# Regular Board of Directors Meeting

Tuesday May 6, 2025, at 3:00 p.m.

2435 Wallace Avenue, Summerland CA 93067

## NOTES

This meeting will be held at the District's office at 2435 Wallace Avenue in Summerland.

The public may attend the meeting in person. The public may also listen to the meeting telephonically by calling +1 669 900 6833 (San Jose) Meeting Code ID: 983 226 8568, **Passcode 123** or through the internet at https://us02web.zoom.us/j/9832268568?pwd=nlt8jNgA5DOkwx950nKL4h0nmahQbj.1&omn=84255333774

Should you wish to participate by offering comments on either non-agenda or agenda-related items, please follow the instructions set forth in Item IV of the agenda.

Materials related to an item on this agenda, which are part of the agenda packet, are available for public inspection on the District's website at www.summerlandsd.org, or during normal business hours (8:00 a.m. - 4:00 p.m. weekdays) in the District's office.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Clerk of the Board at (805) 969-4344. Notification 24 hours prior to the meeting will help the Clerk make reasonable arrangements to ensure accessibility to this meeting.

## AGENDA

I. **CALL TO ORDER/ROLL CALL**

II. **PLEDGE OF ALLEGIANCE**

III. **APPROVAL OF THE AGENDA** [Action Item]
The Board President will ask the Board, public, and staff if there are any additions or modifications to the Agenda.

IV. **PUBLIC COMMENT** [Non-Agenda Items]
The public may address the Governing Board on items of interest to the public that are not already on the agenda and are within the subject matter jurisdiction of the Board.
The three-minute time limit is pursuant to District regulation.

V. **APPROVAL OF THE MINUTES FOR THE REGULAR BOARD MEETING OF APRIL 10, 2025** [Action Item]

VI. **APPROVAL OF THE MONTHLY EXPENDITURES FOR APRIL 2025, INCLUDING PAYROLL AND PETTY CASH** [Action Item]

VII. **COMMITTEE REPORTS**
- A. Finance Committee Report
- B. Administrative, Operations & Personnel Committee Report
- C. Ad-Hoc Strategic Committee Report

**SUMMERLAND SANITARY DISTICT**
**Regular Board of Directors Meeting**
**AGENDA**

VIII. **NEW BUSINESS ITEM**

A. **Summerland Sanitary District Coastal Hazard Monitoring Plan** [Non-Action Item]
The Board received the completed Coastal Hazards Monitoring Plan per State Water Resources Control Board's permit requirement. The Board will receive a presentation from Nick Garrity, Principal Engineer at ESA, and will discuss the highlights of the report.

B. **Resolution No. 2025-01: A Resolution of the Governing Board of Directors of the Summerland Sanitary District Adopting Guidelines for the Submission and Tabulation of Protests in Connection with Rate Hearings Conducted Pursuant to Article XIII D, Section 6 of the California Constitution** [Action Item]
The Board will be requested to consider adopting Resolution No. 2025-01.

IX. **CLOSED SESSION ITEMS**

A. Public Employee Appointment [Gov. Code section 54957(b)(1)]
Title: Business Manager

Conference with Labor Negotiators (Gov. Code section 54857.6)
Unrepresented Employee: Business Manager

X. **FINANCIAL STATUS REPORT** [Action Item]
The Board will receive Financial Status and Cash Balance Reports for Funds 5215, 5216, and 5217 and may ask staff for explanations. The Board will be asked to accept the reports as presented.

XI. **OPERATIONS MANAGER REPORT**
The Operations Manager will provide a written report on operations, facility, collection system maintenance, and regulatory affairs and will provide explanations as requested.

XII. **ADMINISTRATIVE MANAGER REPORT**
The Administrative Manager will provide a written report on the District's administrative and financial affairs and will provide explanations as requested.

XIII. **BOARD COMMUNICATIONS**

A. Board Communications
B. Items for future Board meetings
C. Next Board meeting date

XIV. **ADJOURNMENT**

THIS AGENDA WILL BE POSTED ON May 2, 2025, ON THE SUMMERLAND SANITARY DISTRICT'S AND POST OFFICE BULLETIN BOARDS, AND THE SUMMERLAND SANITARY DISTRICT'S WEBSITE.

V

# Minutes of the Regular Board of Directors Meeting

Thursday, April 10, 2025, at 3:00 p.m.

These are the minutes of the Summerland Sanitary District Governing Board meeting held at the District's office at 2435 Wallace Avenue, Summerland, California.

The public was able to listen to the meeting telephonically by calling +1 669 900 6833 (San Jose) Meeting Code ID: 983 226 8568 Passcode 123 or through the internet at https://us02web.zoom.us/j/9832268568?pwd=nlt8jNgA5DOkwx950nKL4h0nmahQbj.1&omn=84255333774

The agenda notice for this meeting, including instructions for the public to provide comments and/or participate in the electronic meeting, was posted on the district's website and bulletin board and at the Post Office at least 72 hours in advance of the meeting.

PRESIDENT G. ROBINSON CALLED THE REGULAR BOARD MEETING TO ORDER AT 3:01 P.M.

I. CALL TO ORDER/ROLL CALL

| | | |
|---|---|---|
| DIRECTORS PRESENT | JOLENE COLOMY | |
| | JOHN FRANKLIN | |
| | TRICIA PRICE | |
| | GARY ROBINSON | |
| | JAMES WITMER | |
| ABSENT | - | |
| OTHERS PRESENT | DAVID LEWIS | Operations Manager |
| | MARJON (MAR) SOUZA | Administrative Manager |

II. PLEDGE OF ALLEGIANCE

III. APPROVAL OF THE AGENDA

President G. Robinson asked if there were any modifications or changes. Hearing no objections, the agenda was approved as submitted.

IV. PUBLIC COMMENT [Non-Agenda Items]

President G. Robinson asked the Clerk of the Board M. Souza if there were any public comments. No public comments were submitted in advance and no members of the public that were present provided any public comments.

V. APPROVAL OF THE MINUTES FOR THE REGULAR BOARD MEETING MARCH 18, 2025 [Action Item]

Director J. Colomy made a motion to approve the regular board meeting minutes of March 18, 2025. The motion was seconded by Director J. Franklin.

The motion was carried by the following roll call vote:

| | | |
|---|---|---|
| AYES: | 5 | J. Colomy, J. Franklin, T. Price, G. Robinson, J. Witmer |
| NOES: | 0 | None |
| ABSENT: | 0 | None |
| ABSTAIN: | 0 | None |

VI. APPROVAL OF THE MONTHLY EXPENDITURES FOR MARCH 2025, INCLUDING PAYROLL AND PETTY CASH [Action Item]

District Management answered the Board's questions and clarified information about the payout of bills. Director J. Franklin made a motion to approve the monthly expenditures, including payroll and petty cash totaling $93,594 from Operations Fund 5215. The motion was seconded by Director J. Witmer, and was carried by the following roll call vote:

| | | |
|---|---|---|
| AYES: | 5 | J. Colomy, J. Franklin, T. Price, G. Robinson, J. Witmer |
| NOES: | 0 | None |
| ABSENT: | 0 | None |
| ABSTAIN: | 0 | None |

VII. COMMITTEE REPORTS

A. Finance Committee Report
The committee did not meet.

B. Administration, Operations & Personnel (AOP) Committee
The committee did not meet.

C. Ad-Hoc Strategic Committee
The committee met with the Montecito Sanitary District Board of Directors on March 19, 2025, to discuss the Carollo Study Results and possible future collaboration projects. The Committee and Board agreed to explore future collaboration possibilities together and asked MSD legal counsel Aleks Giragosian to prepare a presentation with options. Mr. Giragosian will provide a PowerPoint presentation under the new business item A.

D. Ad-Hoc Rate Study Committee
The committee did not meet.

VIII. NEW BUSINESS ITEMS

A. **Consideration of Consolidation, Dissolution & Annexation, and/or Contract Services** [Action Items]

The Board was introduced to Mr. Aleks Giragosian Esq. Mr. Giragosian shared information about his role at Montecito Sanitary District, his experience with LAFCO, and the services that can be provided to SSD. The board was presented with an agreement contract to consider and approve to retain a joint Montecito Sanitary District (MSD) -Summerland Sanitary District legal counsel representation by Mr. Aleks Giragosian, Esq. concerning possible consolidation, annexation & dissolution, or contract services.

Director J. Colomy made a motion to approve retaining Mr. Aleks Giragosian as legal counsel for potential consolidation, annexation, and/or contracting services. The motion was seconded by Director J. Witmer, and was carried by the following roll call vote:

| | | |
|---|---|---|
| AYES: | 5 | J. Colomy, J. Franklin, T. Price, G. Robinson, J. Witmer |
| NOES: | 0 | None |
| ABSENT: | 0 | None |
| ABSTAIN: | 0 | None |

President G. Robinson signed the retaining letter that was included in the board meeting packet. At this point, the Board received a presentation by Mr. A. Giragosian concerning options for consolidation, annexation & dissolution, or contract services. Mr. Giragosian answered board questions regarding the options, the LAFCO requirements, and the process for each of these options.

After the SSD Strategic Committee met with the MSD Board at a subsequent meeting on March 28, 2025, a motion was approved to start the process of consolidation with the Montecito Water District and it was requested the SSD Board consider joining these efforts.

The current SSD board agenda includes consideration of authorizing Legal Counsel to begin the process with LAFCO and to prepare the Resolution of Application for consolidation, or dissolution & annexation with Montecito Water District. President G. Robinson said that he believed it was too early in the process to consider this. He spoke to the Board President Ken Coates of Montecito Water District (MWD) and their board has not discussed these possibilities yet. The MWD Board is scheduled to meet on April 22nd. The board agreed with this opinion.

Mr. Giragosian advised to consider the SSD board's intention for consolidation or annexation & dissolution with MWD. The Board discussed that they had a preference towards consolidation since with this process Summerland will be represented on the board if a new agency would be created.

The Ad Hoc Committee has been scheduled to meet with the full MSD board on April 16th to discuss these items. The Board agreed that the committee members can inform the MSD that the SSD board is open to exploring all options, including contract services, and has a preference to move forward to consolidation if the MWD is open to exploring this option.

## VIII. CLOSED SESSION

Public Employment (§54957)
Title: District Administrative Manager

Board President G. Robinson said that the Board received the resignation letter from Mar Souza and that this upcoming vacant position will be discussed during the closed session. Public Comments were requested if there were any, there were none.

The Board and the Administrative Manager went into a closed session at 4:08 p.m. and reconvened into an open session at 4:30 p.m. The following action was taken:

Director Tricia Price made a motion to approve the recruitment for a Business Manager with a compensation range between $12,000 - $15,000, a month, depending on experience. The motion was seconded by Director J. Witmer, and was carried by the following roll call vote:

| | | |
|---|---|---|
| AYES: | 5 | J. Colomy, J. Franklin, T. Price, G. Robinson, J. Witmer |
| NOES: | 0 | None |
| ABSENT: | 0 | None |
| ABSTAIN: | 0 | None |

X. FINANCIAL STATUS REPORT – MARCH 2025 [Action Item]

The Board received Financial Status and Cash balance reports for Funds 5215, 5216, and 5217, and staff provided explanations as requested.

Director J. Colomy made a motion to accept the Financial Status Report as presented. The motion was seconded by Director J. Franklin and was carried by the following roll call vote:

| | | |
|---|---|---|
| AYES: | 5 | J. Colomy, J. Franklin, T. Price, G. Robinson, J. Witmer |
| NOES: | 0 | None |
| ABSENT: | 0 | None |
| ABSTAIN: | 0 | None |

XI. OPERATIONS MANAGER REPORT

Operations Manager D. Lewis provided a written and oral report and answered Board questions.

XII. ADMINISTRATIVE MANAGER REPORT

Administrative Manager M. Souza provided a written and oral report and answered Board questions.

IX. BOARD COMMUNICATIONS

A. Board Communications: -
B. Items for future Board meetings: -
C. Next regular board meeting: Tuesday, May 6, 2025.

X. ADJOURNMENT

President G. Robinson adjourned the meeting at 4:45 p.m.

Respectfully submitted:

_____

Jolene Colomy
Secretary

Date: May 6, 2025

Minutes prepared by M. Souza

# Expenditure Transactions (Real-Time)

From April 1 through April 30, 2025

From 4/1/2025 to 4/30/2025

Selection Criteria: Fund = 5215, 5216, 5217

Layout Options: Summarized By = Fund; Page Break At = Fund; Columns = Vendor

## Fund 5215 -- SummerInd San Dist Running Exp

| Document | Post On | Dept | LIAcct | Description | Amount | Vendor | Vendor Name |
|---|---|---|---|---|---|---|---|
| CLM - 0829528 | 4/3/2025 | | 7731 | Gasoline March 2025 | 209.97 | 522736 | McCormix Corporation |
| CLM - 0829532 | 4/3/2025 | | 7090 | Additional Ins. Certificate Holder County of SB Ad | 47.50 | 002073 | SPECIAL DISTRICT RISK MANAGEMENT AUTHORITY |
| CLM - 0829533 | 4/3/2025 | | 7516 | Dig Alert Ticket Charges/Service March 2025 | 26.65 | 828128 | UNDERGROUND SERVICE ALERT |
| CLM - 0829539 | 4/3/2025 | | 7362 | Hose Nozzles and Valves for maintenance | 123.74 | 116421 | SITE ONE LANDSCAPE SUPPLY LLC |
| CLM - 0829544 | 4/3/2025 | | 7510 | Call Center Service - April 2025 | 44.25 | 106048 | CENTRAL COMMUNICATIONS |
| CLM - 0829546 | 4/3/2025 | | 7516 | Annual Utility and Encroachment Permit | 226.00 | 790180 | Summerland Sanitary District |
| CLM - 0829546 | 4/3/2025 | | 7510 | Payroll Program Dec 2024 | 80.00 | 790180 | Summerland Sanitary District |
| CLM - 0829546 | 4/3/2025 | | 7030 | Reimburse C.B. for Purchase Safety Shoes | 230.58 | 790180 | Summerland Sanitary District |
| CLM - 0829546 | 4/3/2025 | | 7030 | SSD Logo for caps (8) | 113.10 | 790180 | Summerland Sanitary District |
| CLM - 0829546 | 4/3/2025 | | 7510 | Payroll Program January 2025 | 80.00 | 790180 | Summerland Sanitary District |
| CLM - 0829546 | 4/3/2025 | | 7460 | Annual Backflow Testing /Repair | 292.00 | 790180 | Summerland Sanitary District |
| CLM - 0829546 | 4/3/2025 | | 7763 | Water usage mainline cleaning Q1&2 FY24/25 | 14.15 | 790180 | Summerland Sanitary District |
| CLM - 0829546 | 4/3/2025 | | 7430 | Application Operator-In-Training Certificate J.R. | 169.00 | 790180 | Summerland Sanitary District |
| CLM - 0829546 | 4/3/2025 | | 7030 | SSD logo on new shirts (8) new EE | 113.10 | 790180 | Summerland Sanitary District |
| CLM - 0829546 | 4/3/2025 | | 7510 | Payroll Program Feb & March 2025 | 154.00 | 790180 | Summerland Sanitary District |
| CLM - 0829568 | 4/3/2025 | | 7460 | Rate Study 2025 Invoice #5 | 3,712.17 | 169424 | LECHOWICZ & TSENG MUNICIPAL CONSULTANTS |
| JE - 0280265 | 4/3/2025 | | 6475 | HRA Administrative Fee - MAR 2025 | 13.50 | | |
| MIC - 0208264 | 4/3/2025 | | 7763 | Water Delivery March 7, 2025 | 26.06 | 067307 | CULLIGAN OF VENTURA COUNTY |
| MIC - 0208264 | 4/3/2025 | | 7763 | Water Delivery March 21, 2025 | 26.06 | 067307 | CULLIGAN OF VENTURA COUNTY |
| CLM - 0829557 | 4/6/2025 | | 6600 | Medical Benefits May 2025 + April new Employee | 7,501.33 | 002073 | SPECIAL DISTRICT RISK MANAGEMENT AUTHORITY |
| CLM - 0830627 | 4/10/2025 | | 7763 | Water Usage March 2025 | 134.45 | 556712 | MONTECITO WATER DISTRICT |
| CLM - 0830628 | 4/10/2025 | | 7053 | Phone Wireless March 2025 | 189.71 | 297454 | VERIZON WIRELESS |
| CLM - 0830630 | 4/10/2025 | | 7763 | Water Usage Lines Cleaning FYE25 3rd Quarter | 20.44 | 556712 | MONTECITO WATER DISTRICT |
| CLM - 0830632 | 4/10/2025 | | 7508 | Rate Making Legal Advice March 2025 | 10,664.00 | 062817 | COLANTUONO HIGHSMITH & WHATLEY PC |
| CLM - 0830637 | 4/10/2025 | | 7110 | Comp. Ad-Hoc Strategic Committee Meeting 4/7/25 | 175.00 | 167410 | GARY W ROBINSON |
| CLM - 0830638 | 4/10/2025 | | 7110 | Comp. Ad-Hoc Strategic Committee Meeting 4/7/25 | 175.00 | 765907 | John Franklin |
| JE - 0280598 | 4/15/2025 | | 7546 | SB2557 Property Tax Admin Fee 2024/25 (7546) | 3,143.53 | | |
| CLM - 0831610 | 4/17/2025 | | 7030 | Safety Shoes D.L. | 222.00 | 790180 | Summerland Sanitary District |

Petty Cash Exp. Dec. through March

Credit Card Exp.

# Expenditure Transactions (Real-Time)

From 4/1/2025 to 4/30/2025

Selection Criteria: Fund = 5215, 5216, 5217

Layout Options: Summarized By = Fund; Page Break At = Fund; Columns = Vendor

## Fund 5215 -- SummerInd San Dist Running Exp

| Document | Post On | Dept | LIAcct | Description | Amount | Vendor | Vendor Name | |
|---|---|---|---|---|---|---|---|---|
| CLM - 0831610 | 4/17/2025 | | 7070 | Household supplies March 2025 | 50.33 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7070 | Refreshments for Townhall meeting 3/6 | 29.78 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7070 | Refreshments for RBM 3/18 | 45.98 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7362 | Replacement Lorex Camera System | 505.33 | 790180 | Summerland Sanitary District | Credit Card Exp. March |
| CLM - 0831610 | 4/17/2025 | | 7362 | Small tools and Workshop organization | 544.07 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7362 | 1/2 HP Sewage Pump Harbor Freight | 129.29 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7362 | California Flag | 31.01 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7362 | Gearwrench | 63.23 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7362 | Hand Winch (2) | 64.63 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7362 | Bleach Spray/w pump 5 gallons | 39.86 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7362 | Step Ladder and buckets (6) | 220.63 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7450 | visual timer for BM | 41.48 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7450 | Copy Paper, stamps, folders, envelopes, etc | 147.92 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7450 | Property Tax Roll 2024 Addresses | 25.00 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7450 | Background Check new EE | 49.50 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7454 | Monthly Subscription Zoom and MS Office | 24.24 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7459 | Label Machine & Labels office D.L. | 103.54 | 790180 | Summerland Sanitary District | |
| CLM - 0831610 | 4/17/2025 | | 7653 | Online Training Program Grade III E.N. | 49.00 | 790180 | Summerland Sanitary District | |
| CLM - 0831614 | 4/17/2025 | | 7404 | FGL Lab testing 2/17-3/19 | 2,050.00 | 270150 | FGL ENVIRONMENTAL INC | |
| CLM - 0831615 | 4/17/2025 | | 7053 | Internet April 2025 | 107.54 | 776537 | COX COMMUNICATIONS - BUSINESS | |
| CLM - 0831616 | 4/17/2025 | | 7764 | Trash Service March 2025 | 385.11 | 509950 | MARBORG INDUSTRIES | |
| CLM - 0831618 | 4/17/2025 | | 7121 | 530 Gallons of Sodium Bisulfite | 2,640.44 | 214614 | UNIVAR SOLUTIONS USA INC | |
| CLM - 0831634 | 4/17/2025 | | 7110 | Comp. Regular Board Meeting 4/10/2025 | 175.00 | 167410 | GARY W ROBINSON | |
| CLM - 0831635 | 4/17/2025 | | 7110 | Comp. Regular Board Meeting 4/10/2025 | 175.00 | 091927 | JAMES WITMER | |
| CLM - 0831637 | 4/17/2025 | | 7110 | Comp. Regular Board Meeting 4/10/2025 | 175.00 | 765907 | John Franklin | |
| CLM - 0831638 | 4/17/2025 | | 7110 | Comp. Regular Board Meeting 4/10/2025 | 175.00 | 009934 | JOLENE M COLOMY | |
| CLM - 0831639 | 4/17/2025 | | 7110 | Comp. Regular Board Meeting 4/10/2025 | 175.00 | 215753 | TRICIA THORSELL PRICE | |
| CLM - 0831640 | 4/17/2025 | | 7110 | Comp. Ad Hoc Strategic committee Meeting 4/16/2025 | 175.00 | 765907 | John Franklin | |
| CLM - 0831642 | 4/17/2025 | | 7110 | Comp. Ad Hoc Strategic committee Meeting 4/16/2025 | 175.00 | 167410 | GARY W ROBINSON | |
| CLM - 0831653 | 4/17/2025 | | 6100 | Regular Salaries April 1-15, 2025 | 18,296.67 | 790178 | Summerland Sanitary District | |

# Expenditure Transactions (Real-Time)

From 4/1/2025 to 4/30/2025

Selection Criteria: Fund = 5215, 5216, 5217

Layout Options: Summarized By = Fund; Page Break At = Fund; Columns = Vendor

## Fund 5215 -- SummerInd San Dist Running Exp

| Document | Post On | Dept | LIAcct | Description | Amount | Vendor | Vendor Name |
|---|---|---|---|---|---|---|---|
| CLM - 0831653 | 4/17/2025 | | 6270 | Standby April 1-15, 2025 | 1,164.44 | 790178 | Summerland Sanitary District |
| CLM - 0831653 | 4/17/2025 | | 6300 | Overtime April 1-15, 2025 | 101.40 | 790178 | Summerland Sanitary District |
| CLM - 0831653 | 4/17/2025 | | 6500 | Medicare and Fica April 1-15, 2025 | 1,581.83 | 790178 | Summerland Sanitary District |
| CLM - 0831653 | 4/17/2025 | | 6600 | Healthcare Contr. D.L. April 1-15, 2025 | 300.00 | 790178 | Summerland Sanitary District |
| CLM - 0832103 | 4/22/2025 | | 7516 | Dig Alert Ticket Charge Feb 2025 - Past Due | 28.50 | 828128 | UNDERGROUND SERVICE ALERT |
| CLM - 0832606 | 4/24/2025 | | 7761 | Electric Bill March 4- April 1 | 5,429.48 | 767200 | SOUTHERN CALIFORNIA EDISON |
| CLM - 0833227 | 4/30/2025 | | 6100 | Regular Salaries April 16-30, 2025 | 17,979.05 | 790178 | Summerland Sanitary District |
| CLM - 0833227 | 4/30/2025 | | 6270 | Standby April 16-30, 2025 | 810.86 | 790178 | Summerland Sanitary District |
| CLM - 0833227 | 4/30/2025 | | 6500 | Medicare and Fica April 16-30, 2025 | 1,524.99 | 790178 | Summerland Sanitary District |
| CLM - 0833227 | 4/30/2025 | | 6600 | Healthcare Contr. D.L. April 16-30, 2025 | 300.00 | 790178 | Summerland Sanitary District |
| | | | | Total SummerInd San Dist Running Exp | 84,017.42 | | |

# Expenditure Transactions (Real-Time)

From 4/1/2025 to 4/30/2025

Selection Criteria: Fund = 5215, 5216, 5217

Layout Options: Summarized By = Fund; Page Break At = Fund; Columns = Vendor

## Fund 5217 -- SummerInd San Dist-Capital Rep

| Document | Post On | Dept | LIAcct | Description | Amount | Vendor | Vendor Name |
|---|---|---|---|---|---|---|---|
| CLM - 0829554 | 4/3/2025 | | 8300 | Gorman Rupp Check Valve 4", R-H for LS II | 1,876.42 | 569122 | Multi W Systems |
| CLM - 0829554 | 4/3/2025 | | 8300 | Gorman Rupp Air Release Valve, Cast Iron LS I & II | 1,596.83 | 569122 | Multi W Systems |
| CLM - 0829620 | 4/3/2025 | | 7671 | Payment to Principal 3rd Installment | 46,148.22 | 156851 | WESTAMERICA BANK |
| CLM - 0829620 | 4/3/2025 | | 7671 | Payment to Interest 2rd Installment should be 3rd installment | 12,766.56 | 156851 | WESTAMERICA BANK |
| CLM - 0833006 | 4/29/2025 | | 7460 | Coastal Hazard Monitoring Plan Study Inv 2 | 9,347.25 | 263269 | ENVIRONMENTAL SCIENCE ASSOC |
| CLM - 0833008 | 4/29/2025 | | 7460 | Coastal Hazard Monitoring Plan Study Inv 3 | 18,398.12 | 263269 | ENVIRONMENTAL SCIENCE ASSOC |
| | | | | Total SummerInd San Dist-Capital Rep | 90,133.40 | | |

VIII A.

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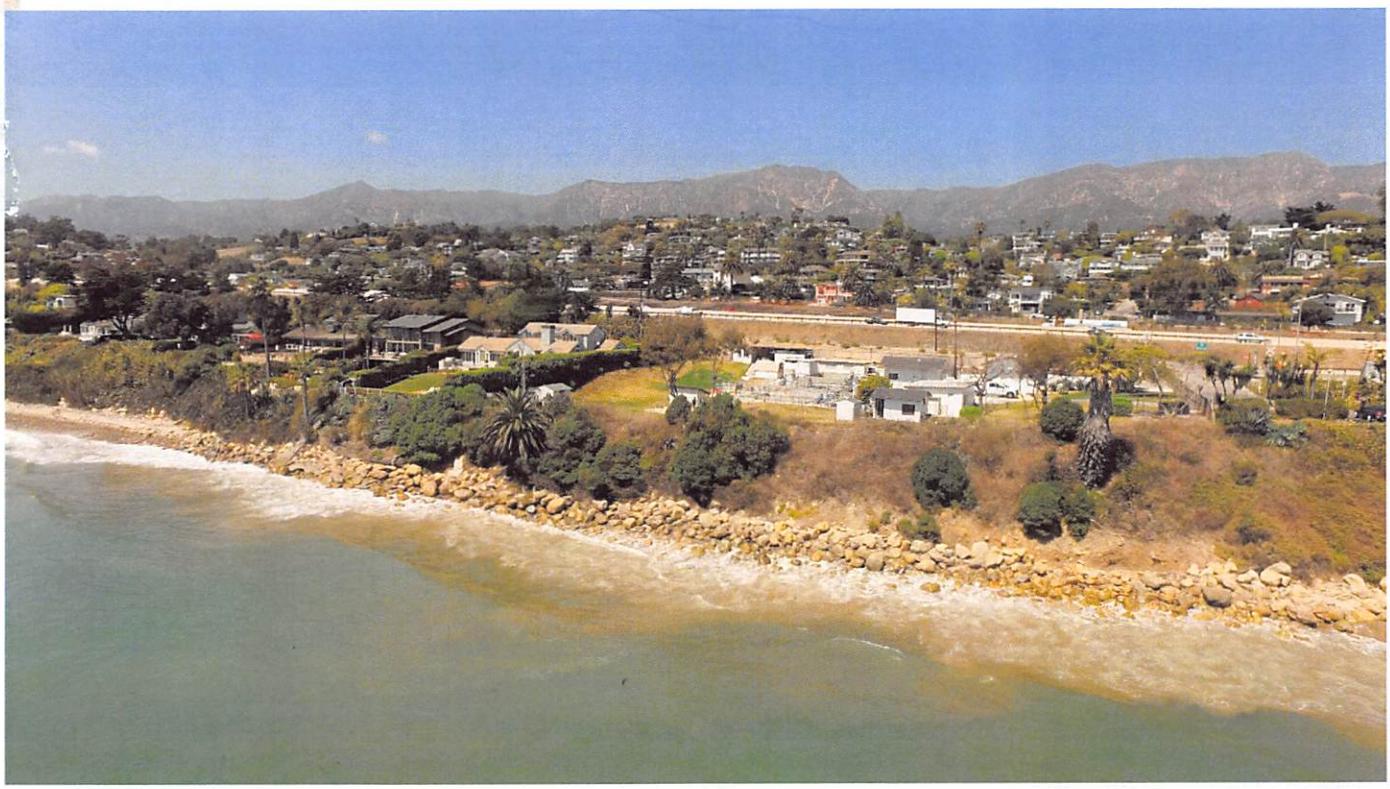
# SUMMERLAND SANITARY DISTRICT

## Coastal Hazards Monitoring Plan

**Prepared for**
**Summerland Sanitary District**

**April 2025**

ESA



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# SUMMERLAND SANITARY DISTRICT

## Coastal Hazards Monitoring Plan

**Prepared for**
**Summerland Sanitary District**

**April 2025**

***Services provided pursuant to this Agreement are intended solely for the use and benefit of the Summerland Sanitary District.***

***No other person or entity shall be entitled to rely on the services, opinions, recommendations, plans or specifications provided pursuant to this agreement without the express written consent of ESA, 575 Market Street, San Francisco CA 94105.***

**115 S. La Cumbre Lane**
**Suite 300**
**Santa Barbara, CA 93105**
**805.880.0922**
**esassoc.com**

ESA

| | | |
|---|---|---|
| Bend | Pasadena | San Francisco |
| Irvine | Pensacola | San Jose |
| Los Angeles | Petaluma | Santa Barbara |
| Mobile | Portland | Sarasota |
| Oakland | Rancho Cucamonga | Seattle |
| Orlando | Sacramento | Tampa |
| Palm Beach County | San Diego | Thousand Oaks |

**OUR COMMITMENT TO SUSTAINABILITY** | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

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## Figures



## Tables



## Appendices

# ACRONYMS AND OTHER ABBREVIATIONS

| Abbreviation | Definition |
|---|---|
| BEACON | Beach Erosion Authority for Clean Oceans and Nourishment |
| CCAP | Climate Change Adaptation Program |
| CCC | California Coastal Commission |
| CHMP | Climate Hazards Monitoring Plan |
| CMIP6 | Coupled Model Intercomparison Project 6 |
| CoSMoS | Coastal Storm Modeling Software |
| District | Summerland Sanitary District |
| ESA | Environmental Science Associates |
| FEMA | Federal Emergency Management Agency |
| GCM | Global Climate Model |
| GIS | Geographic Information System |
| I/I | Inflow and Infiltration |
| IPCC | Intergovernmental Panel on Climate Change |
| LiDAR | Light Detection And Ranging |
| LOCA2 | Localized Construction Analogue |
| MGD | Million Gallons per Day |
| MHHW | Mean Higher High Water |
| MLLW | Mean Lower Low Water |
| NAVD88 | North American Vertical Datum of 1988 |
| NOAA | National Oceanic and Atmospheric Administration |
| NPDES | National Pollutant Discharge Elimination System |
| OPC | Ocean Protection Council |
| OST | Ocean Science Trust |
| RCAMP | Regional Coastal Adaptation Monitoring Program |
| SfM | Structure from Motion |
| SLR | Sea Level Rise |
| SSD | Summerland Sanitary District |
| SSP | Shared Socioeconomic Pathways |
| USACE | United States Army Corps of Engineers |
| USGS | United States Geological Survey |
| WWTP | Wastewater Treatment Plant |

# 1. INTRODUCTION

The Summerland Sanitary District (the District) has undertaken this study to develop a Coastal Hazards Monitoring Plan (CHMP) and life expectancy analysis for its wastewater collection, treatment, recovery, and discharge facilities. The purpose of the CHMP is to guide the District's monitoring of coastal hazards and inform when control measures or adaptation measures are needed to reduce the potential of District assets to coastal hazards. To inform the CHMP, this study also includes an assessment of the exposure of the District's assets to coastal hazards with future projected sea level rise due to climate change.[1] The CHMP also preliminarily identifies control measures and adaptation strategies that the District can take in the future to reduce the District's potential vulnerabilities, thereby improving the District's resiliency to sea level rise.

