AGENDA IRVINE RANCH WATER DISTRICT ENGINEERING AND OPERATIONS COMMITTEE MEETING WEDNESDAY, SEPTEMBER 18, 2024

This meeting will be held in-person at the District's headquarters located at 15600 Sand Canyon Avenue, Irvine, California. The meeting will be held in the second floor SC Committee room. The meeting will also be broadcasted via Webex for those wanting to observe the meeting virtually.

To observe this meeting virtually, please join online using the link and information below:

Via Web: https://irwd.webex.com/irwd/j.php?MTID=m9e129594ac66632eb69ca632839aacf7

Meeting Number (Access Code): 2498 770 4587

Meeting password: umNJx8abx23

PLEASE NOTE: Webex observers of the meeting will be placed into the Webex lobby when the Board enters closed session. Participants who remain in the "lobby" will automatically be returned to the open session of the Board once the closed session has concluded. Observers joining the meeting while the Board is in closed session will receive a notice that the meeting has been locked. They will be able to observe the meeting once the closed session has concluded.

CALL TO ORDER	1:30 p.m.		
<u>ATTENDANCE</u>	Committee Chair: Committee Member:	Karen McLaughlin John Withers	<u></u>
ALSO PRESENT	Paul Cook Neveen Adly Jim Colston Rich Mori Jacob Moeder	Kevin Burton Paul Weghorst Jason Manning Eric Akiyoshi Harry Cho	Wendy Chambers Steve Choi Jose Zepeda Malcolm Cortez Alex Murphy

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the "chat" feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. Public comments are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 8:00 a.m. on Wednesday, September 18, 2024.

COMMUNICATIONS

- 1. Notes: Burton
- 2. Public Comments
- 3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted and determine which items may be approved without discussion.

ACTION

4. CONTROL SYSTEM PROGRAMMING SERVICES FOR THE MICHELSON WATER RECYCLING PLANT TERTIARY FILTER IMPROVEMENTS PROJECT CONSULTANT SELECTION

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with W.M. Lyles Co. in the amount of \$326,800 for control system programming services for the Michelson Water Recycling Tertiary Filter Improvements, Project 07892.

5. SEWER SIPHON IMPROVEMENT PHASE II VARIANCE NO. 1

Recommendation: That the Board authorize the General Manager to execute Variance No. 1 in the amount of \$214,777 with Woodard & Curran to provide engineering services during construction for the Sewer Siphon Improvements Phase II, Project 11841.

6. <u>TECHNOLOGY DRIVE AND ADA DRIVE RECYCLED WATER PIPELINE REPLACEMENT BUDGET ADDITION AND CONSULTANT SELECTION</u>

Recommendation: That the Board authorize the addition of Project 12979, Technology Drive and Ada Drive Recycled Water Pipeline Replacement, to the Fiscal Year 2024-25 Capital Budget in the amount of \$2,819,000, and authorize the General Manager to execute a Professional Services Agreement with MKN and Associates, Inc. in the amount of \$327,709 for engineering design services for the Technology Drive and Ada Drive Recycled Water Pipeline Replacement, Project 12979.

IRWD Engineering and Operations Committee Meeting September 18, 2024 Page 3

ACTION, continued

7. ON-CALL ENVIRONMENTAL CONSULTANT SELECTIONS

Recommendation: That the Board authorize the General Manager to execute Professional Service Agreements with ESA, Psomas, and Rincon to provide on-call CEQA/NEPA services for the next three years for not-to-exceed amounts of \$300,000 each and with Harmsworth Associates, Psomas, and ESA to provide on-call monitoring and permitting services for the next three years for not-to-exceed amounts of \$300,000 each.

OTHER BUSINESS

- 8. Directors' Comments
- 9. Adjournment

above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

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September 18, 2024

Prepared by: R. Ovcharenko / R. Mori

Submitted by: K. Burton

Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITTEE

CONTROL SYSTEM PROGRAMMING SERVICES FOR THE MICHELSON WATER RECYCLING PLANT TERTIARY FILTER IMPROVEMENTS PROJECT CONSULTANT SELECTION

SUMMARY:

The Michelson Water Recycling Plant (MWRP) Tertiary Filter Improvements project will rehabilitate the tertiary filters at this facility to improve performance and reliability by replacing deteriorating and obsolete equipment and infrastructure at the tertiary filter tanks area, air scour blower area, and the backwash supply pumps area. Staff solicited proposals from control system programming firms for programmable logic controller (PLC), supervisory control and data acquisition (SCADA), and operator interface terminal (OIT) programming services for the project.

Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement with W.M. Lyles Co. in the amount of \$326,800 for control system programming services for the MWRP Tertiary Filter Improvements project.

BACKGROUND:

The purpose of the project is to rehabilitate the tertiary filtration system, which includes replacement of obsolete equipment and infrastructure at the tertiary filter tanks area, air scour blower area, and the backwash supply pumps area. Items being rehabilitated include valves, slide gates, instrumentation, above-ground piping, yard piping, air compressor, air scour blower, backwash supply pumps, PLCs, electrical equipment, and electrical conduits. The scope also includes construction of a new masonry block electrical building, concrete rehabilitation at the backwash supply tank, temporary backwash supply pumping, and temporary instrumentation and control systems to allow the existing tertiary filters to remain in service throughout the construction phase. In May 2023, IRWD awarded construction of the project to Innovative Construction Solutions (ICS), and construction has been underway since then. The project is scheduled for completion in April 2026.

The control system programming for the project is a critical element that will ensure that the newly installed and upgraded control components are fully integrated into the existing MWRP SCADA system. The project includes installation and programming of two new permanent PLCs, one temporary PLC, two new OITs, and 11 new valve control panels.

The tertiary filters will remain in service throughout the duration of the construction. As such, the field startup and testing activities for the new control system components will be conducted in a series of twelve phases over thirteen months in which each phase will require four to five days of field support from the control system programmer.

Engineering and Operations Committee: Control System Programming Services for the Michelson Water Recycling Plant Tertiary Filter Improvements Project Consultant Selection September 18, 2024

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Consultant Selection:

Staff issued a Request for Proposal for control system programming services to three firms: Enterprise Automation, Prime Systems Industrial Automation, and W.M. Lyles Co. Staff received proposals from all three firms. While all three firms provided proposals that met the project objectives, W.M. Lyles Co.'s approach to the project exceeded that presented by the other firms. The proposed key members of the W.M. Lyles Co. team have successfully completed previous projects for IRWD, and those key team members are well-versed in the District's automation programming standards and requirements. In addition, W.M. Lyles Co.'s estimated total hours to complete the work closely aligned with staff expectations. The consultant selection matrix is provided as Exhibit "A", and W.M. Lyles Co.'s scope of work and fee proposal as Exhibit "B".

Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement in the amount of \$326,800 with W.M. Lyles Co.

FISCAL IMPACTS:

The MWRP Tertiary Filter Improvements, Project 07892, is included in the Fiscal Year 2024-25 Capital Budget. The existing budget is sufficient to fund the recommendation presented herein.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 which provides exemption for minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. A Notice of Exemption for the project was filed with the Orange County Clerk Recorder on April 2, 2021.

RECOMMENDATION:

That the Board authorize the General Manager to execute a Professional Services Agreement with W.M. Lyles Co. in the amount of \$326,800 for control system programming services for the Michelson Water Recycling Tertiary Filter Improvements, Project 07892.

LIST OF EXHIBITS:

Exhibit "A" – Consultant Selection Matrix

Exhibit "B" – Scope of Work and Fee Proposal

Exhibit "A"

CONSULTANT SELECTION MATRIX

	Control System Recycling	Programir Plant Terti							
Item	Description	Weights	Enterprise	Automation		ems Industrial ation, Inc.	W.M. Lyles Co.		
Α	TECHNICAL APPROACH								
1	Project Understanding	30%		2		3		1	
2	Project Approach		3		2		1		
3	Project Team	40%		2		3		1	
	Weighted Score		2	2.3	2	2.7	1.0		
	Ranking of Consultants			2		3	1		
В	SCOPE OF WORK								
TASK			Task Hours	FEE	Task Hours	FEE	Task Hours	FEE	
1	Project Management and Meetings		71	\$16,565	280	\$63,585	102	\$20,400	
2	Control System Software Configuration and Programming		733	\$165,794	582	\$131,532	1,001	\$200,200	
3	Field Startup and Testing		1,047	\$240,358	670	\$154,653	523	\$106,200	
	TOTAL PROGRAMMING SERVICES FEE		1,851	\$422,717	1,532	\$349,770	1,626	\$326,800	
С	<u>OTHER</u>								
	Exceptions taken to IRWD Std. Contract			one	N	one	None		
	Insurance (Professional & General Liability)	Y	'es	١	′es	Yes			

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Scope



PROJECT UNDERSTANDING:

The Michelson Water Recycling Plant (MWRP) is a vital facility within the Irvine Ranch Water District (IRWD), treating up to 28 million gallons per day (mgd) of sewage to produce Title 22 recycled water for unrestricted use throughout the service area. A critical component of this treatment process is the tertiary filtration system, which relies on seven dual media filters to ensure water quality meets regulatory standards. The current project aims to rehabilitate this filtration system by replacing obsolete equipment and infrastructure to maintain operational efficiency and compliance.

The scope of work involves significant upgrades to the tertiary filter tanks area, air scour blower area, and backwash supply pumpsarea. This includes the replacement of valves, slidegates, instrumentation, piping (both above-ground and yard piping), and other essential equipment such as air compressors, air scour blowers, backwash supply pumps, and programmable logic controllers (PLCs). Additionally, the project requires the construction of a new masonry block electrical building, rehabilitation of the backwash supply tank, and the installation of temporary systems to ensure continuous operation of the existing tertiary filters throughout the construction phase.

The control system programming for this project is a critical element, ensuring that the newly installed and upgraded components are fully integrated into the plant's operations. This includes the installation of a new PLC-810 for the tertiary filtration system, replacement of the existing PLC-53, installation of new operator interface terminals (OITs), and the configuration of new valve control panels across the filtration and valve vault systems. Moreover, the project requires modifications to the existing PLC-8 to accommodate new air scour blowers and the installation of a new PLC-1060 for the backwash supply pumps, alongside a temporary PLC-1060-Temp to manage the temporary backwash pump supply system.

PROJECT APPROACH:

With W. M. Lyles - System Integration Division's (The WML-SID) extensive history and experience in water and wastewater system integration, we understand that collaboration with the end-customer and system operators results in successful, high-quality projects. While each project may be unique, we find that taking a systematic approach and developing a clearly defined schedule provides transparency and open communication throughout the project. This approach ensures there are no surprises throughout the project lifecycle. For this project, we will leverage IRWD's well-defined "Workflow Sequence for Software Development and Testing" process and IRWD's programming standards, specifically the PLC control block library of DFBs and SCADA pre-built

templates and objects. Additionally, we will develop the required new process DFB's CtrlWTP001_Filter_t301 and Filter_t302 using IRWD's defined workflow for custom DFB development. Our team is adept with IRWD's standards and finds the process and use an effective means in achieving highly repeatable and consistent projects, from start to finish.

Due to the project being well-defined by IRWD with strong standards in place, the The WML-SID will follow the defined schedule set forth:

Kick-Off Meeting

Date: October 8, 2024

The Kick-Off meeting will involve the key team members to review the project. The The WML-SID will allocate a minimum of two (2) hours and will trigger steps 2 - 8 in the "Workflow Sequence".

Project Development

Steps 2 - 8 will cover all development and testing efforts associated with PLC-810 and PLC-1060.

Steps 9 - 16 will be divided into twelve (12) startup phases, allowing IRWD to maintain the filtration system throughout the improvement process. The The WML-SID will host four (4), two (2) hour design review meetings with IRWD as part of step three (3). Upon approval, we will host two (2), one (1) hour meetings for step four (4) quality review. The next stage is testing. The The WML-SID will adhere to IRWD's steps 5 - 7 process in developing a bench test plan, performing unwitnessed testing, then moving to step eight (8) and hosting four (4), eight (8) hour witnessed testing days at IRWD's facility. All the above-mentioned activities will occur prior to the Phase 1 startup date scheduled for February 2025.

Field Startup and Commissioning

Phase 1 - PLC-810 and SCADA Setup for Field Testing/ Startup

Estimated startup date: February 2025 The WML-SID will perform step 9 for Phase 1.

Phase 2 - Filter 7 Field Startup and Testing Estimated startup date: April 2025 The WML-SID will perform steps 9 10 - 16 for Phase 2.

Phase 3 - PLC-1060-Temp Field Startup and Testing Estimated startup date: June 2025 The WML-SID will perform steps 9 - 16 for Phase 3.

Phase 4 - Filter 6 Field Startup and Testing Estimated startup date: June 2025 The WML-SID will perform steps 10 - 16 for Phase 4.

Phase 5 - Filter 5 Field Startup and Testing Estimated startup date: August 2025 The WML-SID will perform steps 10 - 16 for Phase 5.

Phase 6 - Air Scour Blowers Startup and Testing and Modifications to Existing PLC-8 Estimated startup date: September 2025 The WML-SID will perform steps 10 - 16 for Phase 6.

Phase 7 - Filter 4 Field Startup and Testing Estimated startup date: September 2025 The WML-SID will perform steps 10 - 16 for Phase 7.

Phase 8 - Filter 3 Field Startup and Testing Estimated startup date: November 2025 The WML-SID will perform steps 10 - 16 for Phase 8.

Phase 9 - PLC-1060 Field Startup and Testing Estimated startup date: December 2025 The WML-SID will perform steps 9 - 16 for Phase 9.

Phase 10 - Filter 2 Field Startup and Testing Estimated startup date: January 2026 The WML-SID will perform steps 10 - 16 for Phase 10.

Phase 11 - Filter 1 Field Startup and Testing Estimated startup date: March 2026 The WML-SID will perform steps 10 - 16 for Phase 11.

Phase 12 - Final Cutover from Existing PLC-53 to PLC-810

Estimated startup date: March 2026

The WML-SID will perform steps 10 - 16 for Phase 12.

Project Handover

Upon completion of all twelve (12) phases, The WML-SID will handover all project documentation to IRWD in compliance with the workflow sequence, step 12.

Project Complete

April, 2026



MULTI-DISCIPLINARY APPROACH

Our approach ensures that we not only meet but exceed client expectations, reinforcing our reputation as a trusted partner in the Water & Wastewater Industry.

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1	MTG - Meetings	Project Kick-Off Meeting		2	1	1	1	1		16	22	0.1	10/8/2024	\$ 4,400.00	
1	MTG - Schedule Development	Generate Project Schedule to be presented to IRWD								32	32	0.1		\$ 6,400.00	
lisc	MTG - Project Scheduling	Project Coordination, Updates, & Scheduling								24	24	0.1		\$ 4,800.00	
2	WRK - Formal Workshop	Generate Agenda & Attend Design Review Meeting 1 (Step 2) - PLC-810								8	8	0.2		\$ 1,600.00	
2	WRK - Formal Workshop	Generate Agenda & Attend Design Review Meeting 2 (Step 2) - PLC-1060		4	2		1	1		8	16	0.2		\$ 3,200.00	\$ 20,400.00
2.5	IODB - Prepare IO Database	Generate PLC Config File - PLC-810 (Step 2 to 3)		14	2						16	0.3		\$ 3,200.00	
2.5	IODB - Prepare IO Database	Generate PLC Config File - PLC-810 (Step 2 to 3) - Quality Control Check		3							3	0.3		\$ 600.00	
2.5	IODB - Prepare IO Database	Generate PLC Config File - PLC-1060 (Step 2 to 3)		10	2						12	0.3		\$ 2,400.00	
2.5	IODB - Prepare IO Database	Generate PLC Config File - PLC-1060 (Step 2 to 3) - Quality Control Check		3							3	0.3		\$ 600.00	
2.5	IODB - Prepare IO Database	Generate PLC Config File - PLC-1060 Temp (Step 2 to 3)			6						6	0.3		\$ 1,200.00	
2.5	IODB - Prepare IO Database	Generate PLC Config File - PLC-1060 Temp (Step 2 to 3) - Quality Control Check		3							3	0.3		\$ 600.00	
2.5	PLC - Develop PLC Program	Generate CtrlWTP001_Filter_t301 Derived Function Block Code (Step 2 to 3)		20	4						24	0.4		\$ 4,800.00	
2.5	PLC - Develop PLC Program	Generate CtrlWTP001_Filter_t301 Derived Function Block Code (Step 2 to 3) - Quality Control Check				4					4	0.4		\$ 800.00	
3.5	PLC - Develop PLC Program	Generate Filter_t302 Derived Function Block Code (Step 3 to 4)		20	4						24	0.4		\$ 4,800.00	
3.5	PLC - Develop PLC Program	Generate Filter_t302 Derived Function Block Code (Step 3 to 4) - Quality Control Check				4					4	0.4		\$ 800.00	
2.5	OTS - Prepare Other Submittal	Generate Custom DFB Manual - CtrlWTP001_Filter_t301 (Step 2 to 3)		34			6			2	42	0.5		\$ 8,400.00	
2.5	OTS - Prepare Other Submittal	Custom DFB Manual - CtrlWTP001_Filter_t301 (Step 2 to 3) - Quality Control Check				6				2	8	0.5		\$ 1,600.00	
2.5	OTS - Prepare Other Submittal	Generate Custom DFB Manual - Filter_t302 (Step 2 to 3)		34			6			2	42	0.5		\$ 8,400.00	
2.5	OTS - Prepare Other Submittal	Custom DFB Manual - Filter_t302 (Step 2 to 3) - Quality Control Check				6				2	8	0.5		\$ 1,600.00	
3	OTS - Prepare Other Submittal	Generate Design Package 1 (DSPKG#01) - PLC-810 (Step 3). Includes Custom DFB Manuals, PLC Config Files, loop descriptions, & initial graphical framework.		2	26					2	30	0.5		\$ 6,000.00	
3	OTS - Prepare Other Submittal	Design Package 1 (DSPKG#01) - PLC-810 - Quality Control Check		4						2	6	0.5		\$ 1,200.00	
3	OTS - Prepare Other Submittal	Generate Design Package 1 (DSPKG#01) - PLC-1060 (Step 3). Includes Custom DFB Manuals, PLC Config Files, loop descriptions, & initial graphical framework.		2	22					2	26	0.5		\$ 5,200.00	
3	OTS - Prepare Other Submittal	Design Package 1 (DSPKG#01) - PLC-1060 - Quality Control Check		4						2	6	0.5	11/12/2024	\$ 1,200.00	\$ 53,400.00
3.5	PLC - Develop PLC Program	Generate PLC-810 PLC Program (Step 3 to 4)		24	112						136	0.6		\$ 27,200.00	

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3.5	PLC - Develop PLC Program	PLC-810 PLC Program(Step 3 to 4) - Quality Control Check		12							12	0.6		\$ 2,400.00	
3.5	PLC - Develop PLC Program	Generate PLC-1060 PLC Program (Step 3 to 4)		16	72						88	0.6		\$ 17,600.00	
3.5	PLC - Develop PLC Program	PLC-1060 Program (Step 3 to 4) - Quality Control Check		8							8	0.6		\$ 1,600.00	
3.5	PLC - Develop PLC Program	Generate PLC-1060 Temp Program (Step 3 to 4)		2			40				42	0.6		\$ 8,400.00	
3.5	PLC - Develop PLC Program	PLC-1060 Temp PLC Program (Step 3 to 4) - Quality Control Check		6							6	0.6		\$ 1,200.00	
3.5	OIT - Develop OIT Program	Generate PLC-810 AVEVA Edge OIT application (Step 3 to 4)					50	10			60	0.6		\$ 12,000.00	
3.5	OIT - Develop OIT Program	PLC-810 AVEVA Edge OIT application (Step 3 to 4) - Quality Control Check		6				2			8	0.6		\$ 1,600.00	
3.5	OIT - Develop OIT Program	Generate PLC-1060 AVEVA Edge OIT application (Step 3 to 4)			32			8			40	0.6		\$ 8,000.00	
3.5	OIT - Develop OIT Program	PLC-1060 AVEVA Edge OIT Application (Step 3 to 4) - Quality Control Check		2				2			4	0.6		\$ 800.00	
3.5	SCA - Develop SCADA application	PLC-810 Process Area System Platform Process Area Development (Step 3 to 4)		60				20			80	0.6		\$ 16,000.00	
3.5	SCA - Develop SCADA application	PLC-810 Process Area System Platform Process Area (Step 3 to 4) - Quality Control Check						8			8	0.6		\$ 1,600.00	
3.5	SCA - Develop SCADA application	PLC-1060 Process Area System Platform Process Area Development (Step 3 to 4)		32				8			40	0.6		\$ 8,000.00	
3.5	SCA - Develop SCADA application	PLC-1060 Process Area System Platform Process Area (Step 3 to 4) - Quality Control Check						6			6	0.6		\$ 1,200.00	
4	OTS - Prepare Other Submittal	Generate Quality Review Package #1 (QRPKG#01) - PLC-810 (Step 4). This includes Custom DFB, custom DFB manuals, current PLC config files, PLC program, SCADA backup, & OIT application file.			4					2	6	0.7		\$ 1,200.00	
4	OTS - Prepare Other Submittal	Quality Review Package (QRPKG#01) - PLC-810 (Step 4) - Quality Control Check		1						2	3	0.7		\$ 600.00	
4	OTS - Prepare Other Submittal	Generate Quality Review Package #1 (QRPKG#01) - PLC-1060 (Step 4). This includes Custom DFB, custom DFB manuals, current PLC config files, PLC program, SCADA backup, & OIT application file.			4					2	6	0.7		\$ 1,200.00	
4	OTS - Prepare Other Submittal	Quality Review Package (QRPKG#01) - PLC-1060 (Step 4) - Quality Control Check		1						2	3	0.7	12/31/2024	\$ 600.00	\$ 111,200.00
5	FFTP - Prepare Test Plans Submittal	Generate Control Systems Bench Test Submittal Package 1 (CSBTPKG#1) - PLC- 810 (Step 5)		24			4	4		2	34	0.7		\$ 6,800.00	
5	FFTP - Prepare Test Plans Submittal	Control Systems Bench Test Submittal Package 1 (CSBTPKG#1) - PLC-810 - Quality Control Check				8				2	10	0.7		\$ 2,000.00	
5	FFTP - Prepare Test Plans Submittal	Generate Control Systems Bench Test Submittal Package 1 (CSBTPKG#1) - PLC- 1060 (Step 5)		20			2	2		2	26	0.7		\$ 5,200.00	
5	FFTP - Prepare Test Plans Submittal	Control Systems Bench Test Submittal Package 1 (CSBTPKG#1) - PLC-1060 - Quality Control Check				6				2	8	0.7		\$ 1,600.00	
6	IST - Internal System Test	Perform Unwitnessed Control System Bench Test (CSBT1) - PLC-810 (Step 6/Step7). Results to be submitted prior to Witnessed Bench Test.		14	2		4	4		1	25	0.8		\$ 5,000.00	
6	IST - Internal System Test	Perform Unwitnessed Control Systems Bench Test (CSBT1) - PLC-1060 (Step 6/Step 7). Results to be submitted prior to Witnessed Bench Test.		14	2		4	4		1	25	0.8		\$ 5,000.00	

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7 - 8	FAT - Factory Acceptance Test	Perform Witnessed Control System Bench Test (CSBT2) - PLC-810 (Step 8)		32					1	33	0.9		\$ 6,600.00	
7 - 8	FAT - Factory Acceptance Test	Perform Witnessed Control System Bench Test (CSBT2) - PLC-1060 (Step 8)		16					1	17	0.9	1/20/2025	\$ 3,400.00	\$ 35,600.00
9	STC - Startup & Commissioning	Phase 1 - PLC-810 & SCADA Setup for Field Startup (Step 9)		32					3	35	1	2/17/2025	\$ 7,000.00	
9 - 11	STC - Startup & Commissioning	Phase 2 - Filter 7 Setup for Field Startup & Loop Testing (Step 9/Step 10/Step 11)		20						20	2	4/14/2025	\$ 4,000.00	
12 - 13	STC - Startup & Commissioning	Phase 2 - Filter 7 Operational Testing (Step 12/Step 13)		8						8	2		\$ 1,600.00	
14 - 15	STC - Punchlist	Phase 2 - Filter 7 Punchlist (Step 14/Step 15)		4						4	2		\$ 800.00	
9	STC - Startup & Commissioning	Phase 3 - PLC1060-Temp Setup for Field Startup (Step 9)		32						32	3	6/9/2025	\$ 8,000.00	
9 - 11	STC - Startup & Commissioning	Phase 4 - Filter 6 Setup for Field Startup & Loop Testing (Step 9/Step 10/Step 11)		8	4				2	14	4	6/23/2025	\$ 2,800.00	
12 - 13	STC - Startup & Commissioning	Phase 4 - Filter 6 Operational Testing (Step 12/Step 13)		8	8					16	4		\$ 3,200.00	
14 - 15	STC - Punchlist	Phase 4 - Filter 6 Punchlist (Step 14/Step 15)		4						4	4		\$ 800.00	
9 - 11	STC - Startup & Commissioning	Phase 5 - Filter 5 Setup for Field Startup & Loop Testing (Step 9/Step 10/Step 11)		4	8				2	14	5	8/11/2025	\$ 2,800.00	
12 - 13	STC - Startup & Commissioning	Phase 5 - Filter 5 Operational Testing (Step 12/Step 13)		8	8					16	5		\$ 3,200.00	
14 - 15	STC - Punchlist	Phase 5 - Filter 5 Punchlist (Step 14/Step 15)		4						4	4		\$ 800.00	
9 - 11	STC - Startup & Commissioning	Phase 6 - Air Scour Blowers Startup & Loop Testing & Modifications to Existing PLC-8 (Step 9/ Step 10/ Step 11)			16					16	6	9/8/2025	\$ 3,200.00	
12 - 13	STC - Startup & Commissioning	Phase 6 - Air Scour Blowers Operational Testing to Existing PLC-8 (Step 12/ Step 13)		4	8					12	6		\$ 2,400.00	
14 - 15	STC - Punchlist	Phase 6 - Air Scour Blowers Punchlist (Step 14/ Step 15)		4						4	4		\$ 800.00	
9 - 11	STC - Startup & Commissioning	Phase 7 - Filter 4 Setup for Field Startup & Loop Testing (Step 9/Step 10/Step 11)			16				2	18	7	9/22/2025	\$ 3,600.00	
12 - 13	STC - Startup & Commissioning	Phase 7 - Filter 4 Operational Testing (Step 12/Step 13)		4	8					12	7		\$ 2,400.00	
14 - 15	STC - Punchlist	Phase 7 - Filter 4 Punchlist (Step 14/Step 15)		4						4	4		\$ 800.00	
9 - 11	STC - Startup & Commissioning	Phase 8 - Filter 3 Setup for Field Startup & Loop Testing (Step 9/Step 10/Step 11)			16				2	18	8	11/3/2025	\$ 3,600.00	
12 - 13	STC - Startup & Commissioning	Phase 8 - Filter 3 Operational Testing (Step 12/Step 13)		4	8					12	8		\$ 2,400.00	
14 - 15	STC - Punchlist	Phase 8 - Filter 3 Punchlist (Step 14/Step 15)		4						4	4		\$ 800.00	\$ 55,000.00
9	STC - Startup & Commissioning	Phase 9 - PLC-1060 Setup for Field Startup (Step 9)			32				2	34	9	12/8/2025	\$ 6,800.00	
9 - 11	STC - Startup & Commissioning	Phase 10 - Filter 2 Setup for Field Startup & Loop Testing (Step 9/Step 10/Step 11)			24				2	26	10	1/12/2026	\$ 5,200.00	

Rand Bucketon	Le see	Project test thron	Autofrai	on site of	is suid the	ite Was	duel jotterie	a Vanto	hile Tarn	et Mai	nagenent Tosk I	Ja Hours Project	, Prinse Est. Pro	Rectorates Task Cost	Comptee Sci	nedule
12 - 13	STC - Startup & Commissioning	Phase 10 - Filter 2 Operational Testing (Step 12/Step 13)			6						6	10		\$ 1,200.00		
14 - 15	STC - Punchlist	Phase 10 - Filter 2 Punchlist (Step 14/Step 15)			2						2	4		\$ 400.00		
9 - 11	STC - Startup & Commissioning	Phase 11 - Filter 1 Setup for Field Startup & Loop Testing (Step 9/Step 10/Step 11)			24					2	26	11	3/9/2026	\$ 5,200.00		
12 - 13	STC - Startup & Commissioning	Phase 11 - Filter 1 Operational Testing (Step 12/Step 13)			6						6	11		\$ 1,200.00		
14 - 15	STC - Punchlist	Phase 11 - Filter 1 Punchlist (Step 14/Step 15)			2						2	4		\$ 400.00		
9 - 13	STC - Startup & Commissioning	Phase 12 - Final Cutover from Existing PLC-53 to PLC-810		8	24						32	12	3/23/2026	\$ 6,400.00		
17	SNH - Project Handoff & Closeout	Project Handover Documentation (Step 17)		4	4					8	16	13	4/1/2026	\$ 3,200.00		
Misc	AOC - Auxiliary & Other Equip Config	Valve Control Panel Setup. Configuration, Programming, & testing of the new valve control panels: LCP-0100, LCP-0200, LCP-0300, LCP-0400, LCP-0500, LCP-0600, LCP-0700, LCP-0800, LCP-0900, LCP-1000, LCP-1100,		80			14	12			106			\$ 21,200.00	\$ 51,200.00	

Total Project Cost	\$ 326,800.00
Project Hours	
Automation Eng	1477
Project Management	149
Total	1626

Note: This page is intentionally left blank.

September 18, 2024

Prepared by: M. Lu / R. Mori

Submitted by: K. Burton

Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITEE

SEWER SIPHON IMPROVEMENTS PHASE II VARIANCE NO. 1

SUMMARY:

The Sewer Siphon Improvements Phase II project will rehabilitate seven of IRWD's nineteen sewer siphons within the District's sewer collection system. Woodard & Curran (W&C) is the engineer of record for the project. Staff recommends that the Board authorize the General Manager to execute Variance No. 1 in the amount of \$214,777 with W&C to provide engineering services during construction for the Sewer Siphon Improvements Phase II.

BACKGROUND:

The District's sewer collection system includes 19 inverted siphons at various locations. In 2016, the District completed a preliminary condition assessment and ranked the siphons through a criticality analysis considering risk and consequence of failure. The four most critical siphons that were identified in the condition assessment were previously rehabilitated in the Sewer Siphon Improvements Phase I project, which was completed in March 2022.

This Phase II project will rehabilitate the next seven siphons on the priority list including Siphons S1, S3, S5, S8, S9, S16, and S18. Siphon S16 is located in the City of Newport Beach, and the remaining six siphons are located in the City of Irvine. The general locations of the siphons included in the project are provided below.

- S1 San Diego Creek/University Drive
- S3 Michelson Drive/Riparian View
- S5 Jamboree Road/Main Street
- S8 Jeffrey Road/Alton Parkway
- S9 Sand Canyon Avenue/Barranca Parkway
- S16 University Drive/State Route 73
- S18 Harvard Avenue/University Drive

<u>Variance No. 1 – Engineering Services During Construction:</u>

W&C is the engineer of record for Phase II of this project. W&C was also the engineer of record for the Phase I project and provided engineering services during construction for the Phase I project. On these previous assignments, W&C provided high quality and responsive service to the District's needs. As such, staff requested a proposal from W&C for engineering services during construction for the Phase II project.

Engineering and Operations Committee: Sewer Siphon Improvements Phase II Variance No. 1 September 18, 2024

Page 2

W&C submitted a proposal, which is provided as Exhibit "A", in the amount of \$214,777. The scope of work includes attending construction meetings, responding to contractor requests for information, reviewing submittals, and preparing record drawings. The scope also includes reviewing contractor-provided CCTV inspection data and providing recommendations on the need for installation of cured-in-place pipe (CIPP) lining for Siphons S3, S5, and S18. The CCTV inspection of these three siphons could not be conducted during the design phase due to high sewer flows and extensive traffic control requirements for these three locations. Staff reviewed W&C's proposal and found the scope and fee to be reasonable.

Staff recommends that the Board authorize the General Manager to execute Variance No. 1 in the amount of \$214,777 to W&C for providing engineering services during construction for the Sewer Siphon Improvements Phase II, Project 11841.

FISCAL IMPACTS:

Project 11841 is included in the Fiscal Year 2024-25 Capital Budget. The current budget is sufficient to fund the recommendation presented herein.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301, which provides an exemption for minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. A Notice of Exemption for the project will be filed with the Orange County Clerk Recorder.

RECOMMENDATION:

That the Board authorize the General Manager to execute Variance No. 1 in the amount of \$214,777 with Woodard & Curran to provide engineering services during construction for the Sewer Siphon Improvements Phase II, Project 11841.

LIST OF EXHIBITS:

Exhibit "A" - Woodard & Curran Variance No. 1

Exhibit "A" IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

Project Ti	itle: <u>Sewer Siphon Improveme</u>	nts	Phase II		Doto	v. August 2	1 2024				
Purchase	Order No.: 631081				Vari	e: <u>August 2</u> ance No.: <u>1</u>	1, 2024				
Originato	r: [X] IRWD [] E	NGl	INEER/CONS	SULTA	ANT	[] Ot	her (Expla	nin)			
	on of Variance (attach any bac rd & Curran (W&C) to provide engi			ng cons	tructio	on per the atta	ched W&C	proposal			
Engineeri	ng & Management Cost Impa	ct:									
	Classification		Manhours	Bill Ra		Labor \$	Direct Costs	Subcon.	Total \$		
Enginee	ring services during constructi	on	730	Var	ies	214,370	407	0	214,777.00		
								Total \$ =	214,777.00		
Schedule	-						1				
Task No.	Task Description		Original Schedule			Schedul Varianc		Ne Sche			
N/A	Engineering services during construction		N/A			N/A		N/A			
Required	Approval Determination:						'				
Total Or	riginal Contract	\$ <u>1.</u>	,285,684.00		irecto		e total of Va	riances less tha	n or equal to		
Previous This Var	s Variances \$ <u>0</u> riance \$ <u>214,777.00</u>			[] E	xecut	ive Director:		total of Varianc	ces less than		
	um of Variances entract Amount		14,777.00 ,500,461.00		•	al to \$125,000 al Manager: C		otal of Variance	s less than or		
	age of Total Variances inal Contract	16	.7 %		•	o \$200,000.	otal of Varia	ances greater th	an \$200 000		
									un ¢200,000.		
ENGINE	ER/CONSULTANT: <u>Woodard</u> Mirko Compan			IR V		E RANCH V	VATER D	ISTRICT			
Project E	Maher, PE ngineer/Manager	27/2024 ate			in <u>L</u> Bu		9/3/2024 Date				
Engineer'	s/Consultant's Management	Da	ate	Ge	neral	Manager/B	oard	Date			
			A	1							

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title:	Sewer	Siphon Improvements	Phase II			
Project No.:	11841	Project	Manager: Mic	hael Lu		
Variance	e		Date		Variance	_
No.		Description	Initiated	Approved	Amount	_
1		Engineering services during construction	08/21/2024		\$214,777.00	

Electronic Submittal



August 19, 2024

Mr. Michael Lu Irvine Ranch Water District 15600 Sand Canyon Avenue Irvine, CA 92618

Subject: Proposal for Engineering Services During Construction for the Sewer Siphon Improvements Phase II Project (PR 11841)

Dear Mr. Lu:

In accordance with our recent communications, Woodard & Curran, Inc. is submitting this proposal to Irvine Ranch Water District (IRWD) for professional engineering services during construction for the Sewer Siphon Improvements Phase II Project (PR 11841). This proposal describes Woodard & Curran's scope of work, fee, and schedule.

SCOPE OF WORK

ENGINEERING SERVICES DURING CONSTRUCTION

Woodard & Curran will provide engineering services during construction (ESDC) for the Sewer Siphon Improvements Phase II Project, which is assumed to span 20 months based on the assumption of a 600 day construction period. This scope of work consists of technical support related to the tasks described below.

Task 1: Project Management

Woodard & Curran will perform routine administrative tasks including monthly invoicing and status reporting, budget tracking, and schedule tracking through the duration of the construction phase (assumes a 20-month duration). In addition, Woodard & Curran will maintain communications and coordination with District staff throughout the duration of the work as needed.

Task 2: Project Meetings

Pre-Construction Meeting

Woodard & Curran's Project Manager and Project Engineer will coordinate, prepare for, and attend one (1) pre-construction meeting (assumed to be 2 hours long) at IRWD's offices with the contractor and District staff. Assumes IRWD will conduct the meeting and prepare the meeting agenda and minutes that will be prepared and distributed to all attendees. Assumes Woodard & Curran will review the minutes.

Attend Construction Meetings / Site Visits

Woodard & Curran will attend construction meetings and/or site visits as requested. Assumes a total of twelve (12) to be attended by either the Project Manager or Project Engineer. Assume each meeting requires 4 hours of staff time on average for preparation, travel, attendance, and/or follow-up action items.



Task 3: Respond to Requests for Information

Woodard & Curran will review and respond to requests for information (RFIs) from the contractor to clarify the contract documents and the design intent. Assumes 10 RFIs with an average of 4 hours each.

Task 4: Review Submittals and Resubmittals

Woodard & Curran will review and prepare written engineer's review comments for construction submittals and resubmittals. Assumes 50 submittals with an average of 4 hours each and 25 resubmittals with an average of 2 hours each.

Task 5: Plan Revisions

Woodard & Curran will prepare contract document modifications based on change orders reviewed and approved by IRWD. Assumes a total of two (2) contract document modifications with an average of 16 hours each.

Task 6: CCTV & CIPP Evaluation for Siphon Barrels at S3, S5, and S18

Woodard & Curran will attend CCTV inspection for each siphon barrel at Siphons S3, S5, and S18 (total of 6 barrels) and subsequently prepare a brief Technical Memorandum (TM) with a recommendation to perform CIPP rehabilitation or not. For each siphon barrel, assumes 8 hours of staff time on average for CCTV inspection supervision and review of footage and 6 hours of staff time on average for TM preparation.

Task 7: Prepare Record Drawings and Consolidated Construction Files

Woodard & Curran will prepare and issue record drawings electronically only based on one set of legible markups provided by the Contractor, and incorporating the changes to the construction drawings issued via addendum during the bid phase. Together with the record drawings, we will submit a consolidated electronic record of the construction documentation (consisting of RFIs and responses, submittals, contract document clarifications, and any field orders).

Assumptions and Exclusions

- Construction management is excluded from our scope. It is assumed that the District and/or a third-party construction manager will provide contractor oversight, field supervision and direction, review of contractor pay applications and baseline schedule updates, and final punch list preparation and closeout.
- Specialty inspections and meetings associated with electrical equipment, coatings, and other third-party inspections are excluded from our scope. It is assumed that the District and/or contractor will provide third-party inspection services as required.
- Attendance at shop visits is excluded from our scope. It is assumed that District staff will attend any shop visits as appropriate.
- Hydraulic model updates are excluded from our scope. It is assumed that the District will
 update its hydraulic model with the project improvements as appropriate.
- Contractor change order request review is excluded from our scope. It is assumed that the District will review change order requests as required.
- Preparation of conformed documents is excluded from our scope. Any changes to the contract documents during the bid phase will be issued via addendum, and those affecting the construction plans will subsequently be incorporated into the record drawing set.



SCHEDULE

The anticipated construction schedule is attached, which shows an overall duration of approximately 20 months. Note that this is contingent on the schedule to be submitted by IRWD's selected Contractor. We are prepared to start work upon receipt of Notice to Proceed (NTP).

FEE

Based on the above scope of work, our proposed fee estimate is summarized in the attached table.

We are committed to working with IRWD to make this important project a success. Thank you for the opportunity to submit our proposal to you. If you have any questions, please do not hesitate to contact Mirko Maher via cell phone (925.212.3757) or email (mmaher@woodardcurran.com).

Sincerely,

WOODARD & CURRAN, INC.

Mirko Maher, P.E. Project Manager

Attachments: Fee Estimate, Schedule

Ryker Brown, P.E.

Regional Leader



IRVINE RANCH WATER DISTRICT SEWER SIPHON IMPROVEMENTS PHASE II (PR 11841)

Fee Proposal - Engineering Services During Construction

Tasks													Total
		Jennifer Glynn	Joe Sinacori	Justin Kraetsch	Tom Scalese	Brian Ling	rian Ling Steve Jung		Tatal	Total Labor		T-1-1 ODC-	Tatal
Project Role	Project Manager	QA/QC	Sr. Tech. Manager	Technical Manager 1	Structural Engineer	Engineer 2	CAD Designer 3	Proj. Asst. PA	Total Hours	Costs (1)	ODCs	Total ODCs (3)	Total Fee
Billing Rate	\$350	\$360	\$350	\$315	\$315	\$235	\$235	\$150					
Engineering Services During Construction													
Task 1. Project Management (20 Months)	50			40				20	110	\$33,100		\$0	\$33,100
Task 2. Project Meetings	18			28		8			54	\$17,000	\$50	\$55	\$17,055
Task 3. Respond to Requests for Information (10)	8			24	4	4			40	\$12,560		\$0	\$12,560
Task 4. Review Submittals (50) and Resubmittals (25)	24		16	96	24	90			250	\$72,950		\$0	\$72,950
Task 5. Plan Revisions (2)	6		6	12			8		32	\$9,860		\$0	\$9,860
Task 6. CCTV & CIPP Evaluation for Siphon Barrels (S3, S5, & S18)	10	6	4	28		18			66	\$20,110	\$320	\$352	\$20,462
Task 7. Prepare Record Drawings (electronic) & Consolidated Construction Files	16	8	8	32	8	16	90		178	\$48,790		\$0	\$48,790
Subtotal:	132	14	34	260	36	136	98	20	730	\$214,370	\$370	\$407	\$214,777
TOTAL	132	14	34	260	36	136	98	20	730	\$214,370	\$370	\$407	\$214,777

Notes:

- 1. The individual hourly rates include salary, overhead and profit.
- 2. Subconsultants will be billed at actual cost plus 10%.
- 3. Other direct costs (ODCs) such as reproduction, delivery, mileage (rates will be those allowed by current IRS guidelines), and travel expenses, will be billed at actual cost plus 10%,
- 4. Woodard & Curran will not adjust its hourly rate structure during proposed contract schedule (Ending March 2026).

Date: 08/19/2024



Rate Schedule

Public 2024

STAFF TYPE	HOURLY RATE
Administrative / Administrative Assistant	\$140
Drafter / Project Assistant / Technician 1	\$150
Designer 1 / Geologist 1 / GIS Analyst 1 / Planner 1 / Scientist 1 / Technician 2	\$155
Graphic Artist / Project Specialist	\$170
Designer 2 / Geologist 2 / GIS Analyst 2 / Scientist 2 / Specifications Manager	\$180
Graphics Manager / Senior Project Assistant	\$200
Engineer 1 / Planner 2 / Technical Specialist 1 / Technician 3	\$210
Contract Document Specialist / Geologist 3 / GIS Analyst 3 / Scientist 3	\$220
Designer 3 / Engineer 2 / Plant Manager / Procurement Specialist / Programmer 1 / Project Geologist 1 / Project Scientist 1 / Technical Specialist 2	\$235
Engineer 3 / GIS Solutions Analyst / Planner 3 / Programmer 2 / Technical Specialist 3	\$265
Programmer 3 / Project Geologist 2 / Project Scientist 2 / Project Tech Specialist 1 / Senior Designer	\$270
Project Electrical Engineer 1 / Project Engineer 1 / Project Planner 1	\$280
Project Engineer 2 / Project Planner 2 / Project Tech Specialist 2 / Senior Project Geologist / Senior Project Scientist / Senior Resident Project Representative	\$290
Senior Cost Estimator / Senior Planner	\$295
GIS Manager / Project Manager 1 / Technical Manager 1	\$315
Construction Manager / Project Manager 2 / Technical Manager 2	\$330
Program Manager	\$340
Senior Project Manager / Senior Technical Manager	\$350
Senior Consultant	\$355
Senior Delivery Leader / Senior Program Leader / Senior Technical Leader	\$360
Principal in Charge	\$365
National Practice Leader	\$380
EXPENSES	
Travel	\$0.67 / mile
Other Direct Costs	At Cost Plus 15%

Subconsultants/Subcontractors At Cost Plus 15%

NOTES

Mileage rate will change as the federal allowable rate is modified.

