

BOARD OF DIRECTORS

ROBERT E. ALVARADO Division 1

DON WILSON Division 2

GLORIA DIZMANG Division 3

KATHY MAC LAREN Division 4

VINCENT DINO Division 5

DENNIS D. LaMOREAUX General Manager

ALESHIRE & WYNDER LLP Attorneys





PALMDALE WATER DISTRICT

A CENTURY OF SERVICE

October 9, 2019

AGENDA FOR REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT to be held at the District's office at 2029 East Avenue Q, Palmdale

MONDAY, OCTOBER 14, 2019

6:00 p.m.

<u>NOTES</u>: To comply with the Americans with Disabilities Act, to participate in any Board meeting please contact Dawn Deans at 661-947-4111 x1003 at least 48 hours prior to a Board meeting to inform us of your needs and to determine if accommodation is feasible.

Additionally, an interpreter will be made available to assist the public in making <u>comments</u> under Agenda Item No. 4 and any action items where public input is offered during the meeting if requested at least 48 hours before the meeting. Please call Dawn Deans at 661-947-4111 x1003 with your request. (PWD Rules and Regulations Section 4.03.1 (c))

Adicionalmente, un intérprete estará disponible para ayudar al público a hacer <u>comentarios</u> bajo la sección No. 4 en la agenda y cualquier elemento de acción donde se ofrece comentarios al público durante la reunión, siempre y cuando se solicite con 48 horas de anticipación de la junta directiva. Por favor de llamar Dawn Deans al 661-947-4111 x1003 con su solicitud. (PWD reglas y reglamentos sección 4.03.1 (c))

Agenda item materials, as well as materials related to agenda items submitted after distribution of the agenda packets, are available for public review at the District's office located at 2029 East Avenue Q, Palmdale (Government Code Section 54957.5). Please call Dawn Deans at 661-947-4111 x1003 for public review of materials.

<u>PUBLIC COMMENT GUIDELINES:</u> The prescribed time limit per speaker is threeminutes. Please refrain from public displays or outbursts such as unsolicited applause, comments, or cheering. Any disruptive activities that substantially interfere with the ability of the District to carry out its meeting will not be permitted, and offenders will be requested to leave the meeting. (PWD Rules and Regulations, Appendix DD, Sec. IV.A.)

Each item on the agenda shall be deemed to include any appropriate motion, resolution, or ordinance to take action on any item.

- 1) Pledge of Allegiance/Moment of Silence.
- 2) Roll Call.
- 3) Adoption of Agenda.

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- 4) Public comments for non-agenda items.
- 5) Presentations:
 - 5.1) None at this time.
- 6) Action Items Consent Calendar (The public shall have an opportunity to comment on any action item on the Consent Calendar as the Consent Calendar is considered collectively by the Board of Directors prior to action being taken.)
 - 6.1) Approval of minutes of regular meeting held September 23, 2019.
 - 6.2) Payment of bills for October 14, 2019.
 - 6.3) Approval of Resolution No. 19-14 being a Resolution of the Board of Directors of the Palmdale Water District Amending and Restating its Record Retention Policy and Record Retention Schedule for the District and Approving Destruction of Records in Accordance Therewith. (No Budget Impact – General Manager LaMoreaux)
- 7) Action Items Action Calendar (The public shall have an opportunity to comment on any action item as each item is considered by the Board of Directors prior to action being taken.)
 - 7.1) Consideration and possible action on approval of contract with Claris Strategy to assist the District in completing the requirements of America's Water Infrastructure Act of 2018. (\$144,641.00 Budgeted Budget Item No. 1-02-5070-007 Assistant General Manager Ly)
 - 7.2) Consideration and possible action to reschedule the first Regular Board Meeting in November from November 11, 2019 to November 12, 2019 due to the Veteran's Day holiday. (No Budget Impact – General Manager LaMoreaux)
 - 7.3) Consideration and possible action to reschedule the first Regular Board Meeting in December from December 9, 2019 to December 16, 2019 due to the ACWA Conference. (No Budget Impact – General Manager LaMoreaux)
 - 7.4) Consideration and possible action to cancel the second Regular Board Meeting in December, December 23, 2019, due to the District's scheduled office closure. (No Budget Impact General Manager LaMoreaux)
 - 7.5) Consideration and possible action on authorization of the following conferences, seminars, and training sessions for Board and staff attendance within budget amounts previously approved in the 2019 Budget:
 - a) None at this time.
- 8) Information Items:
 - 8.1) Reports of Directors:
 - a) Meetings; Standing Committee/Assignment Reports; General Report.
 - 8.2) Report of General Manager.
 - 8.3) Report of General Counsel.

- 9) Public comments on closed session agenda matters.
- 10) Closed session under:
 - 10.1) Conference with Legal Counsel Existing Litigation: A closed session will be held, pursuant to Government Code §54956.9 (d)(1), to confer with Special Litigation Counsel regarding existing litigation to which the District is a party. The title of such litigation is as follows: *Antelope Valley Ground Water Cases*.
- 11) Public report of any action taken in closed session.
- 12) Board members' requests for future agenda items.
- 13) Adjournment.

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DENNIS D. LaMOREAUX, General Manager

DDL/dd

PALMDALE WATER DISTRICT

BOARD MEMORANDUM

DATE:	October 7, 2019	October 14, 2019
TO:	BOARD OF DIRECTORS	Board Meeting
FROM:	Mr. Dennis D. LaMoreaux, General Manager	
RE:	AGENDA ITEM NO. 6.3 – APPROVAL OF BEING A RESOLUTION OF THE BOARD PALMDALE WATER DISTRICT AMENDIN RECORD RETENTION POLICY AND SCHEDULE FOR THE DISTRICT AND APP OF RECORDS IN ACCORDANCE THE IMPACT – GENERAL MANAGER LAMOREA	OF DIRECTORS OF THE 'G AND RESTATING ITS RECORD RETENTION PROVING DESTRUCTION REWITH. (NO BUDGET

Recommendation:

Staff recommends approval of Resolution No. 19-14 being a Resolution of the Board of Directors of the Palmdale Water District Amending and Restating its Record Retention Policy and Record Retention Schedule for the District and Approving Destruction of Records in Accordance Therewith.

Background:

In 2012, the Board of Directors adopted a Record Retention Policy and Record Retention Schedule, which is included in the District's Rules and Regulations as Appendix W. This Policy and Schedule establishes an orderly procedure for the storage, reproduction and possible destruction of District records and provides for the protection of records vital to the District in the event of a disaster.

General Counsel for the Public Water Agencies Group, of which the District is a member, has revised the Record Retention Policy and Record Retention Schedule on behalf of the Group's members to update the provisions of the Policy and to better categorize the Record Retention Schedule.

Strategic Plan Element:

This work is part of Strategic Initiative No. 3 – Systems Efficiency.

Budget:

There is no budget impact from this item.

Supporting Documents:

• Resolution No. 19-14

RESOLUTION NO. 19-14

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE PALMDALE DISTRICT AMENDING AND RESTATING ITS RECORD RETENTION POLICY AND RECORD RETENTION SCHEDULE FOR THE DISTRICT AND APPROVING DESTRUCTION OF RECORDS IN ACCORDANCE THEREWITH

WHEREAS, in order to maintain the efficiency of the operation of the Palmdale Water District ("District"), it is helpful to authorize the destruction of records held by the District which are no longer useful or necessary for the operation of the District and which will not foreseeably become useful or necessary in the future; and

WHEREAS, Government Code Section 60200, et seq. and Water Code Section 21403 sets forth certain legal requirements relating to the retention and destruction of certain records and documents; and

WHEREAS, the Board of Directors desires to authorize the General Manager, or his or her designee, to review the District records from time-to-time, and to provide for the removal and destruction of those documents and records which are no longer required by statute to be retained and which are no longer necessary or useful in the District's operations; and

WHEREAS, on November 21, 2005, the Board of Directors of the District adopted Resolution No. 05-10 to adopt a Record Retention Policy and establish a Record Retention Schedule to establish an orderly procedure for the storage, reproduction and possible destruction of District records on a continuing basis and to provide for the protection of records vital to the District in the event of a disaster; and

WHEREAS, on July 25, 2012, the Board of Directors of the District adopted Resolution No.12-10 amending and restating its Record Retention Policy and Record Retention Schedule.

WHEREAS, the Board of Directors desires now to amend and restate its Record Retention Policy, attached hereto as Exhibit "A" and its Record Retention Schedule attached hereto as Exhibit "B."

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Palmdale Water District as follows:

- 1. Section 1. The Recitals set forth above are incorporated herein and made an operative part of this Resolution.
- 2. <u>Section 2</u>. The Board of Directors hereby approves and adopts the Records Retention Policy set forth in Exhibit "A", attached hereto, which establishes guidelines for the retention and destruction of District records.
- 3. <u>Section 3</u>. The Board of Directors hereby approves and adopts the Record Retention Schedule set fort in Exhibit "B," attached hereto, which outlines the length of time a District record must be retained by the District.

- 4. <u>Section 4</u>. The General Manager of the District, or designee, shall be the official custodian of all District records, files, and documents, and no records, files, or documents shall be removed from the District, deleted, or destroyed without the express authorization of the General Manager, or designee, given in accordance with the Records Retention Policy; provided that the General Manager may delegate the authority under this section to another employee of the District.
- 5. <u>Section 5</u>. The Board of Directors directs the General Manager to review the Record Retention Policy periodically and present any revisions to the Board of Directors for modifications as may be necessary to keep retention information current and efficiently maintained.
- 6. <u>Section 6</u>. Upon the effective date of this Resolution, Record Retention Policy, and Record Retention Schedule, adopted herein, the Resolution, Record Retention Policy, and Record Retention Schedule shall supersede any and all prior resolutions, policies, and schedules adopted prior to that date.
- 7. <u>Section 7</u>. If any provision in this Resolution, Record Retention Policy, or Record Retention Schedule, or the application thereof to any person or circumstances, is for any reason held invalid, the validity of the remainder of this Resolution, Record Retention Policy, or Record Retention Schedule, or the application of such provisions to other persons or circumstances shall not be affected thereby. The Board of Directors hereby declares that it would have passed this Resolution, Record Retention Policy, or Record Retention Schedule, and each provision thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases or the application thereof to any person or circumstance be held invalid.
- 8. Section 8. This Resolution shall become effective upon the date of adoption as set forth herein.

PASSED, APPROVED, AND ADOPTED by the Board of Directors of the Palmdale Water District at a Regular Board Meeting held on the 14th day of October, 2019.

Vincent Dino, President

ATTEST:

Don Wilson, Secretary

APPROVED AS TO FORM:

ALESHIRE & WYNDER, LLP

Eric Dunn, General Counsel

EXHIBIT "A"

PALMDALE WATER DISTRICT RECORD RETENTION POLICY

The purpose of this RECORD RETENTION POLICY ("Policy") is to provide guidelines to staff regarding the retention or destruction of PALMDALE WATER DISTRICT ("District") records; provide for the identification, maintenance, safeguarding and destruction of records in the normal course of business; ensure prompt and accurate retrieval of records; and, ensure compliance with legal and regulatory requirements.

The General Manager, or his or her designee, is authorized by the BOARD OF DIRECTORS ("Board") to interpret and implement this policy, and to cause to be destroyed any or all such records, papers, and documents that meet the qualifications listed in this policy.

Pursuant to Government Code Section 60200, et seq. and Water Code Section 21403, the following qualifications will govern the retention and destruction of District records.

- 1. The General Manager shall be the official custodian of all District records. No records shall be removed from the District, deleted, or destroyed without express authorization of the General Manager given in accordance with this policy, provided that the General Manager may delegate the authority under this Policy to another employee of the District.
- 2. District records shall be retained for the period of time indicated on the Record Retention Schedule attached hereto as Schedule 1. In some instances, circumstances may exist which justify the retention of a particular record for a longer period of time.
- 3. District records (whether originals or reproductions) may be destroyed at the end of their applicable retention period unless the General Manger, or his or her designee, determines there is a compelling reason to continue retention of the document.
- 4. Any duplicate record may be destroyed at any time so long as the original or a permanent electronic or other permanent record of which is maintained in accordance with this policy.
- 5. All original records to be destroyed must be listed. Requests for the destruction of original records must be approved by the General Manager and the General Counsel prior to destruction. A Request for Records Destruction/Certificate of Destruction and listing of documents to be destroyed, and copy of the appropriate page(s) from the records retention schedule shall be filed in the District.
- 6. The following records shall be retained permanently in their original form, unless the Record Retention Schedule expressly authorizes the records to be preserved in a permanent electronic format or other permanent method of preserving a copy:

- a. Records that relate to the formation, change of organization, or reorganization of the District;
- b. Ordinances and resolutions adopted by the Board;
- c. Minutes of any meeting of the Board;
- d. Records that relate to the title to real property in which the District has an interest;
- e. Records determined by the Board or the General Manager to be of significant and lasting historical, administrative, engineering, legal, fiscal, or research value; and
- f. Records required by law to be permanently retained.
- 7. Regardless of the retention periods indicated on the Record Retention Schedule, the following records shall continue to be retained:
 - a. Records that are the subject of any pending request made pursuant to the California Public Records Act, whether or not the District maintains that the record is exempt from disclosure, until the request has been granted or two years have elapsed since the District provided written notice that the request has been denied;
 - b. Records that relate to any pending construction that the District has not accepted or to which a stop notice claim legally may be presented;
 - c. Records that relate to any nondischarged debt of the District;
 - d. Records that relate to any pending claim or litigation or any settlement or other disposition of litigation within the past two years;
 - e. Records that relate to any nondischarged contracts to which the District is a party;
 - f. Records that have not fulfilled the administrative, fiscal, or legal purpose for which it was created or received;
- 8. All records authorized for destruction shall be destroyed and disposed of in a commercially reasonable manner.
- 9. The District may utilize alternative storage methods for those records which are not required to be maintained in their original form. Upon Board authorization, District records may be photographed, microphotographed, reproduced by electronic video images on magnetic surfaces, recorded in the electronic data processing system, recorded on optical disk, reproduced on film or any other medium that is a trusted system and that does not permit additions, deletions, or changes to the original document. This preservation must comply with minimum standards or guidelines recommended by the

American Standards Institute or the Association for Information on Image Management for recording of permanent records or non-permanent records.

- a. The photographs, microphotographs, or other reproductions on film, optical disk, or any other medium shall be maintained in conveniently accessible files with provision being made by the District for preserving, examining, and using files.
- b. The reproductions can be certified, and such certified reproductions shall be deemed to be original public records for all purposes pursuant to Government Code §60203. Certification of the record must comply with standards approved by the California Attorney General, including a statement of identity, description and disposition or location of the records reproduced and the date, reason, and authorization for such reproduction.

LEGEND				
C = Completion/Closed	S = Supersede			
D = Disposal of underlying asset	T = Termination			
P = Permanent				
CITATIO	DNS			

CCP = Code of Civil Procedure CCR = Code of California Regulations

CFR = Code of Federal Regulations

GC = Government Code

LC = Labor Code

USC = United States Code

SAMPLE - Records Destruction

MEMORANDUM

DATE XX/XX/XX

TO: _____, General Manager _____, General Counsel

FROM:

RE: REQUEST FOR RECORDS DESTRUCTION

On October 14, 2019, the Board of Directors adopted Resolution No. 19-14 establishing a Record Retention Policy and Schedule. In accordance with that policy and schedule, certain records have been identified as eligible for destruction. A listing of those records and relevant sections from the records retention schedule are attached.

