

AGENDA
REGULAR BOARD MEETING OF THE
SAN ELIJO JOINT POWERS AUTHORITY
OCTOBER 20, 2026 AT 8:30 A.M.
SAN ELIJO WATER CAMPUS – BOARD MEETING ROOM
2695 MANCHESTER AVENUE
CARDIFF BY THE SEA, CALIFORNIA

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. ORAL COMMUNICATIONS/PUBLIC COMMENT PERIOD (NON-ACTION ITEM)
5. NEW HIRES, AWARDS AND RECOGNITION

None.
6. CHANGES TO THE AGENDA

Announcements of administrative changes to the agenda, in compliance with the Brown Act.
7. **CONSENT CALENDAR**
 - 7A.* [APPROVAL OF MINUTES FOR SEPTEMBER 15, 2026 MEETING](#)
 - 7B* [APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT REPORTS – SEPTEMBER 2026](#)
 - 7C* [WASTEWATER TREATMENT REPORT – AUGUST 2026](#)
 - 7D* [RECYCLED WATER REPORT – AUGUST 2026](#)
 - 7E. * [REPORTABLE MEETINGS](#)
 - 7F. * [CONSTRUCTION COMPLETION ACCEPTANCE – EMERGENCY RECYCLED LATERAL REPAIR ON SAXONY ROAD IN ENCINITAS](#)
 - 7G. * [WANKET TANK CONSTRUCTION PHASE AMENDMENTS](#)
8. * ITEMS REMOVED FROM CONSENT CALENDAR

Items on the Consent Calendar are routine matters and there will be no discussion unless an item is removed from the Consent Calendar. Items removed by a "Request to Speak" form from the public will be handled immediately following adoption of the Consent Calendar. Items removed by a Board Member will be handled as directed by the Board.

9. **REGULAR AGENDA**

9A. [AGREEMENT FOR THE IMPLEMENTATION OF OPEN SPACE MANAGEMENT SERVICES](#)

1. Authorize the General Manager to execute a five-year Technical Services Agreement with Nature Collective for open space management services in an amount not to exceed \$391,950; and
2. Discuss and take action as appropriate.

Staff Reference: General Manager

9B. [AWARD CONSTRUCTION PHASE CONTRACTS FOR THE AERATION BASIN MIXING PROJECT](#)

1. Authorize General Manager to award and execute a contract for the construction of the Aeration Basin Mixing Project to SS Mechanical Construction Corp in the lump sum amount of \$159,365;
2. Authorize General Manager to amend existing construction management and inspection contract with Valley CM for construction management services for the Aeration Basin Mixing Project in an amount not to exceed \$39,900; and
3. Discuss and take action as appropriate.

Staff Reference: Deputy General Manager

9C. [AMENDMENT FOR THE IMPLEMENTATION OF PRE-FILTER CHLORINATION STUDY](#)

1. Authorize General Manager to amend Professional Services Agreement with Trussell Technologies to an amount not to exceed \$88,056 for technical oversight of the Pre-Filter Chlorination Study; and
2. Discuss and take action as appropriate.

Staff Reference: Deputy General Manager

9D. [PROCLAMATION OF THE BOARD OF DIRECTORS HONORING MICHAEL THORNTON'S RETIREMENT AFTER 26 YEARS OF SERVICE TO THE SAN ELIJO JOINT POWERS AUTHORITY](#)

1. Adopt by motion a proclamation recognizing Michael T. Thornton for 26 years of dedicated service to the San Elijo Joint Powers Authority on the occasion of his retirement.

Staff Reference: Deputy General Manager

10. GENERAL MANAGER'S REPORT

Informational report by the General Manager on items not requiring Board action.

11. GENERAL COUNSEL'S REPORT

Informational report by the General Counsel on items not requiring Board action.

12. BOARD MEMBER COMMENTS

This item is placed on the agenda to allow individual Board Members to briefly convey information to the Board or public, or to request staff to place a matter on a future agenda and/or report back on any matter. There is no discussion or action taken on comments by Board Members.

13. CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL—ANTICIPATED LITIGATION (Gov. Code 54956.9(d)(4))

- One potential matter

14. ADJOURNMENT

The next regularly scheduled San Elijo Joint Powers Authority Board Meeting will be Tuesday, November 17, 2026 at 8:30 a.m.

NOTICE:

The San Elijo Joint Powers Authority's open and public meetings comply with the protections and prohibitions contained in Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C Section 12132), and the federal rules and regulations adopted in implementation thereof. Any person with a disability who requires a modification or accommodation, including auxiliary aids or services, in order to participate in a public meeting of the SEJPA Board of Directors, may request such modification or accommodation from Michael T. Thornton, General Manager, (760) 753-6203 ext. 72.

The agenda package and materials related to an agenda item submitted after the packet's distribution to the Board are available for public review in the lobby of the SEJPA Administrative Office during normal business hours. Agendas and minutes are available at www.sejpa.org. The 2026 SEJPA Board meetings schedule is available at [SEJPA Board Meeting Dates](#).

AFFIDAVIT OF POSTING

I, Michael T. Thornton, Secretary of the San Elijo Joint Powers Authority, hereby certify that I posted, or have caused to be posted, a copy of the foregoing agenda on the SEJPA website at www.sejpa.org, and in the following locations:

- San Elijo Water Campus (formerly known as San Elijo Water Reclamation Facility), 2695 Manchester Avenue, Encinitas, California
- City of Encinitas, 505 South Vulcan Avenue, Encinitas, California
- City of Solana Beach, 635 South Highway 101, Solana Beach, California

The original agenda was published on Thursday, October 15, 2026, at least 72 hours prior to the meeting, in accordance with Government Code Section 54954.2(a).

Date: October 20, 2026



Michael T. Thornton, P.E.
Secretary / General Manager

Agenda Item No. 7A

SAN ELIJO JOINT POWERS AUTHORITY
MINUTES OF THE BOARD MEETING
HELD ON SEPTEMBER 15, 2026
AT THE SAN ELIJO WATER CAMPUS

Luke Shaffer, Chair

David Zito, Vice Chair

A meeting of the Board of Directors of the San Elijo Joint Powers Authority (SEJPA) was held Tuesday, September 15, 2026, at 8:30 a.m., at the San Elijo Water Campus.

1. CALL TO ORDER

Chair Shaffer called the meeting to order at 8:30 a.m.

2. ROLL CALL

Directors Present:

Board Chair

Luke Shaffer

Vice Chair

David Zito

Board Member

Jim O'Hara

Board Member

Kristi Becker

Others Present:

General Manager

Michael Thornton

Deputy General Manager

Thomas Falk

Director of Finance and Administration

Kevin Lang

Administrative Coordinator

Vanessa Hackney

SEJPA Counsel:

Snell and Wilmer

Tracie Stender

City of Encinitas:

Senior City Engineer

Will Trax

City of Solana Beach:

City Engineer

Austin Frisby

3. PLEDGE OF ALLEGIANCE

Board Member O'Hara led the Pledge of Allegiance.

4. ORAL COMMUNICATIONS/PUBLIC COMMENT PERIOD

None.

5. NEW HIRES, AWARDS AND RECOGNITION

None.

6. CHANGES TO THE AGENDA

None.

7. CONSENT CALENDAR

Agenda Item No. 7A APPROVAL OF MINUTES FOR JUNE 21, 2026 MEETING

Agenda Item No. 7B.1 APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT REPORTS – JULY 2026

Agenda Item No. 7B.2 APPROVAL FOR PAYMENT OF WARRANTS AND MONTHLY INVESTMENT REPORTS – AUGUST 2026

Agenda Item No. 7C.1 WASTEWATER TREATMENT REPORT – JUNE 2026

Agenda Item No. 7C.2 WASTEWATER TREATMENT REPORT – JULY 2026

Agenda Item No. 7D.1 RECYCLED WATER REPORT – JUNE 2026

Agenda Item No. 7D.2 RECYCLED WATER REPORT – JULY 2026

Agenda Item No. 7E RECYCLED WATER REPORT – JULY 2026

Agenda Item No. 7F CONSTRUCTION COMPLETION ACCEPTANCE – EMERGENCY RECYCLED WATER PIPELINE REPAIR AT EAST (MAIN) ENTRY GATE

Agenda Item No. 7G AWARD OF PRELIMINARY ENGINEERING-DESIGN SERVICES FOR OLIVENHAIN PUMP STATION GENERATOR AND ELECTRICAL UPGRADES PROJECT

Agenda Item No. 7H AMEND PROFESSIONAL SERVICES AGREEMENT FOR AS-NEEDED CONSULTING ENGINEERING SERVICES

Agenda Item No. 7I PROJECT MANAGEMENT AND ENGINEERING SERVICES FOR LOMAS SANTA FE BOOSTER PUMP STATION REHABILITATION

Moved by Vice Chair Zito and seconded by Board Member O'Hara to approve the Consent Calendar.

Motion carried with the following vote of approval:

AYES: Shaffer, Zito, O'Hara, Becker
NOES: None
ABSENT: None
ABSTAIN: None

9A. NOTICE OF EMERGENCY SITUATION AND AWARD OF CONSTRUCTION CONTRACT FOR REPIARS TO RECYCLED WATER PIPELINE LATERAL ON SAXONY ROAD IN ENCINITAS

Deputy General Manager Thomas Falk presented to the Board that on September 8, 2026, at approximately 11:00 a.m., staff was notified of water surfacing through the asphalt pavement above a buried recycled water lateral at approximately 171 Saxony Road in Encinitas. Staff promptly investigated and conferred with both the City of Encinitas' Engineering Department and San Dieguito Water District. Staff determined the leak to be limited in magnitude but requiring prompt repair due to its location within a public street and uncertainty regarding the integrity of the buried lateral connection.

Burtech Pipeline was contacted and was requested to support. Burtech is submitting documentation to secure a Construction Public Right-of-Way (PROW) permit from the City of Encinitas and preparing a crew to excavate, dewater the trench and repair the damaged pipeline in an expeditious manner. The work in the public street will be completed to the City's standards including pavement restoration. Once all work is completed, SEJPA will reconcile time and materials charges with Burtech and close out the emergency declaration.

Under SEJPA's Resolution 2022-01 and PCC 22050, the General Manager authorized emergency repairs without competitive bidding.

The cost of the emergency repairs will be funded through the Recycled Water Program's reserves. The recommended contract with Burtech Pipeline for this work is for an amount not to exceed \$50,000.

Moved by Board Member O'Hara and seconded by Vice Chair Zito to:

1. Review and Confirm this Emergency Condition Pursuant to San Elijo Joint Powers Authority's Resolution 2022-01 "Purchasing Policies and Procedures" and Public Contract Code 22050, and ratify the General Manager's execution of an emergency repair agreement with Burtech Pipeline for repairs to buried recycled water pipeline lateral on Saxony Road.

Motion carried with the following vote of approval:

AYES: Shaffer, Zito, O'Hara, Becker
NOES: None
ABSENT: None
ABSTAIN: None

9B. AWARD OF ENGINEERING-DESIGN SERVICES FOR RECYCLED WATER PIPELINE REPLACEMENT PROJECT

Deputy General Manager Thomas Falk presented the Recycled Water Pipeline Replacement Project (Project) to the Board. Since 2013, SEJPA has experienced six significant leaks in buried ductile iron pipeline sections at the San Elijo Water Campus (SEWC). Due to the recent frequency of failures, staff determined that replacement of the localized ductile iron pipeline was necessary to improve reliability.

The Project will replace approximately 1,100 linear feet of existing 12-inch ductile iron pipe with a more corrosion-resistant material, anticipated to be PVC C900 or a similar plastic piping system. The Project also incorporates replacement of existing ductile iron filtered water piping and an automated filtered water diversion valve identified as high-priority assets through recent facility planning. Combining these improvements with the pipeline replacement will provide economies of scale and proactively address identified asset management risks.

SEJPA publicly advertised a Request for Proposals (RFP) through PlanetBids for professional engineering services, including project management, pre-design investigations, engineering, final design, and related services. Two proposals were received by the August 20, 2026 deadline from Hoch Consulting, Inc. and Scheidel Engineering, Inc. A selection panel reviewed and scored the proposals in accordance with the RFP evaluation criteria, and Hoch Consulting was identified as the highest-ranked firm.

Following the qualifications-based selection process and negotiations regarding scope and fees, staff recommended awarding a Professional Services Agreement to Hoch Consulting in an amount not-to-exceed \$135,543 for Project design.

Staff noted that, in June 2026, the Board authorized the use of federal Title XVI grant proceeds associated with the Recycled Water Conservation and Production Upgrade Project to fund eligible recycled water pipeline replacement costs, estimated at approximately \$1.2 million. The design costs will be funded through the authorized capital reserve appropriation.

Moved by Board Member O'Hara and seconded by Board Member Becker to:

1. Authorize the General Manager to execute Professional Services Agreement with Hoch Consulting, Inc. in an amount not-to-exceed \$135,543 for the design of the Recycled Water Pipeline Replacement Project

Motion carried with the following vote of approval:

AYES:	Shaffer, Zito, O'Hara, Becker
NOES:	None
ABSENT:	None
ABSTAIN:	None

9C. TREATMENT AND DISTRIBUTION PERFORMANCE UPDATE

General Manager Michael Thornton presented an update on summer 2026 operations at the San Elijo Water Campus (SEWC). Periods of increased wastewater strength and near-record recycled water demand challenged treatment and distribution system performance.

Operations staff managed the conditions; however, intermittent coliform detections and pressure concerns in the northern service area highlighted limitations in existing facilities.

Staff is using recent operating experience to implement near-term improvements and prioritize longer-term capital investments through the Facility Plan. Concentrated nighttime irrigation increased peak demands on recycled water production, storage, pumping, and distribution, resulting in periods of inadequate pressure for some northern service area customers.

The recycled water system was designed to supplement recycled water with potable water when production or storage is insufficient to meet peak demand. Wanket Reservoir is expected to be placed into service this winter, providing additional storage and operational flexibility while reducing peak-demand stress.

The Facility Plan will identify and evaluate phased capital improvements needed to increase treatment capacity, improve recycled water quality, and enhance peak-demand reliability.

No new capital authorization is requested with this item.

No action required. This item was submitted for information only.

9D. CAPITAL PROGRAM UPDATE

Deputy General Manager Thomas Falk presented that SEJPA's Capital Improvement Program is currently advancing a series of near-term capital projects focused on rehabilitation and replacement of aging infrastructure, electrical and control system modernization, recycled water reliability, and other priority asset needs. Several of these projects are progressing through engineering and procurement, with construction phases starting later this year.

Concurrently, staff and consultant(s) are nearing completion of SEJPA's updated facility planning effort, titled the Plant Resiliency, Efficiency, and Performance (PREP) Plan. Staff has reviewed and provided comments on the draft report, with final revisions underway.

FYE 2026–2028 Capital Plan expenditures are budgeted and Board-approved at \$8.25 million for wastewater and \$4 million for recycled water. Under SEJPA's "Pay-Go" funding strategy, projects will advance based on priority and available funding, with implementation contracts brought to the Board for authorization.

No action required. This item was submitted for information only.

9E. GENERAL MANAGER EMPLOYMENT AGREEMENT BY AND BETWEEN SAN ELIJO JOINT POWERS AUTHORITY AND THOMAS FALK

General Counsel Tracie Stender reported to the Board that earlier this year, following notice from San Elijo Joint Powers Authority's (SEJPA) General Manager, Michael T. Thornton, of his intent to retire effective November 3, 2026, the Board of Directors initiated succession planning measures that included promoting Thomas Falk, formerly Director of Infrastructure and Sustainability, to Deputy General Manager.

Following negotiations between the Board of Directors and Mr. Falk in May and July 2026, the Board directed General Counsel to prepare a General Manager Employment Agreement reflecting the negotiated terms.

Approval of the Agreement appoints Mr. Falk as General Manager effective November 3, 2026 and through June 30, 2029.

The General Manager's annual base salary of \$290,000.00 and benefits are funded through SEJPA's annual operating budget. Approval of the proposed Employment Agreement does not require a separate budget appropriation.

Moved by Vice Chair Zito and seconded by Chair Shaffer to:

1. Approve the General Manager Employment Agreement by and between San Elijo Joint Powers Authority and Thomas Falk, with an effective date of November 3, 2026.

Motion carried with the following vote of approval:

AYES:	Shaffer, Zito, O'Hara, Becker
NOES:	None
ABSENT:	None
ABSTAIN:	None

10. GENERAL MANAGER'S REPORT

General Manager Michael Thornton provided a brief update to the Board regarding staff's ongoing preparations for the potential impacts of the anticipated Super El Niño conditions in San Diego County this winter.

11. GENERAL COUNSEL'S REPORT

General Counsel Tracie Stender reported to the Board that California's Legislative Session has just come to an end and Counsel will be reporting back to the Board next month with any relevant new laws.

12. BOARD MEMBER COMMENTS

None.

13. CLOSED SESSION

None.

14. ADJOURNMENT

The meeting adjourned at 9:40 a.m. The next Board of Directors meeting is scheduled to be held on Tuesday, October 20, 2026 at 8:30 a.m.

**SAN ELIJO JOINT POWERS AUTHORITY
PAYMENT OF WARRANTS
For the Month of September 2026**

Warrant #	Vendor Name	G/L Account	Warrant Description	Amount
47037	Allied Storage Containers	Equipment Rental/Lease	20' and 40' storage containers - Sep 26	\$ 359.89
47038	APGN Inc.	Repair Parts Expense	Air filters for Neuros blowers	1,144.99
47039	Ardurra Group, Inc	Services - Engineering	Wanket tank refurbish support - Jul 26	3,688.20
47040	AT&T	Utilities - Telephone	Phone service - Jul 26	702.53
47041	Black & Veatch	Services - Engineering	Facility plan update through Jul 26	24,823.00
47042	Boot World, Inc.	Uniforms - Boots	Safety boots - N. Dautremont	184.23
47043	Brax Process and Pump Equip.	Repair Parts Expense	Lomas Santa Fe Pump Station Pump #4 refurbishment	25,338.90
47044	Brewer Crane and Rigging	Services - Maintenance	Crane service for Lomas Santa Fe Pump Station	1,081.00
47045	California Water Technologies	Supplies - Chem - Ferric Chlo	Ferric chloride solution	11,215.12
47046	The Coast News Group	Advertising	Public bid notice for Aeration Basin Mixing Project	744.00
47047	County of San Diego	Fees - Permits	Permits	4,398.00
47048	CWEA	Dues & Memberships	Membership and Certificate renewals	756.00
47049	Dixieline Lumber Company	Shop Tools and Equip.	Various supplies	491.79
47050	Westbound Solar 2, LLC	Utilities - Solar Power	Solar - Jul 26	16,063.51
47051	EDCO Waste & Recycling Service	Utilities - Trash	Trash Services - Aug 26	536.64
47052	City of Encinitas	Repair Parts Expense	RW meter	4,148.38
47053	City of Encinitas	Service - IT Support	Admin network - Jul 26	7,121.00
47054	City of Encinitas	Service - IT Support	Admin network - Aug 26	7,121.00
47055	ENG Design, LLC	Supplies - Shop & Field	Aeration basin bubble accumulators	46,500.00
47056	Eurofins Calscience, LLC	Services - Laboratory	Testing water samples	1,264.00
47057	Excel Landscape, Inc.	Services - Landscape	Grounds maintenance service - Aug 26	4,382.00
47058	Fluid Components International	Services - Maintenance	Annual gas flow meter calibrations	2,373.24
47059	Glasco UV LLC	Repair Parts Expense	Del mar fairgrounds uv parts	2,443.36
47060	Grainger, Inc.	Shop Tools and Equip.	Various supplies	882.20
47061	Hardy Diagnostics	Supplies - Lab	Various lab supplies	912.04
47062	JCI Jones Chemicals, Inc	Supplies - Chem - Sodium Hypo	Procurement of Sodium Hypochlorite	9,831.80
47063	Kyocera Doc Solutions America	Postage/Shipping	Freight for toner	14.00
47064	Managed Mobile, Inc	Vehicle Maintenance	Vehicle inspection - 2019 Ford F750 and 2020 Peterbilt	1,032.20
47065	McMaster-Carr Supply Co.	Repair Parts Expense	Various supplies	574.03
47066	Nautilus Environmental, Inc	Services - Laboratory	Laboratory toxicity testing services for Jul 26	1,370.00
47067	Cosby Oil Company, Inc	Fuel	Fuel - Aug 26	2,025.31
47068	OneSource Distributors, Inc.	Repair Parts Expense	Seal tight fittings	612.32
47069	Onterris Laboratories, LLC	Services - Laboratory	Lab sampling	1,466.00
47070	Pacific Safety Center	Dues & Memberships	Annual membership renewal	185.00
47071	Pencco Inc.	Supplies - Chem - Odor	Liquid calcium nitrate	10,342.90
47072	Polydyne Inc.	Supplies - Chem - Polymer	Clarifloc WE-007	4,287.38
47073	Radwell International, Inc.	Repair Parts Expense	Solana Beach P.S. VFD fan	496.15
47074	Rising Tide Partners, LLC	Services - Professional	Event service - Water Career Day 26	2,800.00
47075	San Dieguito Water District	Utilities - Water	Supplemental Water	27,983.23
47076	Snell & Wilmer L.L.P	Services - Legal	General counsel through Jul 26	8,330.00
47077	Southwest Valve & Equip.	Repair Parts Expense	Grit washer isolation valve	2,524.59
47078	Tesco Controls	Services - Professional	SCADA support services	450.00
47079	Tharsos Inc.	Services - Contractors	Sodium Hypochlorite Tank Replacement - Jul 26	44,434.00
47080	Thayer Water, Inc	Services - Engineering	As needed engineering services - Jul 26	9,585.00
47081	U.S. Bank Equipment Finance	Supplies - IT Equipment	IT equipment lease	298.35
47082	Unifirst Corporation	Services - Uniforms	Uniform service	372.05
47083	Univar Solutions USA Inc.	Supplies - Chemicals	Sodium Hydroxide	3,154.49
47084	Underground Service Alert/SC	Services - Alarm	Dig alert and safe excavation board	158.09
47085	USA Bluebook	Supplies - Lab	Various lab supplies	2,059.87

**SAN ELIJO JOINT POWERS AUTHORITY
PAYMENT OF WARRANTS
For the Month of September 2026**

Warrant #	Vendor Name	G/L Account	Warrant Description	Amount
47086	Benefits Coordinators Corp.	Dental/Vision	Vision - Sep 26	464.30
47087	VWR International, Inc.	Supplies - Lab	Arium RO cleaning set and pre-treatment cartridge	855.41
47088	WageWorks	Payroll Processing Fees	Admin fee - Aug 26	160.25
47089	Water Environment Federation	Dues & Memberships	Membership renewal - A. Hernandez	22.00
47090	Aflac	EE Deduction Benefits Payable	Aflac - Sep	920.54
47091	Ag Tech, LLC	Services - Biosolids Hauling	Biosolids hauling and reuse - Aug 26	19,806.96
47092	AT&T	Utilities - Internet	Internet service - 07/28/26 - 08/27/26	2,183.33
47093	Scott Best	Subsistence - Travel/Rm & Bd	Employee reimbursement - Mileage	145.95
47094	CA. Office Cleaning, Inc.	Services - Janitorial	Office and window cleaning	3,390.00
47095	California Water Technologies	Supplies - Chem - Ferric Chlo	Ferric chloride solution	11,252.13
47096	Carollo Engineers	Services - Engineering	RW valve replacement services through Aug 26	19,326.25
47097	Corodata	Rent	Record storage - Aug 26	128.78
47098	Devin McGinness	Seminars/Education	Employee reimbursement - SWRCB exam prep course	349.99
47099	City of Encinitas	Service - IT Support	Admin network - Sep 26	7,121.00
47100	Eurofins Calscience, LLC	Services - Laboratory	Testing water samples	2,295.00
47101	Firehawk Fire & Safety	Training - Safety	Fire safety training	795.00
47102	Winston Friedly	Seminars/Education	Employee reimbursement - CWEA test fee	225.00
47103	Grainger, Inc.	Supplies - Shop & Field	Various supplies	2,844.45
47104	Hardy Diagnostics	Supplies - Lab	Various lab supplies	1,261.29
47105	JCI Jones Chemicals, Inc	Supplies - Chem - Sodium Hypo	Procurement of Sodium Hypochlorite	18,445.90
47106	Kennedy/Jenks Consultants	Services - Engineering	Engineering services for Olivenhain Pump Station slide gate	1,606.25
47107	Liberty Process Equipment, Inc	Repair Parts Expense	Various supplies	1,212.18
47108	Managed Mobile, Inc	Vehicle Maintenance	Vehicle maintenance - 2019 Ford F750	4,290.11
47109	McMaster-Carr Supply Co.	Repair Parts Expense, Supplies - Safety	Various supplies	851.63
47110	MetLife - Group Benefits	Prepaid - Other	Dental - Oct 26	3,443.04
47111	Cosby Oil Company, Inc	Fuel	Fuel - Sep 26	662.35
47112	The Nyhart Company	Services - Accounting	Actuarial services - CalPERS GASB 68 and 75 FY 26	3,900.00
47113	Olivenhain Municipal Water Dis	Rent	Pipeline rental payment - Aug 26	19,485.00
47114	Polydyne Inc.	Supplies - Chem - Polymer	Clarifloc WE-007	8,574.75
47115	RingCentral, Inc	Utilities - Telephone	Phone service - Sep 26	535.75
47116	Rising Tide Partners, LLC	Services - Professional	Event service - Water Career Day 26	2,375.00
47117	Rohan & Sons, Inc	Supplies - Shop & Field	HVAC refrigerant	475.18
47118	Rusty Wallis, Inc.	Supplies - Shop & Field	Water softener, tank service and salt bags	416.28
47119	Santa Fe Irrigation District	Utilities - Water, SFID Distribution Pipeline	Water and Pipeline purchase payment	6,336.12
47120	SWRCB	Dues & Memberships	Grade I certification application fees - A. Ramirez C.	173.00
47121	Technical Systems Inc	Services - Professional	T & M automation support - PLC RW communications	4,348.08
47122	Terminix Processing Center	Services - Maintenance	Pest control service	711.93
47123	Tesco Controls	Services - Professional	SCADA support services	3,162.50
47124	Trussell Technologies, Inc	Services - Engineering	T1 - Aeration basin mixing system support	9,873.00
47125	Unifirst Corporation	Services - Uniforms, Supplies - Safety	Uniform service and gloves	2,357.76
47126	USA Bluebook	Supplies - Lab	Various lab supplies	2,073.70
47127	Valley CM, Inc.	Services - Professional	Management and inspection services - Aug 26	12,750.00
47128	Verizon Wireless	Utilities - Telephone	Cell phone service - Aug 26	756.51
47129	VWR International, Inc.	Supplies - Lab	Arium comfort softener	233.52
On-line 1303	Home Depot Credit Services	Supplies - Shop & Field, Shop Tools and Equip.	Various supplies	2,060.03
On-line 1304	Mission Square	ICMA Retirement	ICMA - 401 a	9,479.75
On-line 1305	Mission Square - 304175	EE Deduction Benefits Payable	ICMA - 457	12,275.27
On-line 1306	P.E.R.S.	Medical Insurance - Pers	Health - Sep 26	50,399.60
On-line 1307	Blue Triton Brands Inc	Supplies - Lab	Kitchen and lab supplies	334.40

**SAN ELIJO JOINT POWERS AUTHORITY
PAYMENT OF WARRANTS
For the Month of September 2026**

Warrant #	Vendor Name	G/L Account	Warrant Description	Amount
On-line 1308	BankCard Center	Vehicle Maintenance	Various supplies	6,597.94
On-line 1309	Home Depot Credit Services	Supplies - Shop & Field	Various supplies	1,651.74
On-line 1310	Mission Square	ICMA Retirement	ICMA - 401 a	9,526.18
On-line 1311	Mission Square - 304175	EE Deduction Benefits Payable	ICMA - 457	12,275.27
On-line 1312	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 08/15/26 - 08/28/26	26,371.20
On-line 1313	Public Employees- Retirement	Retirement Plan - PERS	Retirement - 08/29/26 - 09/11/26	26,327.50
On-line 1314	Sun Life Financial	Prepaid - Other	Life and disability - Oct 26	3,442.93
On-line 1315	WM Corporate Services, Inc.	Services - Grit & Screenings	Roll off bins - Aug 26	465.00
Payroll ACH	San Elijo Payroll Account	Payroll	Payroll - Pay Date 09/04/2026	134,121.98
Payroll ACH	San Elijo Payroll Account	Payroll	Payroll - Pay Date 09/18/2026	132,510.35
				<u><u>\$ 913,498.09</u></u>

**SAN ELIJO JOINT POWERS AUTHORITY
PAYMENT OF WARRANTS SUMMARY**

**For the Month of SEPTEMBER 2026
As of SEPTEMBER 30, 2026**

PAYMENT OF WARRANTS

\$ 913,498.09

I hereby certify that the demands listed and covered by warrants are correct and just to the best of my knowledge, and that the money is available in the proper funds to pay these demands. The cash flows of SEJPA, including the Member Agency commitment in their operating budgets to support the operations of SEJPA, are expected to be adequate to meet SEJPA's obligations over the next six months. I also certify that SEJPA's investment portfolio complies with the SEJPA's investment policy.