This rate schedule is confidential and for customer internal use only. Woodard & Curran reserves the right to adjust billing rates annually. Date: Thu 7/18/24 **Project Construction Schedule IRWD Sewer Siphon Improvements Phase II** Finish Task Name Start Qtr 3, 2024 Qtr 4, 2024 Qtr 1, 2025 Qtr 2, 2025 Qtr 3, 2025 Qtr 4, 2025 Qtr 1, 2026 Duration Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr Sewer Siphon Improvements Ph. II - Design/Bid Phase 110.6 wks Tue 7/12/22 Mon 8/26/24 2 Tue 7/12/22 Tue 7/12/22 Notice to Proceed 0 days 3 **TASK 1: PROJECT MANAGEMENT** 104 wks Tue 7/12/22 Wed 7/10/24 **TASK 2: PRELIMINARY DESIGN** 30.7 wks Thu 7/21/22 Tue 2/21/23 40 **TASK 3: FINAL DESIGN** 70.9 wks Tue 2/21/23 Wed 7/3/24 59 **TASK 4: ADDENDA PREP. & PRE-BID MEETING** Thu 7/18/24 Mon 8/26/24 5.6 wks Bid Advertisement (28 days) 7/18 60 Thu 7/18/24 Thu 7/18/24 0 days 61 Prepare Addenda Thu 7/18/24 Wed 8/14/24 4 wks 7/31 62 Pre-Bid Meeting Wed 7/31/24 Wed 7/31/24 0 days 8/26 **Bid Opening** Mon 8/26/24 Mon 8/26/24 0 days **TASK 5: OPTIONAL TASKS** Mon 9/18/23 Wed 12/20/23 13.6 wks **്ಷ** 10/14 Construction Award (IRWD Board - 2nd or 4th Monday) 0 days Mon 10/14/24 Mon 10/14/24 71 **Construction Phase** 74.1 wks Tue 10/15/24 Tue 3/17/26 Award/ Contracting Tue 10/15/24 Mon 11/4/24 3 wks **11/4** 73 **Contractor NTP** Mon 11/4/24 Mon 11/4/24 0 wks 74 **Pre-Construction Meeting** Tue 11/5/24 Mon 11/11/24 1 wk Tue 11/12/24 Mon 1/6/25 Initial Shop Drawing Preparation and Review 8 wks 76 **Material Procurement** Tue 12/17/24 Mon 1/27/25 6 wks 77 **S3 Michelson/Riparian Improvements** Tue 12/24/24 Mon 5/19/25 **21** wks 90 **S5 Jamboree/Main Improvements** 10.4 wks Tue 1/7/25 Wed 3/19/25 **S8 Jeffrey/Alton Improvements** Thu 3/20/25 Wed 7/16/25 109 **S9 Sand Canyon/Barranca Improvements** Tue 5/20/25 Mon 8/25/25 **14 wks** 118 **S18 Harvard/University Improvements** 10.5 wks Thu 7/17/25 Mon 9/29/25 131 Tue 8/26/25 Mon 11/3/25 **S16 University/Milano Improvements** 10 wks 144 S1 San Diego Creek/University Improvements Tue 9/30/25 Tue 1/20/26 16 wks 154 **Closeout and Schedule Float** Tue 1/20/26 Tue 3/17/26 8 wks 155 Tue 1/20/26 Tue 2/24/26 Float for Potential Wet Weather 5 wks 156 **Prepare Record Drawings** 3 wks Tue 2/24/26 Tue 3/17/26 **3/17** 157 **Project Closeout Meeting** 0 wks Tue 3/17/26 Tue 3/17/26

> A - 8 Page 1 of 1

September 18, 2024

Prepared by: A. Murphy / M. Cortez

Submitted by: K. Burton

Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITTEE

TECHNOLOGY DRIVE AND ADA DRIVE RECYCLED WATER PIPELINE REPLACEMENT BUDGET ADDITION AND CONSULTANT SELECTION

SUMMARY:

The Technology Drive and Ada Drive Recycled Water Pipeline Replacement project will replace approximately 5,000 feet of asbestos cement pipe (ACP) mains used in the recycled water distribution system in the Irvine Spectrum. Staff recommends that the Board:

- Authorize the addition of Project 12979, Technology Drive and Ada Drive Recycled Water Pipeline Replacement, to the Fiscal Year (FY) 2024-25 Capital Budget in the amount of \$2,819,000; and
- Authorize the General Manager to execute a Professional Services Agreement with MKN and Associates, Inc. in the amount of \$327,709 for engineering design services for the Technology Drive and Ada Drive Recycled Water Pipeline Replacement.

BACKGROUND:

This project will replace approximately 5,000 feet of ACP mains used in the recycled water distribution system in the Irvine Spectrum area of Irvine. Specifically, the pipeline segments to be replaced are the six-inch ACP pipeline within Technology Drive, south of Alton Parkway, and the six-inch ACP pipeline within Ada Drive, between Barranca and Alton Parkways. IRWD has experienced several leaks on these pipe segments, which were installed in 1985. IRWD retained HDR to complete a forensic analysis of ACP and soil samples from several sites within the project area to determine the underlying cause of the failures. The results revealed significant internal deterioration of the ACP, attributed to calcium loss caused by the moderately corrosive quality of IRWD's recycled water in the past. In this condition, ACP is more susceptible to breaks from normal peaks in daily pressure cycles. A location map is provided as Exhibit "A", which reflects the project limits and the ACP mains to be replaced.

Consultant Selection:

Staff issued a Request for Proposal for the design of the pipeline replacement to three consultants: Cannon Corporation, MKN and Associates, and West Yost Associates. All three consultants submitted proposals. While each consultant showed a good understanding of the scope of work, MKN showed superior effort by evaluating the project area and identifying key design considerations that will be crucial to developing a complete and successful design. MKN created an exhibit showing existing storm drain culverts, transformers, bus stops, and schools throughout the project area that will have to be taken into consideration when developing the pipeline alignment. MKN's proposal also demonstrated that its team has the experience, scope understanding, and staff to complete the project in a timely manner. MKN has performed well on recent IRWD projects, including the Serrano Creek Raw Waterline Replacement and the Park

Engineering and Operations Committee: Technology Drive and Ada Drive Recycled Water Pipeline Replacement Budget Addition and Consultant Selection September 18, 2024

Page 2

Plaza Recycled Waterline Replacement. Staff's consultant evaluation matrix and MKN's proposal are provided as Exhibits "B" and "C", respectively.

Based on this, staff recommends the selection of MKN to provide design services for this recycled water pipeline replacement project.

FISCAL IMPACTS:

Project 12979 will be funded from the Sewer Replacement Fund and is currently not included in the FY 2024-25 Capital Budget. The budget shown below is required to fund the design and construction phases for the project.

Project	Current	Budget	Total
No.	Budget	Addition	Budget
12979	\$0	\$2,819,000	\$2,819,000

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA). In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15004, the appropriate environmental document will be prepared when "meaningful information" becomes available.

RECOMMENDATION:

That the Board authorize the addition of Project 12979, Technology Drive and Ada Drive Recycled Water Pipeline Replacement, to the Fiscal Year 2024-25 Capital Budget in the amount of \$2,819,000, and authorize the General Manager to execute a Professional Services Agreement with MKN and Associates, Inc. in the amount of \$327,709 for engineering design services for the Technology Drive and Ada Drive Recycled Water Pipeline Replacement, Project 12979.

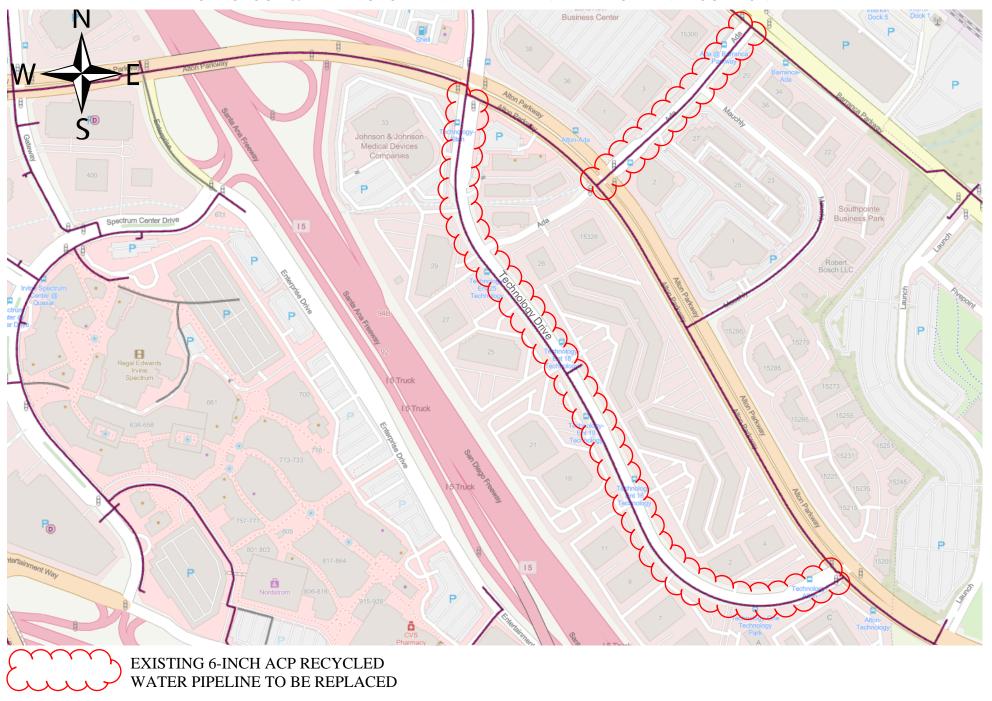
LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" - Consultant Selection Evaluation Matrix

Exhibit "C" - MKN and Associates' Proposal

Exhibit "A" TECHNOLOGY & ADA RECYCLED WATER PIPELINE REPLACEMENT LOCATION MAP



Note: This page is intentionally left blank.

Exhibit "B"

Project No. 12979 CONSULTANT SELECTION MATRIX

	Technology Drive an		e Recycled V			ent		
Item	Description Weights		Cannon		MKN		West Yost	
Α	TECHNICAL APPROACH							
1	Project Understanding & Approach 60%		3		1		2	
2	Project Experience	20%	3		2		1	
3	Project Team		3		2		1	
	Weighted Score		3.0		1.3		1.6	
	Ranking of Consultants		3		1		2	
В	SCOPE OF WORK		•		•		•	
TASK			Task Hours	Fee	Task Hours	Fee	Task Hours	Fee
1	Project Management		108	\$23,476	93	\$22,475	122	\$37,978
2	Final Design		628	\$248,507	492	\$305,234	626	\$329,280
	Total Engineering Services Fee		736	\$271,983	585	\$327,709	748	\$367,258
С	<u>OTHER</u>		-					
	Number of Drawings		24		39		23	
	Engineering Design Services Fee per Drawing		\$11,333		\$8,403		\$15,968	
	Sub Consultants							
	Geotech		Ninyo & Moore		AESCO		Converse Consultants	
	Survey		Cannon		CALVADA		Borchard Surveying	
	Traffic Control Engineering		Cannon		Traffic Control Engineering Underground Solutions Inc.		Traffic Control Engineering Underground Solutions Inc.	
	Potholing DIR Numbers Provided		AirX Utility Surveyors, Inc. 1000001861 (Cannon)		1000047956 (MKN)		1000028648 (WY&A)	
			1000004481 (N&M) 1000008968 (AirX)		1000047330 (WINN)		1000012721 (BS&M) 100001465 (Conv. Cons) 100001465 (TCE) 1000014790 (USI)	
	Insurance (Professional & General Liability)		Workers' Comp missing check under Waiver of Subrogation Expired Policy		Automobile Liability only covers hired and non-owned where should cover any auto. Expired policy.		Workers' Comp missing check under Waiver of Subrogation but present in description. Expired Policy	

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Engineering Design Services for Replacement of 6-inch Recycled Water Pipelines in Technology Drive and Ada

Submittal Due Date: September 3, 2024 at 4pm Malcolm A. Cortez, PE | Engineering Manager Submitted Via Email



September 3, 2024

Alex Murphy, PE Senior Engineer / Project Manager Operations Support and Pipelines Irvine Ranch Water District Via Email

Subject: Proposal for Engineering Design Services for the 6-inch Replacement Recycled Water Pipelines in Technology Drive and Ada

Dear Alex,

Thank you for considering MKN and Associates (MKN) to submit a proposal for engineering design services for the 6-inch Replacement Recycled Water Pipelines in Technology Drive and Ada (Project). With our extensive experience and local expertise, we are confident in our ability to deliver a project that meets the Irvine Ranch Water District's (IRWD) high standards for quality, efficiency, and reliability.

Understanding of the Project: Our team fully understands the critical importance of maintaining and upgrading the recycled water infrastructure to ensure continued service reliability and operational efficiency. The aging 6-inch recycled water lines pose potential challenges that require meticulous planning and execution to minimize disruption to the community and ensure a seamless transition to the new system. To be prepared and expedite the design services, MKN has studied the project requirements and available background data such as IRWD provided record drawings, has produced the existing utility log for utilities in the project area, has made several site visits, and is fully prepared to hit the ground running.

Local Expertise and Experience: What sets MKN apart is our strong connection to both the Irvine Ranch Water District and the City of Irvine. Our local team has a profound understanding of the district's operations and the unique characteristics of the local environment through our recent design projects. We are proposing the same familiar team of Parasto Azami and Safa Kamangar for this project, augmented with additional design staff – all locally situated in Irvine – along with the expertise of Kevin Saleh as the technical lead for the project. This familiarity allows us to anticipate potential issues and tailor our approach to fit the specific needs of your infrastructure.

Additionally, Safa Kamangar has previously served the City of Irvine as Consultant Project Manager. Through this experience, he understands, intimately, the City's policies and procedures and has an established working relationship with the City's Project Delivery and Inspection Team, including Alex Salazar, Manager of Project Delivery. This understanding and relationship will benefit the Project by minimizing the chance of design modifications during the construction.

Moreover, our team brings extensive experience in handling similar projects. We have successfully completed numerous infrastructure upgrades within Orange County, including projects involving recycled water systems. Our track record demonstrates our commitment to excellence, adherence to timelines, and cost-effective solutions.

Commitment to Quality and Collaboration: We are dedicated to maintaining open lines of communication with IRWD throughout the project lifecycle. Our approach emphasizes collaboration and transparency, ensuring that all stakeholders are informed and involved in key decisions. Our local presence allows us to be highly responsive and adaptable,

addressing any concerns or adjustments promptly.

In conclusion, MKN and Associates is well-positioned to execute the Project with the utmost professionalism and efficiency. We are excited about the opportunity to contribute to the enhancement of Irvine's recycled water infrastructure and are confident that our proposal aligns with your objectives for this important project. We look forward to the opportunity to discuss our approach in greater detail and to answer any questions you may have. Please feel free to contact me directly at 949.637.3999 or skamangar@mknassociates.us.

Sincerely,

Safa Kamangar

Operations Manager/Quality Control

Parasto Azami Project Manager

SECTION A APPROACH & SCOPE

APPROACH

MKN has provided an experienced, local team for the District's project. This team has reviewed available asbuilts and visited the project site to assist in developing a detailed project approach and level of effort.

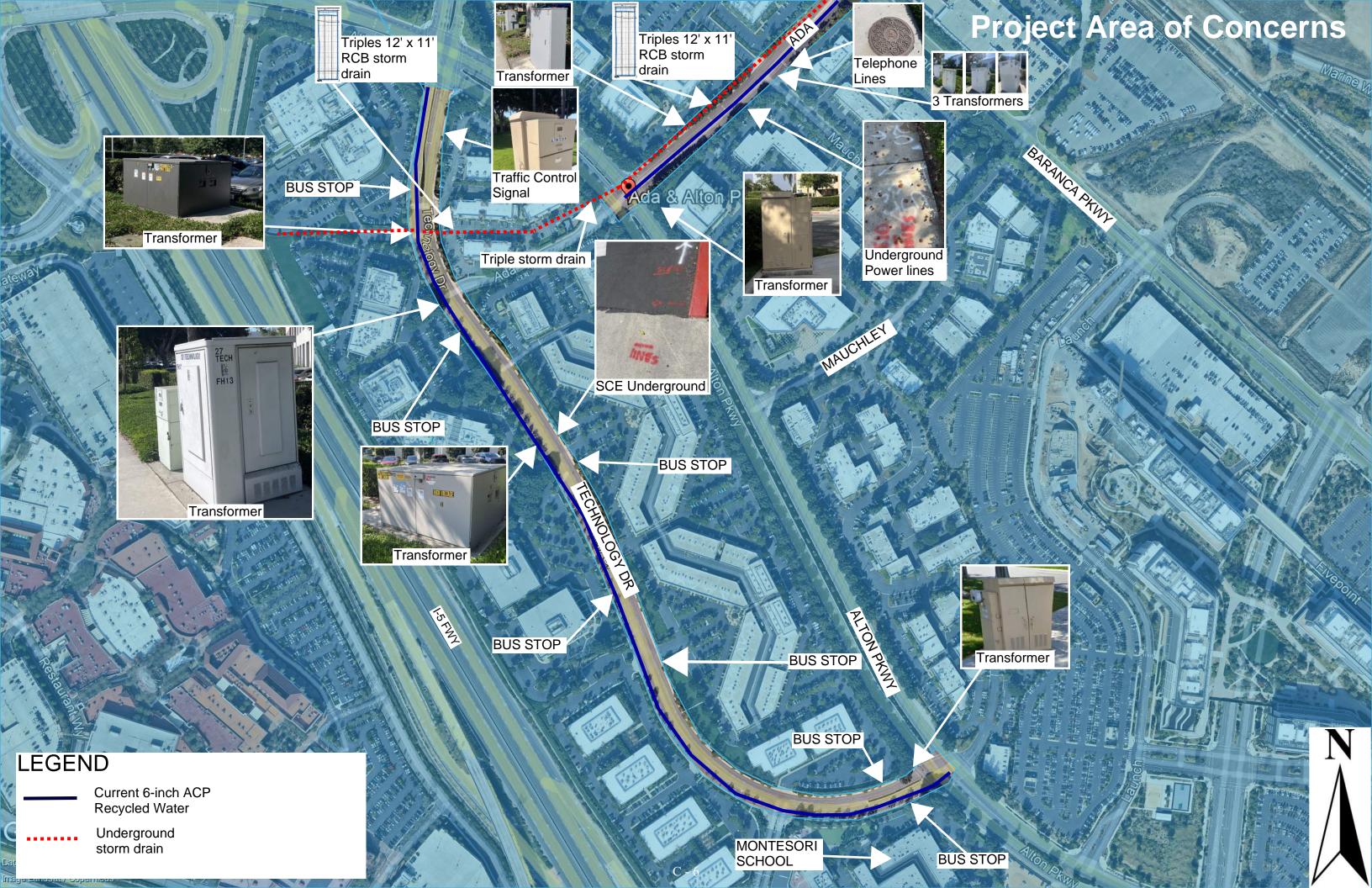
To effectively manage the design services for the 6-inch Replacement Recycled Water Pipelines in Technology MKN's Project Manager, Parasto Azami, PE, and QA/QC, Safa Kamangar, PE, have multiple pipeline and infrastructure projects together, including IRWD, SCWD, EOCWD, YLWD, and others. They are a proven team that are focused on exceeding Client expectations.

Drive and Ada, MKN will implement a comprehensive and structured approach. This approach will focus on ensuring minimal disruption to the Irvine Spectrum business area and complying with the City of Irvine's requirements. Below is a detailed plan for the design and coordination of this project:

- **City of Irvine Consultation:** MKN will reach out to the City of Irvine early in the project to gather information on existing pavement type, thickness, and the presence of paving fabrics (such as Petromat). Establish a point of contact within the city's engineering and project delivery of public works department (both inspection group and engineering group) for ongoing coordination.
- **Community and Business Outreach:** MKN will engage with Irvine Spectrum representatives, to inform them about the project scope, timeline, and potential impacts. Establish a communication plan to keep stakeholders informed throughout the project.
- **Slurry Backfill and Steel Plating:** MKN will coordinate with the City of Irvine in early stage of design regarding the use of concrete slurry backfill in trench restoration.
- Meter Box Assessment: MKN will provide an initial condition evaluation of existing meter boxes for IRWD review
 and decision making. Evaluation will document the condition of each box and its surroundings to determine
 which boxes require replacement or maintenance.
- Traffic Control: MKN's traffic control subconsultant, David Kuan will identify Caltrans traffic control requirements and will develop a detailed traffic control plan that minimizes disruption to local businesses and traffic. Include plans for phased construction, work during hours, and potentially night work, if required by stakeholders.

MKN has reviewed the project record drawings and visited the project site and developed **Figure 1** which highlights several of the design considerations, as outlined in the table below.

Challenge	Approach
Traffic control – I5 FWY offramp	Coordinate with Caltrans in early stage to coordinate work hours and traffic control measures
Storm Drain Culvert - Crossing at Technology Dr and Parallel along ADA	Obtain record drawings, perform pothole to maintain required clearance
School	Limit construction time around school schedule and maintain access during drop off and pick up
Bus Stop	Coordinate with OCTA in early stage to coordinate temporary bus stop relocations/ temporary closure



SCOPE OF WORK

The following scope of work is based on our extensive pipeline design experience and the requested scope provided in the District's RFP. We have **provided a detailed scope of work** as part of our proposal to assist in an expedited process between selection and notice to proceed.



TASK 1

Project Management

Task 1.A | Meetings

Overall project management, which includes supervision of in-house staff, planning and monitoring of contract budget and schedule, and coordination with the District and MKN's project team will be conducted by the MKN Project Manager. The Project Manager will review the status of budget, schedule, and relevant project issues with the District's Project Manager on a bi- weekly basis via email or telephone. The design phase is assumed to be five (5) months.

MKN shall organize, attend, and conduct four

- (4) meetings as part of this scope of services. The following meetings are included:
 - 1. Kick Off Meeting (PM, PE) 1-hour, virtual meeting
 - 2. Preview Proposed Alignment Meeting (25%) 1-hour, Virtual (25%) (PM, PE)
 - 3. Presentation of the 70% Design (PM, PE) 1-hour, In-person meeting
 - 4. Presentation of the 100% Design (PM, PE) 1-hour, In-person meeting

MKN will submit meeting agendas one week prior to the meeting and provide meeting minutes within one week of the meeting date.

Deliverables:

• MeetingAgendas/MeetingMinutes(8total).

Task 1.B | Agency Coordination:

MKN will coordinate with the City of Irvine and the California Department of Transportation (Caltrans) and identify all agency requirements for both design and construction. MKN will present an estimated timeline for agencies to complete their plan review and work. In addition, MKN will coordinate with the Spectrum Center on construction sequencing and hours. MKN will explore alternative construction hours and days with representatives of stakeholders to minimize disruption to the heavily visited adjacent business and shopping Irvine Spectrum development.

Deliverables:

• MeetingAgendas/MeetingMinutes(3total).

Task 1.C | Quality Assurance/Quality Control (QA/QC)

MKN will provide senior technical review and implement our quality assurance and quality control (QA/QC) measures throughout the project. Safa Kamangar will lead the QA/QC work throughout the project, Safa has provided engineering review for over 20 year and understands the District's protocols regarding project implementation.

2 Final Design

Task 2.A | Project Manual

MKN will prepare Project Manual in standard IRWD format for the Contract Documents. IRWD's front end documents will be utilized, and supplemental sections will be prepared as needed for the construction of a complete project. The Project Manual will describe the work, schedule, access or constraints, and sequencing associated with the work. The Project Manual also includes General Technical Specifications, modifications thereto, and any Project Technical Specifications. MKN will prepare the Project Manual in standard IRWD format. The Project Manual template will be provided in Microsoft Word format. MKN will provide a searchable PDF file of the bidding documents in 8-1/2 inch x 11-inch paper size.

Deliverables:

- DraftProjectManualTable of Contents to be submitted as part of the 25% submittal
- 70% Design Submittal Complete Draft Project Manual.
- 100% Draft Design Submittal Complete 100% Project Manual.
- Final Submittal Final Project Manual, be QA/ QC'd by the Engineer, and with the Engineer's electronic stamp and signatures, readyfor reproduction.

Task 2.B | Construction Plans

MKN will prepare detailed Drawings on 22-inch x 34-inch paper size. The Drawings will be developed in the latest version of AutoCAD, using NCS V4.0 layering standards, and utilizing IRWD's standard border template. Drawings prepared in AutoCAD with survey file provided by our sub as a base map. MKN will use the NAVD 88 and NAD 83 survey standards. The Drawings will include a sheet index/location map/legend, general notes, index map, notes, site plan, pipe abandonment, plan and profile, details, sections, elevations, and all details necessary for the construction of the Project. MKN will develop a detailed construction sequencing, shutdown, and dewatering strategy to minimize service interruptions. MKN will propose the pipe material based on utility research, potholing and geotechnical consideration. The following is a list of anticipated design drawings:

Sheet No.	Drawing No.	Title
1	G-001	Title Sheet
2	G-002	Drawing Index, Abbreviations, Location and Index Maps, Legend, and Symbols
3	G-003	Construction, Recycled Water and Surveying Notes
4	D-101	Demolition Plan
5	C-101	Plan and Profile Technology Drive I
6	C-102	Plan and Profile Technology Drive II
7	C-103	Plan and Profile Technology Drive III
8	C-104	Plan and Profile Technology Drive IV
9	C-105	Plan and Profile ADA I
10	C-106	Plan and Profile ADA II
11	C-501	Connection Details
12	C-502	Standard Details
13-39	TC-101- TC-127	Traffic Control Plans

Deliverables:

- 25% Draft design of alternative alignments as
- 70% Draft in Pdf format
- 100% Draft in Pdf format
- Final Drawings in Pdf format and CAD source files

Task 2.B-1 | Review of Background Material

MKN shall review the data provided by the District as part of the District's RFP; these documents include asbuilt files and pipeline Atlas for the project area. MKN will prepare and submit a data request form for additional information needed from the District, which shall include but is not limited to:

- 1. IRWD CAD standards, Title block and pen table
- IRWD Project Manual template in Microsoft Word format
- 3. IRWD Construction Manual
- 4. IRWD Standard Liquidated Damage Calculation Form

MKN Quick Start - Data Review Complete. Our design team has already reviewed all provided as-builts. From this information, we have compiled key areas of concern, potential alignments and point of connections. We are ready to hit the ground running and will deliver an expedited schedule.

MKN Quick Start - Utility Log Complete. Our team has already conducted the utility research, prepared the initial utility log and will send letters immediately following Notice of Award. Our approach utilizing a utility log limits risk associated with utility conflicts by documenting all correspondence.

Task 2.B-2 | Utility Review

MKN will perform utility research to locate utilities or other physical features including District utilities and utilities owned by other agencies (e.g., storm drain, electrical, gas, and telephone/communication duct banks). MKN will conduct multiple contacts to utilities failing to respond, and document all correspondence within a utility log. Additionally, MKN will review street improvement record

drawings from the City of Irvine to confirm the existing street paving type (e.g. rubberized, Petromat) and any special requirements and costs for removal and disposal. Responses, including relevant utilities, will be included in the utility log.

Deliverables:

• Utility Log(PDF)

Task 2.B-3 | Pothole Investigation

MKN's subconsultant, USI, will complete potholes as needed to determine utility conflicts, e.g. proximity of crossings with existing water, sewer, storm drain, and dry utilities, with the proposed alignments of the replacement pipelines or to determine the locations and depths of existing mains at proposed points of connection. MKN has provided a unit cost to complete a total of 20 pothole excavations. This work shall include obtaining permits, and all necessary traffic control measures to perform the pothole excavations. If additional potholes are needed, they will be invoiced at the proposed unit price. All potholes will be surveyed.

Deliverables:

• Pothole Report(PDF)

Task 2.B-4 | Topographic Field Survey

MKN's subconsultant, Calvada, will perform field surveying and produce topographic maps that will be used as a base plan for the proposed improvements. Topographic map will Include all street right-of-way, property line and existing easement boundaries in the project area in the base map. MKN will recommend the width and length of the field surveying to capture the topographic features needed to complete the design. Our surveyor will obtain appropriate permits as required to perform the field survey.

Task 2.C | Geotechnical

MKN's subconsultant, Aesco, will conduct an initial geotechnical study consisting of the following:

- Review historical geotechnical reports for the site.
- Review and consultation with MKN regarding the existing pipeline, new pipeline construction methods, and geotechnical aspects of the project.
- Perform geotechnical investigations (if needed, pending review of existing report) and up to 4 exploratory borings (1 to 30 feet deep) to determine soil properties and conditions, and groundwater levels.
- Preparation of a Geotechnical report for the project summarizing our findings and conclusions regarding the geotechnical conditions along the alignment.

Assumptions:

Excavations will be backfilled and tamped with the excavated spoils and capped with hot-patch asphalt in pavement areas. No contaminated soil in the project area. Traffic control is required to perform the work.

Deliverables:

Geotechnical report(PDF)

Task 2.D | Permits

MKN will identify all permits required and their controlling agencies during the construction phase, including but not limited to the City of Irvine. Initiate and complete application process and secure permits with appropriate agencies and includes a copy of completed permits or the permit's conditions at minimum as part of the Project Manual. Additionally, MKN will coordinate with property owners if a temporary construction permit is needed.

Deliverables:

• Completed permit application or the permit's condition

Task 2.E | Project Schedule

MKN will prepare a project schedule, utilizing Microsoft Project, which includes design through construction phases. MKN will prepare and include schedules with the following deliverables: 70% and 100%.

Deliverables:

Project schedule as described above in PDF format

Task 2.F | CEQA Documentation

MKN will provide exhibits and other information to assist IRWD with preparation of the CEQA documentation.

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Deliverables:

• Exhibits as described above in PDF format

Task 2.G | Liquidated Damages Calculations

MKN will assist in calculation liquidated damages values using the IRWD's standard liquidated damage calculation forms provided by the District.

Task 2.H | Opinion of Probable Construction Cost

MKN will prepare a detailed and itemized opinion of probable construction cost for the proposed facilities for submission with each of the design deliverables (25%, 70%, 100% and Final). The Opinion of Probable Construction provided at the 100% and Final deliverable will be in the form of the Schedule of Work as included in the Bid Documents section of the Project Manual. The cost at 25% & 70% will be in unit cost form and considered a Class 3 per AACE Classification System.

Task 2.1 | Design Deliverables

- 25% Draft: A searchable 25% design concept drawings, table of contents of Technical Specifications, and opinion of probable construction cost in PDF format.
- 70% Draft: A searchable 70% design drawings, 70% Draft Project Manual, Project Schedule, and opinion of probable construction cost in PDF format.
- 100% Draft: A searchable 100% design drawings, 100% Draft Project Manual, Project Schedule, and opinion of probable construction cost in PDF format.
- Final: Final design drawings, Final Project Manual and Final opinion of probable construction cost in PDF format, CAD and Word source files

Task 2.J | Bid Period Assistant

During the bidding period, MKN shall assist with providing information and clarification of bid documents to prospective bidders. This shall include the preparation of one addendum for bidding, including revisions to the design plans and specifications and assistance with addressing bidder questions. The level of effort assumed for this task includes:

- Plan Revisions: Eight (8) hours for plan revisions to the construction drawings.
- Specification Revisions: Eight (8) hours for revisions or additions to the project specifications.
- Bidder Questions: Four (4) hours to address and respond to bidder questions.
- Pre-Bid Meeting: Attend a pre-bid meeting which may include a site visit.

Deliverables:

One addendum (PDF)

SECTION B PROJECT TEAM



Principal-In-Charge

Ryan Gallagher, PE Irvine

PROJECT MANAGER

Parasto Azami, PE *Irvine*

QA/QC

Safa Kamangar, PE Irvine

PROJECT TEAM

PIPELINE DESIGN

Lead Engineer: Ivy Sanders, PE Project Engineer: Judy Beik, PE Project Engineer: Cindy Esparza, PE Assistant Engineer: Sabrina Ryan

Irvine

TECHNICAL ADVISOR

Kevin Saleh, PE *Irvine*

SURVEY

CALVADA Survey

GEOTECHNICAL INVESTIGATION

AESCO Geotechnical

POTHOLING

Underground Solutions Inc.

TRAFFIC CONTROL

Traffic Control Engineering

Key Project Team Take-Aways:

- **1.** Local All project team members are located less than 2.5 miles from the project site.
- **2. Best Value** Project team members with decades of experience with similar projects.
- **3.** Local Experience Key team members have extensive experience with IRWD, the City of Irvine, and The Irvine Company.



PARASTO
AZAMI, PE, PM
PROJECT MANAGER

EDUCATION

MS, Civil Engineering, University of California Irvine, CA

BS, Mechanical Engineering, Tabriz University, Iran

LICENSES & REGISTRATIONS

California Professional Engineer -Civil - No. 91468

Project Management (PM) Certification - University of California, Irvine, CA

PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers (ASCE)

Orange County Water Association (OCWA)

UCI-CEE Affiliates (Former Program Committee Chair)

Association of Women in Water, Energy & Environment (AWWEE)

Woman in Water (OC Chapter)

Parasto Azami brings over 10 years of experience in water and wastewater engineering design, with a strong focus on pipeline design. Her expertise includes water conveyance systems, gravity sewers, force mains, pump stations, and the rehabilitation and condition assessment of infrastructure. She has successfully led numerous complex, large-scale pipeline projects, delivering reliable and sustainable solutions. Parasto's deep understanding of engineering challenges and commitment to excellence ensures optimal outcomes for her clients and stakeholders.

Serrano Creek Raw Waterline Replacement | Irvine Ranch Water District, Irvine, CA

Design Lead for replacement of an existing 8-inch diameter asbestos cement raw water pipe in the vicinity of Serrano Creek Trail in City of Lake Forest, with over 100 feet of trenchless/ tunneling pipe under the community wall. Task included identifying optimum alignment, coordinating with utility and jurisdiction agencies, preparing plans, specifications, cost estimates and construction schedules.

Capital Improvement Water, Sewer, and Reclaimed Water Lines – Portola Parkway, Irvine Ranch Water District | Irvine, CA

Project Engineer for design over 2 miles 30-inch domestic transmission water line, 10-inch sewer line, 16-inch recycled water lines and over 200 feet of trenchless/ tunneling pipe for new developments along Portola pkwy.

Park Plaza Recycled Waterline Replacement | Irvine Ranch Water District, Irvine, CA

Design Lead and Project Manager (on going) for replacement of existing 6-inch and 8-inch diameter asbestos cement recycled water pipe in Park Plaza. Task included identifying optimum alignment, coordinating with Irvine Company for work hours and traffic control, preparing plans, specifications, cost estimates and construction schedules.

Circula Panorama Pipeline Replacement, East Orange County Water District | Orange, CA

Project Manager for preliminary and final design of 4,000 feet of new 12-inch waterlines and three pressure reducing facilities. Major tasks included alternative analysis, utilities research, coordination with County for Traffic and pavement replacement requirements.

Coastal Recycled Water Expansion Program Phase 4 Project, South Coast Water District | Dana Point, CA

Project Manager (Ongoing) for design of 5,500 LF of new 8-inch PVC recycled water pipe as well as a new pressure reducing station along Ritz Carlton Dr, Selva Road and Pacific Coast HWY in

the City of Dana Point. Key responsibilities include coordinating with the City of Dana Point and Caltrans for traffic control and work hours and conducting an alternatives analysis to determine the pipeline alignment with minimal impact on community access.

Hollywood Beach & Roosevelt Waterline Replacement, Channel Islands Beach Community Services District | Channel Islands Harbor, CA

Project Manager and Design Lead for replacement of an existing potable water line located within private easements and transferring customer services to new pipeline.

Marriott Pipeline, South Coast Water District | Dana Point, CA

Project Manager and Design Lead for design of new 12-inch water main via open trench and trenchless installation in the vicinity of the Laguna Cliffs Marriott in the City of Dana Point.





SAFA
KAMANGAR, PE, PMP,
CCM, QSD/P
QUALITY CONTROL
OFFICER

FDUCATION

Azad University, Iran - BS Civil Engineering

University of Tehran - MS Civil Engineering

LICENSES & REGISTRATIONS

California Professional Engineer -No. C70118 (2006)

Qualified SWPPP Developer (QSD), California - No. 23059 (2012)

Project Management Professional (PMP) - No. 1863656 (2015)

Certified Construction Manager - No. 6341 (2016)

OSHA 30-Hour Construction Outreach Training

OSHA 40-Hour HAZWOPER Certification

Confined Space Training

PROFESSIONAL ASSOCIATIONS

American Public Works Association (APWA)

American Society of Civil Engineers (ASCE)

American Water Works Association (AWWA)

Orange County Water Association (OCWA)

Safa Kamangar is a highly experienced professional with 27 years of expertise in water, wastewater, and water reuse. As a design engineer, Safa has provided hydraulic calculations, mechanical design, detailed design drawings, and development of specifications. He has a strong background in planning, design, and construction management, gained from working in both the private and public sectors. His expertise encompasses design, construction, and commissioning of water/wastewater infrastructure including more than 50 pumping facilities, 15 wells, and more than 150 miles of pipeline ranging from 4 inches to 72 inches in diameter.

Bonita Canyon Zone D to B Pressure Reducing Station Supply Pipeline Replacement | Irvine Ranch Water District, Irvine, CA

Project Manager. Responsible for project oversight. The project included the design of a 12" CML&C pipe replacement across Bonita Canyon Road, connecting the recycled water Zone D of IRWD's system to its Zone B system via an existing PRV Station. The project included extensive coordination with Caltrans and the City of Irvine for permitting the construction.

Rockfield Zone 4 & 5 Flow Control Station | Irvine Ranch Water District, CA

Project included installation of new flow control valve and by-pass to connect two different zones, including installation of a new SCADA cabinet and antenna, vault, new service, and provide traffic control plans and obtain permits from Cities of Irvine Lake Forest.

Silverado Canyon Road Pipeline, Irvine Ranch Water District | Irvine, CA

Project Manager for the design of pipeline based on data gathering and information collection performed. Work included performing field reconnaissance, field survey topographic maps, pothole information and geotechnical engineering recommendations. Design included plan and profile, pipeline connection details, road trench section replacement, traffic control plans, and all details necessary for construction of improvements for existing 8-inch domestic water line.

Recycled Water Lateral Installation | West Basin Municipal Water District, CA

Design services for construction of new RW pipeline and services in City of El Segundo to serve 5 new customers including Boeing and Digital Realty. Project included coordination and permitting from City and Metro, as well as coordination with final users for meter locations and easement requirements.

UCI 12" Recycled Water, Irvine Ranch Water District | Irvine, CA

Project Manager for preliminary design and alternative alignment evaluation for UCI's new 12" recycled water system. Reviewed over 8 different possible alignments and made recommendations for construction. Designed the project and oversaw the construction.

PA-5 New 24" Recycled Water Study, Irvine Ranch Water District | Irvine, CA

Project Manager for preliminary design and alternative alignment evaluation for PA-5's new 24" recycled water system.

Project Lateral 6B, USACE/West Basin Municipal Water District | Los Angeles County, CA

Project Engineer. In charge of design and calculations for 48,000-feet of recycled water pipeline ranging from 12-inch to 24-inch and a 5000 gpm booster pump station. Preliminary design report (PDR) and engineering calculations for 48,000-feet of recycled water pipeline ranging from 12-inch to 24-inch and 2500 gpm booster pump station.

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KEVIN
SALEH, PE, PM
TECHNICAL ADVISOR

EDUCATION

University of Tabriz, Iran - BS Civil Engineering

Seneca College, Toronto -Computer Programming / System Analysis

LICENSES & REGISTRATIONS

Professional Engineer, Maryland -No. 36759

Professional Engineer, California -Civil - No. C90535

Project Management (PM) Certificate, Cornell University, Ithaca

PROFESSIONAL ASSOCIATIONS

American Membrane Technology Association (AMTA)

Water Environment Federation (WEF)

Mr. Saleh has 29 years of experience as a civil engineer. His professional experience includes planning, design, construction management, and construction support services for various public works projects, with specific areas of practice in water and wastewater. His relevant experience includes water distribution and treatment facilities, pumping facilities, treatment plant projects/processes, reservoirs, pressure reducing, and surge facilities. Wastewater projects include conveyance systems, pumping stations, and treatment plant projects and processes.

Turtle Rock Zone 3 Reservoir Chloramine Booster Station | Irvine Ranch Water District, CA

Project Manager for this chloramine booster station installation project. The Turtle Rock Zone 3 Reservoir (TR Z3 Res) is located at 13½ Minaret Drive in Irvine. It supplies water to the surrounding Turtle Rock neighborhood and the Zone 3 to 4 Pump Station (TR Z4 PS), which serves the uppermost portion of the community. IRWD has experienced degraded water quality at the TR Z3 Res due to nitrification caused by the loss of chlorine residual, excess free ammonia, and low water supply turnover. Currently, IRWD doses chlorine and ammonia at the Turtle Rock Zone 1 to 3 Pump Station to reduce nitrification in the system; however, this process is susceptible to chemical precipitation in the pipe where the chemical is injected and has required multiple replacements of the injection pipe. This project will install a chloramine booster station at TR Z3 Res, similar to the chloramine booster stations that are in service at various reservoirs throughout IRWD's potable system, to address and prevent nitrification and in-pipe chemical precipitation issues.

Orange Heights Zone 5 to 6 Domestic Water and Zone C+ to D Recycled Water Booster Pump Station Project | Irvine Ranch Water District, CA

Project Engineer responsible for the design of a combined domestic water pump station and recycled water pump station facility for a new 398-acre medium- and high-density residential development. The \$2.0 million domestic water pump station consists of four (4) 15 HP and two (2) 100 HP variable frequency drive pumps, including standby pumps with a combined total capacity of 1,500 gpm, and the \$1.9 million recycled water pump station consists of four (4) 15HP variable frequency drive pumps with a combined total capacity of 1,300 gpm. Both stations have 5 HP jockey pumps. The preliminary design scope of work included hydraulic analysis and modeling, along with site and masonry building layout, perimeter walls with vehicular access, mechanical equipment and yard piping, and instrumentation and control systems.

UCI Recycled Water Line | Irvine Ranch Water District, CA

Project Engineer. Responsible for design, preparation of contract documents, and engineering services during construction for a new metering vault and approximately 5,700 LF of 16-inch and 12-inch pipeline in California Ave from University Drive to Theory Lane and on Academy Way and Palteson Drive from California Avenue to the Cooling Towers. of 16-inch and 12-inch recycled water pipeline for UCI cooling towers.

Rockfield Zone 4 to 3 Automated Valve Vault Rehabilitation | Irvine Ranch Water District, CA

Project Manager. Responsible for the design of the rehabilitation of the existing valve vault and adding a control/pressure reducing valve and flowmeter, electrical panels, and SCADA system antenna.





IVY
SANDERS, PE
LEAD PROJECT
ENGINEER

EDUCATION

University of California, Berkeley -MS Civil Engineering

University of California, Irvine -BS Environmental Engineering

LICENSES & REGISTRATIONS

California Professional Engineer -Civil - No. C93269

PROFESSIONAL ASSOCIATIONS

Asian American Architect/Engineers Association (AAa/e, 2020–Present)

Civil and Environmental Engineering Affiliates @ UCI (2020–Present, President 2021– 2022)

Government Relations Committee, Orange County Branch, ASCE (2022–Present)

Orange County Water Association (2021–Present)

Orange County Branch, ASCE (2020–Present)

Orange County Chapter, WaterReuse (2024-Present) Ivy Sanders has been contributing to water infrastructure and site civil design projects for over five years. Ivy has worked on dozens of projects across California involving pressurized and gravity pipelines, pump stations, drainage infrastructure, and spillway and dam inlet/outlet works. Ivy specializes in hydraulic and hydrology analyses, system design, and preparation of plans, specifications and reports. Ivy also contributes to cost estimation, scheduling and logistics of project delivery.

Serrano Creek Raw Waterline Replacement, Irvine Ranch Water District | Lake Forest, CA

Project Engineer (Ongoing) for replacement of an existing 8-inch diameter asbestos cement raw water pipe in the vicinity of Serrano Creek Trail in City of Lake Forest. The major challenges to this project included identifying an optimal alignment for a new PVC raw water pipe that avoids encroaching on private property, provides adequate maintenance access and limits public impacts. The replacement design included a trenchless installation of a portion of the proposed pipe.

Marriott Pipeline, South Coast Water District | Dana Point, CA

Project Engineer (Ongoing) for design of new 12-inch water main via open trench and trenchless installation in the vicinity of the Laguna Cliffs Marriott in the City of Dana Point.

Coastal Recycled Water Expansion Program Phase 4 Project, South Coast Water District | Dana Point, CA

Project Engineer (Ongoing) for design of new 8-inch PVC recycled water pipe in the City of Dana Point to accomplish phase 4 of SCWD's Recycled Water Roadmap.

Jefferson Avenue Interconnection with Rancho California Water District Project, Western Municipal Water District | Murrieta, CA

Project Engineer (Ongoing). Project involves designing an 18-inch PVC water pipe and two interconnection facilities to connect Western's water supply system and the transmission facility owned by Rancho California Water District to enhance water supply reliability and resiliency to the Innovation Zone in City of Murrieta. The project also involves evaluating design alternatives for the pipe alignment and interconnection locations, preparing preliminary design report, and construction plans and cost estimates.

Mockingbird Canyon Pipeline Emergency Repair Project, Western Municipal Water District | Riverside, CA

Project Engineer. Project involves replacing a 20-inch steel pipe that is exposed to a creek bed located east of Mockingbird Canyon Road in City of Riverside with a 20-inch HDPE pipe. The project also involves site civil design such as backfilling of the exposed pipe area, installing gabions for erosion control, and earthen V-ditch to re-direct the creek flow. One challenge associated with the project is to complete design and construction within a fairly short time frame for the emergency repair.

Calabasas Recycled Water Improvement, Las Virgenes Municipal Water District | Calabasas, CA

Project Engineer for evaluation of 8,478 feet long recycled water pipeline with different size and materials following multiple leaks and breaks and abnormal pressure fluctuation within the pipe along Park Entrada in the City of Calabasas.



