MORRO BAY
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RELIABLE. CLEAN. FOR LIFE.

City of Morro Bay
Water Reclamation Facility Project

QUARTERLY REPORT
ENDING SEPTEMBER 2021

FINAL | November 2021

carollo

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Abbreviations

Anvil	Anvil Builders, Inc.
BMP	Best Management Practices
BNR	Biological Nutrient Removal
BOD	Biochemical Oxygen Demand
BR	brine
CA	California
Carollo	Carollo Engineers, Inc.
CDFW	California Department of Fish and Wildlife
CFAC	Citizens Finance Advisory Committee
CO	Change Order
CPM	critical path method
CWSRF	Clean Water State Revolving Fund
DDW	Division of Drinking Water
EHSP	Enhanced Source Control Program
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FIW	Filter Inlet Water
FO	fiber optic
FRP	Fiber-Reinforced Plastic
FWB	Filter Backwash
GAMA	Groundwater Ambient Monitoring and Assessment Program
GMP	Guaranteed Maximum Price
GSI	GSI Water Solutions
IFC	Issued for Construction
IPR	Indirect Potable Reuse
KPI	Key Performance Indicator
lf	Linear Feet
MBR	Membrane Bioreactor
NPDES	National Pollution Discharge Elimination System
NTP	Notice to Proceed
PA	Programmatic Agreement
PCO	Potential Change Order
PG&E	Pacific Gas and Electric
PPP	Pollution Prevention Plan
Project	Water Reclamation Facility Project
PRW	Plant Recycled Water
PWAB	Public Works Advisory Board

Q1	Quarter No. 1
RFI	request for information
RO	Reverse Osmosis
ROWD	Report of Waste Discharge
RWQCB	Regional Water Quality Control Board
SAA	Stream Bed Alteration Agreement
SHPO	State Historic Preservation Office
SHT	Sludge Holding Tank
SLO	San Luis Obispo
SPI	schedule performance index
SRF	State Revolving Fund
SWRCB	State Water Resources Control Board
TSO	Time Schedule Order
TSS	Total Suspended Solids
USBR	United States Bureau of Reclamation
UVAOP	Ultraviolet Advanced Oxidation Process
VDC	volts direct current
Vistra	Vistra Energy
WIFIA	Water Infrastructure Finance and Innovation Act
WRF	Water Reclamation Facility
WWE	Water Works Engineers
WWR	Wastewater Raw
WWS	Wastewater Screened

Section 1

PROJECT OVERVIEW

1.1 General Project Status Update

All components of the Water Reclamation Facility Project (Project) are currently in progress. The general progress update and schedule information presented in this report represents Quarter No. 1 (Q1) of Fiscal Year 2021-2022, from July 1, 2021 to September 30, 2021.

1.1.1 Water Reclamation Facility

1.1.1.1 Design

The design for the Water Reclamation Facility (WRF) was completed with the delivery of the Issued for Construction (IFC) drawings and specifications for the WRF on May 22, 2020.

1.1.1.2 Construction

Construction at the WRF site began on March 20, 2020. Activities to date include the following major activities which are discussed in detail in Section 8:

- Completion of major earthwork
- Remediation of the second soil slip
- Continued installation of major and minor yard piping systems
- Pressure testing of installed underground piping
- Installation of various electrical infrastructure components.
- Construction progress in the following process areas:
  - Headworks
  - Biological Nutrient Removal (BNR)/Membrane Bioreactor (MBR) treatment
  - Reverse Osmosis (RO)/Ultraviolet (UV) Advanced Oxidation Process (AOP)
  - Product water facilities
  - Residuals sludge processing
  - Electrical and Instrumentation/Controls
  - Chemical storage and feed
  - Operations building
  - Maintenance building
  - City yard facilities

1.1.2 Conveyance Facilities

1.1.2.1 Design

Water Works Engineers (WWE) submitted the bid set plans and specifications in May 2020 and the City advertised this component of the Project on June 15, 2020.

1.1.2.2 Construction

The City opened bids for the Conveyance Facilities component of the Project on August 14, 2020. The City received a total of five bids. Anvil Builders, Inc. (Anvil) was awarded the contract for construction of the Conveyance Facilities on November 10, 2020 and issued notice to proceed (NTP) on December 14, 2020. The following activities were completed between July 1, 2021 and September 30, 2021:

The contractor continued to maintain general and administrative tasks such as project Stormwater Pollution Prevention Plan (SWPPP), archeological mitigation and monitoring, and public outreach efforts. Additionally, five separate construction crews worked at the following locations, and a detailed description of the work within these areas is included in Section 8:

- Pump Station A
- Pump Station B
- Pipeline construction in the following segments:
  - Segment 1 - Atascadero Road (Existing City Wastewater Treatment Plant to Bike Path)
  - Segment 3 – Bike Path (Morro Creek Foot Bridge to Main Street)
  - Segment 5 – Quintana Road (Main Street to Morro Bay Blvd)
  - Segment 6 – Quintana Road (Morro Bay Blvd to La Loma Avenue)
  - Segment 7 – Quintana Road (La Loma Avenue to South Bay Blvd)
- Lift Station 2

1.1.3 Recycled Water Facilities

1.1.3.1 Design

In Q1, the following preliminary design items were progressed for the Recycled Water Facilities by the Program Management Team:

- The locations of both the pilot injection and monitoring well sites were finalized to be within the 100-foot permanent easement acquired by the City from Vistra Energy. This differed from the original plan of having the monitoring well located in the temporary construction easement just north of the pilot injection well. The location of the monitoring well was revised to be within the permanent easement to ensure that the well would be in service for its entire useful life rather than required to be destroyed at the end of the temporary construction easement conditional use timeframe.
- The City, Carollo, and GSI continued to make progress toward installing the pilot injection well. The pilot well work is expected to be bid in the coming months.
- Bidding documents for the pilot injection well were completed and contract documents were sent to the City for review.
- ABC Liovin was the selected contractor to install the monitoring well. Work is anticipated to begin at the end of October 2021.
- The City received Notice of Acceptance on August 27, 2021 from the Regional Water Quality Control Board for their Aquifer Storage and Recovery (ASR) Permit, therefore allowing the upcoming pilot injection testing to commence.

- Guida Surveying, inc. performed their first pre-construction survey on July 6 and 9, 2021 to perform topographic surveying, easement delineation, and existing utility locations for the 100-foot easement from Willow Camp Creek to the bike path parallel to Highway 1.
- Several existing utilities were found to be on site as a result of the topographic survey conducted on July 7, 2021. With the revised well sites both within the permanent easement, the Program Management Team plans to have the utilities in the area near both the pilot injection well and the monitoring well sites potholed and surveyed to ensure there will be no utility conflicts during installation.
- Desktop vegetation surveys and exhibit development has been completed and the Program Management Team is expected to coordinate with the project biologist in October to identify vegetation protection and removal requirements for the pilot injection and monitoring construction activities.

1.1.3.2 Construction

Recycled Water Facilities are not yet under construction.

1.1.4 Accomplishments and Challenges

Table 1 summarizes some of the key accomplishments and critical challenges identified for the Project through September 30, 2021.

Table 1 Project Accomplishments and Challenges

Project Component	Key Accomplishments	Critical Challenges	Actions to Overcome Challenges	Likely Outcomes
General Project	Assembled and submitted the first disbursement request package to SRF Construction Loan.	Invoices from FBV have historically not separated costs incurred by the 16-bid items identified in the agreement between SRF and the City. The 16-bid item format is required for SRF disbursement requests. Moving forward, SRF is requiring that all invoices from FBV reformat costs incurred into these 16-bid items. SRF also requires FBV to develop a one-time breakdown of costs incurred to date by these 16-bid items.	The funding team continues to work with both FBV and SRF staff to develop the appropriate invoice format and historical documentation necessary to meet the requirements of the funding agreement between SRF and the City.	FBV invoices will meet the SRF requirements and the City will submit disbursement requests for WRF and conveyance construction costs.
Water Reclamation Facility	All major earthwork (excluding the remediation of the second soil slip), rough grading, major yard piping is complete.	Contractor continues to install minor service piping, onsite electrical infrastructure, pressure test of underground piping, and second soil slip earthwork remediation.	Contractor continues to progress on-site construction and installation as planned.	All on-site work completed in the coming months.
	City Council authorized the execution of legal documentation for the 19.5 acres conservation covenant on September 28th, 2021.	Finalization of the conservation covenant cannot be completed until the restoration of site to natural condition and the soil slip remediation is complete since a final aerial photograph is required for final documentation.	Complete the remediation of the new soil slip and then restore the remaining area to natural condition.	The 19.5 acres conservation covenant will be officially documented, and the final package will be sent to the EPA and US Fish and Wildlife Service for approval.
	Completed physical investigation of the second soil slip. City has directed FBV to proceed with remediation efforts.	FBV to complete remediation efforts for second soil slip.	FBV will move forward with soil slip remediation activities by complete excavation of disturbed soils, installation of sub drains, installation of engineered fill of soil slip area, and installation of v-ditch drains surrounding soil slip area.	Second soil slip will be remediated.
Conveyance Facilities	Phase 2 Monitoring and Mitigation Report sent to EPA to be transmitted to SHPO.	Phase 2B (between stations 27+00 and 37+00) is still under a ground disturbing moratorium set by SHPO. Program Management Team must ensure that Anvil has clearance within Phase 2B by SHPO in order to prevent any delay claims by Anvil should they need to work in the area.	Program Management Team, Far Western, and City staff continue to coordinate with EPA to provide adequate information required in the Phase 2 monitoring and mitigation plan as directed in the Programmatic Agreement between SHPO and the EPA in regards to the Morro Bay WRF project.	SHPO will accept the Phase 2B Monitoring and Mitigation plan. If comments are received, they will be addressed by the Program Management Team, City and Far Western until completion. If comments are not received by SHPO, the Program Management Team will notify Anvil that clearance by SHPO within Phase 2B has been received.
	Microtunnel boring machine (MTBM) reached receiving pit on September 24th, 2021.	The MTBM encountered several situations that caused the machine to essentially stop until soil conditions were further investigated or cleared by the contractor. Additionally, it was found that pieces of the MTBM cutting head were damaged.	Anvil installed emergency shafts in order to investigate soil conditions and/or make repairs of the MTBM cutting head in order to progress steel casing installation by MTBM.	The steel casing beneath the roundabout was successfully installed and the carrier pipes within the casing are expected to be installed within the casing in Q2.
	A fourth Native American Tribe was added to the construction monitoring efforts for the Conveyance Facilities Project.	Adding the Xolon Salinan tribe will increase project management and coordination costs for Cogstone Resource Management.	Program Management Team in coordination with Far Western and Cogstone resource management coordinated with Xolon Salinan Native American Tribe to be included in the Native American monitoring efforts for the remainder of the Conveyance Facilities project including the Phase 2B archaeological mitigation efforts in the near future.	Cogstone and Far Western will rotate the four Native American Tribes as monitors for the Conveyance Facilities project. Cogstone will be requesting an amendment in Q2 to its contract with the City for the additional effort required.
	Tree survey was completed by Anvil and the Program Management Team to support tree removal and protection survey by Heritage Tree.	Heritage Tree was contracted by the City to provide consultation services on tree removal and mitigation measures for trees along the bike path section of the alignment. Several trees were identified by Heritage tree to be removed and/or protected in place by Heritage tree. This is outside of Anvil's current scope of work and exceeds the quantity of trees identified in the Construction Plan of the Coastal Development Permit. The additional measures to remove and/or protect in place these trees would require a change order for Anvil and a revision to the CDP special condition.	Program Management Team has provided the tree survey which identifies trees outside of Anvil's scope and the CDP special condition that will either need to be removed, protected in place or trimmed. This information is to be used in conjunction with Heritage Tree findings to ultimately make a recommendation to the City.	Additional trees required to be removed will be identified and a request to revise the CDP special conditions report for the Conveyance Facilities will be sent to the Coastal Commission. Additionally, the trees to be protected in place and/or removed will be included in a change order to Anvil for the work outside of their original scope. The City is currently considering a program to replace trees removed due to Conveyance Facilities construction.