Kevin Lang
Director of Finance and Administration

SAN ELIJO JOINT POWERS AUTHORITY
STATEMENT OF FUNDS AVAILABLE FOR PAYMENT OF WARRANTS
AND INVESTMENT INFORMATION

As of SEPTEMBER 30, 2026

FUNDS ON DEPOSIT WITH	AMOUNT
LOCAL AGENCY INVESTMENT FUND <i>(AUGUST 2026 YIELD 3.863%)</i>	\$ 12,105,935.06
CALIFORNIA BANK AND TRUST <i>(SEPTEMBER 2026 YIELD 0.01%)</i>	397,675.93
U.S. Bank <i>(SEPTEMBER 2026 YIELD 2.47%)</i>	8,487,754.97
PARS <i>(AUGUST 2026 YIELD 1.24%)</i>	1,346,855.20
TOTAL RESOURCES	<u>\$ 22,338,221.16</u>

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

October 20, 2026

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: Director of Operations

SUBJECT: WASTEWATER TREATMENT REPORT – AUGUST 2026

RECOMMENDATION

No action required. This memorandum is submitted for information only.

DISCUSSION

Monthly Treatment Facility Performance and Evaluation

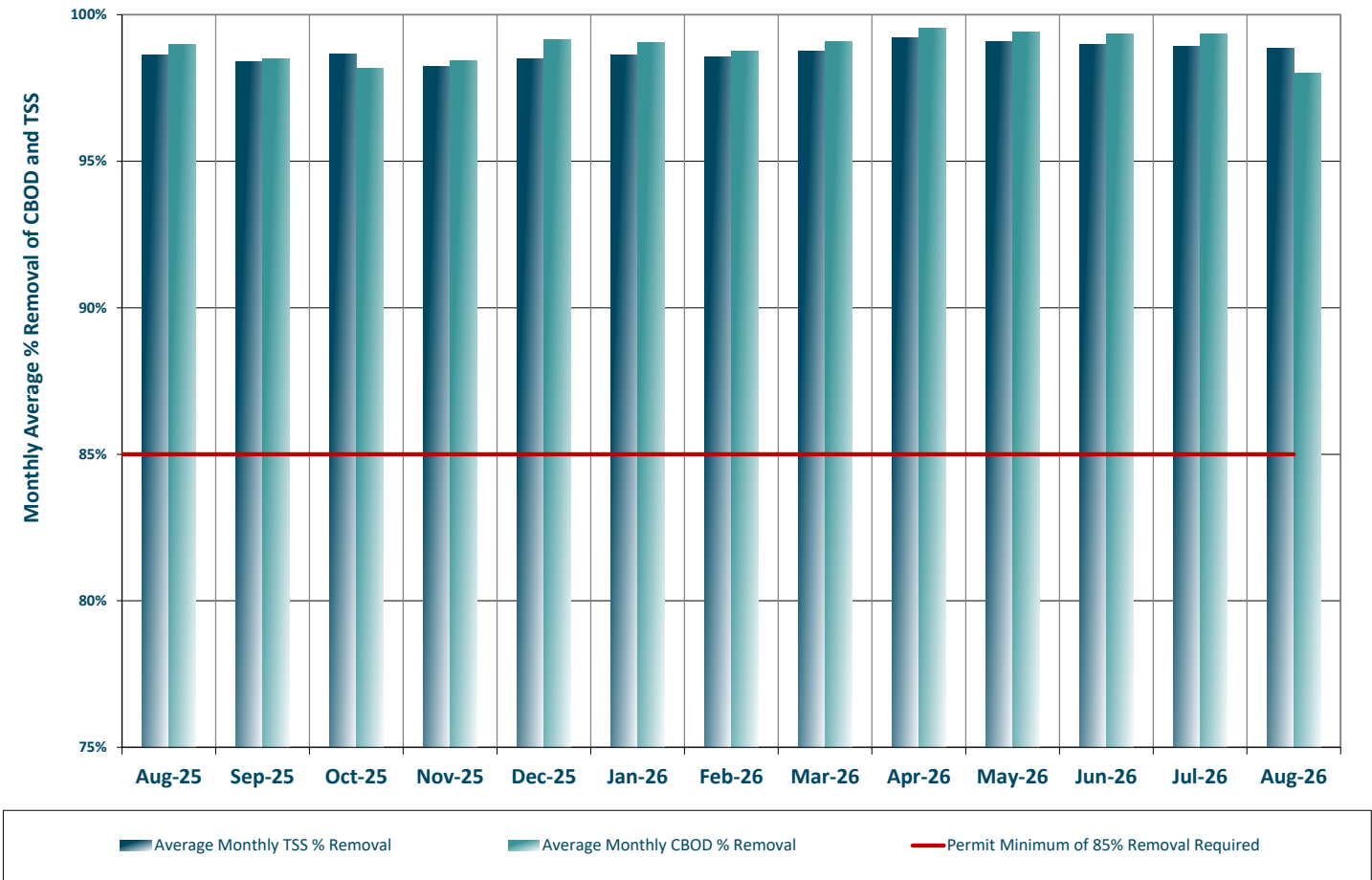
Wastewater treatment for the San Elijo Joint Powers Authority (SEJPA) met all National Pollutant Discharge Elimination System (NPDES) ocean effluent limitation requirements for the month of August 2026. The primary indicators of treatment performance include the removal of Total Suspended Solids (TSS) and Carbonaceous Biochemical Oxygen Demand (CBOD). SEJPA is required to remove a minimum of 85 percent of the TSS and CBOD from the wastewater. Treatment levels for **TSS** and **CBOD** were **98.9** and **98.0** percent removal, respectively, during the month of August.

Exceptional Water Treatment



Figure 1 (below) shows historic treatment performance trends for the removal of TSS and CBOD over the last 13 months compared to the permit minimum removal requirement of 85%.

Figure 1: Wastewater Treatment Performance of the SEJPA % Removal of Total Suspended Solids (TSS) and Carbonaceous Biochemical Oxygen Demand (CBOD)



Figures 2 and 3 (below) show historic influent vs effluent TSS and CBOD concentration fluctuations in the strength of the wastewater being received and discharged by the SEJPA.

FIGURE 2: TREATED EFFLUENT FLOWS REMOVAL OF TSS

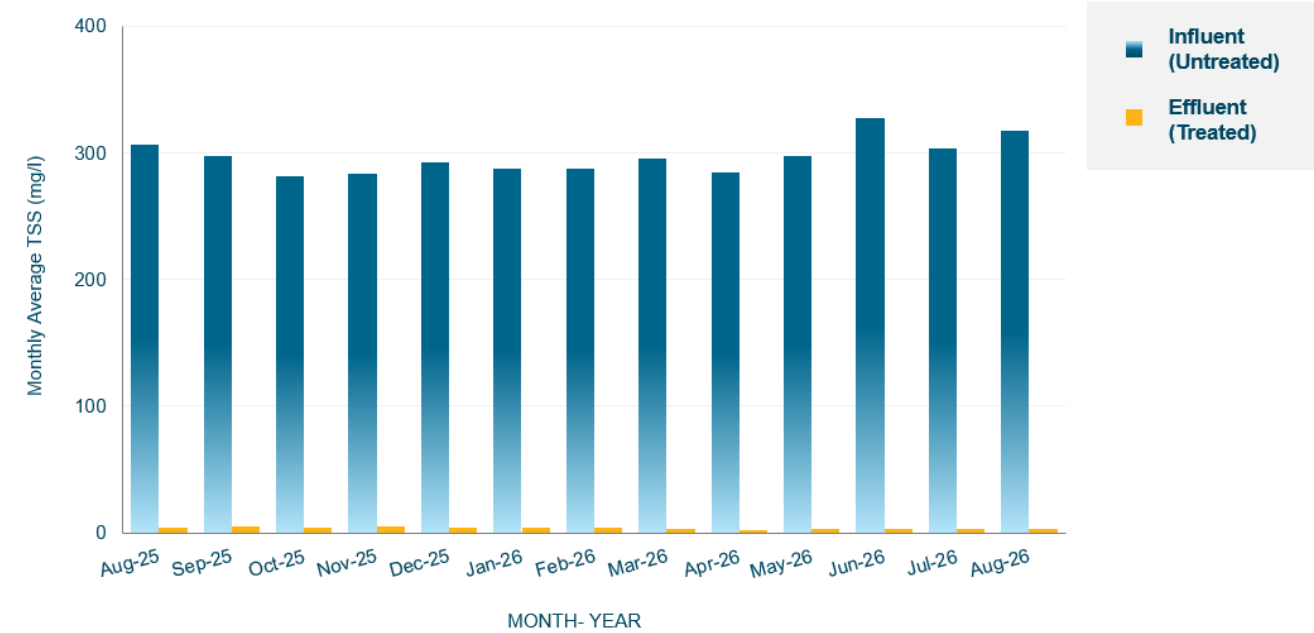
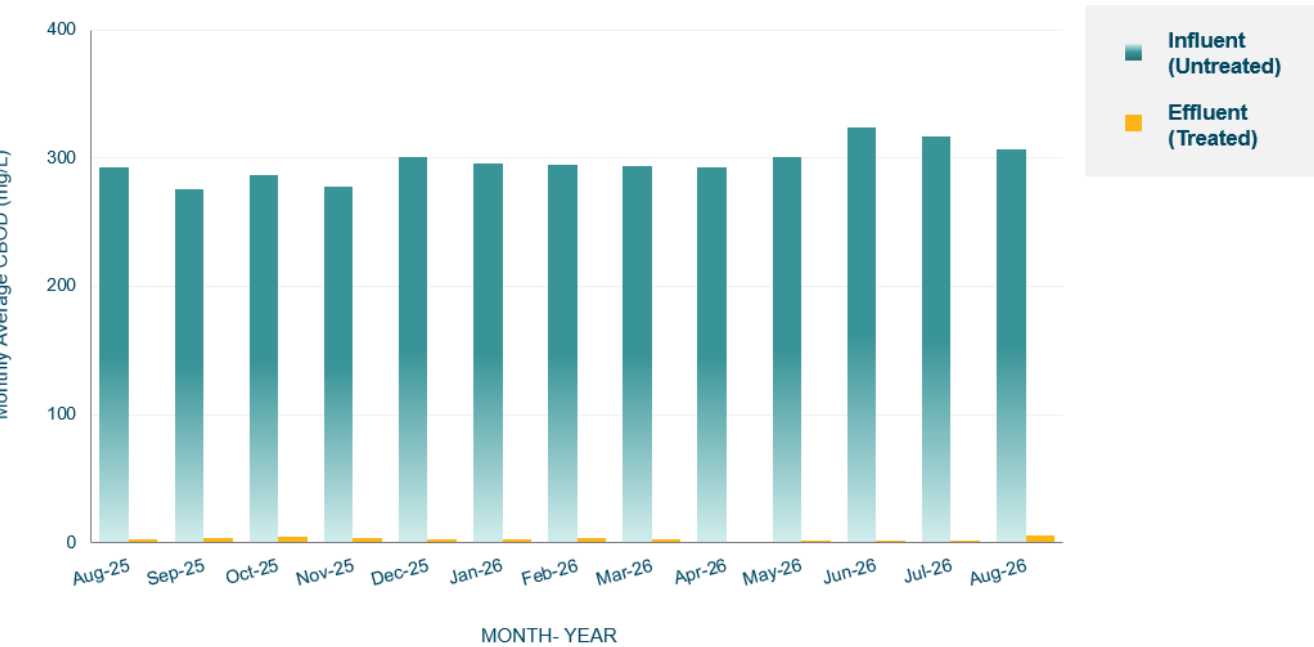


FIGURE 3: TREATED EFFLUENT FLOWS REMOVAL OF CBOD



Member Agency Flows

Table 1 provides a summary of influent and effluent flows for August. Average daily influent volumes were measured for each contributing agency. During this reporting period, approximately 74% of the influent was treated and beneficially reused as recycled water, while the balance was conveyed to the ocean outfall.

TABLE 1 – INFLUENT AND EFFLUENT FLOWS IN AUGUST

	Influent (mad)	Recycled Water (mad)	Effluent (mad)*
Cardiff Sanitaru Division	1.363	1.009	0.354
Citu of Solana Beach	1.050	0.777	0.273
Rancho Santa Fe SID	0.160	0.119	0.041
Citu of Del Mar	0.520	0.385	0.135
Total San Elijo Water Campus Flow	3.093	2.290	0.803

* Effluent is calculated by subtracting the recycled water production from the influent wastewater.

Table 2 (below) presents the historical average and unit influent flow rates per month for each of the contributing agencies during the past 3 years. It also presents the number of connected Equivalent Dwelling Units (EDUs) for each agency during this same time.

TABLE 2 - SAN ELIJO WATER CAMPUS MONTHLY REPORT - FLOWS AND EDUS

MONTH	AVERAGE DAILY INFLUENT FLOW RATE (MGD)					CONNECTED EDUs					AVERAGE UNIT INFLUENT FLOW RATE (GAL/EDU/DAY)				
	CSD	RSF	SB	DM	TOTAL INLET	CSD	RSF	SB	DM	TOTAL EDUS	CSD	RSF	SB	DM	TOTAL UNIT
Aug-23	1.242	0.177	0.954	0.494	2.867	8,559	586	8,166	2,622	19,933	145	302	117	200	144
Sep-23	1.161	0.161	0.885	0.371	2.578	8,559	586	8,166	2,622	19,933	136	275	108	152	129
Oct-23	1.125	0.163	0.870	0.308	2.466	8,559	587	8,166	2,622	19,934	131	278	107	125	124
Nov-23	1.246	0.186	0.961	0.409	2.802	8,559	588	8,166	2,622	19,935	146	317	118	149	141
Dec-23	1.313	0.173	1.011	0.377	2.874	8,559	588	8,166	2,622	19,935	153	294	124	133	144
Jan-24	1.416	0.190	1.055	0.380	3.041	8,569	588	8,166	2,622	19,945	165	323	129	134	152
Feb-24	1.788	0.256	1.099	0.422	3.565	8,569	588	8,166	2,622	19,945	209	436	135	151	179
Mar-24	1.395	0.200	1.061	0.352	3.008	8,616	588	8,166	2,639	20,009	162	340	130	125	150
Apr-24	1.313	0.216	1.036	0.368	2.933	8,620	588	8,166	2,639	20,013	152	368	127	130	147
May-24	1.294	0.196	1.017	0.349	2.856	8,620	588	8,166	2,639	20,013	150	334	125	125	143
Jun-24	1.275	0.191	1.058	0.508	3.032	8,620	588	8,166	2,639	20,013	148	325	130	184	152
Jul-24	1.310	0.185	1.076	0.494	3.065	8,620	588	8,166	2,639	20,013	152	315	132	182	153
Aug-24	1.279	0.166	1.090	0.512	3.047	8,621	588	8,178	2,639	20,025	148	283	133	188	152
Sep-24	1.278	0.165	1.034	0.399	2.876	8,621	588	8,178	2,657	20,043	148	281	126	147	143
Oct-24	1.296	0.160	1.019	0.340	2.815	8,621	591	8,178	2,657	20,046	150	271	125	122	140
Nov-24	1.250	0.184	0.967	0.482	2.883	8,621	591	8,178	2,657	20,046	145	312	118	165	144
Dec-24	1.231	0.182	1.079	0.408	2.900	8,621	593	8,178	2,657	20,048	143	307	132	134	145
Jan-25	1.398	0.187	1.105	0.381	3.071	8,621	593	8,178	2,657	20,048	162	316	135	124	153
Feb-25	1.471	0.186	1.120	0.408	3.185	8,621	593	8,178	2,657	20,048	171	314	137	134	159
Mar-25	1.524	0.214	1.133	0.390	3.261	8,621	593	8,178	2,657	20,048	177	361	139	129	163
Apr-25	1.355	0.210	1.084	0.367	3.016	8,621	593	8,178	2,657	20,048	157	354	133	122	150
May-25	1.349	0.202	1.071	0.371	2.993	8,621	593	8,178	2,657	20,048	156	341	131	123	149
Jun-25	1.310	0.190	1.071	0.524	3.095	8,621	593	8,178	2,657	20,048	152	321	131	175	154
Jul-25	1.326	0.204	1.109	0.502	3.141	8,621	593	8,126	2,657	19,996	154	344	136	168	157
Aug-25	1.351	0.213	1.090	0.556	3.210	8,621	594	8,126	2,680	20,020	157	359	134	187	160
Sep-25	1.354	0.187	1.050	0.426	3.017	8,623	596	8,126	2,680	20,025	157	314	129	142	151
Oct-25	1.292	0.176	1.039	0.378	2.885	8,627	596	8,126	2,680	20,029	150	296	128	126	144
Nov-25	1.407	0.188	1.050	0.424	3.069	8,629	596	8,126	2,680	20,031	163	316	129	144	151
Dec-25	1.362	0.171	1.011	0.379	2.923	8,629	595	8,126	2,680	20,030	158	288	124	128	146
Jan-26	1.473	0.190	1.051	0.383	3.097	8,631	595	8,126	2,680	20,032	171	320	129	129	155
Feb-26	1.464	0.182	1.052	0.417	3.115	8,631	595	8,126	2,680	20,032	170	306	129	140	156
Mar-26	1.357	0.181	1.046	0.401	2.985	8,631	595	8,126	2,680	20,032	157	304	129	135	149
Apr-26	1.309	0.166	1.012	0.350	2.837	8,631	596	8,126	2,680	20,033	152	279	125	118	142
May-26	1.332	0.181	1.003	0.344	2.860	8,638	597	8,126	2,680	20,041	154	303	123	118	143
Jun-26	1.309	0.177	1.004	0.464	2.954	8,638	597	8,126	2,680	20,041	152	296	124	161	147
Jul-26	1.337	0.183	1.053	0.505	3.078	8,638	598	8,126	2,680	20,041	155	306	130	177	154
Aug-26	1.363	0.160	1.050	0.520	3.093	8,639	598	8,126	2,680	20,042	158	268	129	182	154

CSD: Cardiff Sanitary Division

RSF: Ranch Santa Fe Community Service District

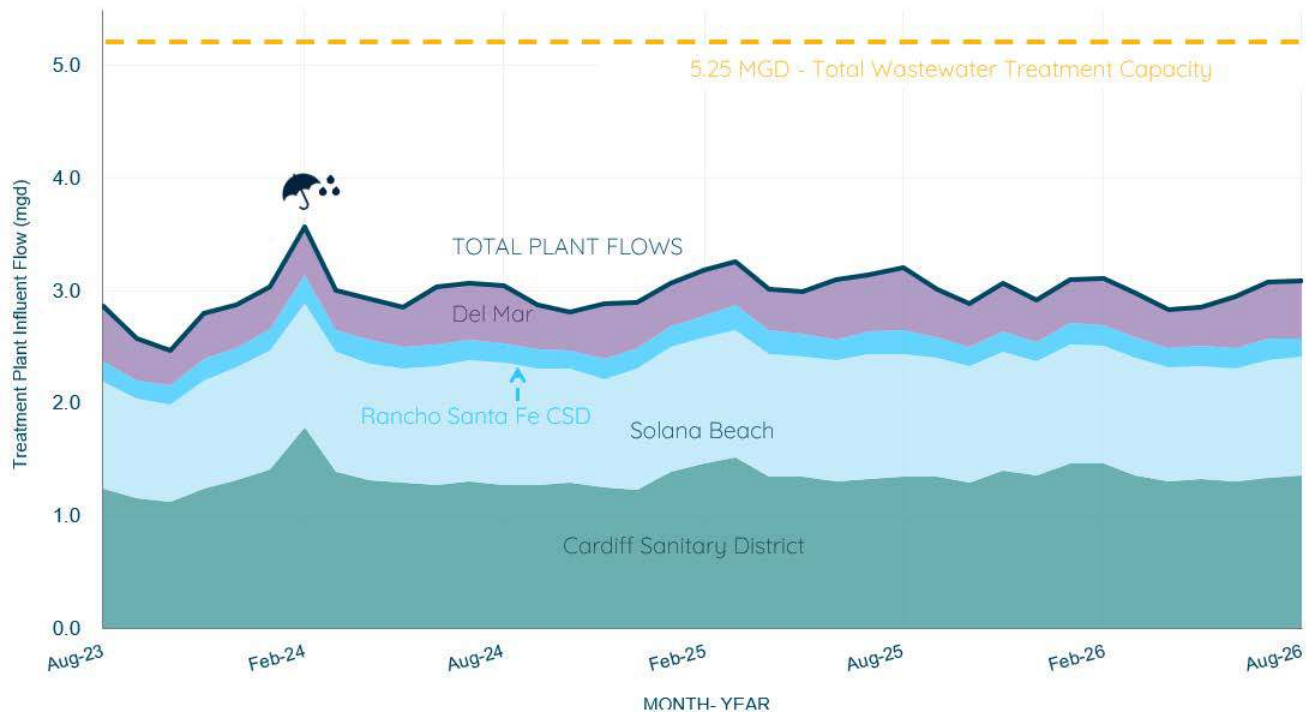
SB: Solana Beach

DM: City of Del Mar

EDU: Equivalent Dwelling Unit

Figure 4 (below) presents the 3-year historical average daily flows per month for each contributing agency. This is to provide a historical overview of the average flow treated for each agency. Also shown in Figure 4 is the total wastewater treatment capacity of the water campus, 5.25 mgd, of which the Cities of Encinitas and Solana Beach each have the right to 2.2 mgd, Rancho Santa Fe Community Service District leases 0.25 mgd, and the City of Del Mar leases 0.60 mgd.

FIGURE 4: SEJPA AVERAGE DAILY FLOWS OVER THE PAST 3 YEARS



City of Escondido Flows

The average and peak daily flow rate for the month of August 2026 from the City of Escondido's Hale Avenue Resource Recovery Facility, which discharges through the San Elijo Ocean Outfall, is reported below in Table 3.

TABLE 3 – CITY OF ESCONDIDO DAILY FLOWS

	Flow (mgd)
Escondido (Average flow rate)	7.7
Escondido (Peak flow rate)	17.8

Connected Equivalent Dwelling Units

The City of Solana Beach and the City of Del Mar updated the number of connected EDUs reported to the SEJPA in September 2025, memorializing updates effective July 1, 2025. The connected EDUs for Solana Beach were reduced due to the reconstruction of Solana Highlands apartments. The City of Encinitas and Rancho Santa Fe CSD update their connected EDUs report every month. The number of EDUs connected for each of the Member Agencies and lease agencies is reported in Table 4 below.

TABLE 4 – CONNECTED EDUs BY AGENCY

	Connected (EDU)
Cardiff Sanitary Division	8,639
Rancho Santa Fe SID	598
City of Solana Beach	7,789
San Diego (to Solana Beach)	337
City of Del Mar	2,680
Total EDUs to System	20,043

Respectfully submitted,



Christopher A. Trees, P.E.
Director of Operations

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

October 20, 2026

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: Director of Operations

SUBJECT: RECYCLED WATER REPORT – AUGUST 2026

RECOMMENDATION

No action required. This memorandum is submitted for information only.

DISCUSSION

Recycled Water Production

In August 2026, recycled water production totaled 214.6 acre-feet (AF) in a 35-day period, which included 7.2 AF required supplemental potable water. Production for the month was 4.5% lower than the budget estimate of 225 AF. The continuing high demand resulted in low pressure issues in the north system and required more supplemental potable water use than normal to meet system demands. The recycled water system operated with no permit exceedances during the month.

Figure 1 (attached) provides a ten-year history of annual recycled water production and rainfall, illustrating the correlation between precipitation and production. Figure 2 compares August production over the past ten years, and Figure 3 shows budgeted versus actual recycled water production for FY 2026-27.