SECTION C REFERENCES

Circula Panorama Pipeline Conversion and Replacement

Orange County, CA

OWNER: East Orange County Water District **KEY PERSONNEL:** Ryan Gallagher, PE; Safa Kamangar, PE; Parasto Azami, PE; Ivy Sanders,

PΕ

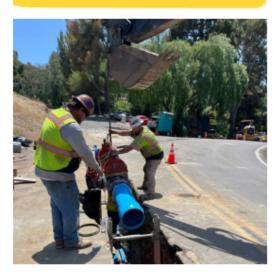
DURATION: Aug 2022 - Present

CLIENT CONTACT:

Jeff Smyth, Engineering Manager 185 N. Mcpherson Road

Orange, CA 92689

714.538.5815; jsmyth@eocwd.com



BRIEF DESCRIPTION

The work involves construction of approximately 2,650 LF of the new 12" and 610 LF of new 8" AWWA C-900 PVC (DR-14) water pipeline along with three new pressure reducing facilities along Circula Panorama area. The scope also includes construction of 28 new 1" service lines and abandonment of existing waterlines and existing PRV facility. MKN coordinated multiple meetings with the County of Orange to ensure that traffic control measures minimize the impact on the community, particularly given the narrow streets in the project area.

Laguna Cliffs Marriott Fire Flow Design Improvements

Dana Point, CA

OWNER: South Coast Water District KEY PERSONNEL: Safa Kamangar, PE; Parasto Azami, PE; Ivy Sanders, PE DURATION: Nov 2023 - May 2024

CLIENT CONTACT:

Dylan LaFrance, PE, JD, Senior Engineer

31592 West Street Laguna Beach CA 92651

949.342.2178; dlafrance@scwd.org

BRIEF DESCRIPTION

This project involves abandonment of existing 6-inch asbestos cement pipeline and construction of approximately 1,100 linear feet of 12-inch and 8-inch PVC pipeline along Terrace Lantern and Laguna Cliffs Marriott site. The scope of work also includes the installation pipe in very steep easement. MKN conducted a site visit and collaborated with the resort's Director of Engineering to address resort's requirements for construction work hour, site access and temporary site aesthetic and noise mitigation measures.



Emergency Pipeline Replacement - Via California

Capistrano Beach, CA

OWNER: South Coast Water District

KEY PERSONNEL: Ryan Gallagher, PE;

Joseph Reichmuth, PE

DURATION: Jan 2020 - Sep 2020

CLIENT CONTACT:

Taryn Kjolsing, Engineering Manager

31592 West Street Laguna Beach CA 92651

949.541.1327; tkjolsing@scwd.org



MKN delivered this emergency design project within 3 weeks from Notice to Proceed, and delivered a cost saving approach.

BRIEF DESCRIPTION

South Coast Water District selected MKN to design a replacement pipeline for an existing 10-inch AC pipeline within a 16-inch steel casing. The 400 foot section of pipe, located in the Via California crossing over the 5 Freeway, had failed and required immediate replacement. Key elements of the design include the following:

- Expedited Delivery. MKN received the Notice to Proceed on January 6, 2020 and returned the draft design documents and specifications on January 22, 2020 – less than three weeks from the start date.
- Project Savings. To reduce cost and schedule, MKN
 recommended consideration of Certa-Lok restrained joint PVC in
 lieu of the District standard fusible PVC. Following a technical
 review with District staff, the recommendation was accepted.
- Technical Experience. The project required design of the new Certa-Lok restrained joint PVC and also a cured-in-place liner for the existing steel casing. Permitting was coordinated with Caltrans and the City of Dana Point.

Placentia Waterline Replacement

Yorba Linda, CA

OWNER: Yorba Linda Water District

KEY PERSONNEL: Parasto Azami, PE; Safa

Kamangar, PE; Dennis Phinney, PE DURATION: May 2024 - Ongoing

CLIENT CONTACT:

Yvette Hanna, PE, Senior Engineer 1717 E. Miraloma Avenue, Placentia, CA 92870 714.701.3000; yhanna@ylwd.com

BRIEF DESCRIPTION

This project involves abandonment of existing 6-inch asbestos cement pipeline and construction of approximately 1,100 linear feet of 8-inch PVC pipeline along McKenzie Drive, Lute Avenue, Roxborough Drive, and Cedarlawn Drive. The scope of work also includes the installation of thirty-five (35) new 1-inch service lines, reconnection of these service lines to existing meters, and removal and replacement of three (3) fire hydrants. MKN conducted a site visit and collaborated with the operations manager to identify existing pipe and meter connections, ensuring the recommended pipeline alignment meets the District's requirements.

Serrano Creek Raw Water Pipeline Replacement

Irvine, CA

OWNER: Irvine Ranch Water District

KEY PERSONNEL: Ryan Gallagher, PE; Safa Kamangar, PE; Josh Nord, PE; Parasto Azami,

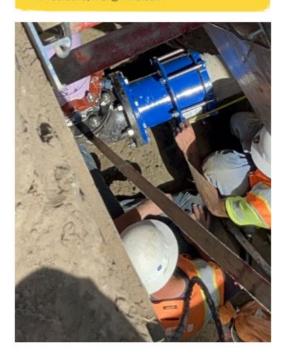
PE; Ivy Sanders, PE

Irvine, CA 92612

DURATION: Nov 2022 - Ongoing

CLIENT CONTACT: Nhan Mai, Project Manager 3512 Michelson Drive

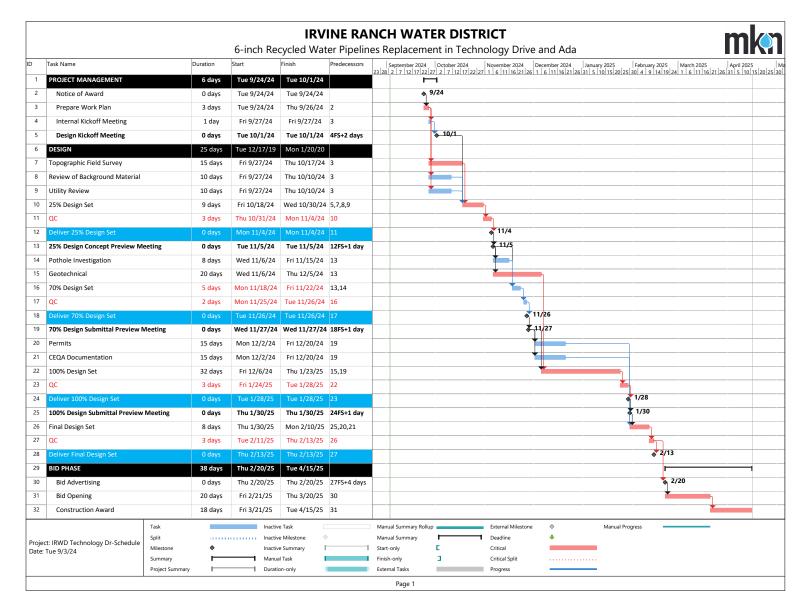
949.453.5678, mai@irwd.com



BRIEF DESCRIPTION

This project will abandon approximately 650 LF of the 8-inch ACP raw water pipe within an easement in the vicinity of the Serrano Creek Trail, north of Trabuco Road, and install a new PVC pipeline along an alternative alignment to restore the distribution system. MKN evaluated several alternative pipeline alignments considering factors such as maintenance access, constructability, critical crossings, public impacts, and other criteria in order to identify a recommended alignment. MKN completed a Technical Memorandum documenting the selected alternative, provided final engineering design and construction documents and is currently providing construction support services.





September 18, 2024 Prepared by: A. Uk

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITTEE

ON-CALL ENVIRONMENTAL CONSULTANT SELECTIONS

SUMMARY:

IRWD retains consultants to provide on-call environmental compliance as well as monitoring and permitting services pursuant to the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and other regulatory requirements. Staff has solicited and evaluated proposals from firms to perform future on-call services. Staff recommends that the Board authorize the General Manager to:

- Execute Professional Services Agreements for on-call CEQA/NEPA services, to be provided for the next three years, with Environmental Science Associates (ESA), Psomas, and Rincon Consultants, Inc. for \$300,000 each; and
- Execute Professional Services Agreements for on-call biological monitoring and permitting services, to be provided for the next three years, with Harmsworth Associates, Psomas, and ESA for \$300,000 each.

BACKGROUND:

IRWD must comply with the requirements of CEQA for all project activities. Where federal government action or funding is involved, compliance with NEPA is required. IRWD must also comply with statutes, regulations, policies, and programs that require biological monitoring and permitting to carry out new projects, conduct operations and maintenance activities, and to address emergency conditions. Following is a description of how IRWD uses on-call consulting services to fulfill these requirements. Also provided is an overview of expected future on-call service requirements, and the selection of consultants to provide these services for the next three years.

On-Call CEQA/NEPA Services:

The use of on-call Professional Services Agreements for CEQA/NEPA work allows staff to efficiently address environmental review requirements for projects. The types of tasks performed under on-call CEQA/NEPA Professional Services Agreements include general consultations and the preparation of Negative Declarations, Mitigated Negative Declarations, Environmental Impact Reports, Addenda, Environmental Assessments, and Findings of No Significant Impact. Over the past four years, approximately \$757,000 of CEQA/NEPA services were obtained on an on-call basis under agreements with environmental consultants at Dudek, ESA, LSA Associates and Psomas.

On-Call Biological Monitoring and Permitting Services:

The use of on-call Professional Services Agreements for biological monitoring and permitting services allows IRWD to task consultants with time-sensitive activities. Most of the tasks performed under such agreements include biological surveys, preparation of regulatory agency permit

Engineering and Operations Committee: On-Call Environmental Consultant Selections September 18, 2024 Page 2

applications, wetland delineations and jurisdictional delineations, and mitigation monitoring. Over the last four years, approximately \$461,000 of monitoring and permitting services were obtained on an on-call basis under agreements with ESA, Harmsworth Associates, and Psomas.

Future On-Call Requirements:

To estimate future on-call CEQA/NEPA as well as biological monitoring and permitting needs, staff reviewed past utilization of on-call consultants. Next, staff reviewed the capital budget for the next several years and determined that there will be continued need for CEQA/NEPA compliance services to support future projects. Additionally, numerous existing and future capital projects will result in an increased need for multi-year mitigation monitoring reporting and permitting assistance. Based on these expectations, staff has estimated future on-call CEQA/NEPA and permitting needs for the next three years.

Staff recommends an approach whereby six firms are retained to provide on-call services over the next three years. Three of the firms are recommended to provide CEQA/NEPA services under agreements for amounts up to \$300,000 each, and three firms are recommended to provide monitoring and permitting services under agreements for amounts up to \$300,000 each. Under these agreements, staff will issue project specific task orders based on negotiated scopes of work, cost estimates, and schedules for projects that have existing approved budgets.

Consultant Selection Process:

A Request for Proposals (RFP) for on-call CEQA/NEPA services was distributed to six environmental consulting firms. Proposals to provide on-call CEQA/NEPA consulting services were received from Adurra Group, Inc., Dudek, ESA, LSA, Psomas, and Rincon. Within the RFP, the consultants were asked to demonstrate:

- A thorough understanding of CEQA and NEPA and associated processes;
- A broad expertise and experience in performing CEQA/NEPA analysis and review work;
- A history of successful CEQA/NEPA activities on behalf of clients; and
- A long-standing working relationship with the natural resources agencies representatives.

A separate RFP for on-call monitoring and permitting services was distributed to five environmental consulting firms. Proposals for were received from Endemic Environmental Services, ESA, Psomas, Harmsworth Associates, and Rincon. The monitoring and permitting RFP asked each consultant to:

- Demonstrate an understanding of the processes of natural resources, wildlife, and regulatory requirements as well as the agencies with jurisdiction over permits and mitigation requirements;
- Commit to responding to requests for service from IRWD in a timely and cost-effective manner; and
- Document its knowledge and experience with endangered species issues and regulations, mitigation monitoring and reporting, IRWD's Natural Treatment System, and the Natural Community Conservation Plan.

Engineering and Operations Committee: On-Call Environmental Consultant Selections September 18, 2024

Page 3

Staff reviewed and evaluated each of the consultants' proposals and recommends that Professional Services Agreements be awarded for CEQA/NEPA services to ESA, Psomas, and Rincon for \$300,000 each. Staff also recommends that Professional Services Agreements for biological monitoring and permitting services be awarded to Harmsworth Associates, Psomas, and ESA for \$300,000 each. The duration of each agreement will be three years.

Each recommended firm has demonstrated extensive knowledge and experience with CEQA, NEPA, monitoring, and permitting requirements. Each firm has committed to staff availability on an on-call basis and demonstrated excellent project team qualifications. Each firm's team have individuals that have demonstrated previous experience assisting IRWD or similar agencies with various CEQA/NEPA and permitting projects.

A CEQA/NEPA services evaluation matrix based on staff's review of the proposals is provided as Exhibit "A" and an evaluation matrix for monitoring and permitting services is provided as Exhibit "B." Pertinent sections of the CEQA/NEPA proposals from the recommended firms ESA, Psomas, and Rincon are included as Exhibits "C," "D," and "E," respectively. Pertinent sections of the monitoring and permitting proposals from the recommended firms Harmsworth Associates, Psomas, and ESA are included as Exhibits "F", "G", and "H" respectively.

FISCAL IMPACTS:

No new project budgets are required in executing these Professional Services Agreements. Task orders for specific projects with existing approved budgets will be issued to the consultants under the terms of the agreements and negotiated scopes of work, costs, and schedules.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board authorize the General Manager to execute Professional Services Agreements with ESA, Psomas, and Rincon to provide on-call CEQA/NEPA services, for the next three years, for not-to-exceed amounts of \$300,000 each and with Harmsworth Associates, Psomas, and ESA to provide on-call monitoring and permitting services, for the next three years, for not-to-exceed amounts of \$300,000 each.

LIST OF EXHIBITS:

Exhibit "A" – 2024 On-Call CEQA/NEPA Services Evaluation Matrix

Exhibit "B" – 2024 On-Call Monitoring and Permitting Services Evaluation Matrix

Exhibit "C" – ESA Proposal for On-Call CEOA/NEPA Services

Exhibit "D" – Psomas Proposal for On-Call CEQA/NEPA Services

Exhibit "E" – Rincon Proposal for On-Call CEQA/NEPA Services

Exhibit "F" – Harmsworth Associates Proposal for On-Call Monitoring and Permitting Services

Exhibit "G" – Psomas Proposal for On-Call Monitoring and Permitting Services

Exhibit "H" – ESA Proposal for On-Call Biological Monitoring and Permitting Services

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Exhibit "A"

2024 ON-CALL CEQA / NEPA CONSULTATION SERVICES EVALUATION MATRIX

Item	Description	Weights	Ardurra	Dudek	ESA	LSA	Psomas	Rincon
Α	Demonstration of CEQA/NEPA Skills and Rates							
1	Understanding of IRWD's Needs	20%	6	5	1	4	3	2
2	Demonstration of CEQA Skills and Abilities	20%	5	6	1	4	3	2
3	Demonstration of NEPA Skills and Abilities	20%	5	6	1	5	3	2
	Provided Staff Rates Consistent with Skills and Abilities	20%	6	5	2	4	1	3
4	Over Range of Staff on Project	20%	6	5	2	4	ı	3
5	Demonstrated Ability to Coordinate with Other Consultants /	10%	6	4	2	5	1	3
_	Engineers	100/	6	4	4	-		2
6	Demonstrated Experience with MMRP's	10%	· ·	•	1	5	3	
	Weighted Score	30%	5.60	5.20	1.30	4.40	2.40	2.30
В	DEMONSTRATION OF PROJECT SCOPING, COST ESTIMATING, AND SCHEDULING							
1	Demonstrated Knowledge of Scope of Work	33.33%	6	5	1	4	3	2
-		33.33%	5	6	1	4		
2	Demonstrated Knowledge of Cost Estimates						2	3
3	Demonstrated Knowledge of Project Schedules	33.33%	6	5	1	3	2	4
—	Weighted Score	20%	5.67	5.33	1.00	3.67	2.33	3.00
С	QUALIFICATION AND EXPERIENCE							
			Lisa Penna	Rachel Struglia	Tom Barnes	Deborah Pracilio	Jennifer Marks	Jennifer Jacobus
1	Principal / Director		P.E., BS 35 years	PhD. 26 years	BA, 26 years	BS, 35 years	BS, 25 years	PhD, 24
		20%	6	5	2	4	3	1
	Project / Contract Manager		Lori Trottier	Rachel Struglia	Sarah Spano	Shanna Guiler	Sean Noonan	Annaliese Torres
2	Floject / Contract Manager		BS, AICP 34 years	PhD. 26 years	BA, 13 years	MA, 21 years	MS, 13 years	BS, 7 years
		30%	4	2	1	5	3	6
3	Project Team	30%	6	5	1	4	2	3
4	Firm's Relevance Experience	20%	6	5	1	4	2	3
4	Firm's Relevance Experience Weighted Score	20% 40%	6 5.40	5 4.10	1 1.20	4 4.30	2 2.50	3 3.50
4 D					1 1.20	-	2.50	3.50
D	Weighted Score				1 1.20 Syphon Reservoir Improvement Project EIR	-		_
D	Weighted Score REFERENCES		5.40 OLIVENHAIN TRUNK	4.10 Irvine Ranch Water District On-	Syphon Reservoir Improvement	4.30 The Woods Sewer	2.50 Santiago Creek Dam Outlet Tower and	3.50 Eastern Municipal Water District, On-Call Environmental Services:
D	Reference Project 1	40% 50%	OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION	4.10 Irvine Ranch Water District On- Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project	2.50 Santiago Creek Dam Outlet Tower and	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project
D	Reference Project 1 Score Reference Project 2 Score	40%	5.40 OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION 6	4.10 Irvine Ranch Water District On- Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project
D	Reference Project 1 Score Reference Project 2	40% 50%	OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION	4.10 Irvine Ranch Water District On- Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project
D	Reference Project 1 Score Reference Project 2 Score	40% 50%	5.40 OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION 6	4.10 Irvine Ranch Water District On- Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project
	Reference Project 1 Score Reference Project 2 Score Weighted Score Weighted Score	50% 50%	5.40 OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION 6 6.00	4.10 Irvine Ranch Water District On- Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access 3 3.00	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services 4 2.50	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project 2 3.50	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND 1 1.50	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project 5 4.50
E	Reference Project 1 Score Reference Project 2 Score Score Weighted Score Weighted Score	50% 50%	5.40 OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION 6 6.00	4.10 Irvine Ranch Water District On- Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access 3 3.00	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services 4 2.50	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project 2 3.50	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND 1 1.50	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project 5 4.50
E	Reference Project 1 Score Reference Project 2 Score Score Weighted Score Weighted Score COMBINED WEIGHTED SCORE Multiplier	50% 50%	5.40 OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION 6 6.00 5.57 Yes; 1.5 rates over 8 hours single or Saturdays, double time Sundays and holidays	4.10 Irvine Ranch Water District On-Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access 3 3.00 4.57 Yes; emergency and holidays @ two hours at 1.75 times	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services 4 2.50 1.32 Yes, subcontracted services @ 1.15 times invoiced amount; labor charges x 3% for tech and data management	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project 2 3.50 4.12	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND 1 1.50 2.34	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project 5 4.50 3.14
E	Reference Project 1 Score Reference Project 2 Score Reference Project 2 Score Weighted Score COMBINED WEIGHTED SCORE OTHER Multiplier Sub Consultants	50% 50%	5.40 OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION 6 6.00 5.57 Yes; 1.5 rates over 8 hours single or Saturdays, double time Sundays and holidays Yes; AQ/GHG, Noise,	4.10 Irvine Ranch Water District On-Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access 3 3.00 4.57 Yes; emergency and holidays @ two hours at 1.75 times	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services 4 2.50 1.32 Yes, subcontracted services @ 1.15 times invoiced amount; labor charges x 3% for tech and data management	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project 2 3.50 4.12 No	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND 1 1.50 2.34 No	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project 5 4.50 3.14 No
E	Reference Project 1 Score Reference Project 2 Score Weighted Score Weighted Score OTHER Multiplier Sub Consultants Exceptions taken to IRWD Std. Contract	50% 50%	5.40 OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION 6 6.00 5.57 Yes; 1.5 rates over 8 hours single or Saturdays, double time Sundays and holidays Yes; AQ/GHG, Noise, NONE	4.10 Irvine Ranch Water District On-Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access 3 3.00 4.57 Yes; emergency and holidays @ two hours at 1.75 times No Yes, Section 9 of Proposal	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services 4 2.50 1.32 Yes, subcontracted services @ 1.15 times invoiced amount; labor charges x 3% for tech and data management No NONE	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project 2 3.50 4.12 No No No	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND 1 1.50 2.34 No No	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project 5 4.50 3.14 No Yes, traffic NONE
E	Reference Project 1 Score Reference Project 2 Score Reference Project 2 Score Weighted Score COMBINED WEIGHTED SCORE OTHER Multiplier Sub Consultants Exceptions taken to IRWD Std. Contract Insurance (General Liability)	50% 50%	5.40 OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION 6 6.00 5.57 Yes; 1.5 rates over 8 hours single or Saturdays, double time Sundays and holidays Yes; AQ/GHG, Noise, NONE YES	4.10 Irvine Ranch Water District On-Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access 3 3.00 4.57 Yes; emergency and holidays @ two hours at 1.75 times No Yes, Section 9 of Proposal YES	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services 4 2.50 1.32 Yes, subcontracted services @ 1.15 times invoiced amount; labor charges x 3% for tech and data management No NONE YES	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project 2 3.50 4.12 No No No NONE YES	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND 1 1.50 2.34 No No	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project 5 4.50 3.14 No Yes, traffic NONE YES
E	Reference Project 1 Score Reference Project 2 Score Weighted Score Weighted Score OTHER Multiplier Sub Consultants Exceptions taken to IRWD Std. Contract	50% 50%	5.40 OLIVENHAIN TRUNK SEWER IMPROVEMENT 6 CARANCHO PUMP STATION 6 6.00 5.57 Yes; 1.5 rates over 8 hours single or Saturdays, double time Sundays and holidays Yes; AQ/GHG, Noise, NONE	4.10 Irvine Ranch Water District On-Call Environmental Services 3 Syphon Reservoir Improvement Project Interim Road Access 3 3.00 4.57 Yes; emergency and holidays @ two hours at 1.75 times No Yes, Section 9 of Proposal	Syphon Reservoir Improvement Project EIR 1 Eastern Municipal Water District On-Call Environmental Services 4 2.50 1.32 Yes, subcontracted services @ 1.15 times invoiced amount; labor charges x 3% for tech and data management No NONE	4.30 The Woods Sewer Improvements 5 San Joaquin Reservoir Filtration Facility Project 2 3.50 4.12 No No No	2.50 Santiago Creek Dam Outlet Tower and Spillway Improvement 2 Zone A to Rattlesnake Reservoir Pump Station Project MND 1 1.50 2.34 No No	3.50 Eastern Municipal Water District, On-Call Environmental Services: Cactus Avenue Corridor Project 4 City of Pismo Beach, Central Coast Blue Project 5 4.50 3.14 No Yes, traffic NONE

Rates Escalation	(Future years subject to review for Consumer Price Index escalation or 3%, whichever is greater)	Increase in-line with CPI-U or 3% whichever is greater	N/A	Changes annually per LSA discretion	N/A	3.5% annual escalation
Principal In Charge Rate /hr	\$330	\$300	\$295	\$190	\$265	\$307
Project Manager Rate /hr	\$280	\$275	\$256	\$150	\$207	\$255

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EXHIBIT "B" 2024 ON-CALL MONITORING AND PERMITTING SERVICES EVALUATION MATRIX

Item	Description	Weights	Endemic	ESA	Harmsworth	Psomas	Rincon
	Demonstration of Permitting Skills and Rates	-					
	Understanding of IRWD's Needs	10%	5	Λ	1	3	2
	Land Use Planning	5%	5	1	4	3	2
	Regulatory Agency Consultation, Permit Application and	370	3	ı	-	3	
3	Procurement	10%	5	3	4	1	2
	Wetland Delination	10%	5	1	4	2	3
5	Biological Survey, Monitoring, Assessment	10%	1	3	2	5	4
6	Threatened & Endangered Species Regulation, Monitoring and Reporting	10%	1	3	2	5	4
7	Mitigation Monitoring and Reporting	5%	5	1	4	3	2
8	Water Quality, Stormwater Monitoring and Reporting	5%	5	1	4	2	3
9	Natural Treatment System (NTS)	10%	1	2	3	5	4
1()	Natural Community Conservation Plan/Habitat Conservation Plan (NCCP)	10%	5	1	4	3	2
11	Coordination with other Consultants/Engineers	5%	5	1	3	2	4
	Staff rates consistent with skills and abilities over range of	100/		_	,	-	,
	staff on the project	10%	2	5	1	3	4
	Weighted Score	30%	3.50	2.40	2.85	3.20	3.05
В	DEMONSTRATION OF PROJECT SCOPING, COST ESTIMATING,						
	AND SCHEDULING						
	Demonstrated Knowledge of Scope of Work	33.33%	4	1	2	3	5
	Demonstrated Knowledge of Cost Estimates	33.33%	3	5	1	2	4
3	Demonstrated Knowledge of Project Schedules	33.33%	4	5	1	2	3
Ш	Weighted Score	20%	3.67	3.67	1.33	2.33	4.00
С	QUALIFICATION AND EXPERIENCE						
			Barry Nerhus	Tom Barnes	Rodney Harmsworth	Jennifer Marks	Jennifer Jacobus
1	Principal / Director		MS, 18 years	BA, 26 years	PhD, 35 years	BS, 24 years	PhD, 20 years
		20%	3	5	4	2	1
	Project Manager		Brian Mayerle	Scott Holbrook	Paul Galvin	Amber Heredia	Brenna Vredeveld
2	i iojoot managoi		BS, 30 years	BA, 30 years	MS, 30 years	MS, 28 years	MS, 15 years
		30%	4	2	1	3	5
-	Project Team	30%	5	3	4	11	2
4	Firm's Relevance Experience	20%	5	2	1	3	4
	Weighted Score	40%	4.30	2.90	2.50	2.20	3.10
D	REFERENCES						
	Reference Project 1		Fairview Park Wetlands Biological Monitoring and Riparian Habitat Restoration Project	Syphon Reservoir Geotechnical Investigation Project IS/MND	Permits for Irvine Ranch Water District projects – Irvine Ranch Water District	Santiago Creek Dam Outlet Tower and Spillway Improvement	The Metropolitan Water District of Southern California, On-Call Contract to Provide Biological Resources Management, Regulatory Permitting and Guidance, and Environmental Planning
	Score	50%	5	1	2	3	4
	Reference Project 2		Orange County Water District Prado Basin Sediment Demonstration Project for Habitat Restoration	San Joaquin Marsh Wetland/Riparian Habitat Concept Development	NROC coordination for Irvine Ranch Water District projects – Irvine Ranch Water District	Irvine Lake Pipeline (ILP) North Conversion Project MND	Santa Clarita Valley Water Agency, Environmental On Call & Multiple Projects
	Score	50%	5	1	2	3	4
	Weighted Score	10%	5.00	1.00	2.00	3.00	4.00
	COMBINED WEIGHTED SCORE	100%	4.00	2.71	2.32	2.61	3.35
E	OTHER						
	Multiplier		Overtime- 9-12hrs per day	Yes, subcontracted services @	No	No	No
	Sub Consultants		No	No	No	No	Yes, Tierra Data, Inc for NTS
-	Exceptions taken to IRWD Std. Contract		No	No	No	No	
	Insurance (General Liability)		YES	YES	YES	YES	YES
	Insurance (Professional)		YES	YES	YES	YES	YES
	Forced Rankings:(Enter 1-5, 1 being best)		5	3	1	2	4
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Irvine Ranch Water District

On-Call CEQA and NEPA Consultation





July 18, 2024

420 Exchange, Suite 260 Irvine, CA 92602 949.753.7001 phone 949.753.7002 fax esassoc.com

Irvine Ranch Water District

Attention: Fiona M. Sanchez 15600 Sand Canyon Avenue Irvine, CA 92618

RE: Proposal for On-Call CEQA and NEPA Consultation

Dear Ms. Sanchez:

Environmental Science Associates (ESA), an employee-owned California corporation with an office in Irvine and 21 other locations, is an award-winning environmental consulting firm with 55 years of experience guiding projects through the environmental review process. Since 2009, ESA has enjoyed a solid working relationship with the Irvine Ranch Water District (IRWD or District) as a trusted California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) on-call consultant. We are pleased to present this proposal and look forward to continuing our successful work with the District. Our proposal includes a summary of ESA's experience and capabilities; our key strengths that set us apart are summarized below:

- → ESA's focus on CEQA and NEPA compliance for water and wastewater clients is unmatched. We provide the full array of technical expertise needed to successfully prepare legally defensible environmental documentation for water supply projects. Our Water Group's core business is providing CEQA/NEPA compliance services to water utilities, and the entire firm is focused on environmental problem solving that expedites project implementation.
- → Experienced on-call environmental consultation providers. We have extensive experience providing on-call environmental compliance services to public utilities in Southern California, including IRWD since 2009, Eastern Municipal Water District since 2013, Inland Empire Utilities Agency since 2013, Los Angeles Department of Water and Power since 2011, and California Department of Water Resources since 2000. We know what it takes to manage on-call contracts effectively and successfully.
- → We provide exceptional Senior Managers and a deep bench of Technical Experts. ESA's senior management team, led by Tom Barnes and Sarah Spano, provides centralized leadership, strategic support, and a commitment to quality. Our job is to understand IRWD's objectives and collaborate with the District to overcome environmental compliance challenges. Sarah will be the primary point of contact and responsible for quality control of all products.
- → **We know IRWD**. As an incumbent, ESA will hit the ground running. We have learned the District's specific style, quality commitments, and cost control expectations, and we have established effective relationships with IRWD project staff. This experience brings value to the District through strategic approaches to project implementation that minimize costs through careful staffing and scoping based on current real-world experience and institutional knowledge. ESA is committed to continuing this partnership with a strong level of excellence.

We have greatly valued our partnership with the District over the past 15 years, and we appreciate this opportunity to be considered for another contract term. This letter is signed by Tom Barnes, who as vice president has the authority to represent and contractually bind the firm, and Sarah Spano as the proposed client/project manager. Should you have any questions, please feel free to contact Sarah Spano at 213.599.4325 or sspano@esassoc.com.

Sincerely,

Sarah Spano,

Client/Project Manager, Southern California Water Group Director

Tom Barnes

Principal Associate and Vice President





ESA'S CONTINUED COMMITTMENT TO IRWD

We are committed to quality assurance and quality control.
Our value is linked to the quality of our analysis and documentation. As detailed in Section 2, ESA follows a strict QA/QC Plan. Comprehensive document reviews are crucial for successful projects.

We are committed to effective cost controls and pricing efficiency.

From experience, we know cost controls are vital in scope and fee preparation, as costs relate to services, staff, and time. We review the scope to meet the District's objectives efficiently, recommending where to gain efficiencies without compromising essential support.

We are committed to close communication with IRWD staff.

From experience, we know the importance of quickly elevating information to management. Prompt communication manages risks and fosters team trust.

Introduction

ESA is a leading planning and environmental consulting firm with over 750 employees across 21 office locations, including Irvine, along our nation's West Coast and in Florida. With a commitment to the principles of responsible development and environmental stewardship, we bring 55 years of integrated experience in all aspects of project planning, regulatory compliance, and environmental analysis and assessment. ESA's mission is to assist clients with advancing sustainability through planning, program development and implementation, and technical analyses that support strategic decision making. Our professionals regularly engage with public-sector clients to act as a single source for well-reasoned and effective solutions.

We Know CEQA/NEPA

ESA has provided on-call environmental services to Irvine Ranch Water District (IRWD or District) since 2009. Accordingly, the staff selected for this on-call California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) consultation contract have an extensive portfolio of experience supporting the District with environmental compliance for small projects. As a foundation of our business, ESA is an expert in the development of CEQA/ NEPA compliance documents for municipal utilities, particularly Initial Studies, Addenda, Negative Declarations, Mitigated Negative Declarations (MNDs), and Environmental Impact Reports (EIRs). We also provide a full range of support services, including preparation of stand-alone technical studies and constraints analyses, biological and cultural surveys, water quality assessments, permit compliance, and construction monitoring. Our team is composed of scientists, planners, and engineers encompassing a wide diversity of specialties in the fields of biology, ecology, geology, hydrology, water quality, archaeology, architectural history, paleontology, air quality, greenhouse gases and climate change, noise, traffic management, city planning, and environmental sciences.

SECTION 1: SCOPE OF WORK

The following scope of work outlines the tasks necessary to provide IRWD with on-call professional services for CEQA and NEPA analysis and compliance as requested in the RFP.

Management Approach

Availability and Schedule

IRWD's need for on-call services over the next three years and the schedule for on-call projects will drive the team's dedication to tasks as they are identified. Both Principal-In-Charge Tom Barnes and Project Manager Sarah Spano will commit time as specific tasks warrant. ESA is committed to meeting project schedule deadlines, and we have recent experience dedicating the time needed to get the job done on schedule. For example, under a previous on-call contract for IRWD, ESA completed four NOEs for and IRWD's Energy Storage Systems Project within three days, as requested by IRWD to meet deadlines for consideration approval by IRWD's Board of Directors.

Sarah will manage project schedules, including monitoring progress of technical analyses, notifying team members of deadlines ahead of time, organizing conference calls, and managing production staff. Tom and Sarah have successfully partnered with IRWD to complete larger multi-year projects, like the Syphon Reservoir Improvement Project, while also completing CEQA/NEPA compliance for small projects as an on-call contract holder (see Table 1 below).

Project Controls and Invoicing

ESA takes a proactive approach to tracking, reporting, and controlling costs so that budgets are managed effectively. The first step in managing project costs is working closely with IRWD to establish a clear and detailed scope, schedule, and budget. As project manager, Sarah will work closely with the internal ESA team once scopes of work are approved by IRWD to ensure team members stay within the approved scope and budget. As part of this process, Sarah will identify in advance any work that is out of scope and communicate with IRWD. ESA has worked with IRWD in the past to move budget and scope within approved contracts to ensure the timely continuation of project work.

ESA uses the Deltek electronic time reporting system to monitor and track staff activities for each project and submit monthly invoices efficiently. This system allows real-time monitoring of labor costs, which are compiled weekly and used to measure project performance as well as percentage of completion and percentage of budget spent. Our invoices include individual staff hours per project and any reimbursable, permitting, and filing fees. We include a customized progress report with each monthly invoice, indicating activities performed for active tasks during the invoicing period, expected activities for the next monthly period, and any expected challenges or problems. Under this contract, ESA will provide separate invoices for each project, and if requested by IRWD can provide a monthly summary of the overall purchase order status.

Quality Control / Quality Assurance

All ESA work products are subject to a stringent QA/QC Program. The program consists of multiple levels of review, each requiring a sign-off from the manager in charge.



This approach provides for preparation of documents that have received reviews from senior technical leaders for accuracy of content, the overall project manager for compliance of task objectives, a technical editor for style and readability, and a project director to ensure documents are legally defensible, technically accurate, and tailored to meet client needs. As principal-in-charge, Tom will continue to oversee ESA's QA/QC program in order to uphold IRWD's rigorous standards for technical excellence in environmental documentation.

Technical Approach

Task 1: CEQA

We understand IRWD has upcoming small-scale projects that could be implemented over the next three years. IRWD needs a firm that can respond quickly and efficiently to produce cost-effective, high-quality environmental documentation in compliance with CEQA. ESA's Southern California Water Group specializes in impact assessments for the construction and operation of water infrastructure projects, including wells, pipelines, pump stations, storage tanks, and reservoirs. Providing CEQA compliance in the form of Addenda, Negative Declarations, and MNDs for these types of projects is our primary business. ESA provides full-service environmental support that includes in-house capabilities to perform technical studies, such as air emissions models; greenhouse gas (GHG) emissions analyses; noise models; biological surveys and monitoring; cultural resources surveys, monitoring, and tribal consultations; historic architectural assessments; traffic impact assessments; and visual simulations. Over the years, ESA has prepared multiple CEQA documents for IRWD, from the Syphon Reservoir Improvement Project EIR to smaller documents such as the Baker Water Treatment Plant Solar Addendum.

ESA's biologists have specialized experience working on projects within Orange County and the Orange County Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP). ESA's biology team is currently assisting IRWD with NCCP coordination for the Syphon Reservoir Improvement Project, meeting with the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) to negotiate a mitigation plan. Also, our Southern California Cultural Resources Group is extremely knowledgeable about Assembly Bill (AB) 52, which was signed into law in September 2014 and requires lead agencies to consider the effects of projects on tribal cultural resources and to conduct consultation with federally and non-federally recognized Native American tribes early in the environmental planning process. ESA will assist the District with implementing this process and will ensure that CEQA/NEPA documents appropriately include the outcome of the Assembly Bill (AB) 52 consultation. This could include preparation of draft AB 52 consultation letters for submission to tribes that have requested consultation with IRWD. ESA is currently recently providing CEQA support to IRWD on the Syphon Reservoir Improvement Project Mitigation Site Addendum, including biological and cultural resources technical reports.

For each CEQA or NEPA task order that is approved and issued by IRWD, we know there to be several rounds of review to ensure comments have been adequately addressed. IRWD expects to see a full Administrative Draft environmental document, a Screencheck Draft document showing revisions to IRWD comments, and finally a Public Draft environmental document that has been fully QA/QC reviewed before publication. After public comments are received on a draft document, ESA will prepare a final document and ensure appropriate public circulation prior to IRWD Board of Directors approval/certification hearings.

Task 2: NEPA

We understand IRWD needs a firm that provides high-quality environmental documentation that complies with NEPA to satisfy the requirements of potential partner funding entities. ESA regularly produces joint CEQA/NEPA documents and stand-alone NEPA documents. We have recent experience working with staff at the State Water Resources Control Board (SWRCB), U.S. Bureau of Reclamation (Bureau), U.S. Army Corps of Engineers (USACE), and U.S. Environmental Protection Agency, to prepare CEQA-Plus and NEPA documents for projects that either will be located on federal lands or will be receiving federal funding. Tom and Sarah both have extensive experience assisting CEQA lead agencies to get through the CEQA-Plus review process for federally funded projects, as well as leading NEPA projects. Tom and Sarah are currently assisting Coachella Valley Water District (CVWD) on a CEQA-Plus EIR for a reduced water diversion project near the Salton Sea, working with the Bureau to satisfy federal funding requirements. Sarah is currently assisting Eastern Municipal Water District (EMWD) on a joint CEQA/NEPA MND/Environmental Assessment on an inland brackish

desalination project with the USACE as the federal lead. For IRWD, ESA prepared the Stockdale Integrated Banking Project EIR, which required coordination with the Bureau due to federal funding for the wells on Stockdale West; Sarah was deputy project manager and assisted in preparing the NEPA review. We have good working relationships with staff at federal agencies that are common funding sources, and we understand their specific NEPA compliance requirements. For example, the Bureau typically suggests preparation of a CEQA-Plus document with robust supporting cultural and biological technical studies that meet their requirements for federal cross-cutter consultation, such as State Historic Preservation Office and USFWS consultation. ESA understands the nuances and requirements of all federal lead agencies with whom IRWD may partner for funding purposes and is ready to provide comprehensive services.

In addition, ESA has gained strategic staff additions from federal agencies, including Dr. Daniel Swenson, who worked at the USACE for 20 years. Daniel has leveraged his past relationships at USACE to move agency consultation and NEPA projects forward. Having former regulators on ESA staff will help the District interface with USACE.

Similar to the CEQA scope of work, ESA understands that IRWD will want several review cycles to finalize a NEPA document. Because there often is a federal joint lead agency involved, the review cycle for joint CEQA/NEPA documents can be more intensive. ESA will take into account these factors when preparing scopes and costs for individual task orders.

Task 3: Staff Rates

The hourly rates for all staff and services resulting from this contract are provided in Section 5. Charges for time spent on project management, consultation, meetings, field work, data analysis, report preparation and review, etc., will be made at the category rates set forth in Section 5. Rates for non-labor expenses, such as reimbursable expenses and equipment usage are also provided in Section 5.

Task 4: Project Task Item Estimates

Our typical on-call services contracts require us to prepare scopes of work, cost estimates, and schedules for projects as they arise. Level-of-effort estimates are developed by our project management team in coordination with technical staff as necessary. Staff are assigned based on project requirements. For IRWD, each new project will be established under this on-Call CEQA and NEPA consultation master contract and IRWD's purchase order. Upon request, ESA will prepare and submit a scope of work, schedule, and budget to the District for new projects as they arise within three to five days. We also know sometimes that much time is not afforded, and have been able to provide a scope of work within one to two days. The most important aspect is to clearly understand IRWD's expectations so that the scope and cost estimate meet the mark. ESA may want to have a meeting with IRWD to understand assumptions. The costs associated with preparing scope/schedule/budget packages will be ESA's responsibility. With District approval of the scope and fee, ESA will begin work on new projects immediately following a notice to proceed.

Task 5: Team Experience

ESA has 55 years of experience in the environmental consulting business. We have excellent knowledge of the business locally, statewide, and nationally. Please refer to Section 2 for summaries of the experience, education, and skills of the key staff on the ESA team proposed for this on-call CEQA and NEPA consultation contract. Additional details about each team member are provided in the resumes attached as **Appendix A**.

Task 6: Project Coordination

ESA is accustomed to working with multiple stakeholders, agencies, and other consultants. Under the direction of IRWD, ESA will team or collaborate with other consultants in order to provide the best technical or regulatory expertise required to meet project objectives and provide services that are in the best interest of the District. One of

the most important aspects of environmental consulting is the ability to coordinate with multiple state and federal agencies on projects. Whether it be in the form of co-lead agencies for joint CEQA-NEPA projects, or early consultation with permitting agencies while a project is undergoing environmental review, ESA has demonstrated our ability to successfully coordinate with other agencies on IRWD's behalf. Most notably for the Syphon Reservoir Improvement Project, which involved up-front coordination with the City of Irvine for traffic-related issues, as well as extensive consultation with USACE, RWQCB, and CDFW. Tom Barnes has been in the industry for decades and will be available to activate his extensive network of agency contacts for IRWD. To facilitate coordination of teams comprised of multiple consultants and agencies, ESA utilizes regularly scheduled conference call meetings to maintain focus of analyses, provide a forum for information exchange, and maintain compliance with project schedules and budgets.

Task 7: Mitigation Monitoring and Reporting

As part of a typical scope of work for environmental compliance, ESA includes development of the Mitigation Monitoring and Reporting Program (MMRP) as required by CEQA. If requested by IRWD under this contract, ESA will implement the MMRPs associated with projects, including preparation of a reporting program designed to track the implementation and completion of each required mitigation measure, management of periodic monitoring activities and required field surveys, and preparation of periodic reports to document ongoing activities and eventual completion of the MMRP. ESA has staff that specialize in construction monitoring in both our Biological Resources & Land Management Group and Cultural Resources Group, and the project managers in our SoCal Water Group regularly manage large compliance efforts for water districts.

ESA is currently implementing several large-scale MMRP compliance efforts for water districts in Southern California, including the Metropolitan Water District of Southern California (Metropolitan) Colorado River Aqueduct Conduit Structural Protection Project, the Los Angeles Department of Water and Power's (LADWP) North Haiwee Dam No. 2 Project, and EMWD's San Jacinto Valley Enhanced Recharge and Recovery Program, all of which require multiple biological and cultural field staff conducting environmental compliance and rigorous systems to manage the volume of work and staffing. In the past five years, ESA has become highly adept at building teams to conduct this work, and we look forward to implementing MMRPs for various IRWD projects as part of this on-call services contract.

Task 8: References

As requested in the RFP, within *Table 3-1*, ESA provided two projects recently completed for IRWD in which IRWD staff members were involved. *Figure 3-1: Irvine Ranch Water District Project Experience* demonstrates projects the ESA team have completed over the course of our current on previous on-call contracts with IRWD.

SECTION 2: TEAM

Taking into consideration the nature of the contract, anticipated projects, and the various disciplines necessary to address CEQA/NEPA requirements, ESA has selected the proposed team based on continuity, technical expertise, exemplary qualifications, location and availability. These key personnel—the principal-in-charge, client/project manager, and task managers—will continue to lead, oversee, and be hands-on in their execution of the contract tasks. With intimate knowledge and understanding of IRWD's policies and procedures, these task managers will continue to provide high-quality and responsive technical service as scientists, biologists, ecologists, and regulatory specialists. Our deep bench of specialists ensures that ESA can maintain responsiveness in the face of potential multiple, concurrent task orders and provide expedited service. ESA understands any substitution or addition of any key personnel must be requested in writing, along with a statement of qualifications and time commitment. We understand this request must be approved in writing in advance. Resumes of key personnel are provided in **Appendix A**. Following our key staff biographies, we have provided Table 2-1 demonstrating our support staff's qualifications. Full resumes for technical support staff are available upon request.

Technical Team Availability

The ESA team understands that the availability of team members is of importance to the District; therefore, only staff with the availability to commit to this on-call CEQA and NEPA consultation contract's scope of services are assigned to this project. We have included a generalized time-available percentage, but recognize that the services needed under this contract will be intermittent and varied, requiring periods of 100 percent commitment of key staff until tasks are complete. The work effort for our proposed key staff members will fluctuate as individual projects move from one phase to another. Based on the schedule and projected staff hours for implementation of the projects under this contract, we can confidently commit to the availability and participation of our proposed management and technical team leaders.

