San José-Santa Clara Regional Wastewater Facility

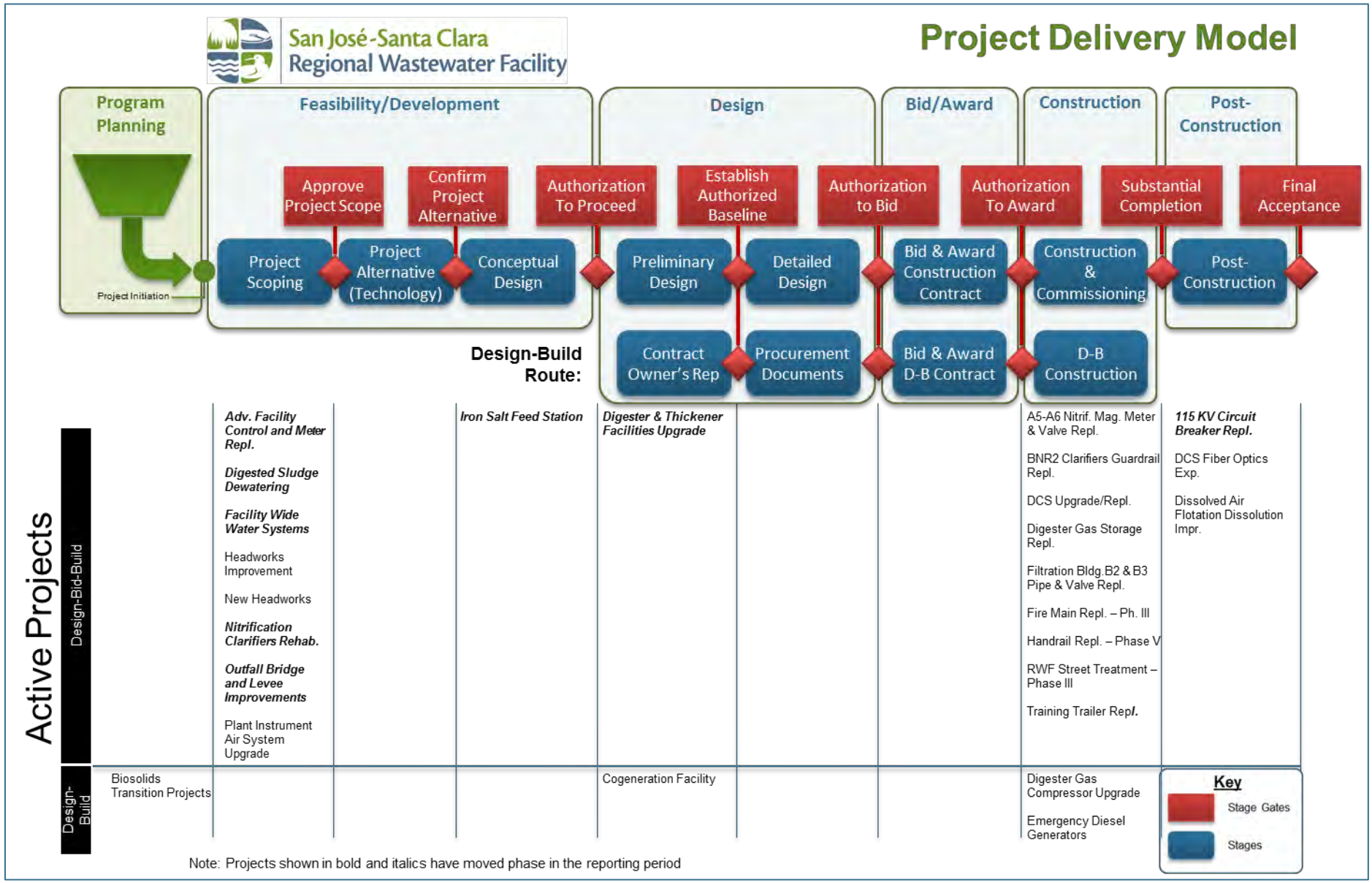
Capital Improvement Program
Monthly Status Report for July 2014

September 4, 2014

This report provides a summary of the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility ("Wastewater Facility") for the period of July 2014.

Report Contents

Project Delivery Model



Program Summary

July 2014

In 2008, the Wastewater Facility undertook a Plant Master Plan (PMP) effort which ultimately resulted in its adoption in November 2013. The Project Validation process held between October 2013 and January 2014 reviewed the projects identified in the Plant Master Plan in order to develop a five-year and ten-year CIP. This monthly report provides a summary of the progress and accomplishments of the CIP for the month of July 2014 within Fiscal Year 2014-2015.

In the month of July, the focus was on initiating several new projects and moving forward on all fronts with existing projects, bringing them into the Project Delivery Model (PDM) process (see figure, inside of front cover). We continued to enhance our program tools, and held additional staff training on several items, including our decision log. We moved forward with drafting an Operations Plan for the Wastewater Facility, which will include both unit process descriptions and an annual plan for coordinating CIP construction with on-going operations. July saw intense activity on our Asset Management Study (see below), one of our nine programmatic studies. We held four workshops the week of June 30th, and a final workshop on July 15th to outline the asset management initiatives we would carry forward. Finally, we continued driving implementation of our program tools and processes on all existing projects, bringing new staff onto the program, and finalizing the next fiscal year service orders for the program work.