## 1.1 Framework and Parameters of the Monitoring Plan

The Summerland Sanitary District Waste Discharge Requirements, Section 6.3.6.1.1 of Resolution No. 2017-0012 and Order No. R3-2022-0014 for the California Regional Water Quality Control Board Central Coast Region specifies that the Coastal Hazards Monitoring Plan will establish the framework and parameters for:

1. Regularly monitoring bluff erosion, tidal inundation, and other coastal hazards at the site,
2. Identify the level of threat those hazards present to the facility, collection system, and associated infrastructure,
3. Identify control measures necessary to protect and accommodate the existing location and facility to allow uninterrupted function of wastewater treatment, and
4. Identify tidal inundation/bluff erosion 'thresholds' to establish when facility changes (including potential plant relocation) need to be pursued in order to ensure continued function of the wastewater treatment facility in a manner that will be protective of human health and the environment.

Order No. R3-2022-0014 requires the District to develop a climate change adaptation program to provide a clear, long-term plan for providing necessary wastewater treatment functions that are not vulnerable to coastal hazards. The CHMP supports the District's Climate Change Adaptation Program (CCAP), which consists of the following phases:

Phase 1 – Coastal Hazards Monitoring Plan (CHMP) due May 1, 2025

Phase 2 – Life Expectancy Analysis due May 1, 2026

Phase 3 – Climate Change Adaptation Plan, due May 4, 2027

[1] This report focuses on sea level rise and increased precipitation as the primary climate stressors for the District and does not consider other potential climate stressors.

This report only includes Phase 1, the CHMP. The subsequent Phases of the CCAP will be provided in future reports. Note that control measures (item 3 in the list above) and tidal inundation/bluff erosion thresholds (item 4) will be further developed in Phase 3, Climate Change Adaptation Plan.

## 1.2 Background

The Summerland Sanitary District encompasses approximately one square mile of coastal area in Summerland, California along the Pacific Ocean. The Summerland Wastewater Treatment Plan (WWTP) is less than 100 feet from the coastline, atop a coastal bluff. The District's sewer collection system infrastructure includes force mains, lift stations, cleanouts, and manholes throughout Summerland, and an outfall pipe from the WWTP to a discharge point approximately 800 ft offshore. **Figure 1** shows the extents of the District and the WWTP location along the Pacific coast, the primary study area for coastal and erosional hazards.

The Summerland shoreline generally consists of narrow bluff-backed sand and cobble beaches, with bluff armoring in some locations and bluff-top residential homes. Due to its blufftop location, shoreline and cliff erosion is a major concern for the WWTP. As the climate changes and sea levels rise, the risk of flooding, erosion, groundwater rise, and other hazards adversely impacting District infrastructure is projected to increase.

The District's wastewater system may be subjected to flooding and erosion by the following mechanisms:

- Chronic coastal erosion (beach and bluff), tidal inundation, and groundwater emergence associated with sea level rise
- Extreme coastal storm event flooding and wave run-up impacts associated with sea level rise

In addition, extreme rainfall runoff, flooding, and high groundwater levels may increase inflow and infiltration (I/I).


SOURCE: NOAA, 2020; SSD, ESA, 2024

D202401372.00 - Summerland Coastal Hazards Monitoring Plan

**Figure 1**
Summerland Sanitary District and Summerland WWTP location and vicinity map

ESA

# 2. SEA LEVEL RISE SCENARIOS

This chapter documents the planning horizons and sea level rise (SLR) scenarios evaluated for the Coastal Hazard Monitoring Plan (CHMP). This study evaluates coastal hazards for existing conditions and three (3) future sea level rise scenarios for the project: 0.8 feet (near-term), 3.3 feet (mid-term), and 6.6 feet (long-term). These proposed sea-level rise scenarios are consistent with the latest State guidance and available coastal hazard maps for the Summerland area, including United States Geological Survey (USGS) CoSMoS 3.0 (O'Neill et al. 2018) and coastal hazard mapping by ESA for Coastal Resilience Santa Barbara County (ESA 2015) and the Montecito Sanitary District CHMP. Section 2.1 summarizes California State guidance on sea level rise, Section 2.2 presents the planning horizons (timeframes for analysis), global climate modeling (for direct precipitation analyses), and sea level rise scenarios for the project.

## 2.1 California State Sea Level Rise Guidance

This section outlines the most up-to-date sea level rise guidance in California, including the California Sea Level Rise Guidance: 2024 Science and Policy Update and the California Coastal Commission's Critical Infrastructure Guidance for Sea Level Rise Adaptation Planning.

### 2.1.1 California Sea Level Rise Guidance: 2024 Science and Policy Update

In June 2024 California Ocean Protection Council (OPC) finalized the State of California Sea Level Rise Guidance: 2024 Science and Policy Update[2] (OPC, 2024), which provides projections for sea level rise at various locations along the coast of California through 2150. OPC produced this guidance in partnership with the California Ocean Science Trust (OST) and a scientific Task Force. The guidance is based on the National Oceanic and Atmospheric Administration (NOAA) 2022 Global and Regional Sea Level Rise Scenarios for the United States (Sweet, et al., 2022), which provides updated sea level rise scenarios for the United States based on global projections from the Intergovernmental Panel on Climate Change (IPCC) 6th Assessment Report. The updated 2024 guidance presents five sea level rise scenarios and values that incorporate: (1) sea level rise observations, estimated and modeled projections, and uncertainties, and (2) a range of global greenhouse gas emissions scenarios, which rely on shared socioeconomic pathways (SSPs).[3]

Note that future global greenhouse gas emissions and warming scenarios drive the sea level rise projections reported by the OPC. Emissions scenarios are influenced by societal choices and therefore

[2] https://opc.ca.gov/2024/06/for-immediate-release-ocean-protection-council-adopts-updated-guidance-to-help-california-prepare-for-and-adapt-to-rising-seas/

[3] SSP background from OPC 2024 guidance: *Developed more recently, the SSPs are a collection of narrative descriptions of alternative futures of socio-economic development in the absence of climate policy intervention. Five SSPs describe five different pathways that the world could take, drawing on data including population, economic growth, education, urbanization, and the rate of technological development. The SSPs are important inputs into the IPCC sixth assessment and are used to explore how societal choices will affect greenhouse gas emissions. Pathways 5-85 (SSP 585) assumes heavy fossil-fueled development with high percentage of coal and energy-intensive lifestyles worldwide and assumes a radiative forcing of 8.5 W/ m².*

their likelihood of occurrence is inherently uncertain. Sea level rise scenarios are determined by modeling a range of global emissions projections and considering a range of uncertainties in sea level rise processes. Due to the inherent uncertainty of future global greenhouse gas emissions scenarios, the probability of sea levels rising a specific amount by a specific date cannot be determined. Instead, the probability of exceedance of a particular sea level rise scenario provided by the 2024 OPC guidance is contingent or conditional on the assumption of a particular future emissions and warming scenario.

The State of California Sea Level Rise Guidance (2024) provides the following sea level rise scenarios and risk aversion applications:

***Low Scenario:*** "Aggressive emissions reductions leading to very low future emissions; the scenario is on the lower bounding edge of plausibility given current warming and sea level trajectories, and current societal and policy momentum."

***Intermediate-Low Scenario:*** "A range of future emissions pathways; a reasonable estimate of the lower bound of most likely sea level rise in 2100 based on support from sea level observations and current estimates of future warming."

***Intermediate Scenario (Low Risk Aversion):*** "A range of future emissions pathways; could include contribution from low confidence processes. Based on sea level observations and current estimates of future warming, a reasonable estimate of the upper bound of most likely sea level rise in 2100." The OPC guidance states:

> *"For short-term adaptation actions (e.g., as part of an adaptation pathways approach) the Intermediate Scenario is recommended, regardless of risk category. This is because multiple lines of evidence identify the Intermediate Scenario as being most likely in the near-term (i.e., 2050) ... For low-risk averse projects, it is recommended that the Intermediate Scenario be applied." (OPC 2024)*

Low risk aversion is appropriate for adaptive, lower consequence projects (e.g., unpaved coastal trails).

***Intermediate-High Scenario (Medium-High Risk Aversion):*** "Intermediate-to-high future emissions and high warming; this scenario is heavily reflective of a world where rapid ice sheet loss processes are contributing to sea level rise." OPC guidance states:

> *"For medium-high risk averse applications, the Intermediate-High Scenario is recommended. Although there is a 0.1% chance of exceeding the Intermediate-High Scenario in 2100 (assuming 3°C of warming and no low confidence processes) the state recommends a precautionary approach, when possible, to maximize preparedness and resilience. Furthermore, if there is greater than 4°C warming and contribution from low confidence processes, there is a 20% chance of exceeding the Intermediate-High Scenario in 2100 (high levels of warming). Additionally, because medium-risk averse projects have longer lifespans, the Intermediate-High Scenario provides an additional buffer should the project need to persist further into the future than originally planned for." (OPC 2024)*

Medium-high risk aversion is appropriate as a precautionary projection that can be used for less adaptive, more vulnerable projects or populations that will experience medium to high consequences as a result of underestimating sea level rise (e.g., coastal housing development).

***High Scenario (Extreme Risk Aversion):*** "High future emissions and high warming with large potential contributions from rapid ice-sheet loss processes; given the reliance on sea level contributions for processes in which there is currently low confidence in their understanding, a statement on the likelihood of reaching this scenario is not possible." However, assuming high emissions and considering the range of model projections for a high emissions scenario without contribution from low confidence processes, the High Scenario's sea level rise estimates have 0.1% or less chance of exceedance by 2100.[4] The OPC states that this scenario "should be used with caution and consideration of the underlying assumptions." The OPC report that:

> *"For extreme risk averse applications, the High Scenario may be appropriate, however, there are limited situations in which designing and constructing to the High Scenario will be necessary and/or feasible without significant logistical tradeoffs. If significant constraints do not exist, then designing to the High Scenario is recommended, all other factors being equal. However, it is likely that in most situations, factors like the urbanized nature of existing communities, location of existing facilities, requirements to provide service to existing development, and fiscal constraints will make incorporating the High Scenario into initial project design infeasible. The adaptation pathways approach is therefore recommended, in which a smaller amount of sea level rise is incorporated into initial project design while also developing options to address higher sea level rise amounts in the future ... Although the High Scenario has an effectively zero percent chance of being exceeded in 2100 (assuming 3°C of warming and no low confidence processes), extreme risk averse projects have anticipated lifespans beyond 2100 and therefore should be prepared for both worst case values at 2100, as well as higher amounts of sea level rise that are expected beyond 2100." (OPC 2024)*

Extreme risk aversion is appropriate for high consequence projects with little to no adaptive capacity and which could have considerable public health, public safety, or environmental impacts (e.g., airport, coastal power plant, wastewater treatment plant, etc.).

The updated guidance recommends evaluation of the Intermediate and Intermediate-High, and consideration of the High Scenario during long term planning of very critical infrastructure such as airports. This study uses the Intermediate, Intermediate-High, and High Scenarios for time frames of sea level rise thresholds (see Section 4.2.2).

Several changes were made from the previous State of California Sea Level Rise Guidance (OPC, 2018). The updated 2024 guidance removes the extreme sea level rise scenario (H++) that was included in the previous guidance. The H++ Scenario assumed rapid ice sheet loss on Antarctica, which could drive rates of sea level rise 30-40 times faster than the sea level rise experienced over the last century. This scenario is not included in the 2024 update, as the rates and amounts of sea level rise are not supported by best

[4] As stated in OPC (2024): "It is important to note that probabilistic projections do not provide actual probabilities of occurrence of sea level rise but provide probabilities that the ensemble of climate models used to estimate contributions of sea-level rise (from processes such as thermal expansion, glacier and ice sheet mass balance, and oceanographic conditions, among others) will predict a certain amount of sea-level rise." Also, note that the High Scenario has an 8% chance of exceedance when accounting for low confidence processes associated with Antarctica and Greenland ice-sheet loss.

available science. Additionally, the 2024 guidance provides a greater certainty of sea level rise through 2050, with a California statewide average of 0.8 feet (Intermediate Scenario). By 2100, the expected range of sea level rise is between 1.6 and 3.1 feet (Intermediate-Low to Intermediate Scenarios), although higher amounts cannot be ruled out. Beyond 2100, sea level rise uncertainty increases, with the potential for statewide sea levels to rise from 2.6 to 11.9 feet or greater by 2150 (Intermediate-Low to High Scenarios).

While the CA OPC guidance provides projections through 2150, it is important to note that sea level rise is expected to continue for centuries, because the earth's climate, cryosphere,[5] and ocean systems will require time to respond to the emissions that have already been released to the atmosphere. Although sea level rise is typically presented as a range in the amount of sea level rise that will occur by a certain date (e.g., 0.6-1.1 feet of sea level rise by 2050), it can also be presented as a range of time during which a certain amount of sea level rise is projected to occur (e.g., 1.6 feet of sea level rise between 2060 and 2080). Even if emissions are reduced to levels consistent with the low-emissions-based projections, sea level will continue to rise to higher levels, just at a later date.

The CA OPC guidance recommends utilizing data from one of twelve NOAA tide gauges that are located along the coast of California, which is slightly different than the California statewide average. Using the data from the nearest tide gauge to the project site can capture local variations due to tectonic activity or subsidence. The nearest NOAA tide gauge to Santa Barbara Airport is located in Santa Barbara Harbor.

**Table 1** presents State-recommended projections for the Santa Barbara area in terms of Low, Intermediate-Low, Intermediate, Intermediate-High, and High Scenarios. The recommended scenarios for evaluation (Intermediate, Intermediate-High, and High) are outlined by the darkened box.

[5] The cryosphere is the portions of the Earth's surface where water is in solid form, like glaciers and ice caps.

**TABLE 1. OPC (2024) STATE GUIDANCE: PROJECTED SEA LEVEL RISE FOR SANTA BARBARA AREA IN FEET**

| Year | Low | Int-Low | Intermediate | Int-High | High |
|---|---|---|---|---|---|
| 2020 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| 2030 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 |
| 2040 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 |
| 2050 | 0.3 | 0.5 | 0.6 | 0.9 | 1.1 |
| 2060 | 0.4 | 0.6 | 0.9 | 1.4 | 1.8 |
| 2070 | 0.5 | 0.7 | 1.2 | 2.0 | 2.7 |
| 2080 | 0.5 | 0.9 | 1.6 | 2.8 | 3.8 |
| 2090 | 0.5 | 1.1 | 2.1 | 3.5 | 5.0 |
| 2100 | 0.6 | 1.2 | 2.8 | 4.5 | 6.3 |
| 2110 | 0.6 | 1.4 | 3.4 | 5.3 | 7.5 |
| 2120 | 0.7 | 1.5 | 4.0 | 6.0 | 8.6 |
| 2130 | 0.7 | 1.7 | 4.4 | 6.6 | 9.5 |
| 2140 | 0.7 | 1.9 | 4.9 | 7.1 | 10.4 |
| 2150 | 0.8 | 2.0 | 5.5 | 7.6 | 11.3 |

SOURCE: 2024 OPC Guidance

NOTES:

- Median values of Sea Level Scenarios, in feet, for each decade from 2020 to 2150, with a baseline of 2000. All median scenario values incorporate the local estimate of vertical land motion.
- The Intermediate, Intermediate-High, and High Scenarios outlined by the dark blue box are evaluated and used to estimate time frames of sea level rise referenced in this study. See Section 4.2 for further discussion.

## 2.1.2 Critical Infrastructure Guidance for Sea Level Rise Adaptation Planning

In 2021, the California Coastal Commission (CCC) released the Critical Infrastructure Guidance for Sea Level Rise Adaptation Planning with specific guidance for sea-level rise adaptation of at-risk critical infrastructure (CCC 2021). The CCC Critical Infrastructure Guidance is based on the previous 2018 OPC California Sea Level Rise Guidance (OPC 2018), which is superseded by the 2024 OPC guidance. The CCC Critical Infrastructure Guidance is summarized below for reference.

The CCC 2021 guidance document is focused on transportation and water/wastewater infrastructure and builds upon the 2018 science update to the CCC Sea Level Rise Policy Guidance (CCC 2018). The purpose of the critical infrastructure guidance is to provide policy and planning information to inform sea level rise planning and adaptation decisions that are consistent with the California Coastal Act. The guidance presents key considerations for successful infrastructure adaptation planning with specific recommendations for each infrastructure category, describes the regulatory framework for infrastructure adaptation planning, and provides model policies.

Consistent with direction from OPC 2018 guidance on the potential for extreme sea level rise, CCC recommended evaluating the extreme risk aversion (H++) scenario for critical infrastructure due to the long lifespans and significant consequences associated with extreme sea level rise and related hazard impacts. CCC guidance was to:

> *"understand and plan for the H++ scenario, not necessarily to site and design for the H++ scenario. In other words, in some cases it may not be appropriate or feasible to site or design a project today such that it will avoid the impacts associated with, for example, ~10 feet of sea level rise (the approximate H++ scenario in 2100 for much of the California coast). However, it is important to analyze this scenario to understand what the associated impacts could be and to begin planning options to adapt to this scenario if and when it occurs, and to ensure that the risks and benefits of economic investments in critical infrastructure are fully understood."*

Given that the 2024 OPC guidance is the best available science and does not include the H++ scenario, ESA does not recommend considering the superseded OPC 2018 guidance's extreme risk aversion (H++) scenario in this study.

## 2.2 Selected Scenarios

Sea level rise scenarios were selected for this study by considering the 2024 OPC guidance discussed above (which is based on latest sea level rise science) and the availability of existing sea level rise hazard data.

In order to assess potential sea level rise impacts through the end of the century, this study considers four time horizons: existing conditions, near-term (e.g. 20-30 years), mid-term (e.g. 50-85 years) and long-term (e.g. 75-125+ years). As described in the previous section, the OPC 2024 report describes the High scenario as having less than a 1% probability of exceedance in a high emissions scenario with up to 5°C of warming in 2100. Due to the low probability of the High scenario, this study uses the Intermediate-High and Intermediate scenarios and considers that there is a low probability of sea level rise amounts occurring as soon as the High scenario timing.

Future global greenhouse gas emissions scenarios drive the sea level rise projections reported by the OPC. These emissions scenarios are influenced by societal choices and therefore their likelihood of occurrence is inherently uncertain. Sea level rise scenarios are determined by modeling a range of global emissions projections and considering a range of uncertainties in sea level rise processes. Due to the inherent uncertainty of future emissions scenarios, the probability of sea levels rising a specific amount by a specific date cannot be determined. Instead, the probability of exceedance of a particular sea level rise scenario provided by the 2024 OPC guidance is contingent or conditional on the assumption of a particular future emissions and warming scenario.

To provide the most conservative sea level rise scenario for the potential of bluff erosion due to sea level rise, the Coastal Bluff Hazards Evaluation considers the High Scenario for the Santa Barbara tide gauge (**Table 1**).

**Table 2** below summarizes the planning horizons and sea level rise scenarios selected for the Summerland Sanitary District CHMP.

TABLE 2. PLANNING HORIZONS AND SEA LEVEL RISE SCENARIOS BASED ON 2024 OPC GUIDANCE

| Planning Horizon | SLR Range | Date Range* | Years from 2025 |
|---|---|---|---|
| Near-Term | 0 to 0.8 ft | Now to 2055 | 0 to 30 |
| Mid-Term | 0.8 to 3.3 ft | 2045 to 2110 | 20 to 85 |
| Long-Term | 3.3 to 6.6 ft | 2075 to 2150+ | 50 to 125+ |

NOTE:

* dates are rounded to the nearest 5 years for simplicity.

**Figure 2** depicts the OPC (2024) high, intermediate-high, and intermediate risk sea level rise scenarios, as well as the scenarios selected for this study.

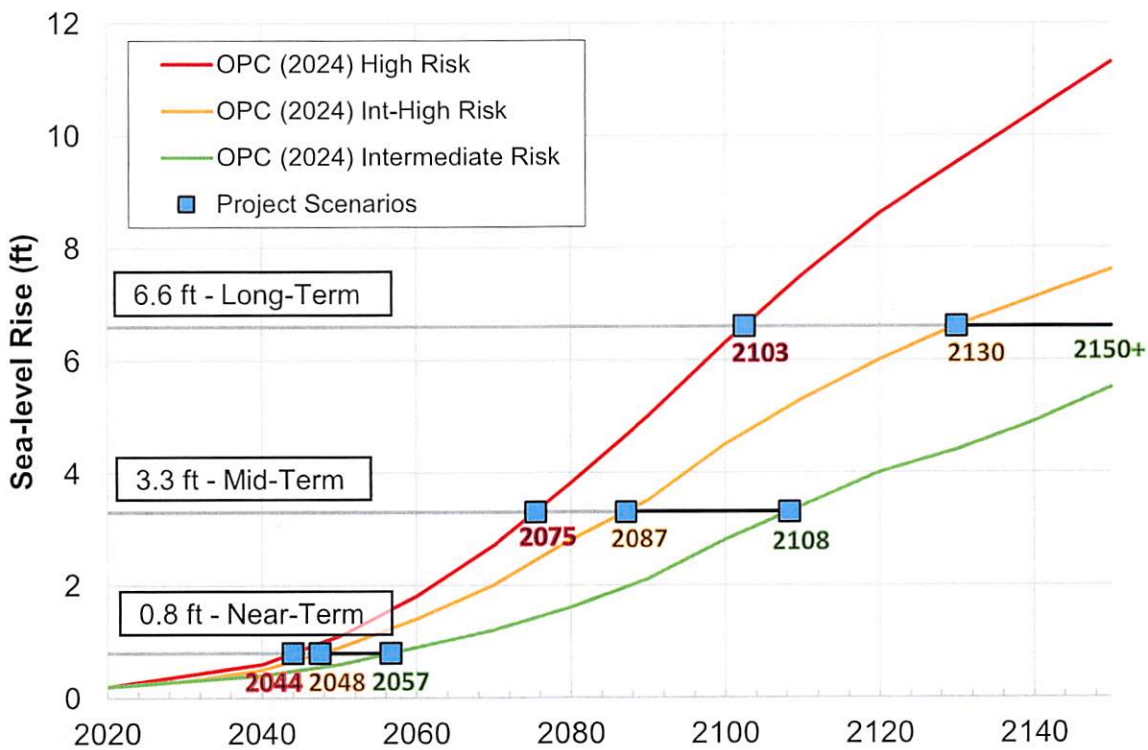



**Figure 2.**
Sea level rise guidance projections for Santa Barbara area (2024 OPC Guidance) and selected scenarios

# 3. HAZARDS EVALUATION

The coastal hazards exposure assessment for this study (Chapter 5) utilizes a spatial assessment of hazard exposure that consists of overlaying wastewater asset maps (Chapter 4) with hazard maps (documented in this chapter). Geospatial data were collected for the pertinent flooding and erosion hazards as well as wastewater assets for District and other contributing jurisdictions. This chapter describes the specific hazard data sources utilized for the study.

## 3.1 Coastal Hazards

This section discusses the coastal hazards for the District based on the USGS Coastal Storm Modeling Software, CoSMoS 3.0 (Barnard et al. 2018) Hazard Mapping for Tidal Inundation, Coastal Storm Flooding, Coastal Erosion, and Groundwater Rise. In addition, it describes the Coastal Bluff Hazards Evaluation prepared by Campbell Geo and included in Appendix A.

### 3.1.1 CoSMoS Hazard Mapping for Tidal Inundation, Coastal Storm Flooding, Coastal Erosion, and Groundwater Rise

Tidal inundation, coastal storm flooding, beach and bluff erosion, and groundwater hazard data with sea level rise are outputs from USGS CoSMoS. Tidal inundation exposure in this study represents inundation from typical monthly spring tide conditions. Groundwater rise exposure in this study represents regular inundation by high groundwater, especially during the wet season. Note that CoSMoS hazard mapping data also includes zones for low-lying areas that are below tidal and storm flood levels, even though the low-lying areas may not be directly connected to areas of modeled tidal and storm inundation.

Note that CoSMoS storm scenarios assume that the storm coincides with a "high spring tide" (tide levels that occur approximately twice every month). This represents a near-worst case scenario for the coincidence of a storm with a high astronomical tide given that astronomical high tides above a high spring tide are infrequent (e.g., the annual "King Tide" is higher than a typical high spring tide, but much less frequent, occurring typically only during two ~3- to 4-day periods per year). In addition, to consider a more conservative approach, the CoSMoS model for bluff erosion was used in the 'no hold the line' scenario, which considers erosion without armoring at the toe of the bluff, despite the presence of armoring in front of the District.

### 3.1.2 Coastal Bluff Hazards Evaluation for Bluff Erosion

A Coastal Bluff Hazards Evaluation was prepared by Campbell Geo (Section 5.2.1 and Appenidx A) to evaluate the coastal bluff retreat in more site-specific detail than the regional CoSMoS model provides, given that shoreline and cliff erosion are potentially a significant hazard for the WWTP.

The objective of the evaluation was to conduct a site investigation, without subsurface exploration, to evaluate blufftop retreat over the three future planning horizons: near-term, mid-term, and long-term. The evaluation did not include geotechnical parameters for a slope stability calculation or to support the

development of a new or remodeled facility. The detailed methodology for evaluating the bluff erosion for the District is described in Section 5.2.1 and Appendix A.

The Coastal Bluff Hazards Evaluation estimated a site specific, historical bluff retreat rate of 0.13 ft/yr from 1969 to 2025 based on aerial photo and ground measurements. The future projected rate of coastal bluff retreat with sea level rise was estimated by increasing the site-specific based on the future rate of bluff retreat modeled by CoSMoS. The percent increase between the regionally-calculated CoSMoS historic bluff erosion rate and future modeled CoSMoS bluff erosion rate (151% increase) was applied to the site specific, historical estimated bluff retreat rate (0.13 ft/yr) to estimate a site-specific future projected rate of coastal bluff retreat with sea level rise of 0.33 ft/yr. Note that the 151% increase is based on CoSMoS model results that do not explicitly consider the existing revetment at the toe of the bluff ("Do Not Hold The Line" model setting) and CoSMoS results for 2 meters of SLR in 2100, which is similar to the OPC High Risk SLR scenario. This approach may represent a conservatively high estimate of future bluff erosion.

