



**SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT**

Post Office Box 339, Oceano, California 93475-0339
1600 Aloha, Oceano, California 93445-9735
Telephone (805) 489-6666 FAX (805) 489-2765
www.sslocsd.us

**AGENDA
BOARD OF DIRECTORS MEETING
OCEANO COMMUNITY SERVICES DISTRICT,
1655 FRONT ST, OCEANO CA 93445**

Wednesday, October 4, 2023, at 6:00 p.m.

Board Members

Caren Ray Russom, Chair
Karen Bright, Vice Chair
Linda Austin, Director

Agencies

City of Arroyo Grande
City of Grover Beach
Oceano Community Services District

Alternate Board Members

Lan George, Director
Clint Weirick, Director
Allene Villa, Director

City of Arroyo Grande
City of Grover Beach
Oceano Community Services District

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- 1. CALL TO ORDER AND ROLL CALL**
 - 2. PLEDGE OF ALLEGIANCE**
 - 3. AGENDA REVIEW**
 - 4. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON AGENDA**

This public comment period is an invitation to members of the community to present comments, thoughts or suggestions on matters not scheduled on this agenda. Comments should be limited to those matters which are within the jurisdiction of the District. The Brown Act restricts the Board from taking formal action on matters not published on the agenda. In response to your comments, the Chair or presiding Board Member may:

- Direct Staff to assist or coordinate with you.
- Direct Staff to place your issue or matter on a future Board meeting agenda.

Please adhere to the following procedures when addressing the Board:

- Comments should be limited to three (3) minutes or less.
- Your comments should be directed to the Board as a whole and not directed to individual Board members.
- Slanderous, profane or personal remarks against any Board Member, Staff or member of the audience shall not be permitted

Any writing or document pertaining to an open-session item on this agenda which is distributed to a majority of the Board after the posting of this agenda will be available for public inspection at the time the subject writing or document is distributed. The writing or document will be available for public review in the offices of the Oceano CSD, a member agency located at 1655 Front Street,

Oceano, California. Consistent with the Americans with Disabilities Act (ADA) and California Government Code §54954.2, requests for disability-related modification or accommodation, including auxiliary aids or services, may be made by a person with a disability who requires modification or accommodation in order to participate at the above referenced public meeting by contacting the District Administrator or Bookkeeper/Secretary at (805) 481-6903. So that the District may address your request in a timely manner, please contact the District two business days in advance of the meeting.

5. CONSENT AGENDA:

The following routine items listed below are scheduled for consideration as a group. Each item is recommended for approval unless noted. Any member of the public who wishes to comment on any Consent Agenda item may do so at this time. Any Board Member may request that any item be withdrawn from the Consent Agenda to permit discussion or to change the recommended course of action. The Board may approve the remainder of the Consent Agenda on one motion.

5A. Approval of Warrants

5B. Approval of Meeting Minutes of September 6, 2023

6. ACTION ITEMS:

6A. CONTRACT FOR COASTAL HAZARD MONITORING WITH RINCON CONSULTANTS

Recommendation: Authorize the District Administrator to execute a contract for Environmental Monitoring Services with Rincon Consultants in the amount of \$80,396.

Recommendation: Authorize the District Administrator to execute future contract amendments if required with Rincon Consultants for the Coastal Hazards Monitoring Program in an amount up to \$3,993 (5%) to address unanticipated changes to the Monitoring Program, for a total potential cost of \$84,389.

6B. CONTRACT AMENDMENT 1 FOR WWTP REDUNDANCY PROJECT ADMINISTRATION SERVICES WITH MKN AND ASSOCIATES

Recommendation: Authorize the District Administrator to execute a contract amendment for continued Wastewater Treatment Plant Redundancy Project Administration Services with MKN and Associates, Inc., (MKN) in the amount of \$140,506, for a total contract budget of \$259,955.

6C. WWTP REDUNDANCY PROJECT SECONDARY CLARIFIER DAMAGE UPDATE #3

Recommendation: Receive and File.

6D. DISTRICT ADMINISTRATOR AND PLANT OPERATIONS REPORT

Recommendation: Receive and File.

7. BOARD MEMBER COMMUNICATIONS:

8. CLOSED SESSION:

Conference with Legal Counsel—Anticipated Litigation • Significant Exposure to Litigation Pursuant to 54956.9(d)(4): 1 case.

9. ADJOURNMENT

The next regularly scheduled Board Meeting is November 1, 2023, 6:00 pm at the
Grover Beach City Hall Council Chambers,
154 South Eighth Street,
Grover Beach, CA 93433

WARRANT REGISTER
10/4/2023
FISCAL YEAR 2023/24

VENDOR	BUDGET LINE ITEM	DETAIL	WARRANT NO.	ACCT	ACCT BRKDN	TOTAL
AKESO OCCUPATIONAL HEALTH	SAFETY	S17471	082823-7081	8056	230.00	230.00
ALLIED ADMINISTRATORS	EMPLOYEE DENTAL	OCTOBER 2023	7082	6025	1,058.39	1,058.39
ALLTECH COMPUTERS	COMPUTER SUPPORT	32924590	7083		100.00	100.00
AQUATIC INFORMATICS INC	MEMBERSHIP	HACH WIMS RENEWAL	7084	7015	5,201.00	5,201.00
ARAMARK	EMPLOYEE UNIFORMS	08/21/23; 08/28/23 09/04/23	7085	7025	1,559.93	1,559.93
BRENNTAG	PLANT CHEMICALS	MULTIPLE	7086	8050	29,780.94	29,780.94
CHARTER COMMUNICATIONS	COMMUNICATIONS	08/28/23-09/28/23	7087	8030	319.96	319.96
CULLIGAN CCWT	RENTAL EQUIPMENT	82877	7088	7032	60.00	60.00
EVERYWHERE RIGHT NOW	COMPUTER SUPPORT	SEPTEMBER 2023	7089	7082	100.00	100.00
GRAINGER	EQUIPMENT MAINTENANCE	MULTIPLE	7090	8030	790.42	1,594.07
	SAFETY	MULTIPLE		8056	803.65	
GSOLUTIONZ	COMMUNICATIONS	OCTOBER 2023	7091	7013	72.95	72.95
HEACOCK TRAILERS	AUTOMOTIVE	19138	7092	8032	621.10	621.10
I.I. SUPPLY	SAFETY	93484	7093	8056	22.48	22.48
INTERSTATE BATTERIES	EQUIPMENT MAINTENANCE	10017171	7094	8030	1,040.54	1,040.54
JB DEWAR	FUEL	264210	7095	8020	121.82	121.82
JOHN DEERE	EQUIPMENT MAINTENANCE	RIDE ON MOWER PARTS	7096	8030	1,171.35	1,171.35
JUSTIN MUSICK		REIMBURSE	7097		146.72	146.72
KENNEDY JENKS	REDUNDANCY	165803	7098	20-7080	30,770.68	30,770.68
LINDE GAS & EQUIP	EQUIPMENT RENTAL	37790443	7099	7032	44.39	44.39
MARCEL ALAIN PHOTOGRAPHY	REDUNDANCY	0C353EEB-0014	7100	20-7080	275.00	275.00
MCMASTER CARR	EQUIPMENT MAINTENANCE	MULTIPLE	7101	8030	615.11	615.11
MINERS	EQUIPMENT MAINTENANCE	AUGUST 2023	7102	8030	732.08	732.08
MNS ENGINEERS	REDUNDANCY	JULY 2023	7103	20-7080	54,304.05	54,304.05
NICHOLAS KUROKAWA	TRAINING	MULTIPLE	7104		294.25	294.25
NVIRO	SCADA	3152	7105	20-7060	1,500.00	1,500.00
OILFIELD ENVIRO COMPLIANCE	BRINE ANALYSIS	1205084	7106		110.50	4,688.00
	CHEMICAL ANALYSIS	MULTIPLE		7078	4,577.50	
POLYDYNE	PLANT CHEMICALS	1767974	7107	8050	8,425.43	8,425.43
READY REFRESH	ADMIN BUILDING	07/25/23-08/24/23	7108	8045	295.71	295.71
SAFETY KLEEN	CHEMICAL ANALYSIS	92307741	7109	7078	265.06	265.06
SECURITAS TECHNOLOGY	ALARMS	SEPTEMBER 2023	7110	7011	80.08	80.08
SOUTH COUNTY SANITARY	RUBBISH	SEPTEMBER 2023	7111	7093	365.49	365.49
SSLOCS	BENEFITS	AUGUST 2023	7112		169,381.79	169,381.79
SWRCB	CERTIFICATIONS	VARGAS GRADE II	7113	7068	170.00	170.00
UMPQUA BANK,	CREDIT CARD	AUGUST 2023	7114		5,046.31	5,046.31
USA BLUEBOOK	EQUIPMENT MAINTENANCE	MULTIPLE	7115	8030	1,870.02	1,870.02
VWR INTERNATIONAL	LAB SUPPLY'S	2023-213; 233; 236	7116	8040	433.97	433.97
JR FILANC	REDUNDANCY	APPLICATION 28	090823-7117	20-7080	192,943.98	192,943.98
AIRGAS USA	EQUIPMENT MAINTENANCE	9141586707	092023-7118	8030	25.79	25.79
ARAMARK	EMPLOYEE UNIFORMS	09/11/23; 09/18/23	7119	7025	1,043.39	1,043.39
ATT MOBILITY	COMMUNICATIONS	08/03/23-09/02/23	7120	7013	80.48	80.48
BLUE WHITE INDUSTRIES	EQUIPMENT MAINTENANCE	M3 PUMP (CL2)	7121	8030	6,195.76	6,195.76
BRENNTAG	PLANT CHEMICALS	BPI372583; BPI373263	7122	8050	23,814.77	23,814.77
CHERRY LANE NURSERY	STRUCTURE MAINTENANCE	101252	7123	8061	190.60	190.60
COASTAL JANITORIAL	STRUCTURE MAINTENANCE	SEPTEMBER 2023	7124	8061	775.00	775.00
COASTAL ROLLOFF	RUBBISH	AUGUST 2023	7125	7093	1,543.80	1,543.80
ENGEL & GRAY	BIOSOLIDS HANDLING	AUGUST 2023	7126	7085	6,278.72	6,278.72
GRAINGER	EQUIPMENT MAINTENANCE	MULTIPLE	7127	8030	233.23	233.23
GSOLUTIONZ	COMMUNICATIONS	09/15/23-10/14/23	7128	7013	356.75	356.75
II SUPPLY	SAFETY SUPPLY'S	93898	7129	8056	40.37	239.47
	EQUIPMENT MAINTENANCE	93848		8030	199.10	
JB DEWAR	FUEL	267015	7130	8020	288.19	288.19
JONES & MAYER	LEGAL COUNSEL	AUGUST 2023	7131	7071	2,793.65	2,793.65
KEMIRA WATER SOLUTIONS	PLANT CHEMICALS	9017804653	7132	8050	15,777.78	15,777.78
MCMASTER CARR	EQUIPMENT MAINTENANCE	MULTIPLE	7133	8030	452.37	452.37
MICHAEL K NUNLEY	REDUNDANCY	1039157	7134	20-7080	8,778.18	11,107.01
	ENGINEERING	CCB AND NPDES PERMIT		7077	2,328.83	
NVIRO	EQUIPMENT MAINTENANCE	3177	7135	8030	370.00	370.00
OILFIELD ENVIRONMENTAL	CHEMICAL ANALYSIS	AERATION BASIN PRE START UP TEST	7136	7078	4,222.50	4,222.50
PERC WATER	REDUNDANCY START UP	6172	7137	20-7080	721.53	721.53
PERRY FORD	AUTOMOTIVE	6154271	7138	8032	190.00	190.00
PG&E	ELECTRICITY	08/09/23-09/07/23	7139	7091	48,572.96	48,572.96
RINCON	COASTAL HAZARD MONITORING	50803	7140		1,383.25	2,647.00
	BIOLOGICAL MONITORING	50799		20-7080	1,263.75	
SAFETY KLEEN	RUBBISH	92710263	7141	7093	2,313.20	2,313.20
SITE ONE LANDSCAPE	EQUIPMENT MAINTENANCE	MULTIPLE	7142	8030	482.55	482.55
USA BLUEBOOK	EQUIPMENT MAINTENANCE	MULTIPLE	7143	8030	558.35	642.68
	LAB SUPPLY'S	INV00131855		8040	84.33	
VWR INTERNATIONAL	LAB SUPPLY'S	8813937585	7144	8040	130.49	130.49
WEST COAST GAUGING	EQUIPMENT MAINTENANCE	3036	7145	8030	6,536.00	6,536.00
SO CAL GAS	UTILITY GAS	07/31/23-08/29/23	092123-7146	7092	3,791.45	3,791.45
CAREN RAY RUSSOM	BOARD SERVICE	AUGUST & SEPTEMBER 2023	7147	7075	200.00	200.00
CLINT WEIRICK	BOARD SERVICE	AUGUST 2023	7148	7075	100.00	100.00
LINDA AUSTIN	BOARD SERVICE	AUGUST & SEPTEMBER 2023	7149	7075	200.00	200.00
KAREN BRIGHT	BOARD SERVICE	SEPTEMBER 2023	7150	7075	100.00	100.00
SUBTOTAL					658,119.77	658,119.77

