

Treatment Plant Capital Project Summaries



Photo: New Sludge Tank Under Construction

Project Number:	18-01	
Project Name:	Wastewater Treatment Plant (WWTP) – Elec/Mech Rehab & Sludge Holding Tank Replacement Project	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Treanor	
Status:	In Construction	
Project Description:	This project is a multi-area project at the WWTP aimed at mitigating risk of failure in the Influent Pump Station, Headworks, 3W/Chlorine Analyzer Building, Effluent Building and Sludge Storage Tank. Most of the work involves replacing aged electrical and mechanical equipment in existing buildings.	
Department:	Treatment	
Financial:	Cumulative Budget:	Cumulative Spent:
	\$9,137,431	\$5,828,938
Financial:	FY Budget:	FY Spent:
	\$4,820,750	\$1,301,675
Reclamation Share:	Estimated at 2.7% of project cost.	
Other Entities:	Pebble Beach Community Services District, CAWD/PBCSD Reclamation Project	
Permits Required:	Coastal Commission Notification	
Challenges:	Electrical Equipment Supply Chains	
Schedule:	<ul style="list-style-type: none"> Construction anticipated for FY21/22 into FY22/23 	
Consultants:	Design: Kennedy/Jenks Consultants Construction Management: Currie Engineers	
Contractor:	Clark Bros. Inc.	



Photo: Eucalyptus trees on South Side of Treatment Plant

Project Number:	18-28	
Project Name:	Perimeter Tree Plan and Implementation	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Treanor	
Status:	Planning Stakeholder Meeting	
Project Description:	Planning and landscaping around the treatment plant. This will include looking into possibly replacing the non-native eucalyptus trees around the perimeter of the treatment plant with native tree species. The project will start with a study and a plan to determine costs, sequencing schedule, and visual impacts. The Eucalyptus trees around the plant have ongoing maintenance costs, which may be offset in the long term with a different type of tree screening. The purpose is to improve security around plant perimeter.	
Department:	Treatment	
Financial:	Cumulative Budget:	Cumulative Spent:
	\$130,020	\$5,020
Financial:	FY Budget:	FY Spent:
	\$75,000	\$0
Reclamation:	N/A	
Other Entities:	N/A	
Permits Required:	Currently unknown (In Study Phase)	
Challenges:	Time it will take for new trees to grow up that will fully screen treatment plant from view	
Schedule:	<ul style="list-style-type: none"> Study moved to 2023; anticipate completion 06-30-26 	
Consultants:	Scott Hall Landscape Design	
Contractor:	TBD	

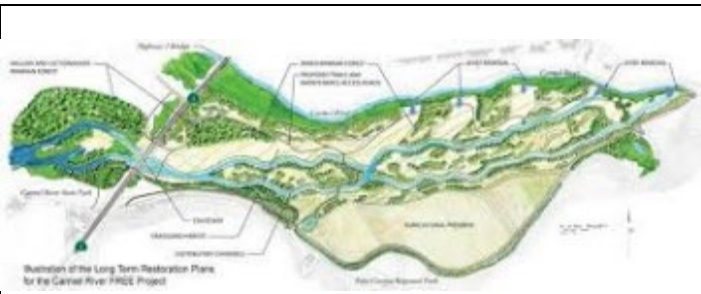


Photo: Carmel River Floodplain Restoration and Environmental Enhancement (CRFREE)

Project Number:	19-21	
Project Name:	Carmel River Floodplain Restoration & Environmental Enhancement (CRFREE) Mitigation	
Project Location:	Carmel River Lagoon	
Project Manager:	Treanor	
Status:	Pending Funding	
Project Description:	The CRFREE Project intends to create a new river channel in the Carmel River lagoon floodplain, which will significantly impact existing wastewater pipelines that cross the lagoon. To fully mitigate impacts from CRFREE the pipelines, which are currently crossing over a portion of the lagoon, are proposed to be installed underground using Horizontal Directional Drilling construction methods.	
Department:	Engineering	
Financial:	Coastal Conservancy Grant Budget: \$750,000	Cumulative Spent: \$618,569 FY Spent: \$0
** Project is being funded by CRFREE initiated grants		
Reclamation Share:	N/A	
Other Entities:	Monterey County	
Permits Required:	Coastal Commission, CA Fish and Wildlife, Army Corp of Engineers, Reginal Water Quality Control Board (RWQCB)	
Challenges:	Construction near environmentally sensitive habitat and obtaining new easement from State Parks	
Schedule:	<ul style="list-style-type: none"> Construction anticipated in 2024 	
Consultants:	Design: Kennedy Jenks and Staheli Trenchless CEQA: Johnson Marigot	
Contractor:	TBD	