Respectfully submitted,



Christopher A. Trees, P.E.
Director of Operations

FIGURE 1: RECYCLED WATER PRODUCTION AND RAINFALL COMPARISON

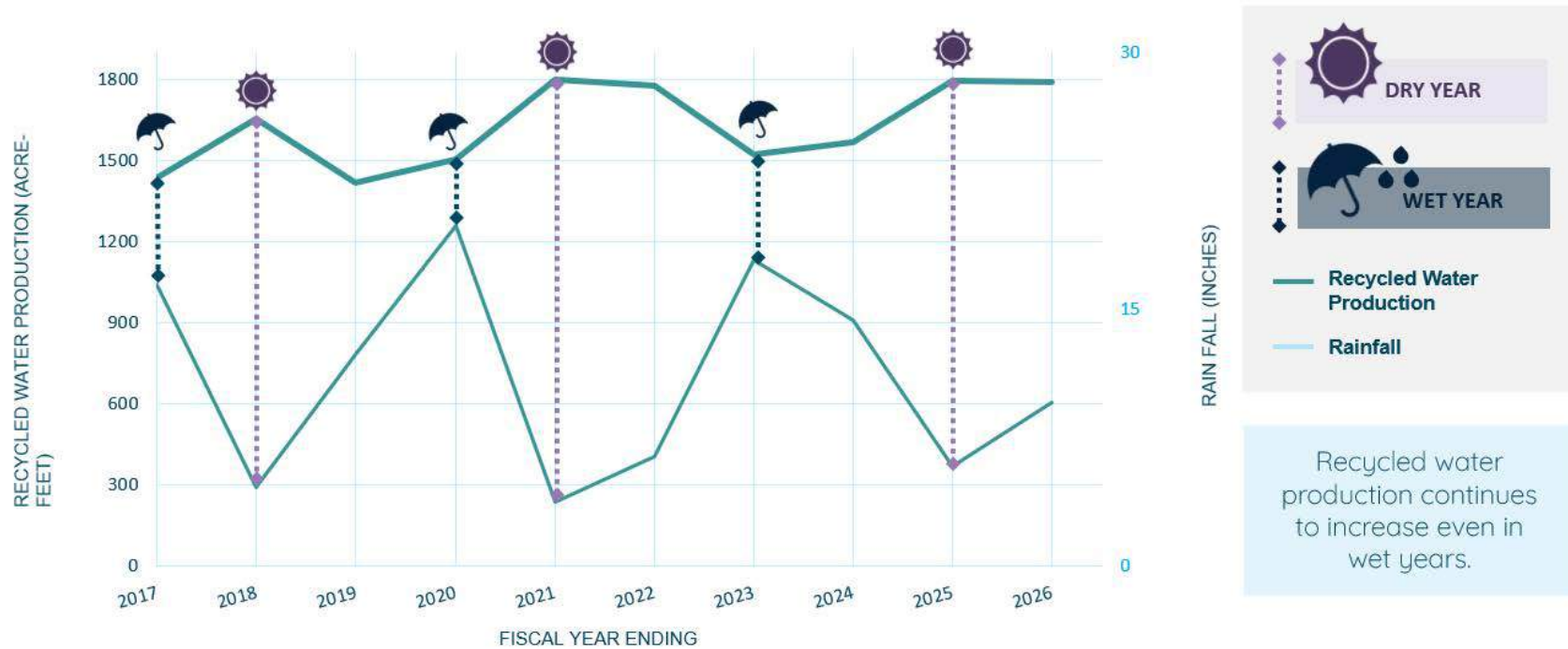


FIGURE 2: AUGUST RECYCLED WATER DEMAND

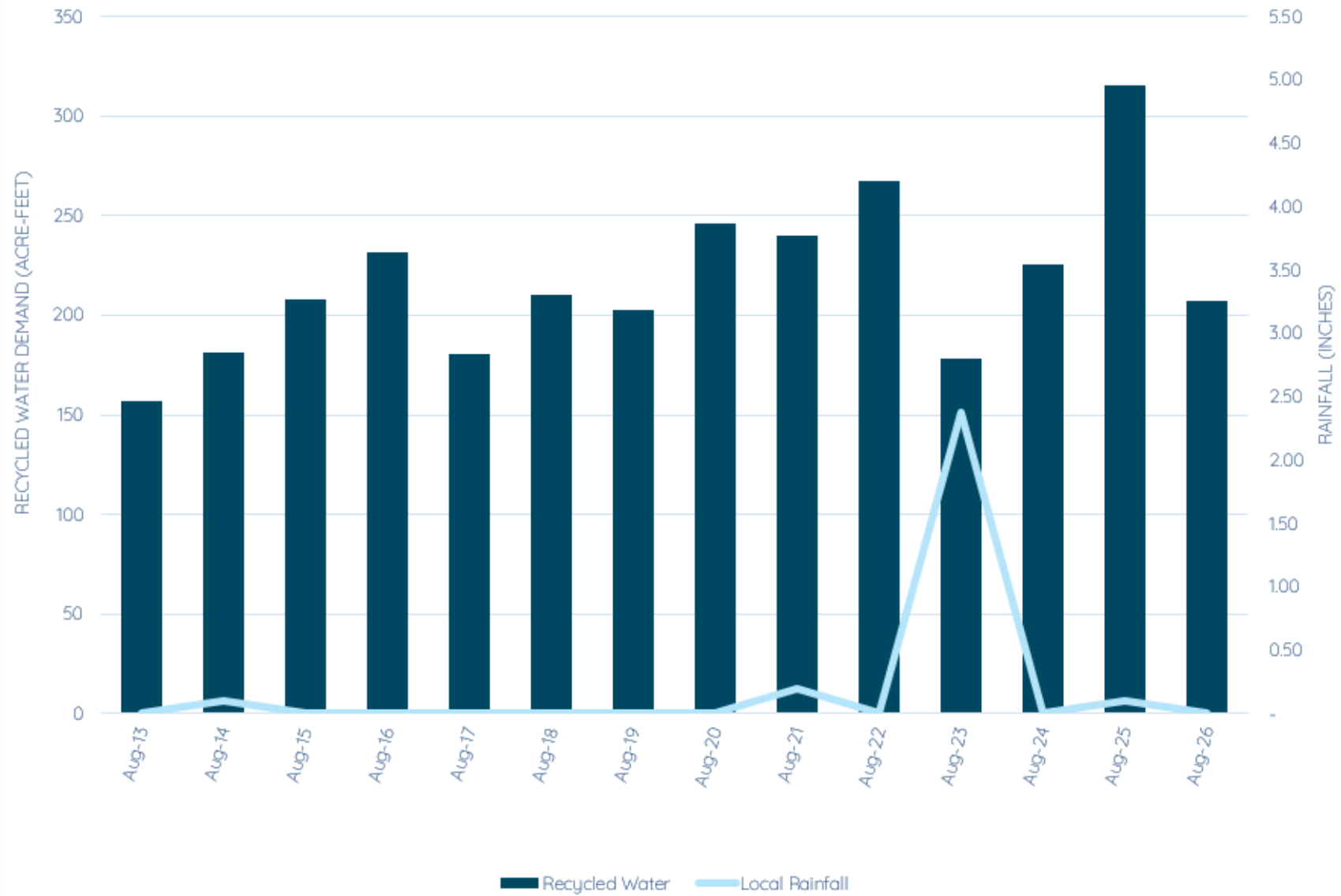
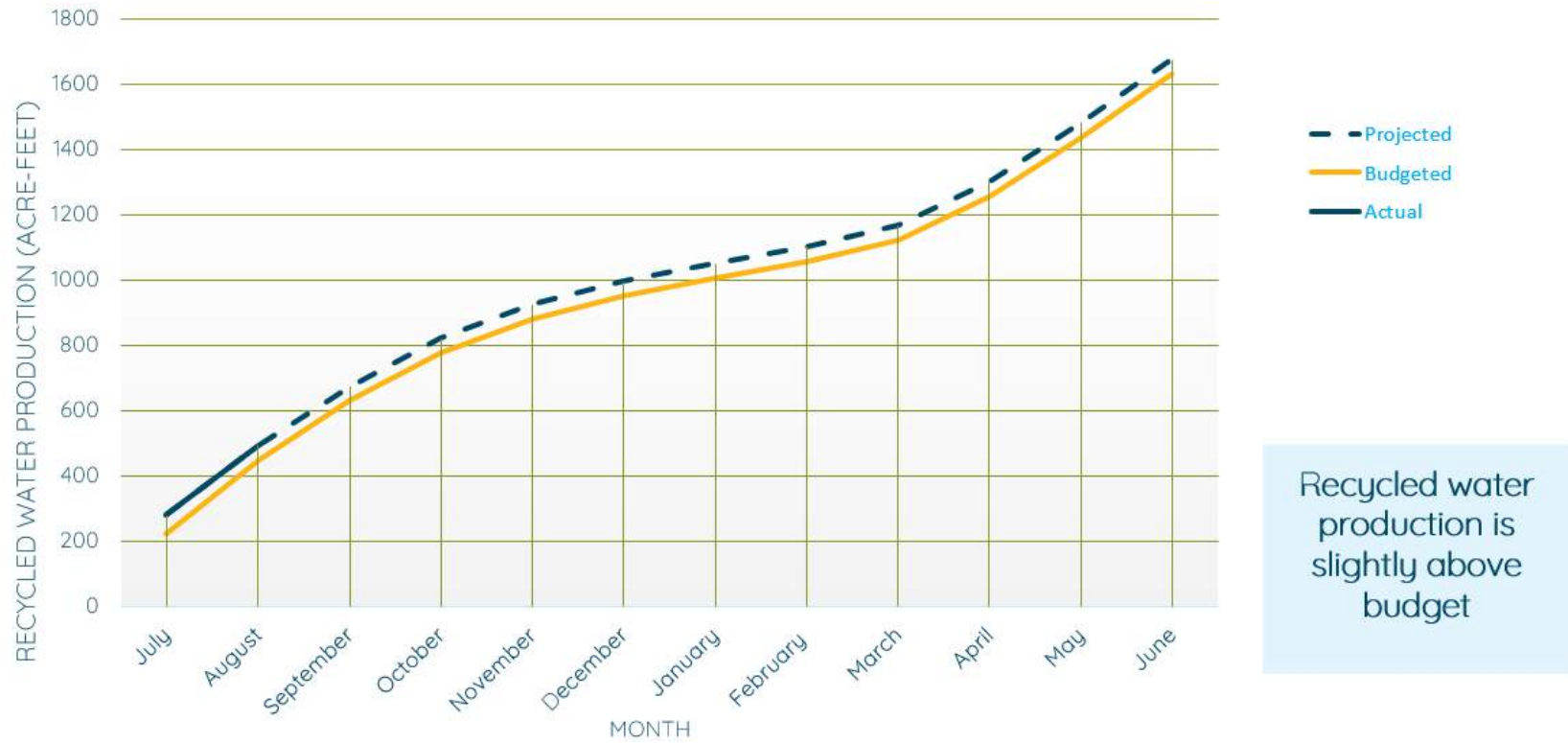


FIGURE 3: FY2026/27 CUMULATIVE PRODUCTION VS BUDGET



*

AGENDA ITEM NO. 7E

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

October 20, 2026

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: REPORTABLE MEETINGS

RECOMMENDATION

No action required. This memorandum is submitted for information only.

BACKGROUND

The General Manager or his designee may meet monthly with one or more Board Members in preparation for the Board Meeting.

DISCUSSION

The following meetings have taken place since previously reported:

- Meeting to review Board Meeting Agenda with Chairperson Shaffer on September 14, 2026

FINANCIAL IMPACT

Per the SEJPA Restatement Agreement, SEJPA offers the Board Member \$160 for each reportable meeting, which the Board Member may choose to accept or reject. These meetings are accounted for in our annual budget.

Respectfully submitted,



Michael T. Thornton, P.E.
General Manager

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

October 20, 2026

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: CONSTRUCTION COMPLETION ACCEPTANCE - EMERGENCY RECYCLED
LATERAL REPAIR ON SAXONY ROAD IN ENCINITAS

RECOMMENDATION

It is recommended that the Board of Directors:

1. Accept the Emergency Recycled Water lateral repairs on Saxony Road and authorize the General Manager to record a Notice of Completion for Contract with Burtech Pipeline; and
2. Discuss and take action as appropriate.

BACKGROUND

On September 8, 2026, staff was notified of a leak in the recycled water distribution system at approximately 171 Saxony Road in Encinitas. Although the leak was relatively minor, the General Manager declared an emergency repair to facilitate an immediate response, in accordance with SEJPA Resolution No. 2022-01, Purchasing Policies and Procedures. SEJPA retained Burtech Pipeline under an emergency repair contract to perform the necessary construction work under agency supervision.

The Board was notified of the emergency declaration and approved the emergency contract at SEJPA's regular Board Meeting on September 15, 2026, consistent with Resolution No. 2022-01, Section 3.1.d. Public Contract Code Section 22050 requires periodic Board review of emergency actions. Accordingly, this memorandum provides an update on the status of the repair work and project closeout activities.

DISCUSSION

Following coordination with the City of Encinitas Engineering Department, Burtech secured an expedited public right-of-way permit, including approval of traffic control plans, on September 15, 2026. Emergency lateral repair work commenced on September 16th. The lateral repair, trench backfill, and base pavement were completed by September 18th. Final pavement restoration and striping were completed on September 21st, concluding the emergency repair work.

FINANCIAL IMPACT

The cost of the emergency repairs will be funded through the Recycled Water Program's operating reserves. The completed emergency repair work, including permits, traffic control, pipeline repair and street surface restoration and consultant construction management and inspection costs, is projected to cost under \$50,000.

RECOMMENDATION

It is recommended that the Board of Directors:

1. Accept the Emergency Recycled Water lateral repairs on Saxony Road and authorize the General Manager to record a Notice of Completion for Contract with Burtech Pipeline; and
2. Discuss and take action as appropriate.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'M. Thornton', written over a horizontal line.

Michael T. Thornton, P.E.
General Manager

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

October 20, 2026

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: WANKET TANK CONSTRUCTION PHASE AMENDMENTS

RECOMMENDATION

It is recommended that the Board of Directors:

1. Increase the Wanket Tank Refurbishment Project appropriation by \$300,000, from \$4,298,800 to \$4,598,800;
2. Authorize the General Manager to amend the construction management and inspection services agreement with CDM Smith by an amount not to exceed \$100,000 and extend the agreement through December 2026;
3. Authorize the General Manager to amend the engineering services during construction agreement with Ardurra by an amount not to exceed \$15,000 and extend the agreement through December 2026; and
4. Discuss and take action as appropriate.

BACKGROUND

SEJPA has implemented two related construction projects, the Wanket Recycled Water Pipeline, completed in February 2025, and the Wanket Tank Refurbishment Project. The refurbishment converts a 50-year-old, 3-million-gallon potable water tank into a recycled water storage facility. The additional storage capacity will improve operational flexibility, help meet peak summer recycled water demands, and relieve pressure on the ocean outfall by storing recycled water during storm events.

The refurbishment included rehabilitation of concrete surfaces and retrofit of the tank to recycled water (base scope), completed in August 2025. A waterproofing liner was installed on the floor in January 2026 to address leakage through deteriorated tank floor joints. Subsequent investigations identified deteriorated inlet and outlet piping, which were rehabilitated with internal pipe liners in June 2026. Additional testing in July 2026 identified defects in the tank floor liner, prompting corrective repairs by the contractor during August and September 2026.

DISCUSSION

The contractor completed repairs to the identified defects in August and September. SEJPA resumed filling the tank in late September to assess the effectiveness of those repairs. Follow-up monitoring indicates that leakage continues. Although the measured leakage rate is approximately 30% lower than earlier in the summer, it remains above acceptable levels.

The contractor is conducting further investigations to identify and correct the remaining sources of leakage, with ongoing technical and inspection support from SEJPA's project team. The Wanket Tank Refurbishment Project will remain ongoing until the leakage is resolved.

FINANCIAL IMPACT

Additional project appropriation is needed to continue leak investigation and fund potential repairs required to achieve acceptable tank performance. Project management, engineering, and construction management and inspection (CM&I) services are anticipated to continue through December 2026. Depending on the results of the ongoing leak investigations, additional tank repairs or leak mitigation measures may also be necessary. The requested \$300,000 appropriation increase includes \$100,000 for CDM Smith CM&I services, \$15,000 for Ardurra engineering services, and a \$185,000 construction contingency. Staff recommends increasing the project appropriation by \$300,000, as reflected in the revised budget below.

Project Element	Project Appropriation (rounded)
Original Wanket Tank Budget (July 2024)	\$ 3,054,600
<i>February 2025 Budget Revisions: Asbestos Abatement</i>	<i>150,000</i>
Revised February 2025 Wanket Tank Budget	\$3,204,600
<i>October 2025 Budget Revisions: Tank Liner for Leak Mitigation</i>	<i>869,200</i>
Revised October 2025 Wanket Tank Budget	4,073,800
<i>February 2026 Budget Revisions: Additional Leak Investigation and Pipe Liners</i>	<i>225,000</i>
Revised February 2026 Wanket Tank Budget	4,298,800
<i>October 2026 Budget Revisions: Continued Leak Investigation and Repairs</i>	<i>300,000</i>
Revised Project Budget Total	\$ 4,598,800

The additional project appropriation will continue to be funded through the 2023 recycled water loan fund, which was secured to support recycled water storage projects of this nature. Completion of the Wanket project remains one of SEJPA's highest-priority recycled water projects. The work is expected to retain eligibility for approximately \$885,000 in Proposition 1 Grant funding and up to \$1 million in Title XVI WIIN reimbursement.

RECOMMENDATION

It is recommended that the Board of Directors:

1. Increase the Wanket Tank Refurbishment Project appropriation by \$300,000, from \$4,298,800 to \$4,598,800;
2. Authorize the General Manager to amend the construction management and inspection services agreement with CDM Smith by an amount not to exceed \$100,000 and extend the agreement through December 2026;
3. Authorize the General Manager to amend the engineering services during construction agreement with Ardurra by an amount not to exceed \$15,000 and extend the agreement through December 2026; and
4. Discuss and take action as appropriate.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'M. Thornton', written over a horizontal line.

Michael T. Thornton, P.E.
General Manager

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

October 20, 2026

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: General Manager

SUBJECT: AGREEMENT FOR THE IMPLEMENTATION OF OPEN SPACE MANAGEMENT SERVICES

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize the General Manager to execute a five-year Technical Services Agreement with Nature Collective for open space management services in an amount not to exceed \$391,950; and
2. Discuss and take action as appropriate.

BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) owns and maintains approximately 29 acres at the San Elijo Water Campus, including treatment facilities, operational areas, and surrounding open space. Approximately 6.5 acres are subject to a Coastal Bluff Conservation Open Space Easement held by the City of Encinitas. The steep coastal bluff along the western property boundary contains native coastal habitat as well as invasive, non-native vegetation that contributes to wildfire risk, particularly along the slopes adjacent to residential properties.

On June 11, 2025, the City adopted [Ordinance 2025-07](#), designating the updated CAL FIRE Local Responsibility Area Fire Hazard Severity Zones. The map places the area that includes the Water Campus in a Very High Fire Hazard Severity Zone, adding context for the Plan's proposed fuel-reduction and vegetation-management work.

In April 2026, Nature Collective completed the Open Space Management and Fire Risk Reduction Plan (Plan) for the Water Campus. The Plan evaluated existing vegetation, terrain, proximity to structures, and potential wildfire hazards. It establishes a coordinated approach to reducing fire risk through targeted removal of invasive vegetation, restoration of native habitat, and ongoing vegetation management.

The Plan recognizes the need to balance wildfire mitigation with the environmental protections established by the conservation easement. The recommended phased approach also accounts

for the steep terrain and the importance of maintaining ground cover for soil stability. By progressively removing invasive vegetation and allowing newly established native vegetation to mature before advancing to adjacent areas, the program is intended to minimize soil exposure and avoid unnecessary disturbance that could exacerbate bluff erosion.

DISCUSSION

The Plan was designed to provide a five-year implementation schedule for vegetation management and habitat restoration. The work is proposed to be phased according to wildfire risk, site accessibility, and seasonal environmental restrictions, with annual maintenance of treated areas to control invasive regrowth and support the establishment of native vegetation.

The principal elements include:

- Invasive Species Removal: Targeted removal of eucalyptus, acacia, palms, castor bean, black mustard, and other invasive species identified in the Plan.
- Habitat Restoration: Revegetation of treated areas with native coastal sage scrub and other appropriate plant communities, incorporating erosion control measures where necessary.
- Fuel Management: Establishment and maintenance of low-fuel vegetation zones along the pedestrian pathway, slopes, property boundaries, and treatment facilities.
- Annual Maintenance: Periodic inspections, retreatment of invasive vegetation, and maintenance of restored habitat to preserve the effectiveness of the initial improvements.

Implementation will prioritize potential high-risk fire areas, particularly the upper slope crests along the west property line adjacent to neighboring residential homes and progressively extend to the remaining slopes and other areas of the Water Campus. With Board approval, work is scheduled to commence during winter 2026–2027, with initial vegetation clearing completed before nesting bird season begins in mid-February 2027.

Regulatory Coordination: On behalf of SEJPA, the Nature Collective consulted with the City of Encinitas Fire Marshal regarding the proposed vegetation management strategy and its consistency with local fire protection objectives. SEJPA and the Nature Collective also presented the plan to applicable State agencies, establishing a streamlined permitting approach for the removal of invasive species within environmentally sensitive areas. These efforts are intended to facilitate implementation while maintaining compliance with applicable conservation easement restrictions and environmental protections.

Contracting Strategy: Staff recommends a sole-source agreement with Nature Collective under SEJPA's Purchasing Policies and Procedures, Sections 3.6(f) and (h) and 3.11(d). These provisions allow exceptions when specialized services are necessary and competition would not benefit SEJPA. Nature Collective has more than 25 years of habitat restoration experience, co-manages the adjacent San Elijo Lagoon Ecological Reserve, and has experience managing other environmentally sensitive properties nearby. It also holds regional permits and state agency

authorizations applicable to the proposed fuel-reduction work. These qualifications and authorizations support direct selection and are expected to facilitate implementation, reduce permitting requirements, delays, and costs, and support consistent long-term habitat management.

FINANCIAL IMPACT

The proposed five-year time-and-materials agreement for Plan implementation and maintenance has an estimated value of \$391,950. Costs are phased over five years, with the largest expenditures in Years 1–3 for initial vegetation removal and habitat restoration. Years 4 and 5 primarily cover retreatment and ongoing maintenance. The table below summarizes planned activities and estimated costs by year.

Program Year	Estimated Cost
Year 1 (2026–2027) Slope Crest, Water Campus Structures, Northern Staging Area	\$ 97,800
Year 2 (2027–2028) Slope Transition, Retreatments	113,200
Year 3 (2028–2029) Slope Transition, Retreatments	111,350
Year 4 (2029–2030) Retreatments, Maintenance	44,100
Year 5 (2030–2031) Retreatments, Maintenance	25,500
Total	\$ 391,950

The adopted FY 2026–27 Budget includes funding for work planned during this fiscal year. Planned payments for FY 2027–28 through FY 2030–31 will be included in the respective future recommended annual budgets.

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize the General Manager to execute a five-year Technical Services Agreement with Nature Collective for open space management services in an amount not to exceed \$391,950; and
2. Discuss and take action as appropriate.

Respectfully submitted,



Michael T. Thornton, P.E.
General Manager

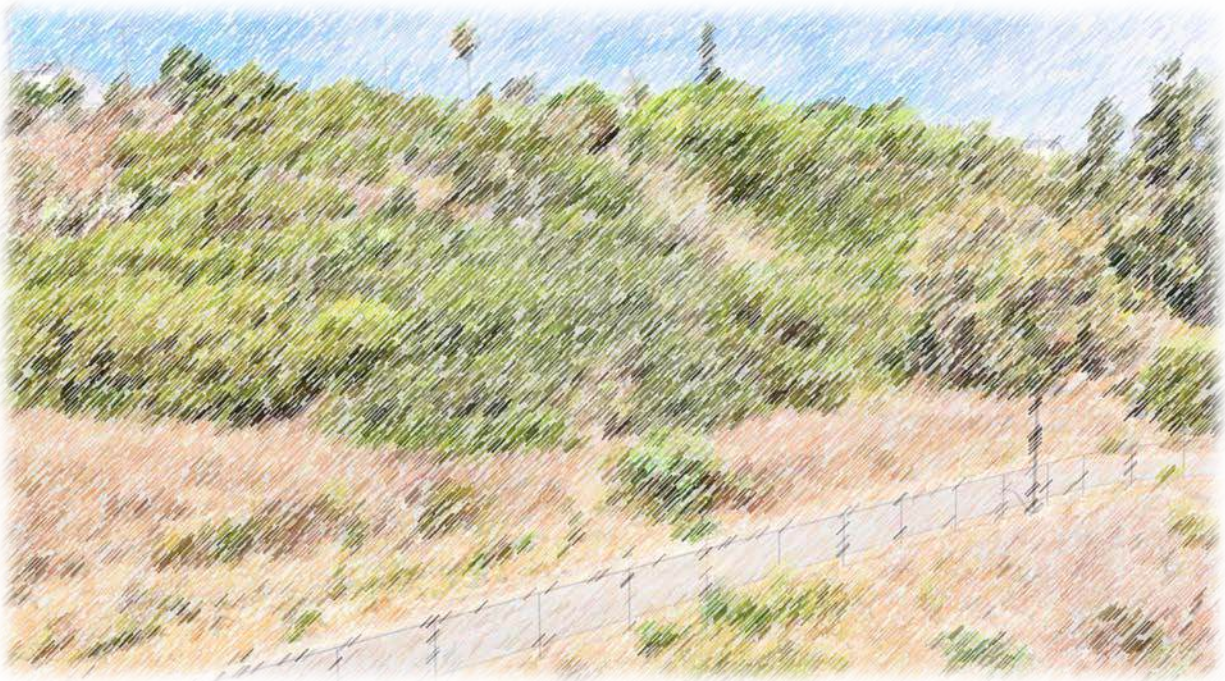
Attachments:

Attachment 1: Open Space Management and Fire Risk Reduction Plan, April 2026

Attachment 2: Proposal for Open Space Management Services – Nature Collective



**SAN ELIJO JOINT POWERS AUTHORITY
OPEN SPACE MANAGEMENT
AND FIRE RISK REDUCTION PLAN**



Prepared For

San Elijo Joint Powers Authority

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Resilient Transitions

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Project Team

Name	Role	Organization
Bradley Nussbaum	Project Manager	Nature Collective
Scott Rothberg, PhD	Land Use Specialist	Resilient Transitions
Kindra Hixon	Restoration Ecologist	Nature Collective
Michael Konicke	Staff Review	San Elijo Joint Powers Authority

Date of Publication

2 April 2026

Report Version 2.0



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PLAN INTENT

Stated quite eloquently by the USDA Forest Service, “wildfire likelihood can be difficult to modify, but wildfire prevention, response, and fuel treatments are steps communities can take to reduce likelihood.”¹ This planning resource is an effort of the San Elijo Joint Powers Authority (SEJPA) to take inventory of the open space present at their facilities located in Cardiff by the Sea, California. SEJPA commissioned Nature Collective to survey the terrain and plant communities distributed across the SEJPA Water Campus (Campus) in order to develop a management resource specifically focused on addressing fire risk reduction needs while fulfilling their responsibilities of managing the facilities and the open space present on their Campus.

As a land manager in the City of Encinitas for over 30 years, Nature Collective recognizes that the plant communities of coastal San Diego are susceptible to wildfire. This means that managing open space is not about eliminating the chance of wildfire but about managing wildfire likelihood and risk. Nature Collective’s goal is to help SEJPA improve their open space management at the Campus by prioritizing at-risk areas for intervention, habitat restoration, and long-term maintenance. The insight shared in this resource provides context to the relative risk of wildfire between different plant community types acknowledged in this plan and provides a wide variety of recommendations that SEJPA can implement to reduce wildfire risk. Nature Collective has provided SEJPA with recommended priorities based on a cost valuation of implementation and the expected reduction in wildfire risk achieved.

Last, this document also highlights the shared responsibility for wildfire risk, acknowledging what actions SEJPA can implement and the complementary benefit of other wildfire mitigation strategies -such as managing vegetation around nearby homes and the residential structures themselves- that adjacent landowners in the community can achieve by cooperatively addressing wildfire prevention and action.

The San Elijo Joint Powers Authority Open Space Management and Fire Risk Reduction Plan (SEJPA Fire Risk Reduction Plan) was prepared and completed on 2 April 2026.

Sincerely,
Operations, Nature Collective
501(c)(3) nonprofit EIN#33-0358660

¹ USDA Forest Service. (2025). *Wildfire Risk to Communities*. Retrieved from <https://wildfirerisk.org/understand-risk/>

PROPERTY AND EASEMENT SUMMARY INFORMATION

SUMMARY INFORMATION				
Property Name				
SEJPA Water Campus				
Assessor Parcel Number (APN)				
261-010-13-00				
Easement Grantor		Current Landowner		Easement Grantee/Holder
San Elijo Joint Powers Authority		San Elijo Joint Powers Authority		City of Encinitas 505 S. Vulcan Avenue Encinitas, CA 92024
BACKGROUND INFORMATION				
Location				
Road: Manchester Avenue	City: Encinitas	Directions: -Get on I-5 North -Exit onto Manchester Ave West -Continue on Manchester Ave until the intersection of the SEJPA Water Campus and the San Elijo Lagoon Ecological Reserve Education Center -Property access is gate restricted.		
County: San Diego	Jurisdiction: City of Encinitas			
Method of easement acquisition				
☐ Gift	☐ Bargain Sale	☐ Purchase	☐ Bequest	☒ Other (explain)
Under the conditions of CDP Amendment No. 6-89-284-A1, San Elijo Joint Powers Authority expanded the existing Deed Restriction (Instrument No. 1990-0148434) on APN 261-010-13-00 by granting a Coastal Bluff Conservation Open Space Easement to the City of Encinitas (DOC# 2022-0042019).				
Total property Acreage		Easement Acreage		
29.08		6.50 (283,266 sq. ft)		
Determined by:		Determined by:		
☒ Survey	☐ Deed	☐ Survey	☒ Deed	
☐ Tax map	☐ Estimate	☐ Tax map	☒ Estimate	

Conservation Easement

Date	Record Date	Action	Document Number
12/20/2021	01/28/2022	Offer to Dedicate	2022-0042019

Conditions, Restrictions, and Exceptions

(Excerpt from DOC#2020-0555340)

Open Space and Conservation Deed Restriction

- (a) No development, as defined in Section 30106 of the Coastal Act, shall occur in the open space area consisting of naturally vegetated steep slopes along the west and north perimeter of the subject project[,] except for:
 - (i) Removal of non-native and invasive species intermixed with Coastal Sage Scrub.
- (b) PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT AMENDMENT, the applicant shall execute and record a deed restriction amendment of Recording No. 1990-0148434 in a form and content acceptable to the Executive Director, reflecting the above restrictions on development in the designated open space area. The recorded document(s) shall include a legal description and corresponding graphic depiction of the legal parcel(s) subject to this permit and a metes and bounds legal description and a corresponding graphic depiction, drawn to scale, of the designated open space area prepared by a licensed surveyor based on an on-site inspection of the open space area.
- (c) The deed restriction shall be recorded free of prior liens and any other encumbrances that the Executive Director determines may affect the interest being conveyed.
 - a) The deed restriction shall run with the land in favor of the People of the State of California, binding successors and assigns of the applicant or landowner in perpetuity.

Form provided by Operations, Nature Collective, 11 September 2025

INTRODUCTION

This planning resource is an effort of SEJPA to take inventory of the open space present at their facilities at the San Elijo Water Campus in order to develop a management resource specifically focused on addressing fire risk reduction needs while fulfilling their responsibilities of managing the facilities and the open space present on their Campus. There is a braided relationship between managing vegetation to provide habitat for wildlife and managing fire risk for the protection of people and property. This relationship is especially complex when portions of land on a property are held under a conservation easement. We begin by presenting a brief overview of concepts important to management in both camps of this relationship to set the stage for our project approach, property inventory, management recommendations, and priorities. Ultimately, this planning resource provides a wide variety of recommendations prioritized based on a cost valuation of implementation and the expected reduction in wildfire risk achieved. Each of the recommended management actions presented herein have the potential to achieve a multifaceted benefits outcome that will advance habitat management and fire risk management.

Land Management Concepts

Land Stewardship

Conservation easement “stewardship” is a process of ensuring the integrity of conservation easements through time. Stewardship has at its foundation a thorough knowledge of the condition of the property. We have documented that SEJPA’s Campus is encumbered with a Coastal Bluff Conservation Open Space Easement granted to the City of Encinitas. The stewardship guidance provided herein must work within the conditions, restrictions, and exceptions of this easement. For the remainder of the property, we seek to complement stewardship guidance while considering facilities operations on the Campus.

The three primary tools used in conservation easement stewardship are baseline documentation, management plans, and annual monitoring. Baseline documentation reports, and in this instance a property inventory, characterize the infrastructure and resource conditions of a property. Management plans outline the management goals and activities to achieve management goals that will ensure effective protection of open space. Annual monitoring documents the changes in property condition over time in relation to the baseline condition, easement provisions, and ongoing management activities.

Land stewardship often has a nested-tier hierarchy of management responsibility. At the SEJPA Campus the broad responsibility for conservation easement enforcement and annual monitoring is the perpetual responsibility of the easement holder (City of Encinitas). At a smaller

temporal scale, the property inventory we have undertaken and the open space management recommendations we present (as well as their associated short-term monitoring and maintenance) are intended to be acute interventions. Collectively, this nested hierarchy is intended to allow SEJPA and their partners to manage their land effectively, responsibly, and sustainably through an adaptive management strategy.