We hereby certify that the demands numbered serially from 082823-7081 to 092123-7150 together with the supporting evidence have been examined, and that they comply with the requirements of the SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT. The demands are hereby approved by motion of the SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT, together with warrants authorizing and ordering the issuance of checks numbered identically with the particular demands and warrants.

BOARD OF DIRECTORS:

DATE:

Chairman

Secretary



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SUMMARY ACTION MINUTES Meeting of Wednesday, September 6, 2023

1. CALL TO ORDER AND ROLL CALL

Chair Caren Ray Russom called the meeting to order and recognized a quorum.

Present: Caren Ray Russom, Chair, City of Arroyo Grande
Karen Bright, Vice Chair, City of Grover Beach
Linda Austin, Director, Oceano Community Services District

District Staff: Jeremy Ghent, District Administrator
Keith Collins, District Legal Counsel
Mychal Jones, District Superintendent
Amy Simpson, District Bookkeeper/Secretary

2. PLEDGE OF ALLEGIANCE

3. AGENDA REVIEW

Action: Approved as presented.

4. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON AGENDA

There was no public comment.

5. CONSENT AGENDA:

5A. Approval of Warrants

5B. Approval of Meeting Minutes of August 2, 2023

There was no public comment.

Motion: Director Austin motioned to approve the Consent Agenda as presented.

Second: Director Bright

Action: Approved unanimously by roll call vote.

6. ACTION ITEMS:

6A. WWTP REDUNDANCY PROJECT SECONDARY CLARIFIER DAMAGE UPDATE

Administrator Ghent presented this report. The Board had a brief discussion.

There was no public comment.

Action: The Board received and filed this report.

6B. APPROVE AND AUTHORIZE DISTRICT ADMINISTRATOR TO ENTER INTO A PROFESSIONAL SERVICES AGREEMENT WITH MICHAEL K. NUNLEY AND ASSOCIATES, INC. TO PERFORM A TRUNK SEWER COLLECTION SYSTEM CAPACITY EVALUATION AND SANITARY SEWER MANAGEMENT PLAN UPDATE

Administrator Ghent presented this report. The Board had a brief discussion.

Public Comment: Christine Fincke asked what year the District was built. Staff responded that the plant was built in the 1960's.

Motion: Director Bright motioned to approve and authorize District Administrator to enter into Professional Service Agreement with Larry Walker Associates in the amount of \$99,488; and to approve a specific contingency for this project up to 10% (\$9,949) of the total project amount for a total potential amount of \$109,437.

Second: Director Austin

Action: Approved unanimously by roll call vote.

6C. DISTRICT ADMINISTRATOR AND PLANT OPERATIONS REPORT

Administrator Ghent presented the Administrator report.

Superintendent Mychal Jones presented this report during the reporting period of July 1st- July 31st there were no violations of the District's National Pollutant Discharge Elimination System (NPDES) Permit to report. All process values were within Permit limitations.

There was no public comment.

Action: The Board received and filed this report.

7. BOARD MEMBER COMMUNICATIONS

Director Ray Russom commented on the pictures in the District Administrator and Plant Operations Report.

8. CLOSED SESSION:

Conference with Legal Counsel—Anticipated Litigation • Significant Exposure to Litigation Pursuant to 54956.9(d)(4): 1 case.

There was no public comment.

Action: There was no reportable action.

9. ADJOURNMENT:

The Board went into Closed Session at 6:52 p.m.

THESE MINUTES ARE DRAFT AND NOT OFFICIAL UNTIL APPROVED BY THE BOARD OF DIRECTORS AT A SUBSEQUENT MEETING.



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Telephone (805) 489-6666 FAX (805) 489-2765

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Staff Report

To: Board of Directors
From: Jeremy Ghent, PE, District Administrator
Date: October 4, 2023

Subject: CONTRACT FOR COASTAL HAZARD MONITORING WITH RINCON CONSULTANTS

RECOMMENDATION:

Authorize the District Administrator to execute a contract for Environmental Monitoring Services with Rincon Consultants in the amount of \$80,396.

Authorize the District Administrator to execute future contract amendments if required with Rincon Consultants for the Coastal Hazards Monitoring Program in an amount up to \$3,993 (5%) to address unanticipated changes to the Monitoring Program, for a total potential cost of \$84,389.

BACKGROUND:

The California Coastal Commission (CCC) approved Coastal Development Permit (CDP) 3-16-0233 for the District's Wastewater Treatment Plant Redundancy Project. As a Special Condition of this CDP the CCC requires the District to perform ongoing Coastal Hazard Monitoring as described in the approved Coastal Hazards Monitoring Plan.

The District Board previously approved Contract's for annual monitoring and reporting on October 2, 2019; September 16, 2020; November 3, 2021; and October 19, 2022.

Throughout the first four years of monitoring and reporting, Rincon collaborated with the District to develop and refine methods to address each aspect of the Monitoring Plan and provided the District and CCC with a summary and analysis of all collected data in the annual reports, submitted in May 2020, June 2021, June 2022, and June 2023. During year five of the Program, Rincon will continue to build upon the experience and stakeholder relationships developed during the past four years to provide services that will continue to improve the assessment of coastal hazards and meet CDP and CCC requirements.

DISCUSSION:

This contract will provide the District with the necessary monitoring and reporting of the coastal hazards and satisfy the regulatory condition as required in the Central Development Permit. The scope of services for year five of the program is in accordance with the District's Coastal Hazards Monitoring Plan, updated based on previous years monitoring, and includes:

- Collecting regional data including tidal water elevations, wave parameters, meteorological parameters, Arroyo Grande Creek water levels, and groundwater data.
- Making this data available to the District in a database as a continuation to data collected during years one through four.
- Collecting photos and documentation of water levels, surface ponding, and any impact to the WWTP following each qualifying rain event of 1.0 inches or more.
- Collecting photos and documentation following a flood event.
- Conducting a topographic channel survey of Arroyo Grande Creek and lagoon.
- Conducting an aerial survey of the beach berm and lagoon to establish a baseline to detect future changes.
- Conducting investigations in the case of an extreme coastal flood event.
- Providing a monthly summary of environmental data and an annual report describing work done and findings over the prior year.
- Preparing and submitting annual report to California Coastal Commission.
- Installing and maintaining a groundwater level transducer and automated rain gauge. This recommended task is added now that the project construction is nearing completion to provide more nuanced understanding of the environmental conditions related to estuarine flooding risks. Rincon will install an automated groundwater level transducer at an existing monitoring well at the WWTP site. The transducer can record water level and temperature at a frequency of up to once per hour and allows for efficient data download from the wellhead. Rincon will work with the District to identify a suitable location for an automated rain gauge. For both pieces of equipment, Rincon will furnish and install the equipment, perform calibration and maintenance throughout the year, and collect data for the monitoring reports.

FISCAL CONSIDERATION:

This monitoring is an annual requirement from the Coastal Commission and is included in the Fund 19 Operations Budget.

Attachments:

Rincon Consultants Proposal, September 21, 2023



Rincon Consultants, Inc.

1530 Monterey Street, Suite D
San Luis Obispo, California 93401

805 547 0900 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

September 21, 2023

Rincon Project No: 23-15146

Jeremy Ghent, District Administrator
South San Luis Obispo County Sanitation District
1600 Aloha Place
Oceano, California 93445
Via email: jeremy@sslocsd.us

Subject: Proposal to Conduct Year Five (2023/2024) of the Coastal Hazards Monitoring Program for the South San Luis Obispo County Sanitation District in Oceano, San Luis Obispo County, California

Dear Mr. Ghent,

Rincon Consultants, Inc. (Rincon) is pleased to submit this proposal to provide the South San Luis Obispo County Sanitation District (District) with professional services to conduct Year Five (2023/2024) of the Coastal Hazards Monitoring Program (Monitoring Program). The Monitoring Program is a requirement of Special Condition #4 of the Coastal Development Permit (CDP, No. 3-16-0233), issued for the District Wastewater Treatment Facility (Facility) Redundancy and Improvements Project (Project) in May 2019. The Monitoring Program is conducted in accordance with the District's Coastal Hazards Monitoring Plan (Monitoring Plan), written by ESA and approved by the California Coastal Commission (CCC) in May 2019. Rincon has implemented the Monitoring Program since its inception in 2019 and will continue to optimize and build upon the methods designed and utilized during the first four years of the Monitoring Program (2019/2020 through 2022/2023).

Monitoring Program Background

The Monitoring Program involves collecting and analyzing local physical data, archiving regional environmental data, and documenting relevant management activities related to flooding. Flooding potentially impacting operations at the District Facility occurs from three primary mechanisms: coastal flooding, fluvial flooding, and estuarine flooding. The various components of the Monitoring Program provide data metrics related to each of these flooding mechanisms and are guided by the following framework, as outlined in the Monitoring Plan and CDP:

- Flood hazards and management responses to those hazards will be monitored annually.
- As part of annual monitoring, the District will identify how flood hazards (fluvial, estuarine and/or coastal) are impacting and affecting operations of the District Facility.
- Monitoring results will be used to indicate when a flood hazard "trigger" (as defined in the Monitoring Plan) has occurred that necessitates response actions by the District.
- If impacts or a triggering event occur in any given year, the District will evaluate how to best address flood hazards and recommend actions to reduce impacts.



Rincon has worked to optimize and improve the methods employed by the Monitoring Program and resulting data sets since 2019, while generally following the existing Monitoring Plan and addressing the specific provisions of Special Condition 4 of the District CDP. Rincon leverages its Coastal Zone experience and expertise to integrate innovative methods and technical improvements to the monitoring and documentation of conditions associated with surface water runoff, coastal processes, and site-specific topography and hydrology. The Monitoring Program focuses primarily on the lower reaches of the Arroyo Grande Creek and Meadow Creek watersheds, as well as the coastal areas adjacent to Arroyo Grande Lagoon and the Arroyo Grande Creek mouth. Rincon continues to identify opportunities to improve the efficiency of the Monitoring Program and discuss potential cost-sharing alternatives with respect to watershed stakeholders who could benefit from the data collected through the Monitoring Program and who are similarly focused on mitigating flood hazards and improving overall watershed health. Rincon is enthusiastic about the opportunity to continue conducting monitoring during Year Five of the Monitoring Program to build on the processes, methods, and data from previous years and to expand collaboration between the District, area stakeholders, and regulatory agencies.