Provide general information about the request: [EXAMPLE: 15 BOXES OF RECORDS EXCEEDING THE RETENTION REQUIREMENTS AND, AS SUCH, ARE BEING PREPARED FOR DESTRUCTION. THE METHOD OF DESTRUCTION WILL BE VIA RECYCLING.]

Please sign below indicating your approval for the destruction of the attached listing of records.

General Manager

General Counsel

CERTIFICATE OF DESTRUCTION

I, [EMPLOYEE NAME], do hereby certify that the records listed on the attached were properly disposed of on [DATE].

Original: Executive Assistant or Admin. Management Analyst

Attachments:

- 1. List of records to be destroyed
- 2. Relevant sections of the records retention schedule

RECORD FOR DESTRUCTION TO BE DESTROYED [MONTH] [DATE], 2019

DEPT./ OFFICE	CREATION YEAR	DESTROY YEAR	DOCSTAR REVIEW/DATE	DESCRIPTION
OFFICE	YEAK	YEAK	KEVIEW/DAIE	DESCRIPTION
Accounting	2000	2005		Receipt Journals. Budget Amendments
Accounting	2001	2006		Receipt Journals. Budget Amendments
Accounting	2002	2007		Receipt Journals, Budget Amendments
Accounting	2003	2008		Receipt Journals. Budget Amendments
Accounting	2004	2009		Receipt Journals. Budget Amendments
Accounting	2000	2010		Receipt Journals. Budget Amendments
Admin	2000	2010		Department Policies
Admin	2000	2010		City Manager Reports
Admin		2010		Staff Meeting Notes
		<u> </u>		
L	L	I	1	

Category	Record Series	Retention Peri Citation (Years)		Description/Notes	Review Notes
Administrative/General	Annexation records	P			
Administrative/General	Board meeting agendas and packets Board meeting minutes	2 P	GC 60201	Original agendas and special meeting notices, including certificates of posting, original summaries, original communications and action agendas.	
Administrative/General	Board meeting recordings, audio/video	3 months	GC 34090.7		May destroy 5 years after superseded (re
Administrative/General Administrative/General	Bylaws Claims	P C+5	GC 25105.5	For districts that have Bylaws	invalid, or unenforceable)
Administrative/General	Conflict of Interest Code	S + 7		May be kept in permanent electronic format or other permanent method for preserving a copy after 2 years	
Administrative/General	Contract, services or goods provided to District (not including construction contracts)	T+4	GC 60201		
Administrative/General	Correspondence, general	2		Letters; emails; memos [note GC provides 2 years; AB 1184 would be 2 years for public agency e-mails]	
Administrative/General Administrative/General	Expense reimbursement FPPC - Form 700	3	GC 81009(e)	FPPC filings; May be kept in permanent electronic format or other permanent method for preserving a copy after 2 years	
Administrative/General	FPPC - other forms	7	FPPC Regs. 1894	4; FPPC filings; May be kept in permanent electronic format or other	
Administrative/General	Formation records	Р	GC 60201	4.1; GC 82015 method for preserving a copy after 2 years	
Administrative/General Administrative/General	Grant application, successful Grant funding records	C+5 C+5			
Administrative/General	Judgments; court orders; settlement agreements	Р			May destroy 5 years after superseded (re
Administrative/General Administrative/General	Ordinances Policies and procedures	P S+3	GC 60201		invalid, or unenforceable)
Administrative/General Administrative/General	Public Records Act requests Resolutions	C+2 P			May destroy 5 years after superseded (re
Administrative/General	Rules and regulations	S+3			invalid, or unenforceable)
Administrative/General Administrative/General	Software license agreement and documentation Staff reports	C+3 2			
Board of Directors	Campaign disclosure, elected	7	GC 81009(c), (g)	FPPC filings; May be kept in permanent electronic format or other permanent method for preserving a copy after 2 years	
Board of Directors Board of Directors	Campaign disclosure, not elected Election records	E+5	GC 81009(b), (g	FPPC filings; May be kept in permanent electronic format or other permanent method for preserving a copy after 2 years Candidate statements; nomination papers	
Board of Directors Board of Directors	Ethics training certificates Expense reimbursement	7	GC 53235.2		
Board of Directors	FPPC - Form 700	7	GC 81009(e)	FPPC filings; May be kept in permanent electronic format or other permanent method for preserving a copy after 2 years	
Board of Directors	FPPC - other forms	7	•	 FPPC filings; May be kept in permanent electronic format or other GC 82015 method for preserving a copy after 2 years 	
Board of Directors Board of Directors	Oath of office Travel records	T+6 7			
		0.0			
Construction/Development	Bids and proposals (unsuccessful)	C+2 C+2			
Construction/Development		T+3			
Construction/Development	Construction records	C+10	GC 60201	All records related to construction projects, such as successful bids, contracts, change orders, correspondence, invoices, designs, engineering	
Construction/Development	Contract, construction	Р			
Construction/Development	Correspondence, environmental review	C+3			
Construction/Development	Developer agreements	Ρ			
•	Environmental review documents	P		EIRs; negative declarations; notices of exemption; notices of determination	n
Construction/Development		S+3 P		Disctrict approved as-built records	
Construction/Development		C+2			
Finance - Accounting	Accounts payable	7		Invoices; check copies; supporting documents	
Finance - Accounting Finance - Accounting	Accounts receivable Asset records	7 D+7		Invoices; check copies; supporting documents	
Finance - Accounting Finance - Accounting Finance - Accounting	Audit reports Bank reconciliations Bank statements	P 5 7	26 CFR 1.6001-1	Statements; summaries for receipts disbursements & reconciliation	
Finance - Accounting Finance - Accounting	Billing records	4		Customer name, service address, meter reading, usage, payments, applications/cancellations	
Finance - Accounting Finance - Accounting	Bonds Budget, adopted	P P		Records of issuance Annual operating budget approved by legislative body	
Finance - Accounting Finance - Accounting	Budget, operating Checks	3	CCP 337	Operating budget and related updates Paid; cancelled; voided; payroll	
Finance - Accounting Finance - Accounting	Check register Correspondence, accting., credit and collection	7			
Finance - Accounting Finance - Accounting	Customer ledger/account Deposit slips; receipts	7	CCP 337	Checks; coins; currency	
Finance - Accounting Finance - Accounting	Depreciation schedules Expense reimbursement	D+7 3			
Finance - Accounting Finance - Accounting	Financial statements/reports (interim(Inventory records	3 D+7			
Finance - Accounting	Investment reports	Р	CCP 337; GC 53		Per Secretary of State Guidelines
Finance - Accounting Finance - Accounting	Investment statements Invoices (not including water bills)	P 7	CCP 337; GC 53	507	Per Secretary of State Guidelines
Finance - Accounting Finance - Accounting	Journals Journal entries, year-end	10 P		Cash; general; payroll; purchase	
Finance - Accounting Finance - Accounting	Ledgers (general and others) Petty cash records Perty cash records	P 3			
Finance - Accounting Finance - Accounting Finance - Accounting	Promissory notes Purchase orders Remittance statements	T+7 3 3			
Finance - Accounting	Source documents; records created for a specific transaction	5		Source documents detailed in a permanently retained register, journal, ledger, or statement	
Finance - Accounting	Tax records and reports	C+4	29 USC 436; 26 CFR 31.6001.1-4		
Finance - Accounting	Tax returns	C+5	CFR 31.6001.1; 29		
Legal Legal	Litigation; case files Legal memoranda and advice letters	T+5 4	GC 60201 CCP 340.6, 343	All documentation pertaining to the claim	
Personnel	Application for employment (hired)	T+3	LC 1198.5	recruitment record, applications and interview documents for applicants no	t
Personnel	Application for employment (not hired)	2	GC 12946	selected for hire; retention period from end of recruitment period plus 2 years	
Personnel Personnel	Contract, employment Correspondence, personnel	T+3 T+3	LC 1198.5 LC 1198.5		
Personnel	Disability claim	T+3	LC 1198.5 29 USC 1027; 2 CCR 1300.85.1;		
	Employee benefits records	T+6	CCR 1300.85.1; CCR 560; 29 CF	separated employees; insurance policies (health, vision, dental, etc.)	1
Personnel			1627.3(b)(2)		

Personnel	Expense reimbursement	3			
Personnel	Immigration records (I-9 forms)	3 or T+1	8 CFR 274a.2(b)(2)(i)(A)		
Personnel	Memorandum of Understanding	Р			Recommended to be permanent due
Personnel	with employee organization Paychecks	7	GC 60201		possible future negotiations
Personnel	Pension records	P	GC 00201		
Personnel	Personnel file	T+3	LC 1174, 1198.5, 1198.5	Applications; resumes; job descriptions; documents signed by employee; accident reports; injury claims; records of hiring, promotion, discipline & termination; May be kept in permanent electronic format or other permanent method for preserving a copy after end of employment	
Personnel	Recruitment records (hired)	T+3	LC 1198.5	······································	
Personnel	Recruitment records (not hired)	2	GC 12946	recruitment record, applications and interview documents for applicants not selected for hire; retention period from end of recruitment period plus 2 years	
Personnel	Safety committee meeting materials	2			
Personnel	Salary and wage changes	T+3	LC 1198.5		
Personnel	Terms and Conditions of Employment	Р			Recommended to be permanent due
Personnel	Time records	2	29 CFR § 516.6	Time cards, tickets and clock records	possible future negotiations
Personnel	Training records	3	27 611 3 510.0	Certificates; licenses	
Personnel	Travel records	2			Retain at least two years from the end of fiscal y After two years, destroy after audit or four years whicever occurs first.
Personnel	Unemployment claims	T+3			
Personnel	Wages; rates; payroll; earnings; deductions;	3	GC 60201	May be kept in permanent electronic format or other permanent method for	
	garnishments			preserving a copy after end of employment	
Personnel	Withholding certificates	T+3			E years from the data of injury or from the data
Personnel	Worker's compensation records	5	8 CCR 15400.2	Claim files; reports; working files; Claim files with awards for future benefits must not be destroyed, but may be kept in permanent electronic format or other permanent method for preserving a copy 2 years after the claim is closed or becomes inactive.	which the last provision of compensation benefi
Property	Agreements for purchase or sale	P	GC 60201	Supporting documents related to sale, purchase, reconveyance, exchange lease, or rental	3,
Property Property	Appraisals Damage reports	P 7			
Property	Deeds	P	GC 60201	Documents related to title to real property in which the district has an interest	
Property	Easements and licenses	Р	GC 60201	Documents related to title to real property in which the district has an interest	
Property	Eminent Domain judgments and orders	Р			
Property	Equipment repair records	3			
Property	Fixed assets	D+4			
Property	Lease, equipment	T+4	CCP 337		
Property	Lease, real property	T+4	CCP 337.2		
Property	Maintenance records, buildings	4			
Property	and machinery Mortgages	T+4	CCP 337		
Property	Options	T+4	CCP 337		
Property	Plans and specifications	Р			
Property	Plant acquisition records	D+4			
Property	Property tax and assessment records	Р			
	(paid to District)				
Property	Property taxes paid by District	10			
Property	Title reports	Р	GC 60201	Documents related to title to real property in which the district has an interest	
Property	Vehicle records	D+2			
Risk Management Risk Management	Accident reports (settled) Insurance policy	4 P			
Risk Management	Insurance policy	Ρ		Contracts for acquisition, operation, maintenance of land, water systems, water entitlements, and water rights; May be kept in permanent electronic format or other permanent method for preserving a copy after 5 years	
Risk Management Water Water Water	Insurance policy Agreements to purchase or sell water rights Contract, water facilities agreements Leases of water rights	P P P T+7		water entitlements, and water rights; May be kept in permanent electronic	
Risk Management Water Water Water Water Water	Insurance policy Agreements to purchase or sell water rights Contract, water facilities agreements Leases of water rights Meter complaint inquiries	P P P T+7 7		water entitlements, and water rights; May be kept in permanent electronic	
Risk Management Water Water Water Water Water Water Water	Insurance policy Agreements to purchase or sell water rights Contract, water facilities agreements Leases of water rights Meter complaint inquiries Meter history	P P P T+7 7 7	40 CER 122 28	water entitlements, and water rights; May be kept in permanent electronic	
Risk Management Water Water Water Water Water	Insurance policy Agreements to purchase or sell water rights Contract, water facilities agreements Leases of water rights Meter complaint inquiries Meter history NPDES permit	P P T+7 7 7 P	40 CFR 122.28	water entitlements, and water rights; May be kept in permanent electronic	
Risk Management Water Water Water Water Water Water Water Water	Insurance policy Agreements to purchase or sell water rights Contract, water facilities agreements Leases of water rights Meter complaint inquiries Meter history	P P P T+7 7 7	CCP 338(a); Howard Jarvis	water entitlements, and water rights; May be kept in permanent electronic	
Risk Management Water Water Water Water Water Water Water Water	Insurance policy Agreements to purchase or sell water rights Contract, water facilities agreements Leases of water rights Meter complaint inquiries Meter history NPDES permit Planning documents Rates and charges - notices and supporting reports and documentation Water distribution system design,	P P T+7 7 7 P S+3 S+3	CCP 338(a); Howard Jarvis Taxpayers Assn. v. City of La Habra (2001) 25 Cal. 4th	water entitlements, and water rights; May be kept in permanent electronic format or other permanent method for preserving a copy after 5 years	
Risk Management Water	Insurance policy Agreements to purchase or sell water rights Contract, water facilities agreements Leases of water rights Meter complaint inquiries Meter history NPDES permit Planning documents Rates and charges - notices and supporting reports and documentation Water distribution system design, installation and repair records	P P P T+7 7 7 P S+3 S+3	CCP 338(a); Howard Jarvis Taxpayers Assn. v. City of La Habra (2001) 25 Cal. 4th	water entitlements, and water rights; May be kept in permanent electronic format or other permanent method for preserving a copy after 5 years	
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PALMDALE WATER DISTRICT

BOARD MEMORANDUM

DATE:	October 7, 2019	October 14, 2019				
то:	BOARD OF DIRECTORS	Board Meeting				
FROM:	Mr. Adam C. Ly, Assistant General Manager					
VIA:	Mr. Dennis D. LaMoreaux, General Manager					
RE:	AGENDA ITEM NO. 7.1 – CONSIDERATION APPROVAL OF CONTRACT WITH CLARIS DISTRICT IN COMPLETING THE REQUIRE INFRASTRUCTURE ACT OF 2018. (\$144,64 LINE ITEM NO. 1-02-5070-007 – ASSISTANT	S STRATEGY TO ASSIST THE EMENT OF AMERICA'S WATER 41.00 – BUDGETED – BUDGET				

Recommendation:

Staff recommends that the Board:

Approve the contract with Claris Strategy to assist the District in completing the requirement of America's Water Infrastructure Act of 2018 in the amount not-to-exceed \$144,641.00.

Alternative Options:

The Board cannot approve the contract and instruct staff to complete the work.

Impact of Taking No Action:

Having staff complete the work will negatively impact other critical work areas and might not meet the deadline set forth in the regulation.

Background:

America's Water Infrastructure Act of 2018 (AWIA) requires water agencies to complete a Risk and Resilience Assessment (RRA) and prepare an Emergency Response Plan (ERP). The deadlines depend on population served. The District needs to certify the completion of the RRA by March 31, 2020 and have an ERP completed by September 30, 2020. Failure to comply with AWIA could result in a violation notice and ineligibility for federal grant funding.