Table 1 Project Accomplishments and Challenges (continued)

Project Component	Key Accomplishments	Critical Challenges	Actions to Overcome Challenges	Likely Outcomes
Conveyance Facilities (continued)	Dewatering efforts at Pump Station A were completed.	Anvil initially had encountered challenging dewatering conditions for the excavation at Pump Station A which significantly slowed construction progress at Pump Station A.	The Program Management Team is currently coordinating with Anvil to implement a series of schedule recovery workshops for pump station A and the remainder of the Conveyance Facilities project.	Anvil has successfully dewatered the PS-A excavation and began subgrade preparation for PS-A facilities. Additionally, schedule recovery strategies are to be implemented by the Anvil to ensure PS-A will be completed on time.
Recycled Water Facilities	Development continued for the pilot injection well bid package and bid opening is expected in late October.	A delineation will be required for the 100-foot-wide permanent easement in field, existing utilities, proposed pilot injection well site, and monitoring well site.	Efforts included surveying the easement, utilities, and well locations from bike path to Willow Camp Creek prior to bid advertisement to include in bid package.	Schedule may require extension due to contractor award/evaluation and notice to proceed timeline.
	Contract was executed with well driller to install pilot monitoring well for late October.	Monitoring well needs to be staked prior to installation.	Program Management Team has scheduled surveyor to stake monitoring well.	Monitoring well to be staked for construction in late October.

1.2 Quarterly Budget Revision

The original $126 million baseline budget was developed in June 2018 (Q4 Fiscal Year 2017 / 2018). At the beginning of each fiscal year, the budget is updated and used as the measure of performance for the Project during that upcoming fiscal year. The budget is then reviewed and reconciled on a quarterly basis to facilitate comparison to both the current fiscal year and baseline budgets.

A summary of the baseline, reconciled quarterly, and fiscal year budgets is provided in Table 2.

Table 3 shows the latest estimate at completion (EAC) for each project component. The EAC considers the City's fiscal year budget and adjusts for City contract amendments, new City consultant contracts, City costs such as labor and administrative expenses, as-needed reallocation from contingency, and other information gathered by the Program Management Team as the project progresses.

Table 2 Budget Revision Summary

Project Component	Baseline (Q4 FY 17/18)	Quarterly Reconciliation (Q3 FY 18/19)	Fiscal Year 19/20 (Q4 FY 18/19)	Quarterly Reconciliation (Q1 FY 19/20)	Quarterly Reconciliation (Q2 FY 19/20)	Quarterly Reconciliation (Q3 FY 19/20)	Fiscal Year 20/21 (Q4 FY 19/20)[4]	Quarterly Reconciliation (Q1 FY 20/21)	Quarterly Reconciliation (Q2 FY 20/21)[1]	Quarterly Reconciliation (Q3 FY 20/21)[1][2]	Fiscal Year 21/22 (Q4 FY 20/21)[1][3]	Quarterly Reconciliation (Q1 FY 21/22)[1][6]
Water Reclamation Facility	$62,414,000	$74,059,000	$72,891,000	$72,598,000	$72,231,000	$71,856,000	$77,828,000	$77,082,000	$77,281,977	$77,087,023	$77,687,023	$74,697,995
Conveyance Facilities	$21,087,000	$27,108,000	$28,864,000	$28,524,000	$29,224,000	$29,989,000	$29,840,000	$37,355,000	$37,482,000	$37,482,000	$37,982,000	$34,214,311
Recycled Water Facilities	$8,593,000	$5,366,000	$5,250,000	$5,212,000	$5,353,000	$5,526,000	$5,526,000	$5,740,000	$5,968,000	$5,968,000	$6,668,000	$6,668,000
General Project[5]	$24,403,000	$11,614,000	$11,801,000	$11,625,000	$11,701,000	$12,964,000	$13,260,000	$14,255,000	$14,445,000	$14,445,000	$15,445,000	$25,589,712
Construction Contingency	$9,444,000	$6,450,000	$7,132,000	$7,131,000	$7,364,000	$10,264,000	$4,207,000	$4,250,000	$3,414,023	$3,608,977	$6,892,854	$3,504,859
Total	**$125,941,000**	**124,597,000**	**$125,938,000**	**$125,090,000**	**$125,873,000**	**$130,599,000**	**$130,661,000**	**$138,682,000**	**$138,591,000**	**$138,591,000**	**$144,674,877**	**$144,674,877**

Notes:

(1) The Project budget is estimated on a quarterly basis (i.e. September 30th, December 31st, and March 31st) and compared to the adopted fiscal year budget by June 30th. Costs shown through Q2 FY 20/21 include the design-build agreement with Filanc/Black & Veatch (Overland), Carollo's Program Management Contract (including subcontracting consultants), and other City consultants. Beginning Q3 FY20/21 this table reflects updated contract amendments and new adopted budgets.

(2) Breakdown of the Q3 FY 20/21 contingency of $3,608,977 is as follows: WRF = $808,977; Conveyance Facilities = $2,500,000; and Recycled Water Facilities = $300,000.

(3) As presented to City Council on May 25, 2021 for the WRF Q3 2021 Update Report. Breakdown of the Q1 FY 21/22 contingency of $3,504,859 is as follows: WRF = $304,859; Conveyance Facilities = $2,700,000; and Recycled Water Facilities = $500,000.

(4) The FY 20/21 budget adopted by City Council was $130,596,361. The numbers shown in this column, and all columns prior to Q3 FY 20/21, are preserved from prior year quarterly reports.

(5) Starting in Q4 FY 20/21, General Project includes construction management of the Water Reclamation Facility and the Conveyance Facilities as part of the Program Management costs.

(6) Starting in Q1 FY 21/22, General Project includes all associated City Costs (e.g. staff salaries and benefits, legal services, land acquisition, supplies, equipment, etc.), and City Contracts for active consultants including construction permitting compliance activities and Program Management costs.

Table 3 Estimates at Completion

Project Component	Original Estimate	Initial Contract Value	Current Contract Value	Expenditures to Date	Estimate at Completion[1]
WRF	**$62,414,000**	**$67,234,512**	**$76,697,995**	**$39,868,487**	**$74,697,995**
Design/Build (FBV/Overland)	--	$67,234,512	$76,697,995	$39,868,487	$74,697,995
Conveyance Facilities	**$21,087,000**	**$32,854,240**	**$33,707,986**	**$13,244,368**	**$34,214,311**
Design (Water Works Engineers)	--	$1,360,565	$2,214,311	$2,058,935	$2,214,311
Construction (Anvil Builders)	--	$31,493,675	$31,493,675	$11,185,433	$32,000,000
Recycled Water Facilities[5]	**$8,593,000**	**$351,000**	**$933,650**	**$549,967**	**$6,668,000**
Design (GSI)	--	$351,000	$933,650	$549,967	$933,650
Construction	--	--	--	--	$5,734,350
General Project	**$24,403,000**	**$293,000**	**$13,233,472**	**$16,354,157**	**$25,589,712**
City Costs[2]	--	--	--	$9,376,602	$11,889,712
Program Management (Carollo and Subconsultants)[3]	--	$293,000	$11,808,401	$5,738,681	$12,200,000
City Contracts[4]	--		$1,425,071	$1,238,873	$1,500,000
Contingency	**$9,444,000**	**--**	**--**	**--**	**$3,504,859**
Water Reclamation Facility	--	--	--	--	$304,859
Conveyance Facilities	--	--	--	--	$2,700,000
Recycled Water Facilities	--	--	--	--	$500,000
Total	**$125,941,000**		**$124,573,103**	**$70,016,979**	**$144,674,877**

Notes:
(1) Beginning with the Q4 Fiscal Year 2020/2021 report, the EAC reflects the June 2021 adopted City budget for Fiscal Year 2021/2022 and updated contract amendments.
(2) City costs include staff salaries and benefits, legal services, land acquisition, supplies, equipment, etc.
(3) Program management costs include permitting, public outreach, funding support, and construction oversight/management.
(4) Costs shown for General Project City contracts include inactive consultants (such as MKN, Black & Veatch, ESA, and Kestrel) and current consultants including Bartle Wells Associates, Cogstone, Far Western, Guida, and Kevin Merk & Associates.
(5) Recycled Water Facilities Expenditures to Date costs include injection well planning and permitting (included with General Project costs) as well as hydrogeologic modeling by GSI.

Section 2

KEY PERFORMANCE MEASURES

2.1 Performance Measures

A set of five (5) Key Performance Indicators (KPIs) were established to readily measure the progress of the Project. These KPIs represent various success factors associated with the WRF project management and delivery that were established by the Program Manager and City staff and are summarized as Table 4.

Table 4 WRF Project Performance Measures (through September 2021)

Performance Measure	Data	Baseline (Q4FY 19/20)	Current (Q1 FY 21/22)	Delta	Status	G	Y	R
1: Total Project Costs	Total Project Projected Cost at Completion versus the Baseline Budget	$130.7 M	$144.7M	$14.0M	R	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
1.1: WRF Costs	On Site WRF Projected Cost at Completion versus the Baseline Budget	$77.8 M	$74.7 M	$(3.1)M	G	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
1.2: Conveyance Facilities Costs	Conveyance Facilities Projected Cost at Completion versus the Baseline Budget	$29.8 M	$34.2 M	$4.4 M	R	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
1.3: Recycled Water Facilities Costs	Off Site Injection Facilities Projected Cost at Completion versus the Baseline Budget	$5.5 M	$6.7M	$1.2 M	R	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
1.4: General Project Costs	General Project Projected Cost at Completion versus the Baseline Budget	$13.3 M	$25.6 M	$12.3M	R	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
2: Program Manager Earned Value	Ratio of Program Manager Earned Value to Actual Invoiced Cost-to-Date	1.00	1	0	G	>= 1.00	0.99 to 0.90	< 0.90
3: Schedule Performance Index	Ratio of Planned Percent Complete to Actual Percent Complete	1.00	1.02	0.02	G	>=1.00	0.99 to 0.80	<0.80
4: TSO Compliance Date Countdown	Days Remaining to time schedule order (TSO) Compliance Date of February 28, 2023	789	516	273	G	<= 365 days	364 days and 180 days	> 179 days

Section 3

PROJECT COSTS

3.1 Project Budget

The overall budget status for the Project is summarized in Table 5.

Table 5 WRF Project Overall Budget Status (through September 2021)

Summary of Total WRF Project Cost	
Original Baseline WRF Project Budget(1)	$125,941,000
Adopted FY 20/21 WRF Project Budget(2)	$130,596,361
Adopted FY 21/22 WRF Project Budget(2)	$144,674,877
Adopted Budget Percent Change (FY 20/21 to FY 21/22)	10.8%
Total Expenditures for FY 21/22 Q1 (7/01/21 to 9/30/21; Cash Basis)	$14,607,553
Total Expenditures to Date (thru 9/30/21 invoices; Cash Basis)	$70,016,979
Percent of Adopted FY 21/22 WRF Project Budget Expended to Date	48.4%

Notes:
(1) Developed in June 2018 as the basis of the approved rate surcharge that took effect in July 2019.
(2) The budget for the Project is reviewed on an annual basis near the end of each fiscal year (May) and is adopted by City Council in June prior to each fiscal year.