During Year Five of the Program, Rincon will continue to innovate and improve the data collection and analysis processes and further expand stakeholder relationships cultivated during the past four years of Coastal Hazards Monitoring. Rincon will continue to provide the District with high quality Monitoring Program services that will further improve the assessment of coastal hazards and meet or exceed the requirements of the District's CDP.

Staff

Leading the team is **Colby J. Boggs, MS**, a Principal and Senior Ecologist based out of Rincon's San Luis Obispo office. He has over 20 years of experience directing physical and biological surveying and monitoring projects in the Coastal Zone, including extensive experience with specific District issues and challenges associated with facility operations and improvements that involve coastal wetlands, sensitive species, and regulatory permitting. Mr. Boggs will serve as the Principal-in-Charge and will provide oversight of the Quality Assurance/Quality Control process for the Program. **Heather Price Curran, MS**, will serve as the Project Manager in charge of day-to-day oversight and will serve as the District's primary contact. Ms. Curran is a biologist with a specialty in coastal and marine ecosystems and has an intimate understanding of the Program and the area resources. Ms. Curran has helped lead the Program's data collection, analyses, and reporting since 2019. **Derek Lerma**, a Senior Marine Scientist, will serve as a technical advisor and will continue to work with Mr. Boggs and Ms. Curran and offer his expertise after serving as Project Manager of the Program from 2019 to early 2023. Mr. Lerma has extensive experience in marine and coastal monitoring including work in coastal lagoons, sand beaches, and compliance monitoring programs. **Ryan Wardle, MS**, is a biologist who will continue his role in supporting Ms. Curran with field data collection, analyses, and reporting, leading the majority of the Qualifying Rain Event and Beach Berm and Lagoon Monitoring. **Adam Card** is another biologist involved in the Monitoring Program who will also continue to assist with field data collection and analyses as needed. **Emily Gaston, MS**, is a Senior GIS Analyst who will oversee the data analysis and graphics creation for the Program, as well as the drone survey flight/s and related data processing. **Nikole Vannest** is a Data Solutions & GIS Analyst who will oversee the data archive downloads and maintenance, in addition to creating graphs to visualize Monitoring Program data sets.



Rincon will utilize biologists, hydrologists, stormwater specialists, and GIS professionals located in Rincon's San Luis Obispo office, as well as staff from other offices as needed, to execute the Program. Participating Rincon professionals have extensive local knowledge of the Monitoring Program area, regional weather conditions and regulatory personnel, greatly benefiting the Monitoring Program in terms of responsiveness, schedule, and regional regulatory tendencies.

Scope of Work

Rincon proposes to perform Year Five of the Monitoring Program for the District consistent with the Scope of Work (SOW) for each of the following tasks. The tasks collectively address each of the critical components of the Monitoring Program and include monitoring and surveys associated with the District Facility, nearby waterways, and adjacent beach, to acquire site-specific data. The Monitoring Program remains focused on meeting the CDP requirements through the collection of data and technical analyses of the Monitoring Program areas to evaluate their exposure to flooding hazards for both existing and future conditions. This SOW provides details, by task, of how Rincon intends to collect, process, and analyze the various data metrics, as well as document flood hazard mitigation responses. The primary objective of the Monitoring Program is to track how coastal flooding hazards change over time in the vicinity of the Facility and to document actions and responses by the District and other regional stakeholders for managing those hazards.

The ability to identify critical flooding hazard metrics precipitated by increased groundwater levels and surface water runoff during annual rain events or coastal flooding hazards caused by extreme high tides, storm surges, and significant wave events requires adequate data resolution. The tasks outlined in this SOW follow the Monitoring Plan specifications described in each section and are structured to follow the general requirements presented in Table 3 of the Monitoring Plan.

Task 1 Regional Data Acquisition

In accordance with Section 5.2 of the Monitoring Plan, Rincon developed a Regional Data Archive (archive) in 2019 and has made incremental improvements to date. Acquisition, analysis, and archiving of regional environmental data collected by other government agencies will continue to be stored in the archive developed during the first year of the Monitoring Program. The archive program will continue to download and store data for the following environmental parameters: precipitation, air temperature, wind speed, tidal height, wave height, wave period, and surface water levels in Arroyo Grande Creek, Arroyo Grande Lagoon, and Meadow Creek. Rainfall event, monthly and annual precipitation data will continue to be downloaded for three regional weather stations: the Nipomo Station (CI202) maintained by the California Irrigation Management Information System (CIMIS); the Oceano County Airport Station (KL52) maintained by the National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) and the Federal Aviation Administration (FAA); and the Arroyo Grande Creek Station (Arroyo Grande EC1) maintained by the NWS California Nevada River Forecast Center (CNRFC) (**Error! Reference source not found.**). An additional station located near Lopez Dam will also be added for Year 5 to provide additional data from the upstream portion of the Arroyo Grande Creek watershed. Air temperature and wind speed data will also be downloaded for the Nipomo and Oceano County Airport Stations. Real-time surface water level data for Arroyo Grande Creek, Arroyo Grande Lagoon, and Meadow Creek will continue to be collected by electronic gauges maintained by the San Luis Obispo County (County) Department of Public Works and downloaded from the County website.



The archive process is semi-automated and performed by running a series of scripts developed in R, a statistical computing programming language. The scripts access the application programming interface (API) for each data source, download files containing data for the prior month, and extract and process the data in each data file based on script directives. The scripts then archive the downloaded file to Rincon's file server and automatically produce monthly graphs for assessment and QA/QC.

Analysis will be performed using R scripting or by exporting subsets of data to Microsoft Excel for analysis and graphing. The flexibility afforded by scripting in R enables long term trend analysis and comparative analysis of different types of data for the same time period. Monitoring triggers for rainfall events and stream gauge levels are tracked by Monitoring Program personnel on a daily and weekly basis by accessing real-time data available online.

A summary of the data collected and stored in the archive, as well as the source for each of these physical parameters, is provided below.

Stream Gauges

Source: County of San Luis Obispo
Public Works Department

Stations

- Arroyo Grande Lagoon, Site: 769
- Meadow Creek, Site: 770
- Pier Avenue, Site: 4615

Parameters

- Water level (feet, NAVD 88)

Recording Interval: 15 minutes

Tides and Currents

Source: NOAA

Station

- Port San Luis, CA - Station ID: 9412110

Parameters

- Water level (feet, MLLW)

Recording Interval: 6 minutes

Wave Data

Source: Coastal Data Information Program (CDIP), UCSB

Station

- CDIP MOP SL068 nowcast

Parameters

- Significant wave height (meters)
- Peak period (seconds)

Recording interval: 60 minutes

Weather Data

Source: NOAA NWS, CIMIS, County of San Luis Obispo
Public Works Department

Stations

- Nipomo (CI202)
- Oceano County Airport (KL52)¹
- Arroyo Grande Creek (Arroyo GrandeEC1)²

Parameters

- Air Temperature (degrees Fahrenheit [°F])
- Precipitation (inches)
- Wind speed (miles per hour)

Recording interval: 60 minutes

¹ The Oceano County Airport Station (KL52) was added to the Archive as it was determined to be a more appropriate source of regional weather than Nipomo Station (CI202).

² Only precipitation data were obtained from the Arroyo Grande Creek Station (Arroyo GrandeEC1).



Rincon will host and maintain the archive in-house and will perform routine maintenance, updates, and backups of the environmental data during Year Five (including data from the previous four years). Subject to the District's requests and budget availability, Rincon will make periodic improvements to the database application user interface, including adding features such as dynamic graphs, charts, and analyses summaries.

Regional environmental data will be analyzed and evaluated, in addition to other survey and monitoring data, as part of the annual reporting task. Rincon will provide all collected regional environmental data archived in the database to the District in a Microsoft Excel spreadsheet format for the District's continued use, as requested. If requested by the District, Rincon can provide a web-based user interface source code and database backup file as well.

Assumptions

- The term for regional environmental data acquisition, processing, and analysis is assumed to be November 2023 to October 2024.
- The District will actively collaborate with Rincon's IT/GIS staff to review the database and application user interface and provide feedback and approval during development.
- Data will be obtained from the readily available, public, online sources listed above, and the availability of such data is dependent upon the availability of the data sources. Should the data sources become unavailable during the life of this project, Rincon will coordinate with the District to identify suitable alternatives.
- Only data from sources listed above will be contained in the regional environmental database unless otherwise agreed to by the District and Rincon.
- Any meetings between the District and Rincon's IT/GIS team will be done via telephone and online web conferencing services.
- All database and GIS work will be performed off-site at Rincon's offices.
- All regional environmental data sent to the client will be delivered via email or File Transfer Protocol (FTP).
- Rincon reserves the right to utilize the database and application source code for use in marketing or other similar projects.
- Rincon does not guarantee 24-hour, 7-day accessibility of the database or the user interface application.

Task 2 Rainfall Event Monitoring

Section 4.1 of the Monitoring Plan dictates that visual assessments of the District Facility will be conducted following each Qualifying Rain Event (QRE). The Regional Water Quality Control Board (RWQCB) defines a QRE as any event that produces 0.5 inch or more of precipitation, with a 48-hour or greater period between rain events. Post-QRE visual assessments are required at the conclusion of each QRE and weekly for QREs extending beyond 7 days. Since the start of the rainy season in 2019, Rincon staff have provided QRE notifications and have collaborated with the District in accordance with the Monitoring Plan. Rincon has worked collaboratively with the District to execute an efficient and cost-effective Program since 2019 and will continue to do so throughout the 2023/2024 rainy season. Based on the results of post-QRE assessments conducted by Rincon at the District Facility over the past four years, Rincon is recommending that the threshold for post-rain event visual inspections of the District



Facility be increased to 1.0 inch of rainfall (i.e., for the purposes of the Monitoring Program, a QRE would be defined as any rain event that produces 1.0 inch or more of precipitation, with a 48-hour or greater period between rain events.) This change in monitoring methods will require approval from the CCC, which is still pending at this time.

Rincon staff will continue to closely track the NOAA NWS weather forecast to predict when a QRE might occur, and the NOAA NWS Weather and Hazards Map will be used to track rainfall in real time. The Oceano County Airport NOAA Station (KL52), located within 300 feet of the District, will be used to track on-site rainfall prior to each visual assessment. Rincon also plans to install a new automated rain gauge at the District Facility in late 2023, which will be used to measure and validate on-site precipitation. Additionally, Rincon plans to install an on-site groundwater level transducer in late 2023, which will be used to record continuous groundwater level measurements at the District Facility. Installation and maintenance of the rainfall gauge and groundwater level transducer are described in detail in Task 8. Data collected during each post-QRE visual assessment will include: on-site rain gauge and groundwater level measurements, photographs of the site and surrounding area from repeat photography locations, documentation of stream gauge water level heights in Arroyo Grande Lagoon and Meadow Creek Lagoon, documentation of ponding within the site, and any operational issues and/or District response related to the QRE. Photographs of the Facility and surrounding area will be taken from multiple aspects at 17 predetermined repeat photography locations. Photographs and notes will be taken during post-QRE visual assessments using an ArcGIS Survey123 form on an electronic data tablet. The data will be uploaded, reviewed, and organized by Rincon personnel on an online server. The post-QRE visual assessment methods were refined by Rincon and District staff during the first four years of the Monitoring Program and will continue to be utilized during year five of monitoring.