There were no regular meetings in July of the Technical Advisory Committee (TAC) or the Treatment Plant Advisory Committee (TPAC). There was a special study session held with TAC on July 16th to review the status of the Flow Study, which is being conducted by others outside of the CIP Program.

Look Ahead

In August, we will move forward with financial planning activities, supporting ESD as it works on its upcoming debt financing. We will develop a cost estimating guideline document, for use throughout the program. Our project schedules will undergo a thorough review, to take advantage of "lessons learned" in the first nine months of the program. In addition, we will continue to implement the PDM and Stage Gate process.

Program Highlight – Asset Management

One of our nine programmatic studies involves developing a strategy for asset management (AM) at the Wastewater Facility. As defined for the CIP Program, asset management involves optimizing the full cycle of an asset's life (see Figure 1 below). The program team is building on a previous AM study, along with our program tools, to develop a pragmatic approach to implementing an on-going AM program. We anticipate the program will consist of three to five AM initiatives being implemented each year, with an annual report summarizing progress and laying out the next year's direction. As illustrated in Figure 1, AM truly spans both capital delivery and operations and maintenance (O&M), and will be an intensely collaborative effort between those two groups at the Wastewater Facility.

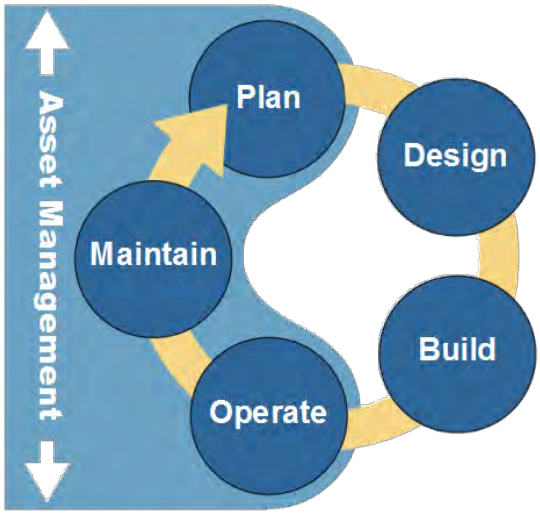


Figure 1—Asset Life Cycle

Program Performance Summary

Seven KPIs have been established to measure the overall success of the CIP. Each KPI represents a metric which will be monitored on a regular frequency. Through the life of the CIP, KPIs will be selected and measured which best reflect the current maturity of the program. In this report, the six KPIs currently being measured have been reset to reflect the start of the new Fiscal Year 2014-2015. The target for the seventh KPI "Staff Count" KPI will be established as part of the analysis of future staffing needs.

Program Key Performance Indicators – Fiscal Year 2014-2015

KPI Description	Target	Actual	Status	Trend	Measurement
Schedule[1]	85%	NA			Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone. ***Target: 85% of projects delivered within 2 months of approved baseline schedule or better.***
Budget[1]	90%	NA			Percentage of CIP projects that are completed within the approved baseline budget. ***Target: 90% of projects total expenditures do not exceed 101% of the baseline budget.***
Expenditure[1]	≥$123.9M	NA			Total CIP actual + forecast committed cost for the fiscal year compared to CIP fiscal year budget. ***Target: Forecast committed cost meets or exceeds 70% of budget for Fiscal Year 14/15 (70% of $177= $123.9M)***
Procurement[1/2]	100%	100% (7/7)			Number of actual + forecast consultant and contractor procurements compared to planned for the fiscal year. ***Target: Forecast /actual procurements for fiscal year meet or exceed planned.***
Safety[1]	0	0			Number of OSHA reportable incidents associated with CIP construction for the fiscal year. ***Target: zero incidents.***
Environment/Permits[1]	0	0			Number of permit violations caused by CIP construction for the fiscal year. ***Target: zero violations.***
Staffing Level[3]	TBD	TBD	TBD	TBD	Percentage of authorized staffing level ***Target: to be determined***

KEY:

Cost:	 Meets or exceeds KPI target	 Does not meet KPI target

Notes

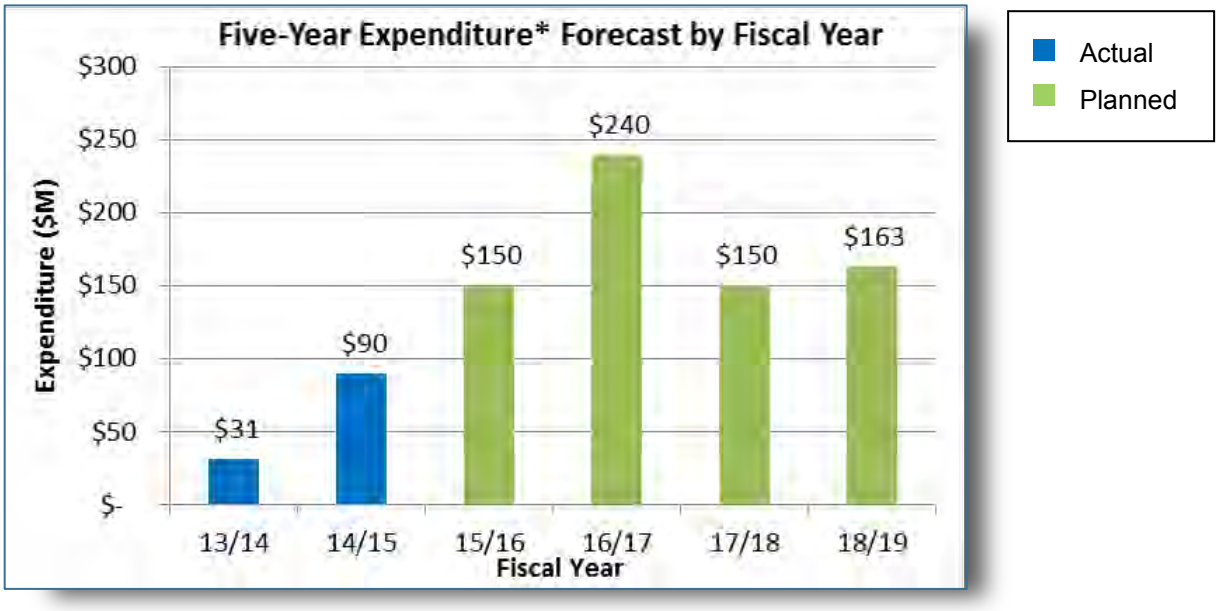
1. KPIs have been reset for the new FY14-15.
2. Procurement KPI target will be updated following the project schedule reviews.
3. Staff count KPI measured quarterly; all other KPIs measured monthly.

Program Cost Performance

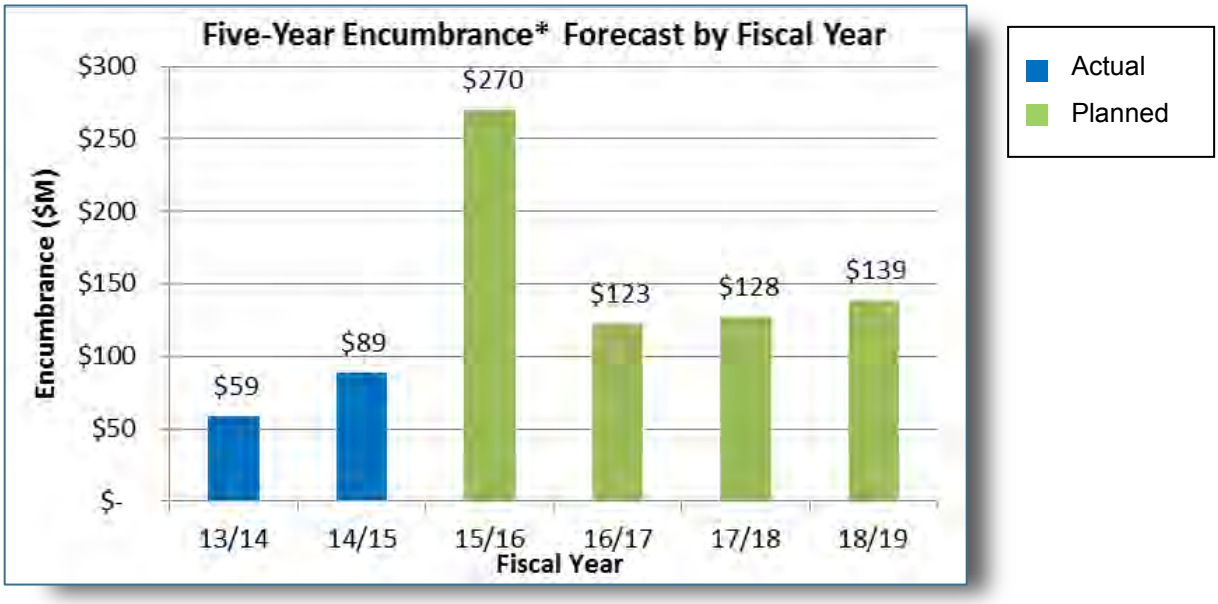
This section provides a summary of CIP cost performance for all construction projects and non-construction activities for FY14-15 and the Five-Year CIP.

Adopted 2015-2019 CIP Expenditure and Encumbrances

To accommodate the proposed increase in expenditures and encumbrances over the next five years, the City is developing a long-term financial strategy to fund the needed, major capital improvements while minimizing the impact to ratepayers. The City held special study sessions with TAC and TPAC in April to discuss the ten-year funding strategy and the financing plan.