3.2 Quarterly Expenditures by Budget Code

The current quarterly expenditures as reported by the City's corresponding budget performance report and according to adopted City budget code designations are summarized in Table 6, and expressed by Project component in Table 7.

Table 6 Quarterly Expenditures by Budget Code

City Budget Code(1)	Fund Name	Total Q1 FY21/22 Expenditures(3)	Vendor Name	Project Component
4120	Overtime Pay			
4310	Part-Time Pay			
4910	Employer Paid Benefits		Summarized in Total Personnel Services below	
4911	Pension Normal Cost			
4999	Labor Costs Applied			
	Total Personnel Services	**$25,252.67**	**City of Morro Bay**	**General Project**
5114	Laboratory Testing Supplies			
5115	Water Distribution System Supplies			
5116	Wastewater Collection System Supplies		Summarized in Total Supplies below	
5199	Miscellaneous Operating Supplies			
	Total Supplies	**$80,446.43**	**Various**	**General Project**
6101	Legal Services – General	$25,904.36	Aleshire & Wynder	General Project
6103	Financial Audits	-	-	General Project
6107	Advertising	-	-	-
5307	Blueprint/Copy Charges	-	-	-
6220	Postage (Included in 6710)	$232.77	-	-
6301	Electricity	$30,646.46	PG&E	Water Reclamation Facility and Conveyance Facilities
6303	Water	$504.00	City of Morro Bay	Water Reclamation Facility and Conveyance Facilities
6510	Meetings & Conferences	-	-	-
6513	Meals & Lodging	-	-	-
6514	Travel Expense	$39.00	Mechanics Bank	General Project
6640	Maintenance Contracts	-	-	-
6710	Notices & Publications	-	-	-
	Total Services	**$57,326.59**		
6104	Engineering Services	$60,810.39	GSI Water Solutions	Recycled Water Facilities
6105	Consultation Services	$168,565.16	Bartle Wells, Ferguson Group, Cogstone, KMA, Heritage Tree	General Project
6152	Outside Lab Testing	$13,232.00	BC Laboratories	General Project
6161	Licenses & Permits	$2,962.50	Mechanics Bank, SLO APCD	General Project
6195	Rate Study	-	-	-
6196	Program Management & DB Procurement	$760,646.84	Carollo Engineers and Subconsultants(2)	General Project
6197	Grant Support	-	-	-
6198	Government Relations	$85.18	Ferguson Group	General Project
6640	Maintenance Contracts	-	-	-
7101	Land Acquisition	-	-	-
	Total Project Soft Costs	**$1,006,302.07**		
6106	Contractual Services	$5,502,051.33	Anvil Builders	Conveyance Facilities
7103	Design/Build-On-Site Improvement Design Phase	-	-	-
7104	Design-Lift Station/Force Main	$27,099.70	Water Works Engineers	Conveyance Facilities
7105	Planning & Permitting	$50,538.24	Far Western	Conveyance Facilities
7106	Design-Injection Wells & Recycled Water Pipeline	-	-	-
7107	Design/Build-On-Site Improvement Build Phase	$7,858,536.38	FBV Overland	Water Reclamation Facility
7108	Injection Well Construction	-	-	-
7109	Lift Station/FM Construction Phase	-	-	-
7110	Pilot Well Construction	-	-	-
	Total Construction Costs	**$13,438,225.65**		
	Total Quarterly Expenditures	**$14,607,553.41**		

Notes:

(1) Budget codes correspond to the City's adopted budget for current fiscal year and paid invoices correspond with the City's budget performance report for those codes. Opportunities to reallocate invoice codes or consolidate codes will be considered in future quarters.

(2) Carollo Engineers' active subconsultants include the following: CM Solutions/Quest (Conveyance Facilities schedule review), Earth Systems (Conveyance Facilities materials testing and special inspection), Filippin Engineering (Conveyance Facilities construction inspection), Guida (surveying), JFR Consulting (CEQA support), Katz & Associates (public outreach), KMA (biological resources services), Underwater Resources, Inc. (outfall analysis), Mimiaga Engineering Group (WRF Construction Management), Penny Carlo Engineering (industrial users permitting) and Yeh and Associates (geotechnical engineer).

(3) Total quarterly expenditures shown only include invoices paid by the City in this quarter and are derived from a cash basis of accounting using the Accounts Payable reports provided by the City approximately one week after the end of the quarter. Total quarterly expenditures shown may differ from City fiscal year-end budget performance reports that are based on a modified accrual basis of accounting, which reallocates current quarter expenditures for services rendered in prior fiscal year back to June 30, 2021.

Table 7 Quarterly Expenditures by Project Component

Project Component	Cash Basis Expenditures (Q1 FY 21/22)
Water Reclamation Facility	$7,858,536
Conveyance Facilities	$5,579,689
Recycled Water Facilities	$60,810
General Project	$1,108,517
Total	**$14,607,553**

3.3 Project Cash Flow

Figure 1 presents the projected and actual expenditures for the Project through September 2021 compared to the Fiscal Year 2021/2022 budget developed at the end of Q4 Fiscal Year 2020/2021. The line graph shows the cumulative values for the Project and the bars show the discrete monthly values. Actual and budgeted expenditures from 2013 to the end of Fiscal Year 2018/2019 have been combined to improve readability. The cumulative actual and cumulative forecasted expenditures show anticipated project costs over the project duration. The milestone markers correspond to the final completion deadline of the WRF and Conveyance components of the project by February 2023, which coincides with the City being in compliance with the Time Schedule Order (TSO) issued by the Regional Water Quality Control Board (RWQCB) in June 2018.

A breakdown of the current Q1 Fiscal Year 2021/2022 budget projection by fiscal year compared with total project expenditures to date is included in Table 8.

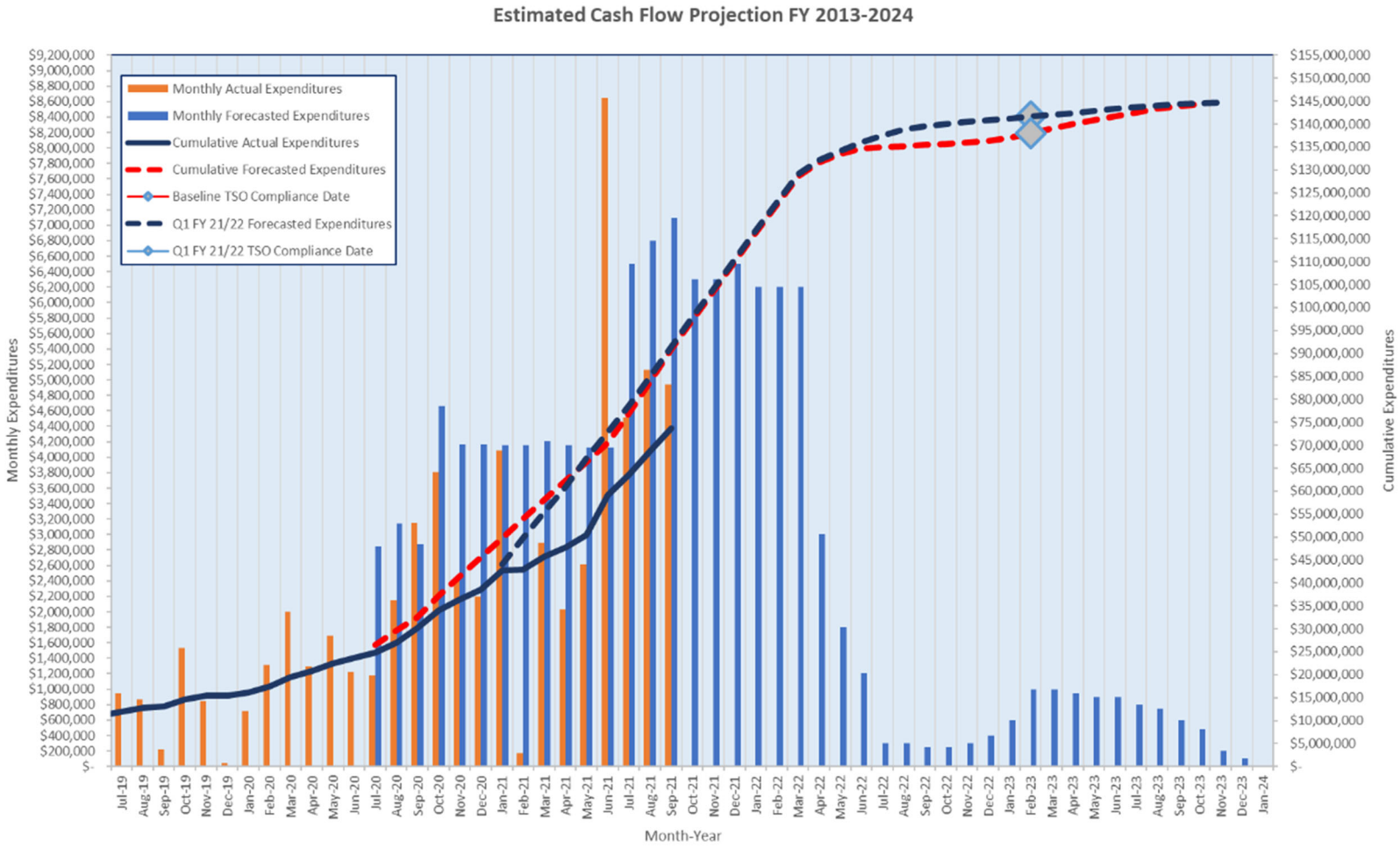

Figure 1 Project Cash Flow Projections and Actual Expenditures

Table 8 WRF Project Expenditures and City Fiscal Year Budgets

Project Component	Total Project Expenditures to Date as of FY 21/22 Q1[1]	FY 21/22 Budget [2] [8]	FY 22/23 Budget [2]	FY 23/24 Budget [2]	Total Project Budget as of FY 21/22[2]
WRF	$39,868,487	$33,609,031	$700,000	$-	$73,677,796[3]
Conveyance Facilities	$13,244,368	$22,289,569	$-	$-	$38,802,964[4]
Recycled Water Facilities	$549,967	$2,025,000	$3,000,000	$3,000,000	$8,280,570[5]
General Project	$16,354,157	$7,748,516	$1,181,402	$283,750	$23,913,546[6]
Subtotal	**$70,016,979**	**$65,672,116**	**$4,881,402**	**$3,283,750**	**$144,674,877**
Contingency	$-	$-	Note[7]	Note[7]	Note[7]
Total	**$70,016,979**	**$65,672,116**	**$4,881,902**	**$3,283,750**	**$144,674,877**

Notes:
(1) This table reflects activity through the end of the quarter using the quarterly expenditures by project component allocations shown in Table 6.
(2) This quarterly report Total Project Budget projection reflects the new FY 21/22 WRF Project budget as adopted by City Council in June 2021 as well as future fiscal year City budget projections.
(3) Breakdown of the Water Reclamation Facility budget by codes from the adopted FY21/22 budget: 7103 (Design/Build WRF Onsite Imprv) = $59,686,921 and 7107 (Design/Build – On-site Imprv Build Phase) = $13,990,875. Budget reallocation from another code will be needed during FY 21/22.
(4) Breakdown of the Conveyance Facilities budget by codes from the adopted FY21/22 budget codes: 7104 (Design-Lift Station/Force Main) = $2,396,412 and 7109 (Liftstation Pipeline Construction) = $36,406,552.
(5) Breakdown of the Recycled Water Facilities budget by codes from adopted FY21/22 budget: 7106 (Design-Inj Wells & Recycled Water Pipeline) = $1,695,570; 7108 (Injection Well Construction) = $6,285,000 and 7110 (Pilot Well Construction) = $300,000.
(6) Breakdown of the General Project budget includes the remaining codes from the adopted FY21/22 budget not specified in (4), (5), or (6) above. Starting in Q4 FY 20/21, General Project includes construction management of the Water Reclamation Facility and the Conveyance Facilities as part of code 6196 (Prog Mgmt & DB Procure).
(7) Beginning Q4 FY 20/21 the contingency budget is not broken out within the latest adopted City budget but is accounted for in each project component.
(8) FY 21/22 Budget amounts exclude carryforward from FY 2021.

