	
20.	FV	SP-137	Primary Treatment Area Rehabilitation Study	1	Gary Conklin	TBD	TBD	TBD	✓ $ 300,000	
21.	FV	SP-139	Initial Expansion of the Groundwater Replenishment System	1	Angie Anderson	TBD	TBD	TBD	✓ $ 300,000	
22.	FV,HB	SP-145	Facility-Wide Safety Assessment	1	Gary Conklin	TBD	TBD	TBD	✓ $ 3,260,000	
23.	FV,HB	SP-147	Administrative Facilities Master Plan	1	Gary Conklin	TBD	TBD	TBD	✓ $ 250,000	
24.	FV	SP-153	Laboratory Water Piping Replacement	3	Christopher MacLeod	TBD	TBD	✓ 05/20/14	✓ $ 1,005,000	
								Closed Projects	$ 378,333,402	
								Canceled Projects	$ 10,016,677	
								Future Projects	$ 147,577,335	
								Joint treatment plant projects total	**$ 803,203,101**	

Secondary treatment expansion projects at OCSD

	City	Project No.	Project Name	Current Phase	OCSD Project Manager	Consultant	Contractor	✓ On Schedule Consent Decree Deadline	✓ On Budget Estimate Total Project Cost at Completion	Project Decription in Report
1.	FV	P1-76	Trickling Filter Rehabiltation and New Clarifiers at Plant 1	CLOSED	Dean Fisher	Black & Veatch	J.R. Filanc Const. Company, Inc.	✓ 03/16/06 *completed*	✓ $ 46,018,662	pg. 12
2.	FV	P1-102	New Secondary Treatment System at Plant 1	4	Dave MacDonald	Black & Veatch	Kiewit Infrastructure West	✓ 11/15/12	✓ $ 255,644,000	pg. 13
3.	HB	P2-74	Rehab of Activated Sludge Plant at Plant 2	CLOSED	Kathy Millea	MWH Americas Inc.	J.F. Shea Const., Inc.	✓ 01/15/09 *completed*	✓ $ 16,159,081	pg. 12
4.	HB	P2-90	Trickling Filters at Plant 2	5	Kathy Millea	Brown and Caldwell	J.F. Shea Const., Inc.	✓ 02/15/11 completed	✓ $ 220,002,000	pg. 12
								Secondary treatment expansion projects total	**$ 537,823,743**	

OCSD Reclamation Plant No. 1 projects

	City	Project No.	Project Name	Current Phase	OCSD Project Manager	Consultant	Contractor	✓ On Schedule Construction Finish Date	✓ On Budget Estimate Total Project Cost at Completion	Project Decription in Report
1.	FV	P1-71	Headworks Rehabiltation/ Refurbishment	6	Wendy Sevenandt	Carollo Engineers	Helix Electric, Inc.	✓ 6/28/2010 completed	✓ $ 7,954,667	pg. 14
2.	FV	P1-82	Activated Sludge Plant Rehabiltation	6	Wendy Sevenandt	HDR Engineering, Inc.	J.R. Filanc Const. Company, Inc.	✓ 05/12/09 *completed*	✓ $ 46,654,446	
3.	FV	P1-100	Digester Rehabilitation at Plant 1	4	Umesh Murthy	AECOM Technical Services, Inc.	J.R. Filanc Const. Company, Inc.	09/30/13	✓ $ 55,515,217	pg 14
4.	FV	P1-101	Sludge Dewatering & Odor Control	3	Umesh Murthy	HDR Engineering, Inc.	J.R. Filanc Const. Company, Inc.	✓ 05/18/15	$ 147,486,360	pg. 14
5.	FV	P1-111	Power Building 3A Backup Power Reliability Project	1	Gary Conklin	TBD	TBD		✓ $ 502,000	
6.	FV	P1-112	Plant Water System Rehabilitation at Plant 1	2	Victoria Pilko	TBD	TBD	11/25/14	✓ $ 10,031,139	
7.	FV	P1-113	Trickling Filter Covers and Odor Control	1	Wendy Sevenandt	TBD	TBD	12/16/16	✓ $ 5,820,789	
8.	FV	P1-115	Title 24 Access Compliance & Building Rehabilitation	1	Wendy Sevenandt	The Austin Group	TBD	✓ 10/17/14	$ 28,778,413	pg. 14
									Closed Projects $ 112,415,248	
									Canceled Projects $ 42,815	
									Future Projects $ 341,621,000	
								Reclamation Plant No. 1 projects total	**$ 756,822,094**	