Each post-QRE visual inspection will include: completing the on-site visual inspection of the District Facility and surrounding area, completing the monitoring datasheet and acquiring photographs at repeat photography locations utilizing ArcGIS Survey123, performing QA/QC on data, and archiving results. A Rincon QSP or assigned storm water professional will perform the post-QRE monitoring inspections. Rincon will track meteorological parameters and notify the District via email when a potential QRE is forecast. Furthermore, Rincon will provide email notifications to the District when Rincon intends to conduct post-QRE visual assessments.

Assumptions

- A QRE is typically defined as a precipitation event that produces 0.5 inch or more of precipitation, with a 48-hour or greater period between rain events. Should the CCC approve the change, the definition of a QRE (for the purposes of the Monitoring Program) could be a precipitation event that produces 1.0 inch or more of precipitation, with a 48-hour or greater period between rain events.
- The number of post-QRE visual assessments conducted by Rincon during the 2023/2024 rainy season will be reduced if the CCC approves changing the definition of a QRE from 0.5 to 1.0 inch of precipitation.
- If the definition of a QRE is changed to 1.0 inch of precipitation or greater, then Rincon assumes that six post-QRE visual assessments will be conducted during the 2023/2024 monitoring period (November 2023 to October 2024).
- If the definition of a QRE remains 0.5 inch of precipitation or greater, then Rincon assumes that nine post-QRE visual assessments will be conducted during the 2023/2024 monitoring period (November 2023 to October 2024).



- Post-QRE visual assessments will be conducted by Rincon on a per-occurrence basis for approximately \$1,670 per event beyond the six assessments included in this scope of work and cost estimate.
- The Oceano County Airport NOAA station (KL52) will be tracked by Rincon personnel to determine when a QRE threshold will be reached. The on-site automated rain gauge (planned for installation at the District Facility in late 2023) will also be utilized to determine when a QRE has occurred.
- Rincon will collect post-QRE information for each post-QRE assessment that will include the following:
 - Photographs of the District Facility and surrounding area;
 - Groundwater level measured at the District Facility;
 - Documentation of surface ponding;
 - Arroyo Grande Lagoon elevation recorded from San Luis Obispo County electronic stream gauge; and
 - Any operational issues and/or damages to the District Facility as a result of the QRE.
- Post-QRE visual inspections will be completed within 48 business hours of the conclusion of a QRE.
- Should a QRE extend beyond seven days, a visual assessment will also occur within 48 hours of the conclusion of each seven-day period within the QRE.
- Rincon will conduct QA/QC, analysis, and summarize post-QRE inspections in the annual report. Rincon will also provide all post-QRE monitoring datasheets as an appendix to the annual report.
- Rincon will require a minimum of 24 business hours for post-QRE inspection mobilizations.

Task 3 Arroyo Grande Channel Survey

Topographic surveys of Arroyo Grande Creek and Lagoon are required as part of the Monitoring Plan at a frequency of once every three years. Data collected at a three-year time frame provides limited value to the District and other regional stakeholders, so Rincon recommends that the Arroyo Grande Channel surveys be conducted annually in conjunction with collection of Arroyo Grande Lagoon and beach berm topographic data. The Arroyo Grande Channel survey will be collected using a high resolution (± 15 cm) GPS to document temporal and spatial changes to nearby water courses to provide relevant information for developing coastal flood hazard management or mitigation strategies.

Rincon scientists will continue to coordinate access to the lagoon with the California Department of Parks and Recreation (State Parks) and will utilize an electronic data tablet and Trimble Catalyst GNSS unit (with horizontal and vertical accuracy of between 5.0 and 15.0 cm) to collect data points along approximately 20 separate transects (cross sections) of lower Arroyo Grande Creek and Arroyo Grande Lagoon. Scientists will wade through the lagoon to collect data using the GPS unit and data tablet. GPS points will be collected along transects from west to east, beginning on the beachside of the lagoon and progressing across the lagoon to the lagoon/dune interface on the inland side of the lagoon. Photographs will be taken in each surveyed section of the lagoon (upper, middle, and lower), as well as the lower portions of Arroyo Grande Creek. The thalweg (deepest point of the cross-section of a body of water) of Arroyo Grande Creek and Lagoon will be identified by collecting depth measurements along each transect using a meter tape affixed to the three-meter survey pole. Channel survey mapping data will then be processed for QA/QC to determine position accuracy and to plot the thalweg on aerial imagery provided from the drone survey described in Task 4. Depth measurements will be used in



conjunction with elevation data to map the thalweg and representative cross sections of lower Arroyo Grande Creek and the upper, middle, and lower reaches of Arroyo Grande Lagoon.

During the 2023/2024 monitoring year, Rincon plans to conduct one Arroyo Grande Creek and Lagoon channel survey, following similar methods to those developed during the first three years of monitoring. Collecting channel survey data on an annual basis will allow for a better understanding of how water depth and topography change within the creek and lagoon over time and following variable annual rainfall and weather conditions.

Task 4 Beach Berm and Lagoon Monitoring

In addition to the topographic and visual surveys outlined in the previous task, monitoring and assessment of Meadow Creek Lagoon, Arroyo Grande Creek and Lagoon, and the foredunes between Arroyo Grande Lagoon and the Pacific Ocean (beach berm) are required as part of the Monitoring Plan. Since 2019, Rincon has conducted monthly pedestrian monitoring of lower Arroyo Grande Creek, Arroyo Grande Lagoon, and the foredunes adjacent to Arroyo Grande Lagoon. In addition to this monthly monitoring, Rincon has conducted one annual drone survey of the same area. While the monthly monitoring provides a snapshot of the lagoon footprint and foredune crest, the aerial imagery and other data collected during the annual drone survey has proved to be much more accurate and comprehensive. Rincon is therefore proposing to improve the quality, quantity, and accuracy of the beach berm and lagoon monitoring data by replacing monthly pedestrian surveys (and one annual drone survey) with three annual drone surveys (in December, February, and late September) combined with two pedestrian surveys (in April and June/July). Drone surveys must be conducted outside of the western snowy plover nesting season (March through early September), and pedestrian surveys could therefore be conducted during the months when drone surveys are prohibited. Implementation of these updates to the methodology will require approval by both the CCC and State Parks. Communications with both agencies have been initiated regarding these methodology changes and State Parks has approved conducting three drone surveys per year outside of the western snowy plover nesting season. Approval from the CCC is still pending.

Emily Gaston will be leading Rincon's drone survey efforts. Ms. Gaston is a broadly trained environmental scientist and spatial analyst with an emphasis in geographic information sciences, remote sensing, and coastal geomorphology. She received her M.S. in Geographic Information Sciences from CSU Long Beach in 2021, and her master's thesis research focused on the use of drones as an alternative to walking transects to monitor western snowy plover nests at Ormond Beach, as well as to collect critical habitat data without causing disturbances to nesting birds. Rincon's extensive experience in the area, combined with Ms. Gaston's expertise in flying drones within western snowy plover nesting habitat, would allow us to conduct drone surveys in a manner that would not disturb sensitive species or habitats. Utilizing drone technology to collect detailed measurements of the creek-lagoon-dunes system offers several distinct advantages compared to ground-based data collection methods. Drone-based surveys are not limited by ground constraints and can easily capture the entirety of the site in a moment of time, as opposed to pedestrian monitoring, where data can only be collected at limited points and transects within the monitoring area. Drone surveys also provide the ability to later measure spatial metrics without additional field visits. The data collected during drone surveys is used to produce high-resolution aerial imagery and highly accurate topographic features which reflect the current condition of the creek, lagoon, foredunes, and beach. By conducting drone surveys three times a year, Rincon could monitor both subtle and dramatic changes to the landscape over different seasons. This seasonal



monitoring could reveal patterns and trends related to rainfall, wave action, erosion, deposition, vegetative growth, and other factors. The drone is equipped with high precision and highly accurate GPS, which makes it easier and more efficient to measure and quantify change over time.

Assuming CCC approval is granted, drone surveys will be conducted in December 2023, February 2024, and late September 2024 (outside of the western snowy plover breeding season). During each drone flight, a DJI Mavic 3 Multispectral (M3M) Real Time Kinetic (RTK) Drone will be used to acquire visual and topographic data on Arroyo Grande Lagoon and Creek, the adjacent beach berm, and the lower portions of Meadow Creek. The drone operations will be conducted by an FAA licensed pilot and coordinated with local State Parks staff. The drone is equipped with a 12-megapixel camera that collects data in the visible spectrum (R, G, B) and near-infrared. The drone-acquired data uses a RTK receiver as well as a redundant GPS system capable of providing real-time positioning data. The drone will be connected to an Emlid Reach 2 base-station which is connected to the virtual reference station provided by California Real Time Network.

The drone survey data will then be used to produce high-resolution RGB and near-infrared aerial images and a topographic digital surface model (DSM) with sub-foot pixel resolution at sub-foot horizontal and vertical accuracy. The topographic DSM will represent surface heights of the land cover and not the bare earth across the site. The acquired data will be processed into ArcGIS-compatible formats and files for post-processing assessment and development of various mapping and topographic visual products (orthomosaic and DSM). The images will be processed using ESRI Drone2 Map photogrammetry software to stitch the imagery together and create the associated products (i.e., aerial imagery and a DSM). Vegetation cover will be assessed using both the natural color and near-infrared aerial imagery. Initial vegetation cover classification will be performed using supervised classification and object/shape analysis using ESRI ArcGIS image classifications toolsets. The output will then be refined manually through image interpretation, heads up digitization, and editing. Total beach volume will also be calculated, and the elevation of the foredune crest will be mapped. These drone survey efforts provide an excellent way to assess the entire monitoring area, allowing for accurate mapping of 3D elevation, vegetation, beach volume, and the lagoon footprint.

During the western snowy plover nesting season, Rincon proposes to conduct two pedestrian surveys (in April and June/July 2024) consistent with the Monitoring Plan and the monitoring methods developed during the past four years of monitoring. Rincon scientists will document the Arroyo Grande Lagoon footprint and beach berm elevations during field surveys and will continue to coordinate with State Parks staff to gain access to monitoring locations that are within western snowy plover nesting closure areas. A high-resolution GPS will be used to acquire data at ten established monitoring locations along the edge of Arroyo Grande Lagoon and Creek, and one location along the edge of Meadow Creek. At each of these eleven locations, Rincon personnel will collect high resolution latitude, longitude, and elevation data at the water's edge and will take photographs from multiple aspects. Location (GPS) points and photographs will be acquired at all monitoring locations to document the status of the lagoon mouth, water levels, and lagoon topography. Collected data will be uploaded from the data tablet to Rincon's server, reviewed, and archived. Data points collected in the field will be projected onto an aerial image of the lagoon to track changes in the lagoon footprint over time and document water levels. Beach berm elevation data will be collected along six transects, running east to west, at regular intervals along each transect. Photographs of each beach berm transect will also be taken from the western-most point of each transect. The high-resolution data will provide a snapshot of the beach berm (along six transects) and the lagoon footprint (at eleven points) during the dynamic spring and



early summer months, and can be compared to data collected during the same months in previous years to document the changing topography of the beach berm and lagoon over time.

Combining three drone surveys and two pedestrian surveys per year to monitor this dynamic creek-lagoon-dunes system would enhance the efficiency and accuracy of data collection and would further our ability to provide valuable insights for the Monitoring Program.