3.4 Project Cost Summary

Table 9 summarizes the cost-to-date and contracted amounts for each of the components of the Project. This table also provides the current cost estimate for each project. Detailed information on the individual components of the Project is provided in Section 7 of this Report.

Table 9 WRF Project Cost Summary (through September 2021)

Project Component	FY 21/22 Q1 Actual Expenditures to Date	Contracted Amount to Date	Contracted Amount Expended to Date (%)	Anticipated Total Project Cost[2]	Anticipated Total Project Cost Expended to Date (%)
WRF	$44,942,556	$76,697,995	58.6	$75,002,854	59.9
Conveyance Facilities	$13,424,623	$33,707,986	39.8	$36,914,311	36.4
Recycled Water Facilities	$653,403	$933,650	70.0	$7,168,000	9.1
General Project	$10,996,396[1]	$12,618,208[1]	87.1[3]	$25,589,712	43.0
Total	**$70,016,979**	**$123,957,839**	**56.5**	**$144,674,877**	**48.4**

Notes:
(1) General Project actual expenditures to date include prior contracts from previous program consultants that are no longer active. General Project contracted amount to date shows active contracts.
(2) Estimate at Completion with contingencies included in each project component.
(3) General Project contracted amount expended to date as a percent assumes that actual expenditures to date of active contracts are accrued after the baseline Q2 FY 20/21 amount of $8,115,000.

3.5 Detailed Project Costs

Tables 10 through 13 present the detailed costs to date for active contracts for each element of the Project.

Table 10 General Project Contracts Cost Summary (through September 2021)

Consultant / Contractor	Actual Expenditures to Date[1]	Total Contracted Cost	Contract Expended to Date (%)
Bartle Wells Associates	$45,100	$64,000	70.5
Carollo Engineers, Inc.[2]	$5,738,681	$11,808,401	48.6
Cogstone	$247,417	$264,918	93.4
Far Western	$336,100	$397,079	84.6
JSP Automation	$43,450	$63,500	68.4
Kevin Merk & Associates	$14,155	$71,310	19.8
Total	**$6,424,903**	**$12,669,208**	**50.7**

Notes:
(1) Actual expenditures to date as indicated on City budget performance report and total contracted cost only includes contracts that are currently active.
(2) Includes all Carollo subcontractors under Program Management Contract.

Table 11 WRF Contract Cost Summary (through September 2021)

Consultant / Contractor	Actual Expenditures to Date	Total Contracted Cost[1]	Contract Expended to Date (%)
Overland Contracting	$39,868,487	$76,697,995	52.0
Total	**$39,868,487**	**$76,697,995**	**52.0**

Notes:
(1) Total Contracted Cost includes final value for Amendment No. 1 through No. 6 of $1,636,060, $63,937, $5,992,218, $835,097, $(195,946), and $1,132,117 respectively and the original contract value of $67,234,512.

Table 12 Conveyance Facilities Contracts Cost Summary (through September 2021)

Consultant / Contractor	Actual Expenditures to Date	Total Contracted Cost	Contract Expended to Date (%)
Water Works Engineers	$2,058,935	$2,214,311	93.0
Anvil Builders	$11,185,433	$31,493,675	35.5
Total	**$13,244,368**	**$33,707,986**	**39.3**

Table 13 Recycled Water Facilities Contracts Cost Summary (through September 2021)

Consultant / Contractor	Actual Expenditures to Date	Total Contracted Cost	Contract Expended to Date (%)
GSI	$549,967	$933,650	58.9
Total	**$549,967**	**$933,650**	**58.9**

3.6 Change Orders

This section presents change orders executed for the WRF and Conveyance Facilities construction activities.

3.6.1 WRF Project Change Orders

The following Amendments have been approved by City Council and have been incorporated into the WRF design-build team's contract, resulting in revisions of the Guaranteed Maximum Price (GMP). Tables 14 through 19 lists the change orders associated with each Amendment.

- Amendment No. 1 – May 2019 (GMP increased by $1,636,060)
- Amendment No. 2 – March 2020 (GMP increased by $63,937)
- Amendment No. 3 – May 2020 (GMP increased by $5,992,218)
- Amendment No. 4 – November 2020 (GMP increased by $835,097)
- Amendment No. 5 – March 2021 (GMP reduced by $195,946)
- Amendment No. 6 – September 2021 (GMP increased by $1,132,117)

Table 14 Summary of Approved Change Orders (Amendment No. 1)

Contract	Change Order No.	Description	Value
WRF	01	New sodium hypochlorite feed for plant water	$78,576
WRF	02	Change architecture of operations building	$(21,623)
WRF	03	Headworks odor control	$18,422
WRF	04	Remove canopy and monorail at membrane bioreactor (MBR)	$(185,434)
WRF	05	Consolidate chemical facilities	$218,978
WRF	06	Modify chemical piping	$(15,856)
WRF	07	Remove solids dumpster lid	$14,543
WRF	08	Add safe equalization tank	$504,116
WRF	09	Instrumentation and control changes	$75,266
WRF	10	Revise maintenance building layout and size	$516,583
WRF	11	Influent piping and metering	$411,766
WRF	12	Install outdoor-rated positive displacement blowers at BNR facility	$(58,210)
WRF	13	Remove bypass of coarse screens	$(37,137)
WRF	14	Safe diversion box additions	$58,304
WRF	15	Size dewatering as a building in the future	$30,983
WRF	16	Stairs for the coarse screens and grit basins (total of 4)	$52,870
WRF	17	Indirect potable reuse (IPR) product water tank bypass	$(26,087)
	Total		**$1,636,060**

Table 15 Summary of Approved Change Orders (Amendment No. 2)

Contract	Change Order No.	Description	Value
WRF	65	Davis-Bacon wage increases	$63,937
	Total		**$63,937**

Table 16 Summary of Approved Change Orders (Amendment No. 3)

Contract	Change Order No.	Description	Value
WRF	16	Modify outfall pump station	$367,632
WRF	19	Reduce size of the product water tank	$(129,681)
WRF	32	Sulfuric acid system	$315,652
WRF	37	PLC/SCADA software uniformity (MBR, RO, and headworks only)	$201,577
WRF	39	NTP delay	$1,220,532
WRF	40	Headworks valve automation	$249,946
WRF	41	Perimeter barbed wire fence	$79,935
WRF	42	UV/AOP system modifications	$(33,481)
WRF	44	Tank access improvements	$210,327
WRF	45	Maintenance ceiling revisions and automated roll-up door	$21,009
WRF	46	Curbed washdown areas	$76,250
WRF	47	Changes to furnishings and residential equipment	$85,194
WRF	50	Revisions to water/sewer supply storage sheds	$13,142
WRF	52	Analyzer relocation and enclosures	$76,555
WRF	55	Notice of dispute – PG&E temporary power	$13,163
WRF	56	Impacts of water quality changes	$282,420
WRF	57	Soil lateral earth pressure	$116,329
WRF	58	Permanent exclusion fencing	$855,991
WRF	59	Increased escalation costs	$1,232,677
WRF	61	Potential change order (PCO) design impacts	$158,172
WRF	62	Conduit alternative design	$(268,400)
WRF	64	Reduce performance period	$(35,450)
WRF	66	Caltrans intersection improvements	$(21,893)
WRF	67	BNR system modifications	$742,405
WRF	68	Safe equalization settle tank drain piping	$62,215
WRF	69	Third party inspection and testing	$100,000
	Total		**$5,992,218**

Table 17 Summary of Approved Change Orders (Amendment No. 4)

Contract	Change Order No.	Description	Value
WRF	30	Match sludge blowers to MBR scour blowers	$17,426
WRF	71	California department of fish and wildlife (CDFW) site access restrictions	$254,443
WRF	72	Owner trailer utility hook ups	$19,593
WRF	73	Man gates in perimeter fence	$27,031
WRF	74	Parking canopy electrical receptacles	$42,346
WRF	75	Security window at admin building	$11,079
WRF	76	Additional sodium bisulfite pump	$58,243
WRF	78	Changed condition - soil slip	$280,013
WRF	79	Modify water and collection system supply shed	$10,847
WRF	82	SCADA uniformity	$108,887
WRF	86	Water shut off valve in Theresa Road	$5,189
	Total		**$835,097**

Table 18 Summary of Approved Change Orders (Amendment No. 5)

Contract	Change Order No.	Description	Value
WRF	84	Alternate Red Legged Frog barrier (Ref. PCO 58)	$(468,768)
WRF	87	Modify alternate conduit design scope (Ref. PCO 62).	$272,822
	Total		**$(195,946)**

Table 19 Summary of Approved Change Orders (Amendment No. 6)

Contract	Change Order No.	Description	Value
WRF	77	Covid-19 impacts	$125,000
WRF	88	Dead-front control panels	$37,774
WRF	90	24 volts direct current (VDC) digital output circuits	$25,689
WRF	91	Equipment color (Tnemec 32 light gray)	$12,500
WRF	92	West cut-slope soil slip reactivation (2021)	$825,300
WRF	93	NEMA 4x electrical enclosures	$40,000
WRF	94	Security system revisions	$25,659
WRF	95	January 2021 storm event (1-26 thru 1-29)	$40,195
	Total		**$1,132,117**

3.7 Reimbursement from Funding Agencies

In 2017, the City was awarded a $10.3 million planning loan from the Clean Water State Revolving Fund (CWSRF) program. As of Q1 FY 21/22, the City has submitted three disbursement requests for the planning loan resulting in a total disbursement to the City of $7.95 million, with an additional $1.15 million of expenses that is eligible but withheld by the State for final disbursement release. Therefore approximately $1.20 million remains. City staff and the

Program Management Team are currently preparing a fourth disbursement request to the State that is anticipated to use most of the remaining amount and is expected to be sent in November 2021.

In February 2020, the City executed a $61.7 million loan with the Environmental Protection Agency's (EPA's) Water Infrastructure and Innovation Act (WIFIA) program. To date, a total of 15 WIFIA reimbursement requests have been made, totaling $35.73 million in reimbursements.

In June 2021, the City executed a $66.6 million construction loan with the CWSRF program. To date, the City has submitted one reimbursement request for the construction loan in the amount of $11.19 million and is awaiting approval by CWSRF.

A summary of these requests is presented in Table 20.