Management Team Biographies



Tom Barnes | Principal-in-Charge

Tom is an ESA vice president and a principal associate in the Southern California Water Group, focused on providing environmental planning and management services for water and wastewater utilities in the Southern California region. He has over 26 years of experience in CEQA/NEPA analysis, project management, environmental documentation, permit review and facilitation, and data analysis. A

proven project manager specializing in water projects, Tom manages on-call multi-year environmental contracts for Southern California agencies, including Metropolitan and Orange County Sanitation District. Tom served as the project director for all IRWD projects described in Table 1, as well as smaller projects stemming from our previous and current on-call contracts with IRWD. Tom knows IRWD and your expectations for technical excellence. In addition, Tom has most recently overseen the completion of the following projects: West Basin Municipal Water District Ocean Water Desalination Project EIR; City of Ventura's Ventura Water Supply Projects EIR; and the San Gabriel River Reduced Discharge EIR for the Los Angeles County Sanitation District.

Project Availability:15% | Labor Category: Senior Principal Consultant 3 | Education: BA English, University of California, Berkeley



Sarah Spano | Client/Project Manager/CEQA/NEPA Documentation Technical Lead

Sarah has stepped into the role of director of ESA's Southern California Water Group, managing a team of CEQA/NEPA planners who conduct environmental documentation and compliance for water and wastewater utilities throughout Southern California. She has over 13 years of experience managing

CEQA documentation and coordinating environmental review for a variety of complex and controversial water and wastewater projects. She is currently the project manager for ESA's on-call contracts with several large public water utilities in California, including DWR, EMWD, CVWD, and Otay Water District, for which she manages ESA's technical and subconsultant team, tracks project schedules and milestones, and ensures timely and accurate transmission of deliverables. Sarah will serve as the project manager and primary point of contact for the District. She is experienced with processes like task order execution and organization and will provide prompt responses to IRWD task order requests and compile thoughtfully organized teams. She will also oversee all CEQA/NEPA documents prepared that may come out of this contract. Sarah has worked for IRWD as a deputy project manager for nearly 10 years, working on the Stockdale West Integrated Banking Project EIR, the Syphon Reservoir Improvement Project EIR, and the Syphon Reservoir Geotechnical Investigations Project MND, and is managing preparation of the Syphon Reservoir Improvement Project Mitigation Site Addendum. She understands IRWD's expectations and looks forward to bringing her skills as contract manager for other water district on-calls to the District.

Project Availability: 50% | Labor Category: Managing Consultant 4 | Education: BA, Anthropology/ Archaeology, New York University, *magna cum laude*

Task Managers Biographies



Michael Burns | Geology/Hazards and Hazardous Materials & Groundwater Technical Lead

Michael has over 30 years of experience in the environmental and geological sciences including CEQA/NEPA assessment and impact analyses. He provides expert services in planning and permitting, site characterization, Superfund sites, remedial investigation/feasibility studies, waste management,

litigation support, property assessments, development and redevelopment, soil and groundwater remediation, and water rights. His projects include municipal and regional water supply, industrial and manufacturing facilities, general plan updates, airports, levees, landfills, refineries, research and development facilities, hazardous waste management, vineyards, and commercial properties. Michael prepared the technical hazards, geology, and hydrology analysis for the Syphon Reservoir Improvement Project EIR and the Syphon Reservoir Geotechnical Investigations Project MND.

Project Availability: 20% | Labor Category: Principal Consultant 3 | Education: B.S., Geology, San Jose State University



Kyle Garcia | Cultural Resources/Tribal Consultation/AB 52 Technical Lead

Kyle has over 20 years of experience in cultural resources management, directing teams of specialists on projects involving a wide breadth of resource types in compliance with federal and state laws and regulations, including AB 52 and tribal consultations. He has served as cultural resources task

lead on dozens of tasks for on-call contracts throughout Southern California, including projects for water utilities, sewer departments, and public works departments. He is skilled in evaluating historic and prehistoric archaeological resources, agency and Native American consultation, pedestrian surveys, testing and evaluation excavations, archaeological and paleontological construction monitoring, and laboratory processing. Kyle is a certified archaeologist and paleontologist in Riverside and Orange counties, and managed preparation of the Syphon Reservoir Mitigation Site Addendum Cultural Resources Assessment.

Project Availability: 20% | Labor Category: Principal Consultant 3 | Education: MA, Anthropology (Archaeology Option), California State University Los Angeles; BA, Anthropology, (Physical/ Biological Emphasis), University of California, Santa Barbara



Nick Garrity | Hydrology/Water Quality Technical Lead

Nick is the director of ESA's Southern California Environmental Hydrology & Design Group. He is a hydrologist and civil engineer with more than 23 years of experience working with wetland, river, estuary, and coastal systems. His technical and project management experience includes the planning and design of multi-benefit wetland enhancement, restoration, and management projects; water

quality and flood hazard studies; hydrodynamic modeling; environmental impact assessments; and post-project monitoring and evaluation. His technical skills and expertise include the assessmodeling of wetland hydraulics and water quality, sediment dynamics, and engineering design. With previous experience leading ESA'son the San Joaquin Marsh for the Peters Canyon Water Capture and Reuse Project, as well as the San Joaquin Marsh Wetland Mitigation Concept Design and Feasibility Study, and experience with various treatments wetlands and wetland maintenance and restoration projects, including San Joaquin Marsh/Peters Canyon, Big Canyon, and Aliso Creek, he is well-suited to lead the hydrology studies and analyses for IRWD.

Project Availability: 20% | Labor Category: Principal Consultant 3 | Education: MS, Civil and Environmental Engineering, University of California at Berkeley; B.S., Geology– Physics/ Mathematics, Brown University



Alan Sako, LEED AP BD+C | Air Quality/Greenhouse Gas/Noise Technical Lead

Alan has over 22 years of experience in preparing and managing air quality and climate change analyses, performing ambient air quality impact analyses and health risk assessments for CEQA and NEPA documents, and providing air quality permitting and compliance support. He has experience with

water infrastructure projects including facility master plans and projects spanning multiple city and county boundaries. Alan is cross trained in acoustical/noise modeling, and preparing hazardous materials business plans, risk management plans for hazardous substances, and off-site consequence analyses for hazardous substances. Alan oversaw preparation of the air quality, greenhouse gas emissions, energy, and noise assessments for the Syphon Reservoir Improvement Project EIR, Syphon Reservoir Geotechnical Investigations Project MND, and the Syphon Reservoir Improvement Project Mitigation Site Addendum.

Project Availability: 20% | Labor Category: Principal Consultant 2 | Education: BS, Atmospheric, Oceanic & Environmental Science, University of California, Los Angeles



Maile Tanaka | Biological Surveys/Monitoring & Reporting; T&E Species; MMRP Technical Lead

Maile has more than 18 years of experience in the field of consulting biology and is the Southern California biological resources CEQA/NEPA program manager at ESA. Her professional experience includes vegetation mapping, habitat assessments, botanical surveys (including tree inventories and

rare plant surveys), focused surveys for special-status wildlife, nesting bird surveys, and jurisdictional delineations throughout Southern California. She has experience in preparing technical biological resources documents in accordance with CEQA guidelines for numerous complex projects and is well-versed with the requirements of the Orange County NCCP/HCP. Maile prepared the biological technical report for the Syphon Reservoir Improvement Project and the Project, which analyzed the project's consistency with the County of Orange Central & Coastal Subregion NCCP/HCP. She also was the lead biologist who conducted and coordinated multiple years of focused surveys for special-status floral and faunal species in support of the, coordinated with USFWS and CDFW, and oversaw the biological monitoring conducted in compliance with the project's MMRP and permit during implementation of the geotechnical work. Maile also coordinated with USFWS and CDFW regarding implementation of NCCP/HCP Construction-Related Minimization Measures.

Project Availability: 30% | Labor Category: Managing Consultant 3 | Education: Master of Environmental Science & Management, University of California, Santa Barbara; BS, Organismic Biology, Ecology & Evolution, University of California, Los Angeles



Jonthan Teofilo | Traffic Technical Lead

Jonathan has over 10 years of experience providing analytical and technical leadership for a variety of transportation planning projects throughout the United States. Jon is actively managing or part of the management team for multiple CEQA and NEPA projects and oversees critical aspects of projects including document preparation and permit coordination. He is highly skilled in project management

and coordination, public outreach activities, the preparation of environmental documents following state and federal regulations, and traffic and transit operations analysis.

Project Availability: 20% | Labor Category: Managing Consultant 3 | Education: BS, Environmental Studies, Biology Minor, California State University Sacramento

TABLE 2-1: SUMMARY OF ESA TECHNICAL TEAM STAFF AND QUALIFICATIONS				
Name	Education	Technical Expertise		
Nicolle Steiner CEQA/NEPA Specialist Availability: 40% Labor Category: Managing Consultant 4	BS, Biology (Environmental), California State University, Northridge	Nicole has 18 years of experience performing environmental analysis to support CEQA and NEPA documentation. Nicole provides project management and senior oversight and analysis for water utility and municipal clients to facilitate timely completion of work products.		
Kevin Smith CEQA/NEPA Specialist Availability: 40% Labor Category: Managing Consultant 3	BS, Natural Resource Management, Environmental Management, California Polytechnic State University, San Luis Obispo	Kevin has 15 years of experience as a senior environmental planner and project manager with focus on water and wastewater infrastructure projects. Kevin provides management, planning, and scientific expertise to support CEQA and NEPA compliance documents.		
Justin Nguyen CEQA/NEPA Specialist Availability: 40% Labor Category: Consultant 6	MS, Environmental Studies, California State University, Fullerton BS, Biochemistry California State University, Fullerton	Justin has one year of experience in preparing environmental analysis documentation, primarily for hazards, geology, and hydrology. Justin is a deputy project manager who assists in schedule and assignment tracking.		
Katherine Tovey CEQA/NEPA Specialist Availability: 40% Labor Category: Consultant 4	BS, Environmental Management and Protection, California Polytechnic State University, San Luis Obispo	Kate has one year of experience preparing aesthetics, hydrology, and traffic CEQA sections, among others, for infrastructure projects.		
Amanda French Biological Resources Specialist Availability: 20% Labor Category: Senior Consultant 1	BS, Field Biology, Ecology and Organismal Biology, Southern Oregon University	Amanda has five years of experience in biological and regulatory monitoring, aquatic resources delineations, biological resources assessments, and protocol-level surveys.		
Florence Chan Biological Resources Specialist Availability: 20% Labor Category: Senior Consultant 2	MS, Plant and Soil Sciences (Emphasis: Wildlife), Alabama A&M University BS, Physical Geography, University of British Columbia	Florence has 18 years of experience in biological assessments, vegetation mapping, focused surveys for special-status species, nesting bird surveys, mitigation monitoring, and construction monitoring.		
Fatima Clark Archaeological Resources Specialist Availability: 20% Labor Category: Managing Consultant 3	BA, Anthropology, California State University, Fullerton	Fatima has over 15 years of archaeological experience, including CEQA/NEPA report writing, archaeological testing, site recordation, laboratory analysis, pedestrian surveys, records searches, and monitoring for a wide variety of energy, water, and road infrastructure projects		

TABLE 2-1: SUM	MARY OF ESA TECHNICAL	TEAM STAFF AND QUALIFICATIONS
Claudia Camacho-Trejo Cultural Resources Specialist Availability: 20% Labor Category: Senior Consultant 1	BA, Anthropology, California State University, Los Angeles AA, Behavioral Studies, East Los Angeles Community College	Claudia has 6 years of experience working as a cultural resource specialist and has authored and co-authored several technical reports for CEQA documents, archaeological peer reviews, archaeological monitoring reports, and reports under Bureau of Land Management requirements.
Shelbi Skillern Cultural Resources Specialist Availability: Labor Category: Consultant 2	AA, Anthropology and General Studies, Palomar College	Shelbi has 3 years of experience in survey, excavation, laboratory analysis and monitoring projects.
James Jackson, PE Hydrology Specialist Availability: 10% Labor Category: Senior Consultant 5	MS, Environmental Engineering, University of California, Berkeley BS, Civil and Environmental Engineering, University of California, Berkeley	James has over 11 years of experience working with habitat restoration design and feasibility studies, floodplain and stormwater management, coastal and fluvial hydrology and geomorphology, local and regional climate change/sea-level rise vulnerability assessments, and coastal adaptation planning.
Elbert Hsiung AQ/GHG/Energy Specialist Availability: 20% Labor Category: Senior Consultant 4	MPH, Public Health - Environmental Health Sciences, University of California Los Angeles BS, Ecology, University of California, San Diego (Summa Cum Laude)	Elbert has six years of experience in performing air quality, greenhouse gases, health risk, energy, and noise analyses. Elbert assists in preparing and refining of air quality, GHG, and noise assessments to support planning and environmental review, including CEQA and NEPA documents.
Tim Witwer Noise Specialist Availability: 20% Labor Category: Senior Consultant 3	BA, Environmental Studies, University of California, Santa Barbara	Tim has 8 years of experience with performing air quality impact assessments, GHG analyses, and energy assessments to support planning and environmental review, including CEQA and NEPA documents.

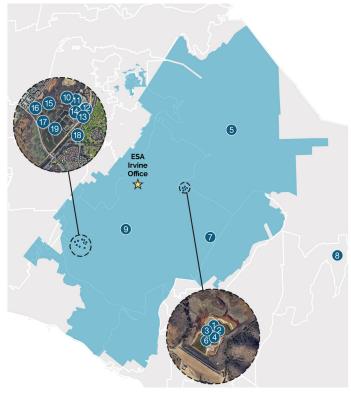
SECTION 3: REFERENCES

Over the past 15 years, we have built a relationship with IRWD founded on trust and mutual respect, consistently reinforcing our commitment through successful projects. Our partnership thrives on open communication and shared values, ensuring that each project meets its goals with precision and excellence. Through our dedication and deep understanding of each project's needs, our relationship has only grown stronger, delivering ever-greater results. The map below illustrates the success of our partnership, serving as a testament to our enduring commitment to IRWD and the communities that benefit from our collaborative efforts.

Figure 3-1: Irvine Ranch Water District Project Experience

IRWD Boundary

- Syphon Reservoir Improvement Project EIR
- Syphon Reservoir Improvement Project Permitting
- Syphon Reservoir Geotechnical Investigations Project MND
- Syphon Reservoir Geotechnical Investigations Project Permitting
- Black Star Canyon Wilderness Park Vegetation
- 6. Syphon Reservoir PAR Assessment
- 7. Baker WTP Solar Project CEQA Addendum
- 8. Trabuco Canvon Water District Property Mapping
- San Diego Creek Water Rights Change Petition CEQA Compliance
- 10. Peters Canyon Channel Water Capture and Reuse Pipeline Mitigation Monitoring
- 11. Syphon Reservoir Mitigation Site Addendum
- 12. San Diego Creek Water Rights Change Petition **CEQA** Compliance
- 13. MWRP Biosolids Project Construction
- 14. MWRP RW Bypass
- 15. San Joaquin Marsh Wetland Mitigation Conceptual Design & Feasibility Study
- 16. San Joaquin Marsh, Phase 1 Cultural Resources Assessment
- 17. San Joaquin Marsh Ground Water Monitoring
- 18. Siphon Sewer Maintenance
- 19. San Joaquin Marsh Wetland/Riparian Habitat Concept Development



In addition to our longstanding partnership with IRWD, ESA has a proven track record of supporting water districts across Southern California with services that align with the requirements outlined in this RFP. For over a decade our clients including Metropolitan, EMWD, LADWP, and DWR have benefited from our expert as-needed consultant services as we have consistently delivered defensible CEQA/NEPA support, technical assistance (such as biological, cultural, hydrologic, and permitting expertise), resource management planning, and comprehensive long-range planning documents similar to the scope of our work with IRWD. Detailed descriptions of these projects, along with an overview of our current IRWD contract, are provided below, showcasing our capability and commitment to excellence.

On-Call Contracts



Sanchez, Kellie Welch, Andy Uk

Dates: 2009-Present

Irvine Ranch Water District | On-Call Environmental Services

Since 2009, ESA has supported IRWD with on-call environmental services for its project planning, construction, operation, and maintenance activities, including CEQA/NEPA and permitting services, biological/cultural resources assessments, hydrologic modeling, water quality assessment, and mitigation compliance IRWD Staff: Paul Weghorst, Fiona monitoring. To date, ESA has responded to over 20 individual task order assignments, mostly including IS/MNDs and CEQA Addenda from prior EIRs. ESA has also assisted in emergency repair work for IRWD treatment facilities, including the Michelson Water Reclamation Plant Phase 2/3 Capacity Expansion EIR Addendum No.4: Emergency Recycled Water Discharge.

Tabel 3-1: IRWD Reference Projects

Syphon Reservoir Improvement Project EIR. ESA prepared an EIR for the expansion of Syphon Reservoir and Dam in Orange County. ESA provided extensive biological surveys and cultural surveys, assisted IRWD with AB 52 process for Tribal consultation, facilitated coordination with USFWS and CDFW for mitigation associated with the Orange County Central/ Coastal NCCP/HCP and applicable Grant Deed restrictions for the site, and obtained a Jurisdictional Determination from USACE and worked with IRWD to negotiate a Streambed Alteration Agreement with CDFW covering all geotechnical investigation activities in less than one year. The project would increase its recycled water storage capacity from 500 to 5,000 acre-feet. This will allow IRWD to maximize use of its recycled water instead of discharging it into the ocean while reducing the District's dependence on imported water supplies during the summer months. The Reservoir Expansion Draft EIR was published in March 2021.

Staff: Paul Weghorst, Fiona Sanchez, Kellie Welch

Syphon Reservoir Geotechnical Investigations Project. Syphon Reservoir Geotechnical Investigations Project. ESA prepared an MND that geotechnical work needed in order to determine the design of the future enlarged dam at Syphon Reservoir. ESA provided extensive biological surveys and cultural surveys in support of the Initial Study/MND; assisted IRWD with the AB 52 process for tribal consultation; facilitated coordination with USFWS and CDFW for mitigation associated with the Orange County Natural Community Conservation Plan/Habitat Conservation Plan and Grant Deed restrictions for the site; and secured a Jurisdictional Determination from the USACE and Streambed Alteration Agreement from CDFW in less than 1 year. The Final Initial Study/MND was adopted by IRWD in June 2019. Staff: Paul Weghorst, Fiona Sanchez



Client Contact: Joseph Broadhead, Principal Water Resource Specialist,

Phone: 951.928.3777 ext. 4545

Dates: 2013-Present

Eastern Municipal Water District | On-Call Environmental Services

Since 2013, ESA has provided CEQA and NEPA consulting services to EMWD. In that time, ESA has become a trusted advisor in the development of technically sound and comprehensive environmental documents for various water infrastructure projects. Most notably, ESA prepared a Program EIR for the San Jacinto Valley Enhance Recharge and Recovery Project that included many CIP projects intended to capture and store imported water for later use. The PEIR included project-level CEQA analysis for facilities EMWD planned for the near term, allowing the design and construction to begin immediately after CEQA approval. These facilities include recharge basins, pipelines, wells, and treatment facilities in San Jacinto and Hemet, for which ESA conducted biological and

cultural resources compliance monitoring in accordance with the approved MMRP. For the more long-term components of the project, ESA prepared program-level CEQA documentation that allows EMWD to analyze environmental impacts generally at the conceptual level in order to cover the entire program. ESA is currently working with EMWD on subsequent phases of the ERRP, tiering appropriately from the PEIR by means of CEQA Addenda.

Los Angeles Department of Water and Power | On-Call Environmental Services

Since 2011, ESA has supported LADWP by providing a full array of environmental services in an on-call capacity to the Office of Environmental Planning and Assessment. ESA has responded to a wide range of planning, permitting, and compliance needs for capital projects and for routine and emergency operations and maintenance activities with qualified technical experts in all environmental disciplines. Over the 13 years that ESA has been contracted with LADWP, we have routinely worked on approximately 20 open task orders simultaneously at any given time. To date, ESA has responded to 132 individual task order assignments



Client Contact: Jane Hauptman, Manager of Environmental Planning and Assessment

Phone: 213.367.0968

Dates: 2011-Present

for projects involving CEQA and construction monitoring/compliance, including Operation NEXT Water Supply Program EIR, Century Trunk Line Project MND, and cultural resources construction monitoring and MMRP compliance for the North Haiwee Dam No 2 Project.



Client Contact: Sarah Cannon, Manager of the Environmental Coordination Section, Division of Engineering

Phone: 916.882.2829

Dates: 2000-Present

California Department Of Water Resources | On-Call Environmental Services

Since 2006, ESA has supported DWR on a range of projects within the Southern Division of the California State Water Project system. ESA's services have included strategic environmental planning, impact assessment, NEPA/CEQA, biological and cultural surveys, mitigation planning, mitigation monitoring, habitat conservation plan compliance, and permitting for multiple task orders. To date, ESA has responded to over 100 individual task order assignments. In the past five years, ESA supported four of DWR's largest programs from the San Luis to the Southern Field Division: two MNDs to support the California Aqueduct Subsidence Program, the Castaic Dam High Intake Tower Access Bridge Retrofit Project IS/MND, Lake Perris Emergency Release Facility Project permitting and pre-construction activities, and the Salton Sea Monitoring Implementation Plan.

SECTION 4: SCHEDULE

Responsiveness

ESA is a seasoned on-call environmental consultant serving public and private entities. In some cases, project assignments are initiated on short notice with a quick turn-around time required. In many cases, ESA has signed a master services agreement specifically to facilitate quick project turnarounds. Depending on the nature of the project, ESA is poised to respond within hours, if needed. Moreover, due to our Irvine office's proximity to IRWD headquarters and central location within the overall jurisdiction, we can participate in on-site meetings or be at an IRWD project site with short notice; these attributes are representative of an extension of staff. ESA prides itself on the ability to deliver high quality consultation and documentation to meet the specific needs of specific task assignments under other on-call contracts and ESA will perform and provide this high-quality work for all projects undertaken for IRWD.

Project Schedule

ESA understands the schedule required for CEQA compliance depends on the complexity of the project, the completeness of the project objectives and description, and the level of controversy associated with project components. We know that the tasks to initiate immediately are AB 52 outreach with Native American tribes, which can take several months, as well as initiation of technical surveys and reports, which can require up-front records searches that must be completed before surveys are conducted. With a completely developed project description, a Mitigated Negative Declaration requires approximately four to six months to prepare, circulate for public review, and certify. An Addendum to an EIR typically can be completed within one to two months. When a project requires intensive technical studies or neighborhood outreach, the schedule can be extended by several months.

NEPA documents also can be prepared efficiently depending on the complexity of the project and the federal lead agency involved. However, federal approval of EAs generally adds at least several months to the CEQA schedule due to the additional agency coordination. For this reason, we typically work with the federal lead agency to negotiate preparation of a CEQA-Plus document instead of a joint CEQA/NEPA document. We have found that after completion of a CEQA-Plus document, the process of coordination with the SWRCB for SRF funding can add several months to the project schedule, depending on the level of effort needed to comply with Section 106 of the National Historic Preservation Act, and any consultation that may be needed with USFWS.

SECTION 5: FEE SCHEDULE

The range of rates shown for each staff category reflects ESA staff qualifications, expertise, and experience levels. These rate ranges allow our project managers to assemble the best project teams to meet the unique project requirements and client expectations for each opportunity. Subcontracted services will be invoiced at cost multiplied by 1.15. We have provided our Fee Schedule following Section 9: Sample Contract.

Environmental Science Associates | Fee Schedule

Charges will be made at the category hourly rates set forth below for time spent on project management, consultation, or meetings related to the project, field work, report preparation and review, travel time, etc. Time spent on projects in litigation, in depositions, and providing expert testimony will be charged at the category rate times 1.5. The estimated hours below are representative of a typical MND ESA might prepare under this on-call, with the total budget estimated at \$94,440.

Staff Name, Role, Labor Category	Hourly Rate	Estimated Hours
Tom Barnes, Principal-In-Charge, Senior Principal Consultant 3	\$295	24
Michael Burns, Geology/Hazards and Hazardous Materials & Groundwater Technical Lead, Principal Consultant 3	\$265	0
Kyle Garcia, Cultural Resources/Tribal Consultation/AB 52 Technical Lead, Principal Consultant 3	\$265	16
Nick Garrity, PE, Hydrology/Water Quality Technical Lead, Principal Consultant 3	\$265	0
Alan Sako, LEED AP BD+C, Principal Consultant 2	\$238	0
Sarah Spano, Client/Project Manager/CEQA/NEPA Documentation Technical Lead, Managing Consultant 4	\$256	40
Nicolle Ianelli Steiner, CEQA/NEPA Specialist, CEQA/NEPA Specialist, Managing Consultant 4	\$256	0
Maile Tanaka, Biological Surveys/Monitoring & Reporting; T&E Species; MMRP, Managing Consultant 3	\$234	24
Jonathan Teofilo, Traffic Technical Lead, Managing Consultant 3	\$234	16
Fatima Clark, Archaeological Resources Specialist, Managing Consultant 3	\$234	0
Kevin Smith, CEQA/NEPA Specialist, Managing Consultant 3	\$234	0
James, Jackson, PE, Hydrology Specialist, Senior Consultant 5	\$233	0
Elbert Hsiung, Air Quality/Greenhouse Gas/Energy Specialist, Senior Consultant 4	\$212	60
Tim Witwer, LEED AP BD+C, Noise Specialist, Senior Consultant 3	\$192	20
Florence Chan, Biological Resources Specialist, Senior Consultant 2	\$171	80
Claudia Camacho-Trejo, Senior Consultant 1	\$155	80
Amanda French, Biological Resources Specialist, Senior Consultant 1	\$155	0
Justin Nguyen, CEQA/NEPA Specialist, Consultant 6	\$169	0
Katherine Tovoy, CEQA/NEPA Specialist, Consultant 4	\$143	140
Shelbi Skillern, CEQA/NEPA Specialist, Consultant 2	\$117	0

ESA Expenses

A. Travel Expenses

- 1. Transportation
 - a. Company vehicle fixed rate + fee for mileage in excess of 100 miles.
 - b. Common carrier or car rental actual expense multiplied by 1.15
 - c. If company vehicle is to be used in off-road conditions, a daily \$15 use fee will be added to the standard daily vehicle rate.
- Lodging, meals and related travel expenses direct expenses multiplied by 1.15

B. Technology and Data Management Fee

Non-travel expenses incurred for the duration of the agreement for project support but not itemized below. Project labor charges multiplied by 3%. Fee encompasses the following:

- 1. Ongoing long-term retention and retrieval, management, and security of project-related data.
- 2. Proprietary tools, cloud data services (ArcGIS Online Hosting \$225 per month), data science and AI capabilities as required for project delivery.

C. Printing/Production Rates

Our innovative production equipment ensures high efficiency and exceptional quality in every project ranging in \$0.15 (letter) – \$0.30 (legal) per page for black and white prints, \$0.50 (letter) – \$0.80 (legal) per page for color prints, and \$10.00 per CD.

SECTION 6: JOINT VENTURE

ESA will not employ a joint venture during the course of this contract. Typically, ESA's in-house staff has capabilities that are comprehensive and sufficient for completing environmental compliance documents for small projects. However, ESA routinely engages in subcontract arrangements when technical specialties that are beyond our in-house capabilities are required and appropriate for a project. We have worked with many firms in the area, including traffic engineering firms, geotechnical firms, local cultural resources specialists, and specialized biological resource personnel. We are open to a variety of teaming arrangements which suit IRWD and the particular projectriate subconsultants.

SECTION 7: CONFLICT OF INTEREST

To the best of our knowledge, ESA does not have existing personal, financial, and/or organization conflicts of interest prohibited by law.

SECTION 8: INSURANCE REQUIREMENTS

If selected to provide the services under this contract, ESA is prepared to furnish IRWD with acceptable evidence showing that the insurance coverage required has been procured. ESA has insurance coverage of at least \$1 million each for commercial general liability, worker's compensation, automobile, and professional liability. We will provide proof of insurance through our broker, IOA Insurance Services, upon the awarding of this contract. A copy of our sample certificate can be found in **Appendix B**.

SECTION 9: SAMPLE CONTRACT

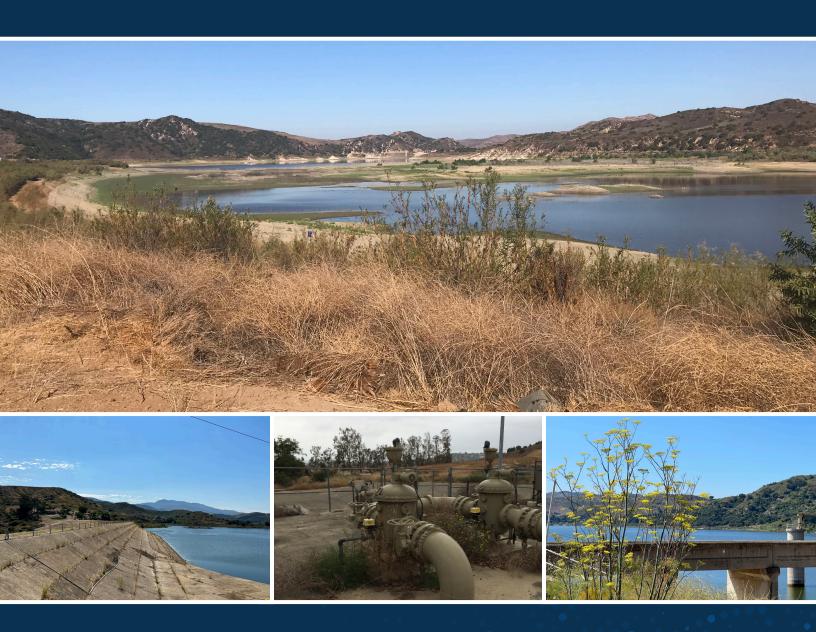
ESA has reviewed the draft agreement and generally accepts the terms. If selected, ESA would request an opportunity to discuss modification of a few of the proposed terms as well as some additional terms that ESA believes are consistent with the provision of professional services and industry standards.

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Exhibit "D"

On-Call CEQA and NEPA Consultation

IRVINE RANCH WATER DISTRICT



Proposal | 07.18.2024

PSOMAS

Balancing the Natural and Built Environment

July 18, 2024

Fiona M. Sanchez, Director of Water Resources Irvine Ranch Water District 15600 Sand Canyon Avenue Irvine, CA 92618

Subject: Proposal for On-Call CEQA/NEPA Consultation

Dear Ms. Sanchez:

Dedicated to balancing the natural and built environment, Psomas has been providing sustainably engineered solutions to public and private clients throughout our 78-year history. As a full-service consulting firm, we help our clients create value and deliver complex projects. Psomas looks forward to continuing our partnership with Irvine Ranch Water District (IRWD) as a trusted on-call consultant to provide environmental consulting services. In reviewing the attached proposal, IRWD will find a team that is prepared to undertake a variety of projects to assist IRWD in implementing their project activities on an on-call basis.

We believe our continued partnership with IRWD will be mutually rewarding because:

- Psomas presents a comprehensive, multidisciplinary team that is able to respond and provide the various types of expertise IRWD needs for its upcoming projects. We will draw upon our recent experience with IRWD to anticipate potential areas of controversy and resource sensitivities.
- As the District's primary point of contact, I, Jennifer Marks, am a Vice President at Psomas and have served as a Principal-in-Charge and Project Director on similar on-calls with water agencies, including our current contract with IRWD. I bring over 24 years of experience managing a variety of project types, including water and wastewater infrastructure, and development projects. I have worked with water districts and local city-owned utilities throughout Southern California and am familiar with the unique challenges facing special utility agencies, including the need to satisfy requirements set forth by multiple jurisdictions and interests of numerous stakeholders.
- I will be supported by fully committed in-house subject matter experts from our Santa Ana, Los Angeles, and Pasadena offices with the necessary registrations, certifications/permits, and resource agency relationships to assist the District in completing capital improvement and/or maintenance projects in a timely manner. Each key professional proposed is an expert in his/her discipline and are also familiar with local, state and federal procedures and preferences, having completed projects with diverse sources of funding.

Psomas acknowledges and confirms receipt of IRWD's Q&A, issued July 15, 2024.

As a Vice President and Officer of Psomas, I, Jennifer Marks, will be the individual authorized to enter into an agreement with IRWD on behalf of the firm. I will serve as the day-to-day contact managing all task orders, act as a conduit of information between any task-specific project managers, and verify overall quality and responsiveness. We consider our clients a top priority and we are eager to continue our important work for IRWD. Should you have any questions concerning our proposal, please do not hesitate to contact me by email at jennifer.marks@psomas.com or by phone at 949.322.6774.

Sincerely,

PSOMAS

Junifer J. Marlis

Jennifer Marks

Vice President/Principal

5 Hutton Centre Drive Suite 300 Santa Ana, CA 92707

Tel 714.751.7373 www.Psomas.com

FIR	FIRM PROFILE 1		
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Firm Profile



Dedicated to balancing the natural and built environment, Psomas provides sustainably engineered solutions to public and private clients. Psomas, a California Corporation, was founded in 1946 and is a multi-faceted consulting firm with over 750 employees, providing our core services of environmental consulting, civil engineering, survey and mapping, and construction management. While the firm as a whole offers a wide variety of services, Psomas' **Environmental Services Group** is capable of supporting the needs that are most relevant to the Irvine Ranch Water District's (IRWD's) On-Call California Environmental Quality Act (CEQA) and National

Environmental Policy Act (NEPA) contract. Psomas' Environmental Services Group specializes in providing the following services:

- ► CEQA and NEPA documentation
- Air Quality and Greenhouse Gas (GHG) Emissions Analyses

- Energy Analyses and Health Risk Assessments
- Noise and Vibration Studies
- Cultural Resources including Archaeological and Paleontological Assessments, Monitoring, and Tribal Cultural Coordination
- Biological Resources Surveys and Assessments
- Jurisdictional Evaluations/ Delineations, Regulatory Permitting, and Agency Coordination
- Habitat Restoration/Mitigation
 Planning, Monitoring, and Reporting

For over 30 years, Psomas' technical staff have been actively engaged in providing a variety of similar CEQA and NEPA environmental consulting services for many public agencies and private companies in Southern California, with many projects occurring in the vicinity of IRWD projects and in Orange County. Our Team's extensive qualifications are demonstrated by the type and range of resource management and environmental services we have been providing to our clients, including the IRWD.

1 Scope

In accordance with IRWD's request, Psomas, with our understanding of the vision, environment, and priorities of IRWD, is proposing to provide On-Call CEQA and NEPA Consultation, including CEQA and NEPA documentation, technical study preparation, mitigation monitoring and reporting tasks, and overall strategic consultation to IRWD. Our staff's water utility agency experience ranges from small pipeline replacement projects that

may require Categorical Exemptions (CEs), Categorical Exclusions (CEs) or Addendum documents, to midsize projects such as water tanks or pump stations that require Negative Declarations (NDs), Mitigated Negative Declarations (MNDs), Environmental Assessments (EAs), and Findings of No Significant Impact (FONSIs), to large-scale projects such as the current Santiago Creek Dam Outlet Tower and Spillway Improvements Project

that require Environmental Impact Reports (EIRs), or Environmental Impact Statements (EISs). Our depth of experience in various types of environmental documents and geographies provides us with a range of knowledge and expertise that will apply to a variety of projects for IRWD. Our previous experience preparing CEQA documentation for IRWD projects as well as our local knowledge of the IRWD service area give Psomas a unique understanding of priorities, key stakeholders, and potential challenges.

Additionally, if requested, Psomas' specialists will prepare technical studies for Air Quality, Energy, Greenhouse Gas Emissions, Noise, and Transportation, in addition to Biological Resources and Regulatory Permitting, Cultural Resources, Tribal Cultural Resources, Hydrology, and Water Quality, as deemed necessary. However, if technical studies are prepared by other consultants under contract to IRWD, Psomas can perform peer reviews of such studies and prepare memoranda summarizing the findings of the peer reviews.

Psomas understands IRWD will notify the selected consultants of future projects, at which time Psomas and other consultants will submit work plans, cost estimates, and schedules to IRWD. Upon being selected for preparation of an environmental document for a future project, Psomas will initiate the process by meeting with IRWD to define the project and coordinate on the technical approach. Subsequently, the Psomas Team will conduct research and gather data; prepare technical studies, as necessary; or peer review the technical studies prepared by others. Upon completion of the technical studies or peer review of technical studies, Psomas will prepare administrative or screencheck drafts of the environmental document and a final draft for review and approval by IRWD

prior to distribution for public review. Upon receipt of comments from the public, Psomas will prepare draft and final responses to comments and final document for review and approval by IRWD prior to distribution to the commenters and the decision makers. Additionally, Psomas will attend scoping meetings, study sessions, and Board of Director hearings upon request. Psomas will also be responsible for preparing all the notices required for the particular type of environmental document prepared.

Psomas will provide quality control for each draft of the document. Our in-house quality assurance/quality control process will confirm that all deliverables are accurate and legally defensible. Furthermore, while IRWD may identify the anticipated and appropriate CEQA document for future projects, Psomas will review and provide recommendations, including identifying the required technical studies. The potential need for NEPA documentation, or CEQA-Plus in accordance with the California Clean Water/Drinking Water State Revolving Fund (CW/DWSRF), will also be assessed and discussed with IRWD and required federal agency permitting identified.

Approach

Kick-Off Meeting

Upon being selected by IRWD for a future project, the Psomas Project Manager will meet with IRWD to initiate the assigned project. The kick-off meeting will provide an opportunity to discuss and/or confirm the approach to the CEQA or NEPA document and environmental process; discuss the technical analyses/studies; and identify the key community issues/concerns. Additionally, the project schedule will be discussed, and a communication protocol established. Psomas will identify information needs and prepare a data needs request. The project initiation task will also include conducting a site visit, data collection, and preparing a project description.

Draft Initial Study and Required Technical Studies

Psomas routinely prepares Initial Studies (ISs) to determine the appropriate environmental



documentation. Upon a project kickoff meeting, Psomas will prepare an IS in accordance with the State CEQA Guidelines (California Code of Regulations (CCR), Title 14, Chapter 3, Sections 15000, et seq.) to determine the appropriate CEQA documentation for a project. All topical issues will be evaluated in the IS, and all conclusions will be substantiated by technical information. Psomas' technical experts will prepare technical analyses, including air quality, energy, greenhouse gas emissions, noise, transportation, hydrology/drainage, and Water Quality Management Plan (WQMP). For certain technical disciplines such as geology and soils, hazards materials, and historic resources, Psomas will engage experts/ firms within the industry who have worked extensively with Psomas. If technical studies are prepared by the applicant's consultants, Psomas' technical experts will conduct peer reviews of those studies for technical adequacy and compliance with CEQA requirements.



Draft Environmental Document

Psomas recognizes that future IRWD projects, depending on their types, size, and issues of concern, may require any type of CEQA or NEPA document.

As indicated above, upon completion of the analysis in the IS and based on conclusions of the technical studies, IRWD and Psomas will determine the appropriate type of CEQA document for the project, unless a determination has already been made by IRWD.

- Categorical Exemption: Article 19 of CEQA Guidelines (Sections 15300 to 15333) lists the criteria for categorical exemptions. If it is determined that a project is within one of the classes of projects that have been determined not to have a significant impact on the environment, that project would be exempt from provisions of CEQA. Additionally, if it is determined through the IS analysis that no significant impacts would result from the said project, a CE would be prepared, and no additional environmental documentation will be required.
- Negative Declaration: Per the analysis in the IS or IRWD's prior finding, if it is determined that the potential impacts of the project are less than

significant such that no mitigation measures would be required, an ND would be the appropriate CEQA document for that project. The ND will be prepared in compliance with Article 6 of CEQA Guidelines (Section 15070 to 15075), which includes the criteria, requirements, contents, and process for an ND.

- Mitigated Negative Declaration: If it is determined that the project would result in potentially significant impacts, and that mitigation measures would be required to reduce the potentially significant impacts to less than significant level, an MND would be the appropriate type of environmental documentation for that project. The MND will be prepared in compliance with Article 6 of CEQA Guidelines (Section 15070 to 15075), which includes the criteria, requirements, contents, and process for an MND.
- ► Environmental Impact Report: If it is determined that the project would result in potentially significant impacts, and the impacts of the project are such that, even with incorporation of mitigation measures, some of the impacts would remain significant and unavoidable, an EIR would be the appropriate type of environmental documentation

for that project. The EIR will be prepared in compliance with Article 7 of CEQA Guidelines (Section 15080 to 15097), which includes the criteria, requirements, and process for an EIR. Article 9 of CEQA Guidelines (Sections 15120 to 15132) lists the contents of an EIR. The specific type of EIR (e.g., project, program, master) will depend on the scale, schedule/duration, phasing, and level of detail available.

▶ **NEPA Documentation:** Usually, the CEQA and NEPA documentation will be coordinated for increased efficiency in the schedule, document preparation, and processing involved. The format and content requirements for NEPA documents can vary significantly and are determined by the affected federal agency and/or the federal agency providing funding (e.g., US Forest Service (USFS), U.S. Department of Transportation [through Caltrans], U.S. Bureau of Reclamation); each federal agency has their own set of requirements for achieving NEPA compliance. For example, projects requiring NEPA approval through Caltrans would be prepared in accordance with the Caltrans Standard Environmental Reference (SER). Common types of NEPA documents include Categorical Exclusions which address a category of actions that a Federal agency has determined normally does not significantly affect the quality of the human environment, Environmental Assessment leading to a Finding of No Significant Impact (EA/FONSI), and an Environmental Impact Statement. More commonly, water agencies in California are required to meet abbreviated NEPA-like requirements (based largely on Federal laws, acts, and Executive Orders) set forth for projects pursuing funding through the CWSRF or DWSRF, also known as CEQA-Plus or Federal Cross-Cutters. While much of the required documentation is similar to what would likely be prepared for the CEQA document, Psomas has extensive experience preparing supplemental documentation and analysis to support preparation of the Environmental Package Form. Specifically, items that generally require supplemental documentation include research and findings associated with the Clean Air Act, Coastal Zone Management Act, Floodplain Management Executive Orders, Federal Lands, Coastal Barriers Resources Act, Magnuson-Stevens Fishery Conservation and Management Act, the Safe Drinking Water Act/Sole Source

Aquifer Protection, and the Wild and Scenic Rivers Act.

Regardless of the type of the document, upon completion, administrative or screencheck drafts of the environmental document will be provided to IRWD staff and the applicant for review. Upon receipt of comments, they will be addressed prior to resubmitting the document for a second round of review. The draft document will be approved by IRWD prior to distribution for public review. Psomas will distribute the draft documents for public review.

Final Environmental Document

- ▶ Final Negative Declaration or Mitigated Negative Declaration: Upon completion of the 20- or 30-day public review period for an ND or MND, Psomas will coordinate with IRWD on the approach to preparing responses received on the ND or MND. Preparation of responses to comments on an ND or MND is not required but recommended to assist IRWD in the decision-making process. All environmental comments on the ND or MND will receive responses. Upon finalizing the response to comments, they will be mailed out to the commenting agencies at least 10 calendar days prior to any public hearings.
- ► Final Environmental Impact Report: Upon completion of the 45-day public review period for a draft EIR, Psomas will coordinate with IRWD on the approach to preparing responses to comments on the draft EIR. Upon finalizing the final EIR and response to comments, including errata, Psomas will mail out the responses to commenting agencies at least 10 calendar days prior to any public hearings.
- Mitigation Monitoring and Reporting Program: Pursuant to Section 15097 of the State CEQA



Guidelines, Psomas will prepare a Mitigation Monitoring and Reporting Program (MMRP) for the CEQA document (MND and EIR). The MMRP will confirm that the mitigation measures proposed and contained in the final environmental document are implemented.

- Findings of Fact and Statement of Overriding Considerations: As part of the final EIR, Psomas will prepare the findings of fact and, if applicable, a statement of overriding considerations, for the project pursuant to Sections 15091 and 15093 of the State CEQA Guidelines.
- Noticing: Psomas will prepare and distribute all applicable notices for all types of CEQA and NEPA documents, upon project initiation, public distribution of CEQA and NEPA documents, and document certification. This task will include Notice of Exemption (NOE), Notice of Completion (NOC), Notice of Availability (NOA), Notice of Intent (NOI) (to adopt an ND or an MND), Notice of Preparation (NOP), and Notice of Determination (NOD).

Attendance at Meetings and Public Hearings

Throughout the environmental process, Psomas will attend various meetings, including project team meetings, community meetings (if requested), and scoping meetings. Additionally, upon completion of the environmental document, Psomas will attend Board of Directors public study sessions (if requested) and public hearings where decision makers consider projects. Psomas will be available to make presentations and/or provide input to IRWD and address questions regarding CEQA.

Effective Regulatory Agency Permitting and Coordination

In addition to our CEQA and NEPA documentation services, Psomas has established long-standing and positive working relationships with the staff of regulatory permitting agencies (e.g., USACE, RWQCB, CDFW, and USFWS) through our previous and ongoing work on projects in the region. These agencies know that technical documentation provided by Psomas in support of regulatory agency permit applications will meet their requirements while demonstrating practical considerations that will facilitate project

implementation. We have regularly assisted our public agency clients with negotiating reasonable mitigation provisions and commitments from the regulatory agencies. This proven capability can facilitate permit processing with the regulatory agencies because they



have confidence in our analysis and work products that are relied upon to issue their agency permits/ approvals. In addition, the quality of our services can provide substantial cost and time savings to IRWD's maintenance and construction activities by moving permit approvals along expeditiously.