Photo: Existing air diffuser system

Project Number:	19-19	
Project Name:	WWTP – Aeration Basin Improvements	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Waggoner	
Status:	On Hold Until Spring 2023	
Project Description:	The Aeration Basins 4A & 4B need to have additional diffusers installed to ensure the proper air (oxygen) transfer into the wastewater to support the aerobic microorganisms in the basins.	
Department:	Treatment	
Financial:	Cumulative Budget: \$17,332 FY Budget: \$0	Cumulative Spent: \$17,332 FY Spent: \$0
Reclamation Share:	N/A	
Other Entities:	N/A	
Permits Required:	N/A	
Challenges:	Weather conditions and Scheduling	
Schedule:	<ul style="list-style-type: none"> Design is complete Materials ordered and received Construction anticipated for 2023 	
Consultants:	N/A	
Contractor:	N/A	



Photo: Existing Dilapidated Fence

Project Number:		19-18	
Project Name:		Perimeter Fencing	
Project Location:		Wastewater Treatment Plant	
Project Manager:		Treanor	
Status:		Design/CEQA	
Project Description:		Install a new fence around the perimeter of the WWTP.	
Department:		Treatment	
Financial:	Cumulative Budget:	Cumulative Spent:	
	\$275,000	\$27,881	
Financial:	FY Budget:	FY Spent:	
	\$275,000	\$16,054	
Reclamation Share:		N/A	
Other Entities:		N/A	
Permits Required:		California Environmental Quality Act (CEQA) Mitigated Negative Declaration (MND), Coastal Developmental Permit (CDP) Notification	
Challenges:		Environmental Mitigations	
Schedule:		<ul style="list-style-type: none"> Design in FY22-23 Construction in FY23-24 	
Consultants:		Kennedy Jenks	
Contractor:		TBD	



Photo: Gas Meter on North Side of River

Project Number:		22-03	
Project Name:		WWTP Gas and Water Main Replacement	
Project Location:		Wastewater Treatment Plant	
Project Manager:		Treanor	
Status:		In Study Phase	
Project Description:		The WWTP natural gas and water utility service exists on the opposite side of the Carmel River from the WWTP. CAWD owns the piping under the river for these utilities. The water line and gas line are PVC and identified as having a high risk of failure. The gas line is needed for plant operations to provide supplementary heating to the digesters for thermophilic digestion.	
Department:		Treatment	
Financial:	Cumulative Budget:	Cumulative Spent:	
	\$300,000	\$43,444	
Financial:	FY Budget:	FY Spent:	
	\$100,000	\$38,846	
Reclamation Share:		N/A	
Other Entities:		Cost Share w/ Collections @ 5.5%	
Permits Required:		TBD	
Challenges:		Underground work in riparian area	
Schedule:		<ul style="list-style-type: none"> Currently undergoing alternatives analysis study Design in FY22-23 Construction in FY23-24 	
Consultants:		Kennedy Jenks	
Contractor:		N/A	



Photo: Conceptual Rendering of Public Use and Bridge

Project Number:	22-04	
Project Name:	CAWD Bridge and Trail Project	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Trenor	
Status:	Funding Strategy	
Project Description:	Construct a new bridge at the location of the existing CAWD bridge over the Carmel River. Bridge would be open for public use and would allow for new walking trails to connect the City of Carmel-by-the-Sea (Mission Trail) to the Regional Parks (Palo Corona).	
Department:	Treatment	
Financial:	Cumulative Budget:	Cumulative Spent:
	\$550	\$550
Financial:	FY Budget:	FY Spent:
	\$0	\$0
**No budget. Funding potential via Carmel River settlement grants.		
Reclamation Share:	N/A	
Other Entities:	State Parks, Diocese of Monterey, City of Carmel-by-the-Sea, Regional Parks District	
Permits Required:	TBD	
Challenges:	Obtaining Funding and Community Support	
Schedule:	Currently working on video and marketing outreach effort	
Consultants:	TBD	
Contractor:	TBD	