Table 20 Summary of Reimbursement Requests

Agency	Description	No.	Date Submitted	Requested Amount	Approved Amount	Received?
SWRCB	CWSRF Planning Loan	01	Dec 2018	$289,595	$217,441	Yes
SWRCB	CWSRF Planning Loan	02	Nov 2019	$6,431,295	$5,312,748	Yes
SWRCB	CWSRF Planning Loan	03	Oct 2020(1)	$4,783,797	$2,415,669	Yes
SWRCB	CWSRF Construction Loan	01	Sep 2021	$11,185,434	TBD	No
EPA	WIFIA Loan	01	May 2020	$1,100,944	$1,100,944	Yes
EPA	WIFIA Loan	02	Jun 2020	$61,014	$50,486	Yes
EPA	WIFIA Loan	03	Jul 2020	$3,489,409	$3,489,409	Yes
EPA	WIFIA Loan	04	Jul 2020	$2,461,121	$2,461,121	Yes
EPA	WIFIA Loan	05	Aug 2020	$142,863	$142,863	Yes
EPA	WIFIA Loan	06	Oct 2020	$1,635,106	$1,635,106	Yes
EPA	WIFIA Loan	07	Dec 2020	$3,008,572	$3,008,572	Yes
EPA	WIFIA Loan	08	Dec 2020	$3,671,499	$3,671,499	Yes
EPA	WIFIA Loan	09	Jan 2021	$5,553,851	$5,553,851	Yes
EPA	WIFIA Loan	10	Mar 2021	$2,440,399	$2,440,399	Yes
EPA	WIFIA Loan	11	Apr 2021	$1,621,783	$1,621,783	Yes
EPA	WIFIA Loan	12	May 2021	$2,988,342	$2,988,342	Yes
EPA	WIFIA Loan	13	Jun 2021	$3,544,987	$3,544,987	Yes
EPA	WIFIA Loan	14	Jul 2021	$2,692,977	$2,692,977	Yes
EPA	WIFIA Loan	15	Sep 2021	$1,328,552	$1,328,552	Yes
Total				**$58,431,540**	**$43,676,749**	

Notes:
(1) Reimbursement No. 3 for the CWSRF Planning Loan was originally submitted in December 2019 and was resubmitted in October 2020.

Section 4

PROJECT SCHEDULE

A summary of the Project schedule is presented in Figure 2. Updates to the individual schedules for each Project component are developed by or provided to the Program Management Team on a regular basis. The light blue bars for each major task represent the planned progress based on the baseline schedule. The dark blue bars represent the current actual progress through September 2021. For each major line item, the schedule performance index (SPI) has been provided as well as an overall SPI for the entire Project. The SPI is a ratio of the planned percent complete versus the current actual percent complete. A SPI of greater than 1.00 indicates that the Project is on or ahead of the most current schedule and a SPI of less than 1.00 indicates the Project is running behind the most current planned schedule.

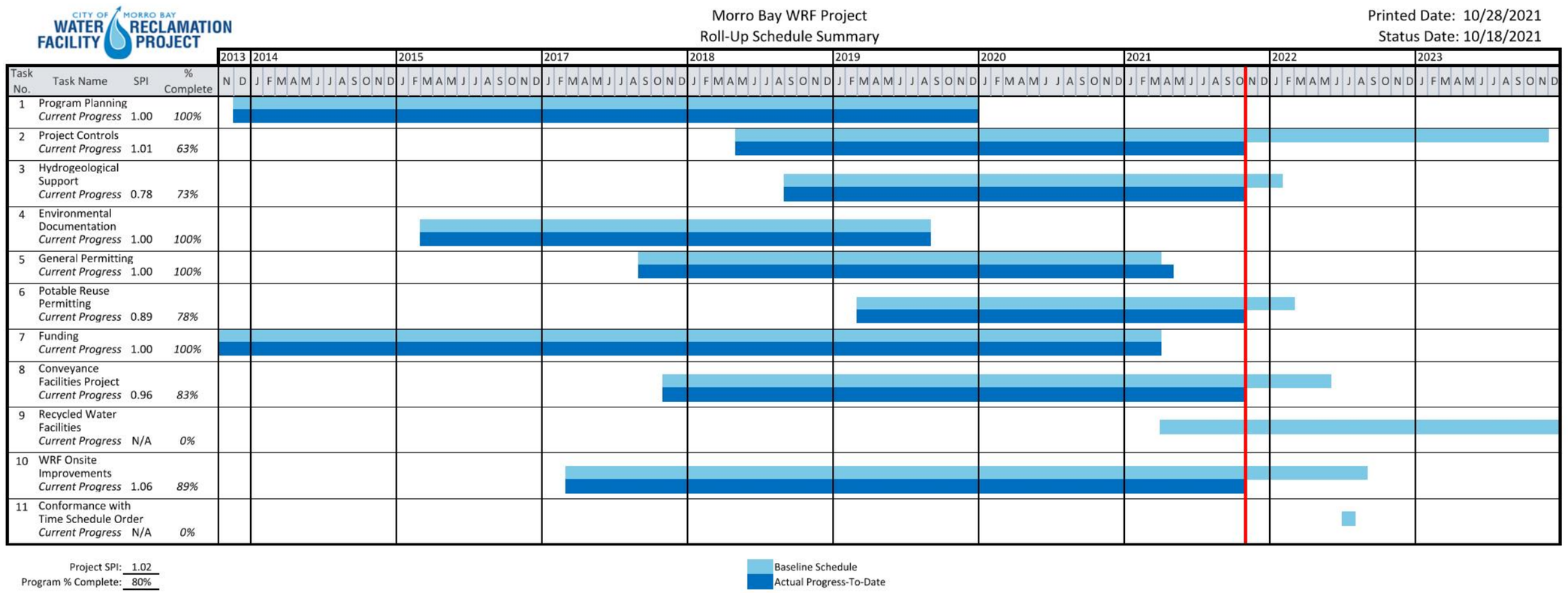

Figure 2 Project Summary Schedule

4.1 Project Milestones

In June 2018, the City received a TSO from the RWQCB. The TSO requires the City to comply with a time schedule that will, within five years of adoption, allow the City to achieve full compliance with biochemical oxygen demand (BOD) and total suspended solids (TSS) final effluent limitations established in Order No. R3-2017-0050. In addition to the final compliance date, a number of intermediate milestones are provided in Table 3 (Compliance Schedule) of the TSO. Presented in Table 21 are the milestones in the TSO.

Table 21 Time Schedule Order Milestone Summary

Required Actions	Compliance Due Date	Planned Compliance Date	Actual Compliance Date
Release of Public Draft EIR	March 30, 2018	-	March 30, 2018
Release of Updated Rate Study	June 30, 2018	-	July 05, 2018
Proposition 218 Hearing	August 30, 2018	-	September 11, 2018
Certification of Final EIR	June 30, 2018	-	August 14, 2018
Award of Contract for WRF	September 30, 2018	-	October 23, 2018
Develop, Implement, and Submit Pollution Prevention Plan (PPP) for BOD and TSS	December 01, 2018	TBD(1)	-
Award of Contract for Construction of Conveyance Facilities	November 30, 2019	-	November 10, 2020
Completion of WRF Improvements with Completion Report	December 30, 2022	July 05, 2022	-
Full TSO compliance with final effluent limitations	February 28, 2023	July 05, 2022	-

Notes:
(1) The City and Program Manager have noted this requirement in the previous quarterly progress reports sent to the RWQCB (as required by the TSO). The City has requested that the Enhanced Source Control Program (EHSP) required as part of the Title 22 Engineer's Report be considered acceptable for this requirement in lieu of the PPP identified in the TSO.

Table 22 lists an expanded milestone schedule. It has also been developed for outstanding Project activities.

Table 22 Expanded Milestone Schedule

Milestone	Baseline Schedule due Date	Planned Completion Date
General Project		
Compliance with the TSO(1)	November 11, 2021	July 05, 2022
Water Reclamation Facility		
Begin Construction	August 08, 2019	March 20, 2020 (Actual)
Deliver 90 Percent Design	October 24, 2019	March 31, 2020 (Actual)
Substantial Completion	November 11, 2021	July 05, 2022
Final Completion	June 09, 2022	August 30, 2022
Conveyance Facilities		
Deliver 90 Percent Design	October 15, 2019	February 10, 2020 (Actual)
Deliver 100 Percent Design	December 17, 2019	June 15, 2020 (Actual)
Bid Advertisement	February 21, 2020	June 16, 2020 (Actual)
Award Construction Contract	May 08, 2020	November 10, 2020 (Actual)
Substantial Completion	September 17, 2021	March 11, 2022
Final Completion	November 19, 2021	April 25, 2022
Recycled Water Facilities		
Select Preferred Injection Area	May 28, 2019	June 17, 2020 (Actual)
Deliver 30 Percent Design	August 04, 2020	December 22, 2021
Deliver 60 Percent Design	November 10, 2020	March 30, 2022
Deliver 90 Percent Design	February 16, 2021	June 15, 2022
Deliver 100 Percent Design	April 27, 2021	September 14, 2022
Award Construction Contract	July 21, 2021	December 07, 2022
Substantial Completion	April 21, 2022	November 11, 2023
Final Completion	June 21, 2022	December 06, 2023

Notes:
(1) The TSO requires compliance with full secondary treatment by February 28, 2023.

Section 5

DESIGN AND PROCUREMENT

5.1 Design Status

No new design contracts for the Project were executed in Q1 Fiscal Year 2021/2022. A summary of the existing design contracts is included in Table 23 below.

Table 23 Design Status (through September 2021)

Project Component	Current Contract Amount	Amount Expended	Percent				Final
			30	60	90	100	
WRF (Design-Build)	$76,697,995	$39,868,487	✓	✓	✓	✓	NA
Conveyance Facilities[(1)]	$2,214,311	$2,058,935	✓	✓	✓	✓	✓
Recycled Water Facilities	$933,650	$549,967	-	-	-	-	-

Notes:
(1) The Water Works Engineers contract amount included in this table is for both Conveyance Facilities design and Engineering Services During Construction. This contract is excluded from the Project Construction Costs table below.

5.2 Procurement

No design or design-build contract procurements were performed in Q1 FY 2021/2022. Table 24 presents a summary of the procurement activity for the Project.

Table 24 Procurement Status (through September 2021)

Project Component	Circulate Request for Proposals	Proposal Opening Date	Council Award Date	Notice to Proceed Date	Consultant
WRF	January 24, 2018	May 8, 2018	October 23, 2018	November 1, 2018	Overland Contracting (Filanc-Black & Veatch)
Conveyance Facilities	January 31, 2017	March 8, 2017	November 14, 2017	November 15, 2017	Water Works Engineers
Recycled Water Facilities	GSI is currently completing permitting and planning activities. Design Engineer to be Selected in FY 2021/22				

Section 6

CONSTRUCTION STATUS

6.1 Construction Summary

During Q1 Fiscal Year 2021/2022, construction continued for the WRF and the Conveyance Facilities. Table 25 presents a summary of project construction progress and costs through September 30, 2021.

Table 25 Project Construction Costs (through September 2021)

Project Name	Amount Expended	Initial Contract Amount	Current Contract Amount	% Change in Contract Amount
WRF	$39,868,487	$67,234,512	$76,697,995	14.1
Conveyance Facilities	$13,244,368	$31,493,675	$33,707,986	7.0
Recycled Water Facilities	$-	$-	$-	0
Construction Total	**$53,112,855**	**$98,728,187**	**$110,405,981**	**11.8**

6.2 Upcoming Traffic Control

6.2.1 Planned Impacted Areas

Construction activities for the Conveyance Facilities continued in several work zones:

- Pump Station A near the Existing WWTP on Atascadero Road.
- Pump Station B at the intersection of Quintana and Main Street.
- Pipeline installation along Quintana Road between Main Street and Kennedy Way.
- Pipeline installation along Quintana Road between La Loma and South Bay Boulevard.
- Trenchless installation preparations at Morro Bay Roundabout.
- Site preparation for trenchless installation at Willow Camp Creek on bike path.