Mitigation Monitoring Support

During construction, IRWD will be required to implement all mitigation measures set forth in the CEQA document and comply with all applicable regulatory requirements. Psomas cultural resource technicians and biologists have the experience needed to support construction services by providing qualified monitors to direct and monitor ground disturbing activities. As part of this effort, Psomas will be available to prepare and present a Worker Environmental Awareness Program (WEAP) to the contractor and all construction personnel prior to initiating ground disturbance.

Project Controls

Psomas has espoused methods and approaches in its preparation and delivery of environmental documents and supporting technical studies to verify project deadlines are met and the process is completed within budget.

- ▶ Scope of Work (SOW): The SOW for most projects influences the budget and schedule. Upon project kick-off, the SOW will be further discussed with IRWD and better defined. As the SOW will direct the action items for all tasks proposed, it is imperative that it be kept updated and any changes in approach and direction be reflected in the SOW. The SOW will be communicated with IRWD at regular intervals to facilitate solutions to potential issues, as applicable, before they become impediments to completing the proposed project.
- Schedule: An agreed-upon master schedule will be used to monitor progress on key milestones and deliverables. The schedule will be updated, as needed, and distributed to the project team. Additionally, in order to maintain the project schedule, we have established workload management systems to assist in the meeting project schedule. The mechanisms in place, the diligence of our project manager, and access to a deep bench of environmental experts will keep the proposed project on schedule.
- ▶ **Budget:** The budget is another key component that will be closely monitored and controlled by the project manager. Assigned hours and costs for each task will be communicated with the Psomas team to confirm that hours allocated for those tasks are aligned with performance. The project manager has real-time information regarding

- total authorized budget, costs expended to date, current expenditures, and the remaining balance. Access to accurate, complete data will allow our project manager to alert IRWD to potential budget implications if issues arise.
- regularly reviewed and communicated to IRWD staff. The method of communicating project status will be established during project initiation and will be dependent on IRWD staff preferences. As a regular course of business, Psomas maintains some level of communication on a weekly basis for all active projects and may communicate via conference call or in-person meeting, or via email with an itemized update on the status for all deliverables, a budget overview, and review of the project schedule.

In-House Quality Assurance/ Quality Control (QA/QC)

Psomas is committed to providing high quality technical documents that engender client satisfaction, meet the needs of the project, and withstand legal scrutiny. Psomas prescribes to a rigorous quality assurance/ quality control (QA/QC) process that utilizes key staff to maintain technical accuracy, readability, and responsiveness in all work products and deliverables.

2 Team

One aspect of our client portfolio that speaks highly of our team, client responsiveness, and attention to detail is the number of long-term clients and On-Call/As-Needed Environmental Services contracts we have maintained with public sector agencies.

With a deep bench of professional staff members, Psomas will be able to meet the requirements and schedules of multiple, concurrent projects. We have established workload management systems, monitoring techniques, and internal staffing arrangements to assist in meeting project requirements that at certain times could have the potential to exceed our in-house staffing capabilities. While each of our key staff members will have other project responsibilities, we confirm that each team member will have adequate availability to meet the assigned project's requirements. We are careful not to commit 100 percent of any staff member's time, thereby ensuring availability of qualified staff.

On the following page is a listing of each staff member assigned to this contract; their role; education; anticipated availability for this contract (schedule); and certifications, capabilities and experience. Resumes for key personnel (denoted with an asterisk [*]) are included in the Appendix.

Jennifer Marks 🍨 | Project Director, Principal-in-Charge, Quality Assurance/Quality



Jennifer Marks is a Principal and Senior Project Manager with over 24 years of experience in environmental documentation and analysis consistent with CEQA and NEPA. Jennifer's career has focused on a wide variety of projects, including public works assignments related to water resources; specific plan and general plan analyses; transportation infrastructure; and various utility infrastructure projects.

Education

1999/BS/Natural Resources, Planning and Interpretation/Humboldt State University

Availability

25%

Sean Noonan, AICP / | Senior Environmental Planner



Sean Noonan, AICP, has 13 years of experience working on various types of public and private projects across Southern California. In his current role, Sean prepares and manages the preparation of CEQA/ NEPA environmental documents and supporting environmental technical studies. He is also experienced in providing his clients with support related to regulatory permitting, environmental compliance during final design and construction, and environmental constraints during due diligence.

Education

2014/MS/Urban and Regional Planning/California State Polytechnic University, Pomona

2011/MA/Geography/California State University, **Fullerton**

2006/BA/History/University of California, Santa

Availability

50%

Jillian Neary | Senior Environmental Technical Specialist



Jillian Neary has 25 years of experience specifically focused on preparing environmental compliance documents pursuant to CEQA, NEPA, and associated State and federal regulations. Her experience includes working with both private- and public-sector clients throughout Southern California, including tract map and master planned communities; infill development and redevelopment; General Plan, Housing Element, and zoning updates; commercial and industrial developments; open space and recreation projects; and flood control, water and sewer infrastructure, and water conservation projects.

Education

2005/Coursework/Landscape Architecture/ University of California, Los Angeles Extension

1997/BA/Geology/Indiana University-Purdue University, Indianapolis, IN

Availability

50%

Jessica Hitchcock | Project Manager



Jessica Hitchcock has seven years of experience in managing and preparing CEQA evaluations includes a wide variety of projects, including commercial, residential, mixed-use, industrial, school, solar and public works/infrastructure projects for a variety of public and private clients throughout Southern California.

Education

2017/BA/Environmental Studies and Political Science/University of California, Santa Barbara

Availability

50%

Megan Larum | Environmental Technical Specialist



Megan Larum is an Assistant Project Manager with 15 years of experience in environmental documentation and analysis consistent with CEQA and NEPA. She has experience in cultural resources management and has participated in Native American Heritage Commission (NAHC) requests, records searches, and Phase I Cultural Resources Assessments.

Education

2006/BS/Environmental Policy Analysis and Planning/University of California, Davis

Availability

75%

Jordan Werkmeister | Environmental Planner



Jordan has worked on a variety of CEQA and NEPA documents, including preparation of initial studies, reviewing plans and drafting project descriptions, and writing key analysis sections. As an Environmental Planner, Jordan prepares environmental documents, assist with management efforts, and coordinate with internal staff and subconsultants. Jordan also has experience preparing air quality, greenhouse gas, and energy analyses to support CEQA and NEPA documents.

Education

2022/BS/Environmental Policy Analysis and Planning/University of California, Davis

Availability

Bryan Hamilton | Environmental Planner



Bryan Hamilton is an Environmental Planner with experience in preparing environmental documents pursuant to the California Environmental Quality Act (CEQA) for a wide variety of projects, including commercial, residential, mixed-use, industrial, general plan updates, and infrastructure for public and private clients. Bryan also specializes in conducting noise analyses to support CEQA and NEPA documents.

Education

2013/BA/History, Minor in Urban Studies/University of California, Los Angeles

Availability

25%

Chaise Lapierre | Environmental Planner



Chaise Lapierre is an Environmental Planner with approximately one year of experience preparing analyses to support categorical exemptions, addenda, and mitigated negative declarations.

Education

2023/BA/Environmental Studies/California State University, San Marcos

Availability

25%

Charles Cisneros / | Cultural Resources Manager



Charles Cisneros is a registered professional archaeologist with 19 years of experience in archaeological assessment and field experience in California and Nevada. He has directed numerous field projects in support of compliance with the CEQA, NEPA, and NHPA. Charles has managed a wide range of projects involving archaeological survey, testing, data recovery, monitoring, and laboratory analysis.

Education

2008/MS/European Archaeology/University of Edinburgh, United Kingdom

2004/BA/Anthropology/California State University, Los Angeles

Availability

25%

Heather Garnett | Cultural Resources Specialist



Heather Garnett is an experienced Cultural Resources Specialist with seven years of experience in archaeological assessment and field experience in California and New Mexico. She has participated in several field projects in support of compliance with CEQA, NEPA, and NHPA. Heather has provided support on a wide range of projects involving archaeological survey, site recordation, excavation, monitoring, and laboratory analysis.

Education

2020/MA/Anthropology/New Mexico State University, Las Cruces

2017/BA/Anthropology/University of California, Irvine

Availability

50%

Daniella Balassa | Cultural Resources Specialist



Daniella Balassa is a professional paleontologist with experience in paleontological assessment and field experience in Southern California. She has provided support on a wide range of projects involving paleontological resource monitoring, Paleontological Resource Monitoring Plans (PRMP), museum education, laboratory analysis, and has valuable expertise on extinct North American mammals (megafauna).

Education

2024/MS/(Expected) Geology/California State Polytechnic University, Pomona

2021/BS/METRIC Scholar/California State University, Long Beach

2019/AS/Geology/Pierce College, Los Angeles

Availability

25%

Farshad Farhang | Senior Noise Technical Manager



Farshad is an experienced Senior Noise Technician and has managed noise/vibration studies and performed technical noise work in the infrastructure and environmental sectors. He is experienced in many facets of the acoustics field, including environmental and transportation noise and vibration measurement, analysis, and control.

Education

1994/MBA/Business Administration/California State University, Fresno

1986/BS/Electrical Engineering/California State University, Fresno

Availability

Amber Heredia 🏮 | Biological Resources Manager



Amber Heredia is a Senior Project Manager and Senior Biologist with 27 years of experience in the preparation of Biological Technical Reports to meet the requirements of the FESA, CESA, CEQA, NEPA, and the CWA. Amber has a wide range of knowledge on the plants, wildlife, and vegetation communities of Southern California, especially those listed as Threatened or Endangered.

Education

2005/MS/Biology/University of California, Riverside 1998/BS/Ecology and Evolution/University of California, Santa Barbara

1998/BS/Environmental Studies/University of California, Santa Barbara

Availability

25%

Brad Blood, PhD ! Regulatory Permitting Manager



Brad Blood, PhD, is a Senior Biologist/Environmental Scientist and Project Manager with expertise in regulatory compliance related to biological issues including CEQA/NEPA, the federal and state Endangered Species Acts, federal clean water act, and the State Fish and Game Code. He is a certified wetland delineator and is experienced with the State and federal regulations governing wetlands delineation and permitting.

Education

1987/PhD/Biological Sciences/University of Southern California

1981/MS/Biology/California State University, Long

1978/BS/Zoology/California State University, Long Beach

Availability

25%

David Hughes | Regulatory Permitting Manager



David Hughes is a Senior Project Manager in Restoration Ecology and Regulatory Services with 20 years of experience in mitigation planning, restoration monitoring, wetland delineations, and regulatory permitting. David is also a Certified Arborist and fully trained practitioner of the California Rapid Assessment Method (CRAM) for wetlands.

Education

2003/MS/Ecological Restoration and Management/ University of Wisconsin, Madison

1991/BS/Ecology, Behavior and Evolution/ University of California, San Diego

Availability

25%

Lindsay Messett, CWB | Senior Biologist



Lindsay Messett, a Certified Wildlife Biologist® with a specialty in wildlife biology, has 21 years of experience in data collection, field research, resource management, and environmental document preparation. She has conducted focused surveys and habitat assessments throughout California for several endangered wildlife species.

Education

1999/BS/Ecology and Systematic Biology, Concentration: Wildlife Biology/California Polytechnic State University, San Luis Obispo

Availabilitu

25%

Jonathan Aguayo | Senior Biologist



Jonathan Aguayo has 16 years of experience as a Senior Biologist including field experience in ornithology and herpetology. He has a solid knowledge of California's flora and fauna gained from work experience, professional affiliations, and personal interest. He has contributed to the preparation of various technical reports addressing State and federal laws, including the CEQA and NEPA for a variety of development projects and under on-call contracts.

Education

2007/BS/Environmental Science and Resource Management/California State University, Channel Islands

Availability

25%

Allison Rudalevige | Regulatory Specialist



Allison Rudalevige is a Senior Biologist with 19 years of experience in the areas of biological and jurisdictional resources. She has experience conducting general and focused plant and wildlife surveys, vegetation mapping, mitigation monitoring, tree surveys, jurisdictional delineations, California Rapid Assessment Method (CRAM) analyses, and physical habitat analysis according to the Surface Water Ambient Monitoring Program (SWAMP) protocol.

Education

2005/MS/Biology/University of California, Riverside 2000/BS/Biology, Zoology/California State University, Long Beach

Availability

Paul Myers | Senior Biologist



Paul has over 20 years of experience as an environmental permitting and NEPA compliance specialist, wetland and stream scientist, botanist, and ecologist. His specific areas of expertise include managing projects for environmental review and permitting compliance, wetland delineation, restoration and mitigation design, rare plant and wildlife surveys, habitat classification and mapping, and habitat restoration.

Education

BS/Botany/Western Carolina University

Availability

40%

Trevor Bristle | Certified Arborist



Trevor Bristle is a Biologist and Registered Consulting Arborist with 18 years of field experience. He has gained extensive experience while working throughout Southern and Central California and is familiar with the associated plants, wildlife, and habitats found therein.

Education

2008/BS/Natural Resources Management/ Northland College

Availability

40%

Jennie Ramirez | GIS Specialist



Jennie has five years of experience in GIS. Her recent project experience includes utilizing ArcGIS, Adobe Illustrator and ArcGIS Collector to create and edit map documents and graphic exhibits for various client projects that meet cartographic and data collection needs.

Education

2021/MS/Geographic Information Science/ California State University, Long Beach

2016/BA/Philosophy and Geography/California State University, Long Beach

Availability

15%

Paul O'Brien | GIS Specialist



Paul is a Geographic Information Systems (GIS) Analyst with five years of experience in GIS. His recent project experience includes utilizing ArcGIS, ArcGIS Field Maps, ArcGIS Online and Adobe Illustrator to create and edit map documents and graphic exhibits for various client projects that meet cartographic and data collection needs.

Education

2020/BS/Geography and Geospatial Science/ Oregon State University

Availability

15%

Sheryl Kristal | Support Services Manager



Sheryl Kristal is a Word Processor with more than 10 years of experience word processing for CEQA and NEPA documents. As Senior Word Processor at Psomas, Sheryl creates custom templates in Microsoft Word for projects and proposals.

Education

2004/Coursework/General Studies with a focus on Graphic Design/Golden West College

Availability

25%

Matt Heideman, PE | Senior Hydrology/Water Quality Engineer



Matt has 30 years of experience in all aspects of land development engineering. He has worked on residential, commercial, and industrial projects throughout Southern California, and has managed the design of mass grading, precise grading, storm drain, sewer, water, reclaimed water, widening of existing streets and highways, new street improvements, parking lots, street lighting, retaining walls, box culverts and vesting tentative tract maps for projects ranging from 10 acres to over 1,000.

Education

1993/BS/Civil Engineering/University of California, Irvine

Registration

1996/CA/Professional Engineer/Civil/55639

Availability

15%

Steve Baine, PE, QSD | Hydrology/Water Quality Engineer



Steve Baine has 35 years of experience in hydrology and hydraulic studies, water and sewer system analysis, storm water pollution prevention plans, and water quality management plans.

Education

1989/BS/Civil Engineering/University of California, Irvine

Registration

1994/CA/Professional Engineer/Civil/51327

Availability

3 References

Santiago Creek Dam Outlet Tower and Spillway Improvement

Orange County, CA | Irvine Ranch Water District

IRWD and Serrano Water District are jointly proposing to abandon the existing Santiago Creek Dam outlet tower and construct a new inclined outlet structure located on the left abutment of the existing dam. Based on feedback from the Department of Safety of Dams (DSOD), the dam spillway also requires structural improvements. As part of the project, the existing outlet tower would be demolished and a new structure would be built. Inlet/outlet works would be configured to incorporate the new structure and flows would be bifurcated between the Irvine Lake Pipeline and the emergency outlet pipeline. The dam crest would be widened and raised to subsequently raise the effective dam crest.



Sundago Creek Dun

Relevance to Project

- IRWD project
- Technical studies
- Strategic consultation
- Biological survey, focused surveys, and technical report
- CEQA and CEQA-plus compliance

Psomas has been actively working alongside IRWD, as Lead Agency, since August 2020 in the preparation of technical studies and an Environmental Impact Report (EIR) to evaluate the project. Efforts were initiated with preparation of an Initial Study (IS) and key technical studies to understand the anticipated level of impacts and help identify the required document type. Technical studies include a biological constraints report including a jurisdictional delineation, and a cultural resources report including archaeological and paleontological surveys and a historic analysis of the existing dam and spillway. Following IRWD's initial review of the IS, it was determined that an EIR would be prepared and Psomas coordinated with the IRWD Team to prepare a variance request to cover the additional tasks required for the EIR. Psomas also prepared a separate scope of work under our on-call biological monitoring and permitting contract related to additional services needed for biological surveys, regulatory agency coordination, and permit preparation.

Psomas is also preparing supplemental documentation to comply with CEQA-Plus/Federal Cross-cutters pursuant to the California Clean Water State Revolving Fund requirements. Throughout this process, Psomas has worked collaboratively with IRWD staff, providing guidance and assistance as design challenges have arisen. Our assigned Principal-in-Charge, Jennifer Marks, and Biological Resources Manager, Amber Heredia, have worked as a team to provide the technical expertise and creative problem-solving needed for this project. Psomas staff are also working closely with IRWD to maintain a positive working relationship with resource agency staff. These relationships will assist in the success of the regulatory permitting process.

PROJECT OWNER

Irvine Ranch Water District PO Box 57000 15600 Sand Canyon Avenue Irvine, CA 92618

OWNER STAFF

Fiona Sanchez Kellie Welch Jacob Moeder Andy Uk

INITIAL CONTRACT

Biological Technical Report, Air Quality/Greenhouse Gas Study, Historic Resource Assessment, Noise Assessment, Draft IS: \$144,862

CHANGE ORDERS

Under our CEQA contract, Psomas has requested a total of \$179,696 in change orders, related to the decision to prepare an EIR; accommodate updated construction assumptions, project design; integrate Additional Geotechnical Investigation; address County of Orange comments; and evaluate modifications to SCE infrastructure

Additional IRWD Projects

In addition to our current work on the Santiago Creek Dam Outlet Tower and Spillway Improvement Project, Psomas, previously BonTerra Psomas, has been under contract providing on-call environmental consulting services to IRWD since 2014. Projects have included:

- ► Irvine Lake Pipeline (ILP) North Conversion Project MND
- ▶ ILP North Pipelines Mitigation Monitoring
- ▶ ILP North Reservoir Mitigation Monitoring
- ▶ 3.7 MG Zone 1 Reservoir Project MND
- Zone A to Rattlesnake Reservoir Pump Station Project MND
- Orange Park Acres Well Replacement Addendum

Additional Items

4. Schedule

Psomas understands that good communication requires a level of transparency with our clients regarding schedule and budget. In order to present an accurate picture of the project schedule and budget to IRWD on a regular basis, the Psomas management team will actively track each project's progress through our in-house management software, allowing us real-time project statistics. With this information, our management team can quickly make the necessary adjustments to reallocate resources and make any necessary reassignments to ensure schedules are met and budgets are not exceeded. Our commitment to the schedule and budget has been demonstrated through our past work with IRWD.

5. Budget

Our proposed budget is on the following page.

6. Joint Venture

Psomas is not proposing as part of a joint venture.

7. Conflict of Interest

Psomas has no conflicts of interest that would preclude our ability to uphold this contract.

8. Insurance

Copies of Psomas' insurance are in Appendix B.

9. Contract

Psomas has reviewed the professional service agreement and has no proposed modifications to the standard terms and conditions.

Budget

Title/Classification	Staff	F	Rate
Contract Manager, Principal-in-Charge, QA/QC Manager	Jennifer Marks, Ann Johnston	\$	265
Senior Technical Manager	Charles Cisneros	\$	202
Regulatory Permitting Manager	Brad Blood	\$	233
Senior Project Manager, Environmental		\$	260
Senior Environmental Planner	Sean Noonan	\$	207
Senior Regulatory Specialist	David Hughes	\$	190
Senior Project Manager/Biological Resources Manager	Amber Heredia	\$	233
Senior Biologist/Project Manager, Biology	Paul Myers	\$	187
Project Manager III		\$	202
Project Manager II		\$	186
Project Manager I	Jessica Hitchcock	\$	164
Regulatory Specialist/Senior Botanist	Allison Rudalevige	\$	167
Senior Biologist	Lindsay Messett, Jonathan Aguayo	\$	166
Certified Arborist	Trevor Bristle	\$	188
Senior Technical Specialist, AQ/GHG, Noise, Cultural, CEQA/NEPA	Farshad Farhang	\$	233
Technical Specialist III, AQ/GHG, Noise, Cultural, CEQA/NEPA	Jillian Neary	\$	212
Technical Specialist II, AQ/GHG, Noise, Cultural, CEQA/NEPA		\$	186
Technical Specialist I, AQ/GHG, Noise, Cultural, CEQA/NEPA		\$	159
Technical Analyst, AQ/GHG, Noise, Cultural, CEQA/NEPA		\$	133
Environmental Planner III	Megan Larum	\$	164
Environmental Planner II/Assistant PM	Jordan Werkmeister, Bryan Hamilton	\$	149
Environmental Planner I	Chaise Lapierre	\$	133
Biologist		\$	127
Field Technician, Archaeology/Paleontology	Heather Garnett, Daniella Balassa	\$	101
GIS Analyst	Paul O'Brien	\$	129
GIS Specialist	Jennie Ramirez	\$	154
Technical Writer/Editor	Danae Overman	\$	106
Word Processor/Support Services Manager	Sheryl Kristal	\$	135
Senior Project Manager, Engineering	Matt Heideman	\$	250
Project Technical Manager, Engineering	Steve Baine	\$	205

250 East 1st Street, Suite 1400 Los Angeles, California 90012 • July 18, 2024

Irvine Ranch Water District

On-Call CEQA and NEPA Services









Rincon Consultants, Inc.

250 East 1st Street, Suite 1400 Los Angeles, California 90012 213-788-4842



July 18, 2024

Fiona Sanchez, Director of Water Resources Andy Uk, Environmental Compliance Analyst Irvine Ranch Water District 15600 Sand Canyon Avenue Irvine, California 92618

Subject: Proposal for On-Call CEQA and NEPA Consultation

Dear Ms. Sanchez and Mr. Uk:

Rincon Consultants, Inc. (Rincon) is pleased to provide the Irvine Ranch Water District (IRWD) the enclosed proposal to provide on-call environmental consulting services to support the compliance of future IRWD projects with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). Rincon offers extensive experience in providing on-call and as-needed environmental services to California water, wastewater, and groundwater agencies, and our team brings unique qualifications to assist with managing projects in an efficient, transparent, and ethical manner. Our staff have experience supporting environmental compliance for various types of projects ranging from simple to complex discretionary actions, including water, wastewater, groundwater, water reuse, and desalination projects.

This proposal identifies Rincon's capabilities to provide environmental consultation services, curated to address the anticipated needs of IRWD. Our team offers:

- Knowledgeable and responsive project management team. Our Principal-in-Charge Jennifer Jacobus, PhD
 managed IRWD's environmental on call for 13 years and our Project Manager Annaliese Torres has led
 environmental compliance for water infrastructure projects throughout Southern California.
- Local team who understands Orange County conditions and species. Rincon has more than 115 staff
 members within one hour of IRWD in our Los Angeles (60 staff), Carlsbad (20 staff), and San Diego (35 staff)
 offices that are ready to respond to IRWD environmental compliance needs.
- Deep bench of Southern California staff with expertise in CEQA and NEPA compliance. Our in-depth understanding of local environmental resources and CEQA/NEPA enables us to provide strategic guidance through the technical challenges associated with managing a range of natural and water resources.
- **Firm reputation for high-quality deliverables,** creativity in problem solving, and high-value services overseen by our experienced senior professionals. Rincon will provide IRWD with consistent, high-quality, and informed environmental consulting deliverables.

Our proposed management team are experienced environmental professionals and will holistically manage IRWD's task orders, be responsive to IRWD inquiries, and identify defensible and streamlined environmental compliance pathways. **Jennifer Jacobus, PhD**, will lead this contract as Rincon's Principal-in-Charge, responsible for final quality assurance and quality control, as well as overall management of contract execution. Jennifer brings extensive experience with IRWD and other Southern California water agencies. **Annaliese Torres** will be Rincon's Project Manager and serve as IRWD's primary point-of-contact, with responsibility for day-to-day management. Our experienced project team is trusted in providing environmental consulting services for water agencies throughout Southern California, including South Coast Water District, The Metropolitan Water District of Southern California, Santa Clarita Valley Water Agency, Coachella Valley Water District, and Eastern Municipal Water District. Our responsiveness, commitment to streamline environmental compliance where possible, and ability to meet sometimes challenging deadlines makes us an essential partner in IRWD's success.

For this contract, Rincon will apply our existing program management framework, which facilitates internal coordination, quality assurance/quality control consistency, and institutional knowledge-sharing across projects. Our internal program serves as a valuable connection point to leverage Rincon's long history of successful cross-

disciplinary work within and knowledge of IRWD's service territory in Orange County and the greater Southern California area. With established service line leads, monthly check-in meetings for project managers, and communal repositories for resources, including standard construction specifications and approved mitigation measure language, we will work diligently to provide IRWD with consistent, high-quality, and informed environmental consulting deliverables.

Rincon's combination of highly qualified staff, local presence, in-depth environmental planning, policy development and permitting experience, and ability to manage all sizes of environmental programs makes us uniquely suited to this on-call contract. This proposal outlines our qualifications and experience, and describes our strong technical and project management team, who will aid in meeting the objectives of each task order under this on-call contract.

We are confident that the Rincon team will meet or exceed IRWD's needs, and we welcome an opportunity to meet with you to discuss our qualifications further. Please do not hesitate to contact us should you have questions about this qualifications package or need additional information.

Sincerely,

Rincon Consultants, Inc.

Annaliese Torres | Project Manager

maliese Vorres

atorres@rinconconsultants.com

Contact for Clarification

Jennifer Jacobus, PhD | Principal-in-Charge

ijacobus@rinconconsultants.com

Authorized to contractually obligate and negotiate on behalf of Rincon Consultants, Inc.

About Rincon

Rincon Consultants, Inc. (Rincon) is a multidisciplinary environmental science, planning, and engineering consulting firm providing quality environmental services to government and industry. Rincon believes water is the unifying life source of California, creating a more equitable society, thriving economy, and flourishing ecosystem that are central to what Californians value. Rincon strives to advance the adaptation of California communities to a more resilient future by transforming competing interests into collaborative and creative solutions for our residents, businesses, and environment. Rincon has been supporting water districts throughout California for nearly 30 years.

Rincon's Water Team is experienced in providing on-call and as-needed environmental services for water agencies such as The Metropolitan Water District of Southern California, South Coast Water District, Eastern Municipal Water District, Inland Empire Utilities Agency, and SCV Water. Our principal service is to provide environmental support and scientific research to create and sustain innovative solutions to natural resource management, sustainability, and environmental impacts. We pride ourselves on the considerable knowledge-depth of our staff, which includes environmental scientists, planners, aquatic and wildlife biologists, botanists, wetland and restoration specialists, regulatory specialists, hydrogeologists, geospatial analysts, water quality experts, geologists, engineers, air quality specialists, and cultural and historic resource specialists.

Rincon's in-depth understanding of local environmental resources and regulatory processes in the IRWD service area allows us to provide recommendations for project design, alternative siting, analysis, and options for minimizing environmental impacts, permitting requirements, and associated mitigation costs. We have specialized expertise in relevant resource databases and current literature, field survey design, identifying and mapping sensitive resources, and communicating and implementing the regulatory requirements associated with them. Our approach to every project is centered on the design and development of proactive solutions that respond to our clients' specific needs in a cost-effective manner.

Rincon's Water Vision

Water managers hold the key to California's water future, and failure is not an option. Rincon's Water Team is entrusted and dedicated to providing public and private water purveyors the environmental science, planning, and sustainability services necessary to contribute to a clean and reliable water supply.

Our planners and scientists are leading California in resolving one of the most pressing twenty-first century challenges—water security. Rincon partners with our clients to transform competing values into collaborative solutions in delivering one water: water supply, recycled water, storm water, groundwater sustainability, and wastewater.

Rincon's culture focuses on providing environmental consulting services in a way that is beneficial to both the environment and our client's needs. We perceive Rincon as an extension of our client's team and function with their best interests in mind. Our success is based Rincon's overall project approach including early engagement to confirm needs and expectations in advance of and during implementation, fluid communication, responsiveness to changing client and project needs, long-term agency relationships and coordination, and thinking like our clients to proactively manage risk and capitalize on opportunities for time and cost efficiencies.

By managing each project with a focus on three primary objectives—economic efficiency, technical excellence, and sustainable approach—we can provide superior service that efficiently and effectively meets the needs of our clients.

Major Services Provided

We have categorized our environmental consulting services into six core areas, as summarized on the following page. Our firm structure ensures a focused and expert approach to addressing a wide range of environmental needs, which ensures swift access to specialized knowledge for timely and effective problem-solving when needed.



Rincon's Core Services

Environmental and Land Use Planning

- CEQA Compliance: EIRs, Initial Studies, Categorical Exemptions, Addendums, MMRPs
- NEPA Compliance: EISs, EAs, FONSIs, Categorical Exclusions
- Community Involvement Programs
- Noise Studies, including Bio-Acoustic Evaluation Air Quality Analysis

Natural Resources

- Biological Construction and Mitigation Monitoring
- Baseline Biological Resources Inventories and Vegetation Mapping
- Biological Resources Effects/Impacts Analyses: Biological Assessments, Biological Evaluations, Natural Environment Studies
- Rare, Threatened, and Endangered Plant and Wildlife Species Surveys
- Nesting Bird Surveys
- Jurisdictional Delineations: USACE, RWQCB, CDFW, USFWS, and California Coastal Commission Methodologies
- California Rapid Assessment Method for Wetlands

- Tree Inventory, Health Assessment, Risk Assessment, and Tree Protection Plans
- Certified Arborist Tree Surveys and Impacts Assessments
- Regulatory Permitting: USACE Clean Water Act Section 404, RWQCB CWA Section 401, CDFW Fish and Game Code Section 1602
- Federal Endangered Species Act Section 7 Consult. and Section 10 Habitat Conservation Plans
- California Endangered Species Act Section 2081 Permits/Memorandum of Understandings
- Wetland, Riparian, and Upland Habitat Revegetation and Restoration Planning

Cultural Resources

- Literature Reviews/Records Searches/Archival Research •
- Native American Consultation/AB52
- Cultural and Paleontological Resource Surveys
- California Register of Historical Resources and National Register of Historic Places Eligibility Evaluations
- · Archaeological Data Recovery Programs
- Archeological and Native American Monitoring
- Paleontological Monitoring

- Section 106 Consultation
- State Historic Preservation Officer Consultation
- Historic Preservation Plans
- Cultural Resources and Paleontological Management Plans
- Third Party Peer Review
- Phase I, II, and III Cultural Resources Analysis

Environmental Site Assessment and Remediation

- Phase I and II Environmental Site Assessments
- Hazardous Waste Characterization
- Site Remediation: Planning, Design, and Construction
- Spill Prevention Control and Countermeasure Plan
- Underground Storage Tank Removal and Investigation
- Environmental Construction/Grading Monitoring
- · Methane Soil Gas Testing

Water Resources

- · Water Resources and Water Management Planning
- Hydrogeological Studies and Groundwater Sustainability Planning
- Storm Water Management and Compliance Monitoring
- Water Supply Assessments and Studies
- Groundwater Dependent Ecosystems and Interconnected Surface Waters
- · Water Rights Permitting
- Watershed Management and Planning

Sustainability Services

- Climate Action Planning
- GHG Emissions Inventories

- Climate Adaptation and Resiliency Planning
- · ASHRAE Level 1 and 2 Energy Audit

Rincon's combination of highly qualified staff, local presence, in-depth environmental planning, policy development and permitting experience, technical expertise, and ability to manage all sizes of environmental programs make our firm uniquely suited to meet IRWD's needs and support task order completion and project implementation under this on-call contract.

1 Scope

Task 1 California Environmental Quality Act (CEQA)

Rincon employs a creative, problem-solving approach to environmental impact evaluation and the environmental review process. We provide the full range of CEQA services, from interpreting and understanding statutory implication and guidelines, to document processing and administrative actions, including project completion and certifications. Rincon has successfully prepared hundreds. of CEOA documents and supporting technical studies for water and wastewater agencies throughout California. We seek to identify the most streamlined and effective pathway to CEQA compliance for every project, and we provide all levels of CEQA documentation. We anticipate many of IRWD's CEQA actions will involve Categorical Exemption or Initial Study (with Negative Declaration or Mitigated Negative Declaration) levels of documentation, as well as Addendums to existing CEQA documents. Rincon will also provide close and thoughtful support for IRWD to conduct effective Assembly Bill 52 (AB-52) processes, when necessary, by providing letter templates, checklists, and detailed instructions to ensure meaningful consultation with interested Native American groups.



Rincon provided CEQA support, technical reports, and construction monitoring for rehabilitation of 100 miles of Prestressed Concrete Cylinder Pipelines for The Metropolitan Water District of Southern California

Rincon understands that IRWD occasionally conducts projects with a federal nexus triggering NEPA (discussed further under Task 2, below) as well as CEQA. A joint CEQA/NEPA document maybe be prepared at the discretion of both IRWD and the federal lead agency; alternatively, a CEQA-Plus document addressing federal requirements may be used by a federal lead agency to satisfy its NEPA requirements. Rincon's staff has considerable experience preparing CEQA-Plus environmental documentation to meet State Water Resources Control Board (SWRCB) State Revolving Fund (SRF) Program environmental standards. Our team is also experienced in developing technical studies for the Federal Emergency Management Agency/California Office of Emergency Services Hazard Mitigation Grant Program, United States Bureau of Reclamation Title XVI, the U.S. Environmental Protection Agency (USEPA) Water Infrastructure Finance and Innovation Act (WIFIA), and the United States Department of Commerce Economic Development Administration American Rescue Plan Act.

Task 2 National Environmental Protection Act (NEPA)

Rincon has provided NEPA support for water districts and public agencies throughout California. We are fluent in the requirements of NEPA where they diverge from CEQA, which enables us to advise our clients on the most streamlined and effective regulatory pathway possible. We have completed successful NEPA documentation for a variety of federal lead agencies, each of which has their own requirements, processes, and preferences; these agencies include but are not limited to the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), U.S. Forest Service, U.S. Bureau of Reclamation (USBR), and Federal Highway Administration (via California Department of Transportation), among others.

Rincon has prepared documentation for numerous NEPA Categorical Exclusion projects similar to those previously prepared by IRWD, which have been related to the use of federal funding (American Recovery and Reinvestment Act of 2009; Water and Energy Efficiency Grant funds), as well as for activities on federal lands (Cleveland National Forest). Where a project does not qualify for a NEPA Categorical Exclusion, an Environmental Assessment (EA) and Finding Of No Significant Impact (FONSI) may be required or, less commonly, an Environmental Impact Statement (EIS) and Record of Decision. However, based on our experience and familiarity with IRWD's projects and activities, Rincon anticipates that most NEPA documentation required for IRWD projects

will involve Categorical Exclusions and supporting technical studies.

Rincon is also experienced in addressing federal environmental documentation requirements for projects seeking federal funding from the USEPA WIFIA program. Our approach to preparing WIFIA NEPA documentation has been carefully crafted with the guidance of our contacts at the USEPA WIFIA Program (e.g., Alejandro Escobar, Associate Director of the WIFIA Program). We are currently preparing WIFIA Programmatic Environmental Assessment Questionnaires for a suite of groundwater well and PFAS remediation projects for SCV Water.

Task 3 Staff Rates

Rincon's labor categories and rates are provided in Section 5 of this proposal.



View of the Ventura-Santa Barbara Counties Intertie Project alignment, where horizontal directional drilling was proposed to cross a drainage. Rincon prepared NEPA documentation and technical studies for this project.

Task 4 Project Task Item Estimates

Rincon believes in finding creative solutions to maintaining low budgets and **completing work in the most efficient and cost effective way achievable**. We accomplish this efficiency through direct technical senior and principal involvement at the beginning of each project to reduce the need for multiple rounds of review and revision. We manage multiple task orders under a master on-call agreement through close project tracking, early identification of issues, consistent quality control, and effective client communication. Rincon's approach to managing multiple tasks under a master on-call agreement is discussed further under Task 6, and is based on our ongoing experience managing more than 1,800 assignments every year for more than 800 clients statewide.

For each task order presented by IRWD, Rincon will provide a project-specific scope of work, schedule, and cost estimate. Understanding the efficiency is important, only those tasks needed to satisfy project requirements are included in scope of work proposals. To provide flexibility in project execution and ability to adapt to changes, Rincon may also define optional tasks for services IRWD may elect to conduct, or which may become necessary depending upon the outcome of initial project analysis. As specified in the RFP, cost estimates will also include costs/fees for document filing, including newspaper ads, County Clerk fees, and California Department of Fish and Wildlife (CDFW) CEQA Filing Fees.

Task 5 Team Experience

Section 2 of this proposal introduces the Rincon team assembled specifically for this contract with IRWD. Team member resumes are provided in **Attachment A**, including a selection of relevant project experience, years of professional experience, education, and special knowledge and skills related to this contract.

Task 6 Project Coordination

Rincon understands that this contract may involve working with other consultants and agencies, and working as a subordinate and/or project management role. For many of our water projects, Rincon either collaborates alongside engineering firms that develop project design, often concurrent with Rincon's environmental work, or we engage in a prime/subcontractor relationship. Rincon has strong, collaborative relationships with engineering consulting firms and regulatory agency staff. Rincon regularly coordinates in this manner, as demonstrated by our ongoing work on the EMWD On-Call Environmental Services contract, as a subconsultant to a Prime contractor; see Section 3, *References*. Rincon also supports our water agency clients by facilitating inter-agency partnerships and multiple regional coalitions, such as the North San Diego Water Reuse Coalition which has been managed by Rosalyn Prickett for 10 years. Rincon also regularly teams with other firms to supplement our in-house expertise; **Fehr & Peers**, with whom Rincon has an ongoing professional relationship and Master

Services Agreement (MSA), will support our team for this contract with IRWD to provide traffic and transportation studies if needed. We also hold a mutual MSA with **Todd Groundwater** for groundwater modeling when needed.

At Rincon, we believe that project management is an integral part of a project's success and use the following methods to deliver that success: (1) proven project management techniques to provide technical direction to our internal staff and subconsultants; (2) regular communication with IRWD staff as needed throughout the course of each assignment and provide technical assistance as needed; (3) consistent control of program costs, schedule, staffing, technical performance, deliverables, and subcontractors; and (4) detailed internal reviews to ensure that the quality of the work meets or exceeds IRWD work order and contract requirements. To facilitate coordination and communication, we have established a program of weekly planning and coordination meetings using an agenda developed and circulated in advance.

Rincon's proven management techniques will be implemented by **Annaliese Torres** as discussed further in Section 2, *Team*, under "Quality Assurance and Project Management." Our approach to management involves technical direction for our internal staff as well as to subconsultants, primes, and partners. Rincon also has a formal process for tracking and disseminating information and data using an electronic, centralized recordkeeping system for all data relevant to task orders. This organization provides easy access to the most upto-date versions of project information as needed.

Task 7 Mitigation Monitoring and Reporting

Rincon has a team of environmental compliance specialists that focus on developing and implementing mitigation monitoring and reporting programs (MMRPs) that include the commitments from CEQA/NEPA documents and regulatory permits. Our depth of experience with MMRP implementation is fundamental to informing our approach to CEQA and the crafting of mitigation measure language, applying our knowledge of project construction and operational requirements to inform feasibility, effectiveness, and minimum regulatory requirements. Our environmental compliance team includes program managers who orchestrate, schedule, document, and manage all MMRP requirements, as well as field monitors such as qualified biologists, archaeologists, architectural historians, paleontologists, hydrologists, and noise specialists.

Prior to undertaking fieldwork, we conduct background research and assess fieldwork needs to inform a site-specific approach and safety plan. Our field staff are supported by application-based mapping and documentation software provided by Rincon's GIS team, as well as a robust health and safety program to ensure the fieldwork is completed safely. During project construction, Rincon's trained monitors help minimize costs and delays by clearly communicating permit conditions to staff and crew, conducting preconstruction surveys as needed, presenting environmental education programs, identifying appropriate levels of monitoring, proactively coordinating with resource agencies when appropriate, and documenting compliance and mitigation progress.

Rincon's environmental compliance team is closely coordinated with our regulatory permitting team, which is highly experienced in implementing state and federal regulations for streambeds, wetlands, and special status plants and wildlife. We strive to gain necessary approvals for mitigation for every project in a cost-conscious and time-efficient manner. Our team has forged solid connections with staff responsible for issuing permits from every resource agency relevant to water infrastructure, including CDFW, USFWS, SWRCB, Regional Water Quality Control Boards (RWQCBs), Department of Water Resources, USACE, USBR, and the federal and State Environmental Protection Agencies. This combination of experience and agency contacts will facilitate prompt and efficient responses to IRWD requests for permit applications and MMRP implementation. In addition, our team uses state-of-the-art technology during monitoring to control costs, streamline efforts, and effectively manage data. Our entire team, from project managers to monitors, understands how to work together with our clients and construction teams to think proactively, exercise frequent and effective communication, work efficiently, and collaborate to ensure compliance schedule and budget needs are met.

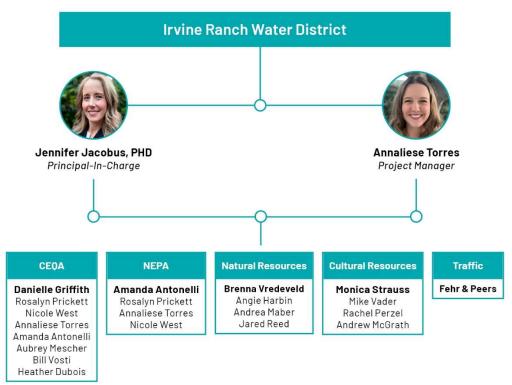
Task 8 References

Rincon's relevant experience is presented in Section 3, and letters of reference from two Rincon clients – The Metropolitan Water District of Southern California and the City of Pismo Beach – are provided in **Attachment B**. In addition, the table below presents a selection of IRWD projects that Rincon staff have worked on in the past.

Project Name	Rincon Staff	IRWD Staff
Baker Water Regional Treatment Plant EIR and EIR Addenda	Jennifer Jacobus; Monica Strauss	Paul Weghorst, Fiona Sanchez, Kellie Welch, Richard Mori
Battery Storage Facilities NOE	Jennifer Jacobus	Paul Weghorst, Fiona Sanchez, Kellie Welch
Eastwood Recycled Water Pump Station IS/MND	Nicole West	Jo Ann Corey (no longer at IRWD)
Kern Fan Groundwater Storage Project EIR	Jennifer Jacobus	Paul Weghorst, Fiona Sanchez, Kellie Welch
Michelson Water Recycling Plant, Biosolids Handling and Energy Recovery Project EIR	Jennifer Jacobus; Danielle Griffith	Paul Weghorst, Kellie Welch
San Diego Creek Water Rights Petition IS-ND	Jennifer Jacobus	Paul Weghorst, Fiona Sanchez, Kellie Welch, Ian Swift
San Joaquin Reservoir Filtration Facility IS/MND	Nicole West	Jo Ann Corey (no longer at IRWD)
Strand Ranch Integrated Banking Project EIR and EIR Addendum	Jennifer Jacobus	Paul Weghorst, Kellie Welch
Syphon Reservoir Geotechnical Investigations IS/MND	Jennifer Jacobus; Heather Dubois	Paul Weghorst, Fiona Sanchez, Kellie Welch, Richard Mori
Syphon Reservoir Improvement Project CEQA- Plus EIR	Jennifer Jacobus	Paul Cook, Paul Weghorst, Fiona Sanchez, Kellie Welch, Richard Mori
Wells 21, 22, and Tustin Legacy 1 Projects, IS/MND/EA and Addendum	Jennifer Jacobus	Paul Weghorst, Fiona Sanchez, Kellie Welch

2 Team

The figure below presents Rincon's proposed organizational chart for this team, followed by an introduction to our contract management team and an overview of key personnel experience.



As requested in the RFP, no substitution of key team members will occur without IRWD's prior written consent. The Rincon team assembled for this important contract provides all the technical expertise, experience, local familiarity, and availability needed to effectively respond to IRWD task orders under this on-call contract. Detailed staff resumes are provided in **Attachment A**.

Contract Management Team

Our core management team includes **Jennifer Jacobus**, **Principal-in-Charge**, and **Annaliese Torres**, **Project Manager**. While at a previous firm, Jennifer managed on-call services for IRWD for 13 years, and has intimate understanding the IRWD's organization and facilities, both in Orange County and Kern County. Jennifer currently oversees several of Rincon's successful on-call services contracts with water districts/agencies and will similarly oversee the effective execution of task orders under this on-call, including final quality assurance and quality control (QA/QC) for all deliverables. Annaliese has overseen the environmental documentation, permitting, and construction monitoring processes for numerous water, wastewater, and groundwater projects throughout the state, including on-call services for water and wastewater agencies. She is adept at anticipating needs and challenges associated with site-specific environmental constraints and experienced in the nuances of environmental documentation and permitting for these project types.