Photo: CAWD Vector Truck

Project Number:	22-06	
Project Name:	Vector Receiving Station	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Trenor	
Status:	Design Phase	
Project Description:	Construct a new Vector Receiving Station for the Collections Department and the disposal of waste collected in the vector truck.	
Department:	Treatment	
Financial:	Cumulative Budget:	Cumulative Spent:
	\$354,950	\$11,996
Financial:	FY Budget:	FY Spent:
	\$104,950	\$0
Reclamation Share:	N/A	
Other Entities:	N/A	
Permits Required:	Coastal Developmental Permit (CDP) Notification	
Challenges:	Design for ultimate user satisfaction.	
Schedule:	Construction in FY23/24	
Consultants:	Kennedy Jenks	
Contractor:	TBD	

Reclamation Capital Project Summaries



Photo: Existing totes used for Sulfuric Acid storage and Feed

Project Number:		18-26	
Project Name:		Sulfuric Acid & Citric Acid Storage & Feed Systems Project	
Project Location:		Reclamation – Microfiltration (MF)/Reverse Osmosis (RO)	
Project Manager:		Trearor	
Status:		In Construction	
Project Description:		Code compliance upgrades for existing acid chemical storage and feed system used by Reclamation for enhancing RO recovery. Project includes code compliant secondary containment and separation of dissimilar chemicals.	
Department:		Treatment	
Financial:	Cumulative Budget:	Cumulative Spent:	
	\$455,923	\$125,468	
Financial:	FY Budget:	FY Spent:	
	\$334,000	\$0	
Reclamation Share:	100%		
Other Entities:	Reclamation Project		
Permits Required:	Coastal Commission Notification		
Challenges:	Hazardous Chemical Safety		
Schedule:	Anticipated Completion mid 2023		
Consultants:	Trussell Technologies, Inc		
Contractor:	Monterey Peninsula Engineering		

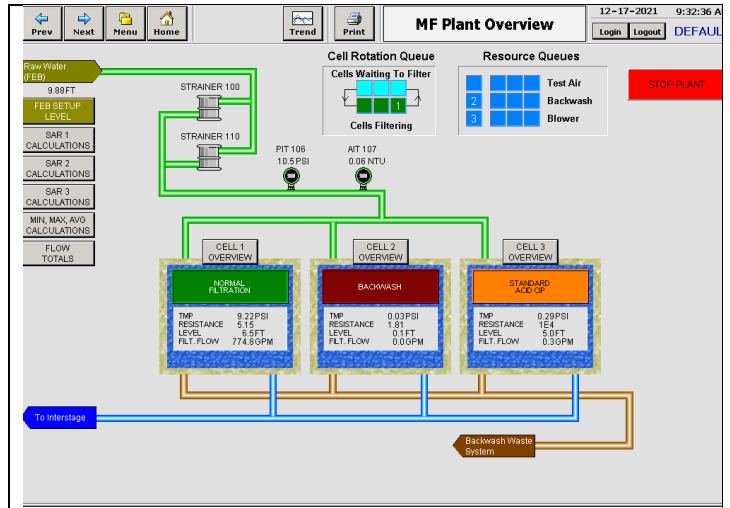


Photo: Microfiltration SCADA Overview

Project Number:		21-09	
Project Name:		Reclamation Supervisory Control and Data Acquisition (SCADA) Migration Project	
Project Location:		Reclamation Plant	
Project Manager:		Foley	
Status:		Complete	
Project Description:		Migration of reclamation legacy from RSVIEW32 SCADA screens, alarms and trending to Ignition SCADA platform utilized by the treatment plant and collections pump stations. The legacy system software is no longer supported and poses a cybersecurity risk. It has been in service for 14+ years and the hardware is past its useful life. The new system will be more secure and installed on modern reliable hardware.	
Department:		Reclamation	
Financial:	Cumulative Budget:	Cumulative Spent:	
	\$179,075	\$152,428	
Financial:	FY Budget:	FY Spent:	
	\$80,000	\$0	
Reclamation Share:	100%		
Other Entities:	Reclamation Project		
Permits Required:	None		
Challenges:	Structure of old Programming		
Schedule:	Work started in December 2021		
Consultants:	Frisch Engineering		