Wildlife Habitat

Planning for wildlife has evolved over the past 50 years from predominantly managing for indicator species to planning and managing ecosystems, wildlife corridors, and the habitats that support a large suite of wildlife. Habitat is the arrangement of food, water, cover, and space that is needed by an individual, a species, or a population of wildlife. It is the plant community (or arrangement of plant communities) which provide habitat and is why so much focus is often given to the plant community type in open space management plans. A plant community type is a unique combination of plants that occur in an area, and the community is usually defined by the dominant single species of the community and/or the plant association. Rarely does a single plant community exist in isolation. Instead, factors like climate, topography, slope, soils, and disturbance create a mosaic of plant communities within a landscape.²

Fire Ecology Concepts

The Fire Triangles

Fire ecology concepts change across spatial and temporal scales. In its simplest form:

The classic “Fire Triangle” is Fuel <> Heat <> Oxygen. Combustion is an oxidation process, therefore without oxygen we have no fire. Likewise, without heat we have no combustion to produce fire. And last without fuel as a substrate, we have no fire. As we change spatial scale, we encounter the next fire triangle form:

The “Fire Environment” triangle is Fuel <> Terrain <> Weather. At this scale, current weather (temperature, relative humidity, surface wind, etc.) has a direct influence on fire behavior during a fire event. Terrain also comes into play at this scale as -driven by wind- convective heat from a fire can preheat available fuel upslope before radiant heat propagates fire spread, creating a condition for aggressive fire spread on a landscape with varying terrain. As land managers responsible for mitigating fire risk in the coastal zone of San Diego County we can leverage features of the terrain (being mindful of the influence of topographic and ambient conditions at a particular location on fire behavior) but it the fuel component we can modify. Regarding the

² Randolph, J. (2011). Environmental land use planning and management (2nd ed.). Island Press.

fuel component, our primary focus is on fuel in the form of vegetation and structures. In the case of the Campus, we are inherently seeking to evaluate the proximity of vegetation to the structures at the facilities and the structures within the surrounding residential community. As we change temporal scale, we encounter the last fire triangle form:

The “Fire Regime” triangle is Vegetation <> Landform <> Climatology. At this scale, daily and seasonal changes in climate create ever changing patterns (sunshine duration, seasonal temperatures, rain and drought cycles, etc.) which have a direct influence on vegetation across variable landscapes. Vegetation experiences growth changes during growing seasons and dormancy seasons across many years, and as such, the availability of fuel and the condition of that fuel also changes. As land managers we can evaluate the fuel load, fuel continuity, moisture content, and other factors of different plant communities to compare and contrast fire risk.³

One of the most well-known tools in the wildland fire ecology and management toolbox are the Scott and Burgan 40 Fire Behavior Fuel Models (FBFM40). Built upon the original 13 Anderson Fuel Models (1982), this expanded and refined set were developed in 2005 by Joe H. Scott and Robert E. Burgan at the USDA Forest Service to improve fire behavior predictions made by wildfire modeling systems like BehavePlus, FlamMap, and FARSITE. The fuel models are grouped into six categories—Grass (GR), Grass-Shrub (GS), Shrub (SH), Timber-Understory (TU), Timber-Litter (TL), and Slash-Blowdown (SB). The categories are further broken down to numeric codes which increase according to fuel load quantity, moisture content, or other selective fire behavior characteristics.⁴

Synergy in Open Space Management and Fire Risk Planning

The plant communities of coastal San Diego are susceptible to wildfire. This means that managing open space is not about eliminating the chance of wildfire but about managing wildfire likelihood and risk. Although many of the native plant communities in San Diego evolved to dynamically accommodate periodic disturbance from fire, the infrastructure of our communities is far more static. This presents a well-documented challenge for managing open space and mitigating risk from fire in the wildland urban interface. We briefly document the policy framework behind this synergy and highlight the differences between native plant

³ Cochrane, M.A., & Ryan, K.C. (2009). Fire and fire ecology: Concepts and principles. USDA Forest Service, Rocky Mountain Research Station. Retrieved from https://www.fs.usda.gov/rm/pubs_other/rmrs_2009_cochrane_m001.pdf

⁴ Scott, J. H., & Burgan, R. E. (2005). *Standard Fire Behavior Fuel Models: A comprehensive set for use with Rothermel's surface fire spread model* (Gen. Tech. Rep. RMRS-GTR-153). U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

communities and invasive non-native plants to set the stage for opportunities for intervention and recommended actions.

Policy Framework

There is policy in place which land managers must adhere to but can also leverage when evaluating risk mitigation strategies. Specific to this property, in the State of California there is legislation which legally requires owners and operators of property to maintain 100 feet of defensible space around structures (but not beyond the property line) (Gov. Code. 51182).⁵ CALFIRE defines Defensible Space Zones as Zone 0: The Ember-Resistant Zone, Zone 1: The Lean, Clean, and Green Zone, and Zone 2: The Reduce Fuel Zone.⁶ Broadly:

- Zone 0: The Ember-Resistant Zone
 - o Managing the first five feet from a structure, but also including what construction materials are used for and around the structure that could spread embers or produce ignition.
- Zone 1: The Lean, Clean, and Green Zone
 - o Within 30* feet of a structure, recommendations are to regularly clear dead and dry vegetation and create space between vegetation to limit fire spread.
 - o *San Diego is among the Counties in California with stricter requirements, requiring 50 feet of Clearance in Zone 1.⁷
- Zone 2: The Reduce Fuel Zone
 - o Within 100 feet of a structure or to the property line, whichever is closer, recommendations seek to disrupt horizontal and vertical fuel continuity and reduce flammable vegetation.

There are also exceptions to Gov. Code. 51182 which are applicable to the management of open space on this property. Specifically, Gov. Code 51184 which states:⁸

(a) Section 51182 shall not apply to any land or water area acquired or managed for one or more of the following purposes or uses:

⁵ California Government Code § 51182 (current through 2025). Retrieved from

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNum=51182

⁶ California Department of Forestry and Fire Protection (Cal Fire). (n.d.). Defensible Space. Retrieved from

<https://www.fire.ca.gov/dspace>

⁷ San Diego County Department of Planning & Development Services. (2025). *Fire Resistant Building Materials and Technology*. Retrieved from https://www.sandiegocounty.gov/content/sdc/pds/fire_resistant.html

⁸ California Government Code § 51184 (current through 2025). Retrieved from

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=51184.&nodeTreePath=6.1.1.17&lawCode=GOV

- (1) Habitat for endangered or threatened species, or any species that is a candidate for listing as an endangered or threatened species by the state or federal government.
- (2) Lands kept in a predominantly natural state as habitat for wildlife, plant, or animal communities.
- (3) Open space lands that are environmentally sensitive parklands.
- (4) Other lands having scenic values, as declared by the local agency, or by state or federal law.

In alignment with this state level legislation, the Coastal Bluff Conservation Open Space Easement lists Conditions, Restrictions, and Exceptions outlined and accepted by the California Coastal Commission, the County of San Diego, and the City of Encinitas. These restrictions generally preclude the removal of trees and native vegetation, grading and paving of soil, and other vegetation clearance or alteration of the slopes for fuel modification purposes.

It is the Exception clauses that provide SEJPA with opportunities for intervention in open space management and fuel management. **The exception specifically states that it is acceptable for, “Removal of non-native and invasive species intermixed with Coastal Sage Scrub”.** This generally permits the removal of non-native species and allows for revegetation for habitat restoration purposes (DOC#2020-0555340).

Expected Fire Behavior: Native Plant Communities and Non-native Plants

When plants that evolved in one region of the globe are moved by people to another region, a few of them flourish, crowding out native vegetation and the wildlife that feeds on it. Besides damaging wildlife habitat, these invasive plants can degrade our food and water supply and increase the risk of damage from wildfire and flooding, all of which can cause major economic damage to our state (California Invasive Plant Council).⁹ There are both ecological incentives and wildfire mitigation incentives to restoring habitat from non-native plants and non-native plant communities to native plant communities. In this section we will focus on the restoration of Diegan Coastal Sage Scrub (DCSS) and make comparisons to the removal of the invasive non-native plant communities of greatest concern for SEJPA - *Brassica nigra* (Black Mustard) and *Eucalyptus* Woodland (*Eucalyptus*). Many other invasive non-native plants will be addressed in our recommendations.

Through the lens of open space management, there are clear ecological incentives for habitat restoration. DCSS is an endemic plant community with high plant species richness which

⁹ California Invasive Plant Council. (2025). *Plants*. Retrieved from <https://www.cal-ipc.org/plants/>

support a biodiverse range of wildlife species. Conversely, Black mustard grasslands and Eucalyptus woodlands develop monocultures across landscapes which offer little to no habitat resources to native pollinators and wildlife. DCSS is also known to be a coastal bluff and slope stabilizer. Many of the plants associated with DCSS produce deeply rooted systems that endure through the dry dormant season. Mustard grasslands are winter annuals and the bluffs occupied by mustard are more prone to landslides and post-fire sediment erosion. Last, native shrubs and forbs sequester carbon far more effectively in the long-term compared to ephemeral mustard grasslands. Eucalyptus shrubs and trees may appear to thrive in areas, but it has been documented that eucalyptus species are prolific consumers of surface water, impacting the availability of water for native wildlife and the broader water supply.

Through the lens of fire risk reduction, there are numerous incentives for replacing non-native plants with native plant communities. The fuels of DCSS (classified as SH5 or SH7) are a low-moderate fuel load or high fuel load shrub depending on the maturity of the community, meaning that DCSS can carry moderate intensity fire. The fuels of Eucalyptus woodlands (classified as TU5) are a very high load timber-understory fuel. The dense stands and heavy litter accumulation of Eucalyptus amplify the rate of spread, the intensity of wildfires, and the potential for spotting all of which equates to exceptionally more challenging wildfire conditions for firefighters compared to landscapes composed of DCSS.

The fuels of mustard grasslands (classified as GR2 or GR3) are a low-moderate fuel load. At a glance, in theory this would mean that DCSS plant communities produce more intense fire behavior than Black mustard grasslands, but this comparison is more nuanced. Revisiting the structural and physiological characteristics of DCSS, plants in this community are deep-rooted perennial shrubs (*Artemisia californica*, *Isocoma menziesii*, *Eriogonum fasciculatum*, etc.). These shrubs can access deeper soil moisture and maintain living tissues through the dry summer season. Conversely, Black mustard is an annual which completes a full life cycle during the spring. As temperatures rise into the summer mustard grasslands cure into dead fine fuel with little to no moisture. Mustard can reach 3-5% dead fuel moisture by the beginning of summer. On the other hand DCSS shrubs can retain near 150% live fuel moisture into the early summer and sustain a high live fuel moisture in late summer, therefore requiring hotter and drier conditions to reach ignition compared to mustard. In all, the fire risk tradeoff is that DCSS may be more intense when it does experience fire, but the ignition frequency is lower and the fire return interval can be 30-50 years. For mustard grasslands, there is a longer wildfire season window, the flame lengths may be shorter than DCSS, but flashy fuels allow for a significantly higher rate of spread, and the fast recovery of mustard can create conditions for repeated,

frequent burn cycles that threaten residential communities and can exacerbate the spread of mustard grasslands into native plant communities.

Replacing non-native plants with native plant communities has other fire risk reduction incentives. For Eucalyptus and other non-native trees, tree felling and mechanical removal has an immediate reduction in fuel load. For mustard and other non-native plants, removal of non-native plants begins the process of disrupting horizontal and vertical fuel continuity. Managers can then design strategic habitat restoration that leads to the creation of predictable, modified fuel zones. For slopes, this is often completed by dividing the slope into management sections (toe, face, crest, etc.) with specific defensible space goals. Subsequently, managers can develop specific native plant palettes and restoration designs that have clusters of larger shrubs separated into a mosaic by plants like grasses, forbs, and succulents with lower growth forms and lower fuel loads.

The aforementioned strategy can produce fire risk mitigation recommendations that are regulatory compliant, ecologically beneficial, and more predictable fire behavior for first responders when wildfires do occur.

PROJECT APPROACH

Nature Collective will inventory the site and provide recommendations based on two work zones: The 8.53 acre open space area (Area 1), and the 20.68 acre treatment facilities and staging area (Area 2).¹⁰ To determine fire risk priorities across the Campus Nature Collective will first conduct a detailed vegetation survey. The results of the survey will be integrated with additional spatial data, including topographic features, proximity to structures and other infrastructure, and accessibility. Vegetation types will be assessed and classified using the standardized FBFM40 fuel models, with a particular focus on characterizing fuel loads of native and non-native plant communities, including high fire risk invasive species such as Black mustard, Eucalyptus species, Arundo donax, Acacia species, and Palm species. Within each of the work zones we will establish management sections and categorize the sections into three priority levels, High (Priority 1), Medium (Priority 2), and Low (Priority 3), based on both fuel load and contextual risk. This classification will guide the development of a phased risk reduction strategy which will include section-specific treatment recommendations and habitat restoration objectives, collectively a fire risk reduction plan. The goal of this project is to provide

¹⁰ The conservation easement area is 6.50 acres. The 8.53 acre size of the open space area listed here as a work zone includes an expanded section of open space capturing the entire Northern parcel boundary and additional square footage along the East side and South side of the pedestrian pathway.

the SEJPA with the information needed to proactively address open space habitat management and fire risk.

PROPERTY INVENTORY

Terrain Characteristics

The SEJPA Campus runs South to North from Manchester Avenue northward parallel to the West side of Interstate 5. The average elevation is 45.1 feet, with a maximum elevation of 85.3 ft. (located in Area 1), and a minimum elevation of 16.9 ft. (located in Area 2). In Area 1, the average slope is 28.2 degrees (Min: 0 deg., Max: 48 deg., Std dev: 7.04 deg, normal distribution). In Area 2, the average slope is 6.76 degrees (Min: 0 deg., Max: 76 deg., Std dev: 9.41 deg, heavily right skewed distribution with a maximum slope corresponding to sections of manmade building features). For a detailed illustration of the terrain characteristics, see Appendix A, Figure 1, Figure 2, and Figure 3.

Emergency Response Infrastructure

The site's primary emergency response infrastructure is located at the property entrance on Manchester Avenue, where a designated emergency services staging area is located adjacent to a City of Encinitas fire hydrant. There are multiple other water sources located within the facilities area, but it is unclear if these are supportive of Fire Department Connections. Additional City of Encinitas fire hydrants are located in the vicinity of the property, with two located Southeast of the property along Mackinnon Ranch Road, three located West of the property's open space above the steep slopes along Montgomery Avenue, Oxford Avenue, and Cambridge Avenue, and one located North of the property along Carol View Drive. A map of the access points and water connections is provided in Appendix A, Figure 4.

Plant Communities and Land Uses

A Nature Collective Restoration Ecologist completed vegetation surveys between September and October 2025. Plant communities and land cover types detected at the Lake Drive property consist of DCSS, Baccharis-dominated DCSS, Southern Mixed Chaparral, Riparian Scrubs, Southern Riparian Forest, Southern Coast Live Oak Riparian Forest, Coast Live Oak Woodland, Eucalyptus Woodland (non-native), Disturbed Habitat (non-native), Non-native Vegetation, Unvegetated Habitat, water management facilities, paved roads, dirt roads, and a pedestrian/bicycle pathway. We provide an account of the plant community acreage observed during field surveys below. The observations have been inventoried according to each of the two work zones. We also provide plant community descriptions directly referenced from the Draft Vegetation Communities of San Diego County (Oberbauer et al. 2008) and Vegetation

Manual for Western San Diego County (Sproul, F., et al., 2011.). A map of the plant communities is provided in Appendix A, Figure 5.

Open Space Area Plant Communities

Plant Community	Area (Acres)
Diegan Coastal Sage Scrub	0.24
Eucalyptus Woodland	0.15
Non-Native Vegetation	3.55
Southern Mixed Chaparral	3.05
Disturbed Habitat	≤0.01
Southern Riparian Forest	≤0.01

Treatment Facilities and Staging Area Plant Communities

Plant Community	Area (Acres)
Diegan Coastal Sage Scrub	1.12
Disturbed Habitat	0.86
Non-Native Vegetation	5.56
Riparian Scrubs	0.02
Southern Mixed Chaparral	0.07
Unvegetated Habitat	1.12
Coast Live Oak Woodland	≤0.01
Diegan Coastal Sage Scrub: Baccharis-dominated	≤0.01
Southern Coast Live Oak Riparian Forest	≤0.01

Diegan Coastal Sage Scrub (*Artemisia californica* Association)

Low, soft-woody subshrubs (to ca. 1 m high) that are most active in winter and early spring. Many taxa are facultatively drought- deciduous. Dominated by *Artemisia californica* and *Eriogonum fasciculatum* together with *Malosma laurina*, *Salvia apiana* and *Salvia mellifera*. Stem- and leaf-succulents, while present, are not nearly as conspicuous as in Maritime Succulent Scrub. *Artemisia californica* clearly dominates this association, especially in the coastal form of DCSS, often with a relatively open cover and high diversity of subdominant shrubs, including *Atriplex canescens*, *Rhus integrifolia*, *Encelia californica*, *Malsoma laurina*, *Eriogonum fasciculatum*, *Baccharis pilularis*, *B. sarothroides*, *Isocoma menziesii*, *S. mellifera*, *S. apiana*, and *Malacothamnus fasciculatus*. Higher herb cover and diversity occurs in openings. This association can occur both as a mature stable shrub community or as an early transitional stage of other shrublands in response to fire or other disturbance.

Diegan Coastal Sage Scrub: Baccharis-dominated (*Baccharis sarothroides* Association)

Similar to Diegan Coastal Sage Scrub (32500) but dominated by *Baccharis* species. Site factors are typically on disturbed sites or those with nutrient-poor soils. Often found within other forms of Diegan Coastal Sage Scrub and on upper terraces of river valleys. Characteristic Species include dominant *Baccharis sarothroides* and/or *Baccharis pilularis*. May also include *Artemisia californica*, *Eriogonum fasciculatum*, *Hazardia squarrosa*, *Isocoma menziesii*, and *Salvia mellifera* in lesser amounts. *Baccharis sarothroides* is dominant in an open shrub canopy. Subdominant shrubs include *Isocoma menziesii*, *Artemisia californica*, *Salvia mellifera*, and *Eriogonum fasciculatum*. Associated wetland trees and shrubs may include *Sambucus nigra* ssp. *caerulea* and *A. dracunculus*. A diverse herbaceous understory includes *Juncus* spp., *Urtica dioica*, and many nonnative species. This association often colonizes disturbed sites, although it is also a stable upland scrub, occurring most often on floodplains that are transitional between upland and more fully developed riparian woodlands.

Southern Mixed Chaparral (*Rhus integrifolia* Association)

Broad-leaved sclerophyll shrubs, 1.5-3 m tall. Occasionally with patches of bare soil or forming a mosaic with Venturan Coastal Sage Scrub (32300) or Riversidean Sage Scrub (32700). Divisible into Granitic (37121) and Mafic (37122) subtypes based on substrate, but floristic distinctions between these two subtypes remain unknown. In San Diego County, this is dominated by bluecolored lilacs, especially Ramona lilac (*Ceanothus tomentosus* var. *olivaceus*) as well as *C. leucodermis*, *C. oliganthus*; other *Ceanothus* spp. generally indicate other chaparral types. Site Factors include dry, rocky, often steep slopes with little soil and moderate temperatures. Slopes are typically south-facing in northern California but north-facing in the south. Often adjacent to and on moister sites than Chamise Chaparral (37200). Transitional from the chaparral habitats of California to the coastal semi-desert of Baja California Norte. In San Diego County, it generally occurs east of Southern Maritime Chaparral and west of Montane Chaparral. Characteristic Species include *Adenostoma fasciculatum*, *Arctostaphylos glandulosa*, *A. pennisularis*, *Calochortus albus*, *Ceanothus tomentosus olivaceus*, *C. verrucosus*, *Cercocarpus minutiflorus*, *Cneoridium dumosum*, *Fritillaria biflora*, *Heteromeles arbutifolia*, *Lonicera subspicata*, *Quercus dumosa*, *Malosma laurina*, *Rhamnus crocea*, *Rhus ovata*, *Ribes indecorum*, *Xylcoccus bicolor*, *Yucca schidigera*, *Y. whipplei*. *Rhus integrifolia* is dominant often as continuous shrub cover. Associated subdominants include *Adenostoma fasciculatum*, *Artemisia californica*, *Mimulus aurantiacus*, *Encelia californica*, *E. fasciculatum*, *Heteromeles arbutifolia*, *Malosma laurina*, *Rhamnus crocea*, *S. mellifera*, and *Xylococcus bicolor*. Herbaceous cover is usually low, and is primarily in openings. Although the distribution of *R. integrifolia* is ubiquitous throughout coastal sage scrub and chaparral, the sample data analysis indicates that it associates most closely with coastal sage scrub or those chaparral associations at the margins or ecotones with coastal sage scrub.

Riparian Scrubs (*Juncus acutus* Provisional Association)

Riparian zones dominated by small trees or shrubs, lacking taller riparian trees. Encroaching into some Coastal Saltmarsh habitats. Site Factors are those areas mostly in major river systems where flood scour occurs. Expanded from increased urban and agricultural run-off. Characteristic Species include *Salix lasiolepis*, *Salix* spp., *Baccharis sarothroides*. *Juncus acutus* ssp. *leopoldii* occurs as a dominant mostly in an open canopy with other shrubs including *Baccharis* spp. and *Isocoma menziesii*. Herbaceous cover occurs as codominant or in sparse association, including *Iva hayesiana*, *Distichlis spicata*, *Leymus triticoides*, *Anemopsis californica*, *Artemisia palmeri*, and *Schoenoplectus americanus*. This vegetation type is designated to describe its freshwater expression of the *J. acutus* Alliance as it extends upslope into freshwater systems.

Southern Riparian Forest (*Platanus racemosa*-*Quercus agrifolia* Association)

Dense riparian forests that cannot be differentiated to other categories listed below. Site Factors are those areas found along streams and rivers. Characteristic Species include *Platanus racemosa*, *Populus* spp., and many other wetland plants. *Platanus racemosa* and *Quercus agrifolia* together are codominant in a continuous to open tree canopy; subdominants may include *Populus* spp. and *Salix* spp. Associated subdominant riparian shrubs include *Sambucus nigra* ssp. *caerulea*, *Toxicodendron diversilobum*, *Vitis girdiana*, *Rosa californica*, and *Rubus ursinus*. Many associated upland shrubs may also be present including *Rhus integrifolia*, *R. ovata*, *Rhamnus* spp., *Heteromeles arbutifolia*, and *Baccharis salicifolia*. The herbaceous diversity is high and cover is continuous to open, including *Artemisia douglasiana*, *A. palmeri*, *Ambrosia psilostachya*, *Carex spissa*, *Cyperus* spp., *Anemopsis californica*, *Juncus* spp., *Typha* spp., and many ruderal species.

Southern Coast Live Oak Riparian Forest (*Quercus agrifolia*/*Salix lasiolepis* Association)

Dense riparian forests dominated by evergreen sclerophyllous trees (*Quercus agrifolia*) with a closed, or nearly-closed, canopy. This type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. A homogenous mixture of Coast Live Oak Woodland (71161) and Southern Riparian Woodland (61300), especially if the riparian elements are not substantial or are discontinuous. Site Factors are those bottomlands and outer floodplains along larger streams, on fine-grained, rich alluvium. Characteristic Species include *Acer macrophyllum*, *Artemisia douglasiana*, *Cardamine californica*, *Eucrypta chrysanthemifolia*, *Heteromeles arbutifolia*, *Keckiella cordifolia*, *Lonicera hispidula*, *Marah macrocarpus*, *Pholistoma auritum*, *Quercus agrifolia*, *Rhus trilobata*, *Rosa californica*, *Rubus ursinus*, *Sambucus mexicana*,

Symphoricarpos mollis, *Toxicodendron diversilobum*, *Umbellularia californica*. *Quercus agrifolia* is dominant in an open to closed tree canopy with *Salix lasiolepis* typically dominating the shrub canopy. Subdominant trees may include *Platanus racemosa*, *Populus* spp., and *Salix* spp. (*laevigata*, *gooddingii*); if present, these tree species must have a less than trace percent cover for this association to apply. Subdominant shrubs include *Vitis girdiana*, *Sambucus nigra* ssp. *caerulea*, and *Baccharis* spp. (*salicifolia*, *sarothroides*, *pilularis*). The herbaceous diversity is low and cover is generally open, including wetland affiliates such as *Artemisia palmeri*, *Ambrosia psilostachya*, *Anemopsis californica*, *Distichlis spicata*, and *Epilobium ciliatum*.

Coast Live Oak Woodland (*Quercus agrifolia*/*Artemisia californica* Association)

This woodland is dominated by *Quercus agrifolia*, an evergreen oak that reaches 10-25 m in height. The shrub layer is poorly developed, but may include *Heteromeles arbutifolia*, *Ribes* spp., *Malosma laurina*, or dominated *Sambucus mexicana*. The herb component is continuous and dominated by [*Bromus diandrus*] and several other introduced taxa. Site Factors are those areas typically on north-facing slopes and shaded ravines in the south and more exposed sites in the north. Intergrades with Coastal Scrub (32000) and Upper Sonoran Mixed Chaparral (37100) on drier sites and with Coast Live Oak Forest (81310) or Mixed Evergreen Forest (81100) on moister sites. Characteristic Species include *Aesculus californica*, *Sanicula laciniata*, *Heteromeles arbutifolia*, *Quercus agrifolia*, *Rhamnus californica*, *Sambucus mexicana*, *Toxicodendron diversilobum*, *Diplacus aurantiacus*, *Lathyrus vestitus*, *Artemisia californica*, *Arbutus menziesii*, *Umbellularia californica*, *Ribes* spp. [*Bromus diandrus*] [*Stellaria media*], [*Galium aparine*], [*Cirsium vulgare*], *Torilis nodosa*. *Quercus agrifolia* is the dominant species in an open tree canopy, while *Artemisia californica* is dominant in an open shrub canopy. Subdominant shrubs include a variety of chaparral and coastal sage species, such as *Ceanothus tomentosus*, *Adenostoma fasciculatum*, *Mimulus aurantiacus*, *Malosma laurina*, *Sambucus nigra* ssp. *caerulea*, *Rhamnus ilicifolia*, *Artemisia californica*, *Eriogonum fasciculatum*, and *Heteromeles arbutifolia*. Herbaceous cover occurs in openings and includes *Marah macrocarpus*, *Nassella pulchra*, *Phacelia* spp., *Sidalcea malviflora*, *Grindelia hirsutula*, and many shrubs, and often includes a high cover of ruderal species.

Eucalyptus Woodland (non-native) (*Eucalyptus (globulus, camaldulensis)* Semi-Natural Stands)

Eucalyptus habitats range from single-species thickets with little or no shrubby understory to scattered trees over a well-developed herbaceous and shrubby understory. In most cases, eucalyptus forms a dense stand with a closed canopy. Eucalyptus species produces a large amount of leaf and bark litter, the chemical and physical characteristics of which limit the ability of other species to grow in the understory, decreasing floristic diversity. Overstory composition is typically limited to one species of the genus, or mixed stands composed of

several *Eucalyptus* species; few native overstory species are present within eucalyptus planted areas, except in small cleared pockets. Characteristic Species include [*Eucalyptus* spp.] including the most common [*E. globulus* (blue gum)] and [*E. camaldulensis* (red gum)] species. Over 50 species of *Eucalyptus* have been introduced to California from Australia. However, only a few are known to form self-perpetuating stands and have the qualities of semi-natural stands. The two most common species that form semi-natural stands are listed in parentheses in the name of this type. *E. camaldulensis* is one of the most common species found in naturalized stands in San Diego County, but there are at least 6 other species that are listed in the most recent San Diego County Plant checklist (Rebman and Simpson 2006).

Disturbed Habitat (non-native)

Characterized by predominantly non-native species introduced and established through human action. Distribution is common throughout San Diego County especially in highly populated areas, coastal and riparian zones. Additional details are provided on the composition of non-native species detected on site in later sections.

Non-native Vegetation

Characterized by predominantly non-native species introduced and established through human action. These areas are not typically artificially irrigated, but receive water from precipitation or runoff. Distribution is common throughout San Diego County especially in highly populated areas, coastal and riparian zones. Additional details are provided on the composition of non-native species detected on site in later sections.

Unvegetated Habitat

This classification is typically composed of mostly bare ground with minimal vegetation cover (less than 2% cover of herbaceous species and less than 10% cover by trees or shrub species).

Invasive Non-native Plant Species Assessment

During field surveys we identified California Invasive Plant Council (Cal-IPC) listed invasive plants throughout both work zones. We provide an inventory of the invasive plant species observed during field surveys below which includes: the acreage (or where relevant their count and height range), their fire risk, and a brief description of their fire risk. The plants have been inventoried according to each of the two work zones. We also provide a map of invasive plant distribution to assist with future treatment cost estimation and implementation (Appendix A, Figure 6).