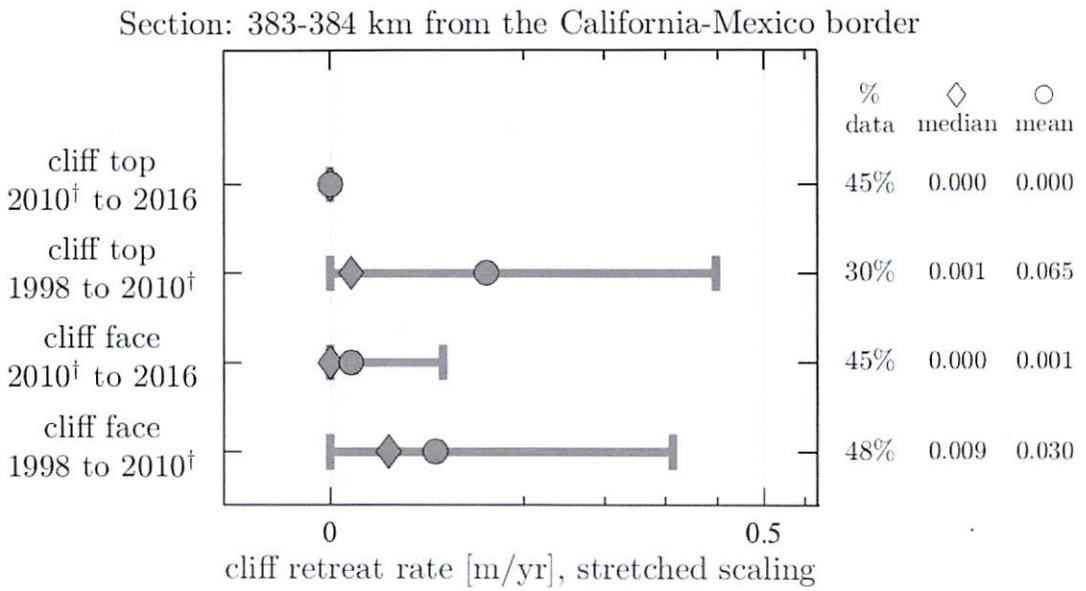
As an additional assessment, this study compares and checks the site-specific, historical bluff retreat rate estimated for this study's Coastal Bluff Hazards Evaluation to the California Coastal Cliff Erosion Viewer.[6] The California Coastal Cliff Erosion Viewer presents a statewide dataset tracking historic coastal bluff retreat rates across two monitoring periods (1998 to 2010 and 2010 to 2016). Using high-resolution airborne LiDAR surveys, this resource quantifies both bluff face and bluff top erosion at 5-meter (16 ft) alongshore intervals, later grouped into larger coastal sections every 1 kilometer (0.6 mile) for visualization.

This study's site-specific erosion analysis results align with the regional trend results identified in the California Coastal Cliff Erosion Viewer for Section 383-384, which includes the bluff where the District WWTP is located. The California Coastal Cliff Erosion Viewer (**Figure 3**) shows the following results for Section 383-384:

- 1998 to 2010: bluff top erosion of 0.21 ft/yr, bluff face erosion of 0.1 ft/yr
- 2010 to 2016: no (or negligible) erosion of the bluff top or face (i.e., bluff face erosion of 0.003 ft/yr)

For comparison to this study, the California Coastal Cliff Erosion Viewer calculated the weighted average bluff top erosion rate from 1998 to 2016, which is 0.14 ft/yr, which agrees with this study's Coastal Bluff Hazards Evaluation estimated site specific, historical bluff retreat rate of 0.13 ft/yr from 1969 to 2025.

[6] https://siocpg.ucsd.edu/data-products/ca-cliff-viewer-guide/.




Caption: Dark gray bars indicate data range within the section. % data is the percentage of the coastal section analyzed. †The 2010 survey was conducted between 2009-2011. X-axes are square root scaled with ticks spaced at 0.1 m/yr between -1 and 1 and spaced at 0.25 m/yr otherwise. Data sources: Young (2018), Swirad & Young (2021, 2022a, 2022b).

OCEAN PROTECTION COUNCIL

Source: Coastal Processes Group, 2025 (https://siocpg.ucsd.edu/data-products/ca-cliff-viewer/)

**Figure 3.**
California Coastal Cliff Erosion Viewer results

## 3.2 Precipitation Changes

ESA previously performed a precipitation change analysis for Montecito watersheds. The outcomes for the Summerland area are expected to be highly comparable as Summerland and the District's collection system are immediately adjacent to Montecito watersheds. Therefore, the results of this analysis are discussed and shown below.

ESA used precipitation data from the latest release of the Coupled Model Intercomparison Project 6 (CMIP6) general circulation models (GCM) to estimate projected changes in the 25-year storm design rainfall depth. CMIP6 is an ensemble of GCMs that simulate global physical processes between the atmosphere, ocean, and land surface and its response to increasing greenhouse gas concentrations. Because the CMIP data is provided at a very coarse resolution, ESA used the localized construction analogue version 2 (LOCA2) downscaled dataset from the CMIP GCMs specifically for California that is provided at a 3-kilometer resolution (Pierce et al, 2023).

ESA selected 13 of the downscaled CMIP models from the LOCA2 dataset that most accurately simulated California's observed climate records. The estimated increase in the 25-year rainfall depth was quantified for each 3-kilometer climate grid cell that intersected the local watershed by conducting extreme value analysis to estimate the increase in future extreme rainfall. The increase in design event rainfall was averaged over the watershed. Estimates for the projected increase in the design precipitation are for a high emissions trajectory.[7]

**Figure 4** shows the precipitation return interval curves from the extreme value analysis of the LOCA2 dataset for baseline conditions (i.e., past climate conditions) and future projected climate conditions. Results show the magnitude and frequency of future extreme rainfall depths generally increases compared to baseline conditions. Under past climate conditions, the 24-hour, 25-year design rainfall for the Montecito watershed was estimated to be 6.3 inches, which is consistent NOAA Atlas 14. Under a high emissions trajectory, the future 25-year rainfall depth was estimated to be 8.1 inches, an approximately 30% increase from baseline conditions. In addition to increasing magnitude, the frequency of extreme rainfall is also projected to increase. The past 25-year rainfall depth was estimated to have a lower recurrence interval of 6 to 8 years under a high emissions trajectory. **Table 3** summarizes the changes in recurrence interval for the past 2-year, 5-year, 10-year, and 25-year storms.

[7] Shared Socioeconomic Pathways 5-85 (SSP 585) assumes heavy fossil-fueled development with high percentage of coal and energy-intensive lifestyles worldwide and assumes a radiative forcing of 8.5 W/ $m^2$. SSPs, introduced in CMIP6, are more comprehensive, combining socioeconomic information with greenhouse gas emissions and concentrations. SSPs offer a broader view of possible futures by integrating economic, environmental, demographic, and policy variables, leading to more nuanced climate projections.

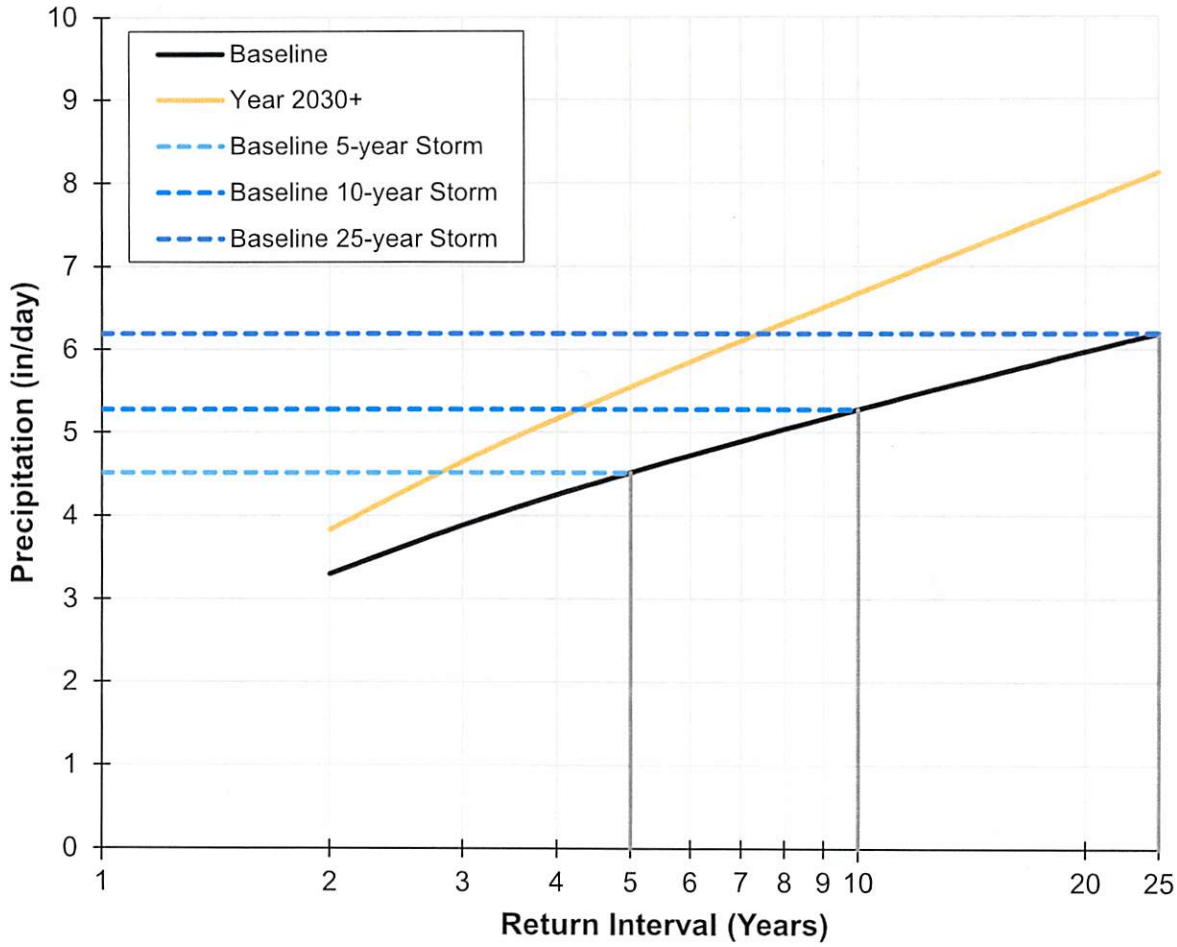



**Figure 4.**
Extreme value analysis precipitation curves under existing and future climate conditions for the Montecito watershed

**TABLE 3. CHANGE IN RAINFALL EVENT RECURRENCE INTERVAL OF THE MONTECITO WATERSHED, IN YEARS**

| Past Recurrence Interval | Projected Future Recurrence Interval (2030 and after) |
|---|---|
| 2-year | 1- to 2-year |
| 5-year | 2- to 3-year |
| 10-year | 3- to 5-year |
| 25-year | 6- to 8-year |

# 4. ASSETS

District wastewater assets include the Summerland Wastewater Treatment Plant (WWTP), ocean outfall, and wastewater collection system assets such as lift stations, cleanouts, manholes, sewer force mains, and gravity sewer mains. The District provided georeferenced asset data, as-built plans for the outfall, and other asset information. These data were overlaid with the hazard data in ArcGIS, a spatial mapping software, to create asset exposure maps by hazard and sea level rise scenario (see Section 5.2). **Figure 9** shows the extents and locations of the District wastewater assets.

## 4.1 The Summerland Wastewater Treatment Plant

The Summerland WWTP is situated atop coastal bluffs above Summerland Beach that are actively eroding. The WWTP is immediately south of the railroad and located along Wallace Avenue. The WWTP includes a lab/control room, office, garage/workshop, , headworks, equalization basin, primary clarifier, two digesters, two aeration basins, two secondary clarifiers, three blowers, a chlorine contact chamber, filter, dechlorination contact chamber, a belt press room, emergency generator building and effluent outfall pipe (SSD, 2025). It was designed for a flow of 0.3 million gallons per day (MGD) and processes an average daily flow of 0.062 MGD.

In 1989 there was a rebuild of the WWTP that improved treatment capacity. This rebuild was completed in 1992. This upgrade removed a sludge bed from the site, relocated the office/board room, and included the construction of the two aeration basins,secondary clarifiers, blower room, press building and new sludge holding area. **Figure 5** provides the 1989 topography update drawing of the site, showing the location of these buildings and assets in relation to the coastal bluff.

A revetment was constructed at the base of the bluff alongside the District's property to help protect against erosion. The exact construction year of the revetment is unclear, though based on a review of aerial imagery it has been in place since 1972 (**Figure 6**) (Adelman and Adelman, 2004-2010).

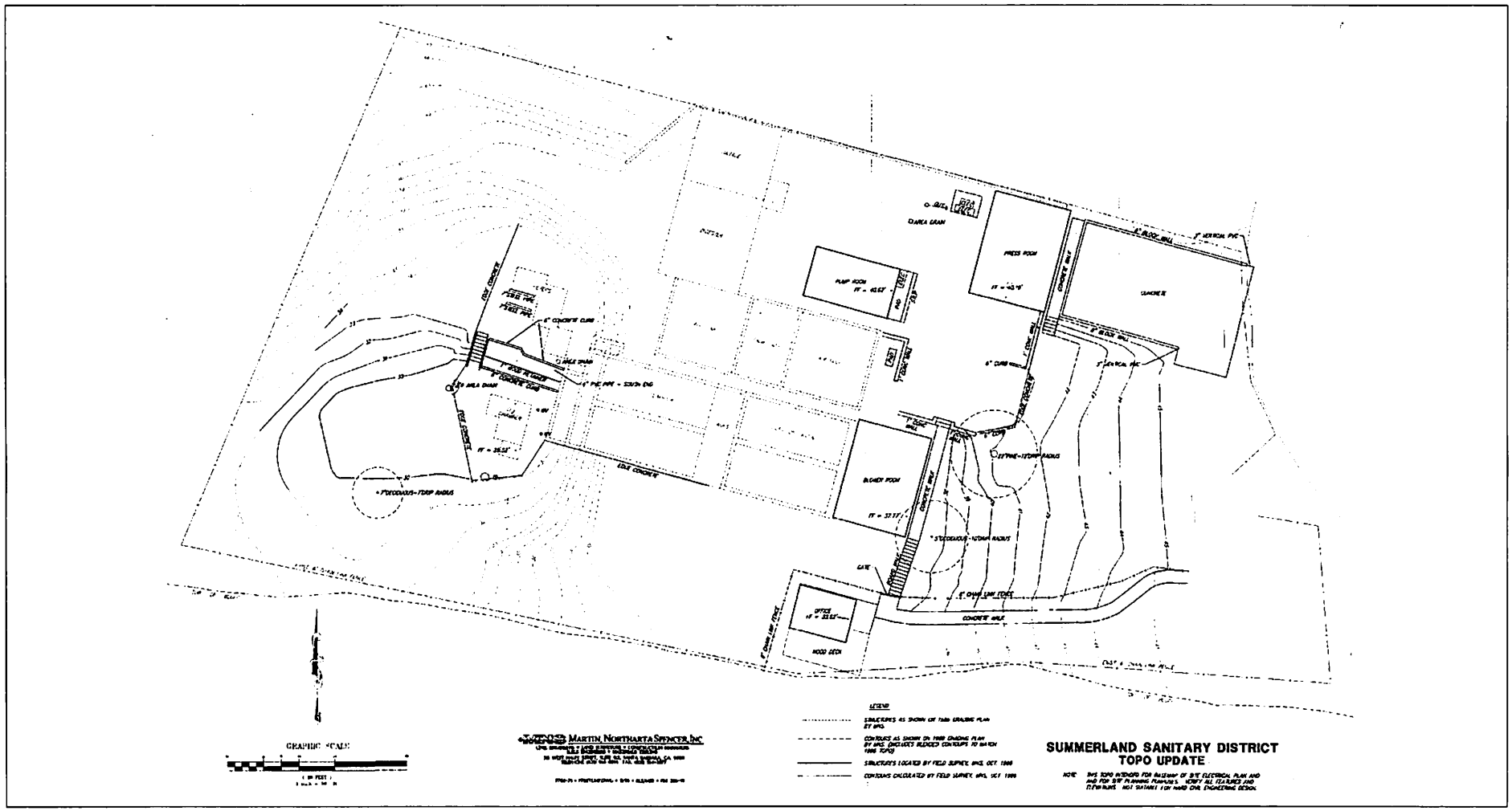
## 4.2 The District's Ocean Outfall

The District's ocean outfall carries treated outflow water from the dechlorine contact chamber offshore approximately 800 ft to discharge. The offshore outlet is located approximately 19 ft below mean sea level where a buoy demarcates the outfall location. The outfall is a 12-inch cast iron pipe, running underground approximately 150 ft from the contact chamber to an exposed "cobble and large boulder area" at a depth of 5 to 10 ft below mean sea level from which point it runs along the ocean floor. The as-built profile for the outfall from 1958 is shown below in **Figure 7**.

## 4.3 Lift Station #1

The District's collection system contains three lift stations, here referred to as Lift Stations numbers 1, 2, and 3. Lift Station #1 is located amid the residential properties along Finney St. and Finney St. E to the West of the Summerland WWTP with the purpose of lifting the sanitary sewer line that runs underneath

the homes to connect with the sewer line along Wallace Ave. and toward the WWTP. **Figure 8** shows Lift Station #1.




SOURCE: MNS, 1989

D202401372.00 - Summerland Coastal Hazards Monitoring Plan.

**Figure 5**

Summerland Wastewater Treatment Plant topo update (1989)

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Source: Kenneth & Gabrielle Adelman. All rights reserved. (https://www.californiacoastline.org/)

**Figure 6.**
Summerland WWTP and rock revetment (both within the red rectangle) in 1972.

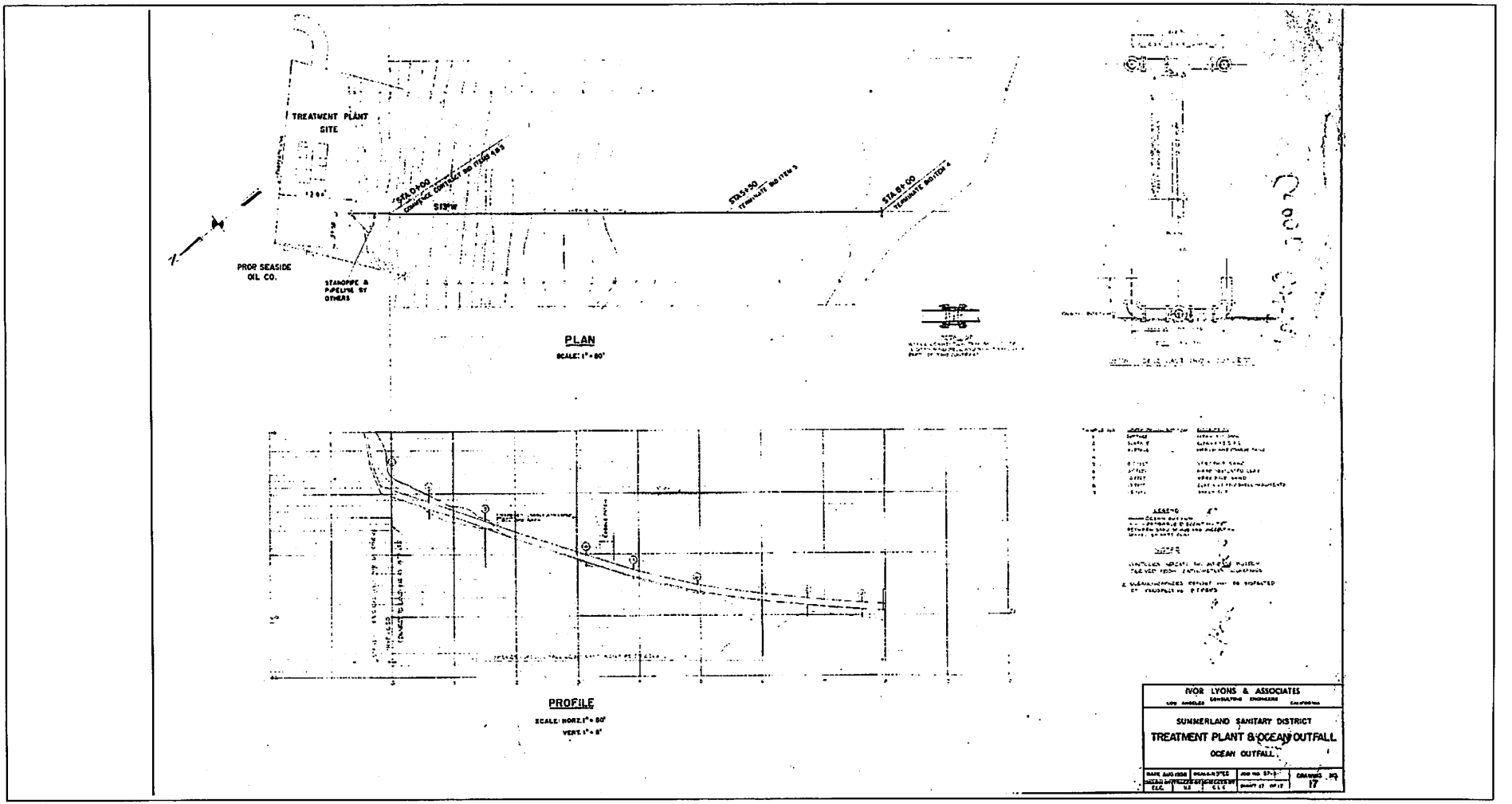
Seaward of the lift station there is a storm drain that carries stormwater runoff from the adjacent homes and rail landward of the lift station down towards the beach. In this vicinity, there is also a cleanout. The cleanout is located on a slope west of the lift station in the same easement. These assets, along with the WWTP, are the most seaward in the District, making them the most vulnerable to coastal hazards.

## 4.4 Additional District Assets

Other District assets include northern, more inland parts of the wastewater collection system, including lift stations #2 and #3, cleanouts, manholes, sewer force mains, and gravity sewer mains.

Lift Station #2 is located north of Highway 101 adjacent to the intersection of Via Real and Montecito Ranch Lane. Lift Station #3 is at the eastern edge of the sanitary district, along Lambert Road near the intersection with Vista Oceano Lane. Sanitary sewer lines and accompanying manholes and cleanouts run underneath and along most streets in the Summerland residential areas north of Highway 101. In the portion of the district east of the residential areas, force mains run, and associated manholes run north of Via Real to Lift Station #2 and along Lambert St. to Lift Station #3. Additionally, a sanitary sewer line and manholes run along Montecito Ranch Lane.

These assets are not discussed in detail in this report as they are located inland, generally outside of the coastal hazard zones. The assets throughout the District are shown below in **Figure 9**.




SOURCE: Ivor Lyons & Associates

D202401372.00 - Summerland Coastal Hazards Monitoring Plan.

**Figure 7**

Summerland Sanitary District ocean outfall as-built plan profile

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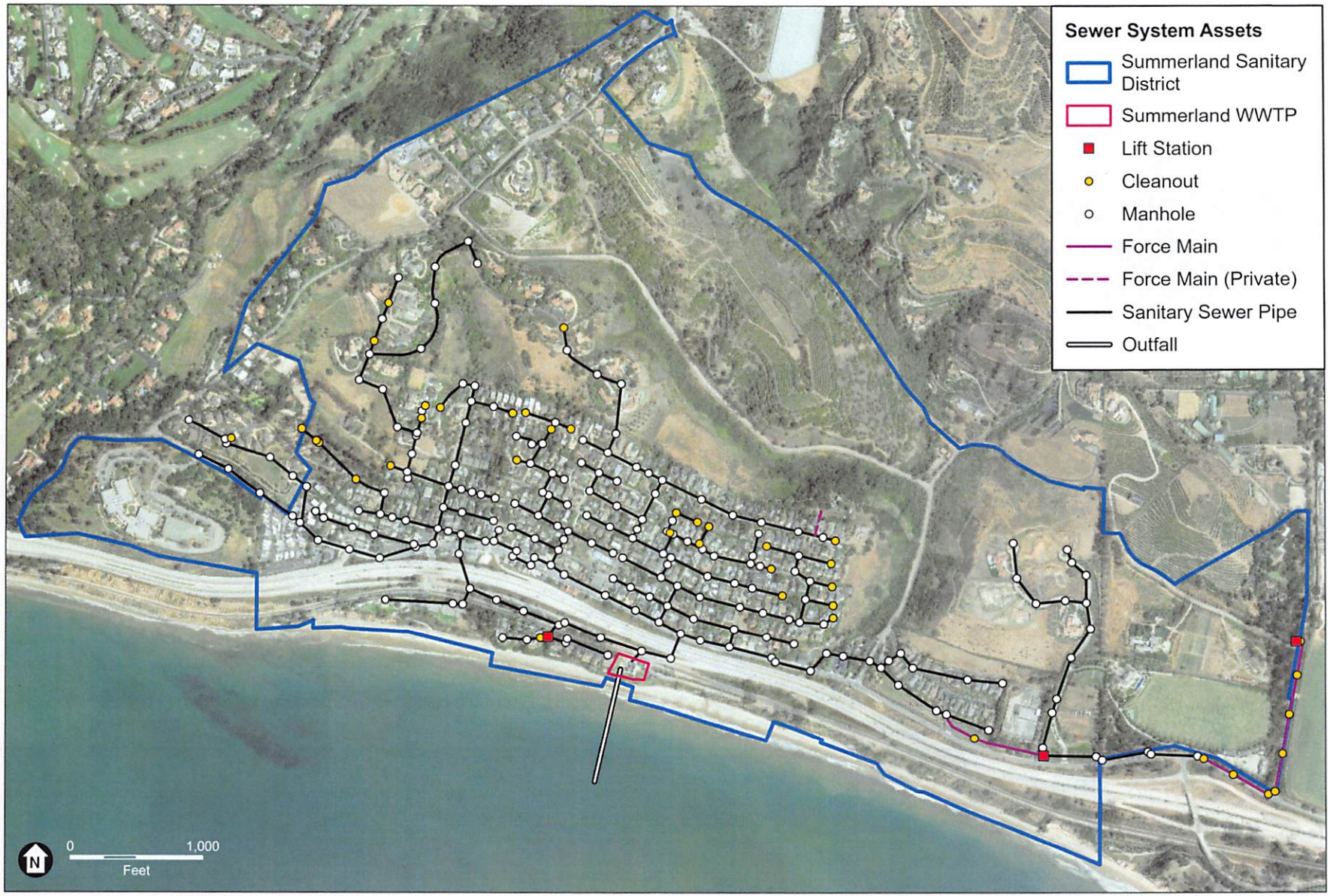
**Figure 8.**
Summerland Sanitary District Lift Station #1, located near Finney St




SOURCE: NOAA, 2020; SSD, ESA, 2024

D202401372.00 - Summerland Coastal Hazards Monitoring Plan

**Figure 9**
Summerland Sanitary District assets

ESA

# 5. COASTAL HAZARD EXPOSURE

This chapter presents the methods and findings of the sea level rise hazard exposure analysis that uses spatial data for coastal hazard zones (described in Section 3.1) and wastewater assets (described in Section 4). ESA assessed coastal hazard exposure for the WWTP, wastewater pipes, lift stations, and other structures in the District.

In order to develop an effective adaptation plan and policies to address sea level rise, the risks of not taking action must be understood first. For this reason, the hazard exposure assessment analyzes hazard impacts assuming a "no action" scenario in which asset managers do not prepare for or respond to sea level rise. By considering this scenario, the District, neighboring jurisdictions, and other decision-makers can understand the full potential impacts of sea level rise, identify areas and/or individual assets with the greatest exposures, and then prioritize and plan adaptation to reduce identified exposures and vulnerabilities.

This study evaluates wastewater asset hazard exposure for multiple hazard types: tidal inundation, coastal storm flooding, and wave run-up, and coastal erosion. An asset's vulnerability to a given hazard is a function of the quantity of exposed assets, the consequences of exposure, and the adaptive capacity of the asset (i.e., asset's ability to be modified to mitigate or avoid exposure). This assessment takes the first step of identifying assets that are currently exposed to coastal hazards or may be exposed with future sea level rise. Vulnerability will be further examined in Phase 2 of the CCAP in the Life Expectancy Analysis (See Section 1.2).

Asset exposures were determined by overlaying each asset layer with hazard zones in ArcGIS. The resulting asset exposure for each hazard type is summarized in the following sections.

## 5.1 Existing Hazard Exposure

The Summerland WWTP and many of the District's assets have a high enough elevation to be protected from certain coastal hazards. The Summerland WWTP is situated at approximately 42.8 ft NAVD88 (North American Vertical Datum of 1988, a standardized reference used to measure elevation) near the secondary treatment tanks adjacent to the top of the bluff to 43.9 ft NAVD at the pump room (Martin, Northart, & Spencer, Inc., 1986). At the NOAA tidal gage in Santa Barbara, the mean higher-high water level (the average of the highest daily tide) is 5.26 ft NAVD and the highest observed tide was 7.52 ft NAVD (NOAA, 2025). This indicates that the existing risk of coastal flooding, storm wave runup, and tidal inundation is minimal.

There is a revetment along the beach at the toe of the bluff in front of the Summerland WWTP. The construction date of the revetment is unknown but based on a review of historical imagery at the site, it has been in place since 1972. Adjacent stretches of shoreline without revetments in place have recently faced larger amounts of erosion than the bluffs in front of the Summerland WWTP. A January 2023 coastal storm and rain event caused erosion and damage to portions of these adjacent, unprotected, areas of shore while the bluffs in front of the WWTP were not noticeably affected.