Photo: Exterior of Tertiary Building

Project Number:	22-05	
Project Name:	Reclamation MF/RO and Tertiary System 15-Year Capital Improvement Program (CIP) Master Plan	
Project Location:	Reclamation – Microfiltration (MF)/Reverse Osmosis (RO) and Tertiary Building	
Project Manager:	Treanor	
Status:	In Progress	
Project Description:	Asset management condition and risk evaluations, development of projections of capital expenditures, and preliminary engineering planning	
Department:	Treatment	
Financial:	Cumulative Budget: \$300,000	Cumulative Spent: \$0
	FY Budget: \$300,000	FY Spent: \$0
Reclamation Share:	100%	
Other Entities:	Reclamation Project	
Permits Required:	None	
Challenges:	Complexity	
Schedule:	Planning Process will extend into FY 23/24	
Consultants:	Kennedy Jenks Trussell Technologies, Inc	
Contractor:	N/A	

Collections Capital Project Summaries



Photo: View gravity pipe in Carmel easement

Project Number: 19-03		
Project Name: Carmel Meadows Sewer Replacement		
Project Location: Collection System		
Project Manager: Lather		
Status: Permitting		
Project Description: The project will replace 1,300 feet of Ductile Iron Pipe (DIP) on an aerial span and eight manholes by constructing a small pump station at the end of Mariposa Drive. This project is located on an easement parallel to Ribera Road and was originally installed in the early 1960's.		
Department: Collections		
Financial:	Cumulative Budget:	Cumulative Spent:
	\$2,471,949	\$511,198
Financial:	FY Budget:	FY Spent:
	\$2,000,000	\$30,628
Permits Required: Coastal Permit and Environmental Review		
Challenges: Redirecting the sewer to the pump station without requiring booster pumps for individual houses.		
Schedule: Design and Environmental Review completed 6/28/22. Construction to begin FY22/23.		
Consultants: SRT Consultants, WRA Environmental		
Contractor: TBD		



Photo: Looking at Pump Station Exterior

Project Number: 20-07		
Project Name: Bay/Scenic Pump Station Rehabilitation		
Project Location: Collection System		
Project Manager: Lather		
Status: In Design		
Project Description: Remodel the interior of the pump station and update the SCADA panel to minimize areas prone to flooding.		
Department: Collections		
Financial:	Cumulative Budget:	Cumulative Spent:
	\$680,892	\$54,077
Financial:	FY Budget:	FY Spent:
	\$650,000	\$13,015
Reclamation Share:		0%
Other Entities:		Carmel-by-the-Sea, Coastal Commission
Permits Required:		Exemptions from CEQA & Coastal Commission
Challenges:		Traffic Control
Schedule:		Design 2021, Construct 2022, completed by 06-2023
Consultants:		SRT Consultant
Contractor:		Pending



Photo: Pipe Bursting Limits on Scenic

Project Number:		20-08
Project Name:		Scenic Rd Pipe Bursting - Ocean to Bay
Project Location:		Collection System
Project Manager:		Lather
Status:		In Design / CEQA
Project Description:		Replace approximately 9,525 linear feet of existing 6-inch clay pipe with a new 8-inch High-Density Polyethylene (HDPE) and includes manhole rehabilitation.
Department:		Collections
Financial:	Cumulative Budget:	Cumulative Spent:
	\$3,731,786	\$247,374
Financial:	FY Budget:	FY Spent:
	\$3,500,000	\$14,287
Reclamation Share:		0%
Other Entities:		Carmel-by-the-Sea, Coastal Commission
Permits Required:		CEQA & Coastal Commission permit required.
Challenges:		Traffic control & poorly mapped underground utilities. Cultural Resources at southern end of project.
Schedule:		Design 2021-2022, Construct 2023, Completed 06-2023
Consultants:		MNS, Rincon
Contractor:		Pending