Open Space Area Non-native Invasive Plant Species Assessment

Invasive Species	Count (Trees)	Acres	Fire Risk	Risk Description
Eucalyptus sp.		0.15 @20 ft	Very high	Well documented as among the most hazardous non-native trees in CA; Produces heavy litter (including both fine leaf litter and larger downed woody debris); branches and leaves can cast spot fires; mature trees sustain crown fires.
Acacia sp.		1.77	High	Foliage is highly volatile in both shrub and tree form creating high intensity burns; significant source of embers from litter; significant resprouting.
Canary island date palm	3 @15 ft	0.09	High	Significant vertical fuel hazard when unmaintained; vertical fuel continuity is exacerbated when surrounded by other vegetation; fronds and embers can loft in smoke plume creating a spotting hazard.
Giant reed		0.03	High	Growth form as tall and dense canes create high flame lengths and accelerate spread, especially when surrounded by other vegetation; Known for significant post-fire regeneration potential.
Black mustard		0.56	Medium-high	Fine fuels accelerate fire spread; mature plants are desiccated creating ignition prone fuels; promotes frequent burns and fire return intervals.
Castor bean		1.12	Medium	Moderate fire potential though greater when in disturbed habitat; not highly volatile.
Crown daisy		0.00	Medium-low	Fine fuels accelerate fire spread; low plant volume minimizes fire intensity, however it often occurs with other flashy fuels contributing to surface fire spread.
Ice plant		0.00	Low	This succulent is known to retain a high moisture content in living tissue and historically considered a fire suppressant; however dry continuous sheets of dead tissue can lead to smoldering and re-spotting on slopes.
Landscaped		0.14	---	Composition influences vertical and horizontal fuel continuity.
Native		3.19	---	Total native plant community acreage in Area 2 included for reference.

Treatment Facilities and Staging Area Non-native Invasive Plant Species Assessment

Invasive Species	Count (Trees)	Acres	Fire Risk	Risk Description
Canary island date palm	15 @20-30 ft	0.09	High	Significant vertical fuel hazard when unmaintained; vertical fuel continuity is exacerbated when surrounded by other vegetation; fronds and embers can loft in smoke plume creating a spotting hazard.
Mexican fan palm	3 @50 ft	0.01	High	Significant vertical fuel hazard when unmaintained; vertical fuel continuity is exacerbated when surrounded by other vegetation; fronds and embers can loft in smoke plume creating a spotting hazard.
Brazilian pepper tree	1 @15 ft	0.01	High	Foliage is both dense and highly resinous producing intense fire fronts; significant source of embers when branches and litter are dry.
Black mustard		2.15	Medium-high	Fine fuels accelerate fire spread; mature plants are desiccated creating ignition prone fuels; promotes frequent burns and fire return intervals.
Crown daisy		1.18	Medium	Fine fuels accelerate fire spread; low plant volume minimizes fire intensity, however it often occurs with other flashy fuels contributing to surface fire spread.
Castor bean		0.06	Medium-low	Moderate fire potential though greater when in disturbed habitat; not highly volatile.
Landscaped		3.69	---	Composition influences vertical and horizontal fuel continuity.
Native		1.29	---	Total native plant community acreage in Area 1 included for reference.

Baseline Condition Site Photographs

We provide baseline condition site photographs in order to support documentation of relevant site conditions of the property before any intervention and to monitor and evaluate changes that follow future management activities. For documentation purposes, the aerial map contained in Appendix B documents the current site conditions in high resolution as it appeared in September 2025 (captured by NearMap). We also refer to the unaltered photograph sets of the property as it appeared in September 2025 located in Appendix B.

Fire Risk Evaluation

Nature Collective contracted Resilient Transitions to evaluate fire risk on the property and to determine management objectives and recommendations. We used ArcGIS Pro to assign FBFM40 fuel models to the native plant communities and non-native plant communities we identified during site surveys. Some select trees and plant species were not included due to

their limited distribution on the property or minor distribution within another larger native or non-native plant community. We provide a table summary below.

Our FBFM40 fuel model assignment exercise allowed us to qualitatively categorize fuels on the SEJPA campus, identify fire risk patterns, and guide vegetation management and restoration recommendations. Software programs like BehavePlus, FlamMap, and FARSITE can be used to model fire behavior (rate of spread, flame length, fireline intensity, etc.) under different weather conditions and fuel moisture content scenarios to produce landscape level simulations. The SEJPA campus size and relatively uniform site conditions identified during our site inventory would make use of such programs add unnecessary complexity and cost without producing feedback that would remarkably improve management recommendations. Instead, we tailored specific restoration recommendations to the management sections within the two work zones.

Plant Community Fuel Model Assignment and Notes

Plant Community - Vegetation Association - Species	Selected FBFM40	Fuel Load Notes	Application
Diegan Coastal Sage Scrub (<i>Isocoma menziesii</i> , <i>Artemisia californica</i> , etc.)	SH5	Low-moderate load, shorter dry-climate shrubs	Applicable to younger and/or more open DCSS stands
Diegan Coastal Sage Scrub	SH7	High load, dry-climate shrub with more dead material	Applicable to older, denser DCSS
Diegan Coastal Sage Scrub: Baccharis-dominated (Baccharis sarothroides Association)	SH2	Low load shrub, open canopy	Applicable to a composition with scattered shrubs present
Rhus integrifolia Association (Southern Mixed Chaparral)	SH7	High load dry-climate shrub	Represents mid-aged chaparral with continuous fuels
Rhus integrifolia Association	SH8	Very high load shrub	Applicable to older, mature chaparral with heavier canopy closure
Juncus acutus Provisional Association (Riparian Scrub)	GR2	Low load grass	Representative of dense sedge/grass-like fuels
Juncus acutus Provisional Association	GS2	Moderate grass-shrub mix	More appropriate when riparian shrubs are intermixed
Southern Riparian Forest (<i>Platanus racemosa</i> – <i>Quercus agrifolia</i> Association)	TL6	Moderate load broadleaf litter	Representative of leaf litter present under a closed-canopy sycamore-oak forest
Southern Riparian Forest	TU5	Very high load timber-understory	More appropriate for dense shrub or cane understory (such as when mulefat or Arundo are present)
Southern Coast Live Oak Riparian Forest (<i>Quercus agrifolia</i> / <i>Salix lasiolepis</i> Association)	TL6	Moderate load broadleaf litter	Representative of oak-sycamore riparian woodland with moderate surface fuels present

Southern Coast Live Oak Riparian Forest	GS2	Moderate grass-shrub mix	More appropriate if willow/shrub understory is continuous and grass-shrub layer carries fire
Coast Live Oak Woodland (<i>Quercus agrifolia</i> / <i>Artemisia californica</i> Association)	TL6	Moderate load broadleaf litter	Representative of closed oak canopy with litter-dominated surface fuels present
Coast Live Oak Woodland	GS2	Grass-shrub mix	More appropriate for oak overstory with patchy sage scrub or grass understory
Non-Native - Eucalyptus Woodland (<i>Eucalyptus</i> sp.)	TU5	Very high load timber-understory	Applicable to dense stands with significant understory/shrubs
Non-Native - Eucalyptus Woodland	TL8	Litter-dominated	More appropriate when fire spread is mainly through bark/leaf litter
Non-Native - Black Mustard (<i>Brassica nigra</i>)	GR2	Low load grass	Representative of flashy annual fuel bed and grassland
Non-Native - Black Mustard	GR3	Moderately heavier grass	More applicable if fuels are taller and denser
Non-Native – Crown Daisy (<i>Glebionis coronaria</i>)	GR2	Low load grass	Applicable when dominated by daisy dried into a fine fuel bed
Non-Native – Crown Daisy	GR1	Short sparse grass	More appropriate when plant density is low or interspersed with bare ground
Non-Native - Acacia (<i>Acacia</i> sp.)	SH5	Low-moderate shrub	Applicable to mid age shrub stand intermixed with native shrubs
Non-Native - Acacia	TU5	Timber-understory	More appropriate where mature acacia forms dense stands with litter/understory
Non-Native - Castor Bean (<i>Ricinus communis</i>)	SH2	Low load shrub, open canopy	Applicable to scattered patches intermixed with native plants
Non-Native - Castor Bean	SH5	Moderate shrub	More appropriate for dense patches of shrub stands
Non-Native - Canary Island Date Palm (<i>Phoenix canariensis</i>) ~20 ft	TU1 or TL8	Light litter or litter-dominated	Applicable to a grove with dead fronds/litter present or present as a single or cluster of palms within a stand of native shrubs
Non-Native - Canary Island Date Palm	NB1	Non-burnable	If an isolated ornamental planting. NB1 here does not preclude the chance ignition of fronds.
Non-Native - Mexican Fan Palm (<i>Washingtonia robusta</i>) ~50 ft	TU1 or TL8	Light litter or litter-dominated	Applicable to a grove with dead fronds/litter present or present as a single or cluster of palms within a stand of native shrubs
Non-Native - Mexican Fan Palm	NB1	Non-burnable	If an isolated ornamental planting. NB1 here does not preclude the chance ignition of fronds.
Landscaped	NB1	Non-burnable	This represents unvegetated landscaped areas.
Unvegetated Habitat	NB1	Non-burnable	This represents unvegetated bare ground.
Non-Native - Non-native Vegetation	---	---	Fuel model selected based on primary dominant non-native species present.
Non-Native - Disturbed Habitat	---	---	Fuel model selected based on primary dominant non-native species present.

FIRE RISK REDUCTION STRATEGY

Observations from Property Inventory

Non-Native Plant Community Fire Risk

Wherein Appendix A Figure 5 our focus is on presenting the distribution of native plant communities and other dominant land uses on the SEJPA campus, in Figure 6 we highlight and focus our attention on the widespread distribution of non-native plants on the Campus. **Over 55% of the land area held within the Coastal Bluff Conservation Open Space Easement is composed of non-native plants.** In the facilities area, of the land not composed of built uses and landscaping, 44% of the land area is composed of non-native plants. In total on the property, this equates to 4.47 acres of native plant communities, 3.94 acres of non-native plant communities, and 3.71 acres of landscaping.

Our FBFM40 fuel model assignment exercise demonstrates the relative tradeoff of fire risk between the non-native plant communities and native plant communities present on site. We used this information to design fire management sections with specific fuel treatments and other management activities intended to achieve fire risk mitigation goals. The exercise also establishes a baseline of existing fuel conditions against which future conditions can be evaluated. This will give SEJPA the option to assess changes in fuel loading over time and evaluate the effectiveness of implemented fuel treatments and management activities.

Public Pathways and Roadways

One of the greatest fire defense features available to SEJPA is the arrangement of the facility's roadways and the public use pedestrian pathway on the property. These built features go beyond their intended operational and recreational uses; they create physical fuel breaks within the property and between the active facilities work area and the inactive open space easement area. Our recommendations will capitalize on these features.

We recommend establishing the pedestrian path as a managed fuel break. We will describe target conditions and treatments in more detail in the Work Area 1 Fire Management Sections. It is expected that this will also serve as a fuel break for the West side of Work Area 2. In summary, the primary management need for the pathway will be routine maintenance to keep the pathway clean and clear of leaf litter and trash. There may already be an existing maintenance routine and schedule for this public feature.

We recommend leveraging the facility roadways as part of the ember-resistant zone and the lean, clean, and green zone in Work Area 2. The roadways can support the facilities' defensible space strategy and also provide access to emergency services when necessary.

Non-Public Pathways

With the exception of the public use pedestrian pathway we identified that there are many locations in Work Area 2 where personnel who use the facilities have developed social pathways. These informal desire routes have organically developed over time through repeated human foot traffic and in some cases equipment and automotive traffic. This is both an identified issue within Work Area 2 and an opportunity. The two primary issues are disruption of the terrain and misuse of the facilities area that creates a fire hazard. Sediment loss and erosion is occurring in the undeveloped northern portion of the facilities work area. Over time the use of the northern portion of the property as an unspecified staging area for soil materials has expanded; this has led to degradation in the natural vegetation present (conversion to Black mustard grassland) and progressive attrition of the natural areas. Misuse of the landscaping areas that are intermixed with the facilities in the central portion of the facilities work area has created a potential fire hazard. We documented many areas where surplus materials are being actively stored and forgetfully stored in the undeveloped areas that either were intentionally set aside for landscaping or were simply adjacent to certain buildings. The intermix of surplus wood and other miscellaneous materials with vegetation jeopardizes the defensible space of structures.

We recommend that SEJPA use this project as an opportunity to define social pathways used by personnel and equally define staging and landscaped areas. In the 1970's Christopher Alexander et al. established a design approach whereby informal desire routes are formalized into permanent paths and built spaces. Applying this type of design strategy on the campus would help reduce fire hazard by designating active areas in the facility, supporting the establishment of inactive areas for fuel management and native vegetation restoration, and avoid storage of scrap materials in those inactive vegetated areas.

Work Area 1 Fire Management Sections

Work Area 1 Fire Management Sections are described from the pedestrian bicycle pathway West and upslope toward the SEJPA Western and Northern property boundary adjacent to the residential community. Management section widths are described in simplified measurements assuming an average 200 foot distance between the bicycle pathway and the Western property boundary. Informed by our property inventory, it is assumed that on site the naturally variable distribution of existing intact native plant communities and variable distance to the property boundary will dictate adherence to measurements given in each section. Where possible, section widths listed in Section 1, 2, and 4 will remain consistent and variation will be observed in Section 2.

1) Management Section 1 – Pedestrian Path Fuel Break (0-2 feet from pathway)

- Section Goal:
 - o Leverage the pathway as an established fuel break between the facilities area and the open space area.
 - o Prevent ignitions from occurring in the public pathway.
 - o Prevent the spread of invasive plants further upslope into the open space area.
- Target Condition:
 - o Maintained pathway and pathway shoulder swale.
 - o Unvegetated with no fuel continuity if possible; Otherwise maintained very low native plants (<18 inches).
- Fuel Treatments and Management Activities:
 - o Pathway routinely cleared.
 - o Shoulder swale is maintained as DG hardscape or similar.
 - o Downed woody debris and trash is routinely cleared from shoulder swale.
 - o Initial herbicide treatment of non-native plants and restoration with very low native plants, ideally grasses and forbs.
 - o If native plants present, disrupt fuel continuity between shrubs with very low native plants, ideally grasses and forbs.

2) Management Section 2 – Slope Toe Low-Fuel Band (2-60 feet from pathway)

- Section Goal:
 - o Reduce the potential for fire spread from ignitions at bottom of slope and reduce the rate of spread in case of fire.
 - o Treat invasive plants along slope toe and restore with native DCSS plant community.
 - o Capitalize on existing non-burnable areas (bare ground or rock) to reduce fuel continuity.
- Target Condition:
 - o Restoration of all black mustard, eucalyptus sp, and acacia sp.
 - o Encourage islands of native shrubs with 10-20 ft gaps composed of bare ground, rock, and very low native plants (<18 inches).
 - o Where native trees are present, establish vertical separation between shrubs and tree limbs.
- Fuel Treatments and Management Activities:
 - o Cut and stump eucalyptus and acacia trees, herbicide treatment of sprouts. Re-treatment likely required.
 - o Remove lower limbs of native tree species to reduce vertical fuel continuity.

- o Initial herbicide treatment of other non-native plants. Restoration with groups of native shrubs spaced out 10-20 feet by very low native plants, ideally grasses and forbs.
- o If native plants present, disrupt fuel continuity between shrubs with very low native plants, ideally grasses and forbs.

3) Management Section 3 – Slope Transitional Mosaic (~60-160 feet from pathway)

- Target Condition
 - o Replicate Section 2 management where conservation easement restrictions limit activities in native plant communities.
 - o Create a transitional mosaic of chaparral and DCSS plant communities.
 - o Retain native plant community structure but use activities in non-native plant community areas to reduce dead fuel load (dead wood and leaf litter) along slope.
- Target Condition:
 - o Restoration of all palm species, acacia sp., castor bean, and eucalyptus sp.
 - o Encourage mosaic of native chaparral with 10-15 ft gaps composed of DCSS plant communities (<36 inches).
- Fuel Treatments and Management Activities:
 - o Cut and stump palms, eucalyptus and acacia trees, herbicide treatment of sprouts. Re-treatment likely required.
 - o Initial herbicide treatment of other non-native plants. Restoration with chaparral species spaced out 10-15 feet by DCSS shrubs and forbs.
 - o If native plants present, disrupt fuel continuity between shrubs with very low native plants, ideally grasses and forbs.

4) Management Section 4 – Slope Crest Setback (last 20 feet to Western property boundary)

- Section Goal:
 - o Replicate Section 2 management where conservation easement restrictions limit activities in native plant communities.
 - o Prevent spillover of vegetation across property lines.
 - o Coordinate with adjacent homeowners to support residential-side defensible space.
- Target Condition:
 - o Restoration of all palm species, castor bean, and giant reed.
 - o If top of slope/bluff is present on SEJPA property, maintain as DCSS.
 - o Slope crest is maintained as Southern Mixed Chaparral and DCSS mosaic.
 - o No trees, branches, or shrubs available to create horizontal nor vertical fuel continuity across property boundary.

- Fuel Treatments and Management Activities:
 - o Initial herbicide treatment of non-native plants and restoration with very low native plants, ideally grasses and forbs.
 - o Prune trees and shrubs to limit ladder fuels and avoid direct contact with fences and structures.
 - o If native plants present, disrupt fuel continuity between shrubs with very low native plants, ideally grasses and forbs.
 - o Host community outreach at SEJPA campus to engage with adjacent homeowners.

Work Area 2 Fire Management Sections

Work Area 2 Fire Management Sections are described in two sections: the Main facilities and structures and the Northern staging area. We attempted to keep recommendations for the main facilities and structures in accordance with defensible space management zones. We also address the Southeastern and Eastern flank where non-native vegetation hazards are present adjacent to water treatment structures and solar arrays. The Northern staging area includes the plant communities along the Eastern side of the pedestrian bicycle pathway as well as the large swaths of inactive space within the northern staging area.

5) Management Section 5 – Main Facilities and Structures

- Section Goal:
 - o Maintain defensible space zones of 0, 50, and 100 feet where feasible.
 - o Establish active use areas (structures, roads, sidewalks, and pathways) and inactive vegetation areas.
 - o Restore inactive vegetation areas to reduce sources of non-native vegetation.
- Target Condition:
 - o Restoration of all black mustard, invasive grasses, and Brazilian pepper tree.
 - o Unvegetated with no fuel continuity where feasible in landscaping areas; Otherwise maintained low native plants (<36 inches).
 - o Maintenance of landscaping areas, including palms.
 - o Acceptable to retain some of the trees near structures if they provide shaded relief for staff.
- Fuel Treatments and Management Activities:
 - o Facilities Area:
 - Follow CALFIRE defensible space zones recommendations. A list of typical management actions is provided in Appendix A List 1.
 - Routine vegetation clearance from roofs, roads, and pathways.
 - Routine maintenance of landscaping.

- Relocate surplus materials away from structures and inactive vegetation areas.
- Ideally, establish a materials stockpiling area in the northern staging area.
- Landscaped palms permitted to stay in place, however any vines and ladder fuels near trunks should be removed and routine removal of dead palm fronds is recommended.
- o Southeastern Corner near water treatment areas:
 - Cut and stump brazilian pepper tree.
 - Initial herbicide treatment of non-native black mustard and restoration with landscaped DCSS species.
 - Disrupt vertical fuel continuity within the landscaped viewscreen (clear dead branches, remove vines if present, maintain low understory).
- o Solar Arrays and Eastern flank:
 - Initial herbicide treatment of non-native black mustard and crown daisy and restoration with DCSS species or native grassland species comparable to the recently restored I-5 corridor on the East side of the property boundary.
 - Routine maintenance underneath solar arrays is expected.

6) Management Section 6 – Northern Staging Area

- Section Goal:
 - o Apply management strategy from Management Section 1 within Eastern 0-2 feet from pathway.
 - o Establish active use areas (roads, earthwork areas, materials stockpiling, and pathways) and inactive vegetation areas.
 - o Restore inactive vegetation areas to reduce sources of non-native vegetation.
- Target Condition:
 - o Restoration of all black mustard, crown daisy, and castor bean.
 - o Encourage islands of native DCSS shrubs with 10-20 ft gaps composed of low DCSS native plants (<18 inches if adjacent to pathway, otherwise <30 inches in interior vegetation areas).
- Fuel Treatments and Management Activities:
 - o Use T-post fencing to delineate earthwork areas and materials stockpiling areas within the staging area to separate vehicular and pedestrian traffic from inactive vegetation areas.
 - o Initial herbicide treatment of non-native plants in inactive vegetation areas. Restoration with groups of native shrubs spaced out 10-20 feet by very low native plants, ideally grasses and forbs.

- o Along Eastern edge of water drainage basin, expand existing Baccharis dominated DCSS.

Work Zone Priority Recommendations

Work Zone Priority

Our original proposition was to directly categorize the two work areas into priority areas. Penultimately, our analysis first led us to develop distinct management sections with unique fire risk reduction and habitat restoration strategies before we proceeded with the development of a prioritization list to guide implementation. We made this modification to assist SEJPA with aligning their implementation timeline with operational feasibility. We evaluated each management section based on its terrain characteristics, vegetation composition, proximity to structures and access points, and its relative potential to influence wildfire behavior across the Campus. Following feedback from SEJPA staff, all recommendations are based on an initial 1-5 year implementation period with a target of 3 years of management activities and up to 5 years of re-treatment and maintenance.

To summarize, from our analysis we determined that Management Sections 1-4 are the highest priority (Priority 1), followed by Section 5 (Priority 2), and Section 6 (Priority 3). In an ideal scenario all of Work Area 1 would be addressed on the same timeline, but this would contract work into one large operationally unrealistic financial expenditure. There are also logistical tradeoffs with decoupling Sections 1-4 across multiple years of implementation. Access to Section 3 and Section 4 is limited by access to the slope from the toe (within the property) and from the crest (off property). It is anticipated that intensive restoration activities in both Sections 3 and 4 could cause disturbance to Section 2 and 1 if the approach for tree servicing is from the pathway at the toe of the slope. Therefore we recommend a sequence of activities that would progressively reduce fire risk from the upper slopes toward the facilities areas below, ensuring that high-disturbance treatments do not inadvertently impact areas already restored. This sequencing would accommodate activities in Sections 1, 4, 5, and 6 phased first before proceeding with activities in the middle and lower toe of the slope, Sections 2 and 3.

Priority 1 (High) - Work Area 1, Management Sections 1-4

The open space contained in Management Sections 1-4 form the Western and Northern slopes adjacent to residential development on the bluffs. As anticipated they represent the highest fire risk interface on the property due to steep slopes, elevated fuel loads from encroaching non-native vegetation, and physical proximity to structures on the upper bluffs. The pedestrian path fuel break will likely be used as an access pathway for equipment, so early treatment and

maintenance of Section 1 has multiple benefits. Work within some of these Sections should be implemented first, proceeding with Sections 1 and 4 followed by Sections 2 and 3.

Initial Phase (Years 1–2): Conduct monthly cleanup of the pedestrian path fuel break (Section 1). Conduct heavy removal and herbicide treatment of Eucalyptus, Acacia, palms, and other non-native plant species in the slope crest setback (Section 4) to establish the uppermost fuel break.

Secondary Phase (Years 2–5): Once the slopes of the upper Section are restored and stabilized with a native DCSS and chaparral plant community mosaic, proceed with downslope treatments in the slope transitional mosaic (Section 3) and in the slope toe (Section 2). Restoration in these lower Sections would complement the mosaic approach, progressively managing for low fuel continuity up to the public pedestrian path fuel break.

Success in this phased strategy will be achieved by maintaining compliance with the Coastal Bluff Conservation Open Space Easement, minimizing slope soil disturbance, and would result in a restored slope profile that functions as both a wildlife corridor and a managed fuel zone.

Priority 2 (Medium) - Work Area 2, Management Section 5 (Main Facilities and Structures)

This area is the operational base of the SEJPA Water Campus. The wildfire risk to property and personnel is present here, but the fuel conditions in the managed landscaping are relatively low. Our recommendations include the targeted removal of non-native trees, the restoration of patches of non-native weeds in inactive areas, and routine defensible space maintenance around structures. The listed activities in this area are meant to reinforce CALFIRE Defensible Space Zones 0, 1, and 2, with an emphasis on lean, clean, and green zone management within 50 feet of structures.

Initial Phase (Years 1–2): Restoration activities focus on removing Brazilian pepper and Black mustard from the landscaping area near structures and the parcel boundaries, followed by replacement with low-growing native or regionally appropriate landscaped species. We recommend that these activities follow immediately after completion of Priority 1 slope treatments, but if the operating budget can accommodate, intervention here in Year 1 would greatly improve the safety of the facilities.

Success in this phased strategy will be achieved by targeting compliance with CALFIRE Defensible Space Zone goals, particularly the removal of highly flammable non-native trees near water management structures. Ecological success will be achieved by complementing

recent Caltrans investments in slope restoration near the I-5 scenic overlook adjacent to SEJPA's Eastern property boundary.

Priority 3 (Low) - Work Area 2, Management Section 6 (Northern Staging Area)

The contextual risk of the northern staging area is low given its separation from facilities infrastructure, its location in relatively flatter terrain, and the paved pathways and dirt roadways that provide fuel breaks from the perimeter of the property. However, we note that given the large expanse of this area and active use of the area, earlier intervention would again provide an increased level of safety.

Initial Phase (Years 1–2) or optional Secondary Phase (Years 2–5): The intent of activities in this Section are to define land use spaces and transition the inactive vegetation areas into managed native vegetation spaces. For this area we recommend that the treatments be phased after higher-priority management sections have been addressed, but if the operating budget can accommodate, we would encourage treatments to occur in conjunction with those in Section 5.

Success in this phased strategy will be achieved by the creation of defined long-term opportunities for earthwork and materials staging and simultaneous maintenance of low-fuel conditions in the interior hills and along the Eastern edge of the pedestrian pathway. This implementation strategy would also allow SEJPA time to consider land use planning in the staging area of Section 6 before taking action.

Long-Term Management and Monitoring Strategy (5–10 Years)

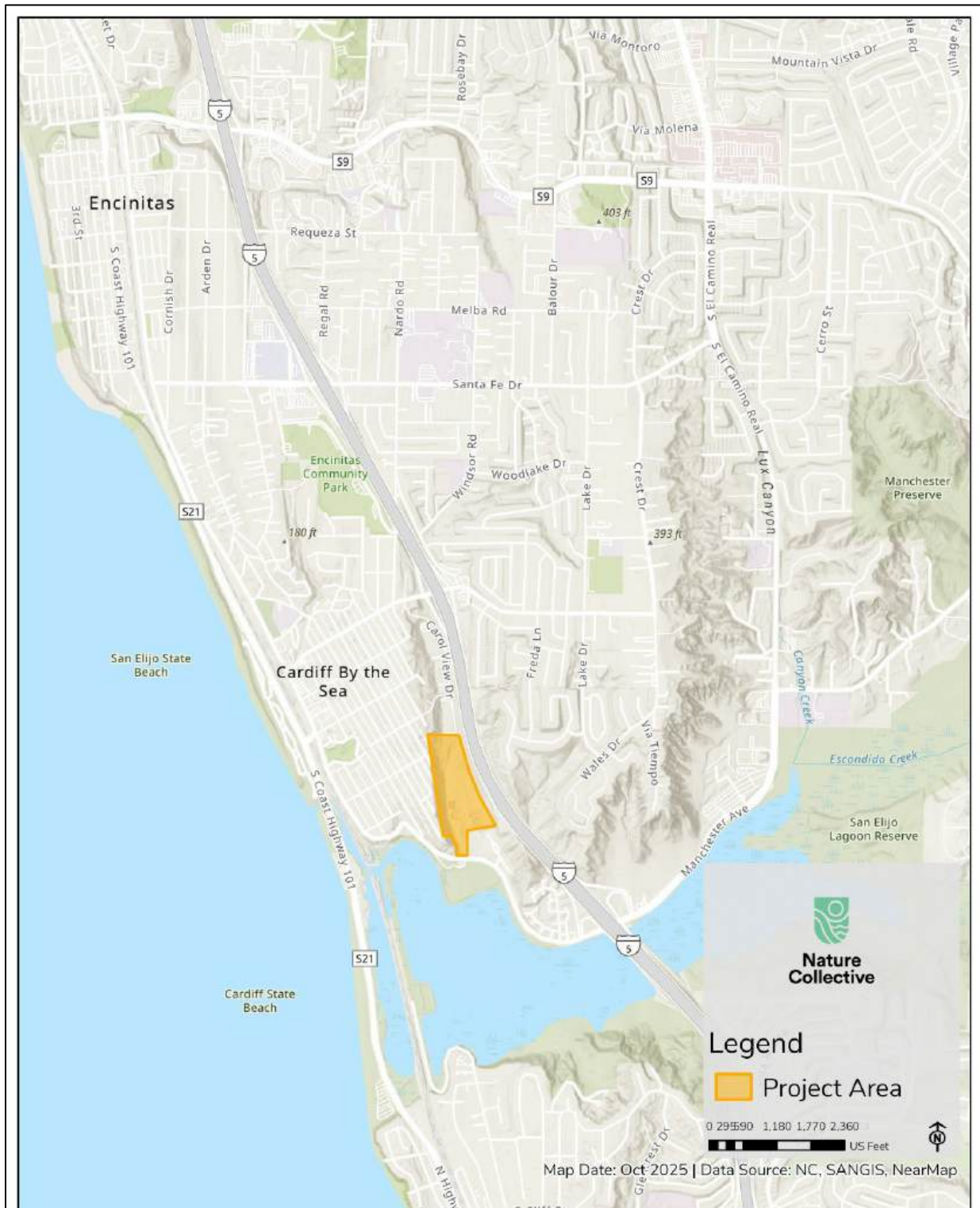
Following the initial 1-5 year implementation and retreatment period, Nature Collective recommends that SEJPA should continue adaptive management and monitoring to sustain reduced fuel loading across the campus as restored vegetation matures. Over a 10-year time period maintenance could include:

- Periodic re-treatment of resprouting non-natives across all work areas but especially in areas with Acacia, Eucalyptus, Castor bean, Black mustard, and Crown daisy.
- Ongoing monitoring and replanting where planting efforts were insufficient or where invasive non-native re-treatments occurred.
- Check ins on defensible space compliance adjacent to structures and pathways.