## 5.2 Hazard Mapping and Exposure Analysis

Existing and future hazards are categorized as having either permanent or temporary impacts (assuming no action). The categories are distinguished between chronic long-term impacts and temporary extreme event-based impacts. The following hazard mapping areas are evaluated:

- Areas subject to the potential future **beach and bluff erosion** hazard zones may be lost entirely (permanent impacts, greatest consequences). Beach erosion consists of landward shoreline movement and scour of assets built on or within the beach. Bluff erosion includes sloughing and erosion of the bluff top and face due to coastal erosion from wave action on the toe of bluff as well as terrestrial erosion processes.
- Areas in the potential future **tidal inundation** hazard zone would be impacted regularly by inundation (permanent impacts, greatest consequences). Tidal inundation represents the potential for chronic infiltration of brackish/salt water to occur at high tides.
- Areas in the potential future **coastal storm flooding** hazard zone would be inundated by extreme high ocean water levels caused by storm surge (temporary impacts, significant consequences). Temporary infiltration of brackish water may occur at unsealed maintenance holes or other access structures.
- Areas in the potential future **coastal storm wave run-up** hazard zone may be damaged or disrupted from flowing water, but assets are likely recoverable, and would return to service when waves and floodwaters recede (temporary impacts, low to moderate consequences).
- Areas in the current **Federal Emergency Management Agency (FEMA) storm flooding** zone are within the published FEMA Flood Insurance Rate Maps' flood hazard zones. The FEMA flood map delineates the 1% annual chance flood hazard zone, which signifies areas with a 1% or higher chance of experiencing a flood each year. Coastal high hazard zones subject to a 1% annual chance of flooding with high velocity waves and flood water are designated as "Zone VE,", meaning these locations could experience extensive damage during flood events caused by fast-moving water and wave action. The 0.2% annual chance flood hazard zones are areas with a 0.2 to 1% chance of flooding each year. Finally, regulatory floodways are defined as the channel of a waterway and its adjacent land areas that must be reserved to accommodate the flow of a 1% annual chance flood without raising surface water levels above a specified height (all FEMA storm flooding zones are temporary impacts, low to moderate consequences).
- The following sub-sections summarize the District's assets that are or may be exposed to coastal hazards with a sea level rise of up to 6.6 feet, which is projected to occur over the next 75 to 125+ years. The following sections are organized by coastal hazard type to inform the development of monitoring methods for each hazard for the CHMP. Hazard exposures are summarized for each planning horizon. Note that the asset exposure is listed under the sea level rise scenario in which it first occurs. Listed exposures are expected to increase with higher amounts of sea level rise but are not listed more than once.
- **Figures 10 to 13** show coastal hazard exposure maps of District assets to under existing conditions, and in the near-, mid-, and long-term with sea level rise scenarios of 0, 0.8, 3.3, and 6.6 ft, respectively.


SOURCE: ESA, ESRI, USGS, SSD, 2025

D202401372.00 - Summerland Coastal Hazards Monitoring Plan

**Figure 10**
Coastal hazards for
existing conditions - 0 ft sea level rise

ESA


SOURCE: ESA, ESRI, USGS, SSD, 2025

D202401372.00 - Summerland Coastal Hazards Monitoring Plan

**Figure 11**
Coastal hazards
near-term - 0.8 ft sea level rise

ESA


SOURCE: ESA, ESRI, USGS, SSD, 2025

D202401372.00 - Summerland Coastal Hazards Monitoring Plan

**Figure 12**
Coastal hazards for
mid-term conditions - 3.3 ft sea level rise

ESA


SOURCE: ESA, ESRI, USGS, SSD, 2025

D202401372.00 - Summerland Coastal Hazards Monitoring Plan

**Figure 13**
Coastal hazards for
long-term conditions - 6.6 ft sea level rise

ESA

### 5.2.1 Coastal Erosion

According to Campbell Geo's Coastal Bluff Hazards Evaluation (Appendix A), a high rate of coastal bluff retreat in Summerland is evident between 1928 and 1947 in the aerial photographs. Dredging of the Santa Barbara harbor entrance began in the 1940s to replenish the sand supply to the coastal system. As a result, beaches started to reappear down coast (Norris 1995). For many decades, the U.S. Army Corps of Engineers (USACE) has conducted an ongoing maintenance sand dredging and by-passing program at the harbor, which has re-established the sediment supply to beaches east of the Santa Barbara Harbor, which consequently reduced the bluff and shoreline erosion in Summerland, including fronting the WWTP.

In the 19 years between 1928 and 1947, the total retreat at the top of the coastal bluff at the property is estimated at 39 feet. The majority of that retreat is most likely due to the beach sand starvation from construction of the Santa Barbara Harbor in 1928 as discussed above. The top of bluff retreat calculated from the data in the 1947 and 1956 photos is 10 feet, for an average of 1.1 feet per year during that period after the beach sediment supply was generally re-established.

In the last 56 years between the 1969 aerial photograph and 2025, there appears to be little to no retreat of the top of the coastal bluff. The photographs indicate 7 feet of bluff retreat along the measurement lineation utilized by Campbell Geo (Appendix A). That equates to an average retreat rate of 0.13 feet per year since the construction of the District and installation of the revetment at the toe of the coastal bluff.

All photos were also evaluated for signs of landslides at and near the site, using stereographic analysis. The photos do not indicate signs of historical and currently active landslides on the slope face at the subject site. In a limited area at the back of the revetment located southeast of the facility, there is some erosion of the bluff slope surface where the boulder elevation is a few feet lower than the surrounding revetment, possibly allowing occasional moderate wave runup under extraordinary tides and/or storm surf conditions. Additional details on the methodology and dataset utilized for the analysis can be found in Appendix A.

The site-specific, historical, estimated bluff retreat rate of zero to 0.13 feet/year based on the 1969 through 2025 aerial photo and ground measurements described above have been applied to the percent increases for the various SLR scenarios used in the CoSMoS model. The results of project bluff erosion due to sea level rise considering the conservatively erosive "Do Not Hold The Line" model setting indicate between 0 to 6 ft of bluff erosion in the near-term, 0 to 28 ft of bluff erosion in the mid-term, and 0 to more than 28 ft in the long-term. Using the model setting with armoring of the coastal bluff by the rock revetment (the "Hold The Line" model setting), the CoSMoS model indicates no future bluff retreat fronting the Summerland WWTP for all sea level rise scenarios. Therefore, the lowest value in the range in retreat rates is listed at zero, although that is judged to be unrealistically low.

The assets below are mapped based on the Coastal Bluff Hazards Evaluation. **Table 4** shows the District assets potentially exposed to coastal erosion now and in the near-term (0 to 0.8 ft SLR, now to 2055, with potential bluff retreat between 0 to 6 ft), mid-term (0.8 to 3.3 ft SLR, 2045 to 2110, with potential bluff retreat between 0 to 28 ft), and long-term (3.3 to 6.6 ft SLR, 2075 to 2150+, with potential bluff retreat between 0 to more than 28 ft).

TABLE 4. SUMMARY OF DISTRICT ASSET EXPOSURE TO COASTAL EROSION

| Time Frame | Sea Level Rise (ft) | Bluff Retreat (ft) | Summerland WWTP Exposed? | Outfall Exposed?[a] | Assets Exposed | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Feet of Sanitary Sewer Pipe | Manholes | Cleanouts | Lift Stations |
| Current Conditions | 0 | 0 | No | No | 0 | 0 | 0 | 0 |
| Near-Term (now to 2055) | 0 to 0.8 | 0 to 6 | No | No | 0 | 0 | 0 | 0 |
| Mid-Term (2045 to 2110) | 0.8 to 3.3 | 0 to 28 | Yes | No | 0 | 0 | 0 | 0 |
| Long-Term (2075 to 2150+) | 3.3 to 6.6 | 0 to > 28 | Yes | No | 0 | 0 | 0 | 1 |

SOURCE: ESA 2025

NOTE:

a. Outfall exposure determined by inundation of the outfall end at the WWTP.

### Existing Asset Exposure

Under existing conditions, there is no expected exposure of District assets to coastal erosion.

### Near-Term Asset Exposure (0 to 0.8 ft SLR, now to 2055)

Between 0 and 0.8 ft of sea level rise, projected to occur from now to 2055, with potential bluff top retreat between 0 to 6 ft, there is no expected exposure of District assets to coastal erosion.

### Mid-Term Asset Exposure (0.8 to 3.3 ft SLR, 2045 to 2110)

Between 0.8 and 3.3 ft of sea level rise, projected to occur between 2045 and 2110, and potential top bluff retreat between 0 to 28 ft would expose the Summerland WWTP to erosion with potential damage to the District's office building and two storage sheds. In the mid-term, the District's treatment assets, including the clarifier, digester, and aeration impoundments are not threatened by exposure.

### Long-Term Asset Exposure (3.3 to 6.6 ft SLR, 2075 to 2150+)

Between 3.3 to 6.6 ft of sea level rise, projected to occur between 2075 and 2150+, and potential bluff top retreat between 0 to more than 28 ft would further expose the Summerland WWTP to erosion, potentially impacting more assets than just the District's office building and two storage sheds, including Lift Station #1.

## 5.2.2 Tidal Inundation

No assets are mapped within the USGS CoSMoS tidal inundation hazard zone. Note that the CoSMoS coastal flood hazard zone indicates direct inundation by ocean water levels during typical monthly spring tide conditions. **Table 5** shows no District assets are likely to be exposed to tidal inundation now and in

the near-term (0 to 0.8 ft SLR, now to 2055), mid-term (0.8 to 3.3 ft SLR, 2045 to 2110), or long-term (3.3 to 6.6 ft SLR, 2075 to 2150+).

**TABLE 5. SUMMARY OF DISTRICT ASSET EXPOSURE TO TIDAL INUNDATION**

| Time Frame | Sea Level Rise (ft) | Summerland WWTP Exposed? | Outfall Exposed?[a] | Assets Exposed | | | |
|---|---|---|---|---|---|---|---|
| | | | | Feet of Sanitary Sewer Pipe | Manholes | Cleanouts | Lift Stations |
| Current Conditions | 0 | No | No | 0 | 0 | 0 | 0 |
| Near-Term (now to 2055) | 0 to 0.8 | No | No | 0 | 0 | 0 | 0 |
| Mid-Term (2045 to 2110) | 0.8 to 3.3 | No | No | 0 | 0 | 0 | 0 |
| Long-Term (2075 to 2150+) | 3.3 to 6.6 | No | No | 0 | 0 | 0 | 0 |

SOURCE: ESA 2025

NOTE:

a. Outfall exposure determined by inundation of the outfall end at the WWTP.

## 5.2.3 Coastal Storm Flooding

The assets below are mapped within the USGS CoSMoS coastal flooding hazard zone. Note that the CoSMoS coastal flood hazard zone indicates direct inundation by ocean water levels during storm events. Results from CoSMoS indicate that no wave runup and overtopping would occur considering the sea level rise scenarios for the near, mid, and long-term. **Table 6** shows the District assets exposed to 100-year coastal storm flooding.

**TABLE 6. SUMMARY OF DISTRICT ASSET EXPOSURE TO 100-YEAR COASTAL STORM FLOODING**

| Time Frame | Sea Level Rise (ft) | Summerland WWTP Exposed? | Outfall Exposed?[a] | Assets Exposed | | | |
|---|---|---|---|---|---|---|---|
| | | | | Feet of Sanitary Sewer Pipe | Manholes | Cleanouts | Lift Stations |
| Current Conditions | 0 | No | No | 0 | 0 | 0 | 0 |
| Near-Term (now to 2055) | 0 to 0.8 | No | No | 0 | 0 | 0 | 0 |
| Mid-Term (2045 to 2110) | 0.8 to 3.3 | No | No | 0 | 0 | 0 | 0 |
| Long-Term (2075 to 2150+) | 3.3 to 6.6 | No | No | 609 | 3 | 0 | 0 |

SOURCE: ESA 2025

NOTE:

a. Outfall exposure determined by exposure of the outfall end at the WWTP.

### Existing Asset Exposure

Under existing conditions, there is no expected exposure of District assets to 100-year coastal storm flooding.

### Near-Term Asset Exposure (0 to 0.8 ft SLR, now to 2055)

Between 0 and 0.8 ft of sea level rise, projected to occur from now to 2055, there is not expected to be exposure of District assets to coastal storm flooding.

### Mid-Term Asset Exposure (0.8 to 3.3 ft SLR, 2045 to 2110)

With 0.8 to 3.3 ft of sea level rise, projected to occur between 2045 and 2110, there is not expected to be exposure of District assets to tidal inundation.

### Long-Term Asset Exposure (3.3 to 6.6 ft SLR, 2075 to 2150+)

With 3.3 to 6.6 ft of sea level rise, projected to occur between 2075 and 2150+, the following assets are expected to be vulnerable to 100-year coastal storm flooding:

- Manholes and sanitary sewer pipe along Finney St
- One manhole and a section of sanitary sewer pipe along Wallace Ave. near Finney St

## 5.2.4 Increased Precipitation

As discussed in Section 3.2, Precipitation Changes, the magnitude and frequency of extreme rainfall events is projected to increase. As a result and in combination with increased groundwater levels, I/I and peak WWTP inflows are expected to increase in frequency and magnitude, possibly similar to the projected increase in precipitation discussed in Section 3.2.

# 5.3 Coastal Hazard Exposure Thresholds

The following coastal hazard exposure thresholds are conditions that would necessitate further management, control measures, or adaptation actions by the District, Santa Barbara County, or other entities. Monitoring methods to track progress towards these thresholds are described in Chapter 5.

## 5.3.1 Coastal Erosion

For **unarmored shorelines**, like the Lift Station #1, located in a gully in the bluff along E Finney St., the exposure thresholds include:

- If erosion from the gully reaches an unsafe distance from the unarmored asset during or after storm or other conditions.
- If the structure platform for Lift Station #1 presents signs of erosion, undermining, or other damage after storm or other conditions.

For **armored shorelines** with rip rap along the District coastal hazard area, like the outfall and the Summerland WWTP, *armor damage is a exposure threshold, including exposure and undercutting of*

*armor toe, and movement of the rocks from the rip rap.* Shoreline armor includes the bluff toe revetment fronting the Summerland WWTP, which is located on the top of the bluff and the protection on the County storm drain outlet. The exposure threshold for the armored shorelines includes:

- If an erosion event causes armor damage, including exposure and undercutting of armor toe.
- If an erosion event causes movements of the rocks in the rip rap.
- If an erosion event exposes the bluff face or causes the removal of trees and vegetation covering the bluff face.
- If an erosion event causes significant erosion of the bluff top edge or signs of damage to the District office building and two storage sheds (e.g., cracking of pavement).

### 5.3.2 Tidal Inundation

The majority of District assets are relatively watertight by design, though *significant regular tidal inundation and infiltration* of maintenance holes, cleanouts, lift stations and other at-grade facilities can result in seawater I/I and associated problems (e.g. corrosion of parts and effects on wastewater treatment processes). Typical collection system assets are not designed to manage daily tidal water inundation.

There is no expected exposure of District assets to tidal inundation in the near, mid, or long term. Therefore, no thresholds were developed to indicate the need for further management, control measures, or adaptation actions by the District related to tidal inundation.

### 5.3.3 Coastal Storm Flooding

As discussed in Section 5.3.2, the majority of District assets are relatively watertight by design. However, the collection system assets are generally not designed to manage inundation from coastal flood events. There is no expected exposure of the Summerland WWTP, the outfall, and most of the District's assets to coastal storm flooding in the near, mid, or long term. However, in the long-term, with 3.3 to 6.6. ft of sea level rise, manholes, and sanitary sewer pipe along Finney St., as well as one manhole and a section of the sanitary sewer pipe at Wallace Ave., could be exposed to coastal storm flooding. Thresholds for coastal storm flooding include:

- Significant infiltration into maintenance holes during storm events.
- Corrosion or additional maintenance needs on the sanitary sewer pipe due to increased interaction with seawater.

### 5.3.4 Coastal Groundwater

There is no expected exposure of District assets to coastal groundwater changes in the near, mid, or long-term. Therefore, no thresholds were developed to indicate the need for further management, control measures, or adaptation actions by the District, Santa Barbara County, or other entities related to tidal inundation.

### 5.3.5 Increased Precipitation

There is no anticipated direct exposure of District assets to increased precipitation changes in the near, mid, or long term. However, increased precipitation poses a significant compounded risk for escalating bluff erosion due to enhanced runoff, which may accelerate bluff failure and erosion along the top of the bluff. Therefore, exposure thresholds for increased precipitation include:

- Increase in extreme precipitation events and annual precipitation.
- Runoff-induced erosion at the top of the bluff and erosion of the existing vegetation (trees and bushes) present on the bluff face.
- If runoff or heavy precipitation causes failure of the bluff top or creates signs of erosion on the top of the bluff (e.g., cracks in the terrain or concrete pads at the Summerland WWTP, or movement of the seaward fence bordering the WWTP)

# 6. MONITORING PLAN

This section outlines the monitoring plan and establishes procedures and metrics for monitoring and data collection. As presented in the Introduction section of Chapter 1, the CHMP follows the framework and parameters outlined in the District Waste Discharge Requirements, Section 6.3.6.1.1 of Resolution No. 2017-0012 and Order No. R3-2022-0014 for the California Regional Water Quality Control Board Central Coast Region. This chapter of the District CHMP establishes the framework and parameters for regularly monitoring bluff erosion, tidal inundation, and other coastal hazards at the site. **Table 7** below outlines the summary of the District monitoring plan.

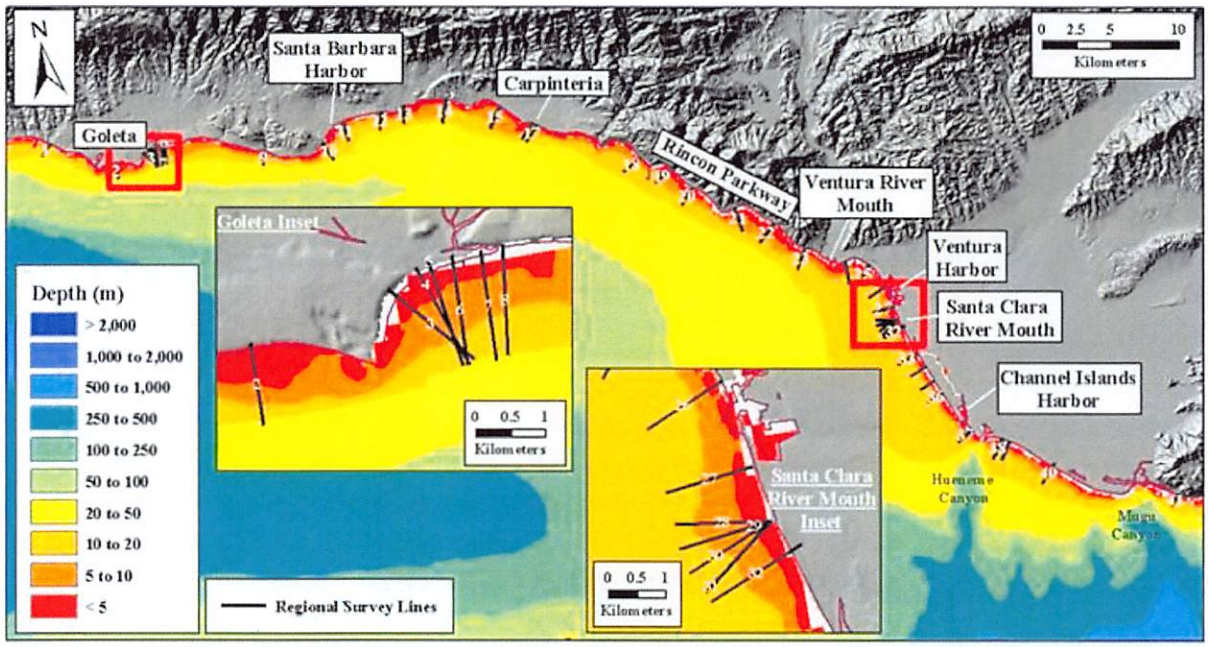
The following sections describe coordination with relevant agencies (Section 6.1), monitoring methods (Section 6.2), regional data archiving of hydrologic processes (Section 6.3), other management activities (Section 6.4), and reporting and documentation (Section 6.5).

## 6.1 Coordination with Relevant Agencies

There are other agencies that may be carrying out monitoring efforts in the District's service area, including the County of Santa Barbara Public Works, the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON), and the USGS. Certain agencies collect data that is relevant to the District and aligns with this monitoring plan, while other agencies are planning to collect relevant data. Coordination with these agencies is necessary to share data and organize efforts.

BEACON is developing a Regional Coastal Adaptation Monitoring Program (RCAMP) Plan as part of a monitoring program to provide consistent data and analysis to inform the implementation of sea-level rise adaptation plans in the BEACON region, which includes Summerland. As part of the RCAMP, a pilot monitoring study is being developed and will be conducted. Coordination with BEACON is necessary to leverage these efforts.

Separate from CoSMoS, USGS has surveyed annual (end of summer) ground and nearshore bathymetry transects or shore profiles at the locations shown in **Figure 14**. USGS analyzed changes from profiles surveyed in 2003 and 2007 for the Coastal Processes Study of Santa Barbara and Ventura Counties (Barnard and others 2009). USGS has not yet published or analyzed more recent surveys. There is one profile that USGS collects (number 14 of Figure 14) that is located on Summerland Beach approximately 600 ft east of the Summerland WWTP. Though the USGS profiles are not yet publicly available, coordination with USGS and BEACON could lead to obtaining these profile data.




Source: Correspondence with Patrick Barnard at the USGS, April 19, 2019

**Figure 14.**
USGS annual shore profile survey locations

## 6.2 Monitoring Methods

### 6.2.1 Periodic Inspections

Qualitative observations shall be carried out annually or semiannually in the fall and spring. Periodic inspections shall be done by District staff.

#### Semiannual (September/October and May/June)

1. **Summerland Beach Bluff (fronting the Summerland WWTP)**

    a. Bluff Erosion – Inspection of the bluff top edge relative to the seaward fence of the Summerland WWTP (alternatively, the District can install benchmarks, such as T-posts, at specific locations on the top of the bluff to serve as monitoring measuring points for bluff crest erosion). The erosion inspection will include:

        i. Examining changes (erosion, crack, or earth movement) on the bluff crest that typically occur after heavy precipitation and identifying potential damages (e.g., cracks) in the ground or on concrete and District assets within the Summerland WWTP.

        ii. Inspection of the erosion of vegetation (trees and bushes) present at the bluff face after heavy rains and/or significant coastal storms.

iii. Examination for significant revetment damages, such as the movement of larger rocks to the beach. If feasible, District staff or others shall measure the distance from the bluff top edge to the installed benchmark or the existing seaward fence. The District can take baseline photos of the vegetation on the bluff face to compare their position after significant weather events.

iv. The District or others should use large rocks on the revetment as an indicator to inspect if the rip rap had major changes and impacts or if the bluff toe eroded after significant coastal storms for example marking larger rocks, and taking photographs. There should be two or three repeated locations designated for these inspections. For safety precautions, the measurement should not include staff walking out to the edge of the bluff. Instead, a device such as a long measuring stick with a string and small weight or similar to locate the bluff edge should be used. Staff should maintain a safe distance from the bluff edge.

v. Examination of the County's storm drain outlet structure above the revetment on the beach for damage to the outfall structure or erosion on the bluff face.

## Annual

### 1. Summerland WWTP and Outfall Armoring

a. Summerland WWTP and Outfall Armoring Erosion – Inspection of the rip rap rock revetment fronting the Summerland WWTP. The inspection shall include walking along the beach to inspect the toe of the armoring. The inspection will include looking for significant damage to the armoring, significant undercutting, and damage that would trigger adaptation to protect the outfall. In addition to the visual inspection, the District shall inspect the armoring using a survey measuring tape. The measurements should be taken in-line with the center of the outfall maintenance hole above the armoring. Monitoring measurements shall include:

i. A measurement of the distance from the top of the structure to the sand. The beach substrate (sand, cobble, etc.) should be noted and photographed. When possible, a minimum of three lengths, measuring perpendicular to the revetment, should be surveyed from the west to the east at established and consistent locations.

ii. The District or others should use large rocks on the rip rap as indicators to inspect if the rip rap had major damage and changes, for example, marking or photographing specific rocks that can be used as reference, or, if possible, using GPS to obtain the specific location of a few larger rocks and retaking the GPS measurements during monitoring assessment or after major weather events.

### 2. Coastal Zone Lift Station: Lift Station #1:

a. Erosion within the Gully – Inspection of the structure platform for Lift Station #1 to assess significant impacts on the platform structure, as it's located in a gully and may be subject to erosion due to water movement. The inspection shall include looking for signs of corrosion and erosion/undermining of the structure/platform, as well as any indication of erosion in the vicinity. Photograph and document the photos and notes for future reference.

### 6.2.2 Event-Based Inspections

In addition to periodic inspections, qualitative observations of the following assets and asset locations shall be carried out after extreme events where flood and erosion hazards may be exacerbated.

## During and/or after Significant Coastal Storm Events:

1. **Summerland Beach Bluff (fronting the Summerland WWTP)**

    a. Bluff Erosion – Inspection of the bluff top edge relative to the Summerland WWTP from the southernmost District asset, the southern fence, or an installed landmark (e.g., T-post). The erosion inspection will include looking for undercutting of the bluff edge, movement of the fence or the landmark, or areas where there may be the potential for undercutting and looking for cracks in the soils or concrete structures within the WWTP.

        i. Inspection of erosion or movement of vegetation present in the bluff face or exposed surfaces on the bluff face. As well as exposure of vegetation roots along the entire bluff (face and toe). This includes the immediate vicinity of the County storm drain outlet.

        ii. Inspection of the riprap in front of the bluff toe at Summerland WTTP. This will include checking for movement of larger rocks on the riprap, exposure of the bluff toe, or noticeable scouring on the bluff behind the riprap.

        iii. These inspections should be recorded and compared with past years for early notice of small movements and changes.

2. **Summerland WWTP and Outfall Armoring**

    a. Outfall Armoring Erosion – Inspection of the rip rap rock revetment fronting the Summerland WWTP. The inspection shall include walking on top of the armoring (if safe) as well as walking along the beach to see the toe of the armoring. The erosion inspection will include looking for significant damage to the armoring, movement of large rocks, significant undercutting, and damage that would need to be addressed to protect the outfall. In addition to the visual inspection, the District shall inspect the armoring using a survey measuring tape. The measurements should be taken in-line of the center of the outfall maintenance hole above the armoring. Monitoring measurements shall include:

        i. A measurement of the distance vertically from the toe of the structure to the sand. The beach substrate (sand, cobble, etc.) should be noted and photographed. When possible, a minimum of three points of the toe of structure should be surveyed from the west to the east at established and consistent locations. See Section 6.1.5 for guidance on survey control.

        ii. A measurement of the armoring toe to the seaward edge of the maintenance hole with measuring tape.

## During and After Significant Rain Events:

1. **Summerland Beach Bluff (fronting the Summerland WWTP)**

    a. Bluff Erosion – Inspection of the bluff crest in relation to the Summerland WWTP from the westernmost District asset, the western fence, or an installed landmark (e.g., T-post). The erosion

inspection will include looking for undercutting of the bluff edge, movement of the fence or the landmark, or areas where there may be the potential for undercutting and looking for cracks in the soils or concrete structures within the WWTP.

i. Inspection of erosion or movement of vegetation present in the bluff face or exposed surfaces on the bluff face. As well as exposure of vegetation roots along the entire bluff (face and toe).