The District joined the Public Water Agencies Group (PWAG) in drafting a Request for Proposal (RFP) to address the requirement within AWIA. This process leverages the group's size to get a competitive price from the consultants. PWAG received three proposals (AARC, Claris Strategy, and Prestige Analytic). A subcommittee made up of staff from La Puente County Water District, Rowland Water District, Walnut Valley Water District, and Palmdale Water District evaluated and rated the proposal in technical capability, experiences, approach and cost. The subcommittee recommended Claris Strategy to PWAG.

BOARD OF DIRECTORS PALMDALE WATER DISTRICT VIA: Mr. Dennis LaMoreaux, General Manager

Strategic Plan Initiative/Mission Statement:

This item is under Strategic Initiative No. 1 – Water Resource Reliability and Strategic Initiative No. 3 – System Efficiency.

This item directly relates to the District's Mission Statement.

Budget:

This project is under Budget Item No 1-02-5070-007.

Supporting Documents:

• Proposal and Scope of Work from Claris Strategy

Claris Strategy

Response to Request for Proposal For America's Water Infrastructure Act (AWIA) Compliance Crosswalks, Risk and Resilience Assessments, and Emergency Response Plans Public Water Agencies Group August 19, 2019 Technical Proposal

PUBLIC WATER AGENCIES GROUP

Response to Request for Proposal For America's Water Infrastructure Act (AWIA) Compliance Crosswalks, Risk and Resilience Assessments, and Emergency Response Plans



August 19, 2019

Claris Strategy

1111 Drake Rd. Arcadia, California 91007 (626) 898-4462 Contact person: William Lim, CEO/President

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COVER LETTER

Claris Strategy

August 19, 2019

Mr. Jim Ciampa Lagerlof, Senecal, Gosney & Kruse LLP 301 N. Lake Ave. Pasadena, California 91101

RE: America's Water Infrastructure Act (AWIA) Compliance Crosswalks, Risk and Resilience Assessments and Emergency Response Plans for the Public Water Agencies Group

Dear Mr. Ciampa and Selection Committee Members:

The America's Water Infrastructure Act (AWIA), which became law in October 2018, requires water utilities to conduct a Risk and Resilience Assessment (RRA) of their water systems and develop Emergency Response Plans (ERP). In an effort to reduce cost and maximize efficiencies, the Participating Agencies of the Public Water Agencies Group (PWAG) have joined together to undergo this effort. PWAG requires a consultant who knows water operations and intimately understands the RRA and ERP processes. The Claris Strategy team is that partner and we want to become a trusted advisor to you.

Claris Strategy has assembled a strong, local team, many of us who live and work in the Los Angeles County, and with broad and deep resources nationwide. Our team has exceptional experience in risk, threat and vulnerability assessments, cybersecurity, water utility engineering, financial analysis and emergency preparedness — all essential skills for successfully completing the new AWIA requirements. Our team is led by William Lim — who has over 30 years experience managing complex projects and large teams for critical infrastructure organizations. He will work closely with Dean Gipson of HDR, the deputy project manager, who has extensive experience working with local water agencies, and Ike Eisenhart of Launch! Consulting, a nationally recognized cybersecurity expert. Additionally, Kelly Hubbard, formerly of the Water Emergency Response Organization of Orange County and now the Director of the Office of Emergency Management for Santa Barbara County, will serve as the project advisor. Wendy Milligan of Terra Firma Enterprises, who has developed over 60 emergency plans, will lead the emergency response planning effort, Nick Lowe of CPARS Consulting will guide the compliance tool training, and Linda Warren of Launch! Consulting, who helped develop the AWIA training for AWWA, will assist in applying the J100 standard.

1111 Drake RoadTel626.898.4462Arcadia, CA 91007Cell626.437.4365www.clarisstrategy.comEmailwlim@clarisstrategy.com

Claris Strategy

Our deep knowledge of the AWIA requirements allows us to take a strategic approach in assisting PWAG's Participating Agencies to meet EPA compliance **and** support the vision of their emergency preparedness goals. We are already well-versed in RRA processes and ERP development. Our HDR and Launch! Consulting partners are currently conducting multiple AWIA compliance assessments for water agencies across the country. Four of our team members are certified under the American Water and Wastewater Association's Utility Risk and Resilience J100 Program. Linda Warren of Launch! Consulting was instrumental in developing the J100 process for AWIA Compliance. Our unmatched knowledge of the natural and man-made hazards facing water agencies in Southern California coupled with our decades of experience working in the water utility industry provides us with the perspective, insight and on-the-ground experience to mitigate risk and increase resilience for PWAG's participating agencies.

Our team includes nationally-recognized experts in security, cybersecurity, emergency planning and emergency response. Claris team members have conducted hundreds of risk assessments and prepared over 200 plans and annexes. We are currently completing ERPs for three water agencies in Southern California and, through Kelly Hubbard, have developed one of the premier water emergency programs in the country. Claris team members, Julie Quinn and Katherine Williams, recently completed an ERP for Valley County Water District. Our team members include former Special Agents for the FBI and NCIS who have conducted investigations nationally and were in charge of counter terrorism in Southern California. Collectively, our team has responded to over 100 disasters globally including 9/11, the Pakistan earthquake, Hurricane Katrina, the San Bernardino shooting and the Woolsey Fire. We bring our knowledge to the risk and resilience assessments and emergency response planning.

We understand that this project must meet rigid AWWA deadlines, so we are committing our key staff for the duration of the project. Because our team has the strategic approach, project management experience and deep bench, we are proposing to perform all of the RRA and ERP compliance certifications for the 15 Participating Agencies.

We are genuinely excited at the opportunity to partner with you on this important project. Please contact me at (626) 898-4462 or wlim@clarisstrategy.com if you have any questions.

Sincerely,

William Lim President/CEO

1111 Drake RoadTel626.898.4462Arcadia, CA 91007Cell626.437.4365www.clarisstrategy.comEmailwlim@clarisstrategy.com

EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

The Public Water Agencies Group (PWAG) and the Participating Agencies are faced with a challenging task: certify that each Agency has completed a Risk and Resilience Assessment (RRA) and prepare an Emergency Management Plan (ERP) to comply with the America's Water Infrastructure Act of 2018 (AWIA). The deadlines vary depending on the population served as shown in the table below.

Claris Strategy leads a highly-experienced team of top professionals in risk assessment, cybersecurity, emergency planning and J100 resiliency experts comprised of HDR, Terra Firma Enterprises, CPARS Consulting and Launch! Consulting. Our team of nationally-recognized, subject-matter experts are well-versed in the AWIA requirements, are seasoned practitioners in the J100 requirements and have written over 200 emergency plans and annexes.



EXECUTIVE SUMMARY

Our team has the strategic approach, project management experience and deep bench to perform ALL RRA and ERP compliance certifications for the 15 Participating Agencies.

To support PWAG and all 15 of the Participating Agencies, we have structured our team so that our core team will lead our project managers as well as participate in the RRA's and the development of the ERPs.

Each participating agency will be assigned a project manager and group of experts to complete the RRA and the ERP.

Population Served	PWAG Agencies Affected
> 100,000	3
50,000 - 99,999	2
3,300 - 49,999	10



PWAG PARTICIPATING AGENCIES

The 15 Participating Agencies listed below are anticipated to participate in the Phase I Compliance Crosswalk Task. They are grouped based on the Risk and Resilience Assessment schedule:

RRA's to be completed by Mar. 31, 2020 ERP's to be completed by Sep. 30, 2020

- 1. Palmdale Water District
- 2. Three Valleys Municipal Water District
- 3. Walnut Valley Water District

RRA's to be completed by Dec. 31, 2020 ERP's to be completed by Jun. 30, 2021

- 1. Rowland Water District
- 2. Valley County Water District

RRA's to be completed by Jun. 30, 2021 ERP's to be completed by Dec. 30, 2021

- 1. Bellflower Somerset Mutual Water Company
- 2. La Puente Valley County Water District
- 3. Montebello Land & Water Company
- 4. Pico Water District
- 5. Quartz Hill Water District
- 6. Rubio Cañon Land & Water Association
- 7. San Gabriel County Water District
- 8. Sunny Slope Water Company
- 9. South Montebello Irrigation District
- 10. Valencia Heights Water Company

Table 1. Population Served and Project Deadlines

WE CAN SERVE ALL OF THE PROJECT NEEDS WITH OUR BREADTH AND DEPTH OF STAFF

Our proposed project manager, William Lim, will lead the Claris team. William has worked extensively with government organizations at the special district, city, county, state and federal levels and has successfully managed multiple projects simultaneously to achieve tight deadlines within budget. Drawing on his 30 years of experience working on various critical infrastructure projects, he has developed the ability to reach consensus on assessment and planning projects. William is very experienced at presenting complex information in a simple, clear and concise way to city officials and board members.

Supporting William, will be Dean Gipson, of HDR, who will be the Deputy Project Manager. Dean will lead an HDR organization of over 10,000 staff. He is also very familiar with municipal organizations, having worked for 15 years with the City of San Diego' Public Utilities Department and over 30 years with utility agencies. Dean has extensive experience managing multiple projects simultaneously.

Kelly Hubbard, formerly of the Water Emergency Response Organization of Orange County and currently the Director of the Office of Emergency Management for Santa Barbara County, will provide strategic guidance to the team on the RRA and ERP processes on an as-needed basis.

The Claris team has partnered with Linda Warren, PE, of Launch! Consulting, a woman-owned firm that has assisted more than 100 localities and utilities nationwide to improve readiness through risk and resilience assessments, emergency planning, training and organizational change activities. Linda actively developed the AWWA J100 guidance for risk and resilience assessments and the training modules currently available.

OUR PROACTIVE TEAM WILL ANTICIPATE YOUR NEEDS

The Compliance Crosswalk phase is a fast-paced effort that requires timely input from all stakeholders so that the process is defined and ready to use by the first wave of 3 agencies. Our highly collaborative team will engage the Agencies to focus on the outcomes so that, together, we can identify the best tools to efficiently meet the deadlines. To have the Compliance Crosswalk template finalized by October 15th and the Compliance Crosswalks completed before November 15th, 2019, the Claris team proposes:

 Sharing a Document Needs List with Each Agency prior to the kick off meeting.
 Several Agencies have already begun assembling the necessary documents. We have found it helpful to categorize the Document Needs list into the following categories: "must have," 'helpful to have," "good to have if available" so that our team can begin reviewing and extracting essential information immediately.

Applying our proven Program Management Planning (PMP) methodology to this project.

We will use the PMP methodology and tools, integrated with the J100 requirements, to implement this project. Our experience has shown that the initial Program planning is crucial to meeting regulatory deadlines, executing critical path activities, and keeping management and stakeholders informed of progress along the way. We start with a detailed workplan to properly staff each phase and optimize each person's efforts. We also plan adequate time for quality reviews by our team and the Agencies which minimizes changes as milestones approach. We offer our program management skills to assist with Phases 2 and 3 of this project if you choose to engage other consulting teams.

- Assigning a Document Control Coordinator who will categorize and crossreference documents for quick retrieval and to highlight gaps in information. This step is crucial to protect confidential information and will assist when returning documents at the end of the project.
- **Developing a Emergency Response Plan Template** that will assist PWAG to standardize the planning approach, organization and processes for emergency response and recovery for PWAG's member agencies. We will use our experience building 200+ plans and annexes with WEROC, water districts, special districts, cities and counties to assist PWAG to develop an ERP template consistent with the National Incident Command System (NIMS), the Incident Command System (ICS), the Standardized Emergency Management System (SEMS), FEMA's CPG 101, Emergency Response Planning for a Water Utility in California and AWIA Community Water System Emergency Response Plan (July 2019).
- Offering twelve highly-qualified project • managers who have worked with water agencies, allows us to devote our resources to each assigned Agency. Based on the document gathering exercise, we propose to assign project managers to Agencies at similar phases in the effort. That is, if Agencies with a completed and active ERP may be grouped and assigned to project managers who can quickly assess the status and recommend similar approaches. Also, the larger Agencies may be assigned to one project manager each while other project managers may be responsible for two or three Agencies that serve smaller populations. This approach creates efficiencies in completing the work and will save time.

Why Our Team?

- Strategic. We understand the intent of AWIA compliance for PWAG and the Participating Agencies and also PWAG's emergency preparedness vision for the future. Our strategic approach will help move this vision forward.
- Subject-Matter Experts. We are top-notch professionals in infrastructure resilience, physical security, cybersecurity, emergency response and AWIA compliance.
- Knowledgeable. We have an intimate knowledge of security, emergency preparedness and water operations and the dynamic environment water agencies face today.
- Innovative. We not only apply best practices, we use innovative techniques that enhance our solutions.
- Inclusive. We choose to work closely with our clients. We believe that by including as many perspectives as possible, a solution gets stronger.
- Bench Strength. We have an unmatched bench to complete a project of this size and complexity. We offer PWAG and the Participating Agencies a single team to complete the project.
- Local Presence. Most of our team live and work in Southern California. We care deeply about the safety and security of the communities we live in.
- A Great Partner. Our team has proven to be a great partner with our clients. We hope to build a great partnership with you.

COMPANY INFORMATION AND QUALIFICATIONS



3 COMPANY INFORMATION AND QUALIFICATIONS

To successfully deliver the PWAG America's Water Infrastructure Act project, we have formed a team led by Claris Strategy, serving as the prime consultant, and HDR Engineering, Launch! Consulting, CPARS Consulting and Terra Firma Enterprises as subconsultants. Collectively as a team, we bring a depth of experience in the areas of risk and resilence assessments, water utility operations and emergency planning that is exceptional. This team has a deep local knowledge of the risks, hazards and challenges facing water agencies in Southern California during disasters, a strong operational knowledge of the resilience requirements for water agencies and decades of experience developing emergency plans.

Claris Strategy and our partners have worked on multiple projects together, synthesizing our areas of expertise and led by strong management, to deliver successful projects that are on time and on budget.

Through our experience, we have developed an ingrained understanding of the challenges facing Southern California, having helped our clients prepare for, respond to and recover from wildfires, windstorms, floods, earthquakes, terrorist acts and climate change. As importantly, we are all members of this community, and we care deeply about the safety and security of our family, friends and neighbors.



i. CONSULTANT COMPANY INFORMATION

Claris Strategy

VISION

Claris Strategy is a new type of consultancy that is focused on helping organizations better plan and prepare for security incidents and emergencies. Our unique approach in putting together solutions for our clients is changing how organizations look at incidents and disaster preparedness.

We believe that a clear path to success lies in engaging stakeholders both within and outside the organization in the planning and preparation. This **incident management ecosystem** provides an organization with the greatest level of resilience in case of a disaster.

Our goal is to provide world-class service to our clients by clearly identifying the challenges they face and opportunities they have, use the most innovative methods to help them develop a comprehensive plan, and develop the simplest, most efficient way possible to implement the plan.

OUR PROCESS

Organizations are social ecosystems. At their best, organizations and all who participate work toward a common goal. Through a highly collaborative process, our process examines each organization's structure and culture, operating procedures, technology, and workplace environment to gain insight.

Using both quantitative and qualitative tools, we identify the opportunities and challenges that are present. By reductive and inductive analysis, we develop a vision for the future, a Concept of Operations, that combines these multiple perspectives into a cohesive solution. Our goal in our process is to ensure that all organizational needs are addressed so that the solution has the best chance for success.