6.2.2 Hours of Planned Lane/Road Closures

The City approves traffic control plans for the 21 designated traffic areas that are outlined in the Project plans. Throughout Q1, the necessary traffic control plans were set in place to provide a safe work area for the Contractor as well as provide a safe detour or means of through traffic for Morro Bay commuters. Anvil continues to traffic control measures on Quintana Road between South Bay Boulevard and La Loma. As Anvil progresses along Quintana Road to the roundabout, the traffic control changes based on the location of the trench and pipeline configuration.

The community is encouraged to obtain additional information on current road closures/conditions from the WRF website (www.morrobaywrf.com) or by calling the Project hotline at 877-MORROBAYH2O.

6.3 Construction Safety

The Project safety goal is zero reportable incidents. Every weekly progress meeting includes a brief safety moment between the Program Management Team and both FBV and Anvil to discuss safety topics encountered in the field. There has been a total of one reported incident through September 30, 2021, however this was not a result of construction. The incident occurred on the Conveyance Facilities component of the Project and involved a driver that was not following the traffic control measures set by Anvil, resulting in injuring an Anvil employee.

Section 7

OTHER PROGRAM ACTIVITIES

7.1 Public Outreach

As part of the construction of the Conveyance Facilities component of the Project, the Program Manager has been engaged in a number of public outreach activities. The following activities occurred during Q1:

- Updated the WRF website with regular construction information on homepage and Construction Information page.
- Coordinated with contractor for distribution of bilingual doorhangers on immediately impacted residences and businesses in several work areas from Main Street to South Bay Boulevard.
- Continued to build stakeholder database email list for regular email correspondence.
- Developed bi-weekly e-blasts to highlight construction schedule look-ahead information and promote virtual community outreach meetings.
- Prepared for and conducted three monthly virtual community outreach meetings via Zoom.
- Responded to regular community inquiries from project phone line and email address, and coordinated with team members when necessary.
- Conducted multiple rounds of business visits to communicate about construction in specific areas.
- Worked with construction team on traffic control configuration planning, and traffic control and circulation concerns from the community.

Additional near-term public outreach activities include:

- Developing bi-weekly e-blasts and as-needed construction notices to convey construction look-ahead information to stakeholders and the public.
- Obtaining media coverage about milestone construction activities.
- Working with contractor to distribute doorhangers to properties with 24-hour and seven-day lead times.
- Visiting businesses before work in new areas.
- Responding to inquiries received from community members.

7.2 Permitting Activities

Permit compliance is an important aspect of the Project. The current permitting activities include:

- Regional Water Quality Control Board:
  - In order to obtain a National Pollution Discharge Elimination System (NPDES), the City must submit a Report of Waste Discharge (ROWD) to the RWQCB. The Program Manager submitted the Draft ROWD to the RWQCB in March, which is currently under review.

- Division of Drinking Water:
  - The Title 22 Engineering Report is required by Division of Drinking Water (DDW) before the City can receive a potable reuse permit. The Program Manager delivered an initial Draft of the Title 22 Engineering Report to the City for review in June 2020. The revised draft, including comments from City staff, was submitted to DDW in July 2020. During Q3 Fiscal Year 2020/2021, the City and Program Manager have received comments from DDW and has had several meetings to review their comments. The Program Management Team met with DDW during Q1 FY 21/22 to discuss the various treatment equipment processes proposed to be installed at the WRF site.
  - The City is working with DDW to obtain a variance from their typical pipeline separation requirements due to the width of the trench for the Conveyance Facilities pipelines and the limited ROW for much of the alignment. The City has been coordinating with DDW on this issue since early 2019 and submitted a formal application to DDW in August 2020. Since that time, the City has had a meeting to review the information provided and has provided supplemental information to aid DDW's review. As of March 2021, The City has addressed the majority of DDW's comments and is expected to complete their response to DDW in October/November 2021.
- Caltrans:
  - The City obtained the encroachment permit from Caltrans for construction of the Conveyance Facilities pipelines in August 2020. In June the Program Manager approached Caltrans to revise their encroachment permit for the Conveyance Facilities project to extend the permit expiration date and to revise the design at the Atascadero Road and Highway 1 on-ramp. There was no activity regarding Caltrans Encroachment Permits in Q1.
- California Department of Fish and Wildlife:
  - The City must have a Stream Bed Alteration Agreement (SAA) (as required) from the CDFW before work can begin along certain segments on the bike path for the Conveyance Facilities component of the Project. The City submitted the revised notification in January 2020 and received notification from CDFW on May 4 that their SAA had been approved and they are cleared for construction.
- State Historic Preservation Office:
  - The PA negotiated with the SHPO requires that a mitigation and monitoring plan be developed for each element of the project (i.e., WRF, pipelines, and injection wells). The City submitted the mitigation and monitoring plan to EPA for distribution to SHPO in October 2020. The City has received notification from the EPA regarding SHPO's response on March 15, 2021. The response stated that the City may proceed with construction by implementing the appropriate cultural resources monitoring and mitigation measures for areas along Main St., Quintana road and both lift stations. Far Western has performed the archeological clearance testing for the LS-2 alignment and the pilot injection well in late May 2021 and found the findings largely negative. Far Western completed their Phase 2 Monitoring and Mitigation plan and transmitted to the EPA for transmittal to SHPO on September 23, 2021. City staff and the Program Management Team are expecting to hear back from SHPO by October 23, 2021.

7.3 Funding Status

- City staff and the Program Management Team continue to support the WIFIA and SRF funding programs through program reporting, invoice documentation tracking and related coordination with consultants, preparation of disbursement request packages, permitting support to satisfy funding agency requirements, and coordination with various funding agency staff.
- During Q1 of FY 21/22, the Program Management Team coordinated with CWSRF and FBV to prepare for the fourth planning loan disbursement request to the State that is expected to be sent in November 2021. The City and Program team will continue to utilize the planning loan as much as possible to cover design and planning costs.
- During Q1 of FY 21/22, the Program Management Team coordinated with CWSRF and Anvil Builders to prepare the first construction loan disbursement request to the State that was sent on September 30, 2021 and currently under review. The City and Program Management Team also coordinated with CWSRF for execution of a second budget approval letter which authorizes disbursement of funding for Conveyance construction expenses. The City anticipates receiving this letter in October 2021. The Program Management Team also coordinated with CWSRF and FBV to prepare for future WRF construction loan disbursement requests.
- The United States Department of the Interior Bureau of Reclamation released its WaterSmart Title XVI WIIN Notice of Funding Opportunity in mid-March 2021. The City prepared an application and submitted to USBR on April 22, 2021 and received notification on July 30, 2021 that they were not selected to receive the grant. The City and Program Management Team met with USBR funding staff on September 1, 2021 to debrief the grant application and scoring metrics.

7.4 City Operations Activity

Significant City Operations activities are not anticipated until start-up of the WRF begins in early 2022.

Section 8

PROJECT DETAILS

8.1 Water Reclamation Facility

8.1.1 Design/Build

In October 2018, the City executed a contract with Overland Contracting consisting of a joint venture of Filanc and Black & Veatch (i.e., design-build team) for design and construction of the WRF located at the South Bay Boulevard site. The WRF will be delivered using the design-build process.

8.1.2 Project Scope

The scope of this element of the Project includes a preliminary, secondary, and advanced treatment facilities. The secondary treatment processes will consist of an MBR and have the ability to exceed the anticipated discharge requirements for the City's new NPDES permit. The advanced treatment facilities include RO and UV-AOP. Purified water from the advanced treatment facilities will be injected into the Lower Morro Groundwater Basin.

8.1.3 Current Progress

The design-build team has continued to progress the construction of the WRF and is on track to reach substantial completion in July 2022. On March 20, 2020, the City issued the construction NTP to the DB team for the WRF. For Q1 of FY 2021-2022, the following activities were completed between July 1, 2021 and September 30, 2021:

General and Administrative

- Continued use and maintenance of SWPPP Best Management Practices (BMP).
- Continued adherence to pertinent Mitigation Measures stipulations.
- Continued compliance with Davis-Bacon Act requirements.
- Responses to numerous public information requests.
- Continued management of equipment submittals/procurements, subcontractor bidding, etc.:
  - Submittal processing is on-going - 450 items submitted and/or approved to date.
  - DB Team has processed 242 requests for information (RFIs) and 30 Design Clarifications to date.
- Continued preparation and submittal of critical path method (CPM) schedule updates monthly:
  - Contractor's September 2021 CPM Schedule Update indicates 12 days late in achieving both Substantial Completion and Final Acceptance, based on current contractual completion dates.

Sitework

- Completion of major earthwork operations including filling, compacting, and rough grading the entire site (only exception is below noted and ongoing landslide remediation work).
- Advancement of remediation of the second solid slip: On January 28, 2021, the previous cut-slope landslide area reactivated during a major storm. The DB Team has performed extensive site investigation, developed remediation drawings, and submitted total costs in the amount of $825,300 to address the known conditions. The remediation scope of work includes:
  - Removal and stockpiling of approximately 17,000 cy of loose material to the mapped slip plane.
  - Benching into competent native subgrade material.
  - Installing a subdrain system at each bench with drainage to surface.
  - Placement and compaction of 17,000+ cy of engineered fill.
  - Surface contours to enhance precipitation run-off.
  - Concrete v-ditches to divert run-off from the areas.
  - The installation of two inclinometer for future monitoring by the City (monitoring not included).
  - Work will be completed in October 2021. Future deliverables shall include As-Built IFC Drawings of all site work revisions and a P.E. stamped Geotech Report amendment indicating approval of work and updated slope stability analysis.
- Near completion of all major yard piping installations.
- Continued work on minor service piping, equipment drains, etc.
- Commencement pressure testing of installed underground piping, including: 20" to 78" POW.
- Completion of the following site work installations by electrical subcontractor:
  - Installing street light stanchions, fixtures, and precast foundations along plant access roads.
  - Continued PG&E conduit run along the WRF Access Road to the PMI-9 Vault on Teresa Road.

Headworks

- Continued installation of process piping, valves, appurtenances, handrails, etc., associated with the Course Screens and Grit Tank equipment skids (by Zima/Kusters) at the Headworks upper slab.
- Completed concrete placement and leak testing for SAFE Diversion Box (high flow diversion box).
- Completed setting Fine Screens (by Enviro-Care) and installing adjacent process piping, valves, etc.
- Taking delivery and setting in place the Odor Control Bio-Filter System (by ESC Environmental).

BNR/MBR Treatment

- Completed concrete placements for MBR cassette tank walls, and currently working on leak testing.
- Installing MBR equipment (by Suez) including pumps, blowers, control panels, and process piping.
- Installing WAS/SCUM wet well tank, pumps, process piping, valves, etc.
- Installing Recycled Water Pump Station skid mounted system and connecting process piping.

RO/UV-AOP

- Completed RO/UV Building erection including exterior walls, roof, Electrical Room interior walls, etc.
- Electrical subcontractor installing conduits, boxes, panels, etc. in the Electrical Room.
- Continued installing Reverse Osmosis (RO) equipment (By H2O Innovation) including three RO skids, RO flush pump skid and tank, RO CIP pump skid and tank, neutralization tank, etc.
- Completed coating concrete in containment areas for CIP, FLUSH, and neutralization tank(s).

Product Water Facilities

- Continued installing calcite facility equipment including two calcite filter tanks, flush pump and backwash supply tank, and much of the connecting process piping, valves, supports, etc.
- Continued installation of IPR/Outfall Pump Station equipment including pumps, piping, valves, etc.