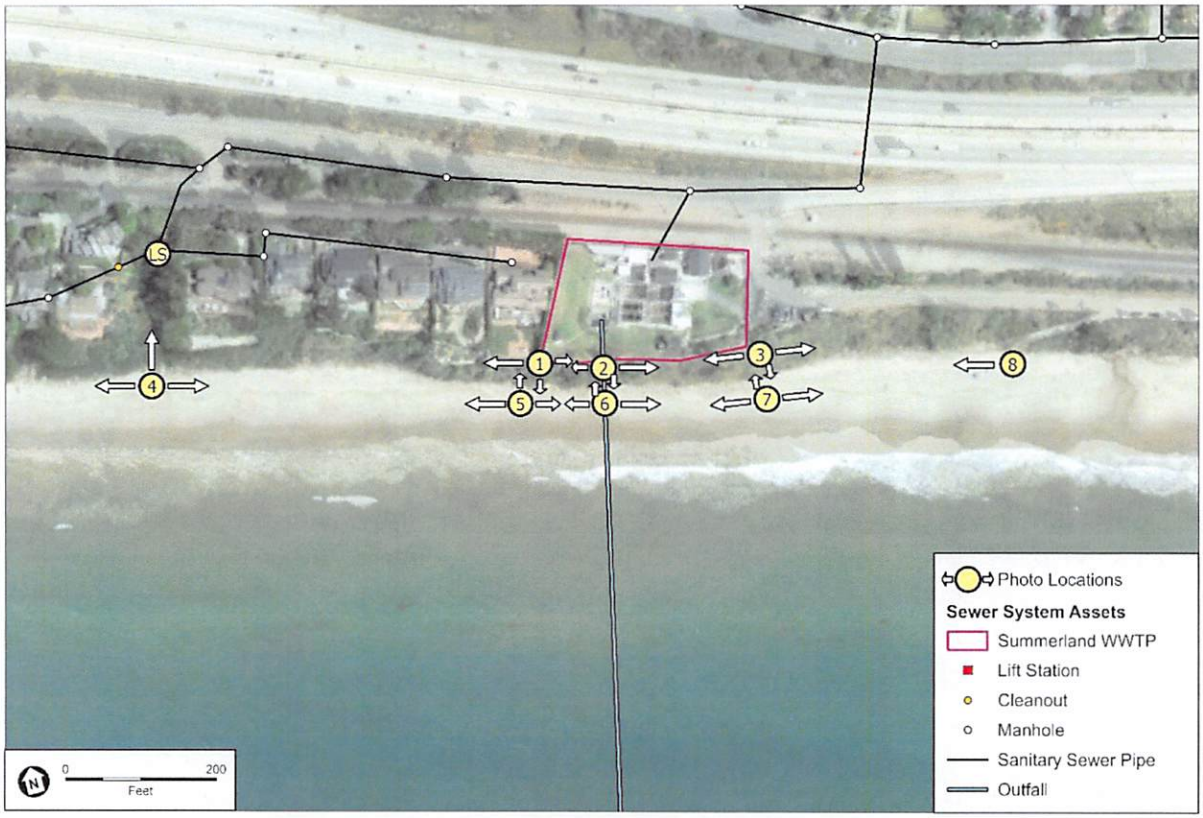
2. **Coastal Zone Lift Station: Lift Station #1:**

a. Increased Precipitation Intensity – Inspection of the structure platform for Lift Station #1 to assess significant impacts on the platform's integrity, as it is located in a gully and may be subject to erosion due to water movement. The inspection shall include looking for signs of corrosion and erosion/undermining on the seaward side of the structure/platform, as well as any indication of erosion in the vicinity. Photograph and document the photos and notes for future reference.

Event-based inspections are intended to identify any critical risks to help quantify and track the effects of extreme events and provide benchmarks against which future storms can be compared. Where possible, high-water marks should be logged and surveyed with water level elevation, date, and time.

### 6.2.3 Repeat Photography

Photographic documentation will be undertaken during the same time as the periodic and event-based inspections. The photographic documentation techniques will be based on the principles of re-photography, also known as repeat photography. This is a technique of landscape study where scenes are repeatedly photographed at certain time intervals to determine the nature of long-term change. The photograph location and compass bearing of the direction of view will be established and notated for every photo. At a minimum, land-based photographs shall be taken along Summerland Beach and atop the beach bluffs at the locations and in the directions shown in **Figure 15**. Photo locations 1,2, and 3 shall be taken atop the beach bluffs, and the remaining photos shall be taken at low tide on the beach. Photographs taken inside lift stations and other locations of note shall be decided by the District based on Sections 6.2.1 and 6.2.2 above. Locations and directions are to be chosen based on specific areas of interest as well as potential indicators for action.




Source: NOAA; 2020; SSD, ESA, 2025

**Figure 15.**
Summerland Beach photo locations

## 6.2.4 Aerial Imagery

The District will obtain and review publicly-available aerial imagery collected by others that are useful for assessing coastal change. At a minimum, the District will obtain and review U.S. Geological Survey's oblique aerial imagery as described below.

### Base Monitoring

USGS has been collecting oblique aerial photogrammetric imagery of the Summerland coastline from 2016 to 2023. The high-resolution images can be viewed through the USGS Remote Sensing Coastal Change Simple Data Distribution Service website (usgs.gov) (Ritchie and others 2023), which includes directories, GIS, and Google Earth files of the image sets.

### Annual

1. **Summerland Beach Bluff (fronting the Summerland WWTP)**

    a. Bluff erosion – using available imagery, assess bluff crest and bluff face fronting the Summerland WWTP. Review the aerial imagery for erosion risks to the Summerland WWTP (cracks and

undercutting on the bluff edge, erosion of vegetation, exposure of bluff face or vegetation roots) and bluff armoring.

2. **Summerland WWTP and Outfall Armoring**

   a. Outfall armoring damage – using available imagery, assess the rip rap rock revetment fronting the Summerland WWTP. The damage assessment will include looking for movement of large rocks, evident scour on the bluff toe behind the rip rap, significant damage to the armoring, and damage that would trigger adaptation to protect the outfall.

### *Optional Monitoring*

The USGS collected oblique aerial photogrammetric imagery that can be used to develop topographic data of bluffs and beaches using structure from motion (SfM) methods (similar to photogrammetric methods). USGS has published SfM instructions for developing topographic data from imagery (Processing Coastal Imagery With Agisoft Metashape Professional Edition, Version 1.6—Structure From Motion, (Over and others 2021). USGS plans to use the imagery to provide topographic data and map products in the future.

### Approximately Every Two Years

1. **Summerland Beach Bluff (fronting the Summerland WWTP)**

   a. Bluff erosion analysis - USGS' SfM instructions or other methods could be used to develop bluff topography data from the USGS imagery data sets. USGS plans to do this in the future for regional coastal imagery that includes the Summerland WWTP. The bluff topography data would be used to map bluff top edge every year or few years. Topography data could also be used to track bluff face erosion, slope, toe position, and bluff erosion rate. This could be accomplished using available LiDAR and processing of available USGS aerial imagery, supplemented with additional surveys for confirmation.

2. **Summerland WWTP and Outfall Armoring**

   a. Outfall erosion analysis - USGS' SfM instructions or other methods could be used to develop topography data from the USGS imagery data sets. The topography data would be used to map the outfall toe position every year or few years. Topography data could also be used to track outfall top extents, damage to the outfall, and damage to the adjacent armor. This could be accomplished using available LiDAR and processing of available USGS aerial imagery, supplemented with additional surveys for confirmation.

## 6.2.5 Regularly Scheduled Survey

To monitor for asset exposure thresholds, ground-based topographic monitoring of the Summerland Beach bluffs shall be undertaken every two to three years at a minimum.

### Every Three Years

Survey the beach every two to three years, or optionally annually as necessary for informing adaptation.

1. **Ocean Outfall**

    a. Adjacent Beach Erosion – The District, possibly in coordination with others, shall take a beach transect survey perpendicular to the section fronting the Summerland WWTP along the outfall profile from the rip rap edge to the water's edge. The transect should be taken at low tide to maximize data collection. The transect should include points taken at the bluff toe/backshore of the beach. The transect should be established and surveyed along the same path each time.

2. **Summerland Beach Bluff (fronting the Summerland WWTP) (Optional)**

    a. Bluff top edge and toe position - The topography could be surveyed using aerial methods (e.g., drone-based LiDAR or photogrammetry). Successive surveys could be compared to assess bluff erosion rate.

### Survey Control

A network of at least three (3) permanent survey control points shall be established within the site to maintain accurate vertical and horizontal accuracy between monitoring events. In order to maintain consistency for the monitoring period, all surveys should be conducted in a consistent coordinate system and datum and should be surveyed relative to these three established control points.

## 6.3 Monitoring Methods Summary

Monitoring methods are specified for beach and bluff erosion, tidal inundation, coastal storm flooding and wave action, and increased precipitation intensity. A summary of the coastal hazards monitoring plan is provided below in **Table 7.**

**TABLE 7. SUMMARY OF COASTAL HAZARDS MONITORING PLAN**

| Hazard Type | Monitoring Method | Frequency | Responsible Personnel |
|---|---|---|---|
| Beach and Bluff Erosion | **Coordination with relevant agencies** – Leverage agency partnerships and data collection by others. | Ongoing | District Staff |
| | **Inspections (periodic and event-based)** – Inspect the bluff top edge relative to the seaward fence of the WWTP for bluff erosion, inspect the bluff toe revetment fronting the WWTP, the County storm drain outlet structure, and inspect the shoreline condition near and platform structure for Lift Station #1 for erosion or damage. | Annual, Every Two Years, or after Significant Coastal Storm Events | District Staff |
| | **Repeat photography** – Take photographs at fixed locations to document conditions and assess change for beaches and bluffs | Annual, or after Significant Coastal Storm Events | District Staff |
| | **Aerial imagery** – Collect and review aerial imagery of coastline to document erosion of bluffs, outfall armoring, and to assess the conditions of the rip rap or if any movement in the rocks. | Annual, Every Two Years, or after Significant Coastal Storm Events | District Staff and Consultant for Optional Monitoring |
| | **Optional focused land surveys and engineering assessment** - Optional, potentially in coordination with others. | Every Two Years | Consultant |

| Hazard Type | Monitoring Method | Frequency | Responsible Personnel |
|---|---|---|---|
| | Survey to map and measure asset distance from bluff top edge and beach profile at outfall using ground-based and/or aerial (LiDAR or photogrammetry) survey methods. A coastal engineer should review those surveys along with an examination of the overall condition of the bluff and revetment. | | |
| Tidal Inundation | **Repeat photography** – Take photographs at fixed locations to document conditions at king tides | Annually (highest predicted tide of the year (king tides)) | District Staff |
| | **Regional environmental data archiving** - Document water level measurements from Santa Barbara monitoring station (NOAA Station 9411340) and compare to baseline | Annually | District Staff and/or Consultant |
| Coastal Storm Flooding and Wave Action | **Inspections (event-based)** - Storm observations and post-storm assessment of damages, identify location(s) of storm flooding or wave action | During and/or after Significant Coastal Storm Events | District Staff |
| | **Repeat photography** – wave actions (e.g., on the revetment) and any flooding | During and/or after Significant Coastal Storm Events | District Staff |
| Increased Precipitation Intensity | **Inspections (event-based)** - Document any operational issues and damages during storm events | During and/or after Significant Storm Events | District Staff |
| | **Regional environmental data archiving** - Document County rain gage data for event | After Storm Events | District Staff and/or Consultant |
| | **Ongoing management actions** - Continue to monitor WWTF inflow | Ongoing | District Staff |

## 6.4 Regional Environmental Data Archiving

Regional environmental data archiving shall be carried out on an annual basis as part of the Monitoring Program. Establishing a multi-year record of environmental conditions (e.g., tides, waves, precipitation, and groundwater measurements) in the area will help inform short and long-term management decisions and will supplement monitoring data collected through the monitoring period.

Datasets included in the regional data archiving span information collected by the County of Santa Barbara Public Works Department and other government agencies, including the USGS, NOAA, and the State of California.

The following sections describe the type of data that should be collected and analyzed as part of the monitoring program. Baseline conditions of tide, wave, and meteorological data are also provided below for future comparisons.

### 6.4.1 Tides

Observed and predicted tides will be compiled for each annual monitoring report. The tidal water elevations will be acquired from the Santa Barbara tide gage, NOAA National Ocean Service (NOS)

Station 9411340, located about five miles east of the Summerland WWTP, but assumed to be representative of the actual conditions at the site.

Tides at the site are characterized by a mixed semi-diurnal tide signal, typical of the California coast, with two high tides and low tides occurring per day, each with unequal heights. The diurnal tide range, or the difference between mean higher high water (MHHW) and mean lower low water (MLLW), is approximately 5.4 feet. **Table 8** presents the tidal datums at the Santa Barbara tide gage. **Figure 16** shows the observed tidal signal from 2024.

### 6.4.2 Rainfall and Stream Discharge

Rainfall and stream discharge data shall be obtained from the County of Santa Barbara Public Works Department, which maintains a gage network throughout the county. **Table 9** lists the relevant gage for the project site and **Figure 17** shows the locations of the County gage closer to Summerland.

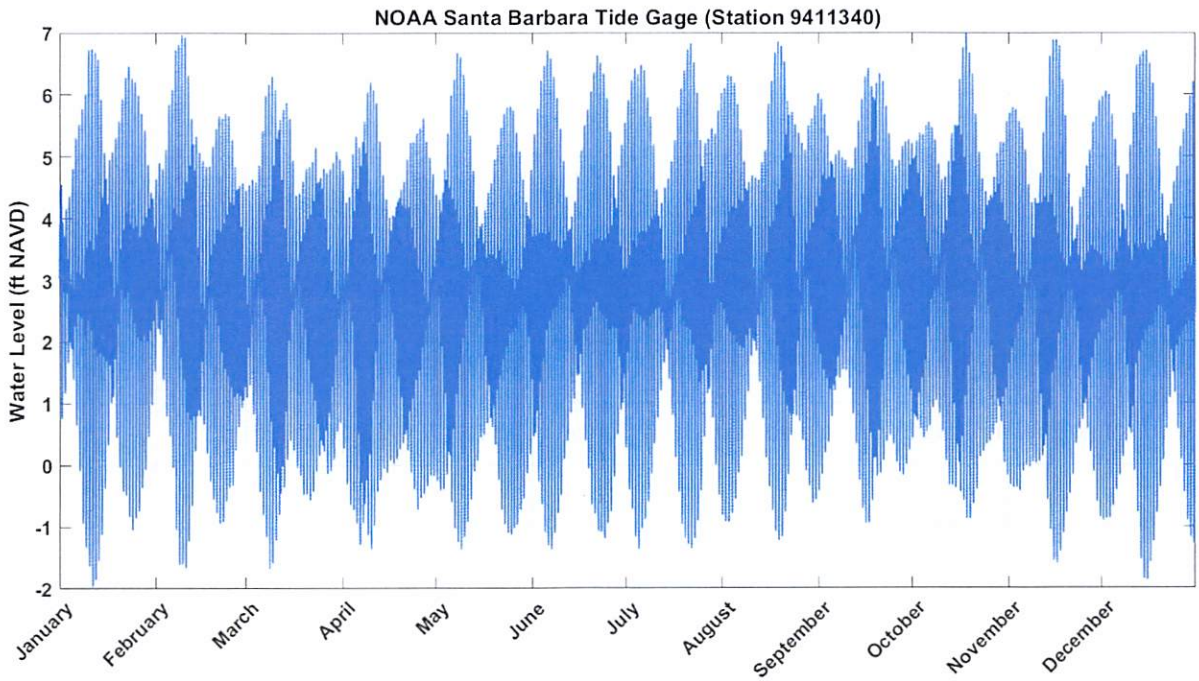
**TABLE 8. TIDAL DATUMS AT SANTA BARBARA GAGE – NOAA #9411340**

| Datum | Value (ft NAVD) | Description |
|---|---|---|
| HOWL | 7.52 | Highest Observed Water Level (12/13/12, 8 AM) |
| HAT | 7.10 | Highest Astronomical Tide |
| MHHW | 5.26 | Mean Higher-High Water |
| MHW | 4.51 | Mean High Water |
| MTL | 2.68 | Mean Tide Level |
| MSL | 2.78 | Mean Sea Level |
| MLW | 0.84 | Mean Low Water |
| NAVD88 | 0 | North American Vertical Datum of 1988 |
| MLLW | -0.13 | Mean Lower-Low Water |
| LAT | -2.18 | Lowest Astronomical Tide |
| LOWL | -3.00 | Lowest Observed Water Level (12/17/33, 8 AM) |

SOURCE: NOAA, 2024

NOTE:

Tidal Datum Analysis Period: 01/01/1983-12/31/2001.




Source: NOAA, 2025

**Figure 16.**

2024 Observed tides at the Santa Barbara NOAA tidal gage

TABLE 9. SANTA BARBARA PUBLIC WORKS GAGE

| Gage ID | Location | Established | Data | Access Data |
|---|---|---|---|---|
| 22168 | Summerland (Loon Point Beach) | May 2014 | Rainfall | Link |


Source: County of Santa Barbara Public Works Department, 2025

**Figure 17.**
Summerland rainfall gage location in relation to the Summerland WWTP (red rectangle)

### 6.4.3 Groundwater Data

Since the District assets and the Summerland WWTP are located in higher elevations there is no expected exposure of District assets to coastal groundwater changes in the near, mid, or long term.

## 6.5 Management Actions

Each year, any relevant management activity the District takes in response to flooding, erosion, or damage will be documented.

## 6.6 Reporting and Documentation

The District shall document the monitoring efforts in annual monitoring reports per requirements in the District's current National Pollutant Discharge Elimination System (NPDES) permit (CA0047899) from the California Regional Water Quality Control Board, Central Coast Region.

The monitoring report shall include descriptions of all data collected and provide information on methods used and accuracy of measurements taken. Parameters should be reported in a consistent datum and units to facilitate analysis and evaluation of data.

Photos collected as part of the photo documentation efforts will be included with annotations and summaries of changes observed. The photos will include a map that relates the photo to the location and the direction of the photo.

A summary of the data collected from the regional environmental data archiving, as described in Section 6.2.4, shall be provided in the annual monitoring report. Extreme events (e.g., higher streamflow, increased wave heights) should be described.

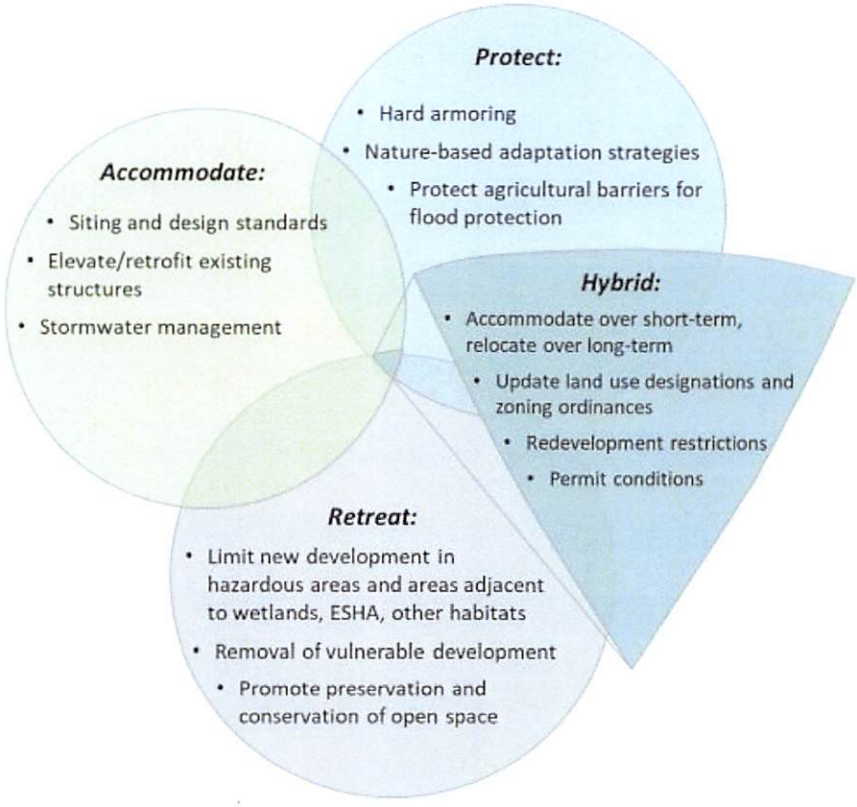
It's advised that a coastal engineer should review the reporting, documents, and surveys along with an examination of the overall condition of the bluff and revetment to ensure the revetment is functional over time. Erosion at the County storm drain outlet on the bluff face in front of the WWTP should be monitored and addressed to reduce further loss of the bluff in that area.

# 7. CONTROL MEASURES

According to the Summerland Waste Discharge Requirements, Section 6.3.6.1.1 of Resolution No. 2017-0012 and Order No. R3-2022-0014 for the California Regional Water Quality Control Board Central Coast Region, the District should consider control or adaptation measures such as emergency procedures, contingency plans, alarm/notification systems, training, backup power, and equipment, and the need for planned mitigations to ameliorate climate-induced impacts such as changing influent and receiving water quality and conditions, as well as the impact of rising sea level, storm surges and back-to-back severe storms that are expected to become more frequent.

When appropriate, adaptation measures should be coordinated with Santa Barbara County, Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) and/or others.

Adaptation strategies, which reduce the vulnerability to coastal hazards such as wave impacts, erosion, and flooding, can be generally organized into the categories of protection, accommodation, and retreat as summarized in **Figure 18** below from the CA Coastal Commission's (2024) Sea Level Rise Policy Guidance.




Note: ESHA is defined as Environmentally Sensitive Habitat Area
Source: CCC

**Figure 18.**
Examples of general adaptation strategies

Different types of strategies will be appropriate in different locations, and, in some cases, a hybrid approach with strategies from multiple categories may be the best option. Additionally, the suite of strategies chosen may need to change over time as conditions change and previous areas of uncertainty and unknown variables become more certain.

Potential adaptation measures could be implemented to protect and/or accommodate the existing wastewater collection and treatment facilities to allow uninterrupted function of wastewater treatment for the District. Control and adaptation measures include options to protect and accommodate in the near-term and potentially relocate vulnerable infrastructure in the long-term with higher amounts of sea level rise. Adaptation measures may include:

- **Protection and/or floodproofing facilities in flood and erosion risk zones:** Exposure of assets at risk of damage to wave run-up, flooding, beach, and bluff erosion may require floodproofing or erosion protection. Nature-based, traditional, and hybrid protection approaches may be considered to protect assets on the beach and near the bluff top edge, such as the Summerland WWTP, Lift Station #1, and the District outfall. Protection measures could include the following:
  - Beach nourishment: placement of sand to widen and raise a beach to counteract erosion.
  - Cobble placement: placement of rounded stones to absorb wave energy and enhance beach stability.
  - Sand retention structures: engineered features (e.g., shore parallel rock groins) that reduce sand loss due to wave transport, including nature-based and hybrid approaches such as cobble or rock fingers (i.e., smaller structures using more natural materials that mimic groins)
  - ECOncrete armoring: concrete structures designed to provide coastal protection while supporting marine habitat.
  - Traditional rock armoring: Use of large rocks (riprap or revetments) to protect the shoreline from erosion and wave attack.
- **Reconfiguration or relocation of WWTP infrastructure in erosion hazard areas:** In the future, using a phased approach over time, WWTP infrastructure may need to be relocated out of erosion hazard areas to reduce erosion and failure risks. WWTP infrastructure would either need to be protected (as described above) or reconfigured/relocated if the bluff top erodes and reaches an established setback distance from the infrastructure. This setback distance would need to be established in a future study. The office building and shed should be moved first, while maintaining other infrastructure and operations. The effluent outfall manhole may be the next infrastructure that becomes at risk of failure. Reconfiguring infrastructure into a smaller and/or more landward footprint may be an option. Decommissioning the WWTP and connecting the sanitary sewer collection system to the Montecito Sanitary District system or the Carpinteria Sanitary District system could be options for the long term.
- **Collection system I/I (inflow and infiltration) management** (e.g. maintenance holes, pipes, junctions): the potential for increased I/I to cause excessive influent wastewater flows to the WWTP could require I/I management measures, modifications to collection system components to reduce I/I, and potentially the need for installation of an equalization basin at the plant to help regulate peak wastewater flows. I/I reduction measures for the District could include the following:

- Increasing influent capacity with wet weather storage and/or larger pipelines
- Smoke testing to identify surface water connections
- Reduction of surface water connections
- Lining sanitary sewer lines or replacing gravity connections
- Crack sealing
- Maintenance hole rehabilitation
- Sealing or replacing maintenance hole covers
- Updating the outflow permit to bypass peak wet weather flows

Control measures and adaptation measures will be further assessed and additional measures may be identified in the yet-to-be-completed required Phase 3, of the District's Climate Change Adaptation Plan.

# 8. REFERENCES

Adelman, K., and Adelman G., 2004-2010. California Coastal Records Project. Accessed online: https://www.californiacoastline.org/cgi-bin/timecompare.cgi?image=3333&flags=0&year=2002&latdeg=34.414000&longdeg=119.600167

Barnard, P.L., Erikson, L.H., Foxgrover, A.C., Limber, P.W., O'Neill, A.C., and Vitousek, S., 2018. *Coastal Storm Modeling System (CoSMoS) for Southern California, v3.0, Phase 2 (ver. 1g, May 2018)*. U.S. Geological Survey data release, https://doi.org/10.5066/F7T151Q4.

California Coastal Commission (CCC), 2021. *Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone.* Final Adopted Guidance, November 17, 2021.

California Ocean Protection Council (CA OPC), California Sea Level Rise Science Task Force, California Ocean Science Trust (CA OST), 2018. *California Sea Level Rise Guidance: 2018.* November 2018.

CA OPC, California Sea Level Rise Science Task Force, CA OST, 2024. *California Sea Level Rise Guidance: 2024 Science and Policy Update.* June 2024.

Johnsson, M., 2003, California Coastal Commission Memorandum transmitting *"Establishing Development Setbacks from Coastal Bluffs,"* from the California and the World Ocean 2002 conference.

Martin, Northart & Spencer, Inc., 1986. *Topographic Survey Map of Summerland Sanitary District Treatment Plant.* 1986.

National Oceanic and Atmospheric Administration (NOAA) Tides & Currents, 2025. *Santa Barbara, CA – Station ID: 9411340.* Accessed online, https://tidesandcurrents.noaa.gov/stationhome.html?id=9411340

Norris, R.M., 1995, "Southern Santa Barbara County, Gaviota Beach to Rincon Point," in "Living with the California Coast," Duke University Press.

Pierce, D.W., Cayan, D.R., Feldman, and D.R., Risser, M.D, 2023. *Future Increases in North American Extreme Precipitation in CMIP6 Downscaled with LOCA.* May 1, 2023.

Summerland Sanitary District (SSD), 2025. Treatment Plant Flow Diagram. Accessed online, https://summerlandsd.org/wp-content/uploads/2017/02/Flow-Diagram-2017-1024x787.jpg

Sweet, W.V., B.D. Hamlington, R.E. Kopp, C.P. Weaver, P.L. Barnard, D. Bekaert, W. Brooks, M. Craghan, G. Dusek, T. Frederikse, G. Garner, A.S. Genz, J.P. Krasting, E. Larour, D. Marcy, J.J. Marra, J. Obeysekera, M. Osler, M. Pendleton, D. Roman, L. Schmied, W. Veatch, K.D. White, and C. Zuzak, 2022. *Global and Regional Sea Level Rise Scenarios for the United States: Updated Mean Projections and Extreme Water Level Probabilities Along U.S. Coastlines.* February 2022

# Appendix A
# Campbell Geo, Inc. Coastal Bluff Hazards Evaluation

CAMPBELL·GEO, INC.
ENGINEERING AND ENVIRONMENTAL GEOSCIENCE

# Coastal Bluff Hazards Evaluation
# Summerland Sanitary District
# 2435 Wallace Avenue
# Summerland, CA 93067

**April 29, 2025**

**Submitted to**

**Environmental Science Associates**
**633 West 5th St., Suite 830**
**Los Angeles, CA 90071.**

**Attn: Mr. Nick Garrity, PE**

**Prepared by**

CAMPBELL·GEO, INC.
1130 DEL SOL AVENUE SANTA BARBARA CALIFORNIA 93109-2108
TELEPHONE: (805) 965-5003 FACSIMILE: (805) 963-5371

CAMPBELL·GEO, INC.
ENGINEERING AND ENVIRONMENTAL GEOSCIENCE

April 29, 2025

Environmental Science Associates
633 West 5th St., Suite 830
Los Angeles, CA 90071.

Attn: Mr. Nick Garrity, PE

Subject: Coastal Bluff Hazards Evaluation
Summerland Sanitary District
2435 Wallace Avenue
Summerland, CA 93067

Dear Mr. Garrity:

## INTRODUCTION

As you requested, Campbell·Geo, Inc. (CGI) is pleased to present this memo summarizing our coastal bluff evaluation of the Summerland Sanitary District (SSD) property at 2435 Wallace Avenue in Summerland, California. The property contains a wastewater treatment plant on a property adjacent to a coastal bluff that descends to the Pacific Ocean. A wastewater lift station is located approximately 500 feet to the west of the main plant, approximately 160 feet inland from the shoreline. We understand that the Central Coast Regional Water Quality Control Board (CCRWQCB) requires a Coastal Hazard Monitoring Plan and Life Expectancy Analysis for the SSD facility under a previously issued NPDES permit.

The objective of our work was to conduct a site investigation, without subsurface exploration, to evaluate blufftop retreat over three future planning horizons, near term, mid-term and long term. Our work did not include geotechnical parameters for a slope stability calculation or to support the development of a new or remodeled facility.

The setback from the top of bluff was determined in general accordance with guidelines (Johnsson, 2002) recognized by the City and County of Santa Barbara as essential for coastal bluff investigations. Bluff retreat projected for the next 100+ years has been evaluated.

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Our work on this project consisted of the tasks outlined in our November 2, 2024 proposal. Those tasks are summarized as follows:

- Review of historical aerial photographs and survey data
- Site visit to review and map the site geology
- Preparation of a geologic map and cross-section
- Evaluation of historic erosion (retreat) of the coastal bluff
- Estimation of future bluff retreat under various sea level rise scenarios
- Preparation of a summary report, including a preliminary recommended setback for future general planning purposes with estimated bluff retreat and an assumed angle of a geotechnically stable slope

A topographic map, prepared at a scale of 1 inch = 20 feet by Prober Land Surveys, dated March 11, 2025, was used as a base for the site map and cross-section for the site. The map does not include a legal survey of the property boundaries. However, the fence lines, buildings, and wastewater treatment impoundments are clearly visible and are shown at a scale useful for future planning.