OCSD Treatment Plant No. 2 projects

	City	Project No.	Project Name	Current Phase	OCSD Project Manager	Consultant	Contractor	✓ On Schedule Construction Finish Date	✓ On Budget Estimate Total Project Cost at Completion	Project Decription in Report
1.	HB	P2-66	Headworks at Plant 2	4	Pamela Koester	Carollo Engineers	J.F. Shea Construction, Inc.	02/19/13	✓ $ 257,745,618	pg. 16
2.	HB	P2-80	Primary Treatment Rehabilitation Refurbishment	6	Steven Schock	Malcolm Pirnie Inc.	Shimmick Construction	✓ 05/03/10 completed	✓ $ 38,534,473	
3.	HB	P2-89	Solids Thickening and Processing Upgrades	3	Steven Schock	MWH Americas, Inc.		✓ 04/10/15	✓ $ 57,798,512	pg. 16
4.	HB	P2-91	Plant No. 2 Primary Sludge Feed System Project	6	Steven Schock	Brown and Caldwell	Shimmick Construction	✓ 06/01/10 completed	✓ $ 26,203,000	
5.	HB	P2-92	Sludge Dewatering and Odor Control at Plant 2	2	Dave MacDonald	TBD	TBD	✓ 03/14/17	✓ $ 64,890,224	pg. 17
6.	HB	P2-96	Plant 2 Landscaping Project	1	Angie Anderson	TBD	TBD	TBD	$ 551,621	
7.	HB	P2-101	Plant Water System Rehabilitation at Plant 2	2	Victoria Pilko	TBD	TBD	07/24/14	✓ $ 3,863,912	
8.	HB	P2-105	Digester Ferric Chloride System Rehabilitation	3	Umesh Murthy	AECOM Technical Services, Inc.	TBD	02/28/14	✓ $ 2,910,065	pg. 17
9.	HB	P2-106	Chemical Scrubber Conversions and Piping System Improvements	3	Christopher MacLeod	Dudek & Associates, Inc.	TBD	11/21/12	✓ $ 2,807,000	
10.	HB	P2-108	15 kV Upgrades at Plant No. 2	1	Alberto Acevedo	TBD	TBD	✓ 03/11/14	✓ $ 5,971,967	
									Closed Projects $ 38,501,594	
									Canceled Projects $ 1,110,235	
									Future Projects $ 199,368,828	
								Treatment Plant No. 2 projects total	**$ 700,257,049**	