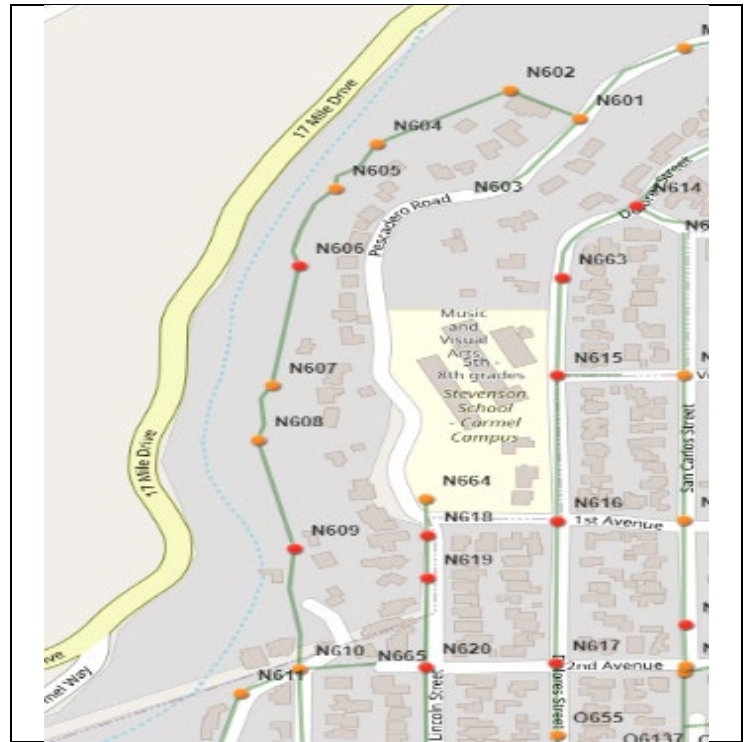


Photo: Sewer Line at Pescadero Creek

Project Number:		21-05
Project Name:		Pescadero Sewer Relocation
Project Location:		Collection System
Project Manager:		Lather
Status:		In Design
Project Description:		Relocate damaged pipe from creek slope to roadway
Department:		Collections
Financial:	Cumulative Budget:	Cumulative Spent:
	\$1,689,236	\$162,648
O&M	FY Budget:	FY Spent:
	\$100,000	\$54,965
Reclamation Share:		0%
Other Entities:		N/A
Permits Required:		Environmental Review
Challenges:		Narrow road, depth of manhole, houses to be placed on individual pumps
Schedule:		Start design, public outreach, & Environmental in Winter 2022/2023.
Consultants:		MNS, Denise Duffy, TBC Communication & Media
Contractor:		TBD

Collections Non-Capital Project Summaries



Photo: River Watch logo

Project Number: 20-05		
Project Name: River Watch Agreement		
Project Location: Collection System		
Project Manager: Lather		
Status: Work in Progress		
Project Description: Work with Collections to provide data that is needed to satisfy the milestones in the agreement with River Watch. As of May 2022, staff completed all of the 1,478 District manholes for the Fiscal Year (FY).		
Department: Collections		
Financial:	Cumulative Budget:	Cumulative Spent:
	N/A	N/A
	FY Budget:	FY Spent:
	N/A	N/A
Reclamation Share:	0%	
Other Entities:	River Watch	
Permits Required:	none	
Challenges:	Closed caption television (CCTV) scheduling deadlines. The Board agreed to increase staffing by one full time equivalent (FTE) to assist in meeting the required schedule. Received 1 yr. extension from River Watch due to COVID-19.	
Schedule:	Due date June 2023	
Consultants:		
Contractor:	N/A	