## PREVIOUS WORK

Regional geologic maps (Dibblee, 1966 and 1986; Bezore and Wills, 1999; Gurrola, 2002; and Minor, 2009) were reviewed for this evaluation. Among the regional geologic maps we reviewed, none of these maps noted the existence of landslides on the bluff face at and in the vicinity of this site. The 2009 geologic map is reproduced as the basis of Plate 1 of this report.

We reviewed an October 5, 1987 Geotechnical Engineering Report prepared by KC Geotechnical Associates to support the design of a proposed (and subsequently implemented) expansion of the SSD treatment plant. The approximate locations of the 1987 soil borings and exploratory trenches are shown on Plates 2 and 3 of this report.

## SITE CONDITIONS

### Existing Land Use

As shown on Plate 2, the approximately 1.2-acre site is developed with the SSD sewage treatment plant in the northern center of the parcel. A buried outfall pipeline transmits treated effluent to a discharge point 900 feet offshore. A pump lift station and backup power generator are located approximately 500 feet west of the main facility, as shown on Plate 4.

### Vegetation

Vegetation at the site consists of small trees and landscaping, including a lawn area surrounding the treatment plan. Vegetation on the coastal slope consists of two palm trees, native and non-native grasses and small shrubs.

### Topography

Topography for the property is depicted on Plate 2, based on the Prober Land Surveying topographic map of the main facility, prepared for this report. The central part of the property is flat to gently sloping. The top edge of the coastal bluff is between 30 and 40 feet above the elevation of the toe of the slope and the current (March 2025) sand elevation at the beach. The elevation of the top edge of the bluff is 34 feet (NAVD 88) at the southwest area of the site and 45 feet at the southeast. The toe of the slope at the beach is at an elevation of five (5) feet. The beach sand profile, at the time of the March 2025 survey, extended down to an elevation of two (2) feet at a horizontal distance of approximately 55 feet south of the toe of the slope. A rock revetment is located at the toe of the coastal bluff. The top elevation of the rock revetment is approximately 10 to 12 feet, as shown on the surveyed elevations on Plate 2. The site topography is also illustrated in cross-section on Plate 3.

The bluff descends to the beach at an overall gradient of 1.4:1 (horizontal to vertical), equivalent to a 71% slope.

The top edge of the bluff is approximately 13 feet south of the small SSD office building. The chlorination building, near the manhole above the effluent discharge pipe, is 43 feet north of the top of bluff. All other treatment plant features are located further inland from the top of bluff than the manhole.

### Drainage

Surface water runs off the site by sheet flow to the south and into a drainage system that collects and directs runoff into a large diameter buried pipe. Drainage discharges from a 36-inch diameter corrugated plastic pipe on the slope face, rather than at the toe of the slope. A rerouting of the fence and a slight landward indentation in bluff edge above this discharge pipe location suggests the possibility of some accelerated erosion in this area in the past.

### Groundwater

Groundwater was reported in the June 1987 borings drilled by KC Geotechnical. The depth ranged from 18 to 40 feet. During periods of wet weather, there could be shallower groundwater temporarily present in the marine terrace and artificial fill deposits. At the time of our March 2025 site visit, springs were not present on the coastal bluff slope.

## GEOLOGY

### Regional Setting

The south coast of Santa Barbara County is located on the southern flank of the Santa Ynez Mountains, which make up a portion of the Transverse Range Province of California. The regional geologic structure consists of generally south dipping sedimentary rocks uplifted from the north by tectonic movement along the Arroyo Parida and Santa Ynez Faults, among other east to west trending structures, and by ongoing regional tectonic compression of the Santa Barbara Channel area. The Tertiary age rocks underlying the Summerland area are deformed by faulting and folding as shown on Plate 1. The North Summerland Fault is located approximately 800 feet north of the SSD property.

Site Geology: Lithology

The geologic units exposed on the parcel are described by Minor (2009) and Dibblee (1966 and 1986) and include the Quaternary-age deposits (please see Plate 2 – Geologic Map). Artificial fill is also present but was not mapped by Minor or Dibblee on the subject site, due to the regional nature of their work. Each geologic unit is described below from oldest to youngest.

Marine Terrace (Qmt)

Unconsolidated sand and silt deposits are identified collectively as the marine terrace deposits, which unconformably overlie the older rock units. The marine terrace is overlain by artificial fill formation and is not well exposed. The geologic map (Plate 2) shows this unit as unconfirmed, but it is likely present under the northern portion of the site.

Artificial Fill (Qaf)

Artificial fill is present at this site, predominately associated with material imported to develop the site. The material consists of silty and sandy clay, organic and inorganic debris (including concrete and asphalt fragments), with some gravels and cobbles. Based on the history of the site and review of aerial photographs (discussed below), the slope to the shoreline south of the facility was created by importation of fill in 1957.

Beach Sand (Qbs)

Unconsolidated sand and minor silt deposits are identified collectively as beach sand. This deposit is located only in the area south of the toe of the coastal slope. This deposit is transitory in nature, subject to the littoral current, season, storm conditions and the sediment supply from sources up current (to the west).

Site Geologic Structure

There are no strike and dip attitudes to measure in the unconsolidated sedimentary or artificial fill deposits at this site. The geologically Recent deposits (beach sand and artificial fill) unconformably overlie the older marine terrace deposit.

## COASTAL PROCESSES

Coastal bluffs and shorelines exist in very dynamic geologic environments. The risk associated with development of near-shore coastal property is well-documented up and down the California coast by damage or loss of structures built too close to the shoreline (Norris, 1995). Erosion and retreat of coastal bluffs are relentless processes and do not occur at a constant rate. Coastal retreat and erosion are controlled by seismic, climatological, and marine (sand and wave) conditions that vary greatly year by year. Sites also vary from location to location in slope geometry, geologic conditions, drainage, and vegetation cover. Coastal bluffs are exposed to physical and chemical erosion processes that include direct wave attack, spring sapping (high groundwater), erosion by direct rainfall or uncontrolled surface water flow, and fracturing by salt crystal formation. All coastal slopes will therefore "fail," over geologic time, by catastrophic massive failures of large volumes of material, by slow erosion of granular size soil/rock fragments over hundreds or thousands of years, or by many variations of slope failure and erosion between the two extremes.

The site is located in the Santa Barbara Littoral Cell described by the BEACON study for beach sand and costal erosion management (Noble Consultants, 1989). The Santa Barbara Littoral Cell extends from Point Concepcion to Port Hueneme. It is divided into sub cells based upon shoreline characteristics and the location of sediment sources (mostly creeks) and sinks. Summerland is located in the sub cell that extends from the Santa Barbara Harbor to Rincon Point,

the latter located 7.5 miles east of Summerland. The movement of sand is predominantly west to east with the side shore (littoral) current generated by the typical ocean wave direction in this area. This sub cell segment was greatly affected by the construction of Santa Barbara Harbor in 1928, resulting in a large sand sink (trap). The new harbor resulted in an interruption of the sand supply to beaches downcoast (east) as far as Carpinteria. Side-shore littoral currents that had previously provided a regular supply of sand were instead, by the late 1920s, relatively devoid of sediment, resulting in beach starvation, an increase in shoreline retreat rates, and property damage at several locations between Santa Barbara's East Beach and Carpinteria. A high rate of coastal bluff retreat in Summerland is evident between 1928 and 1947 in the aerial photographs, as discussed below. Dredging of the harbor entrance started to replenish the sand supply to the system and by the 1940s, beaches began to reappear downcoast (Norris, 1995). For many decades, the U.S. Army Corps of Engineers (USACOE) has conducted an ongoing maintenance sand dredging and by-passing program at the harbor, which has re-established the sediment supply to beaches east of the Santa Barbara Harbor.

## INVESTIGATION

### Analysis of Aerial Photographs

Prior to and during our field evaluation, we analyzed single frame and stereo pair historical aerial photographs, which are listed in Table 1 below. Two maps produced by licensed surveyors (MNS, 1986 and Prober, 2025) are also noted.

**Table 1 – Aerial Photograph Analysis**

| Aerial Survey Company | Date | Flight No. | Frames | Reported Scale | Approx. Distance SPRR to Bluff Top Edge (feet) | Observations |
|---|---|---|---|---|---|---|
| Fairchild | 01/01/1928 | C-311C | B-21, B-22 | 1:18,000 | 188 | SSD facility is not yet constructed; no grading, no revetment; construction of SB Harbor |
| Fairchild | 09/23/1947 | CC-11792 | 1-85, 1-86 | 1:3,600 | 149 | High rate of bluff retreat likely due to the loss of sand from the trap at SB Harbor |
| Fairchild | 06/01/1950 | C-14500 | 6-10 | 1:7,200 | 153 | |
| Hurd | 02/27/1956 | HA-AN | 1-58, 1-59 | 1:9,600 | 139 | SSD facility is not yet constructed; no grading, no revetment |
| Hurd | 01/26/1969 | HB-NN | -83 | 1:6,000 | 184 | SSD facility is developed. Road at edge of bluff and imported fill are visible, extending bluff substantially to the south. |
| Hurd | 12/27/1971 | HB-SY | -22 | 1:6,000 | 178 | |
| Hurd | 02/23/1975 | HB-XQ | -26, -27 | 1:12,000 | 175 | |
| MNS, Inc. | 03/1986 | Figure 2 | | 1' = 10' | 181 | Survey map included as Figure 2 in 1987 KC Geotechnical report |
| I.K. Curtis Services | 09/25/2001 | CCC-BQK-C | 70-4, 70-5 | 1:12,000 | 175 | |
| Pacific Western | 05/20/2003 | PW-SB-14 | -30 | 1:12,000 | 175 | |
| Prober | 03/11/2025 | Drone | -- | 1" = 20' | 177 | Survey map included as Plate 2 in this 2025 Campbell Geo report |

The intent of our aerial photo evaluation was to determine (to the extent possible) the rate of historic shoreline retreat before and after installation of a protective rock revetment when the SSD facility was developed in 1957. We compared and measured features that are visible in historical photos and that are still clearly visible in 2025.

Please see the selected photographs reproduced in Appendix A. The Southern Pacific (now Union Pacific) Railroad track is a fixed feature that has been in its present location since at least the early 1920's. The railroad was selected for comparative horizontal measurements to the top of the adjacent coastal bluff, which has varied in location over time. For each photo, a calculated scale was determined with a known, fixed dimension, measured along Varley Street between the centerlines of two intersecting streets (Valencia and Temple) located a short distance north of the SSD. We compared that static dimension to the distances measured digitally on the original, undistorted, digital images (photos) between the center of the railroad tracks to the top of the bluff in a consistent location and orientation over the years using the Summerland street grid. Specifically, the railroad to bluff distance was measured in the same location visible in all photographs by a visual straight-line extension of the south-southwest trend of Temple Street located 300 feet to the north of the SSD facility.

In the 19 years between 1928 and 1947, the total retreat at the top of the coastal bluff at the site is estimated at 39 feet. The majority of that retreat is most likely due to the beach sand starvation from construction of the Santa Barbara Harbor in 1928. The top of bluff retreat calculated from the data in the 1947 and 1956 photos is 10 feet, for an average of 1.1 feet per year during that period after the beach sediment supply was generally re-established.

In the last 56 years between the 1969 aerial photograph and 2025, there appears to be little to no retreat of the top of the coastal bluff. The photographs indicate 7 feet of bluff retreat along the measurement lineation described above. That equates to an average retreat rate of 0.13 feet per year since the construction of the SSD and installation of the revetment at the toe of the coastal bluff.

All photos were also evaluated for signs of landslides at and near the site, using stereographic analysis. The photos do not indicate signs of historical and currently active

landslides on the slope face at the subject site. In a limited area at the back of the revetment located southeast of the facility, there is some erosion of the bluff slope surface where the boulder elevation is a few feet lower than the surrounding revetment, possibly allowing occasional moderate wave runup under extraordinary tides and/or storm surf conditions.

Analysis of Historical Survey Data

We reviewed the availability of historic surveys of this local area. The notes for the United States Coast and Geodetic Survey (USC&GS) monument located west of SSD did not include historical references to the distance between the monument and the coastal bluff. Only a few surveys were found, and none of the property monuments shown on these surveys include information related to historic distances to the top or toe of the coastal bluff.

A March 1986 topographic survey of the SSD site was prepared by Martin, Northart and Spencer, Inc. This 1986 survey was utilized as the base map for the boring and trench location map in the 1987 KC Geotechnical report. Two features mapped at that time, and still clearly visible at the present time (2025), are the southeast corner of the "Air Tank #2" and the center of the manhole over the effluent outfall line. The dates and distances between those features and the top of coastal bluff are summarized in Table 2 below.

**Table 2 – Distances Between Air Tank, Manhole and Top of Bluff**

| Top of Bluff Distance from Feature | 1986 | 2025 |
|---|---|---|
| Distance Between Air Tank and Top of Bluff | 76 feet | 78 feet |
| Distance Between Manhole and Top of Bluff | 38 feet | 38 feet |

The edge of the air tank may be slightly imprecise between the 1986 and 2025 surveys, but the data indicates little to no retreat of the top edge of bluff relative to that feature and relative to the outfall manhole.

Other Coastal Bluff Retreat Rates

Bluff retreat rates have been measured previously by this office and by other geologists at nearby locations with Quaternary geology and coastal exposures generally similar to the subject site. Previous work by Campbell·Geo in 2022 at a residence on Padaro Lane located approximately 1 mile east of the SSD determined a historical average rate of retreat at the toe (bottom) of the coastal bluff to be 0.21 feet per year, based on survey data collected in 1927, 1962 and 2019. No revetment or other armoring against coastal erosion is or has been present at that Padaro Lane site.

Sea Level Changes

There is general scientific consensus that sea levels will rise at an accelerating rate in the coming decades. The 2024 California Coastal Commission (CCC) and the 2024 California Ocean Protection Council (OPC) guidance documents contain five (5) scenarios for future sea level rise (SLR) projections under various time scales and risks. The CCC considers the 2024 OPC Sea-Level Rise Guidance as the best available science on sea level rise in California and recommends using the scenarios in relevant CCC planning and permitting decisions. The scenarios in the order of increasing severity of SLR are identified as Low, Intermediate-Low, Intermediate, Intermediate-High, and High.

For the Santa Barbara area, projections of the increase in sea level relative to the elevations recorded in the year 2000 are presented under these five SLR scenarios on Table 10 in Appendix 2 of the OPC 2024 document. Table 10 is included in Appendix B of this Campbell·Geo report for SSD.

As requested by ESA, this Coastal Hazards Evaluation uses the High SLR Scenario. This scenario includes the highest considered amount of SLR that occurs due to high future man-made emissions to the atmosphere, high global warming, and large potential contributions from rapid polar ice sheet losses.

As requested by ESA, three planning horizons, near term, mid-term and long term with the date ranges as indicated on Table 3. The OPC (2024, Table 10) projects the upper limit of sea level rise at for each date range under the "High" SLR scenario at Santa Barbara.

**Table 3 - Planning Horizons and Sea Level Rise Scenarios (Based on 2024 OPC Guidance)**

| Planning Horizon | SLR Range | Date Range* | Years from 2025 |
|---|---|---|---|
| Near-Term | 0 to 1.8 ft | Now to 2055 | 0 to 30 |
| Mid-Term | 1.1 to 7.5 ft | 2045 to 2110 | 20 to 85 |
| Long-Term | 3.8 to 11.3 ft | 2075 to 2150+ | 50 to 125+ |
| *Note: These dates are rounded to the next highest 5 year increment for comparison to Table 10 in OPC 2024 | | | |

Shoreline Retreat Rate-Projected

The future rate of coastal bluff retreat is estimated by application of the site-specific historical retreat rate, estimated as described above, to a future increase in the rate of bluff retreat determined by the U.S. Geological Survey's Coastal Storm Modeling System also known as CoSMoS. This widely recognized model simulates coastal hazards that manifest as a result of an ocean wave data set input, storm surge, tides, and sea level rise.

The CoSMoS model (current version listed as CoSMoS 3.0) includes a shoreline hazard map with various historic and projected bluff edge retreat rates at noted transect locations. The transects with numerical identifiers are separated by roughly 300 feet horizontally along the coastline in the Summerland area. The CoSMoS transect number 3871 is located on the subject property, as shown on the aerial image with the transect in Appendix B of this report. The data for that near site transect onsite lists the historical seacliff retreat rate at 0.232 meters per year (0.76 feet per year). The reported CoSMoS historical retreat rate is based on USGS evaluation of historic regional topographic maps and regional aerial imagery (Hapke and Reid, 2007), and not the detailed site-specific historical retreat rate Campbell · Geo determined as described above. The

CoSMoS model provides an increased rate of bluff retreat that is based on the amount of sea level rise (SLR) that occurs by the year 2100. The increase in the rate of retreat is applicable to the entire period, meaning the current year through 2100, not as incremental increases in the rate of retreat as time progresses. The CoSMoS model output of a single overall annual retreat rate for the corresponding amount of sea level rise was confirmed by one of the model developers (Dr. Li Erickson, USGS; memo to Campbell Geo 11/12/2020). The model settings include predicted bluff retreat rates for both a shoreline that is armored (has a revetment, the "Hold The Line" model setting) and for an unprotected shoreline (the "Do Not Hold The Line" model setting).

The site specific, historical estimated bluff retreat rate of zero to 0.13 feet/year based on the 1969 through 2025 aerial photo and ground measurements described above have been applied to the percent increases for the various SLR scenarios used in the CoSMoS model. For example, the CoSMoS model at the noted Summerland transect shows that for a sea level that has risen by 2 meters (the closest value in CoSMoS to the 7.5 foot / 1.92-meter SLR projected at 2110), the bluff retreat rate will increase by 151 percent from the historic rate, using the model setting without armoring of the coastal bluff by the rock revetment (the "Do Not Hold The Line" model setting). That results in an estimated retreat rate that increases to 0.33 feet per year. Applying that rate over the Mid-Term time horizon ending 85 years from now yields a total retreat of 28 feet at year 2110.

Using the model setting with armoring of the coastal bluff by the rock revetment (the "Hold The Line" model setting), the CoSMoS model indicates no future bluff retreat for all SLR

scenarios. Therefore, the lowest value in the range in retreat rates is listed at zero, although that is judged to be unrealistically low.

Applying the increased percentages of bluff retreat rates from the SLR inputs to the CoSMoS model yields estimated total retreat values as shown on Table 4.

**Table 4 – Estimated Bluff Retreat Under Planning Horizons, and OPC 2024 Sea Level Rise Scenarios**

| Planning Horizon | SLR Range | Date Range* | Years from 2025 | Percent Increase in Estimated Previous Bluff Retreat Rate (0.13 ft/yr) | Range of Total Projected Bluff Retreat (feet) |
|---|---|---|---|---|---|
| Near-Term | 0 to 1.8 ft | Now to 2055 | 0 to 30 | 0 to 43% | 0 to 6 |
| Mid-Term | 1.1 to 7.5 ft | 2045 to 2110 | 20 to 85 | 0 to 151% | 0 to 28 |
| Long-Term | 3.8 to 11.3 ft | 2075 to 2150+ | 50 to 125+ | 0 to > 151% | 0 to > 28 |
| *Note: These dates are rounded to the next highest 5 year increment for comparison to Table 10 in OPC 2024 | | | | | |

Slope Stability

The existing bluff slope has an existing overall slope ratio of 1.4: 1 (horizontal to vertical). This is equivalent to a slope angle of 36° below horizontal, or a 71% slope. As the bluff retreats, it is assumed that the existing overall profile or angle is approximately unchanged. It should be recognized that in some future periods the bluff may become somewhat steeper, and, in some periods, it may become less steeply angled. However, it is assumed the existing bluff profile shown on the cross-section generally retreats at the same angle as present day, just further inland.

The stability of the south-facing coastal bluff slope adjacent to the SSD facility is diminished somewhat by the "undocumented" artificial fill. No formal slope stability analyses have been conducted. No geotechnical Factor of Safety setback from the top of bluff has been determined. However, an estimated stable slope angle of 2:1 (horizontal to vertical) is shown on Plate 3. The 2:1 projected slope angle could be further evaluated with in-situ soil sample collection and analyses for a slope stability model to develop recommended structural setback inland from the existing coastal bluff.

Tsunami, Flooding and Wave Runup Hazards

This report does not address the potential hazard associated with these conditions or events.

## CONCLUSIONS AND RECOMMENDATIONS

Preliminary estimates of a range of bluff retreat values have been developed using the estimated rate of historic retreat at SSD over the last 56 years, the most conservatively high sea level rise scenario outlined by the Ocean Protection Council (2024), and the USGS CoSMoS bluff retreat model. The range in bluff retreat includes the analysis without the presence of shoreline armoring, even though the rock revetment that is presently in-place provides significant protection to wave attack at the toe of the coastal bluff at this time.

The lift station, located near a drainage in a lower area than the surrounding residential developments and approximately 160 feet inland, is not threatened by sea level rise or coastal erosion in at least the near term or mid-term planning horizons. Please see Plate 4.

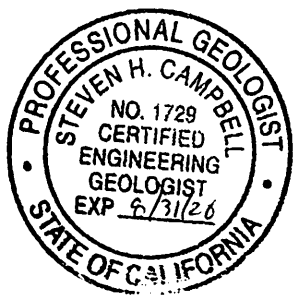
If it occurs at the main SSD treatment facility, the estimated bluff retreat of 28 feet at the mid-term planning horizon (year 2110) shown on Table 4, would require the relocation of the SSD office building and two storage sheds. The projected bluff edge retreat of 6 feet in the near-term planning horizon (through 2055) does not appear to result in directly undermining those structures, although geotechnical safety would be compromised.

Monitoring and appropriate timely response to bluff retreat and to future damage to the coastal bluff and revetment are key. We recommend a survey-based monitoring program to track the locations of the toe and top of bluff in two-year intervals or more frequently if conditions deteriorate more rapidly than anticipated. The survey should also track the conditions of the shoreline near the lift station. A coastal engineer should review those surveys along with an examination of the overall condition of the bluff and revetment. Erosion at the storm drain pipe discharge should be monitored and addressed to reduce further loss of the bluff in that area.

## LIMITATIONS

This report is not intended to provide a warranty against excessive future coastal bluff retreat. This limited report is not a complete investigation of all other geologic hazards that may or may not exist at the site. The conclusions are based on currently available data, current sea level rise projections by the State of California and locally recognized methods of geologic interpretation. This report has been prepared for the sole use of the current property owner.

If you have any questions concerning this report, please do not hesitate to contact us.


Sincerely,
Campbell·Geo, Inc.

Steven H. Campbell
Professional Geologist
State of California, #5576
Certified Engineering Geologist
State of California, #1729

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Attachments: Plates (4)
Appendices

## REFERENCES CITED


Barnard, P.L., et al, 2018, "Coastal Storm Modelling System (COSMoS) for Southern California, V 3.0, Phase 2," US Geological Survey, May 2018.

BEACON (Beach Erosion Authority for Control Operations and Nourishment), 1989, "Main Report, Coastal Sand Management Plan, Santa Barbara/Ventura County Coastline" prepared by Noble Consultants, Irvine CA.

Bezore, S. and Wills, C.J. 1999, "Landslide Hazard Maps of Southeastern Santa Barbara County, California," USGS Open File Report 99-12.

California Coastal Commission, 2024, "Sea Level Rise Policy Guidance" dated November 13, 2024.

California Ocean Protection Council, 2024, "California Sea Level Rise Guidance: 2024 Science and Policy Update", California Sea Level Rise Science Task Force, California Ocean Science Trust.

Dibblee, T.W., Jr., 1966, "Geology of the Central Santa Ynez Mountains, Santa Barbara County, California," Division of Mines, State of California Department of Natural Resources, Bulletin 186.

Dibblee, T.W. Jr., 1986, "Geologic Map of the Carpinteria Quadrangle," Dibblee Foundation Map #DF-04.

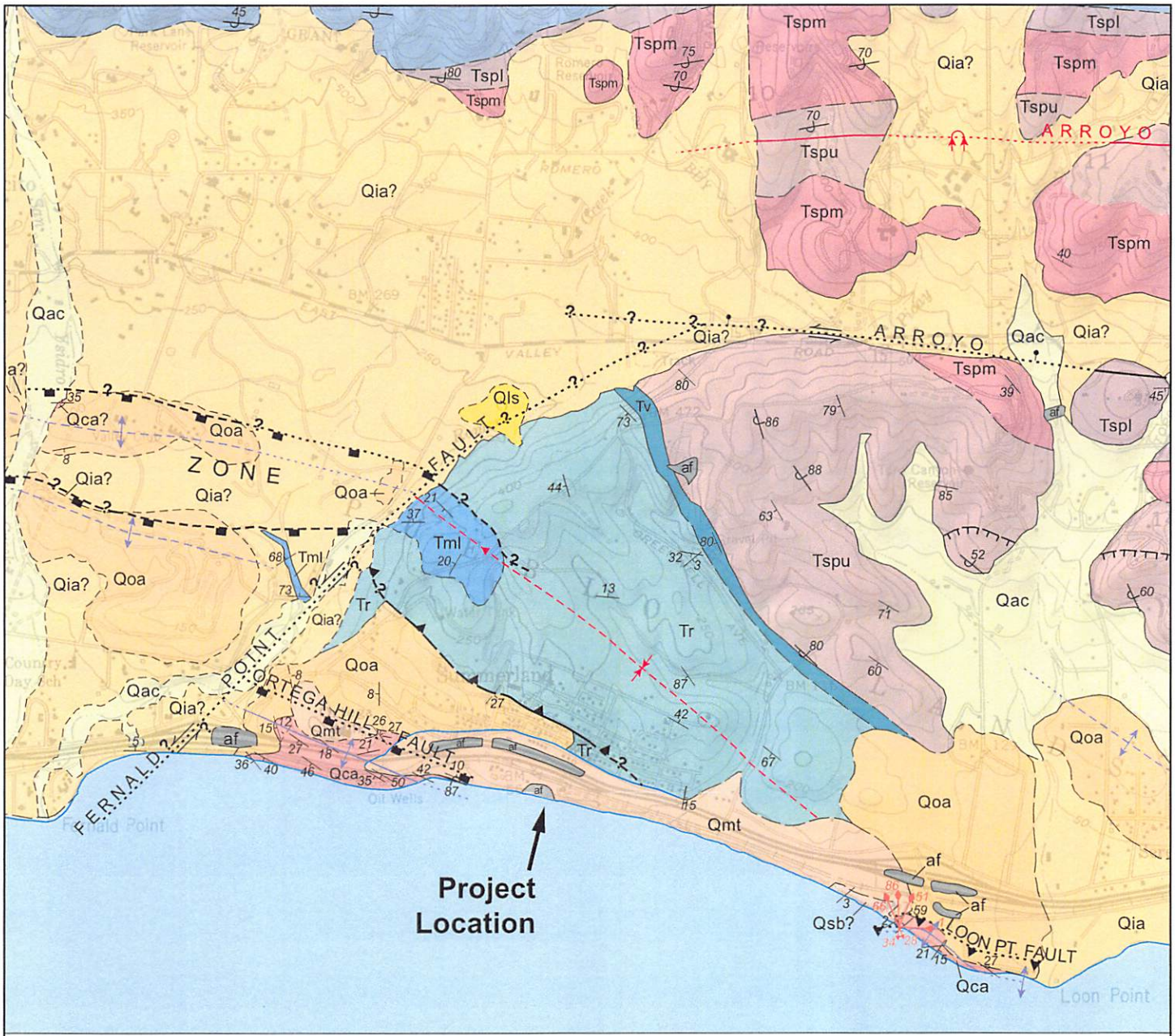
Johnsson, M., 2003, California Coastal Commission Memorandum transmitting "Establishing Development Setbacks from Coastal Bluffs," from the California and the World Ocean 2002 conference.

KC Geotechnical, 1987, "Geotechnical Engineering Report Proposed Expansion Area, Summerland Sanitary District, 2435 Wallace Avenue, Santa Barbara County, California", October 5, 1987.

Minor, S.A., Kellogg, K.S., Stanley, R.G., Gurrola, L.D., Keller, E.A., and Brandt, T.R., 2009, "Geologic Map of the Santa Barbara Coastal Plain, Santa Barbara County, California," U.S. Geological Survey Scientific Investigations Map 3001, Scale 1:24,000.

Norris, R.M., 1968, "Sea Cliff Retreat near Santa Barbara, California" in Mineral Information Service Bulletin, June, 1968.

Norris, R.M., 1995, "Southern Santa Barbara County, Gaviota Beach to Rincon Point," in "Living with the California Coast," Duke University Press.