Collection system projects by city

	City	Project No.	Project Name	Current Phase	OCSD Project Manager	Consultant	Contractor	✓ On Schedule Construction Finish Date	✓ On Budget Estimate Total Project Cost at Completion	Project Decription in Report
1.	FV,CM, Santa Ana	1-17	Santa Ana Trunk Sewer Rehab	2	Martin Dix	Brown and Caldwell	TBD	5/31/2016	✓ $ 21,156,000	pg. 10
2.	Brea	2-24-1	Carbon Canyon Dam Sewer and Pump Station Abandonment	6	Hardat Khublall	RBF CONSULTING, INC.	Ken Thompson, Inc.	✓ 7/24/09 completed	✓ $ 8,843,012	
3.	Anaheim, YL	2-41	SARI Re-Alignment	4	Hardat Khublall	Tetra Tech/HDR Engineering, Inc.	L. A. Engineering	05/07/13	✓ $ 6,524,671	pg. 5,10
4.	Anaheim, YL	2-41-7	Santa Ana River Interceptor (SARI) Inspection & Mitigation	3	Hardat Khublall	TBD	TBD	✓ 01/31/11 *completed*	✓ $ 923,511	
5.	Fullerton	2-65	Newhope - Placentia Trunk Grade Seperation Replacement	2	Victoria Pilko	TBD	TBD	✓ 12/18/14	$ 5,930,871	
6.	Los Alamitos/ Rossmoor	3-52	Rehabilitation of Westside Pump Station	6	Alberto Acevedo	PBS&J	Olsson Construction	12/18/14 completed	✓ $ 12,062,969	pg. 10
7.	FV, GG, Westmin.	3-58	Rehabilitation of Magnolia Trunk Sewer	4	Alberto Acevedo	TBD	Kiewit Infrastructure West	✓ 10/21/11	✓ $ 22,144,468	pg. 10
8.	NB	5-49	Replacement of Bitter Point Pump Station	4	Martin Dix	Lee & Ro	Kiewit Infrastructure West/Mass Electric	06/21/12	✓ $ 31,690,281	pg. 8
9.	NB	5-50	Replacement of Rocky Point Pump Station	4	Martin Dix	Malcolm Pirnie Inc.	Kiewit Infrastructure West/Mass Electric	10/09/11	✓ $ 20,764,151	pg. 8
10.	NB	5-58	Newport Trunk Sewer & Force Main Rehabilitation	4	Alberto Acevedo	Black & Veatch/Butier Engineering	TBD	09/28/12	$ 40,791,016	pg. 9
11.	NB	5-60	Newport Force Main Rehabilitation	2	Victoria Pilko	TBD	TBD	08/30/16	✓ $ 23,780,243	pg. 9
12.	NB	5-63	Dover Drive Trunk Sewer Relief	3	Hardat Khublall	PBS&J	TBD	11/08/13	$ 13,346,006	pg. 9
13.	CM	6-19	Southwest Costa Mesa Trunk	2	Victoria Pilko	Dudek	TBD	08/26/19	$ 15,239,758	pg. 10
14.	Irvine, Tustin	7-37	Gisler - Red Hill Trunk Improvements - Reach B	3	Hardat Khublall	Tetra Tech, Inc.	TBD	09/23/13	$ 11,002,000	pg. 11
15.	Unincorp County	7-61	County Island Annexation and CEQA Documentation	1	James Burror	TBD	TBD	TBD	✓ $ 300,285	
16.	HB	11-26	Coast Trunk Sewer Rehabilitation	6	Alberto Acevedo	Malcolm Pirnie Inc.	Steve Bubalo Construction	11/19/09 completed	✓ $ 9,139,197	
17.	Westmin.	11-32	Wintersburg Channel Siphon Protection Project	1	Hardat Khublall	TBD	TBD	TBD	✓ $ 75,502	
18.	FV	I-10	Replacement of Ellis Pump Station	6	Steven Schock	CDM/Malcolm Pirnie Inc.	J.F. Shea Construction, Inc.	✓ 03/27/09 completed	✓ $ 79,337,000	
								Closed Projects	$ 180,188,127	
								Canceled Projects	$ 12,518,988	
								Future Projects	$ 373,226,682	
								Collection system projects total	**$ 888,984,738**	

New projects beginning next Fiscal Year 2011-12

	City	Project No.	Project Name	Planned Start
1.	FV	J-111	Cengen Emissions Control Project	July 2011
2.	Fullerton, Brea	2-71	Fullerton-Brea Interceptor Sewer Relief	August 2011
3.	CM, HB	6-17	District 6 Trunk Sewer Relief	August 2011
4.	HB	SP-133	2009 NPDES Permit Renewal	August 2011
5.	FV, HB	SP-137	Primary Treatment Area Rehabilitation Study	August 2011
6.	FV, HB	SP-140	Wastehauler Odor Control	August 2011
7.	FV, HB	SP-141	Digester Gas Facilities Assessment	August 2011
8.	FV, HB	SP-145-1	Plant Safety Assessment	August 2011
9.	HB	SP-145-2	P2 WSSPS Motor Location	August 2011
10.	FV, HB	SP-146	Utility Water Systems Study	August 2011
11.	FV, HB	SP-148	Plant Air System Master Plan	August 2011
12.	FV, HB	SP-150	Uninterruptible Power System (UPS) Study	August 2011
13.	FV, HB	SP-151	Uniform Level of Service Standards	August 2011
14.	FV, HB	SP-155	Sidestream Pumping System and Water Characterization Study	August 2011
15.	HB	SP-168	Treatment Plant Hydraulic Assessment	August 2011

New projects

The projects included in this table are in the project development phase. During this phase the scope of work is developed and a detailed plan to manage the project is created.

In closing

OCSD appreciates the help and support received by the public and the various cities and agencies in our service area that contribute to the successful implementation of our Capital Improvement Program.

Board of Directors FY 2010-11

Chair
Fountain Valley Larry Crandall

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