*Expenditure defined as: Actual cost expended associated with services and construction of physical asset which may include encumbered amounts from previous years

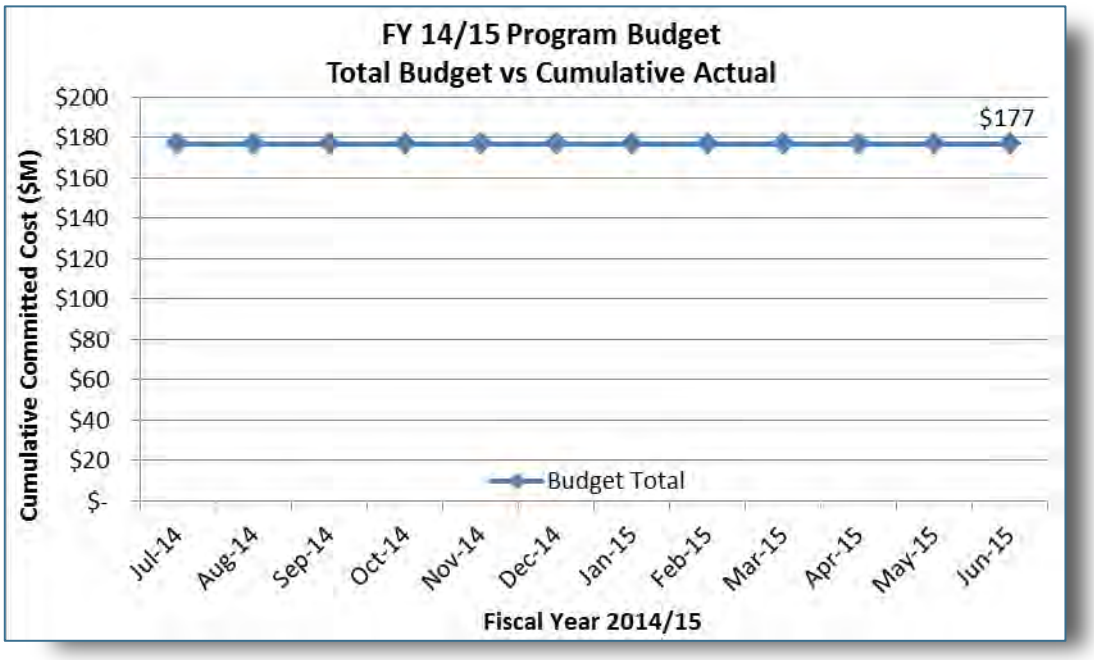


*Encumbrance defined as: Financial commitments, such as purchase orders or contracts, which are chargeable to an appropriation and for which a portion of the appropriation is reserved

Fiscal Year 2014-2015 Program Budget Performance

The fiscal year program budget is $177 million. The budget amount of $177 million represents the 2014-2015 budget of $182 million plus carryover of $58 million, less reserves of $5 million and ending fund balance of $60 million and Fall adjustment of $2.4M. Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year).

The committed costs forecast for Fiscal Year 2014-2015 are currently being finalized and will be included in next month's report.



Project Performance

There are currently 14 active projects in the construction or post-construction phase with a further 11 projects in feasibility/development, design or bid and award phases (see PDM graphic at the front of this report). All active projects are listed in the tables below. Projects in the construction phase have cost and schedule baselines established and are monitored using the City's Capital Project Management System (CPMS). These projects have green/red icons included in the table below to indicate whether they are on budget and schedule using the CPMS data as a source.

Project Name	Phase	Estimated Beneficial Use Date[1]	Cost Performance[2]	Schedule Performance[2]
Baselined Projects				
Dissolved Air Flotation (DAF) Dissolution Improvement	Post-Construction	Apr 2014		
Distributed Control System (DCS) Fiber Optics Network Expansion	Post-Construction	May 2014		
115KV Circuit Breaker Replacement	Post-Construction	Jul 2014		
A5-A6 Nitrification Mag. Meter & Valve Replacement	Construction	Jul 2014		
BNR-2 Clarifier Guardrail Replacement	Construction	Dec 2014		
DCS Upgrade/Replacement	Construction	Jun 2016		
Digester Gas Compressor Upgrade	Construction	Jul 2016[3]		
Digester Gas Storage Replacement	Construction	Jun 2015		
Emergency Diesel Generators	Construction	Aug 2016[3]		
Filtration Building B2 & B3 Pipe & Valve Replacement	Construction	Apr 2015[3]		
Fire Main Replacement - Phase III	Construction	Apr 2015		
Handrail Replacement - Phase V	Construction	Mar 2015		
RWF Street Rehabilitation - Phase III	Construction	Jan 2015[3]		
Training Trailer Replacement	Construction	May 2015		

Project Name	Phase	Estimated Beneficial Use Date[1]	Cost Performance[2]	Schedule Performance[2]
Pre-Baseline Projects				
Cogeneration Facility	Design	Mar 2017	N/A	N/A
Digester & Thickener Facilities Upgrade	Design	Feb 2018	N/A	N/A
Adv. Facility Control and Meter Repl.	Feasibility/Development	Feb 2016	N/A	N/A
Digested Sludge Dewatering	Feasibility/Development	Dec 2018	N/A	N/A
Facility Wide Water Systems	Feasibility/Development	Mar 2021	N/A	N/A
Headworks Improvement	Feasibility/Development	Nov 2017	N/A	N/A
Iron Salt Feed Station	Feasibility/Development	Apr 2016	N/A	N/A
New Headworks	Feasibility/Development	Nov 2017	N/A	N/A
Nitrification Clarifiers Rehab.	Feasibility/Development	June 2018	N/A	N/A
Outfall Bridge and Levee Improvements	Feasibility/Development	Aug 2018	N/A	N/A
Plant Instrument Air System Upgrade	Feasibility/Development	Dec 2015	N/A	N/A

KEY:

Cost:	**On Budget**		**>1% Over Budget**	
Schedule:	**On Schedule**		**>2 months delay**	

Notes

1. Beneficial Use is defined as when the work is sufficiently complete, in accordance with the contract documents, so that the City can occupy or use the work. Beneficial use dates being reviewed as part of project schedule reviews.
2. An explanation of cost and schedule variances on specific projects identified in this table is provided on the next page.
3. Beneficial use dates pending Contractor's Schedule.