Jennifer and Annalise regularly work together on CEQA and NEPA projects for water and wastewater agency clients. They have established clear channels of communication and a collaborative working relationship that facilitates the seamless execution of water and wastewater infrastructure and planning projects, including the early identification of potential issues to allow for effective resolution.

Jennifer Jacobus, PhD | Principal-in-Charge

Office: Los Angeles

Contact Information: jjacobus@rinconconsultants.com | 213-448-2586



Dr. Jacobus is Rincon's Principal-in-Charge of Water Market services, with over 20 years of experience providing support to water and wastewater clients throughout California. Her expertise includes feasibility studies, constraints analyses, funding applications, CEQA/NEPA compliance, regulatory permitting, and construction monitoring. Jennifer has a reputation for client satisfaction, meeting the unique needs of each district and community. Jennifer has successfully completed environmental compliance for projects including treatment plants, distribution systems, potable reuse, and recycled water projects to groundwater replenishment, reservoir storage, water rights, and surface water diversion projects. While at a previous firm, Jennifer served as Client Manager to IRWD for as-needed environmental services over 13 years, completing more than \$1 million of work and 20 task orders.

Annaliese Torres | Project Manager

Office: Los Angeles

Contact Information: atorres@rinconconsultants.com | 657-999-8337



Annaliese is a Senior Environmental Planner and Project Manager who manages environmental analyses, technical studies, and grant tracking and writing for water and wastewater projects. She prepares and manages CEQA, CEQA-Plus, and NEPA documentation, and supports a variety of cross-disciplinary technical studies. Annaliese works with numerous water agencies including the Water Replenishment District of Southern California, Three Valleys MWD, SCV Water, Central Basin Municipal Water District, West Basin Municipal Water District, and South Coast Water District, on projects such as potable and non-potable pipelines, groundwater wells, pump stations, treatment facilities, and reservoirs. Annaliese currently serves as Client Manager to Metropolitan for as-needed environmental services, overseeing more than \$1.4 million of work and 128 task orders.

The environmental professionals selected for on-call contract with IRWD were carefully considered for their relevant expertise, and have all worked on collaborative project teams in the past, including for IRWD projects. The table below provides an overview of key personnel qualifications, including availability and labor categories corresponding to our billing rates provided in Section 5, *Budget*.

With the guidance of our highly skilled management team, supported by our dynamic team of professionals, Rincon is ready to meet and exceed IRWD's needs under this contract.

Key Personnel Experience

Name, Role, Labor Category, Availability	Education and Certifications	Technical Experience
Jennifer Jacobus, PhD Principal-in-Charge Principal Availability: 20%	PhD, Resource Ecology & Management, University of Michigan MA, Geography, Boston University BA, Economics, Johns Hopkins University	 20 years of experience Served as Client Manager to IRWD for as-needed environmental services over 13 years, completing more than \$1M of work and 20 task orders Focused exclusively on water and wastewater clients and projects in California
Annaliese Torres Project Manager Senior Planner II Availability: 35%	B.S., Environmental Science, Texas Christian University CEQA Practice Certificate, UCSD Extension	 7 years of experience Trusted Project Manager for numerous water agency clients including Metropolitan Water District of Southern California; Water Replenishment District of Southern California; North Kern Water Storage District; Santa Clarita Valley Water Agency
Danielle Griffith CEQA Lead Director Availability: 25%	Juris Doctor, Western State University College of Law MA, Political Science, San Diego State University BA, Political Science, Sonoma State University	 20 years of experience Served as Project Manager for IRWD's Michelson and Los Alisos Water Recycling Plants Biosolids Handline and Energy Recovery Facility Project Project manager and director in infrastructure projects and regulatory compliance for water agencies
Amanda Antonelli NEPA Lead Senior Planner II Availability: 30%	MESM, Water Resources Management, UCSB BA, Geography/Environmental Studies, UCLA	 9 years of experience Solutions-oriented manager fluent in guiding water projects through environmental permitting landscapes Expertise in federal regulations including NEPA and crosscutting requirements across CEQA and NEPA, including through CEQA-Plus document preparation
Brenna Vredeveld Natural Resources Lead Supervisor Biologist I Availability: 20%	MESc, Yale University BA, Environmental Studies, Wellesley College Professional Certificate in Spanish/English Translation, UC San Diego Extension	 15 years of experience Ecosystem monitoring and reporting, federal and local regulatory processes, compliance requirements for biological resources on construction projects Program Manager for Metropolitan's Prestressed Concrete Cylinder Pipe Rehabilitation Program
Monica Strauss Cultural Resources Lead Senior Principal Availability: 20%	MA, Archaeology, California State University, Northridge BA, Anthropology, California State University, Northridge Register of Professional Archaeologists, #12805	 25+ years of experience Compliance program management on numerous multi-year large-scale infrastructure projects in the areas of energy, transportation, and water. Has successfully directed hundreds of cultural resources projects meeting local, state, and/or federal regulatory requirements across water markets.
Rosalyn Prickett CEQA QA/QC Principal Availability: 20%	MS, Landscape Architecture/ Environmental Planning, University of California, Berkeley MS, City & Regional Planning, University of California, Berkeley BS, City & Regional Planning, Cal Poly San Luis Obispo	 23 years of experience Excels at managing stakeholder-based water management programs for potable reuse, recycled water, and domestic water supply and sewer efforts. Principal-in-Charge for water infrastructure projects and regulatory compliance for water agencies

Name, Role, Labor Category, Availability	Education and Certifications	Technical Experience
Nicole West CEQA; Water Quality; Permitting Senior Supervisor Planner Availability: 30%	MS, Civil and Environmental Engineering, University of California, Berkeley BS, Evolution and Ecology, University of California, Davis CPSWQ (Permit No. 384) QSD/QSP (Permit No. 00238)	 24 years of experience CEQA Project Manager for agencies in Orange County including IRWD (San Joaquin Reservoir Filtration Facility; Eastwood Recycled Water Pump Station) and Orange County Sanitation District Experienced water and stormwater professional with fluency in water permits and regulations
Aubrey Mescher CEQA; Water; Hydrology/WQ Supervisor Planner I Availability: 30%	MESM, Water Resources Management; University of California Santa Barbara BA, Environmental Studies/Film Studies; Emory University	 19 years of experience Technical specialist with focused expertise in Southern California water and energy projects Adept at conveying complex information in a manner that can be understood by the general public
Bill Vosti AQ/GHG; Noise Supervisor Planner I Availability: 15%	MESM, Environmental Science & Management, UCSB BA, Journalism, California State University, Chico	 8 years of experience Proficient with various noise prediction models and air quality and greenhouse gas emissions models Preparation of technical reports for CEQA/NEPA
Heather Dubois AQ/GHG Senior Planner II Availability: 15%	MBA, Clarkson University BS, Biology, Clarkson University BS, Chemistry, Clarkson University	 21 years of experience Air quality analyses, health risk assessments, and climate change analysis for NEPA and CEQA Well versed with California Air Resource Board and local air district regulations and guidance
Andrea Maben Biological Resources Senior Biologist I Availability: 15%	BS, Environmental Science, Concentration in Conservation Biology, University of California, Los Angeles	 8 years of experience Environmental compliance support for conditional use permits and Mitigation, Monitoring, and Reporting Programs and natural resources permitting Biological resource assessments for CEQA compliance
Jared Reed Biological Resources Senior Biologist II Availability: 15%	BS, Ecology and Evolution, UCSB Authorization to take, possess, and transport Flat-tailed Horned Lizards Trained CRAM Practitioner	 21 years of experience Regulatory permitting, jurisdictional delineations, and biological resources studies in support of CEQA/NEPA Surveys and reports for rare and sensitive species (Coastal California Gnatcatcher, least Bell's vireo)
Angle Harbin Biological Resources Director Availability: 20%	MS, Conservation Ecology, UC Davis BS, Wildlife, Fish, and Conservation Biology, UC Davis	 20 years of experience Broad experience in regulatory permitting, wetlands, wildlife, and conservation ecology Has overseen development of mitigation monitoring and reporting plans and resource management plans
Mike Vader Cultural Resources Senior Archaeologist II Availability: 15%	BA, Physical Anthropology, University of California, Santa Barbara	 17 years of experience Archaeological survey, excavation, monitoring, and environmental compliance projects Numerous water and sewer infrastructure projects for public agencies in Southern California
Rachel Perzel Built Environment Supervisor Archaeologist Availability: 15%	MA, Historic Preservation, Savannah College of Art & Design BA, Historic Preservation & Planning, College of Charleston	 10 years of experience Historic Resources Evaluations for CEQA and NEPA National Historic Preservation Act Section 106 Exceeds the U.S. Secretary of Interior Professional Qualification Standards for Architectural History
Andrew McGrath Paleontology Archaeologist III Availability: 15%	PhD, Earth Science, UCSB Certificate in College and University Teaching, UCSB BA, Evolutionary Biology, Case Western Reserve University	 3 years of experience in environmental consulting and 9 years of paleontological research and publications Field work, construction monitoring, and mitigation implementation for regulatory compliance

Name, Role, Labor Category, Availability	Education and Certifications	Technical Experience
Delia Votsch, PE (Fehr & Peers) Traffic/Transportation	BS, Civil Engineering, Drexel University Licensed Civil Engineer, State of California (C 90171)	 8 years of experience Transportation assessments in support of CEQA and NEPA documentation Operations Manager for Orange County/Inland Empire

Julia Aranda, PE, Engineering Manager, Casitas Municipal Water District

"Rincon is very responsive to the needs of the District and is seen as a valuable resource for supporting our capital projects and ongoing programs. Staff provide reasonable turnaround on deliverables and keep District staff informed when schedule delays are unavoidable. Reports are presented professionally and organized well. Rincon staff are very well qualified and knowledgeable regarding their respective areas of expertise, and deliverables are of high quality."

Quality Assurance and Management

At Rincon, we believe that project management is an integral part of a project's success, and we employ a variety of standards of practice to provide clear, thorough, and effective management of task orders. One of our key strengths is our involvement in projects from "inception-to-implementation," which spans from pre-planning activities (alternative analyses, environmental constraints analysis, and technical report preparation) to project analysis (CEQA/NEPA compliance, regulatory permitting), through project implementation (hazards remediation, construction monitoring, stormwater compliance services) to post construction activities (habitat restoration, mitigation). As a result, we have a full understanding of the demands of large and small-scale projects, and the interaction between environmental issues and the directives of the responsible regulatory agencies.

When managing multiple tasks under a master on-call agreement, we have found that close project tracking, early identification of issues, consistent quality control, and effective client communication are essential. We take pride in our structured management of complex, multidisciplinary environmental review projects. These techniques result in outcomes of high quality, meeting both study objectives and budgets.

- Communication and Documentation Procedures. Communication is critical to managing multiple task orders under an on-call agreement. Upon receipt of a request for task order from IRWD, our Project Manager will coordinate with the project team (including subconsultants) to determine the best lead for each resource area and to provide a scope and cost for each project component. We have established a program of weekly planning and coordination meetings to review work in progress, plans, and schedules. We also have a formal process for tracking and disseminating information and data for large projects. We employ an electronic, centralized recordkeeping system for all data relevant to the project.
- **Technical Direction and Control.** Our team operates in accordance with its rigorous QA/QC Manual, which establishes clear roles and responsibilities for each client, as well as protocols for the execution of each assignment, and protocols for internal/external communication. We will send weekly or bi-weekly planning and coordination e-mails or conference call status updates to the appropriate members of IRWD staff to review work in progress, plans, and schedules and to ensure each project is proceeding in line with expectations. Rincon also can provide access to video conference call technology upon request.
- Cost and Schedule Control. Rincon believes in finding creative solutions to maintaining low budgets and completing work in the most efficient and cost effective way achievable. Rincon achieves cost, schedule, and resource control pursuant to the following three-step process: (1) Cost and schedule baselines are established. (2) Actual cost and schedule data are collected and reported on a weekly basis to the Project Manager. (3) Deviations in cost or schedule performance are discussed internally, and if necessary, with IRWD staff and corrective actions are taken. Rincon uses Deltek Ajera®, a project-based accounting system that controls all aspects of project management and accounting with real-time project information.
- Project Reporting and Editorial Review. We work closely with clients for the duration of the project to ensure
 that progress is carefully tracked, attention is drawn to any difficulties encountered, and the project is
 conducted in a highly professional manner. We hold formal monthly status review meetings in which

- assigned staff meet with the Project Manager for a technical, schedule, and budgetary assessment of progress. This provides a continuing forum for mutual discussion and peer review of the quality of our work.
- **Problem Anticipation and Management.** Rincon recognizes its obligation to anticipate, identify, and resolve all problems—technical, managerial and financial—as early as possible. Problems can most often be avoided by thoroughly planning the program; realistically budgeting time, labor and costs; clearly communicating with clients; and closely monitoring the actual performance of Rincon staff and subcontractors. Problems that do occur may be practical (e.g., conditions at field sites delay test operations) or conceptual and relating to steps in the technical approach. Many can be quickly solved by the involved staff members; otherwise, they are brought to the immediate attention of the Project Manager, who will decide the best resolution.
- Ensuring Comprehensiveness and Legal Adequacy. At Rincon we take pride in offering our clients Principal-level staff involvement in all projects, with decades of experience in interpreting CEQA Statute and Guidelines to help ensure that a client's documents meet accepted standards for comprehensiveness and legal adequacy. We understand the importance of strict adherence to CEQA process and procedures including scoping, notification, filing/posting of documents, statutory timelines and content guidelines to avoid or withstand legal challenges on procedural grounds.

3 References

Rincon offers extensive experience providing on-call and as-needed environmental services to California water, wastewater, and groundwater agencies. This section provides an overview of three projects we have selected as being particularly relevant to the services requested under this contract for IRWD. Additional related experience is discussed under respective heading below. Please see **Attachment B** for letters of reference.

The Metropolitan Water District of Southern California, On-Call Environmental Services

Contact:	Malinda Stalvey, Senior Environmental Specialist	
Phone:	213-217-5545 mstalvey@mwdh2o.com	
Address:	Address: 700 North Alameda Street Los Angeles, California 90012	
Dates:	2011 - Present	

Since 2011, Rincon has provided on-call environmental consulting services to Metropolitan, which serves portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Our program team has managed over 40 task orders for services at every stage of project implementation: CEQA/NEPA, permitting, funding, resource assessments, and construction monitoring. Rincon has performed a wide variety of work scopes for Metropolitan on time and within or under budget. Rincon is currently working with Metropolitan on the F.E. Weymouth Water Treatment Plant and La Verne Site Improvements Program EIR and has come in \$75,000 under budget on tasks completed to date, including preparation of the Initial Study and publication of the Draft EIR, all while adhering to a firm schedule driven by Metropolitan's desired date for Final EIR certification. Our team also responds nimbly to frequent short-notice requests for pre-construction surveys and biological monitoring for both routine maintenance and emergency projects.

Other recent, relevant projects include but are not limited to those listed below.

- Garvey Reservoir Rehabilitation Project EIR and Technical Studies;
- Colorado River Aqueduct Master Reclamation Plan for San Bernardino and Riverside Counties IS-MND and Technical Studies;
- Climate Action Plan and Program EIR; and
- Lakeview Pipeline Repair Project IS-MND Addendum No. 2 and Technical Studies.

Eastern Municipal Water District, On-Call Environmental Services

Contact:	Jennifer Ziv, Woodard & Curran (prime)				
Phone:	949-420-5300 jziv@woodardcurran.com				
Address:	530 Technology Drive Irvine, California 92618				
Dates:	2015 - Present				

As a subconsultant to a Prime contractor, Rincon has been awarded this on-call contract over the last three cycles to provide environmental consulting services including paleontological, archeological, and biological expertise to support compliance with CEQA and regulatory requirements for capital and operations and maintenance projects.

- Cactus Avenue Corridor Project. Rincon prepared technical studies and a CEQA-Plus IS-MND for a project involving construction of groundwater extraction, treatment, and distribution facilities in Moreno Valley. The project would increase potable water supply in EMWD's Perris North Groundwater Management Zone with construction of up to six extraction wells, a treatment plant, and approximately 30,000 linear feet of pipeline to convey raw and treated water. Due to project design and environmental review occurring concurrently, Rincon analyzed potential biological, cultural, and paleontological impacts at approximately 11 well sites, two potential treatment plant locations, and a variety of potential pipeline alignments. Rincon also provided focused burrowing owl surveys and mitigation to address potential impacts to the special-status species; Native American outreach to over 30 tribes as part of the federal Section 106 tribal consultation process; and multiple 24-hour noise measurements to support the noise analysis contained in the IS-MND.
- Perris North Basin Groundwater Contamination Monitoring Program. Rincon prepared a CEQA-Plus analysis including technical reports for cultural, biological, and paleontological resources, for a proposed groundwater monitoring program within EMWD's Perris North Management Zone of the San Jacinto Groundwater Basin. The program involves drilling and operation of up to 10 monitoring wells ranging in depth from 200 to 800 feet, as well as semi-annual data collection visits to all wells in order to understand the extent of groundwater contamination and inform EMWD's long-term groundwater management decisions. Rincon assessed 10 proposed well sites, many of which were not identified at the outset of the analysis; Rincon worked closely with the Prime to keep the project on schedule as new well sites were confirmed and incorporated into the analysis.

City of Pismo Beach, Central Coast Blue Project

Contact:	Benjamin Fine, PE, Director of Public Works/City Engineer		
Phone:	805-773-7037 bfine@pismobeach.org		
Address:	760 Mattie Road Pismo Beach, California 93449		
Dates:	August 2019 - Present		

With Annaliese Torres leading this effort as Project Manager, Rincon completed the preparation of a hybrid Program/Project-level CEQA-Plus EIR for the City of Pismo Beach's Central Coast Blue project. This project is a collaboration between multiple agencies including the City of Pismo Beach, the cities of Arroyo Grande and Grover Beach, Oceano Community Services District, and South San Luis Obispo County Sanitation District. The project includes a full-scale test injection well and a nested monitoring well to provide the City with information regarding the feasibility and design options for the Central Coast Blue project.



Key issues in the EIR included archaeological resources, California red-legged frog, discharge of reverse osmosis concentrate, recreation, and growth inducement. Rincon collaborated closely with the project engineering team and prepared a hybrid program/project-level CEQA document to provide flexibility for the initial phases of the project to move forward while details for future phases of the project are determined. The Final EIR was certified in February 2021, and the project was approved in March 2021. Rincon further provided permitting assistance for the project, including coastal development permits from the City of Grover Beach and the County of San Luis Obispo; permits from USACE, RWQCB, and CDFW; and consultation with the USFWS.



The Central Coast Blue project received a Project Merit Award from the Association of Environmental Professionals (AEP) in 2021.

Matthew Downing, Former Community Development Director, City of Pismo Beach

"...Rincon is constantly thinking ahead and answering questions you did not even know you had. They strategize how to address different complex issues to not create additional issues elsewhere."

Additional Related Experience

Our staff have experience managing, processing, and reviewing projects ranging from simple pipeline repairs to complex conjunctive use plans and multi-agency regional water facilities. Our clients have come to expect a high degree of interaction with community members and organizations, internal public agency staff, and decision-makers. A partial list of clients with whom we are contracted for on-call environmental services is below.

Client	Services	Dates
The Metropolitan Water District of	CEQA/NEPA; Permitting; Biological Services	2011 - Present
Southern California	Bay-Delta Issues	2022 - Present
Eastern Municipal Water District	CEQA/NEPA; Biological Resources; Cultural Resources; Paleontological Resources	2015 - Present
South Coast Water District	CEQA/NEPA; Monitoring/Compliance	2022 - Present
Inland Empire Utilities Agency	CEQA/NEPA; Permitting; Climate Planning; Compliance Training	2020 - Present
Three Valleys Municipal Water District	CEQA; Biological Resources; Grant Writing	2022 - Present
United Water Conservation District	CEQA/NEPA; Biological Resources; Permitting	2016 - Present
Casitas Municipal Water District	CEQA Services; Permitting; Biological Resources	2018 - Present
Montecito Water District	CEQA/NEPA Services	2019 - Present
Santa Clarita Valley Water Agency	CEQA Services; Biological Resources; Cultural Resources; Permitting; Monitoring	2019 - Present
Los Angeles Department of Water and Power	CEQA/NEPA; Biological Resources; Cultural Resources; Compliance	2021 - Present
Calleguas Municipal Water District	CEQA/NEPA; Biological Resources; Cultural Resources; Construction Monitoring	2022 - Present
San Elijo Joint Powers Authority	CEQA/NEPA Services	2023 - Present

4 Schedule

Rincon has assembled a team for this contract with sufficient availability to devote attention required for IRWD task orders, as they arise (please see Section 2). Rincon also has established systems and procedures to manage multiple task orders under an on-call contract, including in coordination with other consultants and

agencies. Schedule drivers and constraints can be associated with project complexity, the type of CEQA/NEPA documentation required, regulatory agency review times, and stakeholder involvement. We will assess these variables upon project kickoff and develop a project-specific schedule to meet all requirements and expectations. Our Principal in Charge, Jennifer Jacobus, and Project Manager, Annaliese Torres, have the authority to identify and prioritize staff to complete CEQA and NEPA services as requested by IRWD.

In general, a CEQA Categorical Exemption or NEPA Categorical Exclusion can be completed within four to six weeks, while a CEQA IS-ND or IS-MND generally requires four to six months. A CEQA-Plus document, similar to an IS-ND or IS-MND, can typically be prepared within four to six months. although compliance with Section 106 of the National Historic Preservation Act can add several months to document approval and certification. If there is a federal lead agency that intends to use a CEQA-Plus document to inform or adopt as its NEPA document, additional time is added to the project schedule. A CEQA Addendum, which builds upon an existing CEQA document, can typically be completed within about four weeks. Rincon understands that an EIR or EIS is unlikely to be necessary under this contract; however, should such a document be necessary, Rincon will work closely with IRWD to develop an acceptable and realistic schedule for project completion.

5 Budget

Rincon's 2024 standard fee schedule for environmental sciences and planning services is provided on the following page, and will be used to inform project-specific budgets for task orders arising under this contract.

6 Joint Venture

Rincon does not propose to use a joint venture agreement in the provision of services under this contract. We have invited **Fehr and Peers** to join our team for traffic modeling and analyses on an as-needed basis. Through the execution of this contract, we will be forward-thinking and collaborative as to what additional partners may bring the best value to IRWD.

7 Conflict of Interest

To the best of our knowledge, Rincon does not have existing personal, financial, and/or organization conflicts of interest prohibited by law.

8 Insurance

Please see **Attachment C** for Rincon's Insurance Certificate.

9 Contract

Rincon accepts the standard terms and conditions in the professional services agreement attached to the RFP and requests no modifications.

Rincon 2024 Standard Fee Schedule with 3-Year Escalation

	Hourly Rate					
Professional, Technical and Support Personnel*	January 1 - December 31, 2024	January 1 - December 31, 2025	January 1 - December 31, 2026	January 1 - December 31, 2027		
Senior Principal	\$319	\$330	\$342	\$354		
Principal	\$307	\$318	\$329	\$341		
Director	\$307	\$318	\$329	\$341		
Senior Supervisor II	\$292	\$302	\$313	\$324		
Supervisor I	\$272	\$282	\$292	\$302		
Senior Professional II	\$255	\$264	\$273	\$283		
Senior Professional I	\$238	\$246	\$255	\$264		
Professional IV	\$211	\$218	\$226	\$234		
Professional III	\$196	\$203	\$210	\$217		
Professional II	\$174	\$180	\$186	\$193		
Professional I	\$155	\$160	\$166	\$172		
Associate III	\$130	\$135	\$140	\$145		
Associate II	\$117	\$121	\$125	\$129		
Associate I	\$109	\$113	\$117	\$121		
Field Technician	\$94	\$97	\$100	\$104		
Data Solutions Architect	\$196	\$203	\$210	\$217		
Senior GIS Specialist	\$187	\$194	\$201	\$208		
GIS/CADD Specialist II	\$167	\$173	\$179	\$185		
GIS/CADD Specialist I	\$150	\$155	\$160	\$166		
Technical Editor	\$147	\$152	\$157	\$162		
Project Accountant	\$125	\$129	\$134	\$139		
Billing Specialist	\$107	\$111	\$115	\$119		
Publishing Specialist	\$120	\$124	\$128	\$132		
Clerical	\$107	\$111	\$115	\$119		

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

Reimbursable Expenses

Direct Cost	Rates	
Photocopies - B/W	\$0.25 (single-sided), \$0.45 (double-sided)	
Photocopies - Color	\$1.55 (single-sided), \$3.10 (double-sided)	
Photocopies - 11" by 17"	\$0.55 (B/W), \$3.40 (color)	
Oversized Maps	\$8.50/square foot	
Digital Production	\$15/CD, \$20/flash drive	
Light-Duty and Passenger Vehicles*	\$90/day	
4WD and Off-Road Vehicles*	\$150/day	
*Current IRS mileage rate for mileage over 50	and for all miles incurred in employee-owned vehicles.	

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

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

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

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HARMSWORTH ASSOCIATES

Proposal to

IRVINE RANCH WATER DISTRICT

for

On-Call Monitoring and Permitting Services

July 18th, 2024

Irvine Ranch Water District Attn: Ms. Fiona M. Sanchez, Director Water Resources 15600 Sand Canyon Ave., Box 57,000 Irvine, CA 92619

Dear Ms. Sanchez:

Re: Proposal for On-Call Monitoring and Permitting Services

Harmsworth Associates (HWA) has provided general environmental services to private and public organizations since 1984. The firm developed expertise in Orange County in ecologically sensitive areas through its work with the Irvine Company, The Nature Conservancy, the Natural Communities Coalition, and IRWD within the IRWD Service Area. The firm has expertise in ecologically sensitive areas and played a major role in the development of the Central and Coastal sub-region NCCP/HCP. Harmsworth Associates has prepared documents for and conducted CEQA/NEPA compliance, mitigation development and monitoring as well as associated wetland permitting with the USACE, CDFW and RWQCB. The firm has a close working relationship with The Irvine Company, in a number of Planning Areas, undertaking predevelopment biological surveys, mitigation planning and monitoring in IRWD's Service Area.

Recently the firm assisted IRWD with the several important projects including, the Syphon Access Road project, the Sewer Siphon project, the Santiago Creek Dam project and construction monitoring and restoration for the Baker Pipeline project. In each case HWA responded promptly to conduct the required monitoring/surveys in a timely and cost-effective manner.

Neither Harmsworth Associates nor its personnel have a conflict of interest prohibited by law. The firm has the required insurance and has named IRWD as an additional insured on its certificates of insurance. The IRWD contract is acceptable to Harmsworth Associates.

Thank you for the opportunity to submit the enclosed Scope of Work. Yours truly

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Harmsworth Associates

Rodney V. Harmsworth, Ph.D.

President

ENVIRONMENTAL ASSISTANCE FOR ON-CALL MONITORING AND PERMITTING SERVICES

SCOPE OF WORK

At the request of the Irvine Ranch Water District (IRWD), Harmsworth Associates will provide the following on-call services:

Task 1: Land Use Planning

IRWD plans through its Master Plan, and sub-area Master Plans for its three primary statutory activities, to provide domestic water, reclaimed water and wastewater treatment. These activities are planned to accommodate the County and City development plans. Moreover, the IRWD is required to comply with the many laws, regulations and codes in its capital improvement program.

Harmsworth Associates is familiar with the Planning Areas within IRWD's Service Area and has recently conducted pre-construction biological surveys, construction monitoring or permitting in the following PAs 1, 6 and 39, for The Irvine Company's residential developments that will be served by IRWD through its capital improvement program. The firm has access to local planning documents, CEQA, NEPA documents and permits. Moreover, the firm was a part of the NCCP/HCP planning process representing the Metropolitan Water District of Southern California and later assisting both The Irvine Company and IRWD in extensive biological surveys and the preparation of amendments to the NCCP/HCP.

Harmsworth Associates will assist IRWD with planning its capital projects and maintenance activities by providing advice on the nexus of environmental issues with planning activities to minimize the environmental consequences and cost of its planned actions.

Task 2: Regulatory Agency Consultation, Permit Application and Procurement

Harmsworth Associates is familiar with the preparation and processing of federal, state, and local permits on projects, operations, maintenance and planning activities. Assistance by Harmsworth Associates may involve the preparation and processing of permit applicants and supporting materials with one or more of the regulatory agencies. The firm has provided consultation on both riparian and upland systems.

Harmsworth Associates secured emergency permits for IRWDs Lake Forest Sewer Emergency Repairs and Williams Canyon Pipeline and Road Repairs. Currently HWA are in the process of obtaining permits for IRWD's Sewer Siphon Project.

Harmsworth Associates will assist IRWD with the preparation of permit applications to the resource/wildlife regulatory agencies including:

- United States Army Corps of Engineers
- Bureau of Land Management

- United States Forest Service
- California Department of Water Resources
- California Regional Water Quality Control Board
- California Department of Fish and Wildlife
- California Coastal Commission
- South Coast Air Quality Management District

Harmsworth Associates will provide services to monitor or implement compliance and reporting. Compliance may require monitoring contractor removal of exotic plants, restoration and revegetation monitoring then complete the annual or periodic reporting requirements in permits. Consultant shall provide certification of compliance with permit conditions for IRWD and agency approval. Harmsworth Associates shall develop a schedule of all permit requirements for existing and new permits and their status. Consultant shall bring any violations of permit conditions to the attention of the District.

Task 3: Wetland Delineation

Harmsworth Associates staff has taken the USACE delineation course and are fully competent to determine the jurisdictional boundaries of the United States Army Corps of Engineers (pursuant to Section 404 of the federal Clean Water Act). They have expertise with the California Fish and Wildlife Code (pursuant to Section 1602) and the California Coastal Commission (pursuant to the California Coastal Act).

Harmsworth Associates has completed many wetland delineations in southern California and Orange County for submission to the USACE, RWQCB and CDFW to obtain permits certifications and agreements. One recent project was for a proposed housing development at Noble Creek in the city of Beaumont. Impacts occurred to a perennial creek that supports riparian habitat. HWA conducted the delineation, all biological surveys, and impact analysis and obtained the permits.

Harmsworth Associates recently completed Wetland Delineations and Vegetation Mapping on projects in Moreno Valley and Winchester in Riverside County.

Harmsworth Associates will provide wetland delineation services to IRWD in compliance with the regulatory definitions in force.

Task 4: Biological Survey, Monitoring, Assessment

Harmsworth Associates has the necessary permits to survey for the listed species in the Service Area including nest monitoring ability for the least Bell's vireo, the southwestern willow flycatcher and the collection of endangered fairy shrimp etc. The staff is very familiar with the flora and fauna of Orange County having completed some of the most extensive surveys undertaken in the County. The firm was selected to survey the Orange County Coastal Central NCCP/HCP project including for a variety of species and habitat types.

In addition the firm has undertaken extensive wildlife and plant surveys of the North Ranch Policy Plan Area for The Irvine Company. Currently the firm is undertaking numerous surveys for TIC, IRC, NCC and the TNC of the flora and fauna in IRWD's Service Area.

Harmsworth Associates will undertake biological surveys, assessments and monitor preconstruction and construction areas as required for the District's projects. Harmsworth Associates will provide field services, written reports, compliance with state and federal protocols and advisement on IRWD's projects. The firm will undertake preliminary and initial assessments, bird nesting surveys, biological monitoring and identification of threatened and endangered species.

Task 5: Threatened and Endangered Species Regulation, Monitoring and Reporting Harmsworth Associates can survey and prepare documents for endangered and threatened species and recommend strategies to minimize and mitigate potential impacts within the NCCP/HCP agreements. Harmsworth Associates has permits (No. PRT-810768) and MOUs to survey and study endangered species such as the least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, fairy shrimp, pond turtle and other species. The firm's staff attends meetings with the USFWS staff on key issues involving survey protocols for listed species and provides input of a practical nature.

As a consultant representative of Lennar Homes with the Coalition for Habitat Conservation the firm follows the latest developments and legal actions under the ESA. Complex issues such as the "No Surprises Policy", "adverse modification" definition and the ability to mitigate "off-site" impacts to critical habitat are currently under litigation and may impact IRWD's Section 10(a) (1) (B) Endangered Species Permit obtained as a result of the NCCP/HCP plan in 1996. These and other issues of importance are well known to Harmsworth Associates.

Over the past several seasons HWA staff has assisted TIC comply with the endangered species act relating to least Bell's vireo at PA1 and PA39. A complex set of mitigation measures required TIC to conduct surveys and nest monitoring for least Bell's vireo in addition to weekly noise monitoring of construction activity during the nesting season for the vireo. Weekly reports were required to be submitted to USFWS, CDFW and the Corps. HWA conducted the surveys, nest monitoring, noise monitoring and submitted the weekly reports.

Harmsworth Associates will assist IRWD in the review of regulatory issues associated with listed species under the Endangered Species Acts (FESA and CESA) and ascertain the significance of such regulation on IRWD's projects, operations, and planning activities. The firm will provide assistance with specific policy formulation on endangered species covered under the:

- Federal Endangered Species Act
- California Endangered Species Act
- Natural Community Conservation Plan Act
- The NCC's policies and IRWD's rights on "take" in the reserve
- Migratory Bird Treaty Act

The firm will provide assistance with both existing 10(a) permits and new applications as required.

Task 6: Mitigation Monitoring and Reporting Plans

Harmsworth Associates has a long history of mitigation monitoring in Orange County. The firm is currently working on a number of projects for the Irvine Company undertaking preconstruction surveys, construction monitoring surveys for conditions compliance, noise monitoring and other requirements for several developments in the service area. The firm is currently assisting IRWD in restoring riparian and CSS habitats at the Baker Pipeline site and is assisting Rancho Mission Viejo managing contractors controlling exotic weeds in the south county NCCP reserve.

Other projects include:

- Mitigation monitoring at various sites for IRWD including Williams Canyon.
- Surveys and monitoring for least Bell's vireo, southwestern willow flycatcher, and other riparian birds at various riparian habitats in Irvine for The Irvine Company.
- Vegetation and wildlife surveys for The Nature Conservancy, at open space areas of the Irvine Ranch.
- Monitoring vegetation removal under the NCCP guidelines

Harmsworth Associates will assist IRWD in mitigation monitoring planning, 404, 1602, and 401 permit conditions compliance. Harmsworth Associates shall provide services to monitor or implement compliance and reporting. Compliance may require monitoring contractor removal of exotic plants, restoration and revegetation monitoring then complete the annual or periodic reporting requirements in permits. Consultant shall provide certification of compliance with permit conditions for IRWD and agency approval. Harmsworth Associates shall develop a schedule of all permit requirements for existing and new permits and their status. Consultant shall bring any violations of permit conditions to the attention of the District.

Task 7: Water Quality Stormwater Monitoring and Reporting

Harmsworth Associates personnel have a strong background in water resources. Dr. Harmsworth was an analytical chemist prior to specializing in the field of fresh water biology as a limnologist. At Camp Dresser and McKee he was president of the Environmental Sciences Division and responsible for over 200 personnel including 100 water quality chemists. He managed water quality monitoring projects from wastewater treatment plant efficacy analysis (City of Detroit WWTP), sewer and wastewater discharges to lake, river and stream systems. He was responsible for the long-term monitoring of Salt Creek sediment load as a part of the RWQCB conditions. We are familiar with water quality collection procedures and the quality assurance procedures required for water quality collection and analysis.

Harmsworth Associates collected the biological data used by the Corps in preparation of the San Diego Creek SAMP and we are familiar with the workings of this SAMP.

Harmsworth Associates will provide water quality and sediment quality monitoring for compliance with USACE, RWQCB, and CDFW permit conditions. Also, Harmsworth Associates will provide compliance monitoring with the General Orange County Stormwater Permit.

Task 8: Natural Treatment System

Harmsworth Associates conducted invertebrate sampling in the Woodbridge Channel for the NTS project. The aim of the sampling was to document the existing invertebrate fauna of the Woodbridge Channel, particularly the riffle areas. Four locations were selected along the channel for sampling. Standard qualitative and semi-qualitative methods including, sweep netting of vegetation and the water column, sediment grabs, kick-sampling and hand searches, will be used to assess the status of the existing fauna. To the extent possible, sampling techniques were compatible with the methods used by Alex Horne along Peters Canyon Channel. The existing physical condition and vegetation communities at each location were described.

Harmsworth Associates obtained permits for IRWD's inline basins under a sub contract to Tettemer and Associates. The firm has expertise in the areas of water quality, freshwater biology, wetland permits and restoration of wetland systems. The NTS as designed will remove sediment, some nitrogen from nitrification processes in the treatment basins and potentially heavy metals adsorbed onto sediments and selenium to the atmosphere.

Harmsworth Associates have been involved in the design, planting palette and installation of the NTS basins at PA1 and PA39 for The Irvine Company. Harmsworth Associates is familiar with the vegetation management and monitoring required for NTS basins.

Harmsworth Associates will provide assistance in monitoring water quality, fauna and the growth and types of vegetation in the basins. In addition the firm will provide advice on the management of the basins to optimize the removal of sediments and pollutants.

Task 9: Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)

Harmsworth Associates was a consultant member of the working group of agencies and landowners that prepared the Orange County NCCP/HCP program for coastal sage scrub including the preparation of the EIR/EIS, Management Plan and the Implementing Agreements. The program plays an important role in the mitigation plans for participating landowner's projects and the operation and maintenance plans of existing and future facilities.

Harmsworth Associates prepared survey documents for the wetland, upland and grassland surveys and biological analysis for the NCCP/HCP Amendment including:

- Rare Wetland Plants in the Orange County Central/Coastal NCCP Subregion
- Rare Grassland Plants in the Orange County Central/Coastal NCCP Subregion
- Quino Checkerspot Butterfly Habitat in O.C. Central/Coastal NCCP Subregion
- Arundo donax in Orange County Central/Coastal NCCP Subregion

- Native Fish in Orange County Central/Coastal NCCP Subregion
- Arroyo Southwestern Toad in Orange County Central/Coastal NCCP Subregion
- Southwestern Pond Turtle in Orange County Central/Coastal NCCP Subregion
- Grassland Birds in Orange County Central/Coastal NCCP Subregion
- Tricolored Blackbird in Orange County Central/Coastal NCCP Subregion
- Raptors in Orange County Central/Coastal NCCP Subregion
- Least Bell's Vireo and Willow Flycatcher in Orange County Central/Coastal NCCP Sub-region

Harmsworth Associates has extensive experience working with the Orange County (NCCP/HCP). Projects relating to NCCP/HCP issues have been conducted for the Natural Communities Coalition, The Irvine Company, The Nature Conservancy, Transportation Corridor Agencies and others. Many of these projects have included conducting biological assessments, focused surveys, assessment of impacts to NCCP resources, construction monitoring and co-ordination with NCC and wildlife agencies.

Harmsworth Associates recently provided NCCP/HCP compliance for IRWD on the Baker Pipeline site and on the Syphon Access Road project.

Harmsworth Associates will provide assistance to IRWD in the planning of its projects that are related to the NCCP/HCP plan. Three main elements, the ESA 10a permit, the Implementing Agreement and the Mitigation Monitoring Program are of importance to IRWD. We will provide assistance for Section 10 relating to the construction minimization methods that must be followed.

Task 10: Project Coordination

Harmsworth Associates has a history of successful coordination with other consultants and agencies; and we can work equally well as a project leader or as a team member. Harmsworth Associates was a consultant member of the working group of agencies and landowners that prepared the Orange County NCCP/HCP, which required significant coordination with other consultants and agencies. Harmsworth Associates successfully obtained permits for IRWD's inline basins under a sub contract to Tettemer and Associates; and regularly work and coordinate with a variety of IRWD managers and staff on IRWD projects.

Harmsworth Associates regularly provide biological data and reports to other consultants preparing the CEQA documents; Harmsworth Associates will work with IRWDs CEQA consultant as requested.

Harmsworth Associates will coordinate with other consultants and agencies as necessary and will provide project management or act as a subordinate as directed by IRWD.

Task 11: Staff Rates

The rates of the personnel shown in the table would be used on the contract

CONSULTING FEE SCHEDULE JULY 1, 2024 TO JUNE 30, 2026

Harmsworth Associates understands that the fee schedule is good for the duration of the contract regardless of employee promotions.

Labor Category	Hourly Rates
Principal	\$140.00
Sr. Vice-principal	\$140.00
Vice-principal	\$130.00
Sr. Biologist	\$100.00
Project Biologist	\$80.00

EXPENSES

Mileage \$ 0.67/mile

Other direct costs at cost plus 12%

Task 12: Project Task Item Estimates

Once requested Harmsworth Associates always provides project scope/cost in a timely manner. Harmsworth Associates is used to working for IRWD, Irvine Company and other clients on call contracts, and is experienced in providing project scopes/costs at short notice. For all projects Harmsworth Associates provides a scope of work, cost estimate, schedule and staff availability; the level of detail depends on the client requirements for individual projects.

On small projects with very quick turn-around times Harmsworth Associates can provide a same-day proposal with staff availability, schedule, cost estimate and scope via email. For example on the Irvine Lake Access Road Emergency Repairs, the cost for the survey was initially provided via phone; the survey, co-ordination and letter report were completed within 10 days of the initial request.

On more typical small jobs Harmsworth Associates can provide a proposal, cost estimate, staff availability and schedule within a few days. For example, the LBV focused surveys at Syphon Reservoir (see Appendix A).

For more complex projects Harmsworth Associates provides a more detailed proposal including methodology, detailed schedule, cost estimate, scope of work and staff assignments. For example the biological surveys conducted at Winchester (see Appendix A).

Task 13: Team Experience and Schedule

Harmsworth Associates would undertake the majority of the work with its own staff; detailed SOQ attached. However, we have included subcontractors in case additional work outside of the current scope is required.

Primary HWA staff for this project are as follows, although other staff may be utilized as necessary (detailed resumes are attached in Appendix B);

<u>Rod Harmsworth Ph.D.</u> - Dr. Harmsworth has 35 years of experience in all phases of project and personnel management in the environmental sciences field. Dr. Harmsworth was involved in the preparation of the Orange County NCCP/HCP as a representative of the Metropolitan Water District of Southern California.

Time availability for IRWD contract -15% of time.

<u>Paul Galvin, M.S.</u> – Designated Project Manager for on-call contract. Mr. Paul Galvin has over 30 years of experience conducting biological surveys, T/E surveys and managing environmental projects. Mr. Galvin is an expert in NCCP/HCP compliance and implementation and 404/1600 permitting.

Time availability for IRWD contract – 30% of time.

<u>Glen Morrison</u>, B.S.– Mr. Morrison has over 15 years experience conducting botanical and biological surveys. Ms. Morrison has extensive experience with wetlands/riparian habitats, coastal sage scrub and other habitats, and in rare plants. Time availability for IRWD contract – 10% of time.

Michelle Balk, M.S.– Ms. Balk has over 15 years experience conducting botanical and biological surveys. Ms. Balk has extensive experience with wetlands/riparian habitats, coastal sage scrub and other habitats, and is an expert in rare plants. Time availability for IRWD contract -10% of time.

<u>Bobby Figarotta</u>, <u>B.S.</u> - Mr. Figarotta has over 5 years of experience in wildlife surveys and construction monitoring. Mr. Figarotta has conducted numerous construction monitoring projects and surveys for wildlife and sensitive bird species including the least Bell's vireo (*Vireo bellii pusillus*). Time availability for IRWD contract – 10% of time.

<u>Matt Filer</u> - Mr. Filer has over 5 years of experience in wildlife surveys and construction monitoring. Mr. Filer has conducted numerous construction monitoring projects and surveys for wildlife and sensitive bird species. Time availability for IRWD contract – 10% of time.

Task 14: References

Dam Maintenance Program

Worked with Andy Uk, Kellie Welch, Jacob Moeder, Danielle Drake and Frank Tedescucci

A variety of maintenance activities are required at Harding Dam, Rattlesnake Reservoir, Sand Canyon Reservoir, San Joaquin Reservoir and Santiago Creek Dam. Some of the activities are required by DSOD and Orange County Fire Authority. These activities involved vegetation maintenance and require coordination and an agreement from CDFW.

At short notice IRWD needed a site visit to each location, a determination of the vegetation onsite, CDFW jurisdictional status, potential for nesting birds and an assessment of potential impacts to CDFW jurisdictional areas. Paul Galvin researched the history of each site from aerial photographs, archive documents and NCCP documents. The sites were visited with IRWD staff, assessed and the vegetation mapped. A report was prepared and a permit application was submitted to CDFW. Due to the urgency of the maintenance work required, CDFW allowed work to proceed while the application was under review. Within a few weeks of the site visits with IRWD staff, maintenance activities got underway.

The entire work was completed in a timely and cost-effective manner. Mr. Galvin worked effectively with all parties and the quick turn-around allowed IRWD to proceed with this important project without any delays.

Syphon Access Road

Worked with Andy Uk, Kellie Welch, Rich Mori and Mark Marcacci

Harmsworth Associates provided construction monitoring and biological overview for the Syphon Access Road project. Harmsworth Associates checked the site during vegetation clearing and initial grading to ensure compliance with all project biological and NCCP conditions; and to map the CSS impact area. This included working with both IRWD staff and contractors to provide advice on which areas could be impacted and how to avoid impacts to sensitive habitats without delaying the project.