By implementing this strategy, SEJPA can achieve a measurable reduction in fuel loading, fuel continuity, and wildfire propagation potential for the campus and their neighbors while simultaneously enhancing habitat quality across the property.

APPENDIX A: MAP SUPPLEMENTS

Figure 1: Vicinity Map



San Elijo Water Campus: Vicinity Map

Figure 2: Topography Map

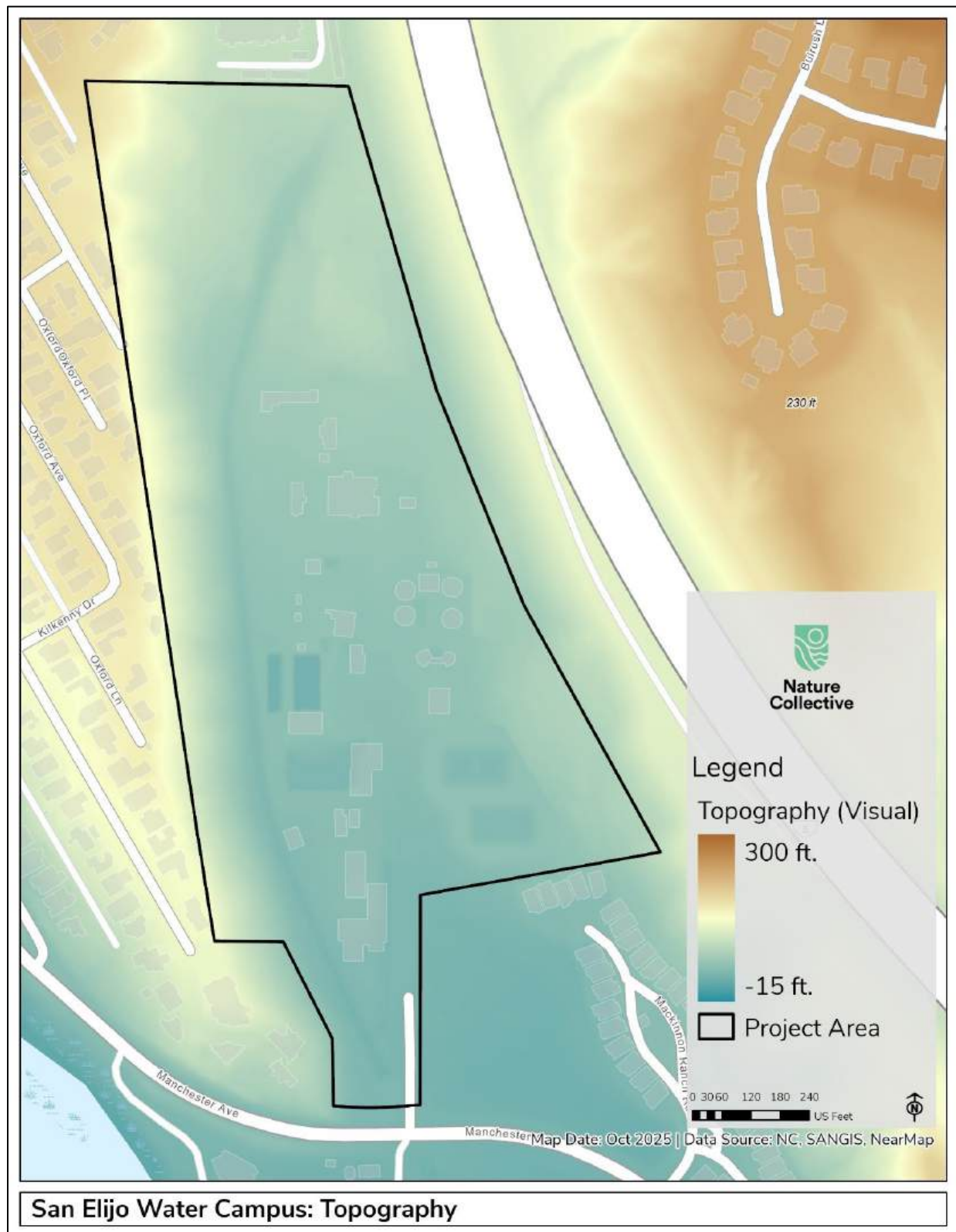


Figure 3: Slope (Degrees) Map

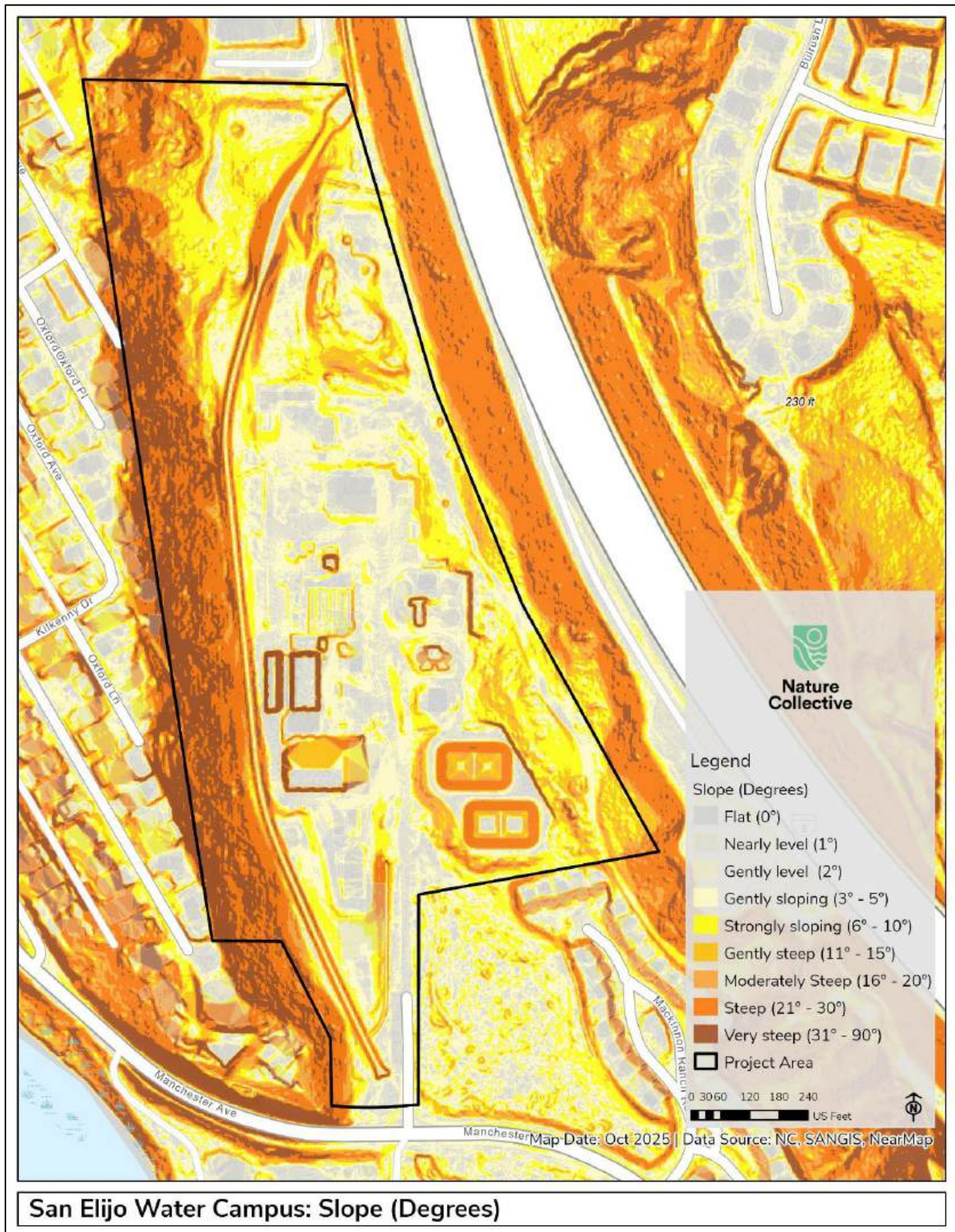


Figure 4: Property Access and Fire Resources Map

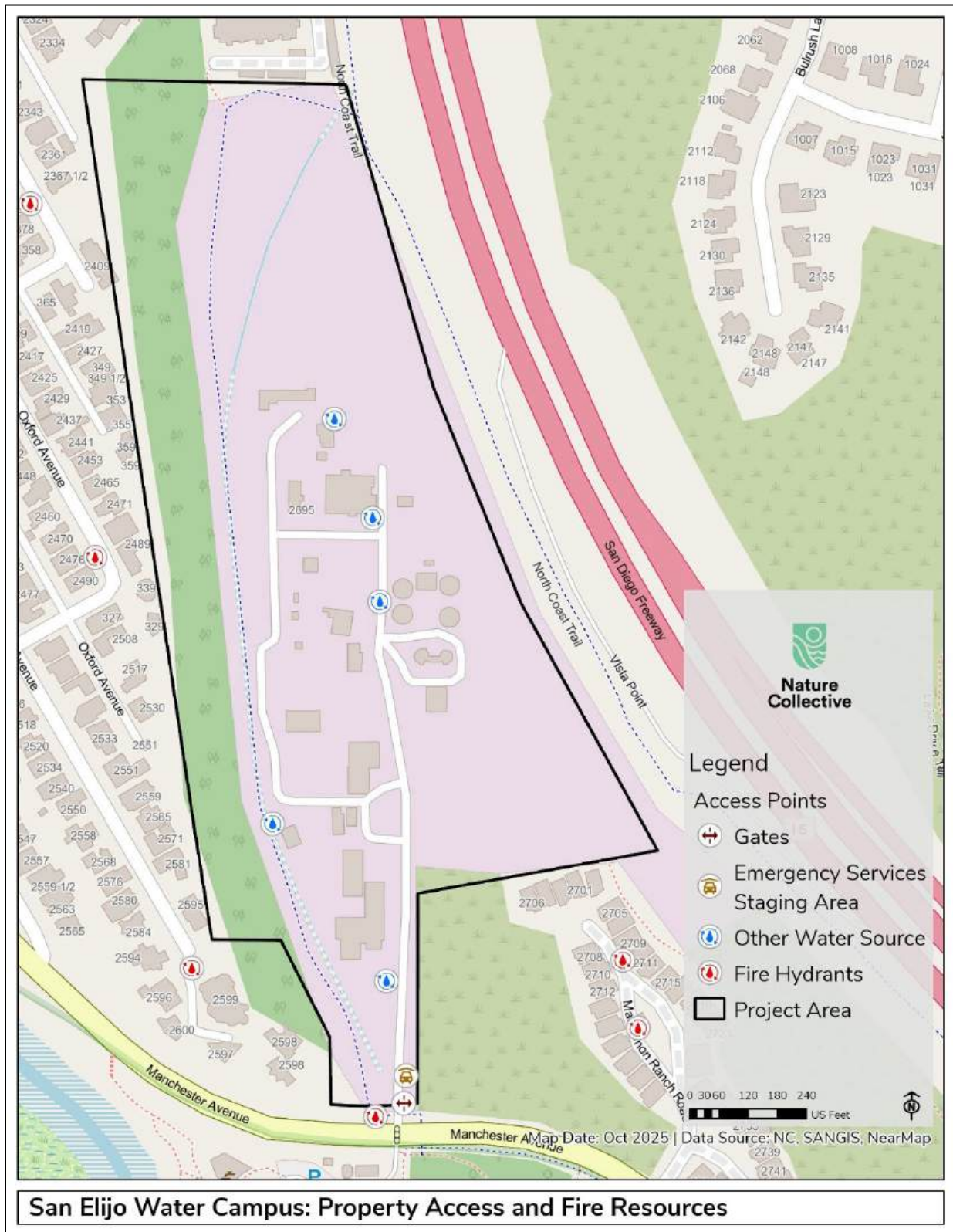
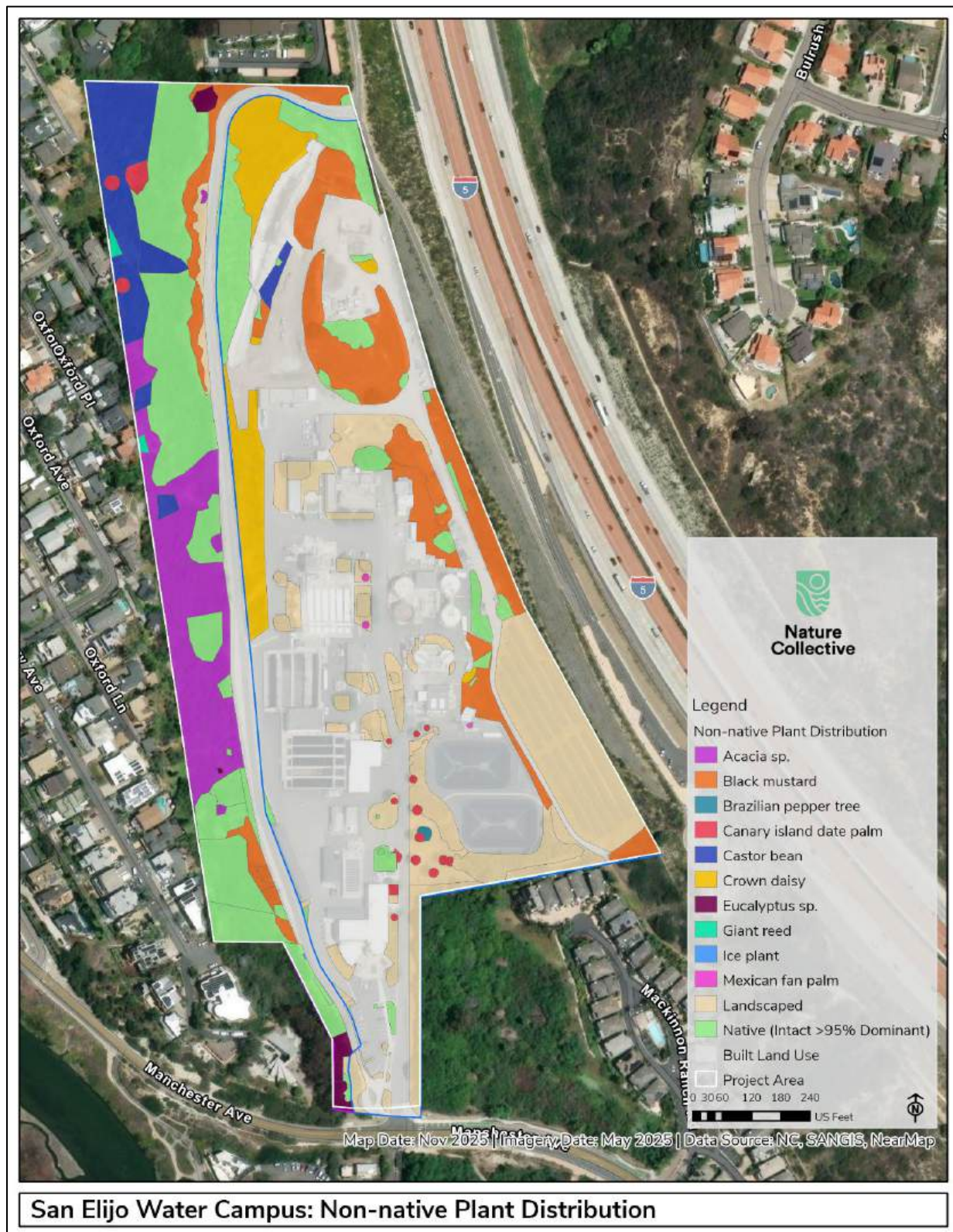


Figure 5: Plant Communities and Land Use Map



Figure 6: Non-native Plant Distribution Map



List 1: CALFIRE Defensible Space Zone Management Recommendations

Zone 0

Zone 0 extends 5 feet from buildings, structures, decks, etc.

- Use hardscape like gravel, pavers, concrete and other noncombustible mulch materials. No combustible bark or mulch.
- Remove all dead and dying weeds, grass, plants, shrubs, trees, branches and vegetative debris (leaves, needles, cones, bark, etc.); Check your roofs, gutters, decks, porches, stairways, etc.
- Remove all branches within 10 feet of any chimney or stovepipe outlet.
- Limit combustible items (outdoor furniture, planters, etc.) on top of decks.
- Relocate firewood and lumber to Zone 2.
- Replace combustible fencing, gates, and arbors attach to the home with noncombustible alternatives.
- Consider relocating garbage and recycling containers outside this zone.
- Consider relocating boats, RVs, vehicles and other combustible items outside this zone.

Zone 1

Zone 1 extends 50 feet from buildings, structures, decks, etc. or to your property line, whichever is closer.

- Remove all dead plants, grass and weeds (vegetation).
- Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
- Remove branches that hang over your roof and keep dead branches 10 feet away from your chimney.
- Trim trees regularly to keep branches a minimum of 10 feet from other trees.
- Relocate wood piles to Zone 2.
- Remove or prune flammable plants and shrubs near windows.
- Remove vegetation and items that could catch fire from around and under decks, balconies and stairs.
- Create a separation between trees, shrubs and items that could catch fire, such as patio furniture, wood piles, swing sets, etc.

Zone 2

Zone 2 extends 50-100 feet out from buildings, structures, decks, etc. or to your property line, whichever is closer.

- Cut or mow annual grass down to a maximum height of 4 inches.
- Create horizontal space between shrubs and trees.
- Create vertical space between grass, shrubs and trees.

- Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 3 inches.
- All exposed wood piles must have a minimum of 10 feet of clearance, down to bare mineral soil, in all directions.

APPENDIX B: BASELINE CONDITIONS SITE PHOTOGRAPHS

Aerial Imagery (September 2025)



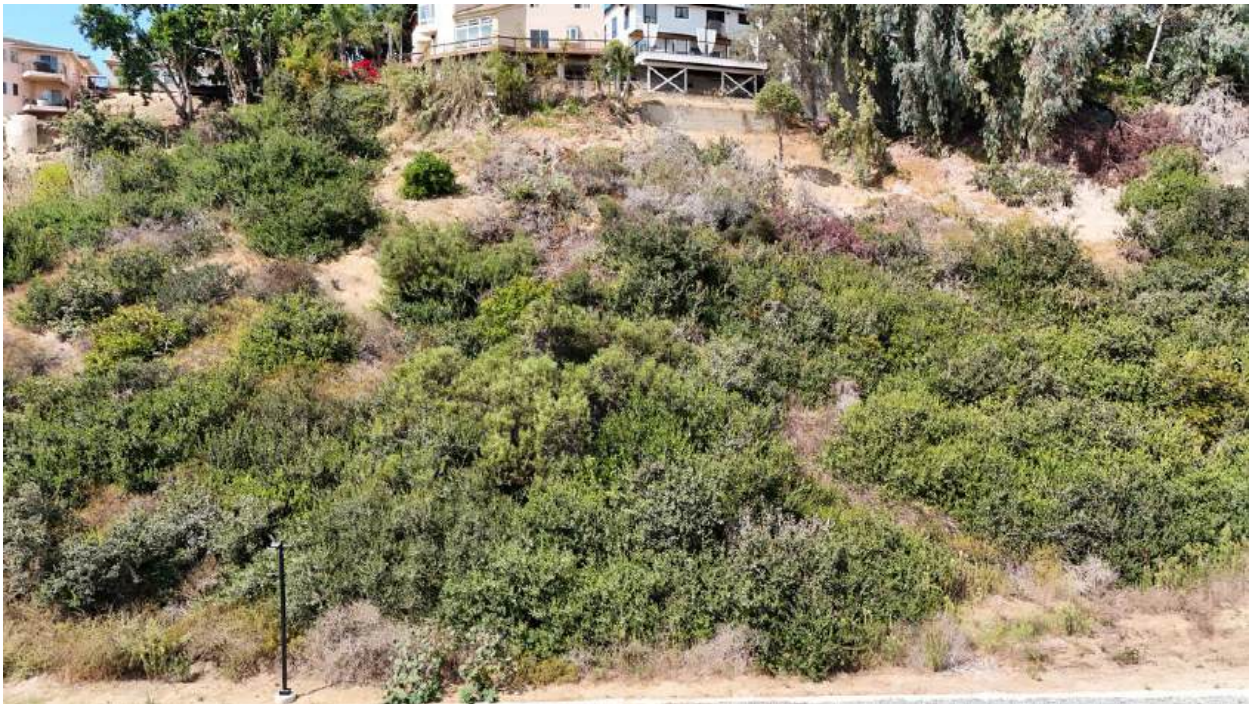
Site Photographs (September 2025)

Note 1: Photos progress from the Southwestern property boundary North then West along the open space easement.













Note 2: Additional supplementary panoramic photos. Photos progress from the Southwestern property boundary North then West along the open space easement.



--- End of Document ---



Proposal

Date: October 9, 2026
To: Tom Falk, Senior Project Manager
From: Kevin Shaw, Ecology Director
Bradley Nussbaum, Operations Director
Re: **SEJPA Fire Risk Reduction and Open Space Management Implementation Proposal**

Summary

In cooperation with the San Elijo Joint Powers Authority (SEJPA), Nature Collective proposes a project to implement the Fire Risk Reduction and Open Space Management Plan (Plan) for the San Elijo Water Campus (Campus). Our goal is to reduce fire risk for the SEJPA and neighboring properties through habitat restoration and ongoing maintenance tasks. The scope of work includes: i) monthly maintenance of the pedestrian path fuel break, ii) invasive species treatment and restoration of the slope toe to a low-fuel band, iii) invasive species treatment and restoration of the mid-slope transitional zone into a native vegetation mosaic, iv) invasive species treatment and restoration of the slope crest setback along adjacent property lines, v) defensible space maintenance around the main facilities and structures in the Campus and revegetation with native plant landscaping, and vi) invasive species treatment, native vegetation restoration, and maintenance of active use areas in the northern staging area. The completed restoration following the Plan will demonstrate balanced wildfire planning, vegetation management, and open space management at the SEJPA Campus.

Background:

With increasing fire risk in coastal Southern California, the need to proactively manage vegetation in the wildland-urban interface has become critical. The San Elijo Water Campus is a 28-acre property located in Encinitas, CA adjacent to the San Elijo Lagoon Ecological Reserve. The Campus includes approximately 8.5 acres of designated open space flanking the western property boundary. The sensitive habitat located along the sloped terrain is a significant ecological resource. Through preparation of the Fire Risk Reduction and Open Space Management Plan, Nature Collective documented 4.47 acres of native plant communities in need of management, 3.94 acres of non-native plant communities in need of treatment and restoration, and 3.71 acres of landscaping in need of maintenance.

This project seeks to implement the Plan across the Campus by reducing hazardous fuels, restoring native vegetation, managing active use areas, and coordinating with the SEJPA and local fire management agencies to protect community infrastructure and ecological resources.

Proposal:

Over a 5-year timeframe Nature Collective will implement the Plan in six tasks following the phasing for each of the fire risk priority areas identified by the Plan for the Campus. We will follow the three priority levels, High (Priority 1), Medium (Priority 2), and Low (Priority 3), used to categorize each area based on both fuel load and contextual risk. We will phase our work following recommendations in the plan to address areas of the highest priority level while planning our ability to access sloped areas to restore them without damaging other restored areas and reducing the duration of exposed slope soils. The goal of this project is to implement the Plan through an operationally feasible approach to address fire risk, vegetation management, and open space habitat management.

Nature Collective proposes the following tasking breakdown based on the management sections identified in the Plan. However, the timing of task implementation by year reflects Nature Collective's proposed approach for addressing the high priority areas and areas around the main facilities, structures, and northern staging area in the first 2-3 years of the project, followed by continued maintenance throughout the 5-year project.



Tasks:

1. Pedestrian Path Fuel Break (Years 1-5; 0-2 feet from the pedestrian pathway)
 - 1.1. Monthly treatment and maintenance

Initially treat all non-native plants followed by routine clearance of the pathway and shoulder swale of woody debris and trash. Restore the shoulder swale with a DG hardscape or similar and disrupt fuel continuity between native shrubs with very low native plants (grasses and forbs <18 inches in height).
2. Slope Toe Low-Fuel Band (Years 3-5; 2-60 feet from the pathway)
 - 2.1. Non-native vegetation removal and treatment

Remove all Eucalyptus and acacia species and herbaceous non-native vegetation consisting primarily of black mustard in year 3 of the project to maintain slope stability and minimize exposed soils from vegetation removal during rainy seasons. Cut and stump treat with herbicide to minimize retreatment needs and reduce vertical fuel continuity by removing lower limbs of native tree species and disrupt fuel continuity between native shrubs.
 - 2.2. Revegetation

Restore the slope toe in year 3 using a Diegan Coastal Sage Scrub hydroseed mix to create spaced-out groups of native shrubs while maintaining existing bare ground, rock, and low native plant areas.
 - 2.3. Maintenance & Retreatments

Retreat any non-native vegetation and maintain space between native shrubs as they grow during years 3-5.
3. Slope Transition Mosaic (Years 1-4; 60-160 feet from pathway)
 - 3.1. Non-native vegetation removal and treatment

Cut and stump palms, eucalyptus, and acacia trees and herbicide treat other non-native plants, including castor bean, in years 2 and 3 of the project.
 - 3.2. Slope stabilization

Stabilize slopes with straw wattle immediately following non-native vegetation removal before native vegetation grows in to minimize erosion.
 - 3.3. Revegetation

Retain native vegetation and hydroseed a mosaic of native chaparral with 10–15-foot gaps composed of DCSS plants <36 inches in height. Hydroseeding will follow straw wattle installation.
 - 3.4. Maintenance & Retreatments

Retreat any non-native vegetation and conduct maintenance sweeps of native vegetation in years 3-5.
4. Slope Crest Setback (Years 1-4; last 20 feet to the Western property boundary)
 - 4.1. Non-native vegetation removal and treatment



Removal and herbicide treatment of all non-native plants, including palms, castor bean, and giant reed, in the first year of the project. Disrupt fuel continuity between existing native shrubs and prune trees and shrubs to limit ladder fuels and avoid direct contact with fences and structures.

4.2. Slope stabilization

Stabilize slopes with straw wattle immediately following non-native vegetation removal before native vegetation grows in to minimize erosion.

4.3. Revegetation

Hydroseed with native Southern Mixed Chaparral and DCSS mixes and maintain short shrubs isolated by very low native plants, such as grasses and forbs.

4.4. Maintenance and Retreatments

Retreat any non-native vegetation and conduct maintenance sweeps of native vegetation in years 2-4.

5. Main Facilities and Structures (Years 1-4)

5.1. Non-native vegetation removal and treatment

Cut and stump Brazilian pepper trees, clear dead branches, remove vines, maintain low understories, lollipop and thin the HOA tree screen in the southeast corner, and treat non-native vegetation around the facilities and solar arrays, especially black mustard and crown daisy.

5.2. Revegetation

Revegetate the southeast corner of the facility and areas near the eastern flank with DCSS and native grassland species.

5.3. Maintenance and Retreatments

Retreat any non-native vegetation and conduct routine maintenance throughout the facilities and under solar arrays in years 2-4.

6. Northern Staging Area (Years 1-4)

6.1. Non-native vegetation removal and treatment

Establish active use areas distinct from inactive vegetation areas in year 1 and remove and herbicide treat any non-native vegetation, including black mustard, crown daisy, and castor bean.