Residuals/Sludge Processing

- Completed concrete placement for dewatering facility slab-on-grade including all underslab piping and electrical. Also placed concrete containment curbs. Ready for Belt Press equipment delivery.
- Completed concrete placement for wet weather SAFE Filter slab-on-grade, including underslab piping and electrical. Also installed the cloth disk filter equipment (by Aqua-Aerobics) and associated process piping, valves, auxiliary equipment, pumps, etc.

Electrical and Controls

- Completed concrete work for E\electrical building, and generator facility, slabs-on-grade.
- Emergency generator has been delivered and set on slab. Installed access stairs and platforms.
- Completed Electrical Building erection including exterior walls, roof, etc.
- Electrical subcontractor installing conduits, boxes, panels, Motor Control Centers (1 & 2), etc.

Chemical Storage and Feed

- Completed chemical facility structural steel columns and roof beams erection. The Chemical Facility canopy roof panels are backordered.
- Continued coating concrete in the various individual Chem Pump and Storage containment areas.

Operations Building

- Building interior work is on-going, including gyp board wall and ceiling installations, interior wall texturing and painting, interior electrical and lighting, heating, ventilation, and air conditioning (HVAC) equipment and ducting, fire protection systems, windows, doors, bathroom tile, etc.
- Building exterior work is essentially completed, including roof, cupolas, louvers, building trim, etc.

Maintenance Building

- Building interior work is on-going, including gyp board wall and ceilings, interior wall texturing and painting, interior electrical and lighting, HVAC, fire protection, windows, doors, roll-up doors, etc.
- Building exterior work is essentially completed, including roof, louvers, building trim, etc.

City Yard Facilities

- Completed all building erections for WRF Parking Canopy and Outdoor Storage Aisles (PEMBs). The Storage Shed wall panels and Vehicle/Equipment Storage Canopy roof panels are backordered.
- Electrical subcontractor installing conduit, switches, fixtures, for canopy lighting and receptacles.

8.1.4 Project Challenges

- West Cut Slope Soil Slip (Re-Activation):
  - The DB Team's proposed landslide remediation work scope and cost has been approved by City Council and is currently being undertaken as noted elsewhere herein. The work is estimated to be completed in October 2021. Item not resolved.
- PG&E Easement Concerns:
  - PG&E previously had determined that existing easement rights on Teresa Road (private road) and the WRF Access Road are ambiguous as to allowing PG&E facilities. The City is currently working to resolve/clarify easement issues. Item not resolved.
- SoCal Gas Easement Concerns:
  - SoCal Gas has advised the City that existing easement rights on Teresa Road (private road) and the WRF Access Road are unacceptable to SoCal Gas. The City is currently working to resolve/clarify easement issues. Item not resolved.
- Equipment Long Term Storage:
  - The DB Team continues to implement project-wide measures to store delivered process and electrical equipment in accordance with operations and maintenance (O&M) manual long-term storage requirements. Item resolved.

- Covid-19 Related Material Shortages and Equipment Delivery Delays:
  - The DB Team has notified the City of current and on-going project cost and schedule impacts caused by the global supply chain disruptions resulting from the Covid-19 pandemic, quarantines, and other related occurrences. The Contractor is currently tracking several minor potential costs impacts from these disruptions, but there is potential for future worsening of the current situation. The City, Program Manager, and DB Team are tracking these actual and potential impacts. This item is not resolved.

Table 26 WRF Performance Measures

Performance Measures	Target	Current
Construction Cost(1)	$67.2M	$74.7M
Construction Contingency(2)	$9.1M	$0.3M

Notes:
(1) The GMP includes costs for both design and construction of the WRF (through Amendment No. 6)
(2) For Q1 of FY 21/22, the total contingency remaining for all components is approximately $3.5M. Approximately $0.3M is allocated to the WRF.

Table 27 WRF Construction Summary

Schedule	
Request for Bid / Bid Advertisement	January 24, 2018
Bid Opening Date	May 08, 2018
Contract Award / Council Award Date	October 23, 2018
Notice to Proceed (Design)	November 05, 2018
Notice to Proceed (Construction)	March 20, 2020
Original Final Completion Date	October 1, 2021
Original Duration (Calendar Days)	886
Days Changed by Change Order	15
Actual Final Completion Date (including Calendar Days)	August 31, 2022
Schedule Percent Complete	62.8% (566 days / 901 days)
Budget	
Engineer's Estimate (Construction Cost + 10% Construction Contingency)	$73,475,845
Award Amount (including Design Cost)	$67,234,512
Change Order Total	$9,463,482
Current Contract Value	$76,697,994
Percent Change	14.0%
Work Completed	
Actual Cost -to-Date	$39,868,487
Percent Complete (Percent Expended)	48.0%

Construction Oversight Statistics		
	PCOs	COs
Total Received	103	N/A
Total Approved	N/A	66[(1)]
Total Pending	7	0
Average Turnaround (calendar days)	N/A	N/A

Acronym List:
PCO – Proposed Change Order; CO – Change Order
(1) 66 PCOs have been approved and are reflected in Amendment No. 1, 2, 3, 4 , 5, and 6 to the Design-Build Agreement.

8.2 Conveyance Facilities

8.2.1 Designer

In November 2017, the City executed a contract with WWE for design and engineering support for the facilities necessary to connect the existing WWTP and the new WRF.

8.2.2 Contractor

The City awarded a contract to Anvil for construction of the Conveyance Facilities component of the Project on November 10, 2020. A construction NTP was issued on December 14, 2020 and Anvil began construction in January of 2021.

8.2.3 Project Scope

The Conveyance Facilities include the design of approximately 3.5 miles of pipelines and two (2) lift stations. The pipelines include two raw wastewater force mains, a wet weather/brine discharge force main, and a potable reuse pipeline to the west injection area.

8.2.4 Current Progress

General and Administrative

- Anvil continues to maintain their project field office at 853 Quintana Road (near Roundabout).
- Contractor continues to maintain SWPPP BMPs.
- Contractor continues to adhere to pertinent Mitigation Measures stipulations.
- Contractor/subcontractors continue to comply with Davis-Bacon Act requirements.
- Several requests for public information were responded to during the reporting period.
- Contractor continues equipment submittals and procurement activities.
- Contractor's submission of CPM schedule updates is tardy and past due. Contractor's July thru Sept. CPM Schedule Updates are pending. Contractor has committed to providing past due updates as soon as possible.
  - Contractor and City have completed negotiations and tentatively agreed upon a 40 calendar day extension for the SHPO ground disturbance moratorium from 02/16/2021 to 03/16/2021. Upon approval by City Council, the revised Final Acceptance Date will be 04/03/2022.
  - Based on the Construction Manager's current rough/informal estimate, Substantial Completion may be expected in late Spring 2022, and Final Acceptance in early Summer of 2022.

  - A half-day "Partnering Workshop" or "Schedule Recovery Meeting" is planned for 10/21/2021.
- The City continued its public relations/outreach effort including:
  - Monthly virtual meetings with stakeholders and affected business owners.
  - Periodic press releases for general information or for specific planned work.
  - Interactive City website with project information, digital documents library, etc.
  - All public contacts are promptly responded to and logged by the Program Manager.
  - Informational door hangers are placed 7 days, then again 24 hours, in advance of work activities.

Pump Station A

- Contractor struggled to maintain dewatering drawdown for various reasons through July/August.
- Contractor corrected dewatering systems and achieved Geotech approval of structure subgrade.
- Contractor set forms, installed rebar, and placed concrete for the wet well slab-on-grade.

Pump Station B

- Contractor completed installing 24" SS and 8" SS (gravity sewers) and the PS-B Junction Manhole.
- Contractor over-excavated, recompacted, and placed CL2AB subgrade for the Electrical Building.
- Electricians installed underground conduits including Electrical Building underslab conduit/stub-ups.

Pipeline

The contractor is currently working at five different locations within the City for the pipeline installation of the Conveyance facilities. Note: Throughout this report "Joint Trench" refers to FM1 & FM2 (wastewater force mains), BR (brine/outfall line), FO (fiber optic conduit), and in some locations IPR (purified water) in casing. Work was performed at each of the different segments listed below:

- Segment 1 - Atascadero Road (Existing City Wastewater Treatment Plant to Bike Path).
- Segment 3 – Bike Path (Morro Creek Foot Bridge to Main Street).
- Segment 5 – Quintana Road (Main Street to Morro Bay Blvd).
- Segment 6 – Quintana Road (Morro Bay Blvd to La Loma Avenue).
- Segment 7 – Quintana Road (La Loma Avenue to South Bay Blvd).

No trenching or potholing activities occurred this quarter at Segment 2 (Bike Path from Atascadero Road to the Morro Creek Foot Bridge), Segment 4 (Main Street from the Bike Path to Quintana Road), Segment 8 (South Bay Blvd between Quintana Road and the new MB WRF), or Segment 9 (Vistra Property from the Bike Path to existing Lift Station 2). The contractor closed the Bike Path in Segment 2.

The following items were completed along Segment 1:

- Pump Station A is located along this segment; there was no trenching work in street this period.

- Contractor continues to store heavy equipment and materials on City property along Atascadero Road, including HDPE piping and the prefabricated utility bridge for crossing Morro Creek.

The following items were completed along Segment 2:

- Contractor has closed the Bike Path in this segment; there was no trenching activity this period.

The following items were completed along Segment 3:

- Contractor has closed the Bike Path in this segment; there was no trenching activity this period.
- Contractor has installed a temporary by-pass above-grade 12" Waterline over this entire segment.
- Contractor has installed sheet pile shoring for both the jacking and receiving pits for the planned trenchless construction crossing the Willow Camp Creek Jurisdictional Wetlands. Contractor will install dewatering systems and mobilize their Jack & Bore subcontractor in late October 2021.
- Contractor continues using assigned Staging Area on Vistra property (using Bike Path for access).

The following items were completed along Segment 5:

- Completed Joint Trench installation, backfill, paving from Sta 64+28 to near Roundabout. During this period, Contractor completed the Joint Trench from approx Sta. 71 to approx Sta. 94.
- Contractor continued partial road closures in this segment during the reporting period.
- Contractor has moved back to Sta 64+28 and will start trenching north toward Pump Station B.

The following items were completed along Segment 6:

- Contractor has completed the Microtunnel crossing below the Morro Bay Blvd Roundabout.
  - MTBM subcontractor is currently demobilizing and removing equipment from site.
  - MTBM was stopped twice near Sta. 98+50, based on reports of possible obstructions from the MTBM subcontractor. Two separate 23-ft deep recovery shafts were excavated, but no obstruction was found (all excavation activities near the cutting-head were closely monitored by engineers and staff representing both the City and Anvil, all parties agree no obstruction was found). Regardless, MTBM subcontractor intends to claim impacts from 2 months downtime.
- Contractor continued partial road closures in this segment during the reporting period.
- Contractor continues Joint Trench installation, backfill, etc. from Sta. 113 to Sta 122 (approx).
- Contractor maintaining temporary above-grade sewer by-pass pipe along this segment.

The following items were completed along Segment 7:

- Completed all Joint Trench installations, backfill, paving, etc., from Sta 122 to Sta 150 (approx).

- Completed 10-inch Waterline Relocation, backfill, etc. from Sta 121+50 to Sta 144+00 (approx).
- Contractor continued partial road closures in this segment during the reporting period.
- Contractor maintaining temporary above-grade sewer and water by-pass pipes along this segment.

Existing Lift Station 2

- No activities.

Existing Lift Station 3

- Contractor maintaining temporary above-grade sewer by-pass pipe from Lift Station 3.