Assumptions

- Rincon assumes that the CCC will approve the proposed changes to the Monitoring Program (i.e., conducting three drone surveys and two pedestrian surveys per year, instead of one drone survey and twelve pedestrian surveys per year).
- Weather conditions on the day of the drone survey(s) will meet Rincon and drone flight safety standards with adequate sunlight for aerial photography.
- All drone operations conducted by Rincon will be conducted in coordination with State Parks and will comply with all FAA regulations. Preliminary evaluations have determined that an FAA waiver is not needed for this project site.

Task 5 Post-Flood Event Monitoring (Triggered)

In accordance with Section 4.3 of the Monitoring Plan, flood hazard triggers are defined as specific conditions associated with increased water levels occurring in Arroyo Grande Creek (fluvial), Arroyo Grande Lagoon (estuarine), and coastal areas with the potential to affect the District Facility or adjacent areas. In accordance with the flood hazard triggers defined in the Monitoring Plan, Rincon will conduct post-flood event monitoring when any of the following conditions are met: 1) water levels in Arroyo Grande Creek cause overtopping of the creek's northern levee, 2) a median elevation of 9.5 feet North America Vertical Datum (NAVD) 88 occurs within Arroyo Grande Lagoon (as measured by the County stream gauge) over a period of 24 hours, and/or 3) the water level in Arroyo Grande Lagoon (as measured by the County stream gauge) exceeds 10.4 NAVD 88. Rincon has budgeted two post-flood event monitoring surveys during the 2023/2024 monitoring year, to be conducted when one or more of the aforementioned flood hazard triggers is reached. The post-flood event observations are intended to document and quantify the impacts of flood events and provide benchmark data needed to predict and manage future flooding hazards precipitated by storms events.

Each post-flood event monitoring survey will include documentation of rainfall amounts, stream gauge water levels at Arroyo Grande Lagoon and Meadow Creek (provided by County stream gauges and Monitoring Program static stream gauges, tidal data, and effluent discharge volumes at the Facility. Rincon staff will also conduct an on-site monitoring visit to observe and document conditions within and around the District Facility following the flood event. Rincon will also communicate with District staff to obtain information on operational impacts, damages, and/or flood will be provided to the District for review. A brief letter report summarizing the flood conditions and any impacts to the lagoon, creek levee, and/or District infrastructure will be provided to the District for review. The individual post-flood event information will then be incorporated into the annual report and analyzed for potential flood management recommendations. Post-flood event letter reports will also be included as an attachment to the annual report.



Assumptions

- Rincon assumes that flood event triggers will be reached up to two times during the 2023/2024 monitoring period.
- Post-flood event monitoring will be conducted on a per occurrence basis, with a fixed cost of \$2,355 per event. If more or fewer than two flood events occur during the 2023/2024 monitoring period, then the cost of this task will be adjusted accordingly and the District will only be billed if/when post-flood event monitoring is conducted.
- Rincon will track electronic water level data reported by San Luis Obispo County for Arroyo Grande Creek and Lagoon (in addition to other nearby stream gauges) to identify when a flood event may occur.
- Rincon will notify the District when a flood event is expected to occur, and may request additional information from District staff regarding on-site conditions, site access, nearby water levels, and/or levee breaches. Rincon will communicate with District staff prior to conducting on-site post-flood event monitoring and will coordinate the site visit to ensure site safety prior to arrival.
- Post-flood event monitoring will be conducted by a Rincon professional within 48 business hours of a flood event, or on the earliest business day when the District Facility is safely accessible following the flood event and any County evacuation orders have been lifted for the area.

Task 6 Extreme Coastal Flood Event Monitoring (Triggered)

The Monitoring Plan defines coastal flooding as one of the three major sources of flooding that may pose a risk to the District Facility. Water levels in Arroyo Grande Lagoon and the lower reaches of Arroyo Grande Creek are intermittently influenced by coastal processes which include extreme high tides, storm surge, and major swell events, particularly at times when the creek and/or lagoon mouth is open to the Pacific Ocean. Potential coastal flooding impacts caused by these extreme coastal events include backwatering of Arroyo Grande Lagoon and Creek, and localized flooding in the vicinity of the District Facility. Each of these potential outcomes cause flood hazards not only at the beach and adjacent neighborhood, but may ultimately cause levee overtopping and District Facility infrastructure damages or disruptions. Extreme coastal flood events (ECFEs) are not clearly defined by the Monitoring Plan, but based on Rincon's data collection and observations over the past four years, water levels within Arroyo Grande Lagoon and Creek receive coastal influence during times when there are high tides of greater than 6.0 feet MLLW and/or swells greater than ten feet combined with high tides. Documenting extreme coastal flood events will provide valuable information regarding current flood hazards, as well as projections for coastal conditions that may become more frequent in the coming decades due to sea level rise.

Rincon proposes to conduct ECFE monitoring at least twice during the 2023/2024 rainy season (November through March), at times when there is a high tide of greater than 6.0 feet MLLW, and/or a large swell event (greater than 10 feet) combined with a high tide. ECFE monitoring will be conducted when the mouth of Arroyo Grande Lagoon and/or Creek is open or anticipated to open. Tidal and swell conditions will be tracked by Rincon scientists to determine when an ECFE will occur. ECFE monitoring will include documentation of water levels within Arroyo Grande Creek and Lagoon, Meadow Lagoon, and other nearby waterways, as measured by the County stream gauges and Monitoring Program static stream gauges. ECFE monitoring will also include an in-person visual survey of Arroyo Grande Lagoon and lower Arroyo Grande Creek, with a particular focus on the location and status (open or closed) of



the lagoon/creek mouth, as well as any other locations where seawater may be overtopping the foredunes entering the lagoon. Rincon scientists will also record and photograph lower Arroyo Grande Creek, Arroyo Grande Lagoon, and lower Meadow Creek water level conditions, and assess and document conditions along the beach berm, beach, and lagoon, as well as at the District Facility and surrounding neighborhood. Prior to conducting the ECFE field monitoring visit, the District will be contacted and information requested with respect to on-site conditions and whether any preventative or responsive actions or measures are necessary prior to, during, and/or after the ECFE. Should any damage to the District Facility or surrounding infrastructure result from an ECFE, a brief letter report summarizing the conditions and any impacts to the lagoon, levee, tidal gate, and/or District infrastructure will be provided to the District for review. The individual ECFE monitoring information will then be incorporated into the annual report and analyzed for potential flood management recommendations. Should any ECFE letter reports be written, they will also be included as an attachment to the annual report.

Assumptions

- Rincon will conduct ECFE monitoring at least twice during the 2023/2024 monitoring period, when ECFE conditions are met.
- ECFE monitoring will be conducted during daylight hours when: 1) a high tide of greater than 6.0 feet MLLW occurs during the rainy season (November to March) and the lagoon mouth is open or anticipated to open; and/or 2) during high tide when an offshore swell event greater than 10 feet (NOAA Marine Forecast) is predicted and the lagoon mouth is open or anticipated to open.
- Additional ECFE monitoring can be conducted beyond the two ECFE monitoring visits described in the task, at the District's request, on a per occurrence basis at a fixed cost of \$1,947 per event.
- Rincon will track tidal data (NOAA) and swell data (NOAA Marine Forecast and other local models) to identify when an ECFE may occur.
- Rincon will notify the District when an ECFE is expected to occur, and may request additional information from District staff regarding on-site conditions, site access, nearby water levels, and/or County flood evacuation orders. Rincon will communicate with District staff prior to conducting ECFE monitoring and will coordinate the site visit to ensure site safety prior to arrival.
- Rincon will conduct ECFE monitoring before, during, and/or immediately following high tide to capture conditions during the event. Rincon personnel will ensure that necessary safety measures are taken prior to conducting ECFE monitoring, and photographic documentation will be limited to those areas that can be safely accessed on foot during the ECFE.

Task 7 Annual Reporting

Per the requirements of Special Condition #4 of the CDP, Rincon will develop an annual report in Spring 2024 that describes: CDP requirements for the Monitoring Program, detailed Monitoring Program methods, the archived environmental data, the survey data collected by Rincon personnel, and relevant flood hazard management actions implemented by the District during the monitoring year. The CDP requires that the annual report be submitted by June 10, 2024, and the monitoring year for the purposes of the annual report will therefore be May 2023 through April 2024. The annual report will present a detailed summary of the data collected during the monitoring year and collectively for all previous years, including the methods used and the accuracy of measurements taken. All spatial data, graphics and maps will be presented with a consistent datum and units to facilitate analysis and



evaluation of the data in a clear and efficient manner consistent with CCC guidance. Environmental data will be summarized monthly, and analysis will be focused on providing descriptive statistics for each regional environmental parameter collected and archived. The annual report will develop a results section that presents the results of each monitoring method employed and describes how information collected during event-based observations correlates with archived regional environmental datasets. Photographs collected during the various monitoring and survey tasks will be included within the report and appendices, and labeled with date, location, and orientation. A subsection in the results section will present the management actions implemented by the District during the monitoring year to mitigate perceived or documented flood hazards in the region.

In March and April 2024, Rincon will coordinate with the District to review of the regional environmental data, survey data, observations, and management actions conducting during the monitoring year, as well as to discuss proposed annual reporting results and conclusions. The intent of the coordination is to align the District's proposed actions and highest flood hazard priorities with the data and observations collected by the Monitoring Program. This coordination will aid in formulating an analysis of the data in terms of vulnerability of the District Facility to flooding hazards. The analysis will include assessment of the temporal and spatial changes to the various water bodies and coastal topography including volumetric and geomorphic changes. The District will provide Rincon with information on any flooding that occurred at District or adjacent facilities or land, including how they were impacted (e.g., ponding, operational issues, evacuation, etc.) to aid Rincon in developing a qualitative assessment of potential impacts to collection, treatment, and discharge operations at the District Facility. The annual report will conclude with summarizing proposed management actions, limitations, Monitoring Program needs, and potential data gaps to be addressed in the upcoming monitoring year, as well as other recommendations. The recommendations will be formulated as both short-term and long-term actions to guide the District's efforts to improve the resiliency of the District Facility to flood hazards.

The draft annual report will be provided to the District no later than the last week of May 2024 and require a ten-day turnaround to meet the June 10, 2024 deadline for submittal to the CCC. The annual report provided by Rincon will be reviewed by the Principal-in-Charge after it has been reviewed by Rincon's technical editing and production departments to provide a high-quality product. Following District review, Rincon will then submit an electronic version of the annual report, including all associated appendices, to the CCC on behalf of the District.

Task 8 Installation and Maintenance of Groundwater Level Transducer and Automated Rain Gauge

The Monitoring Plan requires that groundwater elevation at the District Facility be monitored in order to provide a more nuanced understanding of environmental conditions related to estuarine flooding risks. Now that Project construction is nearing completion, the District has requested that Rincon include installation and maintenance of a groundwater level transducer at the District Facility, in addition to an automated rain gauge, in this proposal.

Rincon will furnish and install one Solinst Levellogger autonomous transducer (transducer), which records water level and temperature, at an existing groundwater well at the District Facility. At a frequency of once per hour, this transducer can provide data for up to ten years. If desired, an advanced transducer capable of recording electrical conductivity can be substituted at additional expense. The transducer will be installed on a Solinst DirectRead cable, which allows for efficient data download from



the wellhead without removing the downhole equipment. Rincon recommends that a reference point on the wellhead be professionally surveyed to accurately convert depth-to-water data to water level elevation. Rincon will work with the District to identify a suitable location for an automated rain gauge. Rincon will furnish and install an appropriate rain gauge (e.g., Hach, HOBO, or Teledyne ISCO model) following District approval. Rincon will conduct quarterly site visits, during which a Rincon scientist will download data from the transducer and rain gauge. Rincon staff will manually measure the water level in the monitoring well to calibrate the transducer data, note the condition of the wellhead, and perform calibration and maintenance as needed on the rain gauge, such as annual battery replacement. Data from both devices will be incorporated into the Monitoring Program database and include in data analyses and annual reporting.