COMPANY INFORMATION

YEAR ESTABLISHED 2012

CORPORATION TYPE S CORP

COMPANY ADDRESS 1111 Drake Rd., Arcadia, Califor<u>nia 91007</u>

CONTACT PERSON

William Lim, Project Manager E: wlim@clarisstrategy.com T: (626) 898-4462 M: (626) 437-4365

FEDERAL ID 45-3647046

CALIFORNIA-CERTIFIED MBE, DBE & SBE FIRM

OUR SERVICES

- Project management
- Strategic planning
- Emergency planning and disaster preparedness
- Continuity of Operations planning
- Concept of operations (CONOPS)
 development
- Security assessments
- Cybersecurity assessments
- Organizational assessments
- Technology assessments
- Facility assessments
- Training and exercise development
- Design strategy

WHAT MAKES US UNIQUE

- **Innovative**. We not only bring in best practices, we often arrive at original ideas from analyzing the information we collect.
- Inclusive. We choose to work closely with our clients. We believe that by including as many perspectives as possible, a solution gets stronger.
- Holistic. Our brains work both on the left side and the right side. We look at an issue in multiple ways to arrive at a solution.
- **Experienced.** We are top-notch professionals with deep and broad experiences in multiple industries and environments.

OUR TEAM

Claris Strategy has assembled an experienced team of experts in risk, vulnerability assessments, cybersecurity, water utility engineering, America's Water Infrastructure Act regulations, training and emergency planning to assist the Public Water Agency Group on its AWIA Compliance Crosswalks, Risk and Resilience Assessments and Emergency Response Plans project. We have thoughtfully assembled our team based on the objectives for this project: To assist PWAG's water agencies in achieving compliance with America's Water Infrastructure Act.

Our team is led by Claris Strategy as the prime consultant. We are partnered with HDR, a global engineering firm established in 1917 with over 10,000 employees, Terra Firma Enterprises, a woman-owned business specializing in emergency planning, CPARS Consulting, which is expert in training, and Launch! Consulting, a consultancy focused on water and wastewater resiliency. Collectively, our team has helped **over 125 water utilities** nationwide with risk and resilience assessments and emergency planning and training.

Claris and our partners have worked on multiple projects together, synthesizing our areas of expertise and led by strong project management, to deliver successful projects that are on time and on budget.

Our team has completed projects for Valley County Water District, Rowland County, Los Angeles Department of Water and Power, Metropolitan Water District of Southern California, MWDOC/WEROC, Orange County Water District, Irvine Ranch Water District, Moulton Niguel Water District and Mesa Water District.

Claris Strategy

Claris Strategy (Claris), founded in 2012, has dedicated our work to enhancing the safety and security of the nation's critical infrastructure and the communities they serve. Our clients include the nation's largest airports, power utilities, water utilities, gas utilities, cities, counties, federal agencies and transportation authorities. We have worked with government agencies including law enforcement, first responders, emergency operations staff and facilities managers across a wide-range of organizations to help them better prepare, mitigate, respond and recover from incidents and disasters. Our associates have responded to or been activated for many of major disasters locally, nationally and globally including the Woolsey Fire, the San Bernardino shootings, 9/11, Hurricane Katrina, the Indonesian tsunami and the Pakistan earthquakes.

We are a charter member of SoCal Critical Lifelines, a group led by Southern California Edison and FEMA of over forty critical infrastructure organizations founded to build resiliency for the Southern California community. Claris staff members form the leadership of the Los Angeles Emergency Preparedness Foundation, a 501(c)(3) non-profit organization focused on building more disaster-resilient and prepared communities by coordinating emergency efforts between government agencies and businesses, academic institutions, faith-based organizations, non-profits and associations in Southern California.

FSS

HDR, a global architecture, engineering and construction (A/E/C) firm established in 1917, is headquartered in Omaha, Nebraska, and maintains more than 225 offices throughout the U.S. and abroad. We are an employee-owned corporation with more than 10,000 employees. In the state of California, we have over 900+ professional staff —250 of whom specialize in water and wastewater services. For the past 102 years in business, HDR has partnered with clients to push boundaries and shape communities. We deliver smart solutions to your toughest challenges; and we involve you at every step along the way because we know strong partnerships are what makes real progress possible. Having worked with more than 25 of your Participating Agencies, HDR staff is familiar with the policies and protocols that will apply to this project and we are eager to get to work for you.

Claris Strategy Team

Prime Consultant Claris Strategy Arcadia, California

Subconsultants HDR Local Office: Los Angeles, California

Terra Firma Enterprises Ventura, California

CPARS Consulting Monrovia, California

Launch! Consulting Richmond, Virginia



Terra Firma Enterprises (TFE) is a certified Woman-Business Enterprise (WBE) and Small Business Enterprise (SBE) that specializes in providing comprehensive emergency management services to government agencies and all levels of government since 1996. TFE assists clients to be better prepared to respond to and recover from a variety of hazards (natural and man-made) by providing planning, training and exercise services. In addition, TFE can assist clients during a disaster as a subject-matter expert in their EOC or after a disaster to navigate the Public Assistance process to maximum reimbursement capabilities should federal and state funds be made available.



Critical Preparedness and Response Solutions (CPARS) was founded in 2008 to bring quality, expertise, and integrity to the emergency management, homeland security, crisis resolution, and business continuity consulting field. CPARS provides end-to-end, full service support to clients in the public and private sectors and non-governmental organizations. Services provided by CPARS include: emergency management consultation, plan development and revisions, business continuity program solutions, mitigation planning, hazard and risk analysis, infrastructure protection consultation, emergency management training, Incident Command System (ICS) training and consultation and exercise design and evaluation



Launch! Consulting (Launch!) has been at the forefront of securing water and wastewater utilities since 9/11. Launch! is led by Linda Warren, a national risk and resilience expert who is also actively involved with AWWA to train and guide all water agencies to successfully comply with AWIA. Launch!, who is exclusively on our team, has assisted more than 100 utilities nationwide improve readiness through risk and resilience assessments, emergency planning and training, and organizational change activities and is ready to assist you.

EXCEPTIONAL QUALIFICATIONS

Our team members have over 150 years experience working in the area of risk and resilience assessments, emergency management and crisis response and have prepared over 200 emergency plans and annexes. Many of our team have worked as emergency planners and trainers for government agencies, responded to disasters and coordinated operations during emergencies. We have successfully completed numerous risk assessments and emergency planning projects for clients including water agencies, cities and counties, the critical infrastructure industry, the Department of Homeland Security and the U.S. Congress. We are forward thinkers who have won multiple awards for developing innovative ideas that can be practically applied.

Most notably, **Kelly Hubbard** of Claris Strategy will serve as the project advisor. As the founder of the Water Emergency Response Organization of Orange County (WEROC), Kelly is a leader of water agency emergency preparedness for the past fifteen years. She will provide strategic guidance to the team on development of the RRAs and ERPs.

Linda Warren of Launch! Consulting has been at the forefront of securing water and wastewater utilities since 9/11. She led the development of the American Water and Wastewater Association's (AWWA) training curriculum for AWIA compliance, including the J100 process.

Wendy Milligan of Terra Firma Enterprises, who will help develop a strategic approach to developing emergency plans for PWAG's member agencies, was the Assistant Director of the Office of Emergency Services for Ventura County. Through her efforts, Ventura County and the cities within the county have standardized their emergency plans, using a common approach, platform and template.

Steven Gomez of Claris Strategy, who will be leading our threat assessment team, was formerly

A UNIQUE BLEND OF EMERGENCY PLANNING KNOW-HOW, HANDS-ON WATER OPERATIONS EXPERIENCE AND LOCAL HAZARD KNOWLEDGE

a Special Agent-in-Charge for the FBI for counter terrorism in the Southern California region.

Tom LaFreniere of Claris Strategy will be leading the physical security vulnerability assessments. Tom was the former FBI Supervisory Special Agentin-Charge for the Bay Area and has conducted numerous vulnerability assessments including the City of Livermore Water Division, Patterson Irrigation District and Fairfield Water District.

Brent Woodworth of Claris Strategy, who will be the emergency response subject-matter expert, has led efforts in the response and recovery of over 70 disasters in 49 countries, including the Indian Ocean tsunami, the Pakistan earthquakes, Hurricanes Katrina and Sandy, the Oklahoma City bombing, and 9/11. Brent, during his 32 year career at IBM, founded and led IBM's Crisis Response team. He was the Chairman of a Congressional study on the benefits of government investment in pre-disaster mitigation. Brent is considered one of the world's leading experts on crisis management and hazard mitigation.

The majority of our team members, along with our families, work, live and actively participate in the Southern California community. We all care deeply for the safety and security of our family, friends and neighbors in this community and would be honored to work on this project.

²² ii. KEY PERSONNEL AND STAFF



TEAM ORGANIZATION CHART

Our proposed project manager, William Lim, will lead the Claris team. William has worked extensively with government organizations at the special district, city, county, state and federal levels and has successfully managed multiple projects simultaneously to achieve tight deadlines within budget. Drawing on his 30 years of experience working on various critical infrastructure projects, he has developed the ability to reach consensus on assessment and planning projects. William is very experienced at presenting complex information in a simple, clear and concise way to city officials and board members.

Supporting William, will be Dean Gipson, of HDR. Dean is intimately familiar with municipal organizations, having worked for 15 years with the City of San Diego' Public Utilities Department and also has the experience to manage multiple projects simultaneously.

Our discipline leads are a cohesive, highly qualified team of top-notch professionals who will provide innovative solutions based on deep experience in risk assessment, emergency management, physical security, cybersecurity, SCADA, natural hazards, operations and maintenance, drinking water systems, asset management, financial optimization, and workshop process facilitation.

We are flexible and we will adapt to the needs of each Participating Agency based on the level of completeness and detail so that we will support you in meeting the AWIA deadlines. The organizational chart presents our key staff followed by brief descriptions of each person.

On the following pages is a summary of our key personnel. (iii.) Resumes of Key Personnel can be found in the Appendix.

KEY STAFF	AVAILABILITY (%)
William Lim Project Manager	75 %
Steve Gomez Threat Assessment	50 %
Tom Lafreniere Physical Security	50 %
Brent Woodworth ERP Advisor	50 %
Kelly Hubbard Project Advisor	5%
Dean Gipson, PE, JD Deputy Project Manager	75 %
Amy Omae, PE Physical Infrastructure	50 %
Alex Shannon Financial Systems	45 %
Todd Engstrand, PE Operations/Maintenance	50 %
Badri Badriyha, PHD, PE Chemical Operations	50 %
Bruce Johnston SCADA/ICS Controls	50 %
David Brearley Cybersecurity	50%
Ike Eisenhart Cybersecurity	65 %
Wendy Milligan Emergency Resp. Planning	40%
SUPPOI	RT SERVICES

JUFF OKT JLKVICLJ				
Jennifer Duffy, PE	40 %			
Regulatory				
Linda Warren	35 %			
J100 Advisor				
Nick Lowe	35 %			
Compliance Tool Training				

Table 2: Key Staff Availability

ii. KEY PERSONNEL AND STAFF

CLARIS STRATEGY



William Lim **Project Manager**

William has successfully managed and delivered risk assessment and emergency planning projects of similar scope and complexity. William has dedicated the majority of his 30 years in the industry to delivering and managing projects for critical infrastructure organizations. His recent work includes managing projects for Irvine Ranch Water District, Orange County Water District, El Toro Water District, Water Emergency Response Organization of Orange County (WEROC), LA Metro, Orange County Transportation Authority, Los Angeles World Airports, Federal Aviation Administration, Southern California Edison, San Diego Gas and Electric, and the City of Los Angeles. He has managed projects with budgets up to \$20 million and was a key member of the leadership team with project budgets of \$1 billion.



Tom LaFreniere **Physical Security**



Steve Gomez Threat Assessment With over 29 years of security and risk management experience, Steven is a leader in security assessments, counter-terrorism and crisis management, Steven is an acknowledged expert in providing security consulting services for government agencies, private corporations and individuals. His broad experience as a security consultant, as Special Agent in Charge for Counter-Terrorism with the FBI, as a Police Officer for the Los Angeles Police Department and as a Revenue Agent for the Internal Revenue Service provides him with the strategic vision for developing security plans and the tactical understanding for how best to respond to security threats.

Brent Woodworth ERP Advisor

Brent, as a nationally-recognized expert in crisis response, will provide guidance to the team in the development of the emergency response plans. Brent's career spans over 40 years with extensive experience in global risk analysis, crisis management research, business continuity, systems and collaborative partnership development. As the leader and founder of the IBM Crisis Response Team, he has responded to over 70 disasters in 49 countries including the Indian Ocean tsunami, earthquakes in Pakistan, the Rwanda genocide, Indonesian tsunami and civil war, the Ecuadoran volcano eruption, Hurricanes Sandy and Katrina, the Oklahoma City bombing, Midwest floods and 9/11. He will provide invaluable guidance on the realities on the ground during emergencies.

With over 42 years in security, Tom's professional experience as a Combat Engineer for the United States Marine Corps, an investigator for Naval Criminal Investigative Service (NCIS) and a Supervisory Special Agent for the FBI ideally provides him with the experience to identify vulnerabilities and threats to the Participating Agencies' physical infrastructure. For the past 13 years, Tom has conducted over 50 physical security assessments across a wide range of industries including the Livermore Water Resources Division, Patterson Irrigation District, Fairfield Water District, Contra Costa Wastewater District, transportation systems, cities, factories, school facilities and office buildings.





Kelly Hubbard Project Advisor

HDR



Dean Gipson, PE Deputy Project Manager



Amy Omae, PE Physical Infrastructure Kelly, who is the Director of the Office of Emergency Management for Santa Barbara County, has nearly two decades of experience in emergency planning, assessing facility vulnerabilities, disaster finance, coordination with nonprofit organizations, public-private partnerships and crisis management. For the past 15 years, she served as emergency director at the Municipal Water District of Orange County (MWDOC), a Metropolitan Water District member. In her capacity as emergency director, Kelly managed the Water Emergency Response Organization of Orange County (WEROC) which oversees emergency preparedness, planning, response and recovery efforts for 37 water and wastewater utilities in Orange County.

Dean has built his 32-year career improving aging utilities, managing water supplies and achieving regulatory compliance. His career began with the City of San Diego where he managed the design and construction of water reclamation facilities and played an integral role in negotiating and implementing the City's consent decree with the EPA. Dean worked side by side with operations and technical staff to build consensus and meet deadlines. Since leaving the City in 2005, Dean had continued to work with utilities on finding affordable solutions to maintain infrastructure and meet Federal regulations. He maintains a keen understanding of public sector utility operations which helps him and the utilities he works with to gain the confidence of the management and rate payers.

Amy is a proven project manager with extensive experience in water and wastewater master planning design and engineering services during construction projects throughout Southern California. Her expertise is in the design of treatment plant processes pipeline profiles and layouts mechanical pumping systems pilot testing and research alternative technology evaluations mass balance and financial model development sample collection data analysis for technically based local limits quality assurance and field engineering services during construction. Amy has worked closely with Irvine Ranch Water District throughout her tenure with HDR and is currently leading the District's Recycled Water Salt Management Plan. Her dedication to delivering quality projects has made her one IRWD's most trusted project managers.