Significant Accomplishments

Cogeneration Facility Project

In July, the City received authorization from the State to utilize the design-build procurement method to deliver the Cogeneration Project. Significant work is underway preparing the Request for Pre-qualifications, which is anticipated to be released in September, followed by the Request for Proposals, targeted for release in November. Estimated contract amount is approximately $60 Million.

Emergency Diesel Generators Project

The contract for the Emergency Diesel Generator Project with the Design-Builder (Anderson Pacific) was executed on July 31, 2014.

115KV Circuit Breaker Replacement Project

The 115KV Circuit Breaker Replacement project was commissioned on July 25, 2014.

Digester & Thickener Facilities Upgrade

The Authorization to Proceed Stage Gate was held on July 17. The recommendations from the Conceptual Design Report were presented and ratified by the Stage Gate Panel.

Explanation of Project Performance Issues

DAF Dissolution Improvement

This project involved the replacement of pipe sections, check valves, and knife gate valves, and the installation of new electric actuators to automate valve operations for the dissolved air flotation process in the Wastewater Facility's Sludge Control Building. One of the new valves required an extended shutdown period and repeated installation attempts. In existing facilities, it is not uncommon for new equipment to present fit and alignment challenges as was encountered in this case. In addition, the installation of the local control panel required a longer than expected submittal review period. These issues resulted in minor cost and schedule impacts (3% above target budget and 3 months beyond target schedule).

In April, the project achieved beneficial use. The contractor's work is essentially complete, with the exception of a local control panel connection and outstanding punch list items. In-house staff is expected to finish the remaining electrical work and staff anticipates project acceptance in August.

Active Construction Photos

In lieu of a detailed project description, photographs of the following active construction projects are provided:

- 115KV Circuit Breaker Replacement
- Dissolved Air Flotation (DAF) Dissolution Improvement
- Digester Gas Storage Replacement
- Fire Main Replacement - Phase III
- Handrail Replacement - Phase V
- Distributed Control System (DCS) Fiber Optic Network Expansion