Task 9 Project Management and Coordination

This task includes coordination within Rincon's project team and with the District and MKN to ensure that the Monitoring Program is executed efficiently. In addition to general client coordination and internal coordination, this task includes oversight of project costs, schedule, staffing, and deliverables. Coordination with the CCC, State Parks, the County, Oceano Community Services District, and other regional stakeholders, including any necessary communications and/or meeting attendance, is also covered under this task. Additionally, this task will include tracking of climatic and coastal conditions to determine when defined Monitoring Plan flood triggers will be met or exceeded. This task also involves financial management of the project and monthly progress reports with regard to the work scope and the budget attached with our monthly invoicing.

Cost Estimate

Rincon recognizes the District's Coastal Hazards Monitoring Program requires annual support and the frequency of some of the proposed tasks may fluctuate annually. Rincon has tailored Year Five of the Program to meet the District's needs by providing flexibility with regard to the number of post-QRE visual inspections, beach berm and lagoon monitoring visits, and "triggered" tasks, depending on agency approval of proposed new methodology and actual climatic and oceanic conditions that will occur during the 2023/2024 monitoring period. Rincon also recognizes additional Program surveys, monitoring, and coordination may be required. Additional work outside of the tasks presented in this SOW can be accomplished on a time and materials basis.

We estimate completion of the currently proposed work scope identified above, including triggered tasks, will require a budget of approximately **\$80,396**. Table 1 provides a breakdown of cost by task. We recommend establishing an additional 5% contingency budget to address additional monitoring visits which may be required due to unpredictable climatic and/or oceanic conditions (e.g., post-QRE inspections, post-flood event monitoring, and/or ECFE monitoring). With the additional 5% contingency, the total proposed cost would be **\$84,389**. Monitoring was estimated on a per task or per day cost and Rincon is willing to negotiate with the District to address Monitoring Program needs or funding limitations. Both the SOW and cost described in this proposal are fully negotiable to meet the District's needs.



Table 1 Cost Estimate – Coastal Hazards Monitoring Program Year Five

Tasks	Labor	Direct Expense	Budget
Task 1: Regional Data Acquisition	\$ 3,220		\$ 3,220
Task 2: Rainfall Event Monitoring	\$9,436	\$1,224	\$10,660
Task 3: Arroyo Grande Channel Survey	\$4,646	\$204	\$4,850
Task 4: Beach Berm and Lagoon Monitoring	\$14,214	\$5,598	\$19,812
Task 5: Post-flood Event Monitoring (Triggered)	\$3,489	\$408	\$4,710
Task 6: Extreme Coastal Flood Event Monitoring (Triggered)	\$3,486	\$408	\$3,894
Task 7: Annual Reporting	\$17,736		\$17,736
Task 8: Installation and Maintenance of On-site Groundwater Transducer and Rainfall Gauge	\$3,386	\$4,034	\$7,420
Task 9: Project Management and Coordination	\$8,910		\$8,094
Total 2023/2024 Proposed Project Budget without Triggered Tasks			\$71,792
Total 2023/2024 Proposed Project Budget with Triggered Tasks			\$80,396
Total 2023/2024 Proposed Project Budget with Triggered Tasks and 5% Contingency			\$84,389

Thank you for considering Rincon to continue supporting the District with this essential Coastal Hazards Monitoring work. Please do not hesitate to contact us if you have questions about this proposal or need additional information.

Sincerely,
Rincon Consultants, Inc.

Heather Price Curran, MS
Biologist/Project Manager
Phone: 805-706-2793
Email: hcurran@rinconconsultants.com

Colby J. Boggs, MS
Principal/Senior Ecologist
Phone: 805-547-0900 x117
Email: cboggs@rinconconsultants.com

CC: Derek Lerma, Senior Marine Scientist
Email: derma@rinconconsultants.com

Attachments

Attachment 1 - Rincon 2024 Fee Schedule

Attachment 1

Rincon 2024 Fee Schedule

Standard Fee Schedule for Environmental Sciences and Planning Services

Professional, Technical, and Support Personnel*	July 1 – December 31, 2023
Senior Principal	\$308
Principal	\$297
Director	\$297
Senior Supervisor II	\$282
Supervisor I	\$263
Senior Professional II	\$246
Senior Professional I	\$230
Professional IV	\$204
Professional III	\$189
Professional II	\$168
Professional I	\$150
Associate III	\$126
Associate II	\$113
Associate I	\$105
Field Technician	\$91
Data Solutions Architect	\$189
Senior GIS Specialist	\$181
GIS/CADD Specialist II	\$161
GIS/CADD Specialist I	\$145
Technical Editor	\$142
Project Accountant	\$121
Billing Specialist	\$103
Publishing Specialist	\$116
Clerical	\$103

* Professional classifications include environmental scientists, urban planners, biologists, geologists, marine scientists, GHG verifiers, sustainability experts, cultural resources experts, and other professionals. Expert witness services consisting of depositions or in-court testimony are charged at the hourly rate of \$400.

Reimbursable Expenses

Direct Cost	Rates
Photocopies – B/W	\$0.25 (single-sided), \$0.45 (double-sided)
Photocopies – Color	\$1.55 (single-sided), \$3.10 (double-sided)
Photocopies – 11" by 17"	\$0.55 (B/W), \$3.40 (color)
Oversized Maps	\$8.50/square foot
Digital Production	\$15/CD, \$20/flash drive
Light-Duty and Passenger Vehicles*	\$90/day
4WD and Off-Road Vehicles*	\$150/day

*Current IRS mileage rate for mileage over 50 and for all miles incurred in employee-owned vehicles.

Other direct costs associated with the execution of a project, that are not included in the hourly rates above, are billed at cost plus 16%. These may include, but are not limited to, laboratory and drilling services, subcontractor services, authorized travel expenses, permit charges and filing fees, mailings and postage, performance bonds, sample handling and shipment, rental equipment, and vehicles other than covered by the above charges.

Annual Escalation. Standard rates subject to 3.5% annual escalation, on January 1.

Payment Terms. All fees will be billed to Client monthly and shall be due and payable upon receipt or as indicated in the contract provisions for the assignment. Invoices are delinquent if not paid within 10 days from receipt or per the contractually required payment terms.

Equipment	Rate
Environmental Site Assessment	
Soil Vapor Extraction Monitoring Equipment	\$160
Four Gas Monitor	\$137
Flame Ionization Detector	\$110
Photo Ionization Detector	\$82
Hand Auger Sampler	\$62
Water Level Indicator, DC Purge Pump	\$46
CAPDash	\$7,500
Natural Resources Field Equipment	
UAS Drone	\$276
Spotting or Fiberoptic Scope	\$170
Pettersson Bat Ultrasound Detector/Recording Equipment	\$170
Sound Level Metering Field Package (Anemometer, Tripod and Digital Camera)	\$113
GPS (Submeter Accuracy)	\$67
Infrared Sensor Digital Camera or Computer Field Equipment	\$57
Scent Station	\$23
Laser Rangefinder/Altitude	\$11
Pitfall Traps, Spotlights, Anemometer, GPS Units, Sterilized Sample Jar	\$9
Mammal Trap, Large/Small	\$1.55/\$0.55
Water and Marine Resources Equipment	
Boat (20-foot Boston Whaler or Similar)	\$800
Multiparameter Sonde (Temperature, Conductivity, Turbidity, DO, pH) with GPS	\$170
Water Quality Equipment (DO, pH, Turbidity, Refractometer, Temperature)	\$62
Refractometer (Salinity) or Turbidity Meter	\$38
Large Block Nets	\$114
Minnow Trap	\$98
Net, Hand/Large Seine	\$57
Field Equipment Packages	
Standard Field Package (Digital Camera, GPS, Thermometer, Binoculars, Tablet, Safety Equipment, and Botanic Collecting Equipment)	\$114
Remote Field Package (Digital Camera, GPS, Thermometer, Binoculars, Tablet and Mifi, Delorme Satellite Beacon, 24-Hour Safety Phone)	\$144
Amphibian/Vernal Pool Field Package (Digital Camera, GPS, Thermometer, Decon Chlorine, Waders, Float Tube, Hand Net, Field Microscope)	\$170
Fisheries Equipment Package (Waders, Wetsuits, Dip Nets, Seine Nets, Bubbler, Buckets)	\$57
Underwater and Marine Sampling Gear (Photo/Video Camera, Scuba Equipment [Tanks, BCD, Regulators, Wetsuits, etc.])	\$57/diver
Marine Field Package (Personal Flotation Devices, 100-foot Reel Tapes with Stainless Carabiners, Pelican Floats, Underwater Slates, Thermometer, Refractometer, Anemometer, Various Field Guides)	\$100
Insurance, Hazard, and Fees	
Historic Research Fees	\$55
L&H Dive Insurance	\$57/diver
Level C Health and Safety	\$70/person



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Post Office Box 339 Oceano, California 93475-0339

1600 Aloha Oceano, California 93445-9735

Telephone (805) 489-6666 FAX (805) 489-2765

www.sslocsd.org

Staff Report

To: Board of Directors
From: Jeremy Ghent, District Administrator
Date: October 4, 2023

**Subject: CONTRACT AMENDMENT 1 FOR WWTP REDUNDANCY PROJECT
ADMINISTRATION SERVICES WITH MKN AND ASSOCIATES**

RECOMMENDATION:

Authorize the District Administrator to execute a contract amendment for continued Wastewater Treatment Plant Redundancy Project Administration Services with MKN and Associates, Inc., (MKN) in the amount of \$140,506, for a total amended contract budget of \$259,955.

BACKGROUND AND DISCUSSION:

In February 2019, the District contracted with MKN to provide administrative and project management services for the WWTP Redundancy Project. Contracts for continuation of these services were executed every twelve to eighteen months over the following three years (January 2020, March 2021, and October 2022). Contracted services have included:

- Review of project documents;
- Integration of funding and permitting conditions in the general specifications for project bidding;
- Assisting with final approval of the Coastal Development Permit;
- Leading efforts required for the USDA loan application;
- Leading procurement for Construction Management team, Startup and Commissioning team, Biological Monitoring Services, and Community Workforce Agreement Administrative services;
- Development of a contractor prequalification package and evaluating the prequalification applications received;
- Consultant coordination;
- Assisting with construction bid phase;
- Reporting to the District Administrator;
- Quarterly reports to the Board of Directors;
- Coordination with USDA for the loan; and
- Providing construction support as the District's representative.

The District advertised the Project bid documents in September 2020. The contract was awarded to the low bidder, J.R. Filanc Construction Company. Notice to Proceed was issued on January

25, 2021 and the construction duration is 30 months. MKN's 2022 project administration contract anticipated construction completion by July 2023. However, equipment and materials delays, as well as unanticipated damage to Secondary Clarifier No. 2 (SC2) have caused construction delays and additional project management effort.