Alex Shannon Financial Systems Alex is an economist/business analyst working in HDR's Economic Modeling Practice within the Water Business Group. He brings a creative and analytical approach to complex scenarios, allowing clients to improve their strategic planning and business performance by using data to make informed strategic decisions. Alex approaches each issue with an economic mindset, encouraging clients to operate in a way that maximizes efficiency. He creates complex financial and economic models to help organizations and utilities make meaningful decisions, manage complexity, and develop program implementation strategies within the context of affordability. Alex has experience developing custom cash-flow, pricing, rate, and concession models, and has worked on models that marry capital, maintenance, and operations to explore various asset management strategies.
HDR



Todd Engstrand, PE Operations / Maintenance

Todd joined the HDR team as a Senior Project Manager from the Yuima Municipal Water District where over the past six years he served as the Director of Operations, Maintenance, and Engineering running the day to day operations of the water system, scheduling and supervising the facilities maintenance, and planning, design, quality control, environmental document review, bidding and construction management of the Capital Improvement Program as the District's Engineer. For the 13 years prior to the Water District, he served as a Senior Project Manager for a large national engineering firm and specialized in leading consultant teams in the planning, design, quality control program reviews and construction support services of water and wastewater facilities for numerous agencies throughout the Southwest.



Badri Badriyha, PHD, PE Chemical Operations

Badri Badriyha has designed wastewater treatment facilities, sludge handling, pump stations, water and wastewater pipelines and sewer systems for agencies throughout Southern California. He has vast experience assessing and designing wastewater treatment processes, biological treatment, sludge thickening and dewatering, and chemical addition and disinfection. He has significant experience in design of odor control systems, as well as odor collection and transport systems. He is an expert in hydraulic assessment for pipelines, treatment facilities and pump stations. He is NASSCO-PACP certified and an expert in condition assessment and inspection of wastewater pipelines, pump stations, treatment facilities, sewer outfalls, large diameter pipelines utilizing CCTV, non-invasive and advanced assessment techniques.



Bruce Johnston SCADA / ICS Controls

Bruce has 30 years of experience in control systems, information technology/systems, data management, instrumentation and control, and electrical design for projects that include municipal water/wastewater facilities and industrial control systems. His experience includes planning, design and implementation of a variety of innovative treatment processes at municipal, private, and industrial sites. He has also worked to develop several SCADA and IT master plans for utilities. His key areas of expertise include: project management, cost estimating, information technology planning, I&C design, supervisory control and data acquisition (SCADA) programming, applications development, data management, network security, quality assurance/quality control (QA/QC) review of I&C and electrical designs, and small-project electrical design and support.



Jennifer Duffy, PE Regulatory

Jennifer has 37 years of civil and environmental engineering experience including an impressive background in water and recycled water master planning and design sewer master planning and alignment studies sewer pipeline and pump station design environmental permitting water supply analysis and hydrologic studies. She has completed water supply assessments urban water management plans and master planning studies for numerous water districts throughout the region. Having worked in Southern California for the majority of her career she has a thorough understanding of the local water supply resources and imported delivery systems and the related risks associated with each.

TERRA FIRMA ENTERPRISES



Wendy Milligan Emergency Response Planning

CPARS CONSULTING



Nick Lowe Compliance Tool Training

LAUNCH! CONSULTING



Ike Eisenhart Cybersecurity

Wendy has worked in the field of Emergency Management since 1988 with eight of those years as the Assistant Director of Ventura County Sheriff's Office of Emergency Services, developing response plans, creating a nationally recognized community disaster training program, and coordinating the response to six presidential disasters. Wendy has written over 60 comprehensive Emergency Response and Hazard Mitigation plans ranging from small jurisdictions to large counties and has designed and implemented over 60 exercises varying from specific drills to full-scale weapons of mass destruction exercises consistent with the Homeland Security Exercise Evaluation Program (HSEEP) and has trained thousands of professionals learning more about emergency management, SEMS, NIMS and HSEEP.

Nick Lowe is a recognized emergency management and homeland security expert with over 15 years of experience supporting efforts at the federal, state, and local levels. As national expert on NIMS, ICS and SEMS training and exercise facilitation, Nick has conducted over 250 trainings and exercises for public agencies and private corporations throughout California. From 2010 - 2014, he was the Southern Region Training and Exercise Program Lead for the State of California Office of Emergency Services. Nick has led dozens of significant emergency preparedness efforts in Southern California, including the annual emergency preparedness exercises for the City of Los Angeles, the policy exercises for the County of Los Angeles, and the emergency preparedness efforts for the Port of Long Beach.

Ike has extensive experience developing and implementing vulnerability assessments, cyber assessments, and emergency plans for water systems and U.S. military bases. His knowledge includes state and federal security and emergency management planning and requirements, including emergency operational command and explosive recognition. As a previous Director of Training, Security, Outreach, and Emergency Preparedness with Virginia Department of Health (VDH), Office of Drinking Water (ODW), Ike was a resource for security and emergency planning at all water systems in Virginia. He also led the Utility Cybersecurity Initiative for VDH. Ike serves on the Working Group for the Water Sector Coordination Council to develop the "Roadmap to a Secure and Resilient Water and Wastewater Sector."



Linda Warren J100 Advisor

As the Principal of Launch! Consulting, Linda has been at the forefront of securing water and wastewater utilities since 9/11, before which she focused on source water protection. She brings extensive experience and knowledge in security and emergency planning from assisting more than 100 localities and utilities nationwide to improve readiness through risk and RRAs, emergency planning, training, and organizational change activities. She is an experienced trainer of resilience in the water sector, and the assistant chair of the AWWA Security and Emergency Preparedness Committee. Linda recently led a team of consultants to develop the AWWA trainings for the AWIA in only three months. Linda is also an Adjunct Instructor of MGT 343 Disaster Management for Water and Wastewater Utilities, a FEMA-sponsored course through Texas A&M University.

PROJECT TEAM MATRIX

Role	Team Members		
Overall Project Leadership	William Lim, Project Manager, Claris Dean Gipson, Deputy Project Manager, HDR Kelly Hubbard, Project Advisor, Claris		
Participating Agency Project Management	Julie Quinn, Claris Zita Gottlieb, Claris John Christopher, HDR Janelle Moyer, HDR	Eric Scherch, HDR Michael Flores, HDR Mandira Sudame, HDR	Alice Wang, HDR Curtis Gauthier, HDR Jon Paz, HDR
Physical Security Assessment	Tom LaFreniere, Claris (Lead) Edward Freyer	Kyle Jones	Kevin Johnson
Cybersecurity Assessment	Ike Eisenhart, Launch! Consulting (Lead)	Bruce Johnston, HDR	David Brearley, HDR
Threat Assessment	Steven Gomez, Claris (Lead) Lisa Garcia, Claris	Matthew Kelly, Claris Todd Anderson, Claris	Ty Labbé, Claris Lisa Gonzalez, Claris
Physical Infrastructure Assessment	Amy Omae, HDR (Lead) Ed Griffenberg, HDR	Aria Heraypur, HDR Sean Hoss, HDR	Rick Viehl, HDR
Operations/ Maintenance Assessment	Todd Engstrand, HDR (Lead) Gregoria Estrada, HDR	Chandrikaa Belendran, HDR Brien Clark, HDR	
Finance Systems Assessment	Alex Shannon, HDR (Lead)	Shawn Koorn, HDR	Josiah Close, HDR
Chemical Operations Assessment	Badri Badriyha, HDR (Lead)		
Emergency Response Planning	Wendy Milligan, Terra Firma (Lead) Brent Woodworth, Claris (Advisor)	Katherine Williams, Claris Fay Glass, Claris Alix Stayton, Claris	Scott Norwood, Claris Nick Lowe, CPARS Consulting
Support Services			
Compliance Tool Trainer	Nick Lowe, CPARS Consulting (Lead)	Alix Stayton, Claris	
J100 Advisor	Linda Warren, Launch! Consulting		
Regulatory Advisor	Jennifer Duffy, HDR		

Table 3. Project Team Matrix

iv. PROJECT EXPERIENCE EXPERIENCE WITH SPECIFIC SERVICE TYPES

1. Water System Vulnerability Assessments

As shown on the figure below, the Claris team has provided more than 40 Vulnerability Assessments for post-9/11 water and wastewater systems all across the country plus dozens of assessments using J100 Methodology. Together, our key staff offers decades of experience in vulnerability, risk and resilience, emergency response, training, and facilitation and project management.

2. Emergency Response Plans

The Claris team has experience completing ERPs for: Valley County Water District, Irvine Ranch Water District, Orange County Water District, El Toro Water District, the City of Beverly Hills Public Works, Seattle Public Utilities, King County, and other agencies across the country.

We understand the practical needs of utilities and how to help busy staff set and achieve their resilience goals, including emergency planning as a follow-up to RRAs.



Figure 1. Claris Team's Experience Map

SAMPLE RELEVANT PROJECTS

The following is an overview of our past projects directly related to the PWAG project. We have highlighted relevant elements to offer a quick snapshot of how our expertise can be applied to the 2019 RRAs and ERPs.

Table 4. Relevant Projects Table						
Project / Owner	RRA/VA Using J100	ERP/Preparedness + Recovery	Risk Assessment, Mitigation, & Prioritization	RRA/ERP/ WMD Training	Water / Wastewater	Year Completed
Valley County Water District, ERP, Baldwin Park, CA		٠	۵		W	2018
Irvine Ranch Water District, Risk Assessment & ERP, Irvine, CA		٠	٠	٠	W/WW	Ongoing
Orange County Water District, Risk Assessment & ERP. Fountain Valley, CA		۲	۲	٠	W/WW	Ongoing
El Toro Water District, Risk Assessment & ERP. Lake Forest, CA	٠ ٠		٠	٠	W/WW	Ongoing
City of Beverly Hills Public Works, Risk Assessment & ERP, Beverly Hills, CA		٠	٠		W/WW	Ongoing
Irvine Ranch Water District, Water Reliability Study. Irvine, CA	•	•		•	W/WW	2017
City of Ventura Water Department, Risk Assessment & ERP, Ventura, CA		٠	٠		W/WW	2013
California Department of Water Resources Oroville Dam Response, Butte County, CA		٠	٠		W	2017
Vulnerability Assessments and Emergency Response Plans, Charlottesville, VA	٠	٠	٠	٠	W/WW	2017
Anchorage Water & Wastewater Utility, Water & Wastewater Risk & Resilience Assessment, Anchorage, AK	٠		•		W/WW	2019
King County Master Plan for Resiliency and Recovery of Wastewater Treatment Facilities, Seattle, WA		٠	٠		WW	2018
Municipal Water District of Orange County, EOC Assessment & Program / Concept Design, Fountain Valley, CA		•	٠		W	2016
AWWA AWIA Trainings for Risk and Resilience Certificate Program				۵	W/WW	2019
Rivanna Water and Sewer Authority, VAs and ERPs, Rivanna, VA	•	•	•	•	W/WW	2017
University of Virginia, VAs and ERPs. Charlottesville, VA	٠	٠	٠	٠	W/WW	2017
Albemarle County Service Authority, VAs and ERP, VA	٠	•	٠	٠	W/WW	2017
COOP, Emergency Response Plan, Crisis Communications Plan, Training Broward County. FL	٠	٠	٠		W/WW	2016
Water Supply Resiliency Program Management, Central Puget Sound Water Forum, WA			٠		W	2016
Department of Public Utilities Active Assailant Training, Richmond, VA				٠	W/WW	2017
Seminole County Environmental Services Department RRA and ERP, Sanford, FL	٠	٠	٠	٠	W/WW	2019
Seattle Public Utilities Comprehensive ERP, Seattle, WA		٠			W/WW	2018
LA Metro Threat & Vulnerability Assessment for Union Station, Los Angeles, CA			٠		TRANS	2019
Orange County Transportation Authority, Cybersecurity Industrial Control System Assessment, Orange, CA			٠		TRANS	2018

v. REFERENCE PROJECTS

We have provided project profiles that describe our team's most relevant and successful current and past experience with regard to risk and resilience assessments and emergency response planning for AWIA compliance.

These projects include:

- 1. Irvine Ranch Water District Risk Assessment & Emergency Response Plan, Irvine, California
- 2. Orange County Water District Risk Assessment & Emergency Response Plan, Fountain Valley, California
- 3. Municipal Water District of Orange County / Water Response Organization of Orange County EOC Assessment, EOC Program and Concept Design, Fountain Valley, California
- 4. Irvine Ranch Water District Water Reliability Study, Irvine California
- 5. City of Charlottesville Vulnerability Assessments and Emergency Response Plans, Charlottesville, Virginia
- 6. King County Master Plan for Resiliency & Recovery of Wastewater Treatment Facilities, Seattle, Washington
- 7. Anchorage Water and Wastewater Utility, Water and Wastewater Risk and Resiliency Assessment, Anchorage, Alaska
- 8. City of Beverly Hills Public Works Emergency Management Services, Beverly Hills, California
- 9. Ventura County Emergency Operations Plan Update
- 10. LA Metro's Threat and Vulnerability Assessment for Union Station and the Gateway Building, Los Angeles, CA
- Orange County Transportation Authority Cybersecurity Industrial Control System Assessment, Orange, CA
- 12. Southern California Edison Business Resiliency Plan and Emergency Concept of Operation, Rosemead, CA

IRVINE RANCH WATER DISTRICT RISK ASSESSMENT & EMERGENCY RESPONSE PLAN

IRVINE, CALIFORNIA CLARIS STRATEGY & CPARS CONSULTING





ESTIMATED / ACTUAL COST \$185,000 / \$185,000

ESTIMATED / ACTUAL COMPLETION DATES Ongoing

REFERENCE CONTACT INFORMATION

Emilyn B. Zuniga, District Safety Manager T: (949) 453-5785 E: Zuniga@irwd.com Claris Strategy was selected by Irvine Ranch Water District (IRWD) in April 2017 as a prime consultant to rewrite its emergency response plan (ERP), to train staff to the plan and to conduct a tabletop exercise. IRWD is the second largest retail supplier of potable water in Southern California, supplying water to over 500,000 customers in Orange County. IRWD is also the innovator for developing the processes of recycling water for reuse. As a key part of critical infrastructure in Southern California, it is important for the District to respond to and recover from emergencies quickly, while also continuing to maintain its operations.

The Claris team, led by William Lim as project manager, Brent Woodworth as emergency response SME and Nick Lowe as exercise developer, reviewed all of IRWD's existing plans, interviewed over 40 staff and visited its key facilities as part of its information collection process. Our team then developed an ERP customized to IRWD's operations, using the fundamentals of the Incident Command System, NIMS, and California's Standardized Emergency System as the foundation of the plan. The ERP was also closely aligned with the Water Emergency Response Organization of Orange County's (WEROC) approach to water emergency response. An organization chart and position checklists were developed for all positions in the Policy Group, Emergency Operations Team and the Incident Response Teams in the field.

The team then trained over 90 staff members on the plan and conducted a tabletop exercise. We are currently in the process of training field staff on how to interact with fire agencies during wildfires using ICS 300 and Agency representative instruction and are developing 10 specific hazard response plans for the District to respond to emergencies including plans for earthquakes, power outages and floods.

Our work continues with IRWD with an EOC assessment, continuity of operations plan, hazard mitigation plan and additional training and exercises.

2 ORANGE COUNTY WATER DISTRICT RISK ASSESSMENT & EMERGENCY RESPONSE PLAN

FOUNTAIN VALLEY, CALIFORNIA CLARIS STRATEGY







Claris Strategy is currently completing an Emergency Response Plan for Orange County Water District (OCWD). OCWD is the caretaker of one of the largest coastal freshwater basins in Southern California, the Orange County Groundwater Basin. Managed properly, the basin provides potable water for 2.4 million people in the north and central parts of Orange County. OCWD has also one of the most advanced groundwater replenishment systems in the world, the Groundwater Replenishment System located in Fountain Valley, California. GWRS purifies wastewater from Orange County Sanitation District that is then added to the groundwater basin. As the steward of a critical, local water source for the region, it is important for OCWD to respond and recover efficiently from disasters to ensure the sustainability of water resources for Orange County.