During this process Harmsworth Associates worked closely with IRWD staff to minimize environmental impacts without impacting the required construction activities.

REFERENCES

Dean Kirk, Vice-President The Irvine Company 5500 Newport Center Drive Newport Beach, CA 92658 DKirk@irvinecompany.com (949) 720-2878

Zach Principe
The Nature Conservancy
1400 Quail, Suite 130
Newport Beach, California 92660
zprincipe@TNC.ORG
(909) 815-2227

Richard Beck Michael Baker International 14725 Alton Parkway Irvine, CA 92618 RBECK@rbf.com (949)-855-3687

Laura Coley Eisenberg Rancho Mission Viejo Land Trust C/O Rancho Mission Viejo, LLC 28811 Ortega Highway San Juan Capistrano, CA 92688 lcoleyeisenberg@ranchomv.com (949)-636-4108

SCHEDULE

Harmsworth Associates is experienced at providing on-call services for several clients and understands how to schedule staff workloads to meet client's requirements for all projects, whether large or small. Harmsworth Associates has a history of staff flexibility and responsiveness. This allows Harmsworth Associates to meet client schedules regardless of staff workloads. Harmsworth Associates demonstrated its ability to meet schedules during past emergencies at several IRWD pipelines, and the quick turn-around on recent projects such as the Syphon Access Road and Baker Pipeline work. Based on our past experience, the firm's current and future workload we anticipate satisfying IRWD's project schedule for this on-call services contract.

JOINT VENTURE

This proposal is not a joint venture

CONFLICT OF INTEREST

Neither Harmsworth Associates nor its personnel have a conflict of interest prohibited by law or in contravention of IRWD policies.

INSURANCE

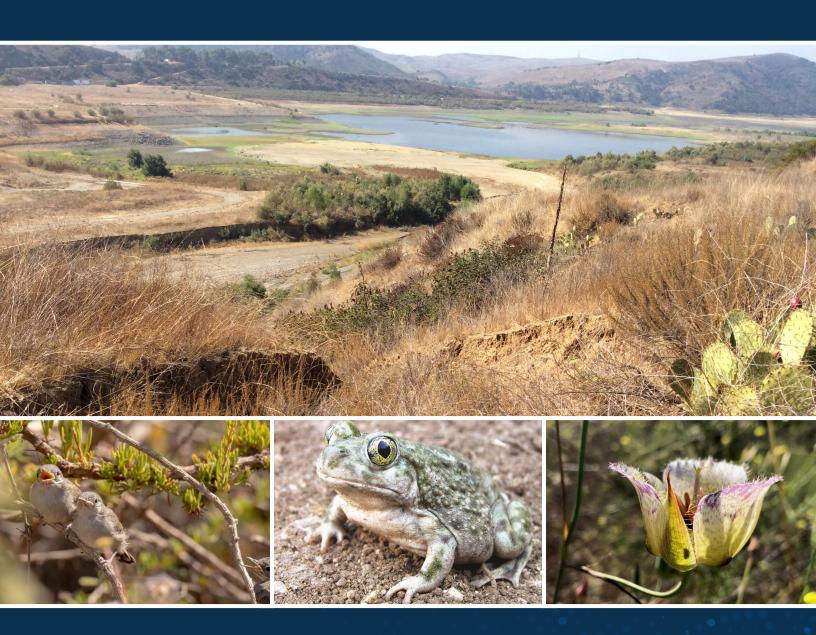
The firm has the required insurance and has named IRWD as an additional insured on its certificates of insurance. The IRWD contract is acceptable to Harmsworth Associates.

CONTRACT

The proposed contract is acceptable to Harmsworth Associates

On-Call Biological Monitoring and Permitting Services

IRVINE RANCH WATER DISTRICT



Proposal | 07.18.2024

PSOMAS

Balancing the Natural and Built Environment

July 18, 2024

Fiona M. Sanchez, Director of Water Resources Irvine Ranch Water District 15600 Sand Canyon Avenue Irvine, CA 92618

Subject: Proposal for On-Call Biological Monitoring and Permitting Services

Dear Ms. Sanchez:

Psomas is pleased to provide a proposal to the Irvine Ranch Water District (IRWD) for On-Call Biological Monitoring and Permitting Services. Psomas' team of highly qualified professionals have a long and successful history of applying their knowledge of biological and regulatory expertise to assist clients with project strategies, document and permit preparation, and implementation of post-project requirements. Several of the biological team members proposed have recently worked for IRWD under Psomas' On-Call CEQA and NEPA Consultation On-Call Contract.

Our team routinely works with local public agencies on a wide variety of infrastructure construction, operations, and maintenance projects for water agencies, public works, utilities, and transportation agencies. Our work includes assisting with project concept planning and carries through to field surveys, reporting, permit processing, and all phases of project mitigation monitoring (from pre-construction surveys to post-construction documentation). Psomas will provide qualified technical staff who will work collaboratively with IRWD to complete projects within established budgets and required timeframes while helping to navigate numerous environmental laws and regulations.

The Psomas Team will be led by Amber Heredia as Project Manager for this contract; she will also be the day-to-day contact with IRWD. Amber is a Senior Project Manager with 28 years of experience managing biological monitoring and permitting services for a variety of project types including water and wastewater infrastructure, flood control, and utility projects.

As a Vice President and Officer of Psomas, I, Jennifer Marks, will be the individual authorized to enter into an agreement with IRWD on behalf of the firm.

Psomas acknowledges and confirms receipt of IRWD's Q&A, issued July 15, 2024.

We appreciate the opportunity to submit the enclosed proposal. Please feel free to contact us with any questions at 714.751.7373 or Jennifer.Marks@Psomas.com, or Amber.Heredia@Psomas.com.

Sincerely,

PSOMAS

Jennifer Marks

Vice President/Principal

Amber O. Heredia

Senior Project Manager

5 Hutton Centre Drive Suite 300 Santa Ana, CA 92707

Tel 714.751.7373 www.Psomas.com

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Firm Profile



Dedicated to balancing the natural and built environment, Psomas provides sustainably engineered solutions to public and private clients. Psomas, a California Corporation, founded in 1946, is a multifaceted consulting firm with over 750 employees, providing our core services of environmental consulting, civil engineering, survey and mapping, and construction management. Psomas' Environmental Group can support the needs that are relevant to the Irvine Ranch Water District's (IRWD) On-Call Biological Monitoring and Permitting Services contact.

The core technical experts of the Environmental Group

have successfully provided resource management surveys, permitting and documentation, restoration and mitigation planning services, and California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) documentation to

public and private sector clients for over 30 years. Our Team provides expertise in the following topical areas:

- ► Biological and Aquatic Resources
- ► Habitat Restoration/Mitigation Planning
- Jurisdictional Delineations/ Regulatory Permitting
- GIS Mapping and Spatial Analysis
- Environmental Planning

For over 30 years, Psomas' technical staff have been actively engaged in providing a variety of similar biological, restoration, regulatory, and environmental consulting services for many public agencies and private companies in Southern California, with many projects occurring in the vicinity of IRWD projects and in Orange County. Our Team's extensive qualifications are demonstrated by the type and range of resource management and environmental services we have been providing to our clients, including IRWD.

Scope

Task 1: Land Use **Planning**

The Environmental Group at Psomas includes two teams. Environmental Planning and Resource Management. Both teams are extremely familiar with land planning processes in the County and cities within and adjacent to the IRWD service area. Staff from both the Environmental Planning and Resource Management Teams have worked on projects for the cities in the service area, including Irvine, Lake Forest, Costa Mesa, Newport Beach, Tustin, and Orange. Our two disciplines are complementary and regularly collaborate on issues and ideas, allowing us to serve our clients well and provide efficient, strategic, and cost-saving products. However, our teams also often work independently with other firms, as each project has a unique combination of players.

As a result of this long-held structure, the Biologists, Regulatory Specialists, and Restoration Ecologists on our Resource Management Team are

embedded into the Psomas land use projects and work closely with their Environmental Planning co-workers on a daily basis. Our Resource Management staff have provided decades of biological resource support documentation for Psomas Environmental Planning staff, including biological surveys and jurisdictional delineations in support of CEQA/NEPA documentation, biological resources sections of CEQA/NEPA documents, response to comments, and attendance/ presentations at public hearings.

Psomas understands the goals and objectives of IRWD and is familiar with the planning processes of the varying public entities (cities/County) where IRWD projects occur. Given the linear nature of many IRWD projects, a single project could span multiple jurisdictions, which sometimes have competing or conflicting objectives. Psomas will assist IRWD in understanding potential issues and will work collaboratively with the various entities to address issues before they become problematic, as we have with IRWD and other public and private entities in the region. Our recent work effort with IRWD on the Santiago Dam Project is an excellent example of our Resource Management Team's ability to work with Environmental Planners and IRWD engineers.

Task 2: Regulatory Agency Consultation, Permit **Application, and Procurement**

Psomas has experience and excellent working relationships with the USFWS, CDFW, RWQCB, SWRCB, USEPA, USACE, NCC (formerly NROC), and SCAQMD. Psomas works with one or more of these agencies on nearly every project, especially those that involve permitting impacts to jurisdictional waters.

Dr. Brad Blood, Regulatory Permitting Manager, has over 36 years of experience in biological consulting with a specialty in jurisdictional permitting. He understands that, where jurisdictions overlap, each agency's regulations and requirements must be met; however, he also works towards the same mitigation strategy with each agency so that the same mitigation plan will address the requirements of multiple agencies to the extent possible. Through his extensive experience in processing regulatory

permits, he has developed close working relationships with personnel in the regulatory agencies.

Regulatory consultations often include an additional layer of compliance with FESA and CESA. Brad Blood, Amber Heredia, and Ann Johnston have provided support on numerous Section 7 Consultations, including those for some of the most contentious projects in Orange County. They have attended many pre-application field meetings to discuss the findings and proposed mitigation strategies to avoid and minimize impacts on Threatened, Endangered, and other special status species. They have authored many Biological Assessments and Habitat Conservation Plans (documents for Section 7 and 10 of the Endangered Species Act [ESA]). Since 2020, Brad Blood has been directing the jurisdictional delineation, documentation, and analysis regarding the type and extent of jurisdictional resources for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project.

Task 3: Wetland Delineation

Psomas Regulatory Specialists and Biologists have the technical background, experience, and necessary training to conduct wetland delineations subject to the regulations of the USACE, CDFW, and RWQCB. Using the most recent guidelines from the resource agencies, Regulatory Specialists conduct field surveys/ assessments to define the jurisdictional boundaries of each agency.

Our Regulatory Specialists have also been trained to conduct California Rapid Assessment Method (CRAM) Analyses, Surface Water Ambient Monitoring Program (SWAMP) Assessments, and Candidate Mitigation Site Evaluations, if needed. Our delineations are then incorporated into the required documentation



needed for specific projects, which may include Preliminary Jurisdictional Site Assessments and/or Jurisdictional Delineation Reports.

Psomas has the experience required to provide IRWD with wetland delineation services in support of capital, operations, and maintenance projects. Our team has conducted jurisdictional delineations and obtained regulatory permits for numerous projects throughout Southern California. Psomas also has experience in obtaining Long-Term Streambed Alteration Agreements and Section 401 Water Quality Certifications.

Regulatory Specialist/Senior Botanist Allison Rudalevige conducted the field surveys to provide the baseline jurisdictional data of the USACE, RWQCB, and CDFW in support of the Santiago Creek Dam Outlet Tower and Spillway Improvements Project. This information has been reported in accordance with accepted scientific

and technical standards that are consistent with the requirements of these agencies.

Task 4: Biological Survey, Monitoring, Assessment

The Psomas Resource Management Team is comprised of Biologists who have a mix of botanical and wildlife expertise with technical specialties that cover any special status plant or wildlife species that occur in Orange County. Each Biologist is trained to conduct general reconnaissance surveys, biological constraints assessments, and habitat assessments for Threatened and Endangered species. Because of this, we can send one Biologist to assess the potential for multiple resources issues. If follow-up focused surveys are necessary, our in-house team contains a range of specialists. Additionally, our team includes multiple individuals with similar expertise, allowing us to concurrently staff multiple projects, often on short notice. Our specialists conduct habitat assessments, focused surveys to determine the presence or absence of special status species, and monitoring during project construction. Our Resource Management Team is supported by multiple Geographic Information System (GIS) staff, who have access to georeferenced digital imagery to provide field maps that can be emailed



to Biologists for use on electronic devices, allowing for quick mobilization as well as quick transmission of survey results back to GIS, and timely mapping of survey results back to the client. Time can become a critical factor during monitoring for a construction project.

Psomas Team technical staff have provided a variety of biological consulting services for public agencies and private entities in Southern California, with many projects occurring in the vicinity of IRWD projects in Orange County. Our team's extensive qualifications are demonstrated by the type and range of biological services we have provided to our clients for almost 30 years.

A sample of these services has been provided below and on the following page.

Biological Analysis, Documentation, and Implementation Services

- ► Literature Reviews and Peer Review of Technical Analyses
- Vegetation Mapping and Plant and Wildlife Habitat Assessments



- Wildlife Movement Analyses, Design Support, and Monitoring
- Special Status Plant and Wildlife Focused Surveys
- Arborist Surveys
- Nesting Bird and Bat Roost Surveys
- Biological Opportunities/Constraints Reports
- Biological Technical Reports
- ► Biological Assessments/Consistency Determinations (to support FESA/CESA consultations)
- ► Biological Resources Sections for CEQA/NEPA Documentation
- ▶ Various NCCP/HCP Reporting and Permit Compliance Documentation
- Agency Consultation and Regulatory Permitting
- Habitat Mitigation Planning, Monitoring, and Reporting
- ► Construction Monitoring and Contractor Education
- ▶ Benthic Macroinvertebrate (BMI) Bioassessments
- CRAM and SWAMP Assessments

Amber Heredia has 28 years of experience working with biological resources in Orange County, including several projects within the Central-Coastal NCCP and IRWD's service area. Her experience began as a field biologist and evolved into project management, in some cases over the course of the long-term environmental process for certain projects (e.g., Alton Parkway Extension, SR-241 Extension). A project manager with an understanding of conducting field surveys is beneficial to preparing scopes of work tailored to the level of effort needed based on project type and location, as well as for reviewing project documentation prepared by Psomas Biologists.

Task 5: Threatened and **Endangered Species Regulation,** Monitoring, and Reporting

As described under Task 2, Psomas has conducted consultations under both Section 7 and 10 of the ESA. Psomas has prepared Biological Assessments consistent with Section 7 for various projects, including the Alton Parkway Extension (addressing least Bell's vireo, a Conditionally Covered species under the NCCP/ HCP) and the SR-241 Extension (addressing threadleaved brodiaea, coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and arroyo toad). Psomas has also prepared the HCP for the Big Tujunga Dam Operation and Maintenance Project, which will provide a 30-year permit to the Los Angeles Department of Public Works. The HCP includes eight Covered Species and included an extensive hydraulic modeling effort to assess the effects of dam operation on downstream riparian species.

Psomas also routinely provides biological monitoring consistent with the requirements of environmental documentation and project permits. This includes biological monitoring typically required by CEQA/NEPA documentation, FESA/CESA, California Fish and Game Code, and USACE, CDFW, and RWQCB jurisdictional permits (i.e., Section 404, Streambed Alteration Agreements, and Section 401 Certifications).

Psomas Biologists also have experience implementing measures required by the Coastal-Central NCCP/ HCP. Amber has managed biological monitoring for numerous construction projects. To ensure compliance with multiple permits for larger projects, Psomas prepares a Biological Monitoring Checklist to summarize measures from all permits (with cross-reference back to the source) and requires that each Biological Monitor fill out the form daily. Psomas is currently implementing this strategy on our OC Public Works On-Call Contract projects, which includes daily monitoring throughout the projects.

Psomas also provides on-call services to OC Public Works for the San Diego Creek Reach II (I-405 to Campus Drive) Operation and Maintenance Project. This includes annual focused surveys for least Bell's vireo and southwestern willow flycatcher to document the number of pairs using the riparian habitat between I-405 downstream to Jamboree Road (Reach II and Reach I). Prior to fall maintenance, Psomas conducts a pre-construction tree survey to flag trees to

selectively remove consistent with project permits and quidance from the resource agencies. During the fall maintenance, Psomas provides full-time monitoring of tree removal and non-native invasive removal work within the 40-foot buffer (i.e., riparian habitat area); weekly reports are prepared and submitted to the resource agencies (following review by OC Public Works). Psomas also provides weekly monitoring to spot-check maintenance work outside the 40-foot buffer; monitoring forms are submitted to OC Public Works for their files. Following completion of the annual maintenance, a post-construction vegetation map is completed per permit requirements, and an Annual Report is prepared that includes a Mitigation Monitoring Reporting Plan compliance matrix; both are submitted to the resource agencies following approval by OC Public Works.

Task 6: Mitigation Monitoring and Reporting

Psomas has the experience and expertise to provide an array of biological monitoring services, from simple pre-construction nesting bird surveys required as a Mitigation Measure from an environmental document to the design, implementation, and monitoring of 100+ acres of coastal sage scrub required as a result of consultations with the regulatory agencies. In



addition to the pre-construction surveys and biological monitoring described above in Task 5. Psomas has extensive experience in habitat restoration services, including the preparation and implementation of Habitat Mitigation Monitoring Plans (HMMPs). Our Restoration Biologists have the necessary technical expertise and project experience to provide

a variety of restoration planning and management tasks for coastal sage scrub, riparian, and oak woodland habitat types found in Orange County. These tasks include habitat restoration design and planning,

mitigation site selection, restoration implementation monitoring, and native plant palette recommendations. Psomas has implemented numerous successful HMMPs, which have resulted in successful habitat establishment, compliance with resource agency performance criteria, and subsequent buy-off from the resource agencies.

Richard Lewis, our Restoration Services Task Manager, has 30 years of experience in developing and directing complex habitat creation and restoration programs for public and private sector clients throughout Southern California. His Santa Anita Oak Woodland Mitigation Site uses cutting edge techniques for habitat creation and has been recognized with awards from the American Council of Engineering Companies (ACEC) and the American Society of Civil Engineers (ASCE).

Additionally, Richard is leading restoration efforts for the Alton Parkway Extension, both on-site creation of habitat along a wildlife corridor that will link with the wildlife corridor being built through the Great Park, and off-site enhancement of habitat along Aliso Creek that includes extensive removal of non-native invasive plants along a large portion of the creek. On the off-site portion of the project, Richard has worked with OC Public Works to install additional cactus plantings to extend habitat for the coastal cactus wren that occupies the site. Additionally, Richard is leading the Peters Canyon enhancement project, which provides off-site mitigation for OC Public Works' San Diego Creek Reach II Operation and Maintenance Project.

Task 7: Water Quality, Stormwater Monitoring, and Reporting

Psomas has provided clients with water quality monitoring and reporting in compliance with regulatory permits for many years. Our team will manage the water quality, storm water monitoring and reporting for IRWD projects. As described under Tasks 2 and 3, Brad has extensive experience with obtaining and complying with jurisdictional permits (USACE, CDFW, RWQCB, and CCC). Brad is familiar with the SAMP permitting process, as he completed SAMP permitting for the Wagon Wheel Creek Restoration Project located in the San Juan Creek/Western San Mateo Creek Watershed SAMP. Psomas prepared a Letter of Permission (LOP) under the SAMP for the USACE, a 1602 Streambed Alteration Agreement for the CDFW, and a Water Quality Certification for the RWQCB.

Task 8: Natural Treatment **System**

Psomas has experience in the design, implementation, and management of Natural Treatment Systems (NTS). Our team of Engineers, Restoration Ecologists, and Biologists have developed NTS that have reduced the introduction of pollutants (i.e., bacteria, suspended solids, nitrogen, selenium, and phosphorus) generated from urban runoff to receiving waters via a series of structural and green elements within the treatment train. These efforts have involved Engineers working collaboratively with Hydrologists, Restoration Ecologists, Botanists, and Biologists to develop integrated treatment facilities that capture and treat urban runoff, while at the same time creating habitat value and aesthetic amenities for neighborhoods. Psomas understands IRWD's needs for NTS and, at the same time, has worked with other public entities to develop multi-beneficial features that work in concert with the NTS. Features we have successfully integrated into an NTS include, but are not limited to, neighborhood-serving park amenities; outdoor classroom amphitheaters; educational kiosk/signage describing the park's function, flora, and fauna; and recreational walking trails with observation bridges/ platforms around the treatment wetlands. Psomas' Restoration staff review plant palettes to ensure that the plan would include native species and/or species that would not be detrimental to surrounding habitat

An exceptional example of Psomas' expertise with NTS is the Bull Creek Water Conservation Pipeline Mitigated Negative Declaration, Technical Studies, and Permitting Support for Los Angeles County Public Works. The

project would allow transport of stormwater runoff from a section of the Bull Creek flood control channel and convey it via an approximate 3.2-mile-long pipeline constructed in the public right-of-way to the Pacoima Spreading Grounds for infiltration into the San Fernando Valley Groundwater Basin. The stormwater diverted from Bull Creek channel would then become part of the water supply available to be used by Los Angeles Department of Water and Power to serve its customers.

Task 9: Natural Community Conservation Plan/Habitat **Conservation Plan**

IRWD's service areas are primarily located within the Central-Coastal Subregion of the NCCP/HCP. IRWD is a participating jurisdiction in the NCCP/HCP and, as such, it is subject to the terms of the Implementation Agreement. Participation in the NCCP/HCP allows compatible land uses and development to follow an established process with the NCCP/HCP and understands that IRWD activities related to infrastructure facilities, including construction of new infrastructure and ongoing operations and maintenance, repair, and reconstruction activities, are Permitted Activities. Psomas will ensure that biological surveys, impact assessments, and mitigation measures are consistent with the Central-Coastal NCCP/HCP, thus providing IRWD with the full benefits of a signatory agency.

Psomas prepared the HMMP for the Peters Canyon Wash Project which provides mitigation for the San Diego Creek Reach II Operation and Maintenance Project. The HMMP includes exotic vegetation control and native plant species establishment within the Peters



Canyon Wash Habitat Mitigation Easement area. The HMMP was developed in coordination with the NCC and in compliance with USACE and CDFW requirements for mitigation of impacts to jurisdictional resources.

During mitigation planning for the Alton Parkway Extension, Amber prepared and presented a PowerPoint to the NROC (now NCC) about the planned roadway, its biological impacts, and the planned mitigation measures. She engaged in discussion of the effects of the roadway on wildlife movement and presented the plan for minimizing effects on both small wildlife (e.g., spadefoot toad) and medium to large-sized wildlife (e.g., bobcats). Amber provided response to comments from NROC and worked with engineers to incorporate modifications to fencing requested by NROC.

Amber is also familiar with many of the NCCP/HCP Reserve lands as she obtained special permission from NROC and OC Parks to access open space areas to conduct her Masters research, Distribution of Riparian



Bird Species in an Urbanizing Landscape, which analyzed the distribution of riparian bird species across a gradient of urbanization in Orange County.

Task 10: Project Coordination

Psomas will be responsible for ongoing coordination with IRWD and other team members. Throughout our history, Psomas' Resource Management Team has assumed the role of both consultant and subconsultant on a variety of projects. Depending on the assigned task, Psomas will assume either a primary project management role and be responsible for the management of a project team or will serve as a member of a larger team and take direction from another party, as directed by IRWD. Due to our extensive experience throughout Southern California, Psomas has positive working relationships with hundreds of consulting firms across multiple professional disciplines; we look forward to the chance to collaborate with peers in these fields. One example of our coordination efforts and ability to work successfully with other teams is our work with Los Angeles County Department of Public Works (LACDPW) on the Big Tujunga Wash Santa Ana Sucker and Benthic Macroinvertebrate Long-Term Monitoring Project. This project required close and frequent coordination within multiple resources agencies, including the Santa Ana Sucker Working Group (SASWG), LACDPW, USFWS, CDFW, USFS, and other consultants.

2 Team

One aspect of our client portfolio that speaks highly of our client responsiveness and attention to detail is the number of long-term clients and On-Call/As-Needed Environmental Services contracts we have maintained with public sector agencies.

With a deep bench of professional staff members, Psomas will be able to meet the requirements and schedules of multiple, concurrent projects. We have established workload management systems, monitoring techniques, and internal staffing arrangements to assist in meeting project requirements that at certain times could have the potential to exceed our in-house staffing capabilities.

While each of our key staff members will have other project responsibilities, we confirm that each team member will have adequate availability to meet the assigned project's requirements. We are careful not to commit 100 percent of any staff member's time, thereby ensuring availability of qualified staff. Highlights of our key staff members who will be providing substantial support to IRWD for this on-call effort include the following:

 Amber Heredia is a seasoned professional who has prepared or overseen the preparation of biological resources documentation for some of the most controversial projects in Orange County. She possesses a depth of knowledge on regulatory processes, extensive experience in impact analysis and document review, a practical approach to problem-solving, strong project management skills and is known for being very responsive to her clients. She is highly organized and strikes the right balance of attention to detail and efficiency. She is excellent at coordinating with internal team members to ensure that deadlines are met. She takes great pride in producing well-written documents that clearly present technical information and is excellent at following required templates. Amber is well-respected by her peers and the resource agencies for producing well-written and accurate documents.

- ▶ Dr. Brad Blood has built working relationships with resource agency staff related to jurisdictional permitting. He has an extensive knowledge of the ever-changing implementation of jurisdictional permitting requirements and experience in obtaining permitting anticipated to be needed by IRWD. He oversees highly skilled Regulatory Permitting Specialists.
- Richard Lewis is passionate about habitat restoration and is known throughout Orange, Los Angeles, and Riverside counties for designing and implementing exceptional habitat mitigation programs. His often simple suggestions to supplement or enhance habitat mitigation programs are frequently incorporated by his clients because they are anticipated to accelerate achieving performance criteria, which can lead to substantial cost savings, and/or to provide alternative measures of performance that increase the odds of project sign-off.

Allison Rudalevige, Lindsay Messett, and Jonathan Aguayo are well-rounded Senior Biologists. Each can conduct habitat assessments, vegetation mapping, general plant and wildlife surveys and monitoring, but each also has several specialties. Allison conducts focused surveys for fairy shrimp and special status plants, jurisdictional delineations (including CRAM, SWAMP), and restoration monitoring. Lindsay and Jonathan both have the necessary permits and experience to conduct focused surveys for coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, burrowing owl, nesting bird/raptor surveys, western spadefoot (including translocation), arroyo toad, trapping for western pond turtle, and Benthic Macroinvertebrate (BMI) surveys.

Staff that will be assigned to the IRWD contract include Senior Managers, Technical Leads, and supporting staff who have been, and are currently, responsible for providing technical support and management oversight of many water district, flood control, and other public works contracts. Thanks to our longstanding history of work on public works projects, staff assigned to this contract understand the importance of coordinating closely with agency managers and engineers, operational/maintenance staff, and resource agency personnel to ensure that project construction and maintenance projects move forward in a manner that meets project objectives and schedule constraints, while at the same time complying with resource agency permit requirements for biological and water quality resource protection.

Below is a listing of each staff member assigned to this contract; their role; education; anticipated availability for this contract; and certifications, capabilities and experience. Resumes for key personnel (denoted with an asterisk [*]) are included in the Appendix.

Jennifer Marks 🏮 | Principal-in-Charge



Jennifer Marks is a Principal and Senior Project Manager with over 24 years of experience in environmental documentation and analysis consistent with CEQA and NEPA. Jennifer's career has focused on a wide variety of projects, including specific plan and general plan analyses; transportation infrastructure; public works assignments related to water resources; and various utility infrastructure projects.

Education

1999/BS/Natural Resources, Planning and Interpretation/Humboldt State University

Availability

25%

Ann Johnston / | QA/QC Manager



Ann Johnston has 35 years of experience in biological resources inventories/evaluations; sensitive species surveys; mitigation monitoring; resource agency permitting and processing; conservation and strategic planning; and technical peer reviews. Ann's professional experience has focused on finding solutions to development challenges where potential impacts to biological resources may occur, and on the assessment and integration of biological data.

Education

 $1989/BA/Biology/California\,State\,University, Long\,Beach$

Availability

Amber Heredia / | Project Manager/Biological Resources Manager



Amber Heredia is a Senior Project Manager and Senior Biologist with 28 years of experience in the preparation of Biological Technical Reports to meet the requirements of the FESA, CESA, CEQA, NEPA, and the CWA. Amber has a wide range of knowledge on the plants, wildlife, and vegetation communities of Southern California, especially those listed as Threatened or Endangered.

Education

2005/MS/Biology/University of California, Riverside

1998/BS/Ecology and Evolution/University of California, Santa Barbara

1998/BS/Environmental Studies/University of California, Santa Barbara

Availability

25%

Brad Blood, PhD | | Regulatory Permitting Manager



Brad Blood, PhD, is a Senior Biologist/Environmental Scientist and Project Manager with expertise in regulatory compliance related to biological issues including CEQA/NEPA, the federal and state Endangered Species Acts, federal clean water act, and the State Fish and Game Code. He is a certified wetland delineator and is experienced with the State and federal regulations governing wetlands delineation and permitting.

Education

1987/PhD/Biological Sciences/University of Southern California

1981/MS/Biology/California State University, Long Beach

1978/BS/Zoology/California State University, Long Beach

Availability

25%

Richard Lewis, ENV SP / Restoration Services Task Manager



Richard Lewis is a Senior Restoration Ecologist and Biologist with 30 years of professional experience. Mr. Lewis is responsible for developing and monitoring habitat restoration and mitigation programs; conducting focused botanical surveys and vegetation mapping; and preparing community involvement and educational programs and literature.

Education

1988/BS/Biology/Pacific Union College

Availability

25%

David Hughes | Senior Regulatory Specialist



David Hughes is a Senior Project Manager in Restoration Ecology and Regulatory Services with 20 years of experience in mitigation planning, restoration monitoring, wetland delineations, and regulatory permitting. David is also a Certified Arborist and fully trained practitioner of the California Rapid Assessment Method (CRAM) for wetlands.

Education

2003/MS/Ecological Restoration and Management/ University of Wisconsin, Madison

1991/BS/Ecology, Behavior and Evolution/ University of California, San Diego

Availability

25%

Allison Rudalevige | Regulatory Specialist/Senior Botanist



Allison Rudalevige is a Senior Biologist with 19 years of experience in the areas of biological and jurisdictional resources. She has experience conducting general and focused plant and wildlife surveys, vegetation mapping, mitigation monitoring, tree surveys, jurisdictional delineations, California Rapid Assessment Method (CRAM) analyses, and physical habitat analysis according to the Surface Water Ambient Monitoring Program (SWAMP) protocol.

Education

2005/MS/Biology/University of California, Riverside 2000/BS/Biology, Zoology/California State

University, Long Beach

Availability

25%

Steve Norton | Senior Biologist/Project Manager



Steve Norton is a Senior Project Manager and Senior Biologist with 23 years of experience conducting biological studies on wildlife, plants, and ecological processes throughout California. His technical experience includes biological resource assessments, natural plant communities mapping, regional conservation plan consistency analyses, biological resource policy compliance management, and technical writing for CEQA/NEPA compliance.

Education

2001/BS/Environmental Biology and Management/ University of California, Davis

Availability

Paul Myers | Senior Biologist/Project Manager



Paul has over 20 years of experience as an environmental permitting and NEPA compliance specialist, wetland and stream scientist, botanist, and ecologist. His specific areas of expertise include managing projects for environmental review and permitting compliance, wetland delineation, restoration and mitigation design, rare plant and wildlife surveys, habitat classification and mapping, and habitat restoration.

Education

BS/Botany/Western Carolina University

Availability

40%

Lindsay Messett, CWB * | Senior Biologist



Lindsay Messett, a Certified Wildlife Biologist® with a specialty in wildlife biology, has 25 years of experience in data collection, field research, resource management, and environmental document preparation. She has conducted focused surveys and habitat assessments throughout California for several endangered wildlife species.

Education

1999/BS/Ecology and Systematic Biology, Concentration: Wildlife Biology/California Polytechnic State University, San Luis Obispo

Availability

25%

Jonathan Aguayo 💆 | Senior Biologist



Jonathan Aguayo has 16 years of experience as a Senior Biologist including field experience in ornithology and herpetology. He has a solid knowledge of California's flora and fauna gained from work experience, professional affiliations, and personal interest. He has contributed to the preparation of various technical reports addressing State and federal laws, including the CEQA and NEPA for a variety of development projects and under on-call contracts.

Education

2007/BS/Environmental Science and Resource Management/California State University, Channel Islands

Availability

25%

Sarah Thomas | Biologist



Sarah Thomas is a Biologist with 16 years of field experience as a Research Assistant, Field Technician and Biologist. Sarah was the Assistant Lead Biological Monitor for the Tehachapi Renewable Project (TRTP). She specializes in birds and has studied bird identification throughout the western United States, bird behavior, bird biology and conservation, and is proficient with nest identification in Southern California.

Education

2008/BS/Biology, Chemistry (minor)/California State University, Long Beach

Availability

40%

Steve Morris | Biologist



Steve Morris is a Biologist with over 16 years of experience completing nesting bird surveys, birding surveys, and ornithological studies. He also has extensive experience with construction monitoring. Steve performs field/site surveys to document existing biological resources and to evaluate potential constraints to development.

Education

2005/BS/Business Administration and Management/California State University, Long Beach

Availability

40%

Trevor Bristle | Certified Arborist



Trevor Bristle is a Biologist and Registered Consulting Arborist with 18 years of field experience. He has gained extensive experience while working throughout Southern and Central California and is familiar with the associated plants, wildlife, and habitats found therein.

Education

2008/BS/Natural Resources Management/ Northland College

Availability

40%

Jack Underwood | Staff Biologist



Jack Underwood is a recent Biology graduate with two years of experience collecting and analyzing biological data for right-of-way and right-of-entry properties; conducting Worker Environmental Awareness Training; and conducting surveys for nesting birds and various species including the California Red Legged Frog and the Foothill Yellow Legged Frog.

Education

2019/BS/Environmental Biology and Natural History/The Master's University, Santa Clarita

Availability

Cristina Juran | Staff Biologist



Cristina is a field Biologist with 14 years of experience in field surveys and data collection contributing to resource management and environmental document preparation. She has conducted general biological surveys and nesting bird surveys throughout a variety of habitats, including desert, chaparral, coastal sage scrub, riparian, and grassland.

Education

2007/MS/Wildlife and Wildlands Conservation/ Brigham Young University

2004/BS/Wildlife and Range Resources/Brigham Young University

Availability

25%

Erin Ruckman | Botanist



Erin Ruckman has 11 years of experience assessing projects for CEQA/NEPA compliance, conducting surveys of terrestrial and aquatic species (including birds, fish, and vegetation), along with summarizing findings in reports.

Education

2009/MS/Population and Conservation Biology/ Texas State University, San Marcos

2000/BS/Ecology/University of California, Santa Barbara

Availability

25%

Jennie Ramirez | GIS Specialist



Jennie has five years of experience in GIS. Her recent project experience includes utilizing ArcGIS, Adobe Illustrator and ArcGIS Collector to create and edit map documents and graphic exhibits for various client projects that meet cartographic and data collection needs.

Education

2021/MS/Geographic Information Science/ California State University, Long Beach

2016/BA/Philosophy and Geography/California State University, Long Beach

Availability

15%

Paul O'Brien | GIS Specialist



Paul is a Geographic Information Systems (GIS) Analyst with five years of experience in GIS. His recent project experience includes utilizing ArcGIS, ArcGIS Field Maps, ArcGIS Online and Adobe Illustrator to create and edit map documents and graphic exhibits for various client projects that meet cartographic and data collection needs.

Education

2020/BS/Geography and Geospatial Science/ Oregon State University

Availability

15%

Sean Noonan, AICP | Senior Environmental Planner



Sean Noonan, AICP, has 13 years of experience working on various types of public and private projects across Southern California. In his current role, Sean prepares and manages the preparation of CEQA/NEPA environmental documents and supporting environmental technical studies. He is also experienced in providing his clients with support related to regulatory permitting, environmental compliance during final design and construction, and environmental constraints during due diligence.

Education

2014/MS/Urban and Regional Planning/California State Polytechnic University, Pomona

2011/MA/Geography/California State University, Fullerton

2006/BA/History/University of California, Santa Barbara

Availability

50%

Megan Larum | Environmental Technical Specialist



Megan Larum is an Assistant Project Manager with 15 years of experience in environmental documentation and analysis consistent with CEQA and NEPA. She has experience in cultural resources management and has participated in Native American Heritage Commission (NAHC) requests, records searches, and Phase I Cultural Resources Assessments.

Education

2006/BS/Environmental Policy Analysis and Planning/University of California, Davis

Availability

Jordan Werkmeister | Environmental Planner



Jordan has worked on a variety of CEQA and NEPA documents, including preparation of initial studies, reviewing plans and drafting project descriptions, and writing key analysis sections. As an Environmental Planner, Jordan prepares environmental documents, assist with management efforts, and coordinate with internal staff and subconsultants. Jordan also has experience preparing air quality, greenhouse gas, and energy analyses to support CEQA and NEPA documents.

Education

2022/BS/Environmental Policy Analysis and Planning/University of California, Davis

Availability

50%

Chaise Lapierre | Environmental Planner



Chaise Lapierre is an Environmental Planner with approximately one year of experience preparing analyses to support categorical exemptions, addenda, and mitigated negative declarations.

Education

2023/BA/Environmental Studies/California State University, San Marcos

Availability

25%

Sheryl Kristal | Support Services Manager



Sheryl Kristal is a Word Processor with more than 10 years of experience word processing for CEQA and NEPA documents. As Senior Word Processor at Psomas, Sheryl creates custom templates in Microsoft Word for projects and proposals.

Education

2004/Coursework/General Studies with a focus on Graphic Design/Golden West College

Availability

25%

Matt Heideman, PE | Senior Hydrology/Water Quality Engineer



Matt has 30 years of experience in all aspects of land development engineering. He has worked on residential, commercial, and industrial projects throughout Southern California, and has managed the design of mass grading, precise grading, storm drain, sewer, water, reclaimed water, widening of existing streets and highways, new street improvements, parking lots, street lighting, retaining walls, box culverts and vesting tentative tract maps for projects ranging from 10 acres to over 1,000.

Education

1993/BS/Civil Engineering/University of California, Irvine

Registration

1996/CA/Professional Engineer/Civil/55639

Availability

15%

Steve Baine, PE, QSD | Hydrology/Water Quality Engineer



Steve Baine has 35 years of experience in hydrology and hydraulic studies, water and sewer system analysis, storm water pollution prevention plans, and water quality management plans

Education

1989/BS/Civil Engineering/University of California, Irvine

Registration

1994/CA/Professional Engineer/Civil/51327

Availability

3 References

Santiago Creek Dam **Outlet Tower and** Spillway Improvement

Orange County, CA | Irvine Ranch **Water District**

IRWD and Serrano Water District are jointly proposing to abandon the existing Santiago Creek Dam outlet tower and construct a new inclined outlet structure located on the left abutment of the existing dam. Based on feedback from the Department of Safety of Dams (DSOD), the dam spillway also requires structural improvements. As part of the project, the existing outlet tower would be demolished and a new structure would be built. Inlet/outlet works would be configured to incorporate the new structure and flows would be bifurcated between the Irvine Lake Pipeline and the emergency outlet pipeline. The dam crest would be widened and raised to subsequently raise the effective dam crest.



Santiago Creek Dam

Relevance to Project

- IRWD project
- Technical studies
- Strategic consultation
- Biological survey, focused surveys, and technical report
- CEQA and CEQA-plus compliance

Psomas has been actively working alongside IRWD, as Lead Agency, since August 2020 in the preparation of technical studies and an Environmental Impact Report (EIR) to evaluate the project. Efforts were initiated with preparation of an Initial Study (IS) and key technical studies to understand the anticipated level of impacts and help identify the required document type. Technical studies include a biological constraints report including a jurisdictional delineation, and a cultural resources report including archaeological and paleontological surveys and a historic analysis of the existing dam and spillway. Following IRWD's initial review of the IS, it was determined that an EIR would be prepared and Psomas coordinated with the IRWD Team to prepare a variance request to cover the additional tasks required for the EIR. Psomas also prepared a separate scope of work under our on-call biological monitoring and permitting contract related to additional services needed for biological surveys, regulatory agency coordination, and permit preparation.

Psomas is also preparing supplemental documentation to comply with CEQA-Plus/ Federal Cross-cutters pursuant to the California Clean Water State Revolving Fund requirements. Throughout this process, Psomas has worked collaboratively with IRWD staff, providing guidance and assistance as design challenges have arisen. Our assigned Principal-in-Charge, Jennifer Marks, and Biological Resources Manager, Amber Heredia, have worked as a team to provide the technical expertise and creative problem-solving needed for this project. Psomas staff are also working closely with IRWD to maintain a positive working relationship with resource agency staff. These relationships will assist in the success of the regulatory permitting process.

PROJECT OWNER

Irvine Ranch Water District PO Box 57000 15600 Sand Canyon Avenue Irvine, CA 92618

OWNER STAFF

Fiona Sanchez Kellie Welch Jacob Moeder Andy Uk

INITIAL CONTRACT

Biological Technical Report, Air Quality/Greenhouse Gas Study, Historic Resource Assessment, Noise Assessment, Draft IS: \$144,862

CHANGE ORDERS

Under our CEQA contract, Psomas has requested a total of \$179,696 in change orders, related to the decision to prepare an EIR; accommodate updated construction assumptions, project design; integrate Additional Geotechnical Investigation; address County of Orange comments; and evaluate modifications to SCE infrastructure.

Additional IRWD Projects

In addition to our current work on the Santiago Creek Dam Outlet Tower and Spillway Improvement Project, Psomas, previously BonTerra Psomas, has been under contract providing on-call environmental consulting services to IRWD since 2014. Projects have included:

- Irvine Lake Pipeline (ILP) North Conversion Project MND
- ► ILP North Pipelines Mitigation Monitoring
- ILP North Reservoir Mitigation Monitoring
- ▶ 3.7 MG Zone 1 Reservoir Project MND
- Zone A to Rattlesnake Reservoir Pump Station Project MND
- Orange Park Acres Well Replacement Addendum

Additional Items

4. Schedule

Psomas understands that good communication requires a level of transparency with our clients regarding schedule and budget. In order to present an accurate picture of the project schedule and budget to IRWD on a regular basis, the Psomas management team will actively track each project's progress through our in-house management software, allowing us real-time project statistics. With this information, our management team can quickly make the necessary adjustments to reallocate resources and make any necessary reassignments to ensure schedules are met and budgets are not exceeded. Our commitment to the schedule and budget has been demonstrated through our past work with IRWD.

5. Budget

The hourly rates for staff members proposed, along with their titles/roles, are on the following page.

6. Joint Venture

Psomas is not proposing as part of a joint venture.

7. Conflict of Interest

Psomas has no conflicts of interest that would preclude our ability to uphold this contract.

8. Insurance

Copies of Psomas' insurance are in Appendix B.

9. Contract

Psomas has reviewed the professional service agreement and has no proposed modifications to the standard terms and conditions.

Title/Classification	Staff	Rate
Principal in Charge	Jennifer Marks	\$265
QA/QC Manager	Ann Johnston	\$265
Project Manager/Biological Resources Manager	Amber Heredia	\$233
Regulatory Permitting Manager	Brad Blood	\$233
Senior Regulatory Specialist	David Hughes	\$190
Regulatory Specialist/Senior Botanist	Allison Rudalevige	\$167
Restoration Services Task Manager	Richard Lewis	\$193
Senior Biologist/Project Manager	Steve Norton/Paul Myers	\$187
Senior Biologist	Lindsay Messett/Jonathan Aguayo	\$166
Biologist/Arborist	Sarah Thomas/Steve Morris/Trevor Bristle	\$153
Staff Biologist	Jack Underwood/Cristina Juran	\$127
Botanist	Erin Ruckman	\$141
GIS Specialist	Jennie Ramirez	\$154
GIS Technician	Paul O'Brien	\$129
Senior Environmental Planner	Sean Noonan	\$207
Environmental Technical Specialist	Megan Larum	\$164
Environmental Planner	Jordan Werkmeister	\$149
Environmental Planner	Chaise Lapierre	\$133
Editor	Danae Overman	\$106
Support Services Manager	Sheryl Kristal	\$135



Irvine Ranch Water District

On-Call Biological Monitoring and Permitting Services





July 18, 2024

420 Exchange, Suite 260 Irvine, CA 92602 949.753.7001 phone 949.753.7002 fax esassoc.com

Irvine Ranch Water District

Attention: Fiona M. Sanchez 15600 Sand Canyon Avenue Irvine, CA 92618

RE: Proposal for On-Call Biological Monitoring and Permitting Services

Dear Ms. Sanchez:

Environmental Science Associates (ESA), an employee-owned California Corporation with an office in Irvine and 21 other locations along the nation's West Coast and in Florida, is an award-winning environmental consulting firm with 55 years of experience guiding projects through the environmental review, permitting, and construction process. We are pleased to present this proposal to Irvine Ranch Water District (IRWD or District) as a qualified consultant for on-call biological monitoring and permitting services for small or recurring projects. As you know, ESA specializes in environmental compliance and natural resources permitting for water and wastewater infrastructure projects, with considerable experience throughout Southern California. Our proposal includes a summary of ESA's experience and capabilities; our key strengths that set us apart are summarized below:

- → ESA's focus on environmental regulatory compliance for water and wastewater clients is unmatched. Our team provides the full array of technical expertise requested in the RFP and will focus on solutions to your environmental issues to expedite successful project implementation.
- → Experienced on-call environmental service providers. We have extensive experience providing on-call biological, permitting, and environmental compliance services to public utilities in Southern California, including IRWD since 2009, Eastern Municipal Water District since 2013, Inland Empire Utilities Agency since 2013, Los Angeles Department of Water and Power since 2011, and California Department of Water Resources since 2000. We know what it takes to manage on-call contracts effectively.
- → We provide exceptional Senior Managers and a deep bench of Technical Experts. ESA's senior management team lead by Tom Barnes and Scott Holbrook provides centralized leadership, strategic support, and a commitment to quality. Our job is to understand our clients' objectives and to collaborate with them to overcome challenges. Scott Holbrook will continue to serve as the primary point of contact and responsible for collaboration with key technical leads and quality control of all deliverables.
- → **We know IRWD**. As an incumbent, ESA will hit the ground running. We have learned the District's specific style, quality commitments, and cost control expectations, and we have established effective relationships with IRWD project staff. This experience brings value to the District through strategic approaches to project implementation that minimize costs through careful staffing and scoping based on current real-world experience and institutional knowledge. ESA is committed to continuing this partnership with a strong level of excellence.