8.2.5 Upcoming Activities

Anvil is scheduled to complete the following activities during Q1 FY 21/22:

- Preparation and installation of jack and bore installation across Willow Camp Creek on bike path.
- Installation of pipeline along bike path.
- Assisting Far Westerns archaeological monitoring and mitigation at CA-SLO-16 site for the installation of the utility bridge and pipelines between station 27+00 to 37+00.
- Installation of pipelines in Quintana Avenue between La Loma Avenue and South Bay Boulevard.
- Installation of carrier pipes within 60" steel casing beneath roundabout.
- Installation of Pump Station A emergency storage system and wet well.
- Above ground mechanical and electrical at Pump Station A.
- Above ground mechanical and electrical at Pump Station B.

8.2.6 Project Challenges

- SHPO Delay – PCO #1:
  - Contract work by Anvil was suspended by directive from the City between 02/16/2021 and 03/16/2021 due to lack of authorization to proceed from SHPO. The City and Contractor have negotiated a cost and time settlement as noted herein above. This item is not resolved.
- Pump Station A Dewatering Permit – PCO #5:
  - Contractor and City have come to agreement on the added scope and on-going costs to sample and test dewatering discharge as mandated by the SWRCB permit issued to the City. The extra cost will be included in a future CCO This item is not resolved.
- Atascadero Gravity Sewer Pipeline Addition – PCO #6:
  - The City is interested in adding a segment of new gravity sewer on Atascadero Road to the project scope. This proposed work is part of a separate City capital improvements effort and would not be paid for under current project funding. The Contractor is currently preparing a quote for the material costs only. This item is not resolved.

- Reroute Quintana Joint Trench for DDW Clearances - PCO #10:
  - The new Joint Trench between 62+00 and 64+28 needs to be rerouted due to DDW clearance requirements. Revised design drawings were issued to the Contractor. The associated extra costs will be tracked on a Time and Materials basis and will be included in a future CCO. This item is not resolved.
- Archaeological Site CA-SLO-16 Work Revisions – PCO #13:
  - The City has proposed and Caltrans has approved work revisions at CA-SLO-16, including adding embankment fill to raise grade, and installing the new pipelines just below added fill to not disturb CA-SLO-16. A required site investigation by Far Western Archeologist has occurred and the City has received input from associated local tribal groups. The necessary documents were submitted to SHPO on 9/23/21, and the required 30-day SHPO response should be received by 10/23/21. This item is not resolved.
- SLO County APCD Determination – PCO #28:
  - The City has received APCD notice of non-compliance for Pump Station A and Pump Station B emergency standby generators. In particular the 1000 hp generator for Pump Station B is non-compliant at Tier 2, due to changes in regulations occurring after project bidding but prior to APCD issuing the Authority to Construct Permit. The City's current approach is to (1) perform the mandated Health Risk Assessments at both pump stations, and (2) subsequently plan for and implement whatever Best Available Control Technology (BACT) is necessary to achieve the mandated Tier 4 compliance level. This item is not resolved.
- Pending Microtunnel Obstruction Claim – PCO #14:
  - The City has received from Vadnais two pieces of concrete debris that Vadnais staff verbally stated were found in the MTBM recovery shafts. The City has formally requested that Anvil/Vadnais provide in writing the specific date, time, and location where the items were found. During all recovery shaft investigations, excavation activities near the cutting-head were monitored by engineers and staff representing both the City and Anvil, including Geotech Engineers. All witnessing parties have agreed that no obstruction as defined by the Contract documents was found in either recovery shaft. Once Vadnais has gone on record clarifying the concrete debris origin, the City will have the concrete debris cored and strength tested for the record. City, Anvil, and Vadnais have agreed to meet in October. This item is not resolved.

Table 28 Conveyance Facilities Performance Measures

Performance Measures	Target	Current
Construction Cost	$24.2M	$31.5M
Construction Contingency(1)	$2.5M	$2.7M
Number of Feet of Pipelines Constructed	25,785 lf	14,748 lf
Number of Days of Full Road Closures	N/A	10 Days
Number of Hours of Night Work	N/A	15 Hours

Notes:
(1) For Q1 of FY 21/22, the total contingency remaining for all components is approximately $3.5M. Approximately $2.7M is allocated to the Conveyance Facilities.

Table 29 Conveyance Facilities Summary

Schedule				
Request for Bid / Bid Advertisement				June 15, 2020
Bid Opening Date				August 14, 2020
Contract Award / Council Award Date				November 10, 2020
Notice to Proceed for Construction				December 14, 2020
Original Final Completion Date				February 22,2022
Original Duration (Calendar Days)				435
Days Changed by Change Order				0
Actual Final Completion Date				April 22, 2022
Schedule Percent Complete				66.7%(290 days /435 days)
Budget				
Engineer's Estimate (Construction Cost + 10% Construction Contingency)				$26,657,000
Award Amount				$31,493,675
Change Order Total				$0
Current Contract Value				$31,493,675
Percent Change				2.14%
Work Completed				
Actual Cost -to-Date				$11,185,433
Percent Complete (Percent Expended)				35.5%
Length of Pipe Installed (Actual to Date / Planned Total)				14,748 lf / 25,785 lf
Construction Management Statistics				
	RFIs	Submittals	PCOs	COs
Total Received	96	233	28	1
Total Responded To	74	210	5	0
Total Pending	122	13	23	0

8.3 Recycled Water Facilities

8.3.1 Designer

Procurement activities for the final design of the Recycled Water Facilities have not yet begun. Phase 1 and Phase 2 or the hydrogeological work has been completed by GSI and work on Phase 3 (i.e., pilot injection testing) will be completed in late 2021, early 2022. The Program Manager also anticipates the final injection well preliminary design to begin in spring 2022.

8.3.2 Contractor

This element of the Project is being delivered via a conventional design-bid-build procurement process. The Recycled Water Facilities will begin construction in late 2022/early 2023.

8.3.3 Project Scope

Since the potable reuse pipeline from the WRF to the selected injection site was moved into WWE's scope for design of the Conveyance Facilities, this element of the Project consists primarily of full-scale injection wells at the west injection site. It is anticipated that the scope of work for the final injection well field design will include, but is not limited to, the following:

- Alternatives analysis and preliminary design report
- Injection well design
- Electrical and instrumentation design and integration
- On-site linear infrastructure
- Above and below-ground mechanical piping and supporting infrastructure
- Injection well back-wash facilities and supporting infrastructure
- Facility and infrastructure flood proofing
- Engineer's estimate of potential cost
- Regulatory permitting

8.3.4 Current Progress

GSI has completed Phase 1 and is currently working on Phase 2 of the hydrogeological work, which has culminated in the selection of the west injection area and preliminary siting of the injection wells. In Q1, the following preliminary design items were progressed for the Recycled Water Facilities by the Program Management Team:

- The locations of both the pilot injection and monitoring well sites were finalized to be within the 100-foot permanent easement acquired by the City from Vistra Energy. This differed from the original plan of having the monitoring well located in the temporary construction easement just north of the pilot injection well. The location of the monitoring well was revised to be within the permanent easement to ensure that the well would be in service for its entire useful life rather than required to be destroyed at the end of the temporary construction easement conditional use timeframe.
- The City, Carollo, and GSI continued to make progress toward installing the pilot injection well. The pilot well work is expected to be bid in the coming months.
- Bidding documents for the pilot injection well were completed and contract documents were sent to the City for review.
- ABC Liovin was the selected contractor to install the monitoring well. They are anticipated to begin work at the end of October 2021.
- The City received Notice of Acceptance on August 27, 2021 from the Regional Water Quality Control Board for their Aquifer Storage and Recovery (ASR) Permit, therefore allowing the upcoming pilot injection testing to commence.
- Guida Surveying, inc. performed their first pre-construction survey on July 6 and 9, 2021 to perform topographic surveying, easement delineation, and existing utility locations for the 100-foot easement from Willow Camp Creek to the bike path parallel to Highway 1. Existing utilities identified will need to be physically located prior to installing both the pilot and monitoring wells.

- Several existing utilities were found to be on site as a result of the topographic survey conducted on July 7, 2021. With the revised well sites both within the permanent easement, the Program Management Team plans to have the utilities in the area near both the pilot injection well and the monitoring well sites potholed and surveyed to ensure there will be no utility conflicts during installation.
- Desktop vegetation surveys and exhibit development has been completed and the Program Management Team is expected to coordinate with the project biologist in October to identify vegetation protection and removal requirements for the pilot injection and monitoring construction activities.

8.3.5 Upcoming Activities

The next phase of hydrogeological work is pilot injection testing, which consists of the following elements:

- Design of the pilot injection well (Completed February 2021).
- Clearance of the pilot injection well by SHPO (Completed June 2021).
- Permitting for installation of the pilot injection well through San Luis Obispo County general well drillers permit (Completed August 2021).
- Install pilot injection well monitoring well (October 2021)
- Construction of the pilot injection well (November/December 2021).
- Conducting pilot testing (Anticipated November 2021 to February 2022).

8.3.6 Project Challenges

The west side injection site resides within a 100-foot-wide permanent easement acquired by the City from Vistra Energy. The injection wells and all supporting infrastructure must be within this easement. To ensure that all construction activity and permanent infrastructure is within this easement, the site had an initial topographic survey with the 100-foot-wide easement partially staked in the field to define working limits for the installation of the pilot and monitoring well installation. Additionally, as part of the initial survey effort, an underground utility search was performed, and several utilities were found to be in the area which could potentially be a conflict during installation. The Program Management Team is planning on having a separate underground utility search performed to identify the known utilities in the area and has directed Anvil Builders, inc. to pothole hole and survey the encountered utilities in the area to physically locate any potential conflicts prior to construction. Lastly, the work area for both pilot and monitoring well has extensive vegetation throughout. Prior to any construction in the area, the Program Management Team must identify which vegetation species are to be protected and/or cleared for removal for future activities in the area. The team is working with the project biologist and working to produce a vegetation clearance map in October 2021.

Table 29 and 30 show anticipated construction information for the Recycled Water Facilities component of the WRF Project. Since there has been no construction progress on this component of the project the majority of the rows are not applicable. With the acceptance of the FY 21/22 budget for the WRF project, the Recycled Water Facilities construction cost has been updated to reflect the total estimated construction cost and its respective contingency.

Table 30 Recycled Water Facilities Performance Measures

Performance Measures	Target	Current
Construction Cost	$5.7M	$0.0M
Construction Contingency	$0.5M	$0.5M

Notes:
(1) For Q1 of FY 21/22, the total contingency remaining for all components is approximately $3.5M. Approximately $0.5M is allocated to the Recycled Water Facilities.

Table 31 Recycled Water Facilities Summary

Schedule				
Selection of the Injection Site				N/A
Request for Bid / Bid Advertisement				N/A
Bid Opening Date				N/A
Contract Award / Council Award Date				N/A
Notice to Proceed for Construction				N/A
Original Final Completion Date				N/A
Original Duration (Calendar Days)				N/A
Days Changed by Change Order				0
Actual Final Completion Date				N/A
Schedule Percent Complete				0%
Budget				
Engineer's Estimate (Construction Cost + 10% Construction Contingency)				$6,307,785
Award Amount				$0
Change Order Total				$0
Current Contract Value				$0
Percent Change				0%
Work Completed				
Actual Cost -to-Date				$0
Percent Complete (Percent Expended)				0%
Work Completed				
	RFIs	Submittals	PCOs	COs
Total Received	0	0	0	0
Total Responded to	0	0	0	0
Total Pending	0	0	0	0
Average Turnaround (calendar days)	NA	NA	N/A	N/A