The Claris Strategy team worked closely with OCWD staff to develop an ERP built on the principles of NIMS, ICS and SEMS and also customized to the operational requirements of OCWD. Our innovative approach to ERP planning allows OCWD staff to quickly transition into emergency response positions from their day-to-day roles.

Our team provided training to over 60 staff members and then conducted an extended power outage exercise for over 45 staff. Through the exercise, OCWD staff identified multiple gaps including the areas of emergency backup generation, information technology/SCADA requirements, communication equipment and crisis communications. Corrective action plans were developed to close the gaps.

ESTIMATED / ACTUAL COST \$65,000 / \$65,000

ESTIMATED / ACTUAL COMPLETION DATES Ongoing

REFERENCE CONTACT INFORMATION

Paula Bouyounes, Risk & Safety Manager T: (714) 378-3310 E: Pbouyounes@ocwd.com

B MWDOC/WATER EMERGENCY RESPONSE ORGANIZATION OF ORANGE COUNTY EOC ASSESSMENT, EOC PROGRAM AND CONCEPT DESIGN

FOUNTAIN VALLEY, CALIFORNIA CLARIS STRATEGY



		CRITERIA RANKING PER SITE			
EVALUATION CRITERIA	WEIGHT	SOUTH EOC	MWDOC ADMIN.	NORTH EOC	
1. Hazards/Risks	3	3	1	2	
	Score	9		6	
2. Seismic Reinforcement	3	1	2	3	
	Score	3			
3. Life Safety	3	2	3	1	
	Score	6			
4. Dedicated EOC	3	3	1	3	
	Score	9			
5. Space Functionality and Future	3	3	1	2	
Configurability	Score	9			
6. Infrastructure	3	2	2	2	
	Score	6		6	
7. EOC Expenses	3	3	1	2	
	Score	9			
8. Accessibility	2	2	3	1	
	Score	4		2	
9. Security	2	2	3	1	
	Score	4			

ESTIMATED / ACTUAL COST \$35,000 / \$35,000

ESTIMATED / ACTUAL COMPLETION DATES

October 2016 / November 2016

REFERENCE CONTACT INFORMATION

Kelly Hubbard,

Formerly Director of Emergency Management Programs Currently Director of the Office of Emergency Management Santa Barbara County T: (714) 715-0283 Claris Strategy was engaged by the Municipal Water District of Orange County (MWDOC) to to evaluate its current Water Emergency Response Organization of Orange County (WEROC) EOC facilities. WEROC's critical role in supporting and managing countywide emergency preparedness, planning, response, and recovery efforts for 35 of Orange County's water and wastewater utilities requires that its EOC be a dedicated, well-equipped and optimized facility.

Our team made recommendations for the optimum number of facilities (primary and alternate), and the types and locations necessary to meet the purpose of WEROC's program. This assessment was intended to provide staff with the justification for changes and improvements to the EOC facilities that may be needed in the future.

The Claris team assessed three potential locations using a set of evaluation criteria including hazards and risks, seismic reinforcement, space functionality, expenses and life safety/security. Working closely with WEROC staff, we scored the evaluation criteria to develop recommendations on the primary EOC and an alternate EOC locations.

We also provided recommendations on potential improvements including:

- Furniture and equipment upgrades
- Workspace improvements
- Structural enhancements
- Life safety modifications
- Building infrastructure improvements

Subsequent to this assessment, Claris assisted MWDOC/ WEROC in developing a space program and conceptual layout for the selected primary EOC facility.

Using our extensive experience designing EOCs for other critical infrastructure organizations, our team prepared two programs, one with an ideal number of rooms and square footages and a second with a minimum number of rooms and square footages. A floor plan layout was developed for each space program using current best practices for EOC design. 4

IRVINE RANCH WATER DISTRICT WATER RELIABILITY STUDY

IRVINE, CALIFORNIA HDR





Irvine Ranch Water District took a diligent approach to developing a reliable and resilient water supply system to serve its growing community. With forethought and planning, the district identified a variety of drought and emergency scenarios that could threaten the district's ability to deliver water to its customers and subsequently put into place a prioritized portfolio of sound and cost-effective responses.

The Water Reliability Study focused on the district's ability to maintain a minimum level of service under various emergency scenarios. Because the potential for emergency conditions to be more severe than historic data could predict the district reassessed its definition of risk and level of service expectations, and developed improved and robust mitigation strategies.

HDR provided modeling and evaluation of local and imported water supply reliability under a variety of emergency scenarios, based on a rigorous and transparent probability of risk analysis. Recent climate change research and projected reliability of imported water resources were incorporated into the

Analysis. The analysis provided sufficient documentation to justify future operational and capital water reliability improvements, and investments, from both a local and regional perspective.

ESTIMATED / ACTUAL COST \$608,000 / \$608,000

ESTIMATED / ACTUAL COMPLETION DATES March 2017 / March 2017

REFERENCE CONTACT INFORMATION

Irvine Ranch Water District: Fiona Sanchez, Director of Water Resources E: Sanchezf@irwd.com T: (949) 453-5325

CITY OF CHARLOTTESVILLE VULNERABILITY ASSESSMENTS & EMERGENCY RESPONSE PLANS

CHARLOTTESVILLE, VIRGINIA HDR



CLIENTS INCLUDE

- City of Charlottesville, VA
- Rivanna Water and Sewer Authority, VA
- University of Virginia, VA
- Albermarle County Service Authority, VA

The Charlottesville area utilities and University of Virginia chose to develop their [100 VAs in a coordinated series of projects, each with individual contracts with Launch!. The PARRE tool and Excel spreadsheets were used to capture information and calculate risk. The Launch! team used its proprietary field forms and critical asset summary sheets to capture information in a clearly understood format for the VA report. The Launch! team collected data through a series of facilitated workshops, interviews, and on-site field assessments. The team then compiled data, reviewed them with each client, and drafted the VA report that included recommended mitigation measures and an implementation plan. The initial workshops were shared by all participants and included representatives from the Federal Bureau of Investigation (FBI), state agencies, and local agencies. The CEMP was then developed together for all the utilities in a series of workshops attended by all four organizations working together alongside Local Emergency Planning Committee (LEPC) members. The projects culminated in an exercise attended by more than 40 people from all of the participating organizations. Even after completion of these projects, each organization has continued coordination through ESF meetings set in motion by the Launch! team.

ESTIMATED / ACTUAL COST Value varies by agency.

ESTIMATED / ACTUAL COMPLETION DATES 2017 / 2017

REFERENCE CONTACT INFORMATION

University of Virginia, Charlottesville Mark Roach, Associate Director for Utility Systems E: msr3w@virginia.edu T: (434) 243-1704

KING COUNTY MASTER PLAN FOR RESILIENCY & RECOVERY OF WASTEWATER TREATMENT FACILITIES

SEATTLE, WASHINGTON HDR



HDR led a natural hazards risk assessment of King County's WTD facilities, comprising of three WWTPs, 391 miles of sewer line, 47 pump stations, 25 regulator stations, 39 CSOs, and system-wide SCADA. The purpose of the study and planning project was to provide a comprehensive strategy to prepare WTD's conveyance and treatment facilities for the impacts of a major tsunami, flood, landslide, extreme weather, or earthquake event. The team developed GIS modeling of hazard scenarios and performed desktop and field assessments to identify vulnerabilities and probabilities of failure. HDR worked closely with the County to validate findings and determine system criticality and consequence-offailure ratings for the risk assessments. In a value-engineering style rapid design workshop, the team developed more than 50 near- and long-term conceptual capital and programmatic solutions and the associated conceptual costs to minimize risk. HDR provided ranking criteria and guidance to help the County prioritize the recommendations according to WTD's funding and risk-management parameters for both near- and long-term improvements.

ESTIMATED / ACTUAL COST

\$1,074,861 / \$1,257,985 Reason: increase was for an amendment after their major treatment plant flooded; addition of flooding as a hazard.

ESTIMATED / ACTUAL COMPLETION DATES 2018 / 2018

REFERENCE CONTACT INFORMATION

Sonia-Lynn Abenojar E: Sonia-Lynn.Abenojar@kingcounty.gov T: 206.477.4524

ANCHORAGE WATER AND WASTEWATER UTILITY, WATER AND WASTEWATER RRA

ANCHORAGE, ALASKA HDR



HDR is currently completing a RRA for the Anchorage Water and Wastewater Utility (AWWU) in Anchorage, Alaska. HDR completed the last assessment in 2013, which was then known as a Vulnerability Assessment (VA). In order make efficient use of the 2013 data, HDR's team first completed a gap analysis of AWWU's 2013 VA; and the then state-of-the-art methodology known as RAM-W; versus the American National Standard Institute/American Water Works Association (ANSI/AWWA) J100-10 Standard (referred to as J100).

Typically, the HDR team develops the RRA through a series of six workshops with utility staff. However, the gap analysis has resulted in a four-workshop approach that meets statutory requirements while recognizing that AWWU's 2013 VA provides considerable useful, translatable information. HDR and our subcontractor, Launch!, are currently working to complete the RRA in 2019.

Launch! reviewed the VA report and developed the gap analysis memo to compare the original RAM-W methodology to the new J100 standards and describe how AWWU could best update the assessment to meet the new requirements.

ESTIMATED / ACTUAL COST

\$230,000 / Not Applicable

ESTIMATED / ACTUAL COMPLETION DATES Dec. 2019 / Not Applicable

REFERENCE CONTACT INFORMATION

Mark Schimscheimer, PE, PMP E: Mark.Schimscheimer@awwu.biz T: 907-786-5695

CITY OF BEVERLY HILLS PUBLIC WORKS EMERGENCY MANAGEMENT SERVICES

BEVERLY HILLS, CALIFORNIA TERRA FIRMA ENTERPRISES



Terra Firma serves as the City Public Works contracted Emergency Services Coordinator. Terra Firma provide 10 hours of emergency services per week to the City's Public Works emergency management program developing and updating plans (Public Works Emergency Operations Plan, Greystone Reservoir Emergency Action Plan, Water Main Break Plans, Department Operations Center (DOC) SOPs, and a Mass Debris Management Plan), providing DOC staff with specific position training and assisting and developing emergency exercises that challenge Public Works staff. The Mass Debris Management Plan, in particular, was a challenging project due to the limited amount of open space in a densely developed community. Most recently, Terra Firma provided expertise on an Oil Well Control Response Plan..

ESTIMATED / ACTUAL COST \$50,000 / \$50,000

ESTIMATED / ACTUAL COMPLETION DATES ONGOING

REFERENCE CONTACT INFORMATION

Michael Hensley, Senior Management Analyst T: (310) 285-2470 E: mhensley@beverlyhills.org

VENTURA COUNTY SHERIFF'S OFFICE OF EMERGENCY SERVICES EMERGENCY OPERATIONS PLAN UPDATE

VENTURA COUNTY AND SIX CITIES IN VENTURA COUNTY TERRA FIRMA ENTERPRISES



Terra Firma provided technical assistance to the County of Ventura and six cities, Moorpark, Ventura, Ojai, Santa Paula and Thousand Oaks, to update their Emergency Operations Plans (EOP) and operational checklists to comply with the Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS) and follow the guidance as set forth in the U.S. Department of Homeland Security's (DHS) Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide (CPG) 101.

Terra Firma developed a standard for the emergency plans for the cities in Ventura County and aligned with the County's Emergency Operations Plan. The update process incorporated a series of stakeholder meetings/workshops to identify planning gaps, goals, objectives and identify courses of action.

ESTIMATED / ACTUAL COST \$93,750 / \$93,750

ESTIMATED / ACTUAL COMPLETION DATES 2013 / 2013

REFERENCE CONTACT INFORMATION

Dale Carnahan Formerly Ventura County Assistant Director of Office of Emergency Services Currently Lake County Director of Emergency Services T: (707) 263-3450 E: dale.carnathan@lakecountyca.gov

10 LA METRO THREAT AND VULNERABILITY ASSESSMENT FOR UNION STATION AND THE GATEWAY BUILDING

LOS ANGELES, CALIFORNIA CLARIS STRATEGY & HDR





ESTIMATED / ACTUAL COST \$500,000 / \$500,000

ESTIMATED / ACTUAL COMPLETION DATES January 2019 / February 2019

REFERENCE CONTACT INFORMATION

Susan Walker, Director, Physical Security T: (213) 922-7464 E: WalkerSu@metro.net Claris Strategy, as the prime consultant, has been working with LA Metro for the past three years on multiple projects. We have helped Metro evaluate its emergency and COOP plans, develop COOP strategies for its rail and bus divisions and conceive and design a consolidated operations center for emergency, security, rail and bus operations (ESOC building).

In the most recently completed project, Claris Strategy led a team of 15 consultants assessing the threats and vulnerabilities of the iconic Union Station and LA Metro's Gateway headquarters building. Union Station, one of the most important transportation hubs in the nation, is a major target for man-made threats and, specifically, terrorist attack. Since 9/11, the hazards and threats to Union Station have grown in complexity and frequency. At the same time, the homeless population of Los Angeles has surged, exacerbating the city's public transportation security concerns. Conducting a threat and vulnerability assessment is critical to evaluating the risks and developing the mitigation measures and enhancements necessary to ensure the safety and security of passengers, visitors and employees.

The security of Union Station and the Gateway Building presents a unique challenge. The environment is a microcosm of Los Angeles, continuing to grow and evolve as the city changes around it. The character and charm of Historic Union Station attract tourists. As a community gathering place, the site also provides a breathtaking backdrop for the local population. Union Station is used daily by thousands of commuters traveling to downtown Los Angeles by bus, rail, motorized vehicle, bicycle and on foot. It is also a place of work for hundreds of employees in a variety of businesses.

The team conducted a site assessment identifying vulnerabilities in security; assessed the threats, including multiple types of terrorist attack, criminal behavior and the homeless issue; interviewed over 50 stakeholders including multiple bus agencies, Metrolink and Amtrak; developed a risk profile; made recommendations in a final report; and presented to Metro senior executives and security staff.

11 ORANGE COUNTY TRANSPORTATION AUTHORITY CYBERSECURITY INDUSTRIAL CONTROL SYSTEM ASSESSMENT

ORANGE, CALIFORNA CLARIS STRATEGY





ESTIMATED / ACTUAL COST \$300,000 / \$300,000

ESTIMATED / ACTUAL COMPLETION DATES June 2018 / June 2018

REFERENCE CONTACT INFORMATION

Samantha Robert, IS Project Manager T: (714) 560-5093 E: srobert@octa.net Claris Strategy, as a subconsultant to a larger team, was selected by Orange County Transportation Authority in March 2017 to perform a cutting-edge study to assess the cyber security of OCTA's industrial control systems and related networks. As a critical hub, the security of OCTA's operations is essential to Orange County's transportation system.

Our team is charged to identify, document and assess the vulnerabilities of cyber attack on its industrial control systems including its buses, facilities (bus operation centers operation bases, network centers, server rooms), security equipment (CCTV, access control, intrusion detection), bus fueling systems (CNG, LNG and diesel) and communications systems (radios, microwaves, network, towers). As a result of this assessment, we will make recommendations on mitigation measures, improvements to OCTA's response plans including their Cyber Incident, Continuity of Operations, Emergency Operations and Crisis Communications Response plans and provide a framework for managing and maintaining current and future ICS equipment, systems and vendors to minimize the cyber attack risk.