We have greatly valued our partnership with IRWD over the past 15 years, and we appreciate this opportunity to be considered for biological and permitting services going forward. This letter is signed by Tom Barnes, who as Vice President, has the authority to represent and contractually bind the firm, and Scott Holbrook as Client/Project Manager. Should you have any questions, please feel free to contact Scott Holbrook at 949.753.7001 or sholbrook@esassoc.com.

Sincerely,

Scott Holbrook

List Hollingle

Client/Project Manager

Tom Barnes

Principal Associate and Vice President



INTRODUCTION

Environmental Science Associates (ESA) is a multidisciplinary firm of environmental professionals that develop creative and feasible project solutions and environmentally responsible plans and projects, and deliver quality, scientifically-based environmental documentation. While we offer a wide range of services to support environmental planning and compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), this proposal focuses specifically on our expertise as it pertains to biological surveys, monitoring, permitting, and compliance services. The format of this proposal follows the proposal content requirements outlined in the Request for Proposals.

We Know Biological Monitoring and **Permitting**

The ESA team presented in the proposal provides the full array of technical expertise for capital, operation and maintenance, and emergency projects that may require biological, permitting and compliance services, including biological monitoring, mitigation planning, design, and implementation. ESA's professional biologists, botanists, arborists, restoration ecologists, regulatory permitting and resource management specialists provide a broad array of consulting services throughout Southern California's diverse environments including biological surveys, vegetation mapping, wetland delineations and assessments, tree inventories, protocol/focused species surveys, and monitoring and reporting. In particular, our team is particularly familiar with the resources within IRWD's service area and the local and regional plans and policies protecting those resources. We have supplemented our biology and permitting team with a few key in-house disciplines including community planning, air quality/noise, cultural resources, and environmental hydrology to ensure technical capability and quality. The breadth and depth of our expertise allows us to successfully engage in and complete multiple concurrent project assignments on schedule and within budget. Our specialists are credentialed and responsive and carry out projects with the greatest level of professionalism at the greatest value to our clients. Committed to accommodating client interests and compliance strategy requirements, ESA is recognized for its integrity and balanced perspective.

Subconsultant: Geosyntec



Geosyntec ESA routinely engages in subcontract arrangements when technical specialties beyond our in-house capabilities are required and the second out in-house capabilities are required as a second out of the second out in-house capabilities are required as a second out in-house c have enlisted the expertise of Geosyntec Consultants, Inc. (Geosyntec) to provide Water Quality, Stormwater Monitoring and Reporting services. Geosyntec provides engineering

and consulting services related to the environment, water and natural resources, and civil infrastructure. Geosyntec is known both locally and nationally for its innovative work in storm water, erosion and sediment control, water quality monitoring, and related environmental services. Geosyntec has been providing services since 1983, with over 200 technical professionals in 11 offices throughout Southern California. ESA also has a long-standing working relationship with Geosyntec on a number of projects and on-call environmental contracts. For example, Geosyntec is currently providing water quality and stormwater permitting, monitoring, and reporting services to the California Department of Water Resources as a subconsultant to ESA.

SECTION 1 SCOPE OF WORK

The following subsections address the ESA team's understanding, expertise, and management and technical approaches to accomplishing the tasks outlined in the RFP.

Management Approach

Availability and Schedule

IRWD's need for on-call services over the next three years and the schedule for on-call projects will drive the team's dedication to tasks as they are identified. Both Tom and Scott will commit time as specific tasks warrant. ESA is committed to meeting project schedule deadlines, and we have recent experience dedicating the time needed to get the job done on schedule. For example, under a previous on-call contract for IRWD, ESA completed four NOEs for IRWD's Energy Storage Systems Project within three days as requested by IRWD to meet deadlines for consideration and approval by IRWD's Board of Directors.

Project Controls and Invoicing

ESA engages in a proactive approach to tracking, reporting, and controlling costs so that budgets are managed effectively. The first step in managing project costs is working closely with IRWD to establish a clear and detailed scope, schedule, and budget. As Project Manager, Scott will work closely with the internal ESA team once scopes of work are approved by IRWD to ensure team members stay within the approved scope and budget. As part of this process, Scott will identify, in advance, any work that is out of scope and communicate with IRWD. ESA has worked with IRWD in the past to move budget and scope within approved contracts, to ensure the timely continuation of project work.

ESA uses the Deltek electronic time reporting system to monitor and track staff activities for each project and submit monthly invoices in a timely manner. This system allows real-time monitoring of labor costs, which are compiled weekly and used to measure project performance as well as percentage of completion and percentage of budget spent. Our invoices include individual staff hours per project and any reimbursable, permitting, and filing fees. We include a customized progress report with each monthly invoice, indicating activities performed for active tasks during the invoicing period, expected activities for the next monthly period, and any expected challenges or problems. Under this contract, ESA will provide separate invoices for each project, and if requested by IRWD can provide a monthly summary of the overall Purchase Order (PO) status.

ESA'S CONTINUED COMMITTMENT TO IRWD

We are committed to quality assurance and quality control.
Our value is linked to the quality of our analysis and documentation. As detailed in Section 2, ESA follows a strict QA/QC Plan. Comprehensive document reviews are crucial for successful projects.

We are committed to effective cost controls and pricing efficiency.

From experience, we know cost controls are vital in scope and fee preparation, as costs relate to services, staff, and time. We review the scope to meet the District's objectives efficiently, recommending where to gain efficiencies without compromising essential support.

We are committed to close communication with IRWD staff.

From experience, we know the importance of quickly elevating information to management. Prompt communication manages risks and fosters team trust.

Quality Control / Quality Assurance

All ESA work products are subject to a stringent QA/QC Program. The Program consists of multiple levels of review, each requiring a sign-off from the manager in charge.



This approach provides for preparation of documents that have received reviews from senior technical leaders for accuracy of content, the overall Project Manager for compliance of task objectives, a technical editor for style and readability, and a Project Director to ensure documents are legally defensible, technically accurate, and tailored to meet client needs. As Principal-In-Charge, Tom will continue to oversee ESA's QA/QC program in order to uphold IRWD's rigorous standards for technical excellence in environmental documentation.

Technical Approach

Task 1: Land Use Planning

ESA provides land use, policy and environmental planning services and supports technical studies for a wide range of public agencies in Southern California. We have also represented a number of our clients and their environmental needs with the City of Irvine's Community Development Department and Orange County Planning and Development. We have developed a relationship with staff and understand their needs and each jurisdiction's expectations.

Our Community Planning team has expertise in policy planning, land use, zoning and development regulations. Our planners will help interpret existing local jurisdiction requirements, identify areas where local permitting or approvals may be required, and assist in the permitting process. In addition, our expertise in CEQA allows us to also interpret and prepare any environmental clearance required for land use permitting that may require CEQA clearance. In addition to understanding local land use and environmental policies and permitting, our team can also provide public outreach services to develop public buy-in for projects, assist stakeholders and the public with better understanding a project and its impacts, and also complying with local, state and federal policies for engagement with any permitting process required.

Task 2: Regulatory Agency Consultation, Permit Application and Procurement

ESA understands that IRWD's projects often require compliance with state and federal statutes that regulate aquatic resources. At the state level, these statutes include the Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne), as amended, Section 1600 et seq. of the California Fish and Game Code (FGC), and the California Coastal Act (CCA), and, at the federal level, the Clean Water Act (CWA) of 1972, as amended. To assist IRWD with complying with these regulations, our approach would be to work with IRWD to: 1) determine if the project activity is a regulated activity that may trigger a need for a permit; 2) delineate limits of aquatic resources (per Task 3) and assess potential impacts; 3) determine the potential jurisdictional status of the aquatic resources (i.e., are they considered waters of the U.S.?); 4) identify the most streamlined permitting strategy and feasible design options; 5) initiate pre-application meetings with agencies; 6) submit permit applications; and 7) thoroughly review permits obtained from agencies and provide suggested revisions.

The ESA team will advise and guide IRWD on how to best navigate permitting requirements depending on the project. We are experienced in securing CWA permits, Water Quality Certifications, Waste Discharge Requirements, Lake or Streambed Alteration Agreements, Coastal Development Permits; obtaining take authorization or demonstrating compliance with the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA); and demonstrating compliance with Section 106 of the National Historic Preservation Act and South Coast Air Quality Management District (SCAQMD) policies. Under the direction of IRWD, ESA will attend pre-application meetings with regulatory agencies and support informal/formal agency consultations as necessary.

Task 3: Wetland Delineations

ESA regulatory scientists and wetland ecologists are extensively experienced in conducting wetland delineations in accordance with protocols and guidelines established by the U.S. Army Corps of Engineers (USACE) and California Coastal Commission (CCC) and are trained to perform the California Rapid Assessment Method (CRAM) assessments. In addition, we comprehensively identify aquatic resources that are protected under the Clean Water Act (per the 2023 Revised Definition of Waters of the United States), Porter-Cologne, FGC, Special Area Management Plans (SAMPs), and local open space and conservation general plan elements. At the onset of a particular project, ESA will identify all applicable regulatory statutes that will require compliance and target field investigations accordingly. Based on the delineation, ESA will prepare an aquatic resources delineation report or CRAM report suitable for submittal to the regulatory agencies to support permitting as well as CEQA/NEPA.

Task 4: Biological Surveys, Monitoring, and Assessments

ESA has demonstrated experience in providing a full range of biological services to IRWD. Our biologists are familiar with the flora and fauna within Orange County and IRWD's service area, and the sensitive habitats and special-status species known to occur in the service area such as least Bell's vireo and coastal California gnatcatcher. Our team is highly qualified to perform a variety of biological surveys, assessments, and monitoring (see Table 2-1 for ESA's biology team's qualifications) and is trained to use the latest technology to collect data electronically. It is anticipated that this task will involve, but not necessarily be limited to, the following: preliminary biological resources assessments and reconnaissance-level surveys; protocol/focused surveys for rare plants and special-status wildlife; preparation of biological technical reports to support permitting, Endangered Species Act compliance, and/or CEQA/NEPA; preconstruction special-status and nesting bird surveys and monitoring; Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) clearance surveys; and staking/flagging restricted work areas.

Our biologists will review available biological reports and databases prior to conducting field surveys to identify known or potential biological resources on or near the project site. Vegetation communities will be mapped in the field using geospatial information systems (GIS) technology and classified according to A Manual of California Vegetation (Second Edition) by Sawyer-Keeler Wolfe and Evans (2009). Habitat assessments will be conducted to determine potential habitat suitability of special-status species, and species-specific surveys will be conducted in conformance with the most recent accepted protocols.

Task 5: Threatened and Endangered Species Regulation, Monitoring and Reporting

This task includes assessing the need for species surveys based on current site conditions, conducting those surveys consistent with federal and/or state protocols, reporting on the findings of these surveys, and monitoring project activities in proximity to listed species. ESA biologists are comprised of a diverse team of experienced and credentialed resource management specialists with expertise and experience, as well as credentials accepted by the applicable resource agencies related to threatened, endangered, and otherwise special status species (see Table 2-1 for ESA's biology team's qualifications).

ESA staff members are permitted or otherwise authorized by the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) to perform protocol surveys for a wide array of species. Although we anticipate working through the NCCP/HCP, ESA biologists will advise IRWD on addressing potential impacts to federally and/or State endangered and/or threatened species subject to the FESA and/or CESA. ESA biologists will prepare mitigation strategies for completing Section 7 FESA consultation and obtaining a Biological Opinion from the USFWS, or a FESA Section 10 Habitat Conservation Plan, when warranted. Relative to CESA, ESA biologists will assist IRWD in the application to request an Incidental Take Permit pursuant to CESA Section 2081(b) and consistency determinations pursuant to FGC Section 2080.1. However, as mentioned above, ESA anticipates employing mitigation guidelines provided for in the region-wide NCCP/HCP to avoid or minimize project-related impacts to regulated resources.

Task 6: Mitigation Monitoring and Reporting Plans

As part of a typical scope of work for environmental compliance, ESA includes preparation of the Mitigation Monitoring and Reporting Program (MMRP) as required by CEQA, Habitat Mitigation and Monitoring Plans (HMMPs) as necessary, and implementation of requirements outlined in permit conditions. We understand that IRWD may require assistance implementing these environmental conditions for current projects such as the Syphon Reservoir Improvement Project. If requested by IRWD under this On-Call Services contract, ESA will implement the MMRPs, HMMPs, and permit conditions associated with projects, including preparation of a reporting program binder designed to track the implementation and completion of each requirement, management of monitoring activities and required field surveys, and preparation of periodic reports to document ongoing activities and project completion. Alternately, ESA has a real-time, scalable mobile data collection and reporting system to support compliance and construction monitoring projects and provide real-time monitoring results. Our field teams are trained with the latest technology to streamline the monitoring and reporting process; saving time and money for our clients.

By implementing a kick-off meeting prior to construction and through regular coordination calls for the duration of construction, ESA will work with IRWD and its contractors, and our subconsultant, to ensure the project's compliance with environmental monitoring and reporting requirements, while achieving construction goals. ESA has staff that specialize in construction monitoring in both our Biological Resources & Land Management Group and Cultural Resources Group, and our team has extensive experience implementing MMRPs and permit conditions for various projects as part of on-call services contracts, including the *Syphon Reservoir Geotechnical Investigation Project*.

Task 7: Water Quality, Storm Water Monitoring, and Reporting

Geosyntec has a highly qualified and diverse team to provide technical expertise in strategic program management of individual, Phase I, Phase II, Industrial, and Construction General Permits in California, performing site inspections and assessments, and monitoring and reporting for storm and wastewater compliance, sediment and water quality assessments.

At the inception of a project, the project site will be evaluated for environmental permitting compliance needs. Depending on the scope of work, there may be the need for water quality permits to be obtained (i.e., Storm Water for Construction Activities, Low Threat Discharge Permits to ground or surface water). Geosyntec will review the construction activities with IRWD and ESA's management team to provide preliminary BMP design recommendations and prepare the water quality permits needed. If requested, our team's Qualified Storm Water Pollution Prevention Plans (SWPPP) Practitioner (QSP) will prepare SWPPPs and oversee SWPPP inspections and compliance with environmental water quality permits and requirements. The SWPPP & Environmental Field Monitors also will be available to respond promptly and provide assistance with sampling required for approved discharges, spills, release reporting requirements, excavation of contaminated soil, and collection of samples of contaminated soil and groundwater. Field summary reports will be prepared, and required field documentation will be completed. The SWPPP and Environmental Field Monitors will comply with sampling, monitoring, and reporting requirements.

Task 8: Natural Treatment System

Part of storm water compliance is using low impact development or technologies to treat storm water runoff. The idea is to use plants specific for the type of pollutants of concern contained in dry weather runoff and storm runoff and to design the "basins" to encourage sediment and/or pollutant deposition within the "basins". In order to determine the size of the Natural Treatment System (NTS) and the types of plants to utilize, our team will provide IRWD with a clear understanding of the soil types and types of pollutants of concern. Our team is experienced in site design, plant palette design, and construction, maintenance, and monitoring of NTS such as the San Joaquin Marsh, Peters Canyon, and Dominguez Gap Wetlands.

Task 9: Natural Community Conservation Plan/Habitat Conservation Plan

ESA has comprehensive knowledge of the local NCCP/HCP program and will work directly with IRWD as we have done in the past to guide the planning and implementation of projects that may affect Reserve lands. Our team will provide field assessments, reporting, coordination, and administrative services consistent with the NCCP guidelines, and will facilitate direct communications with the Executive Director of the Natural Commissions Coalition (NCC) and the agencies in the NCCP guideline documents. If needed, ESA will facilitate meetings with USFWSs and CDFW to discuss any anticipated issues associated with NCCP/HCP compliance. If a proposed project falls within the jurisdiction of the local NCCP/HCP, similar what ESA completed for the Syphon Reservoir Geotechnical Investigation Project, ESA will work with IRWD to coordinate with the appropriate local agency and NCCP/HCP participating parties (i.e., Natural Communities Coalition and resource agencies) to ensure the proposed project is in compliance with the plan and ensure that the appropriate mitigation is recommended and/or satisfied.

Task 10: Project Coordination

ESA is accustomed to working with multiple stakeholders, agencies, and other consultants on any given project. In accordance with our focus on client satisfaction and under the direction of IRWD, ESA will team or collaborate with other consultants or agencies in order to provide the best technical or regulatory expertise required to meet project objectives and provide services that are in the best interest of our clients.

In addition, our project management team will regularly coordinate with IRWD, other consultants, agencies, and contractors to provide services requested under this on-call contract. Tom has worked with Scott and many of the key technical leads identified in this proposal, including Stephanie and Maile, on a variety of water/wastewater/groundwater projects throughout California, including the *Syphon Reservoir Improvement Project*. To facilitate coordination of teams comprised of multiple consultants and agencies, ESA utilizes regularly scheduled conference call meetings to maintain focus of analyses, provide a forum for information exchange, and maintain compliance with project schedules and budgets.

Task 11: Staff Rates

The hourly rates for all staff and services resulting from this contract are provided in Section 5. Charges for time spent on project management, consultation, meetings, field work, data analysis, report preparation and review, travel time, etc., will be made at the Category Rates set forth in Section 5. Rates for non-labor expenses, such as reimbursable expenses and equipment usage are also provided in Section 5, Fee Schedule.

Task 12: Project Task Item Estimates

Our typical on-call services contracts require us to prepare scopes of work, cost estimates and schedules for projects as they arise. ESA has prepared task order proposals for biological and regulatory compliance services under ESA's current CEQA/NEPA on-call contract, as well as other on-call contracts such as for Department of Water Resources (DWR) and Orange County Public Works (OCPW). The appropriate level of effort will be developed by our project management team in coordination with IRWD, key technical staff, and/or ESA's subconsultant. Staff will be assigned based on project requirements. Each new project will be established under this IRWD On-Call Services master contract and IRWD's PO. Upon request, ESA will prepare and submit a project team description, scope, budget, and schedule to IRWD for new projects as they arise within one to three days, depending on the nature of the work. Longer timeframes may be required for larger jobs. The costs associated with preparing scope/schedule/budget packages will be ESA's responsibility. With IRWD's approval of the scope and fee, ESA will begin work on new projects immediately upon receiving a written notice to proceed.

Task 13: Team Experience

As requested in the RFP, we have presented our proposed project team and their relevant experience in Section 2, Team. Additional details about each team member are provided in the resumes attached as **Appendix A**.

Task 14: References

As requested in the RFP, within *Table 3-1*, ESA provided 2 projects recently completed for IRWD and IRWD staff members were involved with the projects. *Figure 3-1: Irvine Ranch Water District Project Experience* demonstrates projects the ESA team have completed over the course of our current on previous on-call contracts with IRWD.

SECTION 2 TEAM

Taking into consideration the nature of the contract, anticipated projects, and the various disciplines necessary to address biological survey, monitoring, permitting, and compliance requirements, ESA has selected the proposed team based on continuity, technical expertise, exemplary qualifications, location and availability. These key personnel – the Principle-In-Charge, Client/Project Manager, and Task Managers – will continue to lead, oversee, and be hands-on in their execution of the contract tasks. With intimate knowledge and understanding of IRWD's policies, and procedures, these task managers will continue its stability within the team of scientists, biologists, ecologists, and regulatory specialists available to them, also presented in this section. This deep bench ensures that ESA can maintain responsiveness in the face of potential multiple, concurrent task orders and to provide expedited service. ESA understands any substitution or addition of any key personnel must be requested in writing, along with a statement of qualifications and time commitment. We understand this request must be approved in writing in advance. Resumes of key personnel are provided in Appendix A. Following our key staff biographies, we have provided Table 2-1 demonstrating our support staff's qualifications. Full resumes for technical support staff are available upon request.

Technical Team Availability

The ESA Team understands that the availability of team members is of importance to IRWD; therefore, only staff with the requisite availability to commit to this On-Call Biological Monitoring and Permitting Services contract's scope of services are assigned to this project. We have included a generalized time-available percentage but recognize that the services needed under this contract will be intermittent and varied, requiring periods of 100 percent commitment of key staff until tasks are complete. The work effort for our proposed key staff members will fluctuate as individual projects move from one phase to another. Based on the schedule and projected staff hours for implementation of the projects under this On-Call Biological Monitoring and Permitting Services contract, we can confidently commit to the availability and participation by our proposed Technical Team.

Management Team Biographies



Tom Barnes | Principal-in-Charge

Tom is an ESA Vice President and a Principal Associate in ESA's Southern California Water Group focused on providing environmental planning and management services for water and wastewater utilities in the Southern California region. He has over 26 years of experience in CEQA/NEPA analysis, project management, environmental documentation, permit review and facilitation, and data analysis.

A proven project manager specializing in water projects, Tom manages on-call multi-year environmental contracts for Southern California agencies, including Metropolitan, Los Angeles Department of Water and Power (LADWP), Orange County Sanitation District, and DWR. Tom served as the Project Director for all IRWD projects described in Table 1-1, including the current and ongoing Syphon Reservoir Improvement Project EIR. In addition, Tom has most recently overseen the completion of the following projects: West Basin Municipal Water District Ocean Water Desalination Project EIR; City of Ventura's Ventura Water Supply Projects EIR; and the San Gabriel River Reduced Discharge EIR for the Los Angeles County Sanitation District.

Project Availability: 5% | Labor Category: Senior Principal Consultant 3 | Education: B.A. English, University of California, Berkeley



Scott Holbrook | Client/Project Manager; NCCP/HCP; Project Coordination

Scott, a seasoned biologist and senior project manager with over 30 years of expertise in Southern California's biological resources and environmental regulations, excels in providing biological compliance services, and providing excellent contract management and client services. His innovative,

cost-effective mitigation measures have supported pipelines, water facilities, energy, road projects, and real estate developments. As an ecological restoration specialist, Scott has crafted mitigation programs meeting stringent resource agency requirements. His notable work with IRWD includes the Syphon Reservoir Geotechnical Investigation Project, Syphon Reservoir Improvement Project, and the San Joaquin Marsh Operating Guidelines and Resource Management Plan Update. Scott also manages ESA's Permitting and Restoration Services contract with OCPW. As the Client/Project Manager for IRWD, Scott will continue to be the primary point of contact overseeing day-to-day contract management, leveraging ESA's tools to ensure quality control and proactive problem-solving, and bringing a strategic, client-focused approach that consistently exceeds expectations.

Project Availability: 30% | Labor Category: Principal Consultant 3 | Education: B.A., Applied Ecology, University of California. Irvine

Task Managers Biographies



Brian Allee | Land Use Planning

Brian Allee is an environmental planner and project manager with 20 years of experience in project entitlements and preparing environmental documentation compliant with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). He is skilled in tracking and ensuring project compliance with conditions of approval and local, state, and federal agency

coordination. He is experienced in research, analysis, and preparation of all levels of CEQA and NEPA documentation for a wide variety of project types, including sports arenas, mixed-use/urban infill projects, large-scale residential and specific plan developments, industrial and commercial developments, parks, medical facilities, waste management, water and wastewater infrastructure, and coastal development projects.

Project Availability: 30% | Labor Category: Managing Consultant 4 | Education: B.S., City and Regional Planning, California Polytechnic State University, San Luis Obispo



Stephanie Gasca | Agency Consultation & Permitting; Wetland Delineation

Stephanie has over 20 years of experience, 17 years as a consultant and 3 years as a regulator with the Santa Ana Regional Water Quality Control Board (RWQCB), with expertise in regulatory permit acquisition and environmental compliance. She has extensive knowledge of Clean Water

Act Sections 401 and 404; the Porter-Cologne Water Quality Control Act; and the Fish and Game Code Section 1600 permitting processes, and experience in obtaining take authorization or demonstrating compliance with the FESA and CESA. Stephanie has also assisted with preparing staff reports and board orders associated with the issuance of waste discharge requirements (WDRs), as well as drafting 401 Water Quality Certification language. Throughout her career, Stephanie has cultivated solid working relationships with agencies and staff that are built on mutual trust and understanding. Stephanie is currently supporting IRWD by leading the permitting efforts for the Syphon Reservoir Improvement project.

Project Availability: 30% | Labor Category: Managing Consultant 4 | Education: M.A., Environmental Studies (Law and Policy), University of Southern California; B.A. Biological Sciences, University of Southern California



Maile Tanaka | Biological Surveys/Monitoring & Reporting; T&E Species; MMRP

Maile has more than 18 years of experience in the field of consulting biology. Her professional experience includes vegetation mapping, habitat assessments, botanical surveys (including tree inventories and rare plant surveys), focused surveys for special-status wildlife, nesting bird surveys,

and jurisdictional delineations throughout Southern California. She has experience in preparing technical biological resources documents in accordance with CEQA guidelines for numerous complex projects, and is well-versed with the requirements of the Orange County NCCP/HCP. Maile prepared the biological technical report for the Syphon Reservoir Geotechnical Investigations Project, which analyzed the project's consistency with the County of Orange Central & Coastal Subregion NCCP/HCP. She also was the lead biologist that conducted and coordinated multiple years of focused surveys for special-status floral and faunal species in support of the Syphon Reservoir Improvement Project, coordinated with USFWS and CDFW, and oversaw the biological monitoring conducted in compliance with the project's MMRP and permit during implementation of the geotechnical work. Maile also coordinated with USFWS and CDFW regarding implementation of NCCP/HCP Construction-Related Minimization Measures.

Project Availability: 30% | Labor Category: Managing Consultant 3 | Education: Master of Environmental Science & Management, University of California, Santa Barbara; B.S., Organismic Biology, Ecology & Evolution, University of California, Los Angeles.



Nick Garrity, PE | Natural Treatment System

Nick is the director of ESA's Southern California Environmental Hydrology & Design Group. He is a hydrologist and civil engineer with more than 23 years of experience working with wetland, river, estuary, and coastal systems. His technical and project management experience includes the planning and design of multi-benefit wetland enhancement, restoration, and management projects;

water quality and flood hazard studies; hydrodynamic modeling; environmental impact assessments; and post-project monitoring and evaluation. His technical skills and expertise include the assessment and modeling of wetland hydraulics and water quality, sediment dynamics, and engineering design. With previous experience leading ESA's reduced discharge technical study on the San Joaquin Marsh for the Peters Canyon Water Capture and Reuse Project, current role in leading the development of IRWD's San Joaquin Marsh Operating Guidelines and Resource Management Plan, and experience with various treatments wetlands and wetland maintenance and restoration projects, including San Joaquin Marsh/Peters Canyon, Big Canyon, and Aliso Creek, he is well-suited to lead the hydrology studies and analyses for IRWD.

Project Availability: 20% | Labor Category: Principal Consultant 3 | Education: M.S., Civil and Environmental Engineering, University of California at Berkeley; B.S., Geology– Physics/ Mathematics, Brown University



Miguel Parames (Geosyntec), P.E., QSP/D | Water Quality, Stormwater Monitoring & Reporting

Miguel is a registered professional engineer in California with over 17 years of experience in civil and environmental engineering. Mr. Parames' practice areas include hydrology and hydraulics, civil design, erosion and sediment control BMP selection and design, construction management/oversight, post-

fire erosion and flood hazard assessments, and NDPES permit compliance. Mr. Parames is an expert in hydrologic and hydraulic engineering and applies this skill to floodplain management (floodplain analysis, inundation mapping, hydraulic structures including bridges, weirs, and spillways), storm water management (storm drain pipe analysis, open channel conveyance, urban hydrology, and sediment basin design), and watershed management (post-fire hydrology, hydromod, green street infrasturcture). Mr. Parames has extensive technical and field experience selecting and designing erosion and sediment control best management practices (BMPs) applicable to the Construction General Permit and Industrial General Permit and provides clients a technical approach to mitigating water quality impacts from sediment. In addition, Mr. Parames has also prepared limited threat discharge permits to surface water and land to support construction projects. More recently, Mr. Parames has developed a civil design practice related to water resource engineering and projects include open channel conveyances, culverts, storm drains, sediment basins, road alignments, and grading

Project Availability: 30% | Labor Category: Geosyntec Principal Engineer | Education: M.S., Civil and Environmental Engineering, University of California, Davis; B.S., Civil Engineering, University of California, Davis

Table 2-1: Summary of ESA Technical Team Staff and Qualifications			
Name	Education	Technical Expertise	
Florence Chan Biological Surveys/ Monitoring & Reporting; MMRP Availability: 20% Labor Category: Senior Consultant 2	MS, Plant and Soil Sciences (Emphasis: Wildlife), Alabama A&M University BS, Physical Geography, University of British Columbia	Florence has 18 years of experience in biological assessments, vegetation mapping, focused surveys for special-status species, nesting bird surveys, mitigation monitoring, and construction monitoring.	
Michelle Gonzalez Biological Surveys/ Monitoring & Reporting; MMRP Availability: 20% Labor Category: Associate Consultant 4	BS, Marine Biology, California State University, Long Beach	Michelle has 7 years of experience in conducting nesting bird surveys and biological monitoring. Michelle has biological monitoring experience and is proficient using programs such as Survey123, Collector, Solocator and RStudio.	
Brandon Mukogawa Biological Surveys/ Monitoring & Reporting, Availability: 65% Labor Category: Consultant 4	MS, Biology, University of California, San Diego BS, Ecology, Behavior, and Evolution, University of California, San Diego	Brandon has 3 years of experience conducting wildlife and vegetative surveys in Southern California, making him familiar with the region's protected species. Brandon can digest technical information, such as permitting language or survey findings, and assist with biological surveys and technical reports such as biological resource assessments.	

James Jackson, PE

Natural Treatment Systems Availability: 20% Labor Category: Senior Consultant 5 James has over 11 years of experience working with habitat restoration design and feasibility studies, floodplain and stormwater management, coastal and fluvial hydrology and geomorphology, local and regional climate change/sea-level rise vulnerability assessments and coastal adaptation planning.

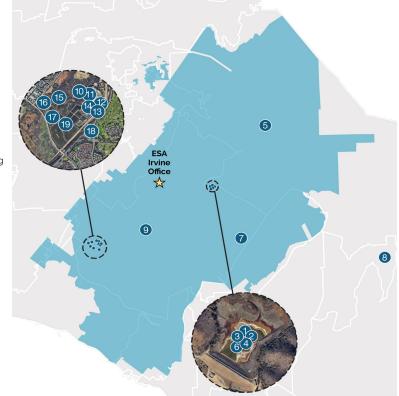
SECTION 3 REFERENCE

Over the past 15 years, we have built a relationship with IRWD founded on trust and mutual respect, consistently reinforcing our commitment through successful projects. Our partnership thrives on open communication and shared values, ensuring that each project meets its goals with precision and excellence. Through our dedication and deep understanding of the project's needs, our relationship has only grown stronger, delivering ever-greater results. The map below illustrates the success of our partnership, serving as a testament to our enduring commitment to IRWD and the communities that benefit from our collaborative efforts.

Figure 3-1: Irvine Ranch Water District Project Experience

IRWD Boundary

- 1. Syphon Reservoir Improvement Project EIR
- 2. Syphon Reservoir Improvement Project Permitting
- Syphon Reservoir Geotechnical Investigations Project MND
- 4. Syphon Reservoir Geotechnical Investigations Project Permitting
- Black Star Canyon Wilderness Park Vegetation Mapping
- 6. Syphon Reservoir PAR Assessment
- 7. Baker WTP Solar Project CEQA Addendum
- 8. Trabuco Canyon Water District Property Mapping
- San Diego Creek Water Rights Change Petition CEQA Compliance
- Peters Canyon Channel Water Capture and Reuse Pipeline Mitigation Monitoring
- 11. Syphon Reservoir Mitigation Site Addendum
- 12. San Diego Creek Water Rights Change Petition CEQA Compliance
- 13. MWRP Biosolids Project Construction
- 14. MWRP RW Bypass
- 15. San Joaquin Marsh Wetland Mitigation Conceptual Design & Feasibility Study
- San Joaquin Marsh, Phase 1 Cultural Resources Assessment
- 17. San Joaquin Marsh Ground Water Monitoring
- 18. Siphon Sewer Maintenance
- 19. San Joaquin Marsh Wetland/Riparian Habitat Concept Development



In addition to our longstanding partnership with IRWD, ESA has a proven track record of supporting districts across Southern California with services that align with the requirements outlined in this RFP. For over a decade our clients, Eastern Municipal Water District (EMWD), Inland Empire Utilities Agencies (IEUA), Los Angeles Department of Water and Power (LADWP), and DWR, have benefited from our expert as-needed consultant services as we consistently delivered biological and permitting support similar to the scope of services being requested by IRWD. Detailed descriptions of these exemplary on-call environmental services contracts, along with an overview of our current IRWD contract, are provided below, showcasing our capability and commitment to excellence.

On-Call Contracts



IRWD Staff: Paul Weghorst, Fiona Sanchez, Kellie Welch, Andy Uk

Dates: 2009-Present

Irvine Ranch Water District | On-Call Environmental Services

Since 2009, ESA has supported IRWD with on-call environmental services for its project planning, construction, operation, and maintenance activities, including CEQA/NEPA and permitting services, biological/cultural resources assessments, hydrologic modeling, water quality assessment, and mitigation compliance monitoring. To date, ESA has responded to over 20 individual task order assignments, mostly including IS/MNDs and CEQA Addenda from prior EIRs. ESA has also assisted in emergency repair work for IRWD treatment facilities, including the Michelson Water Reclamation Plant Phase 2/3 Capacity Expansion EIR Addendum No.4: Emergency Recycled Water Discharge

Tabel 3-1: IRWD Reference Projects

Syphon Reservoir Geotechnical Investigation Project IS/MND. The Geotechnical Investigations Work Plan (GIWP) provided details about the geologic and geotechnical baseline conditions at Syphon Reservoir. This work is necessary in order to inform the design of an enlarged reservoir, which will provide the IRWD service area with a more reliable water supply. The Final IS/MND was adopted by IRWD in June 2019. ESA provided extensive biological surveys and cultural surveys in support of the IS/MND; assisted IRWD with AB52 process for Tribal consultation; facilitated coordination with USFWS and CDFW for mitigation associated with the County of Orange NCCP and Grant Deed restrictions for the site; and secured a Jurisdictional Determination from the U.S. Army Corps of Engineers and Streambed Alteration Agreement from CDFW in less than one year.

Staff: Jo Ann Corey, Fiona Sanchez, Kellie Welch, Ian Swift, Scott Toland

San Joaquin Marsh Wetland/Riparian Habitat Concept Development. ESA assisted the Irvine Ranch Water District (IRWD) evaluate options to mitigate impacts from the proposed expansion of the Syphon Reservoir. ESA assisted IRWD to understand whether additional freshwater marsh creation (i.e., bulrush and cattail marsh with open water) and riparian wetland at San Joaquin Marsh (SJM) is a feasible alternative to purchasing credits from a wetland mitigation bank. ESA studied the feasibility of freshwater marsh and riparian wetland creation at SJM and developing design concepts and conceptual-level cost estimate for implementation.

Staff: Paul Weghorst, Fiona Sanchez, Jo Ann Corey, Scott Toland



Client Contact: Joseph Broadhead, Principal Water Resource Specialist,

Phone: 951.928.3777 ext. 4545

Dates: 2013-Present

Eastern Municipal Water District | On-Call Environmental Services

Since 2013, ESA has provided CEQA and NEPA consulting services to EMWD. In that time, ESA has become a trusted advisor in the development of technically sound and comprehensive environmental documents for various water infrastructure projects. Most notably, ESA prepared a Program EIR for the San Jacinto Valley Enhance Recharge and Recovery Project that included many CIP projects intended to capture and store imported water for later use. The PEIR included project-level CEQA analysis for facilities EMWD planned for the near term, allowing the design and construction to begin immediately after CEQA approval. These facilities include recharge basins, pipelines, wells, and treatment facilities in San Jacinto and Hemet, for which ESA conducted biological and cultural resources compliance monitoring in accordance with the approved

MMRP. For the more long-term components of the project, ESA prepared program-level CEQA documentation that allows EMWD to analyze environmental impacts generally at the conceptual level in order to cover the entire program. ESA is currently working with EMWD on subsequent phases of the ERRP, tiering appropriately from the PEIR by means of CEQA Addenda.



Client Contact: Jane Hauptman, Manager of Environmental Planning and Assessment

Phone: 213.367.0968

Dates: 2011-Present

Los Angeles Department of Water and Power | On-Call Environmental Services

Since 2011, ESA has supported LADWP by providing a full array of environmental services in an on-call capacity to the Office of Environmental Planning and Assessment. ESA has responded to a wide range of planning, permitting, and compliance needs for capital projects and for routine and emergency operations and maintenance activities with qualified technical experts in all environmental disciplines. Over the 13 years that ESA has been contracted with LADWP, we have routinely worked on approximately 20 open task orders simultaneously at any given time. To date, ESA has responded to 132 individual task order assignments for projects involving CEQA and construction monitoring/compliance, including Operation NEXT Water Supply Program EIR, Century Trunk Line Project MND, and

cultural resources construction monitoring and MMRP compliance for the North Haiwee Dam No 2 Project for the North Haiwee Dam No 2 Project.



Client Contact: Sarah Cannon, Manager of the Environmental Coordination Section, Division of Engineering

Phone: 916.882.2829

Dates: 2000-Present

California Department Of Water Resources | On-Call Environmental Services

Since 2006, ESA has supported DWR on a range of projects within the Southern Division of the California State Water Project system. ESA's services have included strategic environmental planning, impact assessment, NEPA/CEQA, biological and cultural surveys, mitigation planning, mitigation monitoring, habitat conservation plan compliance, and permitting for multiple task orders. To date, ESA has responded to over 100 individual task order assignments. In the past five years, ESA supported four of DWR's largest programs from the San Luis to the Southern Field Division: two MNDs to support the California Aqueduct Subsidence Program, the Castaic Dam High Intake Tower Access Bridge Retrofit Project IS/MND, Lake Perris Emergency Release Facility Project permitting and pre-construction activities, and the Salton Sea Monitoring Implementation Plan.

SECTION 4 SCHEDULE

Responsiveness

ESA is a seasoned on-call environmental consultant serving public and private entities. In some cases, project assignments are initiated on short notice with a quick turn-around time required. In many cases, ESA has signed a master services agreement specifically to facilitate quick project turnarounds. Depending on the nature of the project, ESA is poised to respond within hours, if needed. Moreover, due to our Irvine office's proximity to IRWD Headquarters and central location within the overall jurisdiction, we can participate in on-site meetings or be at an IRWD project site with short notice, if necessary; these attributes are incumbent of an extension of staff. ESA prides itself on the ability to deliver high quality consultation and documentation to meet the specific needs of specific task assignments under other on-call contracts and ESA will perform and provide this high-quality work for all projects undertaken for IRWD.

Project Schedule

ESA believes that time is of the essence and will address each request and task order in that respect. ESA will continue its commitment in keeping the project on schedule when circumstances are within our control. ESA understands that delays in development and infrastructure improvements during the environmental review process invariably leading to an increase in the overall budget for the project. ESA often employs Microsoft Project as a flexible scheduling tool that is readily updated to reflect potential changes in the schedule beyond ESA's control, should they arise, with adjustments quickly expressed in real time. With proactive communication being one of our fundamental principles, the ESA project management team will work with IRWD to use the preferred scheduling tools. Through continuous tracking, the Project Manager will be able to determine at any point in the process, if there is any deviation from the planned schedule and budget and make necessary adjustments.

SECTION 5 FEE SCHEDULE

The range of rates shown for each staff category reflects ESA staff qualifications, expertise and experience levels. These rate ranges allow our project managers to assemble the best project teams to meet the unique project requirements and client expectations for each opportunity. Subcontract services will be invoiced at cost multiplied by 1.15.

Environmental Science Associates | Fee Schedule

Personnel Category Rates

Charges will be made at the Category hourly rates set forth below, with an annual 5% escalation, for time spent on project management, consultation or meetings related to the project, field work, report preparation and review, travel time, etc. Time spent on projects in litigation, in depositions and providing expert testimony will be charged at the Category rate times 1.5. The estimated hours below are standard in preparing permit applications for Section 404 Nationwide Permit, Section 401 Water Quality Certification, and Streambed Alternation Agreement. In addition to assisting with permit applications, ESA will provide agency coordination and consultation. These hours exclude the preparation of technical reports that may be included in the permit applications.

Staff Name, Role, Labor Category	Hourly Rate	Estimated Hours
Tom Barnes, Principal-In-Charge, Senior Principal Consultant 3	\$295	1
Scott Holbrook, Client/Project Manager; NCCP/HCP; Project Coordination Principal Consultant 3	\$265	4
Nick Garrity, PE, Natural Treatment System Task Lead, Princi-pal Consultant 3	\$265	0
Brian Allee, Land Use Planning, Man-aging Consultant 4	\$256	0
Stephanie Gasca, Agency Consultation & Permitting; Wetland Delineation, Managing Consultant 4	\$256	32
Maile Tanaka, Biological Surveys/Monitoring & Reporting; T&E Species; MMRP, Managing Consultant 3	\$234	0
James Jackson, Natural Treatment Systems, Senior Consult-ant 5	\$233	0
Florence Chan, Biological Surveys/Monitoring & Reporting Biological Surveys/ Monitoring & Reporting Senior Consultant 2	\$171	0
Michelle Gonzalez, Biological Biological Surveys/Monitoring & Reporting, Associate Consultant 4	\$165	40
Brandon Mukogawa, Biological Surveys/Monitoring & Reporting, Consultant 4	\$135	80

ESA Expenses

A. Travel Expenses

- 1. Transportation
 - a. Company vehicle fixed rate + fee for mileage in excess of 100 miles.
 - b. Common carrier or car rental actual expense multiplied by 1.15
 - c. If company vehicle is to be used in off-road conditions, a daily \$15 use fee will be added to the standard daily vehicle rate.
- Lodging, meals and related travel expenses direct expenses multiplied by 1.15

B. Technology and Data Management Fee

Non-travel expenses incurred for the duration of the agreement for project support but not itemized below. Project labor charges multiplied by 3%. Fee encompasses the following:

- 1. Ongoing long-term retention and retrieval, management, and security of project-related data.
- 2. Proprietary tools, cloud data services (ArcGIS Online Hosting \$225 per month), data science and AI capabilities as required for project delivery.

C. Printing/Production Rates

Our innovative production equipment ensures high efficiency and exceptional quality in every project ranging in \$0.15 (letter) – \$0.30 (legal) per page for black and white prints, \$0.50 (letter) – \$0.80 (legal) per page for color prints, and \$10.00 per CD.

SECTION 6 JOINT VENTURE

ESA does not propose to employ a joint venture during the course of this contract. Typically, ESA's in-house staff has capabilities that are comprehensive and sufficient for completing environmental compliance documents for small projects. However, ESA routinely engages in subcontract arrangements when technical specialties that are beyond our in-house capabilities are required and appropriate for a project. We have worked with many firms in the area, including traffic engineering firms, geotechnical firms, local cultural resources specialists, as well as specialized biological resource personnel. We are open to a variety of teaming arrangements which suit IRWD and the particular project. If such specialized skills are needed for a particular task, ESA will work with IRWD to identify appropriate subconsultants.

SECTION 7 CONFLICT OF INTEREST

To the best of our knowledge, ESA does not have existing personal, financial, and/or organization conflicts of interest prohibited by law.

SECTION 8 INSURANCE

If selected to provide the services under this contract, ESA is prepared to furnish IRWD with acceptable evidence showing that the insurance coverage required has been procured. ESA has insurance coverage of at least \$1 million each for commercial general liability, worker's compensation, automobile, and professional liability. We will provide proof of insurance through our broker, IOA Insurance Services, upon the awarding of this contract. A copy of our sample certificate can be found in **Appendix B**.

SECTION 9 CONTRACT

ESA has reviewed the draft agreement and generally accepts the terms. If selected, ESA would request an opportunity to discuss modification of a few of the proposed terms as well as some additional terms that ESA believes are consistent with the provision of professional services and industry standards.

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