AGE

EXPLANATION

| | | | |
|---|---|---|---|
| Quaternary | Holocene | af | Artificial fill |
| | | Qb | Beach deposits |
| | | Qls | Landslide deposits |
| | Pleistocene | Qac | Alluvium and colluvium |
| | | Qia | Intermediate alluvial deposits |
| | | Qmt | Marine terrace deposits |
| | | Qoa | Older alluvial deposits |
| | | Qca | Casitas Formation |
| | | Qsb | Santa Barbara Formation |
| Tertiary | Miocene | Tml | Monterey Formation |
| | | Tr | Rincon Shale |
| | | Tv | Vaqueros Formation |
| | Oligocene | Tspu | Sespe Formation; upper unit |
| | | Tspm | Sespe Formation; middle unit |
| | | Tspl | Sespe Formation; lower unit |

# SITE LOCATION AND REGIONAL GEOLOGIC MAP

**Summerland Sanitary District**
**2435 Wallace Avenue**
**Summerland, California**

N

SCALE IN FEET

0 1000 2,000

Geology from "Geologic Map of the Santa Barbara Coastal Plain Area, Santa Barbara County, California", by Minor, S., et. al, 2009

SYMBOLS

- Formation contact; dashed where inferred
- Fault; ball/bar on apparent downthrown side; dashed where approximate; dotted where concealed
- Thrust fault with sawteeth on upthrown side, short-dashed where inferred; dotted where concealed
- 20 Strike and dip
- Anticline
- Syncline

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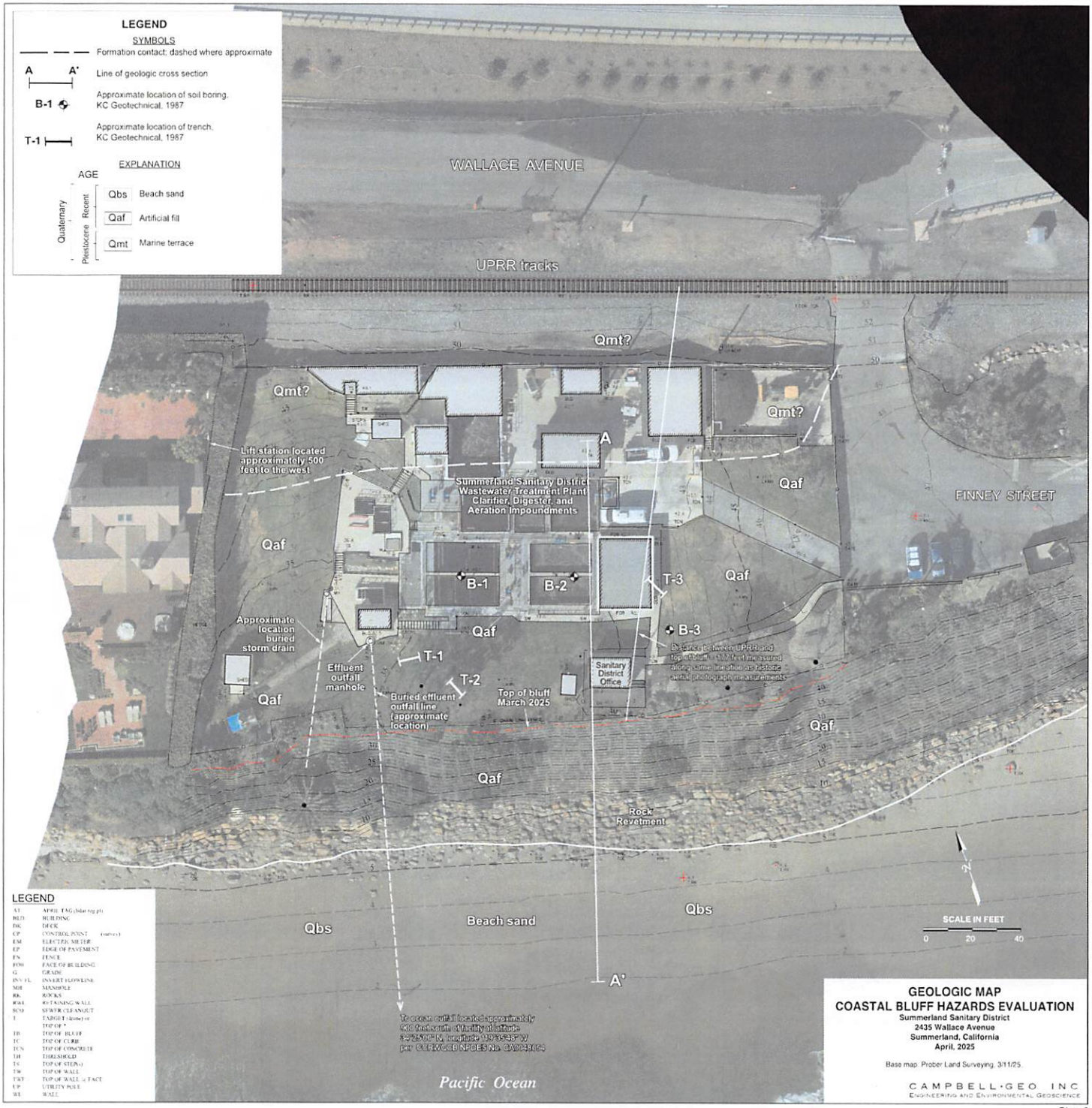
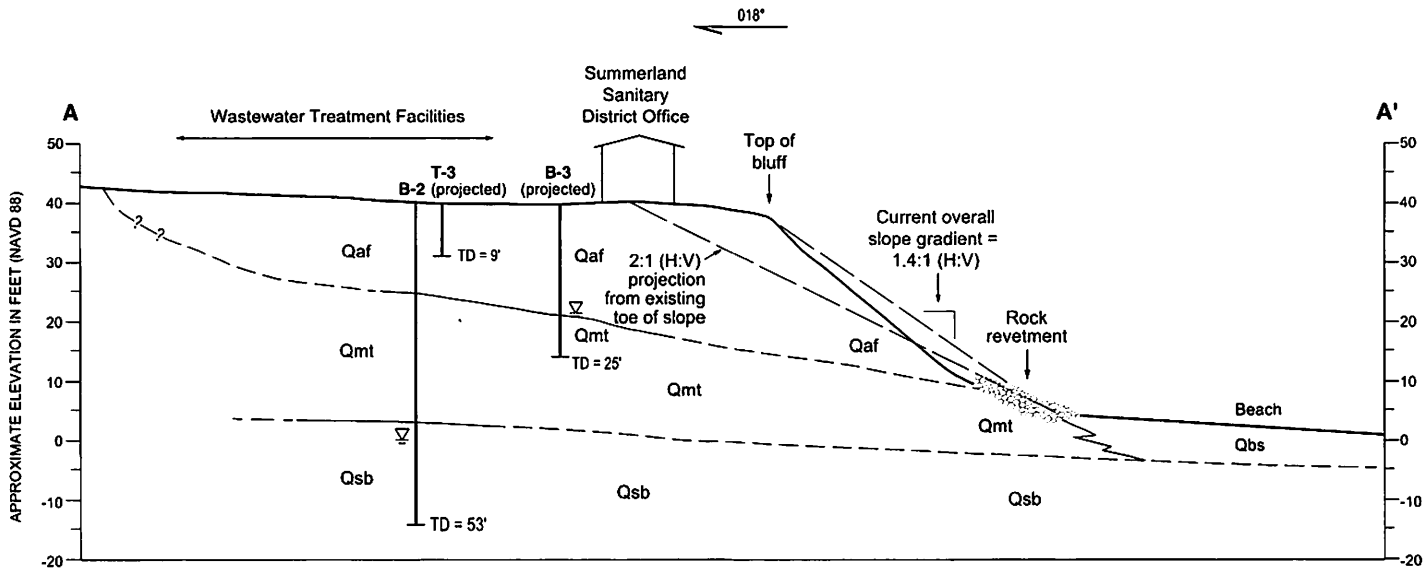



**GEOLOGIC MAP**
**COASTAL BLUFF HAZARDS EVALUATION**
**Summerland Sanitary District**
**2435 Wallace Avenue**
**Summerland, California**
**April, 2025**

Base map: Prober Land Surveying, 3/11/25.

CAMPBELL·GEO INC
ENGINEERING AND ENVIRONMENTAL GEOSCIENCE

Plate 2




## LEGEND

### SYMBOLS

**B-2** / TD = 53' — Location of exploratory boring or trench (KC Geotechnical, 1987) showing depth to groundwater; T.D. - total depth

—?— Formation contact; dashed where approximate; queried where uncertain

### EXPLANATION

| AGE | | | |
|---|---|---|---|
| Quaternary | Recent | Qbs | Beach sand |
| | | Qaf | Artificial fill |
| | Pleistocene | Qmt | Marine terrace |
| | | Qsb | Santa Barbara Formation |

0 — 20 — 40 horizontal
0 — 20 — 40 vertical
SCALE IN FEET
*VERTICAL = HORIZONTAL*

# GEOLOGIC CROSS SECTION A - A'

**Summerland Sanitary District**
**2435 Wallace Avenue**
**Summerland, California**
**April, 2025**

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Plate 3


Base map: Google Earth Image
2025 Airbus

N

SCALE IN FEET

0 100 200

# COASTAL BLUFF HAZARDS EVALUATION

**Lift Station - Summerland Sanitary District**
**2435 Wallace Avenue**
**Summerland, California**
**April, 2025**

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Plate 4

# APPENDICES

**A. Photos**

**1928, 1956 and 1969 Aerial Photograph Enlargements with Annotations**

**Site Photograph – March 2025**

**B. Reference Excerpts**

**Excerpt from USGS CoSMoS Model**

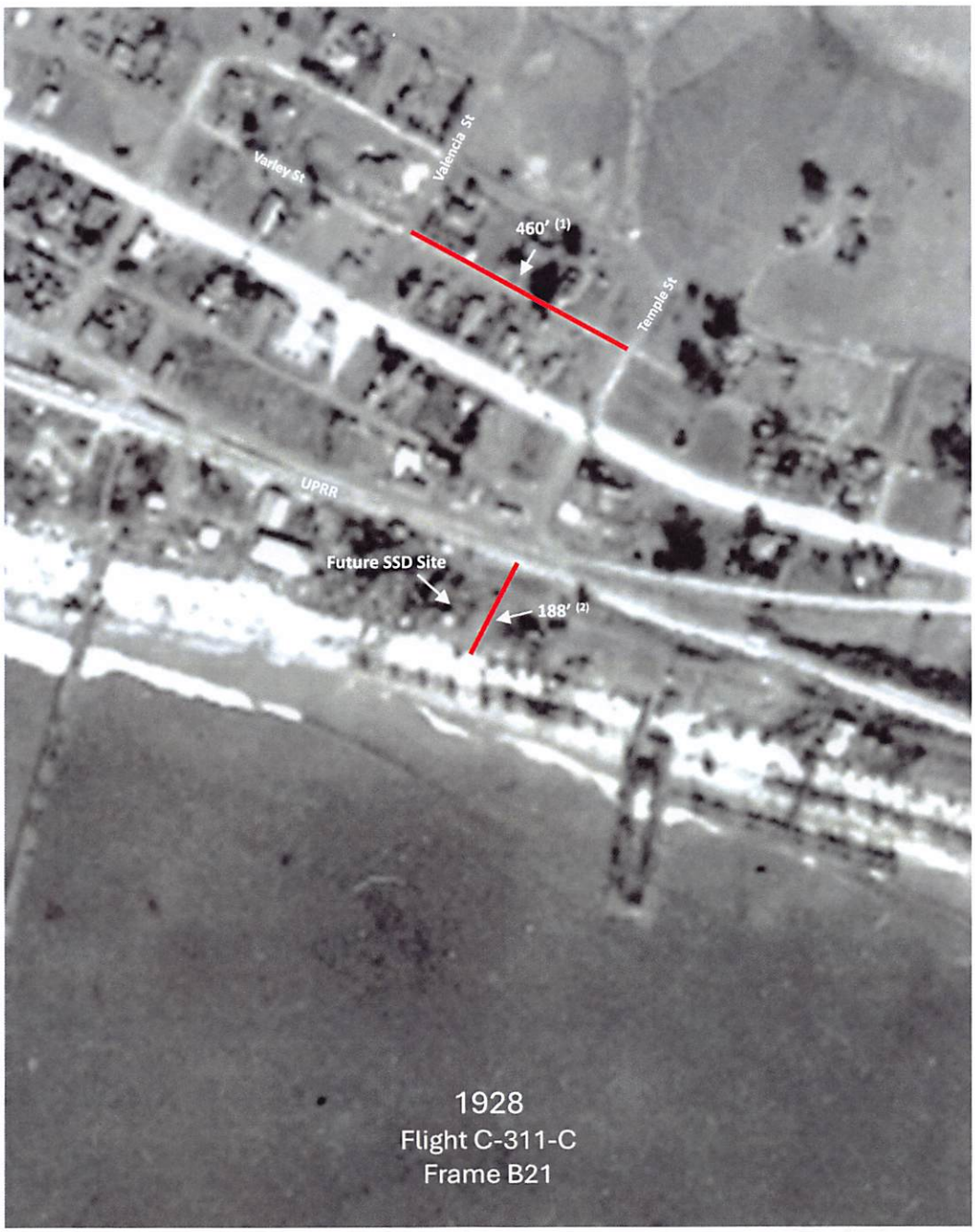
**Table 10 from OPC, 2024**

# APPENDIX A

**1928, 1956 and 1969 Aerial Photograph Enlargements with Annotations**

**Site Photograph – March 2025**

**Analysis of Historic Aerial Photographs - Coastal Bluff Hazards Evaluation**
**Summerland Sanitary District**
**Summerland, California**
**April 2025**

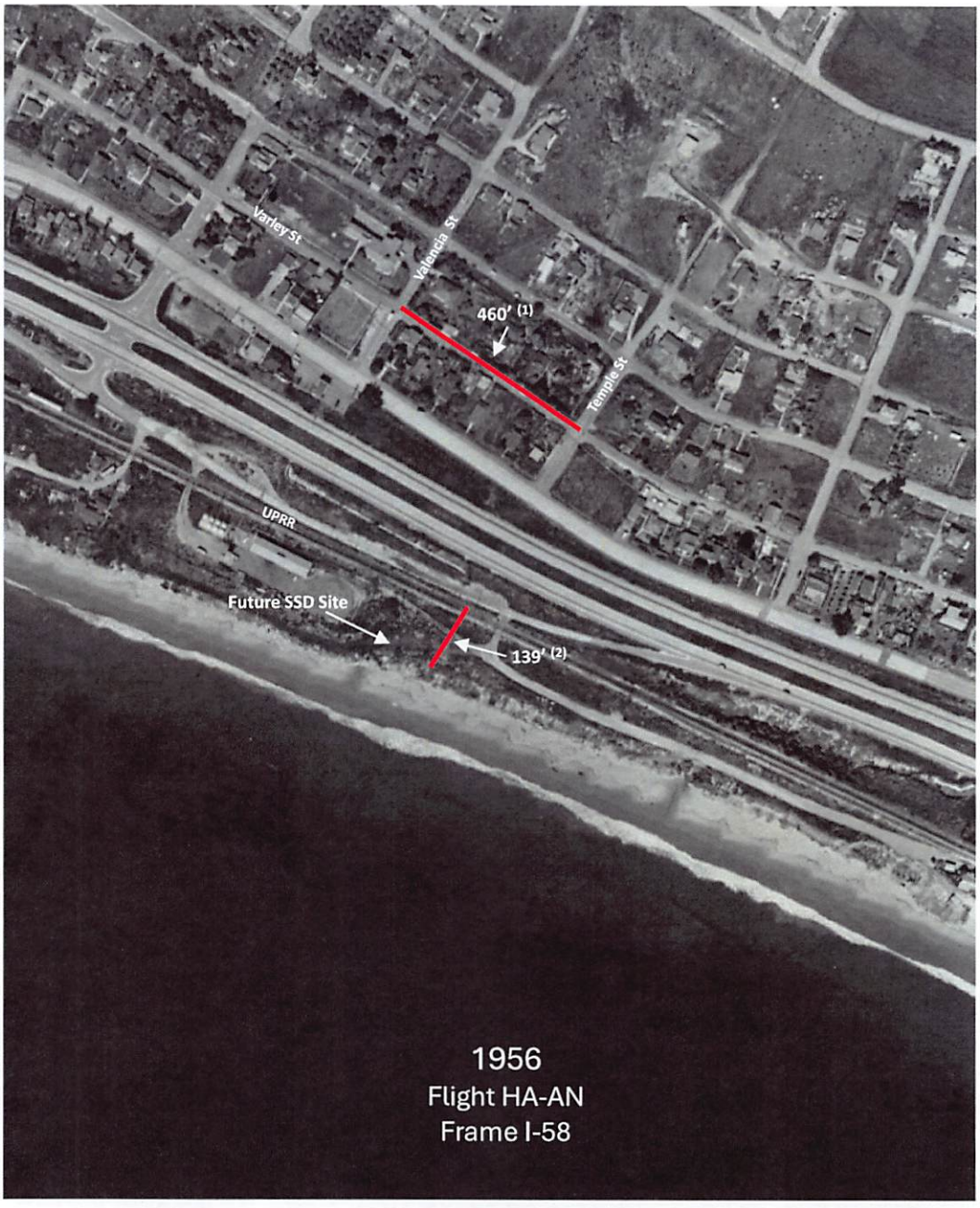



Notes:

(1) Static horizontal distance on Varley Street between centerlines of Valencia and Temple Streets.

(2) Scaled distance between railroad tracks and top of bluff at SSD on date of above photo. Measurement made on projected line from/parallel to Temple Street alignment.

**Analysis of Historic Aerial Photographs - Coastal Bluff Hazards Evaluation**
**Summerland Sanitary District**
**Summerland, California**
**April 2025**




Notes:

(1) Static horizontal distance on Varley Street between centerlines of Valencia and Temple Streets.

(2) Scaled distance between railroad tracks and top of bluff at SSD on date of above photo. Measurement made on projected line from/parallel to Temple Street alignment.

**Analysis of Historic Aerial Photographs - Coastal Bluff Hazards Evaluation**
**Summerland Sanitary District**
**Summerland, California**
**April 2025**


Notes:

(1) Static horizontal distance on Varley Street between centerlines of Valencia and Temple Streets.

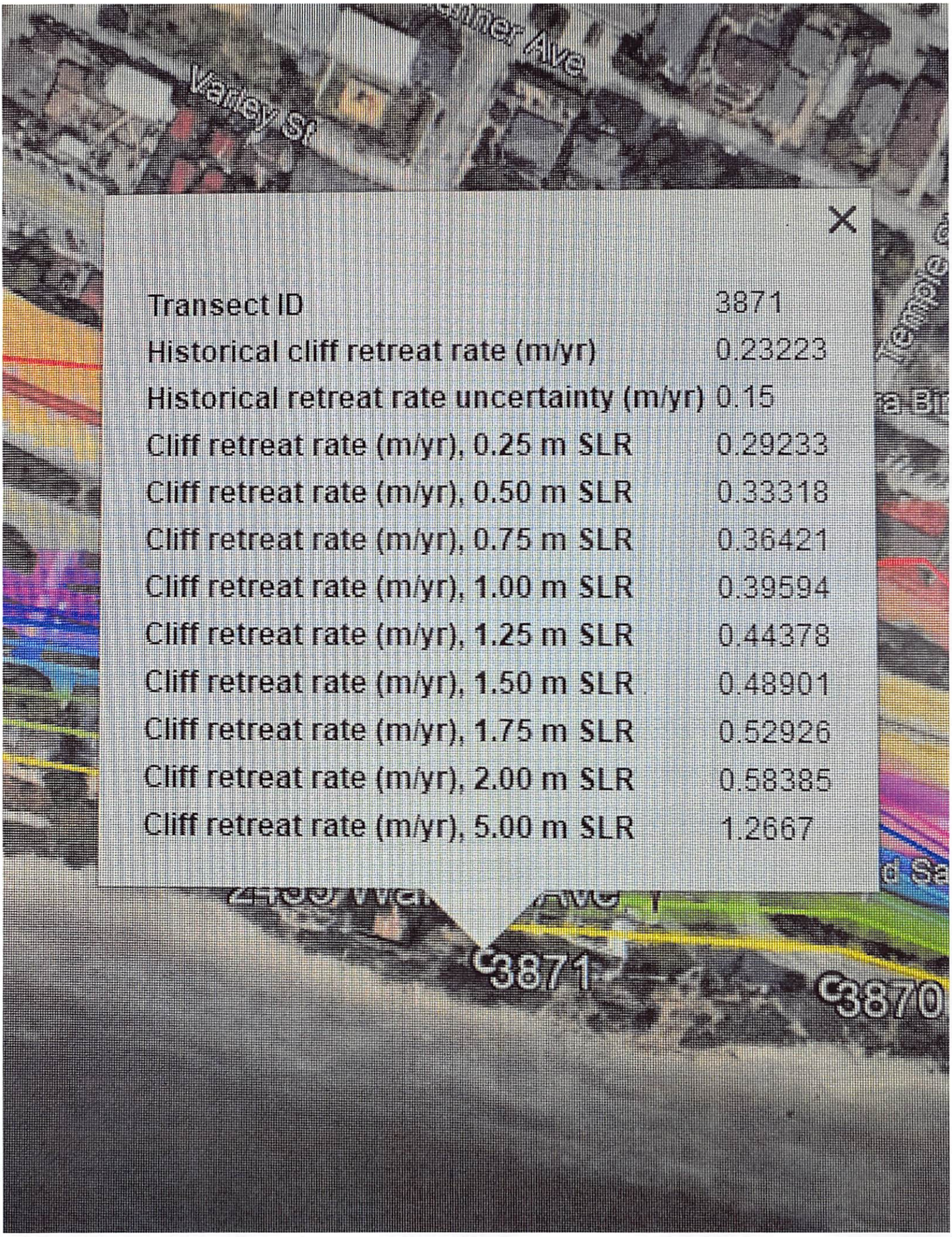
(2) Scaled distance between railroad tracks and top of bluff at SSD on date of above photo. Measurement made on projected line from/parallel to Temple Street alignment.

Erosion at toe of bluff where the top of revetment is lowest, southeast of SSD office, March 2025

# APPENDIX B

**Excerpt from USGS CoSMoS Model**

**Table 10 from OPC, 2024**




| | |
|---|---|
| Transect ID | 3871 |
| Historical cliff retreat rate (m/yr) | 0.23223 |
| Historical retreat rate uncertainty (m/yr) | 0.15 |
| Cliff retreat rate (m/yr), 0.25 m SLR | 0.29233 |
| Cliff retreat rate (m/yr), 0.50 m SLR | 0.33318 |
| Cliff retreat rate (m/yr), 0.75 m SLR | 0.36421 |
| Cliff retreat rate (m/yr), 1.00 m SLR | 0.39594 |
| Cliff retreat rate (m/yr), 1.25 m SLR | 0.44378 |
| Cliff retreat rate (m/yr), 1.50 m SLR | 0.48901 |
| Cliff retreat rate (m/yr), 1.75 m SLR | 0.52926 |
| Cliff retreat rate (m/yr), 2.00 m SLR | 0.58385 |
| Cliff retreat rate (m/yr), 5.00 m SLR | 1.2667 |

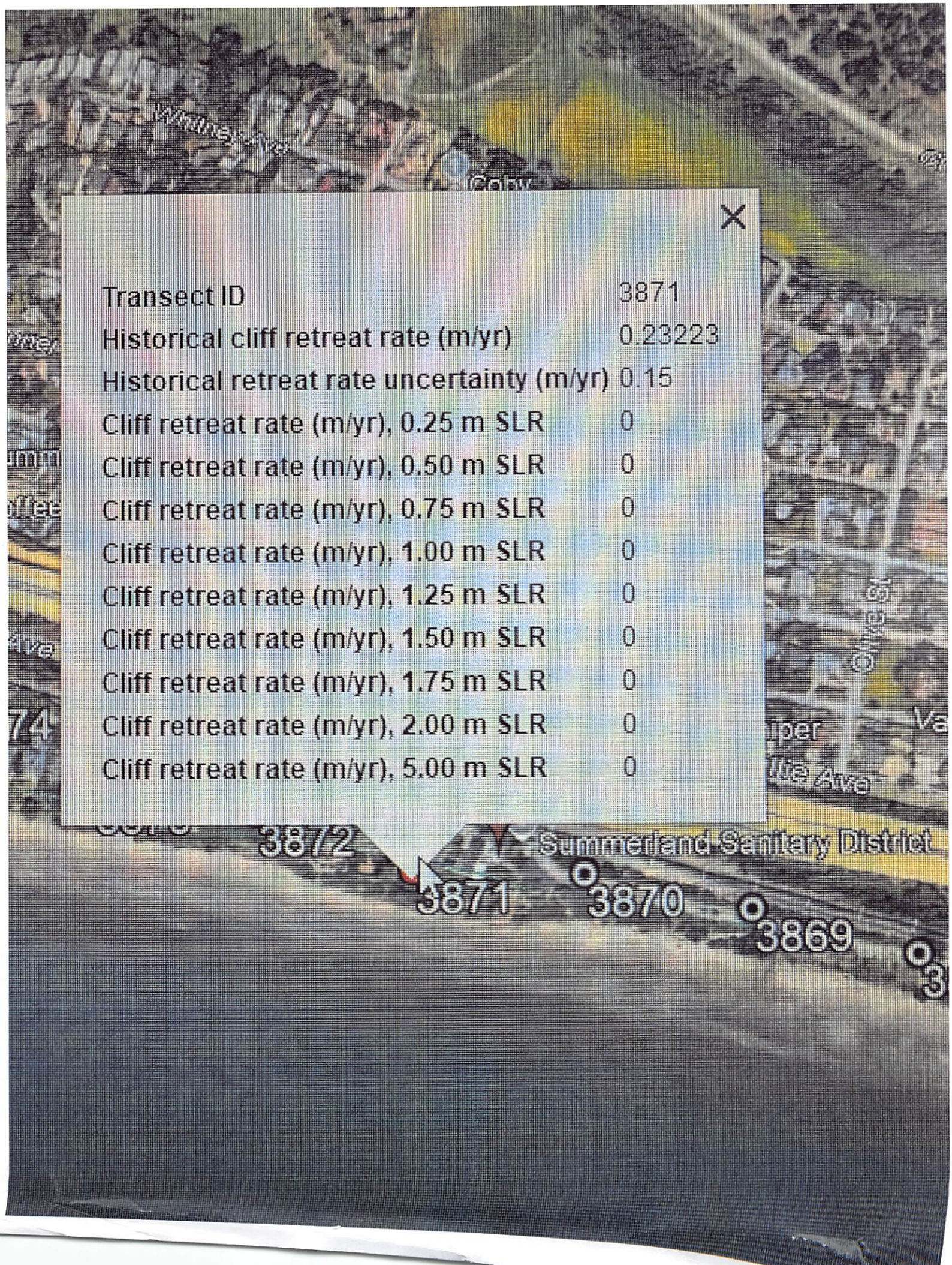

Transect ID 3871
Historical cliff retreat rate (m/yr) 0.23223
Historical retreat rate uncertainty (m/yr) 0.15
Cliff retreat rate (m/yr), 0.25 m SLR 0
Cliff retreat rate (m/yr), 0.50 m SLR 0
Cliff retreat rate (m/yr), 0.75 m SLR 0
Cliff retreat rate (m/yr), 1.00 m SLR 0
Cliff retreat rate (m/yr), 1.25 m SLR 0
Cliff retreat rate (m/yr), 1.50 m SLR 0
Cliff retreat rate (m/yr), 1.75 m SLR 0
Cliff retreat rate (m/yr), 2.00 m SLR 0
Cliff retreat rate (m/yr), 5.00 m SLR 0
3872
3871
3870
3869
Summerland Sanitary District

**TABLE 10. *Sea Level Scenarios for Santa Barbara.***

*Median values of Sea Level Scenarios, in feet, for each decade from 2020 to 2150, with a baseline of 2000. All median scenario values incorporate the local estimate of vertical land motion.*

| YEAR | LOW | INT-LOW | INTERMEDIATE | INT-HIGH | HIGH |
|---|---|---|---|---|---|
| 2020 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| 2030 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 |
| 2040 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 |
| 2050 | 0.3 | 0.5 | 0.6 | 0.9 | 1.1 |
| 2060 | 0.4 | 0.6 | 0.9 | 1.4 | 1.8 |
| 2070 | 0.5 | 0.7 | 1.2 | 2.0 | 2.7 |
| 2080 | 0.5 | 0.9 | 1.6 | 2.8 | 3.8 |
| 2090 | 0.5 | 1.1 | 2.1 | 3.5 | 5.0 |
| 2100 | 0.6 | 1.2 | 2.8 | 4.5 | 6.3 |
| 2110 | 0.6 | 1.4 | 3.4 | 5.3 | 7.5 |
| 2120 | 0.7 | 1.5 | 4.0 | 6.0 | 8.6 |
| 2130 | 0.7 | 1.7 | 4.4 | 6.6 | 9.5 |
| 2140 | 0.7 | 1.9 | 4.9 | 7.1 | 10.4 |
| 2150 | 0.8 | 2.0 | 5.5 | 7.6 | 11.3 |

**TABLE 11. *Sea Level Scenarios for Santa Monica.***

*Median values of Sea Level Scenarios, in feet, for each decade from 2020 to 2150, with a baseline of 2000. All median scenario values incorporate the local estimate of vertical land motion.*

| YEAR | LOW | INT-LOW | INTERMEDIATE | INT-HIGH | HIGH |
|---|---|---|---|---|---|
| 2020 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 2030 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 |
| 2040 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 |
| 2050 | 0.4 | 0.6 | 0.7 | 0.9 | 1.2 |
| 2060 | 0.5 | 0.7 | 1.0 | 1.5 | 1.9 |
| 2070 | 0.6 | 0.9 | 1.3 | 2.1 | 2.8 |
| 2080 | 0.6 | 1.0 | 1.7 | 2.9 | 3.9 |
| 2090 | 0.7 | 1.2 | 2.3 | 3.7 | 5.2 |
| 2100 | 0.8 | 1.4 | 2.9 | 4.6 | 6.4 |
| 2110 | 0.8 | 1.6 | 3.6 | 5.5 | 7.7 |
| 2120 | 0.9 | 1.8 | 4.2 | 6.2 | 8.8 |
| 2130 | 0.9 | 1.9 | 4.7 | 6.8 | 9.7 |
| 2140 | 1.0 | 2.1 | 5.2 | 7.3 | 10.6 |
| 2150 | 1.1 | 2.3 | 5.7 | 7.9 | 11.5 |

VIII
B.