6.2. Revegetation

Hydroseed inactive vegetation areas with a DCSS mix and maintain islands of shrubs with 10-20-foot gaps composed of low native grasses and forbs.

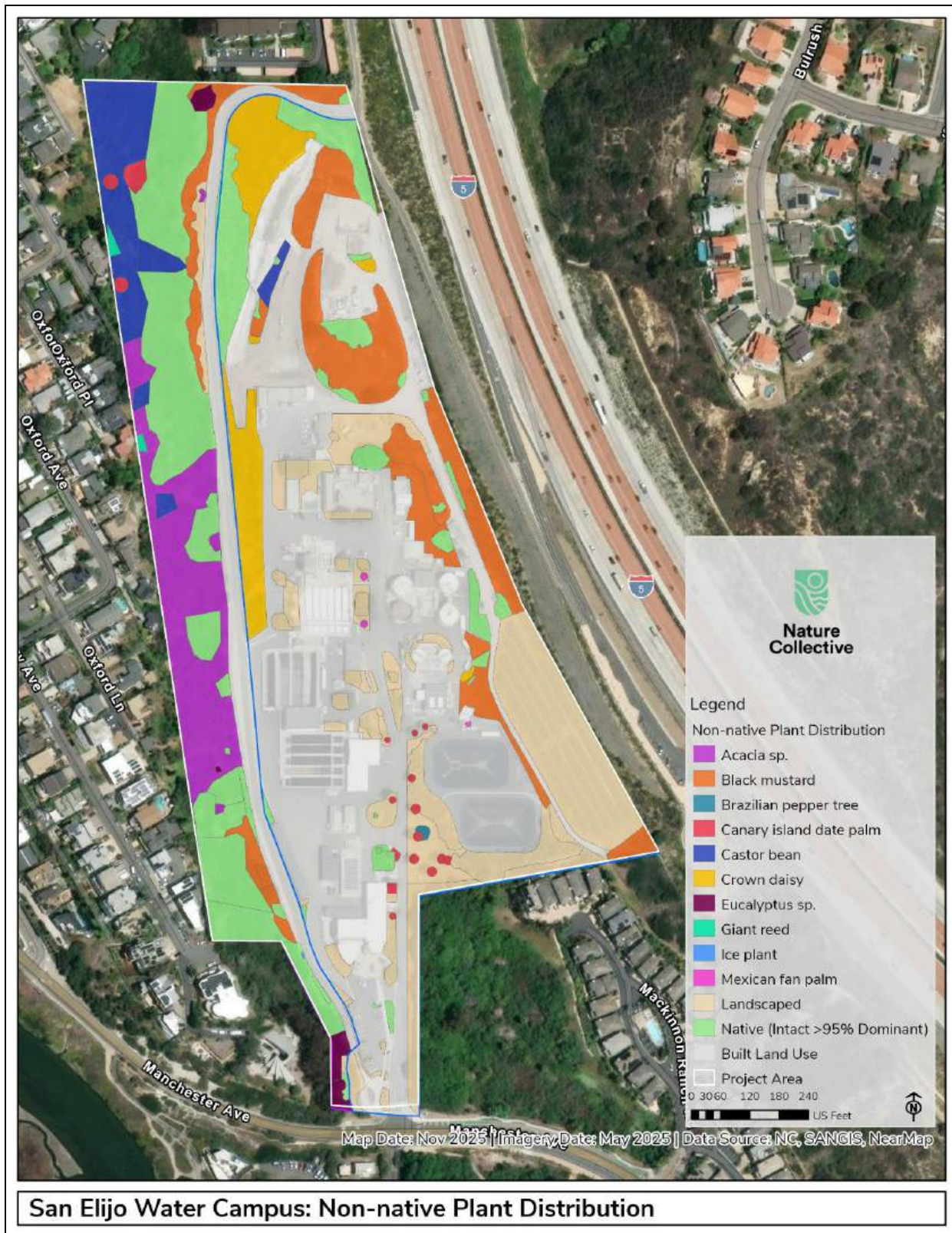
6.3. Maintenance and Retreatments

Conduct maintenance and retreatment sweeps in years 2-4 to address any non-native vegetation and maintain low growth and gaps between native shrubs.



Budget:

Task No.	Task Name	Sub-Task No.	Details	Year 1 Costs	Year 2 Costs	Year 3 Costs	Year 4 Costs	Year 5 Costs	Total Costs
1	Pedestrian path fuel break	1.1	Monthly treatment	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 30,000.00
2	Slope Toe Low-fuel Band	2.1	Non-native Vegetation Removal			\$ 23,600.00			\$ 23,600.00
		2.2	Revegetation			\$ 11,050.00			\$ 11,050.00
		2.3	Retreatments	\$ -	\$ -	\$ 4,500.00	\$ 4,500.00	\$ 4,500.00	\$ 13,500.00
3	Slope Transition Mosaic	3.1	Non-native Vegetation Removal		\$ 55,000.00	\$ 20,000.00			\$ 75,000.00
		3.2	Straw wattle installation		\$ 12,800.00	\$ 4,800.00			\$ 17,600.00
		3.3	Revegetation		\$ 20,800.00	\$ 7,800.00			\$ 28,600.00
		3.4	Retreatments	\$ -	\$ -	\$ 15,000.00	\$15,000.00	\$15,000.00	\$ 45,000.00
4	Slope Crest Setback	4.1	Non-native Vegetation Removal	\$18,000.00					\$ 18,000.00
		4.2	Straw wattle installation	\$ 4,800.00					\$ 4,800.00
		4.3	Revegetation	\$ 7,800.00					\$ 7,800.00
		4.4	Retreatments	\$ -	\$ 5,100.00	\$ 5,100.00	\$ 5,100.00	\$ -	\$ 15,300.00
5	Main Facilities and Structures	5.1	Non-native Vegetation Removal	\$ 8,400.00					\$ 8,400.00
			Landscaping maintenance	N/A					\$ -
		5.2	Revegetation	\$13,000.00					\$ 13,000.00
		5.3	Retreatments	\$ -	\$ 4,500.00	\$ 4,500.00	\$ 4,500.00	\$ -	\$ 13,500.00
6	Northern Staging Area	6.1	Non-native Vegetation Removal	\$ 8,600.00					\$ 8,600.00
		6.2	Revegetation	\$31,200.00					\$ 31,200.00
		6.3	Retreatments	\$ -	\$ 9,000.00	\$ 9,000.00	\$ 9,000.00	\$ -	\$ 27,000.00
Capital Subtotal				\$91,800.00	\$ 88,600.00	\$ 67,250.00	\$ -	\$ -	
Maintenance Subtotal (Monthly treatments and retreatments)				\$ 6,000.00	\$ 24,600.00	\$ 44,100.00	\$44,100.00	\$25,500.00	
Total				\$97,800.00	\$113,200.00	\$111,350.00	\$44,100.00	\$25,500.00	\$391,950.00
Percentage				25%	29%	28%	11%	7%	100%



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501(c)(3) Tax ID: 33-0358660

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

October 20, 2026

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: Deputy General Manager

SUBJECT: AWARD CONSTRUCTION PHASE CONTRACTS FOR THE AERATION BASIN
MIXING PROJECT

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize the General Manager to award and execute a contract for the construction of the Aeration Basin Mixing Project to SS Mechanical Construction Corp in the lump sum amount of \$159,365; and
2. Authorize the General Manager to amend existing construction management and inspection contract with Valley CM for construction management services for the Aeration Basin Mixing Project in an amount not to exceed \$39,900; and
3. Discuss and take action as appropriate.

BACKGROUND

The aeration basins are an important component of San Elijo Water Campus (SEWC) biological treatment process, where microorganisms treat wastewater before it is recycled or discharged to the ocean. The aeration basins include anaerobic zones that require adequate mixing to keep solids suspended and prevent septic conditions that can disrupt treatment. Staff has evaluated mixing technologies over time and, during the past three years, pilot-tested large-bubble mixers in Aeration Basins Nos. 2 and 3. Field testing demonstrated that the mixers keep solids in suspension, prevent accumulation, and improve process reliability.

Based on these results, staff recommend constructing a permanent large-bubble mixing system. The mixers were included in the larger Biological Treatment Improvements Project, which was placed on hold in late 2024. Because the mixing system is a priority upgrade, staff is advancing it separately.

DISCUSSION

SEJPA is strategically aligning implementation of the bubble mixer improvements with the upcoming late-fall construction window, when treatment conditions are expected to allow the aeration basins to be temporarily taken offline for planned maintenance. This approach takes advantage of a favorable operational window while supporting efficient project execution and minimizing disruption to treatment operations. To support implementation within the limited construction window available for basin shutdowns, SEJPA pre-procured sixteen (16) large bubble mixers under the General Manager's procurement authority. Installation requires a construction contractor to install the mixers and associated air piping modifications to feed process air from the existing blowers. Construction will be sequenced to maintain at least one of the two aeration basins in service at all times, preserving treatment capacity and operational continuity.

The request for bids (RFB) for the Aeration Basin Mixing Project was posted on SEJPA's online procurement portal, PlanetBids, on August 24, 2026, and publicly advertised in The Coast News Group on August 28, 2026 and September 04, 2026. A pre-bid meeting was held on September 3, 2026 followed by a site visit on the same day. A total of 33 companies accessed the bidding documents via PlanetBids, including 20 general contractors registered as "prime" bidders. On September 24, 2026, SEJPA received five bids for the Aeration Basin Mixing Project, as shown in Table 1. The bids were evaluated for compliance with the advertised requirements, the contractor's ability to perform the work, and the submitted bid price. SEJPA also checked references for the apparent low bidder, receiving favorable feedback from two southern California agencies on projects that were similar in scope and scale.

Table 1 – Aeration Basin Mixing Project Tabulation

Company	Bid Price (low to high)*
SS Mechanical Construction Corp.	\$ 159,365.00
Tharsos, Inc	\$ 218,980.00
SCW Contracting Corporation	\$ 242,977.00
HPS Mechanical, Inc.	\$ 274,101.00
Levon Construction Group	\$ 346,600.00

Based on SEJPA's evaluation, staff recommends awarding the project to SS Mechanical Construction Corp., the lowest responsive and responsible bidder.

The project requires dedicated construction management and inspection (CM&I) services to support construction within the identified limited seasonal window when the aeration basins can be taken out of service. CM&I services will include construction documentation, onsite coordination with SEJPA's Operations and Maintenance teams, schedule management, and inspection of installed work. Given the limited construction window available for basin shutdowns and the need to coordinate the work with ongoing treatment operations, Staff recommends amendment to existing Valley CM contract in the amount of \$39,900. Valley CM's successful performance on the Biosolids Dewatering Improvements Project and familiarity with SEJPA's facilities and operational requirements provide continuity and reduce project coordination and execution risks.

FINANCIAL IMPACT

The Aeration Basin Mixing project was identified as a priority project in the current capital program and will be funded through previously collected wastewater capital funds. The estimated project appropriation is shown in Table 2.

Table 2 – Aeration Basin Mixing Project Appropriation

Project Element	Budget
Engineering/Design (Trussell Technologies) ¹	\$ 30,000
Mixing Units (Pre-Purchased, ENG Designs) ²	45,600
Construction Contract (SS Mechanical)	159,365
Construction Management & Inspection (Valley CM)	39,900
Legal, Administration, and Project Delivery Services ³	15,000
Construction Contingency (10%) ⁴	29,000
TOTAL	\$ 318,865
<i>Notes:</i> 1. Engineering/Design completed by Trussell (continuation of prior engineering work) 2. Mixing units pre-purchased from ENG Designs 3. Includes engineering services during construction and project management 4. Contingency budgeted at 10% of expected project costs.	

RECOMMENDATION

1. Authorize the General Manager to award and execute a contract for the construction of the Aeration Basin Mixing Project to SS Mechanical Construction Corp. in the lump sum amount of \$159,365.
2. Authorize the General Manager to amend existing construction management and inspection contract with Valley CM for construction management services for the Aeration Basin Mixing Project in an amount not to exceed \$39,900; and
3. Discuss and take action as appropriate.

Respectfully submitted,



Tom Falk, P.E., PMP
Deputy General Manager

Attachment 1: SS Mechanical – Bid Proposal, September 24, 2026

Attachment 2: Valley CM Construction Management Proposal, September 27, 2026

This form is required to be submitted with the Bid.

BID FORM

Bid Form Cover Page

TO: SAN ELIJO JOINT POWERS AUTHORITY
CARDIFF BY THE SEA, CALIFORNIA

BIDDER: SS Mechanical Construction Corp.

FOR: Aeration Basin Mixing Project

UNDERSIGNED, AS BIDDER, HEREBY AGREES AND DECLARES THAT:

Pursuant to, and in compliance with, the Notice Inviting Bids and the other documents relating thereto, the undersigned bidder, being fully familiar with the terms of the Contract Documents, local conditions affecting the performance of the Contract, the character, quality, quantities, and scope of the Work, and the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, materials, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the Contract and complete, in a workmanlike manner, all of the Work required in connection with the construction of said Work all in strict conformity with the Plans and Specifications and other Contract Documents, for the prices hereinafter set forth. This Bid, as presented herein, is irrevocable, and may not be withdrawn for a period of ninety (90) days after the date set for the opening of Bids, except in accordance with the withdrawal of Bid provisions of the Instructions for Bidders.

Further, the undersigned proposes and agrees, if the Bid is accepted, that he/she will execute a Contract with SEJPA in the form set forth in the Contract Documents and that he/she will accept in full payment thereof the following prices to wit:

COMPANY DATA

Legal name of Bidder: SS Mechanical Construction Corp.

The full names and residences of all persons and parties interested in the foregoing Bid Form as principals are as follows:

(NOTICE: Give first and last names in full; in case of corporation, give names of President, Secretary, Treasurer, and Manager, and in case of partnerships and joint ventures, give names and Post Office addresses of all the individual members.)

John Whelan - President

Chris Powers - Secretary

Javier Lopez - Treasurer

Business address: 33208 Paseo Cerveza, Unit D
San Juan Capistrano, CA 92675

Telephone 714-847-1317
Facsimile N/A
Contact John Whelan
Email john@ssmechanical.com

California Contractor's License:

Type: A HAZ
No.: 1027264
Expiration Date: May 31, 2027

BID SHEET

Bidder shall complete the following Bid Sheet in its entirety.

Item	Description	Estimated Quantity	Unit Price	Extended Amount
1.	Furnish contract bonds, project insurance and permits	Lump Sum	N/A	\$ <u>4,300.⁰⁰</u>
2.	Mobilization/Demobilization including project closeout and cleanup (not to exceed three percent (3%) of the Total Bid Price)	Lump Sum	N/A	\$ <u>4,390.⁰⁰</u>
3.	Work for Aeration Basin Mixing Project	Lump Sum	N/A	\$ <u>150,675.⁰⁰</u>

Bidder shall total the extended amounts provided in the bid sheet to determine total bid price entered in the following:

Total Bid Price in Numerals: \$ 159,365.⁰⁰

Total Bid Price in Words: One Hundred Fifty Nine Thousand Three Hundred

The low bid will be determined based on the Total Bid Price listed above.

Sixty five

COSTS INCLUDED IN PRECEDING BID

The undersigned declares that the cost for all labor, materials, equipment, taxes, freight, insurance and incidentals necessary for the Work is included in the Total Bid Price including but not limited to: sheeting, shoring, and bracing, or equivalent method for the protection of life and limb in trenches and open excavation in conformance with applicable safety orders; prices quoted are F.O.B. job site, installed, tested and operational with all applicable sales taxes, State and/or Federal, and any other special taxes, patent rights, or royalties paid by the Bidder.

LIST OF SUBCONTRACTORS

The Bidder shall completely fill out the list below with the name and information of each subcontractor who will perform Work under this contract in excess of one-half of one percent (0.5%) of the Bidder's total bid price, and shall also list the portion of the Work which will be done by each such subcontractor. After the opening of proposals, no changes or substitutions will be allowed except as otherwise provided by law.

The Bidder understands that if the Bidder fails to list a subcontractor that will perform any portion of the Work to be performed under the contract in excess of one-half of one percent of the Bid, the Bidder shall be deemed to have represented that it is fully qualified to perform that portion of the work itself (which is subject to verification), and that Bidder has agreed to perform that portion of the work, and that the Bidder shall not be permitted to sublet or subcontract that portion of the Work except in cases of public emergency or necessity, and then only after a finding, reduced to writing as a public record of SEJPA, setting forth the facts constituting the emergency or necessity in accordance with the provisions of the Subletting and Subcontracting Fair Practices Act (Section 4100 et seq. of the California Public Contract Code). The Bidder may list one subcontractor for each portion of the work as described by the Bidder in the space provided below.

Circumvention by the Contractor of the requirement to list subcontractors by the device of listing one subcontractor who will in turn sublet portions constituting the majority of the Work covered by this Contract shall be considered a violation of Chapter 4 of the California Public Contract Code and shall subject the Contractor to the penalties set forth in Public Contract Code §§ 4110 and 4111. Contractor shall conduct substitutions of subcontractors in compliance with Public Contract Code Sections 4107 and 4107.5 detailing the process and conditions under which a public agency may consent to a subcontractor substitution. Attach additional sheets if necessary.

Contractor's Name & License Number	Place of Business	Value of Work (\$) / Percent of Total Contract	Type of Work
N/A			

CLOSING STATEMENT

In signing below, Bidder certifies that its Total Bid Price requests sufficient funds to allow Contractor to comply with all applicable laws or regulations governing the labor or services to be provided under the Contract. Furthermore, Contractor hereby indemnifies SEJPA for liabilities and penalties for violations of Labor Code Section 2810.

In conformance with current requirements of Section 1861 of the Labor Code of the State of California, the undersigned confirms the following as his certification:

I am aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for workers' compensation or undertake self-insurance in

accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the Work of this contract.

The undersigned has the legal authority to bind the Bidder to a contract for the execution of the Work object of this Bid Form.

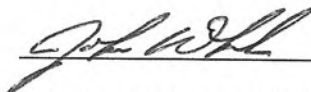
Addenda:

The undersigned acknowledges receipt of the following Addenda numbers:



Respectfully submitted by:

1, 2

 (signature)

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this statement was executed on
September 24, 2026 at
San Juan Capistrano, California.

Clearly printed name:

John Whelan

Position:

President

Seal:

Co-signed or attested:

(signature)

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this statement was executed on
_____, 20____ at
_____, California.

Clearly printed name:

Position:

***** END OF BID FORM *****

This form is required. This form must be submitted with a California All-Purpose Acknowledgment.

BIDDER'S BOND

(At Least 10 Percent of the Total Bid Price)

KNOW ALL PERSONS BY THESE PRESENT,

That, we SS Mechanical Construction Corp
as Principal, and
Swiss Re Corporate Solutions America Insurance Corporation
as Surety, are held and firmly bound unto the San Elijo Joint Powers Authority, California (the "Owner") in the sum of

Ten Percent of Bid Amount

Dollars

(\$ 10% of Bid)

such amount representing at least ten percent (10%) of the amount of the Total Bid Price to obtain the award of a contract for **the Aeration Basin Mixing Project** as specified and directed for a complete and operating installation (the "Contract") and to be paid to SEJPA, its successors and assigns, for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH,

That if the certain proposal of the above bounden SS Mechanical Construction Corp

is accepted by the said SEJPA and if the above bounden SS Mechanical Construction Corp

his heirs, executors, administrators, successors, and assigns, shall duly enter into and execute a Contract for such construction, and shall execute and deliver the Payment Bond, Performance Bond, and other Contract Documents described, within ten (10) days from the date of the award and notice to the above bounden

SS Mechanical Construction Corp

by and from the said SEJPA that said contract is ready for execution, then this obligation shall become null and void; otherwise it shall be and remain in full force and virtue.

IN WITNESS WHEREOF,

We hereunto set our hands and seals this 9th day of September, 2026.

Swiss Re Corporate Solutions America Insurance Corporation

Name of Surety

(Seal)

777 S. Figueroa St., Ste. 3700, Los Angeles, CA 90017

Address

(Attach here Acknowledgement on Standard Form)



Signature of Representative Wrenetta Walker, Attorney-In-Fact

(213) 457-6195

Telephone Number

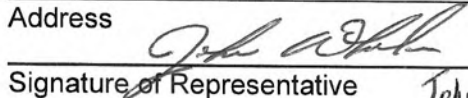
SS Mechanical Construction Corp

Name of Contractor

(Seal)

33208 Paseo Cervez Unit D, San Juan Capistrano, CA 92675

Address



Signature of Representative

John Whelan, President

(714) 847-1317

Telephone Number



*** END OF BIDDER'S BOND ***

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

STATE OF CALIFORNIA

COUNTY OF [County]

On

before me

Notary Public,

personally appeared _____

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

(SIGNATURE OF THE NOTARY PUBLIC)

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

☐ INDIVIDUAL

☐ CORPORATE OFFICER(S)

TITLE(S): _____

☐ PARTNERS

☐ LIMITED

☐ GENERAL

☐ ATTORNEY-IN-FACT

☐ TRUSTEE

☐ GUARDIAN/CONSERVATOR

☐ OTHER _____

TITLE OR TYPE OF DOCUMENT

NUMBER OF PAGES

DATE OF DOCUMENT

SIGNER IS REPRESENTING:

(NAME OF PERSON(S) OR ENTITY(IES))

SIGNER(S) OTHER THAN NAMED ABOVE

Right
Thumbprint
of Signer

ALL- PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

County of Orange }

On 9/9/26 before me, Susan E. Morales, Notary Public
(Here insert name and title of the officer)

personally appeared Wrenetta Walker
who proved to me on the basis of satisfactory evidence to be the person~~(s)~~ whose
name~~(s)~~ is/~~are~~ subscribed to the within instrument and acknowledged to me that
~~he/she/they~~ executed the same in ~~his/her/their~~ authorized capacity~~(ies)~~, and that by
~~his/her/their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of
which the person~~(s)~~ acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that
the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Susan E. Morales
Notary Public Signature

(Notary Public Seal)



ADDITIONAL OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

BIDDER'S BOND
(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages 2 Document Date 9/9/26

CAPACITY CLAIMED BY THE SIGNER

- ☐ Individual (s)
☐ Corporate Officer

(Title)

- ☐ Partner(s)
☒ Attorney-in-Fact
☐ Trustee(s)
☐ Other _____

INSTRUCTIONS FOR COMPLETING THIS FORM

This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he/she/they~~, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
 - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
 - ❖ Indicate title or type of attached document, number of pages and date.
 - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

SWISS RE CORPORATE SOLUTIONS

SWISS RE CORPORATE SOLUTIONS AMERICA INSURANCE CORPORATION ("SRCSAIC")
SWISS RE CORPORATE SOLUTIONS PREMIER INSURANCE CORPORATION ("SRCSPIC")
WESTPORT INSURANCE CORPORATION ("WIC")

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT SRCSAIC, a corporation duly organized and existing under laws of the State of Missouri, and having its principal office in the City of Kansas City, Missouri, and SRCSPIC, a corporation organized and existing under the laws of the State of Missouri and having its principal office in the City of Kansas City, Missouri, and WIC, organized under the laws of the State of Missouri, and having its principal office in the City of Kansas City, Missouri, each does hereby make, constitute and appoint:

TODD M. ROHM, CATHY S. KENNEDY, BEATA A. SENSI, CHERYL L. THOMAS, WRENETTA WALKER, and SHANE WOLF

JOINTLY OR SEVERALLY

Its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its act and deed, bonds or other writings obligatory in the nature of a bond on behalf of each of said Companies, as surety, on contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract or suretyship executed under this authority shall exceed the amount of:

FIFTY MILLION (\$50,000,000.00) DOLLARS

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both SRCSAIC and SRCSPIC at meetings duly called and held on the 18th of November 2021 and WIC by written consent of its Executive Committee dated July 18, 2011.

"RESOLVED, that any two of the President, any Managing Director, any Senior Vice President, any Vice President, the Secretary or any Assistant Secretary be, and each or any of them hereby is, authorized to execute a Power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Corporation bonds, undertakings and all contracts of surety, and that each or any of them hereby is authorized to attest to the execution of any such Power of Attorney and to attach therein the seal of the Corporation: and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Corporation may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be binding upon the Corporation when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached."



By Erik Janssens, Senior Vice President of SRCSAIC & Senior Vice President of SRCSPIC & Senior Vice President of WIC

By Gerald Jagrowski, Vice President of SRCSAIC & Vice President of SRCSPIC & Vice President of WIC



IN WITNESS WHEREOF, SRCSAIC, SRCSPIC, and WIC have caused their official seals to be hereunto affixed, and these presents to be signed by their authorized officers

this 10 day of NOVEMBER, 20 22

State of Illinois
County of Cook

SS

Swiss Re Corporate Solutions America Insurance Corporation
Swiss Re Corporate Solutions Premier Insurance Corporation
Westport Insurance Corporation

On this 10 day of NOVEMBER, 20 22, before me, a Notary Public personally appeared Erik Janssens, Senior Vice President of SRCSAIC and Senior Vice President of SRCSPIC and Senior Vice President of WIC and Gerald Jagrowski, Vice President of SRCSAIC and Vice President of SRCSPIC and Vice President of WIC, personally known to me, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as officers of and acknowledged said instrument to be the voluntary act and deed of their respective companies.



Christina Manisco
Christina Manisco, Notary

I, Jeffrey Goldberg, the duly elected Senior Vice President and Assistant Secretary of SRCSAIC and SRCSPIC and WIC, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney given by said SRCSAIC and SRCSPIC and WIC, which is still in full force and effect.

IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Companies this 9th day of SEPTEMBER, 20 26.

Jeffrey Goldberg, Senior Vice President & Assistant Secretary of SRCSAIC and SRCSPIC and WIC

This form is required to be submitted with the Bid. This form must be submitted with a California All-Purpose Acknowledgment.

NONCOLLUSION DECLARATION

To be executed by Bidder and submitted with Bid.

The undersigned declares: SS Mechanical
I am the President of Construction Corp. the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purposes.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on ____ [date], at ____ [city], ____ [state].

09/24/2026

San Juan Capistrano, CA



Signature of: President, Secretary,
Manager, Owner, or Representative

John Whelan, President

Clearly Print Name and Title

*** END OF NONCOLLUSION DECLARATION ***

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

STATE OF CALIFORNIA

COUNTY OF [County]

On

before me

Notary Public,

personally appeared _____

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

(SIGNATURE OF THE NOTARY PUBLIC)

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

☐ INDIVIDUAL

☐ CORPORATE OFFICER(S)

TITLE(S): _____

☐ PARTNERS

☐ LIMITED

☐ GENERAL

☐ ATTORNEY-IN-FACT

☐ TRUSTEE

☐ GUARDIAN/CONSERVATOR

☐ OTHER _____

TITLE OR TYPE OF DOCUMENT

NUMBER OF PAGES

DATE OF DOCUMENT

SIGNER IS REPRESENTING:

(NAME OF PERSON(S) OR ENTITY(IES))

SIGNER(S) OTHER THAN NAMED ABOVE

Right
Thumbprint
of Signer

See attached Correct Acknowledgment

CALIFORNIA ALL- PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

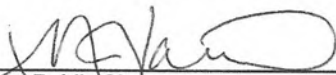
County of Orange }

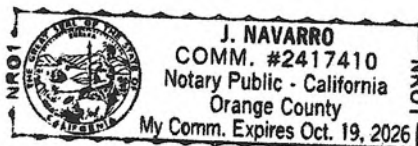
On September 24, 2026 before me, J. Navarro, Notary Public,
(Here insert name and title of the officer)

personally appeared John Whelan,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.


Notary Public Signature



(Notary Public Seal)

ADDITIONAL OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

NonCollusion Declaration

(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages 1 Document Date 09/24/2026

CAPACITY CLAIMED BY THE SIGNER

- ☐ Individual (s)
☒ Corporate Officer
 President
 (Title)
☐ Partner(s)
☐ Attorney-in-Fact
☐ Trustee(s)
☐ Other _____

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- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
 - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
 - ❖ Indicate title or type of attached document, number of pages and date.
 - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

This form is required to be submitted with the Bid.

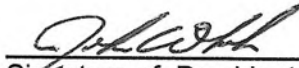
BIDDER'S STATEMENT REGARDING DEBARMENT

To be completed by Bidder and submitted with Bid.

- 1) Has your firm, or any firm with which any of your firm's owners/officers/partners was associated, or any of your subcontractors ever been debarred in the State of California?

 Yes No X

- 2) If yes, provide an attachment with more details, including the name(s) of the party debarred, the names of the agency(ies), and the period(s) of and reasons for debarment(s).

 /John Whelan, President
Signature of: President, Secretary,
Manager, Owner, or Representative

*** * * END OF STATEMENT REGARDING DEBARMENT * * ***

This form is required to be submitted with the Bid.

SURETY AND FINANCIAL STATUS

To be completed by Bidder and submitted with Bid.

A) List the name of all Surety Companies utilized during the last five years. Use additional sheets as necessary.