115KV Circuit Breaker Replacement

Figure 2—115KV Circuit Breaker Replacement

Dissolved Air Flotation (DAF) Dissolution Improvement

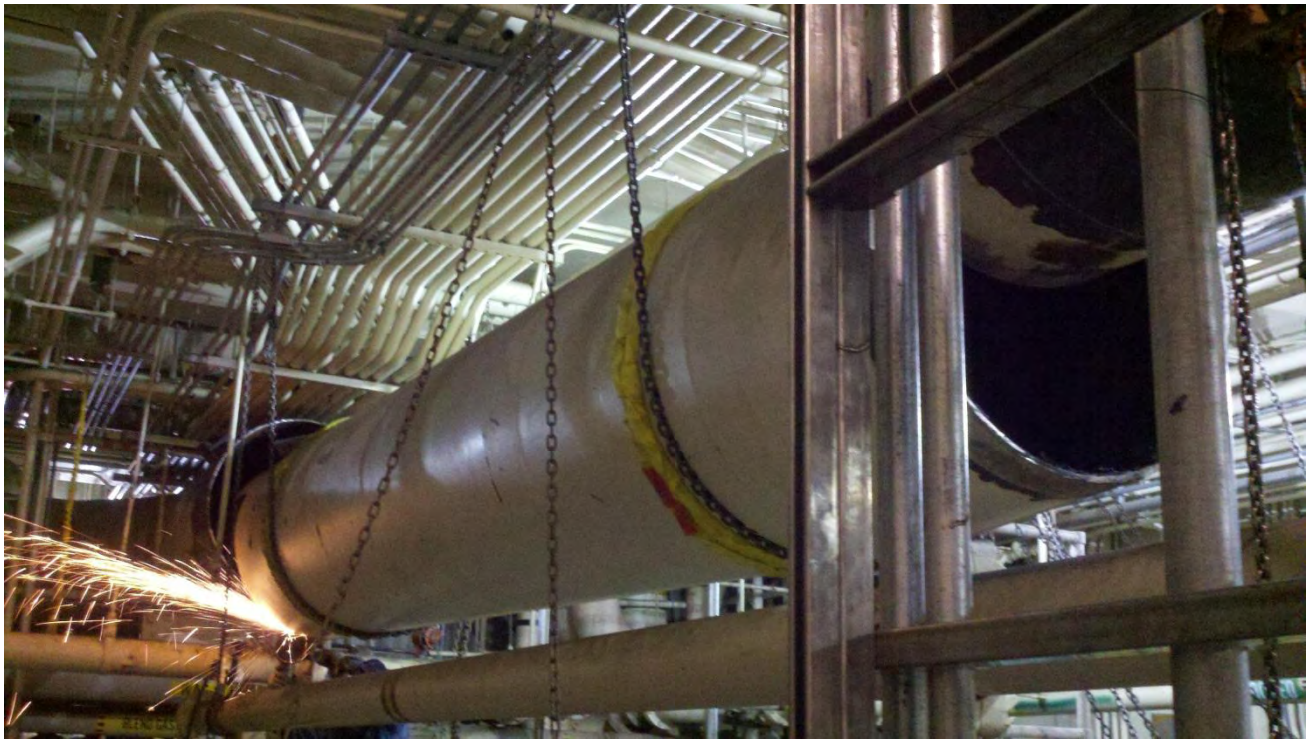


Figure 3—Dissolved Air Flotation (DAF) Dissolution Improvement

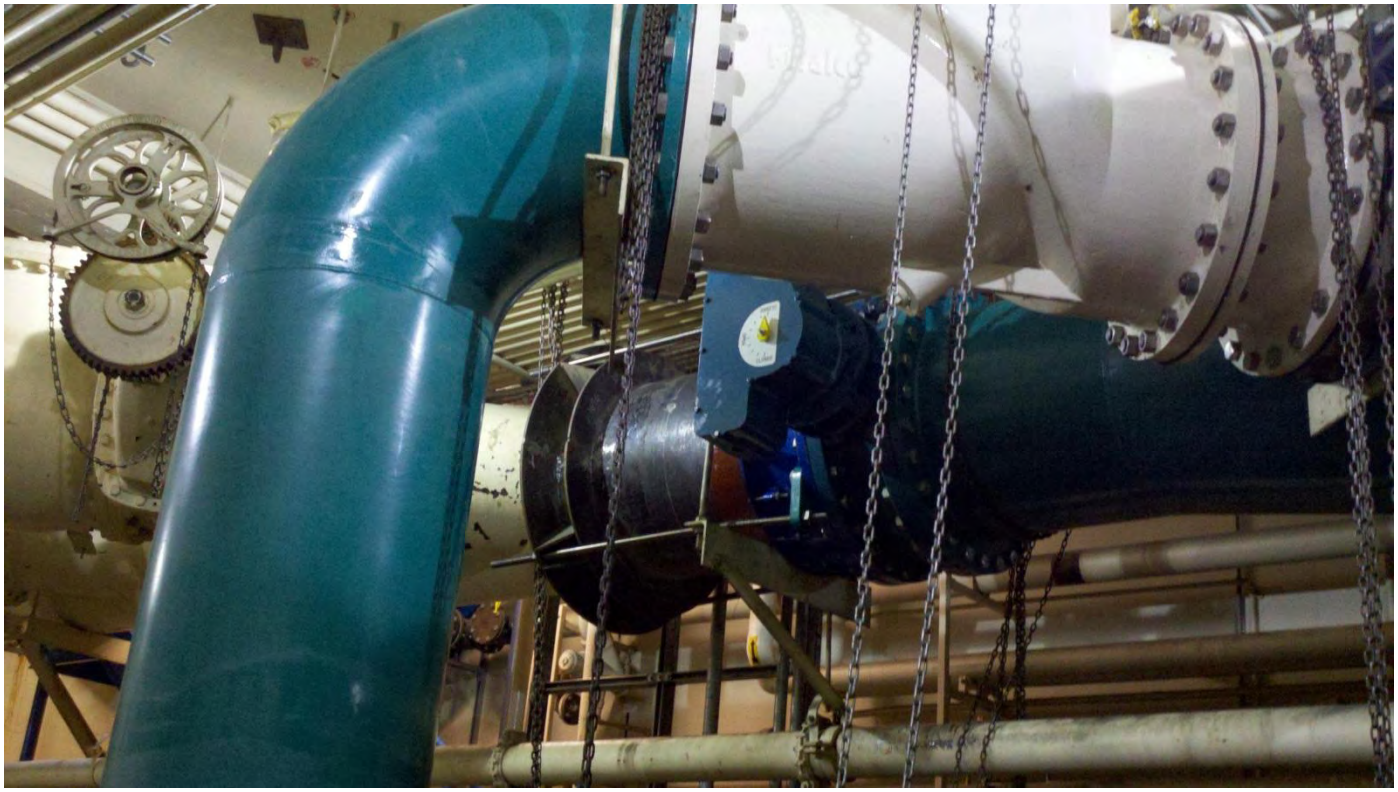


Figure 4—Dissolved Air Flotation (DAF) Dissolution Improvement, Valve Installation