This contract amendment is presented to ensure that the project continues with appropriate support and oversight, including continued support for the investigations, review, and coordination associated with the damage at SC2. The repair of SC2 and coordination to complete the WWTP Redundancy Project is a current and ongoing issue, and the construction completion date is currently unknown. For the purposes of this contract amendment, MKN has assumed construction completion in April 2024. In serving as the District Project Manager for the Redundancy Project since February 2019, and through many years as the District's General Engineering firm, MKN provides a unique project background and understanding. The proposed amendment scope of services consists of the following efforts:

- Attend Project meeting through construction;
- Report project status to the Board of Directors;
- Provide construction phase support services as the District's representative;
- Provide technical support to the District for the Startup and Commissioning Consultant;
- Coordinate with USDA staff and District as needed for USDA loan;
- Assist with Ribbon Cutting Ceremony and project close-out;
- Assist with SC2 damage investigations and review; and
- Provide as-needed staff support services related to the project.

FISCAL CONSIDERATION:

MKN proposes to complete this work on a time and materials basis, in accordance with the existing contract, with a budget of \$140,506 that will not be exceeded without written authorization from the District. A detailed breakdown of the estimated fee is provided with the attached proposed contract amendment. Contract Amendment 1 includes approximately \$110,000 for efforts related to the SC2 damage.

The current project budget includes \$100,922 for professional services contingency. There is also approximately \$2.4 million in construction contingency. Staff recommends utilizing the professional services contingency and reallocating the remaining budget from the construction contingency. These costs are largely offset by the \$3500/day Liquidated Damages for the construction delay.

OUTCOME

Approval of this contract will provide the necessary professional resources to supplement and support District staff for the WWTP Redundancy Project, including completion of construction (assumed April 2024) and project close-out activities.

Attachments:

MKN Proposal – Amendment 1 to Year Four Staff Support for WWTP Redundancy Project



MKN & Associates, Inc.
354 Pacific Street
San Luis Obispo, CA 93402

September 26, 2023

Jeremy Ghent, PE
District Administrator
South San Luis Obispo County Sanitation District
Sent via email: jeremy@sslocsd.us

RE: Amendment 1- Extension of Year 4 Staff Support for WWTP Redundancy Project

Dear Jeremy,

Michael K. Nunley & Associates, Inc., (MKN) is submitting this proposed contract amendment 1 to extend staff support services for the District's Wastewater Treatment Plant (WWTP) Redundancy Project. MKN has been providing these support services since February 2019. In September 2022, the District contracted with MKN to provide administrative and project management services through completion of the construction and project close out services, for the fourth, and final, year of the project.

Project Background

At the time the Year 4 Staff Support contract was initiated, the WWTP Redundancy Project construction completion date was anticipated to occur in July 2023. MKN has been efficient with the budget and was able to extend services to October 2023, even with unanticipated needs. Delays in equipment and materials, along with damage to the slab of the new secondary clarifier, have delayed construction completion. MKN is representing the District as the Project team works through these issues and gets on scheduled towards project completion.

This contract amendment is needed to maintain administrative and project management services and includes additional funding for investigations and continued support associated with the secondary clarifier damage and repair. The repair solution has not yet been determined, so the schedule for project completion is unknown. For the purposes of this amendment, it is assumed construction will continue for an additional seven months, for project completion in April 2024.

Table 1 summarizes the current budget status for the tasks under contract as of September 21, 2023. Note that an additional task (Task 307) was added to track the time spent on the unanticipated investigations and review related to the damage at Secondary Clarifier 2.



Table 1. Contract Budget Summary through September 21, 2023				
	Budget	Spent to Date (through 9/21/2023)	Remaining	Notes
Task Group 207: COMPLETION OF BID DOCUMENTS AND PROCUREMENT SUPPORT				
Task 207. Procurement of Startup and Commissioning Assistance	\$ 18,025	\$ 12,188	\$ 5,838	
Subtotal	\$ 18,025	\$ 12,188	\$ 5,838	
Task Group 300: CONSTRUCTION PHASE SUPPORT				
Task 302. Weekly Progress Meetings	\$ 11,371	\$ -	\$ 11,371	(1)
Task 303. Construction Phase Support	\$ 36,122	\$ 40,868	\$ (4,746)	
Task 304. Report to District Board of Directors (Quarterly)	\$ 8,137	\$ 4,087	\$ 4,050	
Task 305. Assist with Ribbon-Cutting Ceremony	\$ 3,749	\$ 237	\$ 3,512	
Task 306. Assist with Project Close Out	\$ 9,682	\$ -	\$ 9,682	
Task 307. Assist with SC2 Damage Investigations and Review	\$ -	\$ 31,303	\$ (31,303)	(2)
Subtotal	\$ 69,062	\$ 76,494	\$ (7,433)	
Task Group 400: PROJECT ADMINISTRATION				
Task 404. Coordination with USDA for loan	\$ 10,001	\$ 2,554	\$ 7,447	
Task 406. As-Needed Services	\$ 22,361	\$ 10,602	\$ 11,759	
Subtotal	\$ 32,363	\$ 13,157	\$ 19,206	
Total	\$119,449	\$ 101,838	\$ 17,611	
Notes: (1) Meetings were billed to Task 303. (2) Task 307 was not originally budgeted.				

Scope of Work & Estimated Cost to Complete

Task Group 100 – Review of Current Project Documentation

Completed in 2019

Task Group 200 – Completion of Bid Documents and Procurement Support

Remaining tasks within this task group include the following.

Task 207 Procurement of Startup and Commissioning Assistance

Procurement of startup and commissioning assistance has been completed. However, MKN has been supporting District staff and the Startup/Commissioning consultant. MKN will continue the following services under this task:

- Attend biweekly meetings with startup/operations consultant
- Support startup/operations consultant with gathering information needs



- Coordinate as needed between startup/operations consultant and other District consultants and contractor
- Review draft documents prepared by startup/operations consultant and provide comments

A total of \$18,205 was budgeted for Task 207. As of September 21, 2023, \$12,188 had been spent. It is anticipated that continued services will be needed as the District moves to commissioning and completion of the new Standard Operating Procedures and Operations and Maintenance Manual. We recommend budgeting an additional \$9,755 for this task.

Task Group 300 – Construction Phase Support

MKN will continue providing staff support during project construction, including coordination with the District's Construction Manager (MNS Engineers). MKN will serve as an extension of District staff and assist with general project oversight, review of materials, and evaluation of issues that require District input. MKN will report directly to the District Administrator. The following tasks are included in this scope of work, as a continuation of services:

- Weekly Progress Meetings: MKN will attend weekly progress meetings with the Contractors, and the District's Construction Manager. MKN will prepare for these meetings (i.e., review the most current schedule, and coordinate with the Construction Manager regarding the agenda ahead of the meeting). It is assumed the Construction Manager will chair these meetings, develop the agenda and conduct each meeting, and prepare meeting minutes and/or action items. This task was estimated at 1 hour per week. Progress meetings were billed out under the Construction Phase Support task. MKN recommends moving the budget accordingly.
- Construction Phase Support: The level of effort required for construction phase support is difficult to predict for any project, and can vary greatly depending on site conditions, the Contractor, the Construction Management team, and unforeseen circumstances. This task was budgeted at four (4) hours per week for the remaining duration of the project construction, estimated (at the time) to be 9 months (through July 2023), for the following tasks. The budget for these tasks has been expended. A recommendation for additional budget was developed based on the effort expended to date and assuming construction is completed in April 2024.
 - Construction Documents, including Requests for Information (RFIs), construction schedule, monthly progress payments, and change orders: It is assumed the District's Construction Manager will manage the construction documents and lead review of the materials and responses to the Contractor. MKN will review on behalf of the District, where requested, assist with responses on an as-needed basis, and notify the District's Administrator when critical decisions are needed and/or of important project impacts.
 - Tracking Permitting and Financing Requirements: MKN will track progress of compliance with the permitting and funding requirements based on review of the permits and funding agreements and coordination with the District's consultants and Contractor.
 - Reporting: MKN will provide a report of time spent and tasks completed to the District Administrator each month.
 - As-Needed Support: MKN may provide as-needed support services related to the project as directed by the District Administrator.
- Report to District Board of Directors: MKN will provide periodic reports on the project progress at the District Board Meetings. This proposal assumes quarterly (every three months) project reports to the Board of Directors during construction phase and assumes a written report (approximately 15 minutes) will be provided summarizing the project status including major work completed, schedule status, budget status, and any noteworthy occurrences since the last project update. No additional budget is needed at this time.



- Ribbon-Cutting Ceremony: MKN recommends a budget of 26 hours to assist District staff in coordination for a project ribbon-cutting ceremony, or other completion celebration as desired by the District. No additional budget is needed.
- Assist with Project Close Out: MKN recommends a budget of 55 hours to assist District staff in project close-out activities. We assume the District's Construction Manager, MNS Engineers, will oversee close-out activities with the Contractor and collect close-out documentation. MKN will review these documents on behalf of the District and coordinate with MNS on any questions or clarifications needed. MKN will also assist the District as requested in project completion activities. No additional budget is needed at this time.

Two new tasks are added as part of the amendment resulting from the unanticipated damage to Secondary Clarifier No 2 (SC2).

- Assist with SC2 Damage Investigations and Review: Since July 10, 2023, MKN has assisted District staff with coordination, investigations and review of the damage that was discovered at SC2. This was not previously scoped or budgeted. MKN retained the services of a licensed Structural Engineer to assist. Additionally, MKN corresponded with District staff, the Construction Manager, and the Design Engineer to request information; reviewed information provided; coordinated for an independent Structural Engineer review; provided reports to the Board of Directors; reviewed construction documentation; performed independent investigations; coordinated and attended meetings; and worked to determine the extent of the damage, potential cause(s), and move towards the solution for repair. Approximately \$31,000 has been expended to date. Additional reviews and coordination will be required to complete the SC2 repair, as well as documentation and reporting. MKN will support the District in this matter as needed. A budget of an additional \$65,000 for Project Management and structural engineering review is recommended for this task.
- Concrete Materials Testing for SC2 Investigation (if authorized): There is potential to perform concrete materials testing to review the estimated shrinkage of the concrete installed at SC2. At this time, the materials are not available and MKN and District staff anticipates the testing may not be warranted. MKN recommends budgeting this line item in case the District desires to move forward with the materials testing in the future. This task and budget would only be utilized if authorized by the District Administrator. The materials testing is estimated at \$14,200, solely for the certified materials testing laboratory. No subcontractor markups on these costs are proposed.

Task Group 400 – Project Administration

Task 404 Coordinate with USDA for Loan

The loan application was completed in 2020 and the District has received conditional approval. The loan agreement will likely not be completed until after construction. MKN has coordinated the effort for the District meeting the conditions to date and anticipates additional coordination will be required through construction, and afterwards to complete the loan process. A budget of approximately \$10,000 was allocated for this effort. MKN does not anticipate needing additional budget at this time.

Task 406 Allowance for As-Needed Assistance

Approximately \$22,300 was budgeted for as-needed assistance that may be required during the construction phase. This was based on an average of two hours per week over twelve months.



Approximately half of this budget has been expended to date. No additional budget is recommended for this task at this time.

Fee Estimate

MKN proposes to complete this work on a time and materials basis with a budget not to exceed \$140,506, based on the 2023 MKN rate schedule included as **Exhibit A**, for a total Year 4 budget of \$259,955. The estimated level of effort is summarized in Table 2.