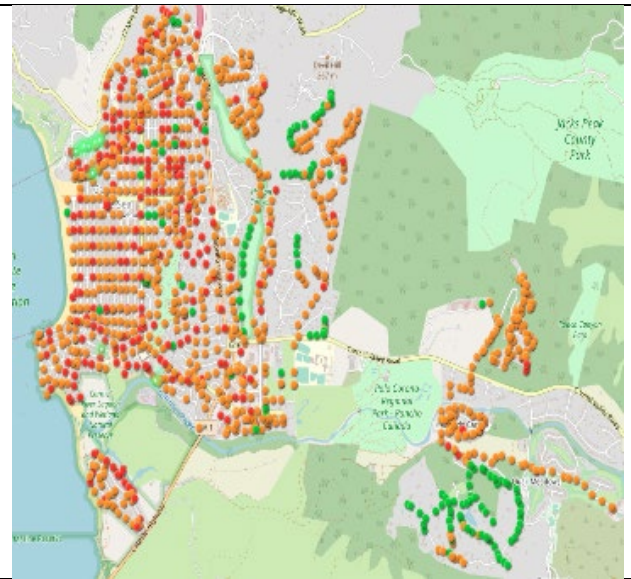


Photo: Manhole Inspection Map

Project Number: 21-06		
Project Name: Manhole Rehabilitation		
Project Location: Collection System		
Project Manager: Lather		
Status: Complete		
Project Description: Line Manholes (52) with a solvent-free rigid polyurethane material that seals surface and provides structural integrity & to prevent inflow/infiltration		
Department: Collections		
Financial: O&M	Cumulative Budget:	Cumulative Spent:
	\$362,300	\$166,724
	FY Budget:	FY Spent:
	\$300,000	\$166,724
Reclamation Share:	0%	
Other Entities:	N/A	
Permits Required:	none	
Challenges:	Traffic control	
Schedule:	Complete by 06-2023	
Consultants:	none	
Contractor:	Express Sewer & Drain, Inc.	

Assessment Districts/Annexations

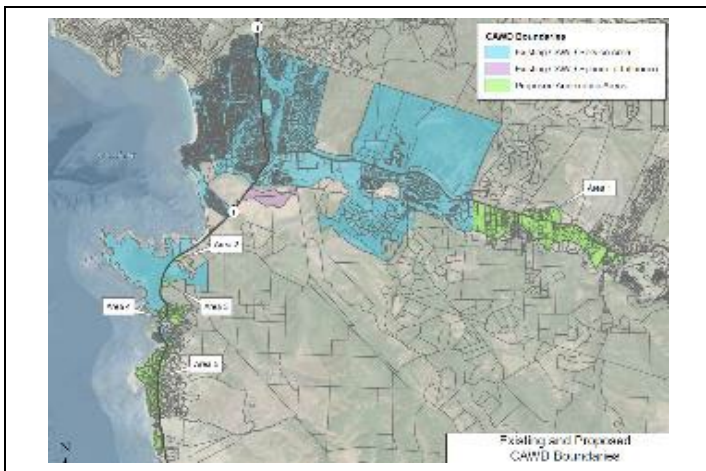


Photo: Areas of Potential Annexation

Project Number: 19-09		
Project Name: 2021 Sphere of Influence (SOI) Amendment & Annexation Proposal		
Project Location: Collection System		
Project Manager: Lather		
Status: In process of obtaining Coastal Development Permit Amendment for annexations in Coastal Zone		
Project Description: The project will provide access for homes and businesses currently on septic systems and add 350 new connections to the District at build-out.		
Department: Collections		
Financial:	Cumulative Budget: \$73,675	Cumulative Spent: \$73,675
	FY Budget: \$0	FY Spent: \$0
** No Budget included for Annexation b/c costs will be recouped through annexation fees.		
Permits Required:	Environmental Review, Local Agency Formation Commission (LAFCO) Annexation Approval	
Challenges:		
Schedule:	Waiting for State Board of Equalization	
Consultant:	Denise Duffy & Associates	