Digester Gas Storage Replacement

Figure 5—Digester Gas Storage Replacement, Demolition

Figure 6—Digester Gas Storage Replacement, Demolition

Fire Main Replacement - Phase III

Figure 7— Fire Main Replacement - Phase III

Handrail Replacement - Phase V

Figure 8— Handrail Replacement – Phase V

Distributed Control System(DCS) Fiber Optic Network Expansion

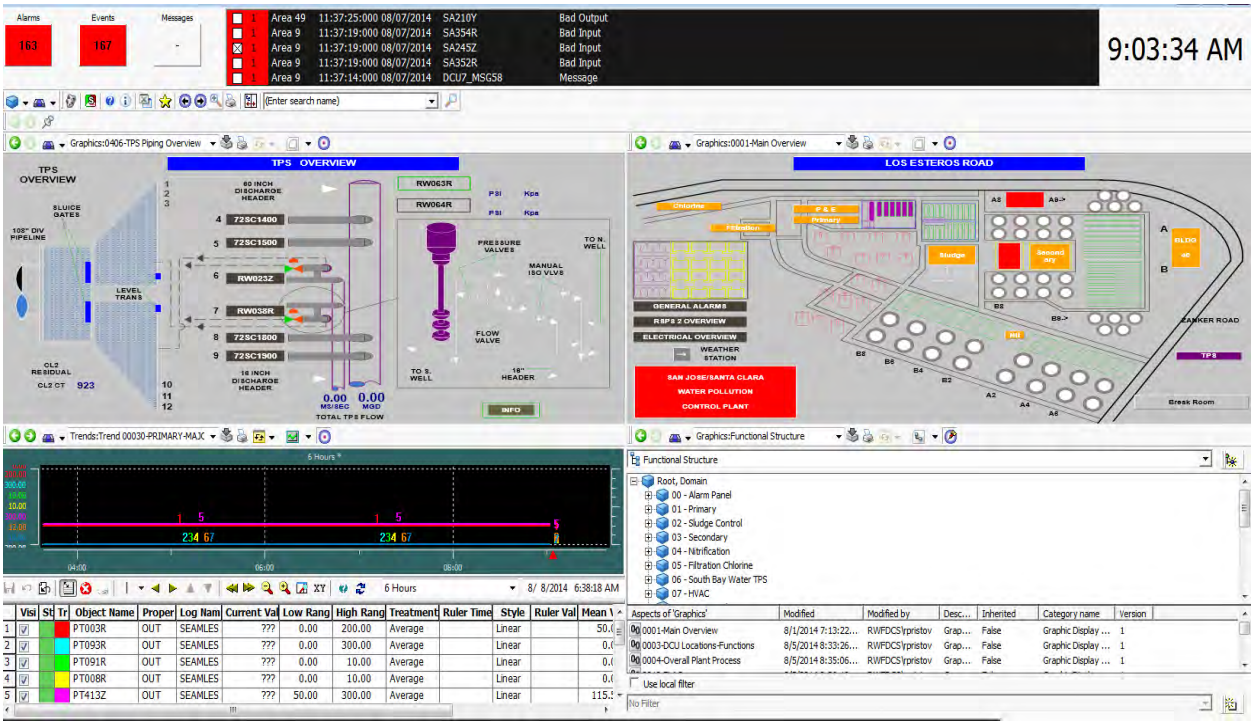


Figure 9— Distributed Control System(DCS) Fiber Optic Network Expansion, Screens Overview