Claris' role on the project is to provide local project management, coordinate client communication and offer our expertise on security operations, emergency operations, and transportation operations. Additionally, one of our responsibilities is to ensure the mitigation measures are compliant to the Department of Homeland Security's National Response Goals. Our final task is to engage all key stakeholders in a cyber attack table top exercise.

The goal of this seminal project for OCTA and the project team is to provide a foundation for vulnerability assessments and mitigation measures against cyber attacks on industrial control systems at critical infrastructure important to the national interest.

12 SOUTHERN CALIFORNIA EDISON BUSINESS RESILIENCY STRATEGY AND EMERGENCY CONCEPT OF OPERATION

ROSEMEAD, CALIFORNIA CLARIS STRATEGY



EMERGENCY OPERATING STRUCTURE



ESTIMATED / ACTUAL COST

\$200,000 / \$200,000

ESTIMATED / ACTUAL COMPLETION DATES 2013 / 2013

REFERENCE CONTACT INFORMATION

David Bartholomew, formerly SCE Manager Currently AVP, Vendor Performance, City National Bank T: (714) 559-1549 E: dave.bartholomew@cnb.com Claris Strategy was engaged by Southern California Edison to help them better prepare and recover from major emergencies that would disrupt its mission of delivering power to its customers. Faced with the challenge of the lack of coordination across departments during emergencies, the project team helped SCE develop a business resiliency strategy and emergency concept of operations that broke down barriers, centralized information and coordination so leadership could have a common operating picture and make better and faster decisions.

Working closely with the SCE project team, we developed a concept of operations for how the new emergency operations would function. This study:

- Identified the needs of the overall business and the key stakeholders
- Assessed current organizational, process, technology and facility capabilities
- Developed a centralized organization for emergency response and recovery
- Defined specific roles for executive staff (CMC), EOC staff (IMT) and responders in the field
- Mapped critical information sources and communication flows
- Defined new operational processes based ICS principles and structures
- Identified new technologies

As one of the key outcomes, Claris Strategy helped guide the design of SCE's first dedicated Emergency Operations Center, incorporating ICS concepts into its floor plan and operations. Redundant power, HVAC, water, communication channels and networking were built into the facility. This EOC has significantly improved how SCE communicates and coordinates in response to emergencies.

SELECTED CLIENTS

Valley County Water District Rowland Water District Metropolitan Water District of Southern California Los Angeles Department of Water and Power Orange County Water District Municipal Water District of Orange County Water Emergency Response Organization of Orange County Irvine Ranch Water District El Toro Water District San Joaquin Valley Irrigation District Patterson Irrigation District California Department of Water Resources Anchorage Water and Wastewater Utility King County Water Treatment Districts American Water and Wastewater Association County of Los Angeles County of Orange County of Ventura County of San Bernardino County of Alameda County of Sonoma City of Fillmore City of Moorpark City of Ventura City of Ojai City of Santa Paula City of Thousand Oaks City of Los Angeles City of Beverly Hills Public Works City of Long Beach City of San Diego City of Seattle City of Charlottesville, Virginia Port of Long Beach Port of Los Angeles Los Angeles County Metropolitan Transportation Authority Orange County Transportation Authority Southern California Edison San Diego Gas & Electric Los Angeles World Airports California Governor's Office of Emergency Services American Red Cross **Denver International Airport** Miami International Airport San Diego International Airport Guam International Airport Federal Aviation Authority Federal Bureau of Investigation U.S. Department of Transportation

ASSURANCE OF DESIGNATED PROJECT TEAM



ASSURANCE OF DESIGNATED PROJECT TEAM

Claris Strategy has a assembled the following core project team for the PWAG project. All of our team members are committed to this project for its duration. Departure or reassignment of, or substitution for, any member of our designated project team, including subconsultants and subconsultants' staff, shall not be made without prior written approval of PWAG.



CLARIS STRATEGY

William Lim Project Manager

AWWA Utility Risk & Resilience Certification



TERRA FIRMA ENTERPRISE Wendy Milligan Emergency Response Planning



HDR

Dean Gipson, PE, JD Deputy Project Manager

AWWA Utility Risk & Resilience Certification



CPARS CONSULTING Nick Lowe Compliance Tool Training



LAUNCH! CONSULTING Linda Warren J100 Advisor MWWA Utility Risk & Resilience Certification

PROJECT APPROACH



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PROJECT APPROACH

We are proposing the following project approach for the PWAG AWIA project to assist the Participating Agencies to meet compliance for the Risk and Resilience Assessments and Emergency Response Plans.

The Claris team proposes the following three step process that follows the phases set forth in the RFP:

- **1. Phase I:** Compliance Crosswalk for All Participating Agencies
- 2. Phase II: Risk and Resilience Assessment for Each Agency
- 3. Phase III: Emergency Response Plan for Each Agency

These 3 phases will be completed to meet the deadlines assigned by the EPA for the various size agencies.



PROJECT UNDERSTANDING

Per Section 2013 of Title II of the America's Water Infrastructure Act of 2018, community water systems are required to conduct risk and resilience assessments, develop corresponding emergency response plans and update these documents every five years. The Environmental Protection Agency (EPA) intends for utilities to identify how they should invest resources to manage man-made-related and natural hazard risk, and the emergency response plans will provide strategies to facilitate response and recovery following an event.

Our understanding is the Public Water Agencies Group and the Participating Agencies are seeking the services of a consultant to help meet compliance of the AWIA. This joint effort by PWAG and the Participating Agencies is to explore the potential in saving costs and time through economies of scale.

The project is anticipated to be completed in three phases (as illustrated in Figure 2):

- 1. Phase I: Compliance Crosswalk for All Participating Agencies
- 2. Phase II: Risk and Resilience Assessment for Each Agency
- 3. Phase III: Emergency Response Plan for Each Agency

We also understand:

- The most pressing deadlines are the three Participating Agencies serving a population of more than 100,000 with the mandated <u>RRA due March 31,</u> 2020, and the <u>ERP due September 30, 2020</u>.
- Each Participating Agency will choose an AWIA compliance tool and be trained on the tool to meet the requirement to self-assess every five years.
- Each Participating Agency must submit selfcertification of the completion of the RRA and ERP.
- Participating Agencies may not have recentlycompleted RRAs or comprehensive ERPs.
- PWAG has expressed a desire to standardize the development of the Participating Agencies' ERPs.

PWAG PARTICIPATING AGENCIES

The 15 Participating Agencies listed below are anticipated to participate in the Phase I Compliance Crosswalk Task. They are grouped based on the Risk and Resilience Assessment schedule:

RRA's to be completed by Mar. 31, 2020 ERP's to be completed by Sep. 30, 2020

- 1. Palmdale Water District
- 2. Three Valleys Municipal Water District
- 3. Walnut Valley Water District

RRA's to be completed by Dec. 31, 2020 ERP's to be completed by Jun. 30 2021

- 1. Rowland Water District
- 2. Valley County Water District

RRA's to be completed by Jun. 30, 2021 ERP's to be completed by Dec. 30, 2021

- 1. Bellflower Somerset Mutual Water Company
- 2. La Puente Valley County Water District
- 3. Montebello Land & Water Company
- 4. Pico Water District
- 5. Quartz Hill Water District
- 6. Rubio Cañon Land & Water Association
- 7. San Gabriel County Water District
- 8. Sunny Slope Water Company
- 9. South Montebello Irrigation District
- 10. Valencia Heights Water Company

Population Served	PWAG Agencies Affected		
> 100,000	3		
50,000 - 99,999	2		
3,300 - 49,999	10		

PROJECT APPROACH

Holistic Perspective

Our team was formed to take a holistic approach to this project by bringing together multiple perspectives and experiences to assist PWAG and the Participating Agencies meet AIWA compliance. This project requires that many aspects be addressed as outlined in the project understanding. Our team includes experts in threat assessment, physical security, cybersecurity, natural hazards and emergency response planning. In addition, we bring a deep bench of supervisory control and data acquisition (SCADA), operations and maintenance (O&M), water treatment, distribution system and storage, economic/ finance, and asset management. Also, our team members are fully invested in helping our communities, many of whom have devoted our professional careers to assisting others. As importantly, we are residents of the communities impacted by these disasters and we understand the sensitivity and empathy necessary for this undertaking. We bring these collective perspectives to the project.

Claris' holistic approach combines both rational and intuitive thinking viewed through the lenses of organization and culture, process, technology and facility. We use a unique approach – one that examines all of the core elements in developing a plan in parallel: **organization, process, facility, and technology**. We do so because we have consistently found that solutions are more successful when these four elements are in alignment.

Inclusive Approach

The Claris team believes in a highly-collaborative approach to all of our work not only within our team but also with our clients. Because we work in partnership, the result is a solution that is comprehensive, relevant, and viable.

This is especially important in the PWAG AWIA Compliance project which will involve not only PWAG and Participating Agencies' leadership and staff, it will require input from multiple stakeholders. Our team must ensure that these voices be heard and included. The following components of this section outline a project road map (Figure 2), a project management plan, and a preliminary work plan.

Public Water Agencies Group Risk & Resilience Management Strategy

COMPLIANCE CROSSWALK

- 1. Kickoff
- 2. Design Compliance Crosswalk Template
- 3. Complete Compliance Crosswalk for each Participating Agency

OUTPUTS

- 1. Compliance Crosswalk Template
- 2. Agency Specific Compliance Crosswalks

RRA PROCESS

- 1. Kickoff(s) & Information Gathering
- 2. Workshops, Field Assessments, Staff Meetings, and Cybersecurity Assessment
- 3. Report Briefing and Review

OUTPUTS

- 1. Risk & Resilience Assessment Report
- 2. Cybersecurity Vulnerability Assessment
- 3. Strategies for risk detection and system resilience
- 4. Conduct group training

ERP PROCESS

- 1. Kickoff(s) and Information Gathering and Review
- 2. Workshops
- 3. ERP Review

OUTPUTS

- 1. Updated ERP
- 2. Executive Summary for each Utility

Figure 2. PWAG Project Road Map

PROJECT MANAGEMENT PLAN

Claris Strategy, working with our team, will develop a project management plan that clearly defines the methods for project execution and coordination. This plan will include an operations plan, communications plan and a QA/QC plan and will address the following items:

- An achievable, realistic schedule and a means for proactively addressing potential delays
- A detailed schedule that demonstrates the overall work approach identifying the critical path
- An organization chart that defines the key positions and an effective staffing plan that assigns the right staff to each project task

At the start of the project, the project manager, William Lim of Claris Strategy and the deputy project manager, Dean Gipson of HDR, will work closely together to develop a project road map for the project. We have provided a preliminary road map for the project on the following page.

OPERATIONS PLAN

Resource Requirements and Planning

At the outset of the project, we will identify the required resources that match the project scope of services:

- A description of tasks required to develop the agreed upon services and deliverables
- A list of specific contract requirements which could impact the scope of services
- A clarification of services to be completed by the client or subconsultants

Budget

Upon the Notice to Proceed (NTP), Claris will develop a plan to monitor the project budget and schedule. The budget will:

- List project and task numbers
- List number of hours budgeted for each task
- List the budgeted expenses for each task
- Identify any limitations or special requirements relating to travel

A detailed estimate of progress made during each reporting period will be used to prepare status reports. Our team will reassess project progress during bi-weekly meetings to determine if we are within the approved budget and whether the approved schedule is being met. If we find that either one of those indicators is compromised, the Project Manager, the Deputy Project Manager and Task Leaders will take corrective measures and adjust resources as necessary. If there is a change in scope, we will closely communicate any issues with the PWAG Project Manager and work together to mitigate impacts.

Scheduling

We understand the importance of project schedules and timely delivery. We will use Microsoft Project to develop project resource loaded schedules appropriate for PWAG. This schedule will include the following:

- Notice to proceed
- Request for information
- Project kickoff
- Site walks
- Research
- Intermediate milestones
- General and detailed assessments
- Recommendations
- QC reviews and resolution of comments
- Draft and final report deliverables
- PWAG/Stakeholder Committee reviews
- Presentation(s)

Detailed Work Plan

Our detailed work plan will include task definition, key project milestones and deliverables. We have provided a preliminary work plan in the following section.

Document Production

For the production of deliverables we will meet the quality standards of PWAG documentation and will confirm the compatibility of PWAG's software requirements. We will:

- Confirm written, presentation and drawing document requirements
- Identify software to be used on the project and validation requirements

Subconsultant Management

Our Project Manager will provide close coordination with our subconsultants and will initiate and execute a document control process.

Project Technical Requirements

The Claris team will perform all services in compliance with any regulatory or policy requirements governing transit operations. We will address the following:

- A project technical approach
- Regulatory and security standards requirements governing the project

- Methodologies and assumptions
- Claris team and industry best practices
- Client directives

Risk Management Plan

Our team will manage risk by verifying that project deliverables and supporting documentation are complete and understandable, conform to applicable and reasonable standards relative to their intended purpose, and meet client and Claris requirements. We will:

- Identify critical risks which may impact successful project delivery
- Risk response strategy (avoid, transfer, mitigate or accept)
- Assign action items and track each risk

A preliminary set of risks and mitigation measures have been identified in the Key Issues And Potential Obstacles section.

COMMUNICATIONS PLAN

We recognize that effective communication is critical to the successful delivery of any project. To that end, William Lim of Claris Strategy will be the primary point-of-contact with PWAG staff. Dean Gipson is also immediately available to respond to project needs. Unless otherwise requested by PWAG, we will hold monthly meetings with the client and select staff to discuss project status, potential project constraints and opportunities in addition to agenda items dealing with project schedule, budget status and potential scope creep.

At the beginning of the project, we will:

- Confirm the individual(s) who will coordinate all communication from the client
- Identify the project team members who are authorized to submit requests for data, meetings or other information
- Describe how communication records shall be prepared and maintained
- Identify confidentiality requirements and restrictions

QUALITY ASSURANCE/QUALITY CONTROL PLAN

Although all team members are cognizant and responsible for the quality of their work, we will ensure that PWAG quality standards are met by assigning a Quality Control manager.

Project Planning Review

The PM will schedule a planning review with the PWAG project leadership to discuss and verify that contractual, business, and management issues have been adequately prepared and planned for prior to beginning project execution.

Risk Assessment

Risk assessments will be performed from the project development stage through the full execution of the project. Mitigation plans are developed and reviewed with senior management for projects with identified elevated risks.

QC Checking

The document originator and document checker will work together to verify the accuracy and completeness of written material, calculations, spreadsheets, and drawings.

QC Reviews

QC reviews are conducted as integral components of project activities as follows:

- 1. Conducted by experienced personnel who are not otherwise involved in producing the documents to provide impartial assessments.
- 2. Originator reviews the comments and makes necessary changes and additions to the original document.
- 3. QC Reviewer reviews the revised document and discusses comment resolutions with the Originator and/or PM.
- 4. PM reviews the QC review comments and revised document.

Project Reviews

Project reviews occur throughout project execution to facilitate communication between the PM and the project team. The status of the project is discussed along with areas where actions are required.

WORK PLAN

We have designed each phase of work to achieve several key objectives including performing multiple, similar tasks simultaneously, identifying efficiencies to improve schedule and being available and responsive to PWAG and the Participating Agencies.