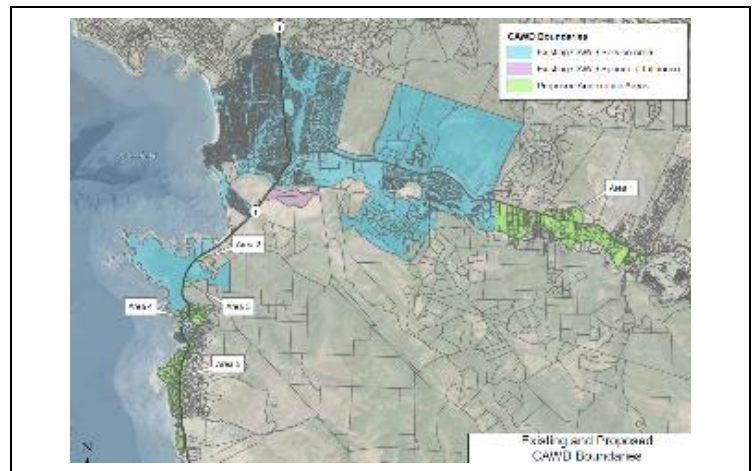


Photo: Areas of Potential Annexation

Project Number: 18-21		
Project Name: Corona Road Sewer Assessment District		
Project Location: Collection System		
Project Manager: Lather		
Status: In design phase by Assessment Engineer. The application has been made for the Septic to Sewer grant. Also organizing efforts for Special Assessment District.		
Project Description: The project will provide sewer facilities to the Corona Road neighborhood and parcels on the west side of Highway 1, across from Corona Road. #18-21 Corona Road (Deferred Revenue**)		
Department: Collections		
Financial:	Cumulative Budget: \$0	Cumulative Spent: \$0
	FY Budget: \$0	FY Spent: \$0
** No Budget included for project because the initial costs were funded by Corona Road residents. District has agreed to fund a portion of environmental work \$56,200 (Res #22-62)		
Permits Required:	Coastal Permit, CalTrans Encroachment permit, Environmental Review	
Challenges:	Assessment District process/approval and obtaining easements for pump station. Funds from homeowners in the amount of \$67K have been received by CAWD.	
Schedule:	Complete studies July/August 2022, Assessment District proceeding along with Septic to Sewer Grant Funding	
Consultant:	Denise Duffy & Associates and Monterey Bay Engineers	

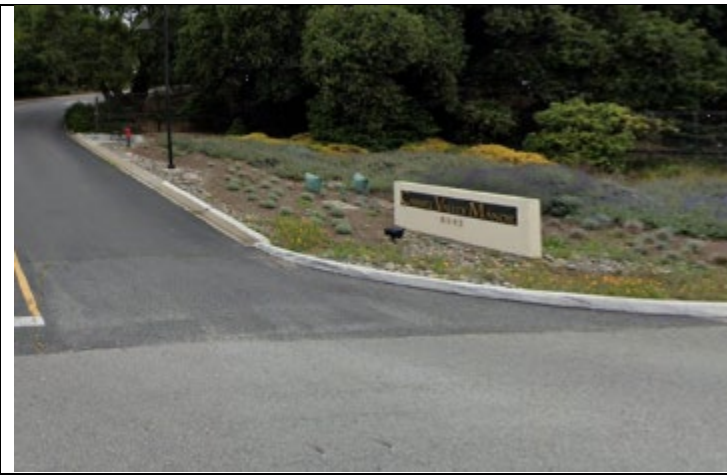


Photo: Entrance to Carmel Valley Manor

Project Number:	19-08	
Project Name:	Carmel Valley Manor Pipeline and Pump Station	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	In Construction	
Project Description:	Sewer extension project to be completed by the owners of Carmel Valley Manor to connect to CAWD's sewer system. Riley Ranch, #19-08 Carmel Valley Manor (Deferred Revenue)	
Department:	Collections	
Financial: this is an unbudgeted item-under repayment agreement (no funds received)-	Cumulative Budget:	Cumulative Spent:
	FY Budget:	FY Spent:
	\$0	\$180
	\$0	\$180
Other Entities:	The prospect of a pipeline has given rise to a plethora of potential additional connections	
Permits Required:	County Encroachment Permit, Environmental Review completed.	
Challenges:	Funding, Repayment Agreement, easement agreements LAFCO annexation	
Schedule:	Approved without protest at 3/22/21 LAFCO hearing.	
Consultants:	MNS and Rincon are working for Carmel Valley Manor to permit and design the project.	
Contractor:	N/A	