**RESOLUTION NO. 2025-01**

**A RESOLUTION OF THE GOVERNING BOARD OF DIRECTORS OF THE SUMMERLAND SANITARY DISTRICT ADOPTING GUIDELINES FOR THE SUBMISSION AND TABULATION OF PROTESTS IN CONNECTION WITH RATE HEARINGS CONDUCTED PURSUANT TO ARTICLE XIII D, SECTION 6 OF THE CALIFORNIA CONSTITUTION**

**WHEREAS**, Article XIII D, Section 6 of the California Constitution requires the Board of Directors of the Summerland Sanitary District to consider written protests to certain proposed increases to utility charges; and

**WHEREAS**, this constitutional provision does not offer specific guidance as to who may protest, how written protests are to be submitted, or how the District is to tabulate the protests.

**BE IT RESOLVED** by the Board of Directors of the Summerland Sanitary District that when the District gives notice of a public hearing with respect to the adoption or increase of wastewater charges pursuant to Article XIII D, Section 6(a) of the California Constitution, the following shall apply:

**SECTION 1: Definitions.** Unless the context plainly indicates another meaning was intended, the following definitions shall apply in construction of these guidelines.

A. "Parcel" means a County Assessor's parcel the owner or occupant of which is subject to the proposed charge that is the subject of the hearing.

B. "Record customer" and "customer of record" mean (i) the person or persons whose name or names appear on the District's records as the person who has contracted for, or is obligated to pay for, utility services to a particular utility account or (ii) another person who demonstrates to the reasonable satisfaction of the Clerk of the Board that he, she or it is a tenant of repeal property directly liable to pay the proposed fee.

C. "Record owner" or "parcel owner" means the person or persons whose name or names appear on the County Assessor's latest equalized assessment roll as the owner of a parcel.

D. A "fee protest proceeding" is not an election, but the Clerk of the Board will maintain the confidentiality of protests as provided below and will maintain the security and integrity of protests at all times except as necessary to respond to legal objections to proposed rates pursuant to Government Code section 53759.1.

**SECTION 2: Notice Delivery.** Notice of proposed rates and public hearing shall be as follows:

A. The District shall give notice of proposed charges via U.S. mail to all record owners and customers of record served by the District.

B. The District will post the notice on District's website (Ordinance 21).

**SECTION 3: Protest Submittal.**

A. Any record owner or customer of record who is subject to the proposed utility charge which is the subject of the hearing may submit a written protest to the Clerk of the Board (listed in Ordinance 21), by:

- Delivery to the District's Office, 2435 Wallace Avenue, Summerland CA 93067 during published business hours.
- Mail to Clerk of the Board/Prop 218 Protest, Post Office Box 417, Summerland CA 93067, or
- Personally submitting the protest at the public hearing.

B. Protests must be received by the end of the public hearing, including those mailed to the District. No postmarks will be accepted; therefore, any protest not actually received by the close of the hearing, whether or not mailed prior to the hearing, shall not be counted.

C. Although oral comments at the public hearing will not qualify as a formal protest unless accompanied by a written protest, the Board of Directors welcomes input from the community during the public hearing on the proposed charges.

**SECTION 4: Protest Requirements.**

A. A written protest must include:

(i) A statement that it is a protest against the proposed charge which is the subject of the hearing.

(ii) Name of the record owner or customer of record who is submitting the protest;

(iii) Identity, by accessor's parcel number or street address or utility account number, of the parcel with respect to which the protest is made;

(iv) Original signature and legibly printed name of the record owner or customer of record who is submitting the protest.

B. Protests shall not be counted if any of the required elements (i thru iv) outlined in the preceding subsection "A." are omitted.

**SECTION 5: Protest Withdrawal.** Any person who submits a protest may withdraw it by submitting to the Clerk of the Board a written request that the protest be withdrawn. The withdrawal of a protest shall contain sufficient information to identify the affected parcel and the name of the record owner or customer of record who submitted both the protest and the request that it be withdrawn.

**SECTION 6: Multiple Record Owners or Customers of Record.**

A. Each record owner or customer of record of a parcel served by the District may submit a protest. This includes instances where:

(i) A parcel is owned by more than one record owner or more than one name appears on the District's records as the customer of record for the parcel, or

(ii) A customer of record is not the record owner, or

(iii) A parcel includes more than one record customer, or

(iv) Multiple parcels are served via a single utility account, as master-metered multiple family residential units.

B. Only one protest will be counted per parcel as provided by Government Code Section 53755(b).

**SECTION 7: Transparency, Confidentiality, and Disclosure.**

A. To ensure transparency and accountability in the fee protest tabulation while protecting the privacy rights of record owners and customers of record, protests will be maintained in confidence until tabulation begins following the public hearing except that:

1. The Clerk of the Board or his or her designee may open protests to confirm that they are protests and to identify any objections to the proposed charges which require a written response pursuant to Government Code section 53759.1; and,

2. The Board Secretary shall forward a copy of any objections to the proposed charges which require a written response pursuant to Government Code section 53759.1 to the District's legal counsel and chief financial officer.

B. Once a protest is opened during the tabulation, it becomes a disclosable public record, as required by state law.

**SECTION 8: Clerk of the Board**

The Clerk of the Board shall not accept as valid any protest if he or she determines that any of the following is true:

A. The protest does not state its opposition to the proposed charges.

B. The protest does not name the record owner or record customer of the parcel identified in the protest as of the date of the public hearing.

C. The protest does not identify a parcel served by the District which is subject to the proposed charge.

D. The protest does not bear an original signature of the named record owner of, or record customer with respect to, the parcel identified on the protest. Whether a signature is valid shall be entrusted to the reasonable judgment of the Clerk of the Board , who may consult signatures on file with the County Elections Official and/or the District.

E. The protest was altered in a way that raises a fair question as to whether the protest actually expresses the intent of a record owner or a customer of record to protest the charges.

F. The protest was not received by the Clerk of the Board before the close of the public hearing on the proposed charges.

G. A request to withdraw the protest was received prior to the close of the public hearing on the proposed charges.

**SECTION 9: Clerk of the Board's Decisions Final.** The Clerk of the Board's decision that a protest is not valid shall constitute a final action of the District and shall not be subject to any internal appeal.

**SECTION 10: Majority Protest.**

A. A majority protest exists if written protests are timely submitted and not withdrawn by the record owners of, or customers of record with respect to, a majority (50% plus one) of the parcels subject to the proposed charge.

B. While the District may inform the public of the number of parcels served by the District when a notice of proposed rates is mailed, the number of parcels with active customer accounts served by the District on the date of the hearing shall control in determining whether a majority protest exists.

**SECTION 11: Tabulation of Protests.** At the conclusion of the public hearing, the Clerk of the Board shall tabulate all protests received, including those received during the public hearing, and shall report the results of the tabulation to the Board of Directors. If the total number of protests received is insufficient to constitute a majority protest, the Clerk of the Board may determine the absence of a majority protest without validating the protests received, but may instead deem them all valid without further examination.

**SECTION 12: Report of Tabulation**. If at the conclusion of the public hearing, the Clerk of the Board determines that he or she will require additional time to tabulate the protests, he or she shall so advise the Board of Directors, which may adjourn the meeting to allow the tabulation to be completed on another day or days. If so, the Board of Directors shall declare the time and place of tabulation, which shall be conducted in a place where interested members of the public may observe the tabulation, and the Board of Directors shall declare the time at which the meeting shall be resumed to receive and act on the tabulation report of the Clerk of the Board.

**SECTION 13:** This resolution will become effective immediately upon adoption.

INTRODUCED AND ADOPTED ON the 6th day of May 2025

_____

Gary Robinson, President

I hereby certify that the foregoing is a full, true and correct copy of the resolution adopted by the Board of Directors of Summerland Sanitary District at its meeting held on May 6, 2025.

ATTEST:

_____

Jolene Colomy, Board Secretary

(SEAL)

# Financial Status for the month of April 2025

As of: 4/30/2025 (83% Elapsed)
Accounting Period: OPEN

Selection Criteria: Fund = 5215,5216, 5217

Layout Options: Summarized By = Fund, LineItemAccount; Page Break At = Fund

## Fund 5217 -- SummerInd San Dist-Capital Rep

| Line Item Account | 6/30/2025 Fiscal Year Adjusted Budget | 4/30/2025 Year-To-Date Actual | 6/30/2025 Fiscal Year Variance | 6/30/2025 Fiscal Year Pct of Budget |
|---|---|---|---|---|
| **Revenues** | | | | |
| **Use of Money and Property** | | | | |
| 3380 -- Interest Income | 25,000.00 | 39,161.45 | 14,161.45 | 156.65 % |
| Use of Money and Property | 25,000.00 | 39,161.45 | 14,161.45 | 156.65 % |
| Revenues | 25,000.00 | 39,161.45 | 14,161.45 | 156.65 % |
| **Expenditures** | | *ESA Coastal Hazard Monitoring Plan ** 3rd loan installment | | |
| **Services and Supplies** | | | | |
| 7460 -- Professional & Special Service | 0.00 | 9,347.25* | -9,347.25 | -- |
| 7671 -- Special Projects | 58,915.00 | 58,914.78** | 0.22 | 100.00 % |
| Services and Supplies | 58,915.00 | 68,262.03 | -9,347.03 | 115.87 % |
| **Capital Assets** | | | | |
| 8200 -- Structures&Struct Improvements | 15,000.00 | 0.00 | 15,000.00 | 0.00 % |
| 8300 -- Equipment | 20,000.00 | 20,510.70 | -510.70 | 102.55 % |
| 8400 -- Infrastructure | 45,000.00 | 4,164.00 | 40,836.00 | 9.25 % |
| Capital Assets | 80,000.00 | 24,674.70 | 55,325.30 | 30.84 % |
| Expenditures | 138,915.00 | 92,936.73 | 45,978.27 | 66.90 % |
| **Other Financing Sources & Uses** | | | | |
| **Other Financing Sources** | | | | |
| 5910 -- Oper Trf (In)-General Fund | 0.00 | 2,052.73 | 2,052.73 | -- |
| Other Financing Sources | 0.00 | 2,052.73 | 2,052.73 | -- |
| Other Financing Sources & Uses | 0.00 | 2,052.73 | 2,052.73 | -- |
| SummerInd San Dist-Capital Rep | -113,915.00 | -51,722.55 *** | 62,192.45 | 45.40 % |
| Net Financial Impact | 148,747.00 | 405,207.19 | 256,460.19 | 272.41 % |

# Financial Status

As of: 4/30/2025 (83% Elapsed)
Accounting Period: OPEN

Selection Criteria: Fund = 5215,5216, 5217

Layout Options: Summarized By = Fund, LineItemAccount; Page Break At = Fund

## Fund 5215 -- SummerInd San Dist Running Exp

| Line Item Account | 6/30/2025 Fiscal Year Adjusted Budget | 4/30/2025 Year-To-Date Actual | 6/30/2025 Fiscal Year Variance | 6/30/2025 Fiscal Year Pct of Budget |
|---|---|---|---|---|
| Charges for Services | 1,075,317.00 | 1,039,415.00 | -35,902.00 | 96.66 % |
| Revenues | 1,459,034.00 | 1,436,197.32 | -22,836.68 | 98.43 % |
| **Expenditures** | | | | |
| **Salaries and Employee Benefits** | | | | |
| 6100 -- Regular Salaries | 451,481.00 | 367,555.22 | 83,925.78 | 81.41 % |
| 6270 -- Stand-by Pay | 22,000.00 | 21,124.68 | 875.32 | 96.02 % |
| 6300 -- Overtime | 7,500.00 | 4,229.06 | 3,270.94 | 56.39 % |
| 6400 -- Retirement Contribution | 129,301.00 | 91,082.28 | 38,218.72 | 70.44 % |
| 6475 -- Retiree Medical OPEB | 9,000.00 | 5,673.51 | 3,326.49 | 63.04 % |
| 6500 -- FICA Contribution | 36,285.00 | 30,643.51 | 5,641.49 | 84.45 % |
| 6600 -- Health Insurance Contrib | 79,157.00 | 70,710.69 | 8,446.31 | 89.33 % |
| 6900 -- Workers Compensation | 17,101.00 | 18,194.37 | -1,093.37 | 106.39 % |
| Salaries and Employee Benefits | 751,825.00 | 609,213.32 | 142,611.68 | 81.03 % |
| **Services and Supplies** | | | | |
| 7030 -- Clothing and Personal | 3,860.00 | 4,505.84 | -645.84 | 116.73 % |
| 7053 -- Telephone Service Local | 10,271.00 | 7,759.13 | 2,511.87 | 75.54 % |
| 7070 -- Household Supplies | 1,300.00 | 1,109.55 | 190.45 | 85.35 % |
| 7090 -- Insurance | 67,000.00 | 65,025.08 | 1,974.92 | 97.05 % |
| 7110 -- Directors Fees | 22,050.00 | 15,342.50 | 6,707.50 | 69.58 % |
| 7121 -- Operating Supplies | 43,626.00 | 41,432.28 | 2,193.72 | 94.97 % |
| 7324 -- Audit and Accounting Fees | 29,000.00 | 27,819.00 | 1,181.00 | 95.93 % |
| 7362 -- Building Maintenance | 10,500.00 | 7,642.36 | 2,857.64 | 72.78 % |
| 7363 -- Equipment Maintenance | 16,375.00 | 14,451.48 | 1,923.52 | 88.25 % |
| 7404 -- Public Health Lab Serv | 27,425.00 | 24,848.00 | 2,577.00 | 90.60 % |
| 7430 -- Memberships | 8,660.00 | 7,832.00 | 828.00 | 90.44 % |
| 7450 -- Office Expense | 3,300.00 | 3,121.91 | 178.09 | 94.60 % |
| 7454 -- Books & Subscriptions | 460.00 | 382.38 | 77.62 | 83.13 % |

# Financial Status

As of: 4/30/2025 (83% Elapsed)
Accounting Period: OPEN

Selection Criteria: Fund = 5215,5216, 5217

Layout Options: Summarized By = Fund, LineItemAccount; Page Break At = Fund

## Fund 5215 -- SummerInd San Dist Running Exp

| Line Item Account | 6/30/2025 Fiscal Year Adjusted Budget | 4/30/2025 Year-To-Date Actual | 6/30/2025 Fiscal Year Variance | 6/30/2025 Fiscal Year Pct of Budget |
|---|---|---|---|---|
| 7459 -- IT Professional Services | 4,000.00 | 1,614.77 | 2,385.23 | 40.37 % |
| 7460 -- Professional & Special Service | 59,572.00 | 39,580.93 | 19,991.07 | 66.44 % |
| 7508 -- Legal Fees | 35,000.00 | 29,835.27 | 5,164.73 | 85.24 % |
| 7510 -- Contractual Services | 9,825.00 | 4,727.44 | 5,097.56 | 48.12 % |
| 7516 -- Permitting Services | 12,403.00 | 12,754.82 | -351.82 | 102.84 % |
| 7530 -- Publications & Legal Notices | 600.00 | 493.00 | 107.00 | 82.17 % |
| 7546 -- Administrative Expense | 3,200.00 | 3,143.53 | 56.47 | 98.24 % |
| 7630 -- Small Tools & Instruments | 500.00 | 457.83 | 42.17 | 91.57 % |
| 7653 -- Training Fees & Supplies | 4,850.00 | 3,739.99 | 1,110.01 | 77.11 % |
| 7671 -- Special Projects | 7,220.00 | 7,220.00 | 0.00 | 100.00 % |
| 7730 -- Transportation and Travel | 750.00 | 844.71 | -94.71 | 112.63 % |
| 7731 -- Gasoline-Oil-Fuel | 3,500.00 | 3,101.01 | 398.99 | 88.60 % |
| 7761 -- Electricity | 68,440.00 | 53,424.79 | 15,015.21 | 78.06 % |
| 7763 -- Water | 2,720.00 | 2,148.52 | 571.48 | 78.99 % |
| 7764 -- Refuse | 4,525.00 | 3,828.60 | 696.40 | 84.61 % |
| Services and Supplies | 460,932.00 | 388,186.72 | 72,745.28 | 84.22 % |
| Expenditures | 1,212,757.00 | 997,400.04 | 215,356.96 | 82.24 % |
| **Other Financing Sources & Uses** | | | | |
| **Other Financing Uses** | | | | |
| 7901 -- Oper Trf (Out) | 0.00 | 2,052.73 | -2,052.73 | -- |
| Other Financing Uses | 0.00 | 2,052.73 | -2,052.73 | -- |
| Other Financing Sources & Uses | 0.00 | -2,052.73 | -2,052.73 | -- |
| SummerInd San Dist Running Exp | 246,277.00 | 436,744.55 | 190,467.55 | 177.34 % |

Revenues minus Expense

# Financial Status

As of: 4/30/2025 (83% Elapsed)
Accounting Period: OPEN

Selection Criteria: Fund = 5215,5216, 5217

Layout Options: Summarized By = Fund, LineItemAccount; Page Break At = Fund

## Fund 5216 -- Summerland San Cap Facilities

| Line Item Account | 6/30/2025 Fiscal Year Adjusted Budget | 4/30/2025 Year-To-Date Actual | 6/30/2025 Fiscal Year Variance | 6/30/2025 Fiscal Year Pct of Budget |
|---|---|---|---|---|
| **Revenues** | | | | |
| **Use of Money and Property** | | | | |
| 3380 -- Interest Income | 4,000.00 | 5,725.19 | 1,725.19 | 143.13 % |
| Use of Money and Property | 4,000.00 | 5,725.19 | 1,725.19 | 143.13 % |
| **Charges for Services** | | | | |
| 5432 -- Connection Fees | 12,385.00 | 14,460.00 | 2,075.00 | 116.75 % |
| Charges for Services | 12,385.00 | 14,460.00 | 2,075.00 | 116.75 % |
| Revenues | 16,385.00 | 20,185.19 | 3,800.19 | 123.19 % |
| Summerland San Cap Facilities | 16,385.00 | 20,185.19 | 3,800.19 | 123.19 % |

# Financial Status

As of: 4/30/2025 (83% Elapsed)
Accounting Period: OPEN

Selection Criteria: Fund = 5215,5216, 5217

Layout Options: Summarized By = Fund, LineItemAccount; Page Break At = Fund

## Fund 5217 -- SummerInd San Dist-Capital Rep

| Line Item Account | 6/30/2025 Fiscal Year Adjusted Budget | 4/30/2025 Year-To-Date Actual | 6/30/2025 Fiscal Year Variance | 6/30/2025 Fiscal Year Pct of Budget |
|---|---|---|---|---|
| **Revenues** | | | | |
| **Use of Money and Property** | | | | |
| 3380 -- Interest Income | 25,000.00 | 39,161.45 | 14,161.45 | 156.65 % |
| Use of Money and Property | 25,000.00 | 39,161.45 | 14,161.45 | 156.65 % |
| Revenues | 25,000.00 | 39,161.45 | 14,161.45 | 156.65 % |
| **Expenditures** | | *ESA Coastal Hazard Monitoring Plan ** 3rd loan installment | | |
| **Services and Supplies** | | | | |
| 7460 -- Professional & Special Service | 0.00 | 9,347.25* | -9,347.25 | -- |
| 7671 -- Special Projects | 58,915.00 | 58,914.78** | 0.22 | 100.00 % |
| Services and Supplies | 58,915.00 | 68,262.03 | -9,347.03 | 115.87 % |
| **Capital Assets** | | | | |
| 8200 -- Structures&Struct Improvements | 15,000.00 | 0.00 | 15,000.00 | 0.00 % |
| 8300 -- Equipment | 20,000.00 | 20,510.70 | -510.70 | 102.55 % |
| 8400 -- Infrastructure | 45,000.00 | 4,164.00 | 40,836.00 | 9.25 % |
| Capital Assets | 80,000.00 | 24,674.70 | 55,325.30 | 30.84 % |
| Expenditures | 138,915.00 | 92,936.73 | 45,978.27 | 66.90 % |
| **Other Financing Sources & Uses** | | | | |
| **Other Financing Sources** | | | | |
| 5910 -- Oper Trf (In)-General Fund | 0.00 | 2,052.73 | 2,052.73 | -- |
| Other Financing Sources | 0.00 | 2,052.73 | 2,052.73 | -- |
| Other Financing Sources & Uses | 0.00 | 2,052.73 | 2,052.73 | -- |
| SummerInd San Dist-Capital Rep | -113,915.00 | -51,722.55 *** | 62,192.45 | 45.40 % |
| Net Financial Impact | 148,747.00 | 405,207.19 | 256,460.19 | 272.41 % |

# Cash Balances (Real-Time)

As of: 4/30/2025
Accounting Period: OPEN

Selection Criteria: Fund = 5215,5216, 5217

Layout Options: Summarized By = Fund; Page Break At = Fund

| Fund | 4/1/2025 Beginning Balance | Month-To-Date Cash Receipts (+) | Month-To-Date Treasury Credits (+) | Month-To-Date Warrants and Wire Transfers (-) | Month-To-Date Treasury Debits (-) | 4/30/2025 Ending Balance |
|---|---|---|---|---|---|---|
| 5215 -- SummerInd San Dist Running Exp | 776,017.79 | 355.00 | 602,880.19 | 0.00 | 88,412.67 | 1,290,840.31 |
| 5216 -- Summerland San Cap Facilities | 252,604.93 | 0.00 | 2,011.33 | 0.00 | 0.00 | 254,616.26 |
| 5217 -- SummerInd San Dist-Capital Rep | 1,699,993.23 | 0.00 | 13,569.70 | 0.00 | 62,388.03 | 1,651,174.90 |
| Total Report | 2,728,615.95 | 355.00 | 618,461.22 | 0.00 | 150,800.70 | 3,196,631.47 |

VIII A.

April 21, 2025

Mr. Gary Robinson, President
Summerland Sanitary District (SSD)
P.O. Box 417/ 2435 Wallace Avenue
Summerland CA 93067-0417

Dear Mr. Robinson,

This letter is to follow up on our recent phone conversation and your suggestion that my sister, Lucinda Malott, and I propose an alternative SSD annual sewer billing rate to the one currently proposed for our property at 160 Evans Avenue, Summerland.

At present, SSD proposes a billing rate of $719 per unit, per year, or 50% of the single-family dwelling rate. Our winter water use figures going back almost 50 years, indicate our occupants are actually using about 10% of the amount of water per unit as that of nearby single-family dwellings. This results in about 10% per apartment of the effluent created by a single-family home. Yet SSD proposes that we pay 50% of the single-family rate per apartment. This has been, and continues to be, grossly unfair to us. We made this clear in our presentation to SSD in 2012, which was ignored and ultimately led to our lawsuit. That we have been overbilled for this long represents many hundreds of thousands of dollars we have overpaid in a huge subsidy to the merchants and single-family homeowners of Summerland.

As you know, our recent lawsuit against SSD settled at a cost to SSD of over $200,000 (our legal fees) and instructions to make your billing fair. We note that you have created numerous new billing categories and reduced the small unit rate for residences to half that of major single-family homes. This does not meet with the actual usage of 160 Evans.

160 Evans is unique. It consists of 30 one-bedroom units (6.5% of Summerland's residences), each of 555 sq ft, or less than 1/6 the size of an average modern home. The units are smaller than most ADUs or affordable housing units. With few exceptions, our units are occupied by single workers who commute daily from 8-6 and thus don't create effluent for SSD during that time. There is a vacancy factor of about 5%, so one or two units are unoccupied at most times. In addition,160 Evans has a single collection pipe to SSD for all 30 units, limiting your maintenance costs to a minimum compared to 30 connections for 30 single-family dwellings.

We are currently in the process of metering our irrigation system to further define our water use and effluent creation.

With the above background information summarized, we propose the following:

- That SSD create a special class category, similar to the categories you have created for Innovation Place, UC Campus, and Pacifica Institute, for 160 Evans.

- That this class consist of higher density housing of 30 units, each of 555 sq ft or less.

- That the SSD billing be set at or about 10% of the single-family home billing rate (proposed for $1351 as of July 1, 2025) or $135 per unit per year. This would total $4050 for 2025-6 billing year.

We do not wish to belabor this matter, but we are most serious in trying to come to a fair and amiable solution before having to resort to another round of legal conflict.

We thank you for your time and serious attention to this long overdue matter and request a resolution in line with our proposal.

Sincerely,

Lucinda Malott jm

James S Malott

Lucinda Malott and
James Malott

P.S. We would appreciate a response at your May 8 2025 meeting

XI

# SUMMERLAND SANITARY DISTRICT

Regular Board of Directors Meeting May 6, 2025

Operations Manager Report

**OPERATIONS AND FACILITY MAINTENANCE:**

1. Staff completed weekly ground maintenance and landscape work including mowing, weed whacking, blowing, edging, and raking.
2. Beltpress was operated on 4/15, 4/17, and 4/22/2025.
3. Digester #2 was removed from service due to an obstructed airline. The airline was jetted clean and the digester was returned to service. 4/23/2025.
4. Both of the Secondary Clarifiers were cleaned and disinfected on 4/24/2025.
5. The Chlorine Contact Chamber was cleaned on 4/29/2025.

**COLLECTION SYSTEM / LIFT STATIONS:**

1. Staff made periodic rounds of the collection system to check for any problems, primarily checking the hotspot manholes to ensure proper flow.
2. Each of the three lift stations was checked and tested daily.
3. The lift station #2 ventilation fan failed. The fan was removed and replaced on 4/11/2025.
4. The property at 230 Ortega Ridge Road would like to connect to the district sewer system. Reviewed and approved the construction plans.

**REGULATORY COMPLIANCE:**

1. Daily meter readings and sample collection are being performed by staff for regulatory compliance and process control.
2. The Monthly Discharge Monitoring Report for March was submitted to CWIQS on 4/17/2025.
3. The collection system "No Spill Report" for March was submitted on 4/17/2025.
4. Safety Talks were held on the topics of Indoor and Outdoor Heat Illness Prevention.
5. Received and reviewed the Coastal Hazards Monitoring Plan from ESA. The Coastal Bluff Hazards Evaluation prepared by Campbell-GEO was included.
6. Submitted the Coastal Hazard Monitoring Plan to the RWQCB in CWIQS on 4/30/2025.

XII

# SUMMERLAND SANITARY DISTRICT

## Regular Board of Directors Meeting May 6, 2025
## District Administrative Manager Report

The District received building plans and requests for will-serve letters from the following properties:
2435 Whitne Avenue – Admin & Inspection Fees for sewer lateral repair.

Administrative and financial items completed outside the regular scope of work:

1. Prepared and sent out the Prop. 218 Notices to property tax roll on April 14, 2025.
2. Reserved the Assembly Meeting Hall for June 12, 2025, at 3:00 p.m.
3. MSD donated their "outdated" conference meeting Owl, which has multiple camera angles and a microphone/speaker for Board meetings. Used Owls are selling for around $400. Bought the MSD team a Starbucks coffee card as a thank-you on behalf of SSD.
4. Posted the job vacancy on the District's website, Linkedin, and Indeed. Received a total of fifty-one applications. Ranked and pulled all candidates and held eight phone interviews with potential candidates. Thereafter scheduled interviews with three candidates. Interviews were held on Thursday, May 1st, together with a panel: AOP Committee and OM.
5. Rate Making Ordinance 22 and Ordinance 23 Administrative Procedure to Change Customer Classifications are drafted and will be presented to the Board at the June 12th board meeting.
6. Attended Workday Seminar and chipped away at the different training modules for the Workday Financial System. Training modules by all staff need to be completed before May 20th.
7. The third loan installment and interest payment was completed on April 3rd.
8. Prepared the 5215, 5216, and 5217 budget's revenue status and projections. Prepared the projected 2025/26 expenditure status for the administrative budgets 5215, 5216, and 5217. Calculated COLA. Prepared current status and projected costs for benefits, contract services, salary scales, and salaries. Prepared the package for the Finance Committee for review. The finance committee meeting is scheduled for budget review on May 8, 2025. After the FCM review and input budget will be presented for Board approval at the June 12th board meeting.
9. Attended HR webinar "legal guidance on employers' investigative obligations and best practices for managing workplace complaints".
10. Met with John Weigold (MSD) and Nick Turner (MWD) for a lunch meeting on April 30th.
11. Met with John Weigold and Stephen Williams to discuss contract service possibilities.
12. Requested and received a letter of engagement from Bartlett, Pringle, and Wolf LLC. The accounting and audit services fee will be increased by 5% for the next fiscal year. The letter of Engagement was signed.
13. Legal counsel filed the complaint for the Stawiekis on April 11th. The requests for admissions, requests for production, and general form interrogatories were mailed and will need responses by June 6th.

Scheduled Days Off:

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