Table 2. Summary of Budget Status and Amendment 1 Request						
	Budget	Spent to Date (through 9/21/2023)	Remaining	Estimated Cost to Complete	Amendment 1	Total Proposed Budget (original + Amt 1)
Task Group 207: COMPLETION OF BID DOCUMENTS AND PROCUREMENT SUPPORT						
Task 207. Startup & Comm. Assist	\$ 18,025	\$ 12,188	\$ 5,838	\$ 9,755	\$ 3,918	\$ 21,943
Subtotal	\$ 18,025	\$ 12,188	\$ 5,838	\$ 9,755	\$ 3,918	\$ 21,943
Task Group 300: CONSTRUCTION PHASE SUPPORT						
Task 302. Weekly Meetings	\$ 11,371	\$ -	\$ 11,371	\$ -	\$(11,371)	\$ -
Task 303. Const. Phase Support	\$ 36,122	\$ 40,868	\$ (4,746)	\$ 32,711	\$ 37,457	\$ 73,579
Task 304. Report to District Board	\$ 8,137	\$ 4,087	\$ 4,050	\$ 4,050	\$ -	\$ 8,137
Task 305. Ribbon-Cutting Ceremony	\$ 3,749	\$ 237	\$ 3,512	\$ 3,512	\$ -	\$ 3,749
Task 306. Assist with Close Out	\$ 9,682	\$ -	\$ 9,682	\$ 9,682	\$ -	\$ 9,682
Task 307. Assist with SC2 Damage	\$ -	\$ 31,303	\$(31,303)	\$ 65,000	\$ 96,303	\$ 96,303
Task 307.A. Concrete Testing (if authorized)	\$ -	\$ -	\$ -	\$ 14,200	\$ 14,200	\$ 14,200
Subtotal	\$ 69,062	\$ 76,494	\$ (7,433)	\$129,155	\$136,588	\$205,649
Task Group 400: PROJECT ADMINISTRATION						
Task 404. Coordination with USDA	\$ 10,001	\$ 2,554	\$ 7,447	\$ 7,447	\$ -	\$ 10,001
Task 406. As-Needed Services	\$ 22,361	\$10,602	\$ 11,759	\$ 11,759	\$ -	\$ 22,361
Subtotal	\$ 32,363	\$ 13,157	\$ 19,206	\$ 19,206	\$ -	\$ 32,363
Total	\$119,449	\$101,838	\$ 17,611	\$158,116	\$140,506	\$259,955



We would like to express our thanks to the District Board and staff for the opportunity to continue working on this important project. Should you have any questions or wish to discuss any of the information presented herein, please do not hesitate to contact me at your convenience at eshields@mknassociates.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eileen Shields'.

Eileen Shields, PE
Principal Engineer

Enclosures:

- Exhibit A – Rate Schedule



2023 FEE SCHEDULE FOR
PROFESSIONAL SERVICES

ENGINEERS AND TECHNICAL SUPPORT STAFF

Engineering Technician	\$90/HR
Administrative Assistant	\$100/HR
CAD Technician I	\$118/HR
CAD Design Technician II	\$140/HR
Senior Designer	\$155/HR
Assistant Engineer I	\$125/HR
Assistant Engineer II	\$145/HR
GIS Specialist	\$150/HR
Planner	\$170/HR
Senior Planner	\$190/HR
Project Engineer I/ Senior Scientist	\$170/HR
Project Engineer II	\$180/HR
Senior Project Engineer I	\$195/HR
Senior Project Engineer II	\$200/HR
Project Manager	\$205/HR
Principal Engineer	\$230/HR
Project Director	\$255/HR

CONSTRUCTION MANAGEMENT SERVICES

Construction Inspector	\$173/HR
Assistant Resident Engineer	\$178/HR
Resident Engineer	\$196/HR
Construction Manager	\$214/HR
Principal Construction Manager	\$252/HR

Routine office expenses such as computer usage, software licenses and fees, telephone charges, office equipment and supplies, incidental postage, copying, and faxes are included as a 3% fee on labor cost.

DIRECT PROJECT EXPENSES

Outside Reproduction	Cost + 10%
Subcontracted or Subconsultant Services	Cost + 10%
Travel & Subsistence (other than mileage)	Cost
Auto Mileage	Current IRS Rate - \$.625/mi.



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

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1600 Aloha Oceano, California 93445-9735

Telephone (805) 489-6666 FAX (805) 489-2765

www.sslocsd.org

Staff Report

To: Board of Directors
From: Jeremy Ghent, District Administrator
Date: October 4, 2023

**Subject: WWTP REDUNDANCY PROJECT SECONDARY CLARIFIER DAMAGE
UPDATE #3**

RECOMMENDATION:

Receive and file the Wastewater Treatment Plant Redundancy Project Secondary Clarifier Damage Update #3.

BACKGROUND:

At the September 6, 2023, Board Meeting staff discussed the status of the investigation into the concrete failure at the newly constructed Secondary Clarifier #2.

The team was analyzing five different potential causes:

- Unforeseen Site Condition
- Act of God/Natural Disaster
- Construction Defect
- Potential Material Failure
- Potential Design Error

As of the September meeting the team had ruled out the first three potential causes and were focusing the investigation on the latter two, a potential material failure and/or a potential design error.

DISCUSSION:

Since the September 6th Board meeting the District's investigation into the failure the project team has reached concurrence on the cause of the failure. Through a third-party review of the structural design calculations and multiple meetings with the designer it has been determined that the primary contributor to the failure is the design of the floor slab. There appears to have been both calculation and assumption errors in the design that led to a floor thickness that could not adequately withstand the hydrostatic pressure. This issue only exists in the floor section and the remaining portions of the structure appear adequate after review.

Potential Material Failure (Ruled Out)

Staff's initial review of potential causes identified a concern of the lack of an additive that would have reduced concrete shrinkage. In reviewing this issue with the designer, they indicated that the shrink reducing agent likely had minimal effect on the failure that had occurred.

Design Error (Identified Cause)

The District in conjunction with MKN and Smith Structural Group has undertaken a review of Kennedy Jenks structural design. This review has revealed that the initial design did not fully evaluate the floor section for the variety of loads that structure experiences. Kennedy Jenks is working on a revised design to replace and reinforce the floor.

NEXT STEPS:

Kennedy Jenks is preparing design plans for removal, replacement and anchoring of the floor. In addition to replacing the floor slab with a thicker section, micro-pile anchors will be used to further protect against hydrostatic uplift.

The team reviewed multiple alternatives. The alternative that is advancing has some obvious advantages.

- Replaces the damaged section entirely.
- Maintains the volume/capacity of the clarifier.
- Avoids modifying or replacing steel clarifier mechanism.
- Eliminates pressure relief valves (PRVs)
- Provides a wide range of operational flexibility for taking the clarifier offline.

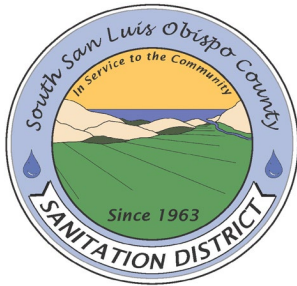
The team expects to receive 75% construction plans late in October.

The 75% plans will include a schedule for the repairs.

Staff and the project team will continue to update the board at every board meeting.

FINANCIAL CONSIDERATIONS:

The District has incurred some minimal expenses participating in the 3rd party investigation. The cost of the repair and delay is still unknown. At this time there is no indication that the District will incur direct costs from the delay or to implement the repair.



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Post Office Box 339 Oceano, California 93475-0339
1600 Aloha Oceano, California 93445-9735
Telephone (805) 489-6666 FAX (805) 489-2765
www.sslocsd.org

Staff Report

To: Board of Directors
From: Jeremy Ghent, District Administrator; Mychal Jones, Plant Superintendent
Date: October 4, 2023

Subject: DISTRICT ADMINISTRATOR AND PLANT OPERATIONS REPORT

This report represents ongoing information on the latest District staff activities on major capital projects and studies, programmatic initiatives, regional collaboration, miscellaneous activities, and Plant Operations. *Updates since the last report are provided in italics below:*

Capital Projects:

Redundancy Project:

- *The Project Team is focused on developing a repair strategy for the damaged floor in the newly constructed secondary clarifier.*
- *Several operational aspects of the project continue to be delayed.*
- *None of the new process can be brought online without the secondary clarifier.*
- *The site is being prepared for paving and paving repairs later this month.*

Misc:

- *On September 13th, at the request of Director Austin and the General Manager of the Oceano Community Services District, the SSLOCSD District Administrator provided an update to OCSD regarding the damage to the secondary clarifier and the associated project delay.*

Plant Tours:

- *None*

Tentative Items:

- *Update on Secondary Clarifier Construction Issue (November 1st)*
- *Resolution Recognizing 60 Years of SSLOCSD Service to our community. (November 1st)*

Plant Operations Report

During the reporting period of August 1st- August 31st there were no violations of the District's National Pollutant Discharge Elimination System (NPDES) Permit to report. All process values were within Permit limitations.

Monthly Plant Data for August 2023

August 2023	INF Flow MGD	INF Peak Flow MGD	INF BOD mg/L	EFF BOD mg/L	BOD % Removal	INF TSS mg/L	EFF TSS mg/L	TSS % Removal	Fecal Coliform MPN/100 mL	Chlorine Usage lbs/day
Low	2.1	3.1	441	18.3		463	19.5		<1.8	312
High	2.35	4	559	41.8		577	33.1		920	759
Aug 2023 AVG	2.2	3.26	505	26.6	94.7	521	25.7	95.1	60	485
Aug 2022 AVG	2.13	3.31	480	25	94.8	448	28.7	93.6	35	390
Limit	5.0			40/60/90	>80		40/60/90	>80	2000	

Operation and Maintenance Tasks

- Test ran emergency generator and ran emergency bypass pump
- Cleaned up maintenance building and shop
- Performed weed abatement throughout plant grounds
- Cleaned out sludge beds
- Completed electrical and shed installation for new polymer pump
- Performed a hydraulic flush of the Fixed Film Reactor
- Troubleshoot and cleaned brine discharge flow meter
- Replaced float ball valve on Digester No. 1 water seal
- Drained and rinsed Chlorine Contact Tank serpentine channels
- Checked and marked Underground Service Alerts
- Repaired handrails and kick plates on Chlorine Contact Tank
- Continued monitoring of chlorine levels and foam levels in Aeration Basins
- Installed new polymer injection line at Splitter Box
- Fabricated new trailer hitch for plant cart
- Installed new life rings throughout treatment facility
- Troubleshoot uninterruptible power supply units on programmable logic controllers
- Repaired 2-inch chemical pump
- Installed new safety signage throughout treatment facility

Work Orders Completed

- Rinsed down all clarifiers
- Inspected digester vacuum/pressure relief valves
- Inspected and verified operation of all clarifier drives
- Flushed all sumps throughout treatment plant
- De-ragged both primary sludge pumps

- Inspected Water Champ flash mixer
- Rinsed and verified operation of disinfection control probes
- Performed monthly safety walk
- Inspected 6-inch trash pump

Training

Staff participated in training on:

- OIT staff members continued shadow training with Operations and Lab staff

Call Outs

- August 7th at 11:17 PM – High ORP alarm. Upon arrival, Operations staff observed and ensured the system was back to normal following the alarm. Operations staff continued to monitor the system prior to resetting alarm.
- August 9th at 12:06 AM – High ORP alarm. Upon arrival, Operations staff observed and ensured the system was back to normal following the alarm. Operations continued to monitor the system prior to resetting alarm.

2023 Non-Serious Violations

- April 20, 2023 – Daily Maximum Fecal Coliform
This exceedance expires October 19, 2023.

Non-serious (also known as chronic) violations are subject to a mandatory minimum penalty of \$3,000 each when four or more occur in any period of six consecutive months (period commencing on the date that one of the violations occurs and ending 180 days after that date). The first three violations in that period are not assessed a mandatory minimum penalty.

Staff