Other Non-Capital Project Summaries



ADP Workforce Now

Photo: ADP Clip Art

Project Number:	N/A	
Project Name:	Workforce Now	
Project Location:	All Supervisor Locations	
Project Manager:	Foley	
Status:	Implementation	
Project Description:	Implementation of a comprehensive Human Resource (HR) software database for all supervisors and employees to utilize. Modules provide employee development tracking, benefits administration, custom performance review templates, and employee goal management.	
Department:	Administration	
Financial:	Cumulative Budget:	Cumulative Spent:
	\$0	\$2,520 (annual fee)
Financial:	FY Budget:	FY Spent:
	\$0	\$2,520 (annual fee)
Challenges:	Technical issues need to be resolved & employee training. Implementation of advanced features for employee development and learning management.	
Schedule:	Anticipate implementation in Feb 2023. HCM Unlocked Consultant hired for specialized implementation services	
Consultants:	ADP	



Photo: Real Estate Clip Art

Project Number:	N/A	
Project Name:	Real Property Investigation	
Project Location:	Carmel Valley	
Project Manager:	Barbara Buikema	
Status:	Evaluation in Progress	
Project Description:	An investigation of a possible new treatment facility site in the mouth of the Carmel Valley, which is in response to the Coastal Commission requirement to move facilities within 30 years.	
Department:	Administration	
Financial:	Cumulative Budget:	Cumulative Spent:
	\$75,000	\$0
Financial:	FY Budget:	FY Spent:
	\$75,000	\$0
Permits Required:	None – at this time	
Challenges:	Limited land possibilities, regulatory hurdles, and zoning	
Schedule:	24 months	
Consultants:	Mahoney & Associates	



Photo: Cyber Security Clip Art

Project Number:	N/A	
Project Name:	Cyber Security	
Project Location:	District-wide	
Project Manager:	Chris Foley	
Status:	Ongoing	
Project Description:	Internal Cyber Security Incident Response Team (CSIRT) formed, and they are working on a response plan & training. The upgrades to email filtering system have been completed. Stricter geofencing policies have been put in place, and a cold backup system that is sandboxed from the network were installed March 2022. Waiting on the receipt of the final report.	
Department:	All	
Financial:	Cumulative Budget:	Cumulative Spent:
	\$17,000	\$0
Financial:	FY Budget:	FY Spent:
	\$17,000	\$0
Challenges:	Ongoing training & the need for continual upgrades as skills of hackers grow.	
Schedule:	Continually updating	
Consultant:	Exceedio	



Photo: Six Sigma Clip Art

Project Number:	N/A	
Project Name:	Lean Six Sigma	
Project Location:	Management staff	
Project Manager:	Barbara Buikema	
Status:	Green Belt Level Training & Certification	
Project Description:	Currently all managers have been assigned the task of earning a Green Belt certification. One staff member has completed the Black Belt training. One more staff member will be moving on to the Black Belt self-study course. Also, will investigate an in-person trainer for the implementation of a specific agreed upon project.	
Department:	Administration	
Financial:	Cumulative Budget:	Cumulative Spent:
	\$0	\$2,000
Financial:	FY Budget:	FY Spent:
	\$0	\$0
Permits Required:	None	
Challenges:	Implementation phase	
Schedule:	Ongoing	
Consultants:	Self-study online	
Trainer:	To be determined	



Photo: California coastline

Project Number:	22-01	
Project Name:	Long-Term Sea Level Rise Planning	
Project Location:	Treatment Plant	
Project Manager:	Barbara Buikema/Patrick Treanor	
Status:	In Progress	
Project Description:	As conditions of Coastal Permit #3-82-199-A8 - the District submitted its Long-Term Coastal Hazards Plan on 03-03-22. Board approved a Wastewater Treatment Plant Alternatives Planning Assistance on Sea Level Rise consultant services contract in May 2022.	
Department:	Administration	
Financial:	Cumulative Budget: \$1,400,00	Cumulative Spent: \$100,261.55
	FY Budget: \$260,000	FY Spent: \$100,261.55
Permits Required:	In response to California Coastal Commission	
Challenges:	Establishing focus on long term objectives and committing to follow through items.	
Schedule:	WWTP Relocation Planning Alternatives on Sea Level Rise presented in May 2022	
Consultants:	Greeley & Hansen	