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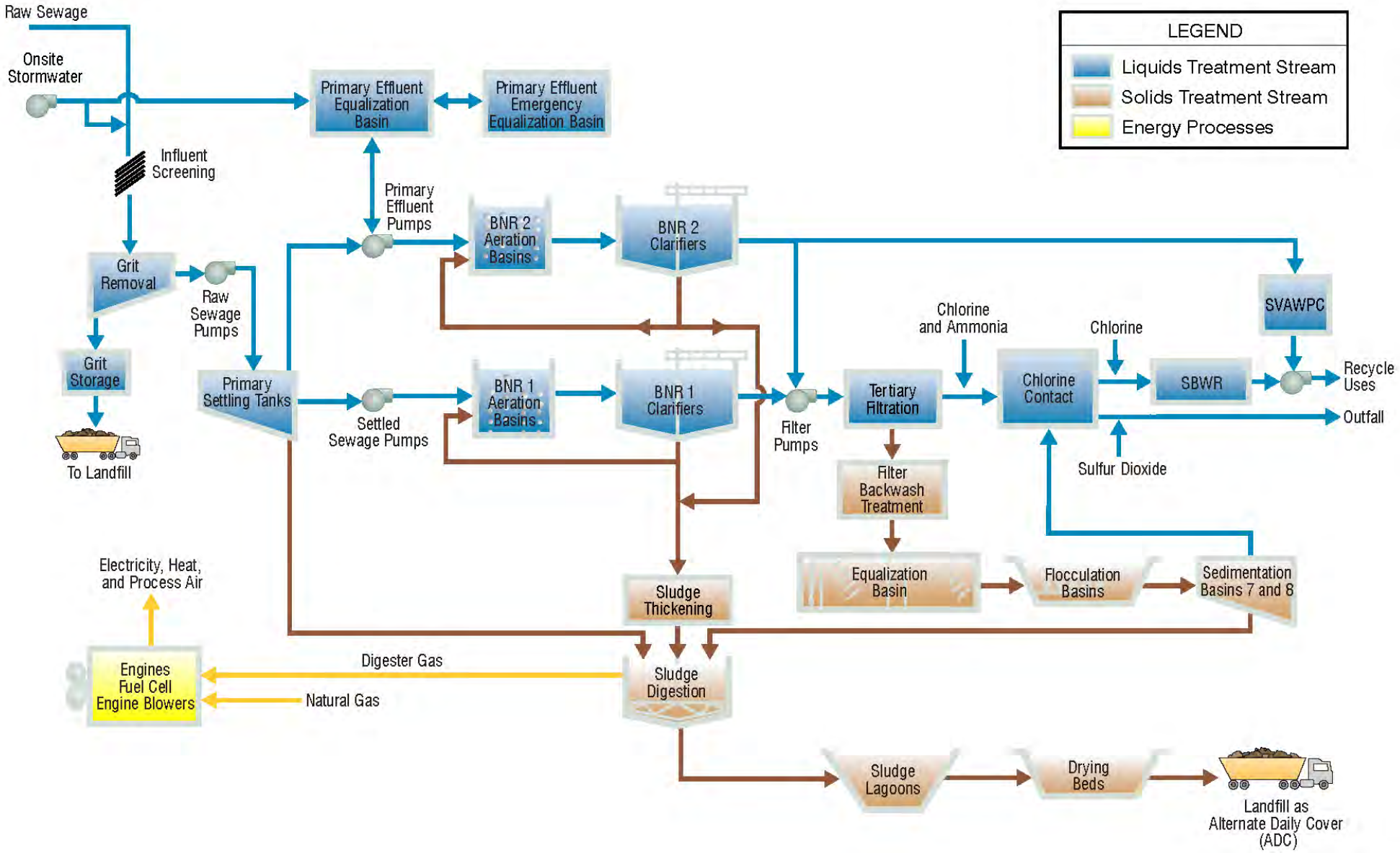
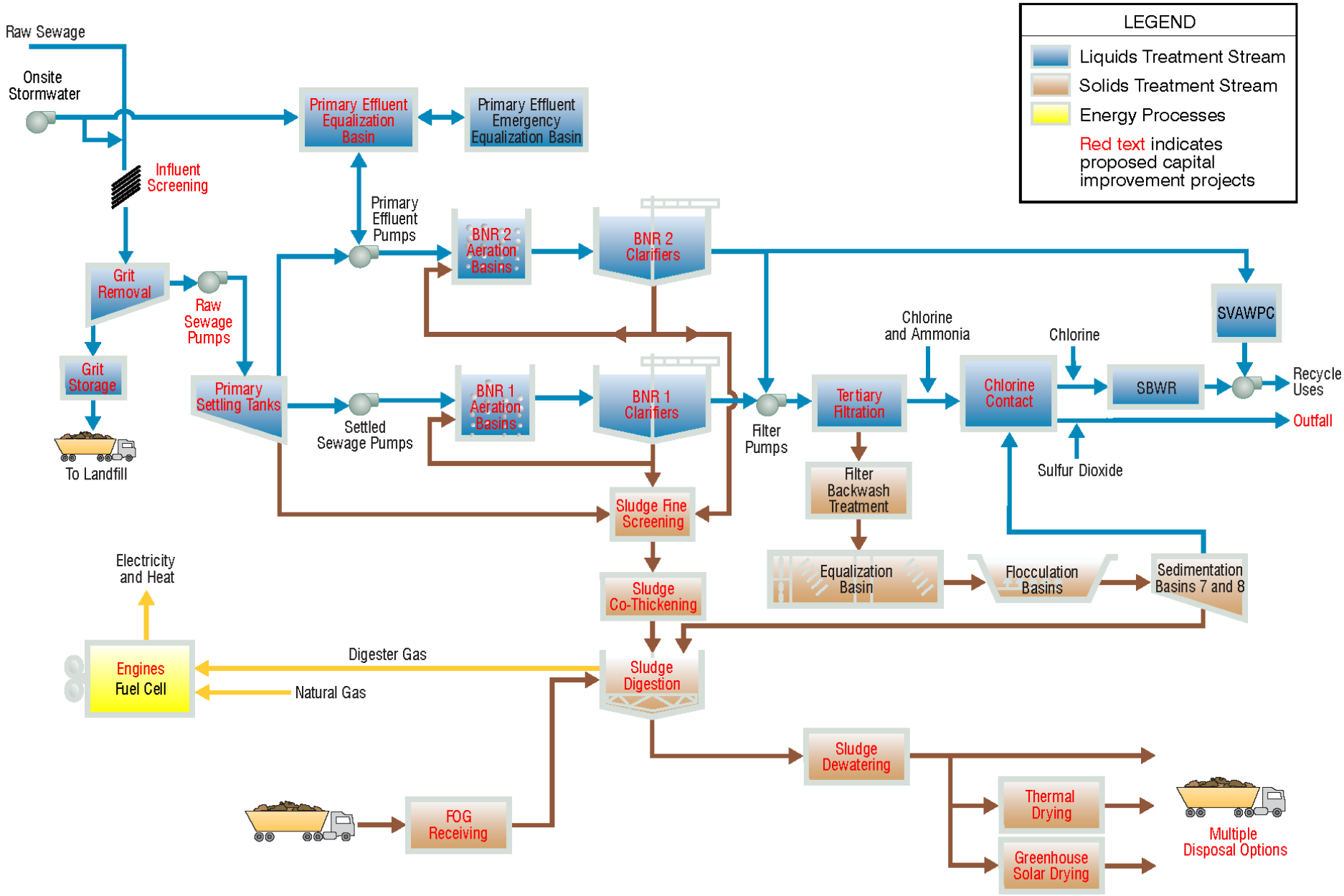
Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram



Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram



Active Construction Projects – Aerial Plan