	Surety Name and Complete Address	Contact and Phone Number	Period Covered
A	Swiss RE Corporate Solutions America Inc. Corp. c/o AGRISURE	Shane Wolf 714-516-2960	06/20/2026 - 06/20/2027
B	611 Anton Blvd., Suite 1500 Costa Mesa, CA 92626		
C			
D			
E			

B) Was any surety required to complete any portion of the prospective bidder's projects in the last five years? If so provide the following information:

	Surety Name, Address, Contact and Phone	Year	Explanation
A	N/A		
B			
C			
D			

*** * * END OF SURETY AND FINANCIAL STATUS * * ***

This form is required to be submitted with the Bid.

SAFETY ACKNOWLEDGMENT

To be completed by Bidder and submitted with Bid.

The undersigned Contractor hereby acknowledges its obligation to ensure that all work performed on behalf of SEJPA for the Project is consistent with safety standards and practices for Contractor's business and as established by state, federal and local laws and regulations, including but not limited to applicable Occupational Safety and Health Administration regulations and safety orders. Contractor will maintain those safety programs, certificates and permits appropriate for the work for the duration of the Project, and will update its safety programs, certificates and permits as needed to reflect best practices and any changes in the scope of work. Contractor further acknowledges that it will ensure that its subcontractors maintain adequate safety programs that are necessary and appropriate for the work those subcontractors will perform on the Project. Contractor agrees to promptly provide a copy of any safety program documentation to SEJPA upon request.

Safety Checklist

Contractor acknowledges that for the duration of the Project, Contractor and/or its subcontractors will maintain, and provide adequate training to employees on, the safety program components marked "YES" below, and that those safety program components marked "N/A" (not applicable) are not necessary or appropriate for the Project work to be performed.

Safety Program Components	Category	Authority	YES	N/A
Boiler Safety	B&FPV	8 CCR §§ 750 - 797		X
General Construction	CSO	8 CCR §§ 1508 - 1527	X	
Dusts, Fumes, Mists, Vapors, and Gases	CSO	8 CCR §§ 1528 - 1537	X	
Excavations	CSO	8 CCR §§ 1539 - 1547	X	
Bins, Bunkers, Hoppers, and Material Storage	CSO	8 CCR §§ 1548 - 1549	X	
Derricks, Cranes, Boom-Type Excavators	CSO	8 CCR §§ 1581 - 1589	X	
Haulage and Earth Moving	CSO	8 CCR §§ 1590 - 1596	X	
Vehicles, Traffic Control, Flaggers, Barricades, and Warning Signs	CSO	8 CCR §§ 1597 - 1599	X	
Pile Driving	CSO	8 CCR §§ 1600 - 1601		X
Work Over or Near Water	CSO	8 CCR §§ 1602 - 1603		X
Construction Hoists	CSO	8 CCR §§ 1604 - 1605.21	X	
Cranes and Derricks in Construction	CSO	8 CCR §§ 1610 - 1619.5	X	
Standard Railings	CSO	8 CCR §§ 1620 - 1621	X	
Ramps, Runways, Stairwells, and Stairs	CSO	8 CCR §§ 1623 - 1626	X	
Access and Egress	CSO	8 CCR §§ 1629 - 1631	X	
Floor, Roof, and Wall Openings	CSO	8 CCR §§ 1632 - 1633	X	
Temporary Floors	CSO	8 CCR § 1635	X	
Scaffolds	CSO	8 CCR §§ 1635.1 - 1667	X	
Fall Protection	CSO	8 CCR §§ 1669 - 1672	X	
Ladders	CSO	8 CCR §§ 1675 - 1678	X	
Saws--Power	CSO	8 CCR §§ 1680 - 1682	X	
Powder-Actuated Tools	CSO	8 CCR §§ 1684 - 1692		X
Miscellaneous Construction Tools and Equipment	CSO	8 CCR §§ 1693 - 1708	X	
Erection and Construction	CSO	8 CCR §§ 1709 - 1722.1	X	

Roofing Operations and Equipment	CSO	8 CCR §§ 1723 - 1731	X	
Demolition	CSO	8 CCR §§ 1733 - 1737	X	
Oxygen, Acetylene, and Fuel Gas	CSO	8 CCR §§ 1739 - 1743	X	
Electrical Requirements for Construction Work	CSO	8 CCR § 1760	X	
Fire Protection and Prevention	CSO	8 CCR §§ 1920 - 1938	X	
Confined Spaces in Construction	CSO	8 CCR §§ 1950-1962	X	
Injury & Illness Prevention Program	GISO	8 CCR § 3203	X	
Personal Safety Devices and Safeguards	GISO	8 CCR §§ 3380 - 3400	X	
General Mobile Equipment and Auxiliaries	GISO	8 CCR §§ 3620 - 3920	X	
Confined Spaces	GISO	8 CCR §§ 5156 - 5159	X	
Hazardous Substances and Processes	GISO	8 CCR §§ 5160 - 5199		X
Diving	GISO	8 CCR §§ 6050 - 6120	X	
Clean Air Act and San Diego Air Quality Management District Compliance	Emissions	Misc.	X	
U.S. Department of Transportation Compliance	Transportation	Misc.		X
Coronavirus/COVID-19 Preparedness and Response Plan (or equivalent)	Emergency	Misc.	X	

In addition to those components described above, Contractor's safety program includes the following elements:

Emergency Action Lock Out/Tag Out, Confined Space and Confined Space Rescue, Employee Certificates, Heat Illness Prevention, Hot Work Permit, OSHA Annual Trench/Excavation Permit, Crystalline Silica Exposure Control Policy, Program & Procedure

By signing below, Contractor certifies that the above statements are true and correct.

Date: September 24, 2026

By: 

Name: John Whelan

Position: President

***** END OF SAFETY ACKNOWLEDGMENT *****

This form is required.

PROJECT EXPERIENCE

Each Bidder and key sub shall use this form to demonstrate required experience. Identify firm for whom the project is relevant, and number projects consecutively. Make as many copies as necessary to demonstrate required experience.

Firm (Bidder/Sub): <u>Prime</u>		Owner: Encina Wastewater Authority	
Project Reference: <u>1</u>			
Aeration Basin Diffuser - TO 1		James Kearns 760-801-9114 jkearns@encinajpa.com	
Project Name		Owner's Representative ⁽¹⁾ Owner Rep. Phone # and Email	
\$344,280.00	\$340,965.86	8/2025	245
Original Contract Value (Dollars)	Final Contract Value (Dollars)	Completion Date	Contract Time/Time Ex-tensions (Calendar Days)
			Penalties Imposed (Dollars)
			-0-
Design Engineer and Representative			
Description of Project and Relevance to Project Experience: The Work consists of replacement of existing diffuser membrane system in all Aeration Basins ¹ , 2, and 3			
Description of Change in Contract Value or Contract Time		Reduction of Scope	
Status of Claims, if any ⁽²⁾ :			
¹ Owner's Representative should be project manager or inspector resident engineer responsible for the work. ² Attach a list of all items claimed by the Owner to be in need of correction, describe item, cause of item and whether resolved to Owner's satisfaction.			

*** * * END OF PROJECT EXPERIENCE * * ***

This form is required.

PROJECT EXPERIENCE

Each Bidder and key sub shall use this form to demonstrate required experience. Identify firm for whom the project is relevant, and number projects consecutively. Make as many copies as necessary to demonstrate required experience.

Firm (Bidder/Sub): <u>Prime</u>		Owner: South Orange County Wastewater Authority	
Project Reference: <u>2</u>		Roni Young Grant rgrant@socwa.com 949-234-5410	
JBL Scum Line		Owner's Representative ⁽¹⁾	
Project Name		Owner Rep. Phone # and Email	
\$278,949.00	\$264,999.15	06/12/2025	-0-
Original Contract Value (Dollars)	Final Contract Value (Dollars)	Completion Date	Contract Time/Time Extensions (Calendar Days)
			Penalties Imposed (Dollars)
Design Engineer and Representative			
Description of Project and Relevance to Project Experience:		Removal and replacement of scum line at the Plant 1 Aeration Basin 1. Removal and replacement of all connections and appurtenances to connect the scum line into the existing system.	
Description of Change in Contract Value or Contract Time		Reduction of Scope	
Status of Claims, if any ⁽²⁾ :			

¹ Owner's Representative should be project manager or inspector resident engineer responsible for the work.

² Attach a list of all items claimed by the Owner to be in need of correction, describe item, cause of item and whether resolved to Owner's satisfaction.

*** * * END OF PROJECT EXPERIENCE * * ***

This form is required.

PROJECT EXPERIENCE

Each Bidder and key sub shall use this form to demonstrate required experience. Identify firm for whom the project is relevant, and number projects consecutively. Make as many copies as necessary to demonstrate required experience.

Firm (Bidder/Sub): <u>Prime</u>		Owner: Irvine Ranch Water District	
Project Reference: <u>3</u>			
INITIAL DISINFECTION FACILITY SODIUM HYPOCHLORITE FEED SYSTEM REPLACEMENT		mwe@irwd.com 949-453-5331	
Project Name		Owner's Representative ⁽¹⁾ Nang Mwe Owner Rep. Phone # and Email	
\$81,946.00	\$91,077.75	10/28/2025	120
Original Contract Value (Dollars)	Final Contract Value (Dollars)	Completion Date	Contract Time/Time Ex- tensions (Calendar Days)
		Penalties Imposed (Dollars)	
		-0-	
Design Engineer and Representative			
Description of Project and Relevance to Project Experience: The work involves replacement of two existing diaphragm sodium hypochlorite metering pumps, piping, valves, pulsation dampener with pressure gauge, high pressure switch, calibration column, and all related appurtenances at IDF.			
Description of Change in Contract Value or Contract Time		Additional Scope	
Status of Claims, if any ⁽²⁾ :			
¹ Owner's Representative should be project manager or inspector resident engineer responsible for the work. ² Attach a list of all items claimed by the Owner to be in need of correction, describe item, cause of item and whether resolved to Owner's satisfaction.			

**** * END OF PROJECT EXPERIENCE * * ***

This form is required.

PROJECT EXPERIENCE

Each Bidder and key sub shall use this form to demonstrate required experience. Identify firm for whom the project is relevant, and number projects consecutively. Make as many copies as necessary to demonstrate required experience.

Firm (Bidder/Sub): <u>Prime</u>		Owner: Encina Wastewater Authority	
Project Reference: <u>4</u>			
CWRf Chemical Feed Pump and Pipe Installation		Mike Norton 760-300-7464 mnorton@encinajpa.com	
Project Name		Owner's Representative ⁽¹⁾ Owner Rep. Phone # and Email	
\$46,894.82 Original Contract Value (Dollars)	\$46,894.82 Final Contract Value (Dollars)	07/10/2025 Completion Date	321 Contract Time/Time Ex- tensions (Calendar Days)
		-0- Penalties Imposed (Dollars)	
Design Engineer and Representative			
Eng. Rep. Phone # and Email			
Description of Project and The removal and disposal of existing chemical feed pumps and piping and installation of new Relevance to Project Ex- Owner Furnished pumps and new CPVC chemical piping at the hypochlorite station for the CWRf Facility perience:			
Description of Change in Contract Value or Con- tract Time			
Status of Claims, if any ⁽²⁾ :			
¹ Owner's Representative should be project manager or inspector resident engineer responsible for the work. ² Attach a list of all items claimed by the Owner to be in need of correction, describe item, cause of item and whether resolved to Owner's satisfaction.			

***** END OF PROJECT EXPERIENCE *****

This form is required.

PROJECT EXPERIENCE

Each Bidder and key sub shall use this form to demonstrate required experience. Identify firm for whom the project is relevant, and number projects consecutively. Make as many copies as necessary to demonstrate required experience.

Firm (Bidder/Sub): <u>Prime</u>		Owner: Orange County Sanitation District	
Project Reference: <u>5</u>			
Aeration Basin Disc Replacement		714-593-7586	
Project Name		dghazi@ocsan.gov	
		Owner Rep. Phone # and Email	
\$171,930.00	\$171,930.00	04/20/2023	365
Original Contract Value (Dollars)	Final Contract Value (Dollars)	Completion Date	Contract Time/Time Ex-tensions (Calendar Days)
			Penalties Imposed (Dollars)
			-0-
Design Engineer and Representative			
Contractor shall be responsible for the removal and disposal (OC San provide trash bins) of old membrane discs and the installation of new discs for each basin. There are approximately eight thousand five-hundred (8,500) membrane discs per basin, of which need to be replaced during this maintenance			
Description of Change in Contract Value or Contract Time			
Status of Claims, if any ⁽²⁾ :			
¹ Owner's Representative should be project manager or inspector resident engineer responsible for the work.			
² Attach a list of all items claimed by the Owner to be in need of correction, describe item, cause of item and whether resolved to Owner's satisfaction.			

***** END OF PROJECT EXPERIENCE *****



September 27, 2026

Tom Falk, PE
Deputy General Manager
San Elijo Joint Powers Authority
2695 Manchester Avenue
Cardiff by the Sea, CA92007

Subject: CM and Inspection Proposal for Aeration Basin Mixing Project (PN 13062)

Dear Mr. Falk,

Valley is pleased to propose the following cost proposal for CM&I services on the above project. The project duration is assumed at 50 calendar days (2 months) and required George Foote to provide CM and inspection services on a part-time basis averaging 5 hours/workday.

CM/Inspector-George Foote (4 hours per workday Inspection, 1 hour CM)

2 months @ 110 hours/month=220 hours

220 hours @ \$175/hour = \$38,500

Welding Inspection-Matt Krepling CWI

8 hours @ \$175/hour = \$1,400

Estimated Cost (T&M Not to Exceed): \$39,900.00

Please let me know if you have any questions regarding our proposal and we appreciate the opportunity to propose on this project for the city.

Sincerely,
Valley Construction Management

A handwritten signature in black ink, appearing to read 'Paul Mochel', written in a cursive style.

Paul Mochel, PE, CCM
Principal Construction Manager



SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

October 20, 2026

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: Deputy General Manager

SUBJECT: AMENDMENT FOR THE IMPLEMENTATION OF PRE-FILTER CHLORINATION
STUDY

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize General Manager to amend Professional Services Agreement with Trussell Technologies to an amount not to exceed \$88,056 for technical oversight of the Pre-Filter Chlorination Study; and
2. Discuss and take action as appropriate.

BACKGROUND

The San Elijo Joint Powers Authority (SEJPA) constructed the sand filters as part of the original Recycled Water Program in 2000. Under California's Title 22 Recycled Water regulations, filtration serves as a critical pretreatment step to remove suspended solids and other constituents that may interfere with downstream chlorine disinfection. Recycled water permit requirements establish limits for turbidity (measure of water clarity), minimum chlorine contact time and dosage (contact time "CT"), and total coliform as an indicator of treatment performance.

Although the sand filters consistently achieve compliant turbidity levels and the chlorine disinfection system always maintains the required CT, SEJPA continues to experience intermittent total coliform exceedances. These excursions require operational intervention and occasionally result in recycled water permit violations, despite otherwise satisfactory treatment performance.

SEJPA engaged Trussell Technologies (Trussell) to investigate the recurring coliform detections and evaluate potential treatment improvements. The investigation identified particle shielding associated with the sand filters as a likely contributing factor. Particles formed or released during filtration are suspected of shielding coliform bacteria from effective chlorine disinfection, allowing detections despite adequate chlorine exposure.

DISCUSSION

Trussell completed the feasibility assessment and developed an implementation plan to evaluate pre-filter chlorination, which introduces chlorine upstream of the sand filters rather than relying exclusively on downstream disinfection. The objective is to disinfect coliform bacteria before particles potentially form or accumulate in the filters and are shielded from chlorine exposure in the downstream chlorine contact basin. A similar approach has successfully addressed recurring coliform detections at another recycled water facility in San Diego County.

The recommended approach will be implemented as a full-scale demonstration using temporary modifications to the existing treatment facilities. The improvements will include chemical metering pumps, chlorine feed piping, chlorine residual monitoring instruments, and integration with the existing SCADA system. The system will be configured to maintain compliance with existing recycled water and ocean discharge permit requirements.

SEJPA's Operations and Mechanics teams will lead equipment and material procurement, installation, and system integration. Trussell will continue as the technical lead, providing startup assistance, operational guidance, water quality monitoring and data analysis during a six-month demonstration period. The study will evaluate treatment efficacy, optimize chlorine dosing, and document changes in coliform detections and overall recycled water treatment performance.

At the conclusion of the demonstration, Trussell will prepare a technical memorandum summarizing the results and recommending a long-term operational strategy and any permanent facility improvements necessary to sustain improved disinfection reliability.

The interim pre-filter chlorination demonstration represents a near-term opportunity to improve disinfection reliability while SEJPA advances longer-term modernization of the recycled water treatment facilities identified in the PREP Plan.

FINANCIAL IMPACT

Project costs will be funded through the Recycled Water Program operating reserves. The estimated project appropriation is shown in Table 1.

Table 1 – Pre-Filter Chlorination Study Appropriation

Project Element	Budget
Engineering Feasibility, Planning, and Implementation Phase (Trussell Technologies) ¹	\$ 88,056
Implementation Phase Materials and Installation ²	55,500
Legal, Administration, and Project Delivery Services ³	25,000
Construction Contingency (10%) ⁴	17,000
TOTAL	\$ 185,556
Notes: 1. Amended contract with Trussell (continuation of feasibility and planning work) 2. SEJPA direct sourcing equipment, materials, and parts; installation 3. Includes project management and owner's engineering services 4. Contingency budgeted at 10% of estimated study cost.	

RECOMMENDATION

It is recommended that the Board of Directors:

1. Authorize General Manager to amend Professional Services Agreement with Trussell Technologies to an amount not to exceed \$88,056 for technical oversight of the Pre-Filter Chlorination Study; and
2. Discuss and take action as appropriate.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "C. Falk", is positioned above a horizontal line.

Thomas C. Falk, P.E., PMP
Deputy General Manager

Attachments:

Attachment 1: Amendment 1: Pre-Filter Chlorination Study Implementation (Trussell)

**AMENDMENT 1 TO PROFESSIONAL SERVICES AGREEMENT
FOR PRE-FILTER CHLORINATION SUPPORT**

This **AMENDMENT 1** is made and entered into on this 20th day of October 2026, by and between the **San Elijo Joint Powers Authority**, hereinafter referred to as "AUTHORITY", and **Trussell Technologies, Inc.** hereinafter referred to as "CONSULTANT".

WITNESSETH:

WHEREAS, on April 29, 2026, the AUTHORITY entered into an Agreement with CONSULTANT for the Pre-Filter Chlorination Support services in the amount of \$24,012; and

WHEREAS, the AUTHORITY and CONSULTANT agree that the additional services described in Exhibit 1 of this AMENDMENT 1 shall not exceed **\$64,044** unless otherwise agreed to by both parties in writing.

NOW THEREFORE, the AUTHORITY and CONSULTANT agree to amend Sections 1.01 and 3.01 of the AGREEMENT as follows:

1.01 CONSULTANT will perform the deliverables within the scope described in Attachment A, *including additional scope defined in Amendment 1 – Exhibit 1*. Consultant will provide SEJPA with periodic reports regarding the progress of services performed, at SEJPA's request. Any changes to the scope of services or timeframes identified in Attachment A must be authorized by SEJPA in writing and shall be set forth as an amendment to this Agreement.

3.01 Compensation for all work performed under this Agreement, including labor, equipment, materials and services which CONSULTANT is obligated to perform, including all applicable taxes, for the services described in **Attachment A** shall not exceed **eighty-eight thousand, fifty-six dollars (\$88,056)**. This amount shall not be exceeded unless there is a change in scope of work, and agreed to in writing by both parties, and set forth in an amendment to this Agreement. Such amendment shall identify any change in compensation as a result of the change in scope of work. CONSULTANT and SEJPA agree that this fee was arrived at through arm's length negotiations between the parties. SEJPA shall make payments to CONSULTANT in response to duly submitted invoices in accordance with this Section.

All other provisions of the AGREEMENT shall remain unchanged.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed the day and year first above written.

SAN ELIJO JOINT POWERS AUTHORITY

CONTRACTOR

By: _____
Michael T. Thornton
General Manager

By: _____
R. Shane Trussell, President
Trussell Technologies, Inc.

Exhibit 1 – Amended Scope of Services

Continued support for the pre-filter chlorination demonstration phase (expected to commence January 2027), providing engineering and technical support for implementation of recommended approach described in the Pre-Filter Chlorination Testing Outline (Trussell, September 2026).

Included by reference (following pages):

- Amendment Proposal, Trussell Technologies, October 12, 2026



October 12, 2026

Tom Falk
San Elijo Joint Powers Authority
2695 Manchester Avenue
Cardiff by the Sea, California 92007

Subject: Pre-Filter Chlorination Implementation Support

Dear Tom,

We are pleased to submit this letter proposal to the San Elijo Joint Powers Authority (SEJPA) for your consideration. The attached proposal details the work that would be completed to support the implementation of pre-filter chlorination to help address the occasional total coliform detections experienced at the San Elijo Water Campus (SEWC).

I am available to discuss this proposal in further detail as needed.

Respectfully, Trussell Technologies, Inc.

A handwritten signature in black ink that reads "Brett Faulkner". The signature is written in a cursive, flowing style.

Brett Faulkner, P.E. Enclosure: Scope of Work, Schedule, Budget, and Rate Sheet



SCOPE OF WORK

The SEWC experiences occasional coliform detections that have resulted in concerns with recycled water permit compliance. The coliform detections are not directly correlated to treatment upsets or specific activities at SEWC and are a result of particle shielding associated with the granular media filters (GMF). The long-term solution/plan is to replace the granular media filters (GMF) with membrane filtration (MF), however this will take several years to fund, design, and construct. Therefore, this scope of work outlines tasks to support SEJPA staff with implementing pre-filter chlorination at SEWC to reduce coliform detections associated with particle shielding. A similar approach was implemented at another recycled water facility in San Diego County, which solved their coliform issues. Trussell worked closely with SEJPA staff to develop an outline of proposed modifications and testing approach for pre-filter chlorination was finalized in September 2026. The outline summarizes system modifications and activities to implement and evaluate pre-filter chlorination and includes applicable NPDES permit considerations, proposed sodium hypochlorite feed and monitoring equipment, electrical and controls requirements, the proposed testing strategy, and additional sampling and laboratory analyses needed to evaluate performance. This scope of work will allow Trussell to support SEJPA with the implementation of pre-filter chlorination.

Task 1: Pre-Filter Chlorination Implementation Support

Trussell will support with the implementation of pre-filter chlorination at SEWC. SEJPA staff will lead the installation and integration of the proposed system modifications that were summarized in the testing outline. Trussell will then support up to 6 months of initial testing of the system. Support will consist of guidance on implementing the testing protocol, routine data analysis, operational support, and communication with SEJPA staff. Up to three site visits are included to allow Trussell to help with system startup, troubleshooting, or investigate system operation and/or performance. Trussell will work with SEJPA staff to streamline data sharing and will create Excel spreadsheets for use by SEJPA operations staff for the duration of the 6-month test. Trussell will review the online and lab data routinely and provide feedback and recommendations. Bi-weekly (i.e., every 2 weeks) progress meetings will be conducted to discuss the ongoing results and inform any adjustments to the chlorine dosing at the pre-filter addition point, the existing CCB addition point, and the tertiary treatment process.

Task 2: Summary Technical Memorandum

Trussell will summarize the results from the six months of pre-filter chlorination testing into a technical memorandum (TM). The TM will provide the recommended long-term operational strategy to reduce the risk of coliform detections and outline any capital improvements needed for implementation. If pre-filter chlorination proves to be effective at reducing coliform, the TM will explore whether the lower coliform counts resulted from a reduction in biological particle shielding with associated removal of biological fouling in the filters, or from a reduction in chemical shielding associated with alum addition, or both.



Task 3: Project Management and Communication

This task allows for project management, budget tracking, invoicing, and project coordination.

SCHEDULE

The anticipated schedule is eight (8) months from the contract date and/or written notice-to-proceed.

BUDGET

The budget is \$64,044, based on time and the SEJPA discounted billing rates.

Task No.	Staff Classification	Trussell Technologies				Total
		Principal Engineer III	Supervising Engineer II	Engineer II	Total Labor Hours	
	Hourly Billing Rate	\$360	\$288	\$207		
1	Pre-Filter Chlorination Implementation Support	16	60	72	148	\$ 37,944
1.1	Installation and Integration Feedback	4	6	0	10	\$ 3,168
1.2	Field Testing and On-Site Support	0	12	12	24	\$ 5,940
1.3	Data Analysis and Process Tracking	0	18	36	54	\$ 12,636
1.4	Routine Bi-weekly Update Calls (Up to 12 Virtual)	12	24	24	60	\$ 16,200
2	Technical Memorandum	12	28	36	76	\$ 19,836
2.1	Draft TM	6	16	24	46	\$ 11,736
2.2	Draft TM Meeting (In Person)	4	4	4	12	\$ 3,420
2.3	Final TM	2	8	8	18	\$ 4,680
3	Project Management	0	16	8	24	\$ 6,264
3.1	Invoicing and Budget Tracking	0	8	8	16	\$ 3,960
3.2	Communication and Coordination with Operations Staff	0	8	0	8	\$ 2,304
TOTAL		28	104	116	248	\$64,044



TRUSSELL TECHNOLOGIES, INC.
HOURLY BILLING RATES

Effective: October 7, 2025

	Standard Billing Rates		San Elijo Joint Powers Authority Discounted Billing Rate	
	Normal Hourly Rate ¹	Expert Daily Rate ²	Normal Hourly Rate ¹	Expert Daily Rate ²
Senior Company Officer	\$ 400	\$ 4,800	\$ 360	\$ 4,320
Principal Engineer III	\$ 390	\$ 4,680	\$ 351	\$ 4,212
Principal Engineer II	\$ 370	\$ 4,440	\$ 333	\$ 3,996
Principal Engineer I	\$ 360	\$ 4,320	\$ 324	\$ 3,888
Supervising Engineer III	\$ 340	-	\$ 306	-
Supervising Engineer II	\$ 320	-	\$ 288	-
Supervising Engineer I	\$ 300	-	\$ 270	-
Senior Engineer III	\$ 280	-	\$ 252	-
Senior Engineer II	\$ 260	-	\$ 234	-
Senior Engineer I	\$ 250	-	\$ 225	-
Engineer II	\$ 230	-	\$ 207	-
Engineer I Senior Office Manager II	\$ 210	-	\$ 189	-
Associate Engineer II Senior Office Manager I	\$ 190	-	\$ 171	-
Associate Engineer I Office Manager III	\$ 185	-	\$ 167	-
Assistant Engineer II Office Manager II	\$ 175	-	\$ 158	-
Assistant Engineer I Office Manager I	\$ 155	-	\$ 140	-
Office / Lab Assistant II	\$ 145	-	\$ 131	-
Office / Lab Assistant I	\$ 125	-	\$ 113	-

1. Time will be billed in 15 minute increments
2. Time will be billed in increments of one day

Other Direct Costs

Mileage for vehicle use to be reimbursed at current IRS rate.
Travel, equipment rental and other direct costs to be reimbursed at actual cost plus 5%.

Outside Professional Services:

Outside professional services to be reimbursed at actual cost plus 15%

SAN ELIJO JOINT POWERS AUTHORITY
MEMORANDUM

October 20, 2026

TO: Board of Directors
San Elijo Joint Powers Authority

FROM: Deputy General Manager

SUBJECT: PROCLAMATION OF THE BOARD OF DIRECTORS HONORING MICHAEL THORNTON'S RETIREMENT AFTER 26 YEARS OF SERVICE TO THE SAN ELIJO JOINT POWERS AUTHORITY

RECOMMENDATION

It is recommended that the Board of Directors:

1. Adopt by motion a proclamation recognizing Michael T. Thornton for 26 years of dedicated service to the San Elijo Joint Powers Authority on the occasion of his retirement.

BACKGROUND

Michael T. Thornton, P.E., joined the San Elijo Joint Powers Authority (SEJPA) in October 2000 and was appointed General Manager in December 2002. Following 26 years of distinguished service to the Authority and the communities it serves, Mike will retire in November 2026.

DISCUSSION

Throughout his tenure, Mike has provided exceptional leadership and made lasting contributions to SEJPA, the communities it serves, and the broader water industry. His dedication to public service, environmental stewardship, and organizational excellence has helped shape the SEJPA into the organization it is today.

In recognition of his 26 years of distinguished service, the Board of Directors will present a proclamation honoring Mike's leadership, accomplishments, and lasting legacy.

FINANCIAL IMPACT

No Financial Impact

RECOMMENDATION

It is recommended that the Board of Directors:

1. Adopt by motion a proclamation recognizing Michael T. Thornton for 26 years of dedicated service to the San Elijo Joint Powers Authority on the occasion of his retirement.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "T. Falk", is positioned above a horizontal line.

Thomas C. Falk, P.E., PMP
Deputy General Manager