William Lim, as the Project Manager, and Dean Gipson, as the Deputy Project Manager, will oversee the entire project. A project coordinator will be assigned to provide support for document control, scheduling and team coordination.

Each Participating Agency will be assigned a team comprised of the following:

- 1. A Project Manager
- 2. A Threat Expert
- 3. A Physical Security Expert
- 4. A Natural Hazards Expert
- 5. A Cybersecurity (Information Technology, SCADA/ Industrial Control Systems) Expert
- 6. An Operations/Maintenance Expert
- 7. A Chemical Handling Expert
- 8. A Finance Expert
- 9. An Emergency Response Planner

The assigned project manager to the Participating Agency will provide continuity and be responsible for completion of the RRA and ERP portions of the project.

Claris team members may be assigned to multiple teams for the 10 Participating Agencies serving less than 50,000 population.

Below we describe our approach in more detail by phase.

PHASE I: DESIGN & COMPLETE COMPLIANCE CROSSWALKS

Task 1: Design of AWIA Compliance Crosswalk

Kickoff and Crosswalk Design:

The Claris team will conduct a Kickoff meeting with representatives from the Participating Agencies. The agenda will include:

- Introductions to the Participating Agencies and to the Claris team
- Project purpose and goals
- Compliance Crosswalk scope, work plan and schedule
- Expectations of project participants
- Information requirements

After the Kickoff meeting, the Claris team will design a draft AWIA Compliance Crosswalk for the Participating Agencies to review and provide comment.

During this time, the assigned Claris project coordinator will request, track and coordinate receipt of the existing documentation from each Participating Agency. We will finalize the Crosswalk Design for final approval by the PWAG Project Manager.

Task 2: Complete AWIA Crosswalk for Participating Agency

Upon approval of the Compliance Crosswalk, the Claris team will review the existing documentation provided by each Participating Agency, focusing on the three largest agencies.

In addition to the listed documentation in the RFP, following is documentation we request:

- Disaster Recovery Plans (DRPs)
- Crisis Communication Plans
- Cyber Security Assessments for Industrial Control Systems
- Cyber Security Incident Response Plans
- Hazardous Material Emergency Response Plans

Timely delivery of this information will be critical given the tight compliance timelines especially for the Participating Agencies serving greater than 100,000 people. We will categorize the requested documents as critical, essential and good-to-have in an effort to expedite the process. The Claris team will complete a Compliance Crosswalk for each Participating Agency for review and comment. We will then finalize the crosswalks for final approval by the PWAG Project Manager as required.



Figure 3. Project Schedule to Deliver RRA and ERP on Time

PHASE II: CONDUCT RISK AND RESILIENCE ASSESSMENTS

Based on the completed Compliance Crosswalks and each Participating Agencies' existing documents, the Claris team will complete a system-wide all-hazards (natural and man-made) vulnerability assessment for each of the Participating Agencies. This assessment will include the following systems:

- Physical
- Operational
- Maintenance
- Systems Engineering
- Chemical
- Cybersecurity (Information Technology/Networks, SCADA/Industrial Control Systems)

The assessments will be integrated into one comprehensive RRA for each Participating Agency.

As previously stated, each participating agency RRA will be assigned a Claris project team led by a project manager and experts.

Task 1: Analysis Tool Selection

Our team's approach uses the ANSI/AWWA J100 standard to cover all parts of the AWIA requirements, plus tools tailored to bring additional value to the Participating Agencies. We can combine the J100 standard with analysis tools such as the Program to Assist Risk and Resilience Examination (PARRE) software program, and/or Excel-based and Access-based or SQL tools. We are also experienced in using EPA's Vulnerability Self-Assessment Tool (VSAT), though for the larger Participating Agencies, our recommendation is PARRE, Excel/Access, or Structured Query Language (SQL).

We will standardize on a selected tool based on agreement with the Participating Agencies, which will also comply with J100/AWIA requirements to limit liability with the assessments. We will deliver all copies, licenses and data for the selected software to the Participating Agencies at the conclusion of the project and will not retain any copies, licenses or data without the written consent from PWAG.

Task 2: Collection and Writing of the RRA

The Claris team, through our partner HDR, has successfully implemented the J100 process for utilities in several states over the past seven years. Our plan uses a workshop-based approach, as developed by Linda Warren for the AWWA, to be as efficient with staff time as possible to meet this federal requirement. This includes workshops that are dynamic, interactive, and comprehensive. It also includes input from related agencies

WORK PLAN (CONTINUED)

such as law enforcement, public safety, partnering utilities, and regulatory agencies, so that relationships built between project participants enhance the utility and community recovery during emergencies. Our proposed process is illustrated in the diagram (Figure 4).

Risk and Resilience Assessment

Kickoff and Information Gathering:

In the RRA Kickoff meeting, the Claris team will work with the Participating Agency's project team to:

- Update the project team on AWIA requirements and how the project will meet them
- Define Participating Agency staff project roles and communication preferences
- Review the seven steps of the J100 ANSI standard methodology
- Identify threats and hazards

• Begin a list of potentially critical assets (including all types listed in the AWIA)

Our team will address natural hazards, malevolent acts, cybersecurity, and other types of threats/hazards.

We will review existing documentation provided by each Participating Agency. We may also request the following information specific to the RRA:

- Site maps and floor plans of critical facilities
- Information Technology Network Diagrams
- Operational Technology/SCADA Network Diagrams
- Communications network diagrams
- List of critical software applications

During this step, our team will conduct a threat assessment of the identified critical assets. Steven Gomez, a former FBI Special Agent-in-Charge for counter terrorism in the Los Angeles region and a former LA PD officer, will lead our threat



Figure 4. Seven Steps of the J100 Methodology

assessment team to identify potential terrorist threats to the Participating Agencies and specific criminal threats to the critical assets. Using available information from sources such as the Joint Regional Intelligence Center, Infragard, ASIS, local law enforcement and open source crime information.

HDR, with assistance from Claris, will lead the effort to identify the natural hazard threats to the identified critical assets. Our team will leverage as much as possible the work previously done, including any local hazard mitigation plans and other hazard assessments conducted recently.

RRA Workshop 1:

In this workshop, the Claris team will work together with key representatives from each Participating Agency to:

- Inventory assets and validate list of potentially critical assets
- Establish a table of consequence values
- Establish a consequence rating for each potentially critical asset.

After the Workshop, our team will develop preliminary scoring for each threat-critical asset pair, refine the consequence values and consequence rating for each critical asset.

RRA Workshop 2:

For this workshop, our team will work with Participating Agency representatives to:

- Refine threats and assets to consider in the J100 risk analysis
- Estimate consequences for each threat-asset pair
- Determine high-consequence critical assets to visit during field assessment

Depending on the Compliance Crosswalk for each Participating Agency, Workshops 1 and 2 may be combined.

Field Assessment and Staff Meetings:

Based on the top threat-asset pairs identified and the high consequence critical assets, the Claris team, accompanied by Participating Agency staff, will visit using standardized, efficient data-collection forms and tools. Our team will visit up to 15 of your top assets. Information gathered on these field visits will be extrapolated to other, similar assets.

For the physical security vulnerabilities, Tom LaFreniere, a

former FBI Supervisory Special Agent-in-Charge and mechanical engineer, will lead a team of physical security experts to conduct an assessment on the vulnerabilities associated with the physical threats to the identified critical assets and the potential measures that could be used to mitigate the risks.

Our team will also meet with Participating Agency staff to assess policies and procedures, O&M needs, financial data backup, monitoring practices, chemical storage/use, and other important aspects of the water system.

Our specialized process allows for easy upload and processing of the information.

Cybersecurity Assessment:

The cybersecurity assessment will be performed by Launch! Consulting and HDR for agencies with network systems only (IT) in scope and for those with both network and SCADA systems (OT). Our team will include in the review of OT security the range of field-level process control systems (PCS)/industrial control systems (ICS) devices and components installed in the agency's operating footprint, such as sensors, actuators, and programmable logic controllers (PLCs) that send information to the SCADA system.

The assessment work will focus on the adequacy of the controls, processes and procedures currently in place and how closely they align with the appropriate standards and best practices for embedded operating technology (OT) systems, the information technology (IT) systems with which they may communicate and the physical security protecting these facilities including the ones below:

- NIST Cybersecurity Framework
- NIST SP 800-82 Rev 2, Guide to Industrial Control Systems (ICS) Security, May 2015
- NIST SP 800-53 Rev 4, Recommended Security and Privacy Controls for Federal Information Systems and Organizations, April 2013.
- NIST SP 800-184, Guide for Cybersecurity Event Recovery, December 2016.
- ISA99/IEC62443-2-1 (99.02.01)-2009 Security for Industrial Automation and Control Systems: Establishing an Industrial Automation and Control Systems Security Program

We will develop an understanding of the Level 1, 2, and Level 3 field components that are connected to the SCADA system

WORK PLAN (CONTINUED)

and that comprise the "operating technology" of agencies' operations and processes and the physical security components that protects them.

Understanding SCADA controls risks, processes and procedures, and compliance gaps requires our ICS, process engineering and physical security assessment team to first validate the complete SCADA systems and perform a comparison of the "as-drawn" environment and the "as-installed" environment – which experience tells us will likely diverge. That "delta" is critical information that members need to empirically understand their system environment accurately, including assessing whether there may be counterfeit or "grey goods" PCS equipment inadvertently installed from an OEM or distributor – a growing industry issue.

We will do this with document review, escorted on-site physical

walk-downs, and discussions with engineering, IT and security counterparts. The basic philosophy is SCADA risk and controls effectiveness can only be accurately understood in the broader systemic context illustrated in Figure 5.

RRA Workshop 3:

Once the field assessments, staff meetings and cybersecurity assessment are complete, the Claris team will hold Workshop 3 to determine baseline risk/resilience. In this workshop, we will:

- Develop risks for threat-asset pairs (validate threat and consequence values, and develop vulnerabilities for each threat-asset pair)
- Review critical asset summary sheets developed from field assessments
- Discuss risk prioritization of assets, as well as potential mitigation measures to lower risk.

Figure 5. Cyber Security Innovation



Provide State RRA Innovation

In the SCADA and OT review, we will be guided by the NIST SP 800-82 Rev 2, Guide to Industrial Control Systems (ICS) Security, May 2015, focused on these security domains:

- ICS Operations & Security Architecture
- Network Segmentation and Segregation
- Boundary Protection
- Firewalls
- Logically Separated Control Network
- Network Segregation
- ICS Firewall Policies
- Unidirectional Gateways
- Single Points of Failure
- Redundancy and Fault Tolerance
- System Recovery
- Man-in-the-Middle Attacks
- Authentication and Authorization
- Monitoring, Logging, and Auditing
- Incident Detection, Response

After this workshop, the Claris team will revise the baseline risk assessment and then develop a prioritized list of mitigation measures based on a cost/benefit analysis using the J100 process.

RRA Workshop 4:

In Workshop 4, the Claris team will review the mitigation measures and order-of-magnitude costs for lowering risk at high-risk threat-asset pairs (these include both physical and operational measures).

Once these mitigation measures are agreed on and approved by the Participating Agency, we will finalize the RRA Report.

Report Briefing and Review:

We will review the RRA Report and Implementation Plan with the Participating Agency staff. Our team's deliverables are action-oriented, implementable and defensible documents. Participating Agency staff can assign a schedule and leader to implement each mitigation measure. These documents can be easily updated for the next review of the RRA within 5 years.

RRA Certification Letter to the EPA:

Dean Gipson, has negotiated extensively with the EPA, can advise and assist the Participating Agency in submitting the Certification Letter to the EPA if necessary.

Task 3: Participating Agency Training on Assessment Process and Tools

Nick Lowe, of CPARS Consulting, will lead the group trainings to Participating Agency representatives on the specifics of the Compliance Crosswalk, RRA and the tools used. We will instruct Agency representatives on how to utilize these processes and tools to successfully update the RRAs in the future. Nick is considered one of the premier trainers in the country on emergency preparedness and is very familiar with the assessment tools. On the network side, Launch! and HDR will look at policies, procedures, controls environment, processes, equipment and organization around these cybersecurity domain families, determining if the cybersecurity program adequately addresses the agency capacity for prevention, detection, preparedness, response and recovery from all types of cyberattack vectors on the network.

The work will be guided by the NIST Cybersecurity Framework which addresses these security domains:

- Asset Management (ID.AM)
- Business Environment (ID.BE)
- Governance (ID.GV)
- Risk Assessment (ID.RA)
- Risk Management Strategy (ID.RM)
- Access Control (PR.AC)
- Awareness and Training (PR.AT)
- Data Security (PR.DS)
- Information Protection Processes and Procedures (PR.IP)
- Maintenance (PR.MA)
- Protective Technology (PR.PT)
- Anomalies and Events (DE.AE)
- Security Continuous Monitoring (DE.CM)
- Detection Processes (DE.DP)
- Response Planning (RS.RP)
- Communications (RS.CO)
- Analysis (RS.AN)
- Mitigation (RS.MI):
- Improvements (RS.IM):
- Recovery Planning (RC.RP)
- Improvements (RC.IM)
- Communications (RC.CO)

The cybersecurity assessment information will inform the threat-asset pair, vulnerability and consequence criteria of the overall risk assessment.

WORK PLAN (CONTINUED)

PHASE III: WRITE/UPDATE EMERGENCY RESPONSE PLANS (ERP)

Depending on the completed Compliance Crosswalks and each Participating Agencies' existing documents, the Claris team will either write or update the Participating Agencies' Emergency Response Plan. This effort will be led by Wendy Milligan of Terra Firma Enterprises and guided by William Lim and Brent Woodworth of Claris Strategy. Additionally, our team has five additional members who can be assigned the task of updating the ERPs as required.

Based on our understanding of PWAG's Emergency Coordinator's desire to standardize the Participating Agencies' ERPs using standards and guidance from the National Incident Command System (NIMS), the Incident Command System (ICS), the Standardized Emergency Management System (SEMS), FEMA's CPG 101, the AWIA Community Water System Emergency Response Plan and Emergency Response Planning for a Water Utility in California, our team will first develop an approved ERP template that will be used to develop the Participating Agencies' ERPs.

Wendy Milligan and William Lim have extensive knowledge of how emergency plans can be standardized across government agencies, developed specifically for water agencies and aligned to local, county, state and federal standards. We will develop a template that will adhere to NIMS, SEMS and ICS and be customizable and scalable for the Participating Agencies.

Task 1: Update/Write the ERP

With the understanding that the majority of the Participating Agencies have updated ERPs, SOPs and Hazard-Specific Annexes, the Claris team will either update or write the ERP using the following levels of service:

- 1. <u>Low Work Effort</u>: Our team will develop a short chapter or section that the Participating Agency will incorporate into their ERP explaining how their all-hazards ERP, RRA and other documents meet the requirements of the AWIA.
- 2. <u>Medium Work Effort</u>: In addition to the short chapter or section, we will develop one risk specific SOP/Annex that addresses an identified planning gap from the RRA.
- 3. <u>High Work Effort</u>: Our team will work with the Participating Agency in updating its non-current ERP. The new ERP will use the template the team develops that meets AWIA requirements and PWAG's desire for standardization for its member agencies.

The Claris Team will develop a standardized ERP Template for the Participating Agencies that will increase effectiveness and efficiency.



Figure 6. ERP Process Steps

The ERP Process

he Claris team proposes using the following process for developing the ERP with the Participating Agencies. After a preliminary project meeting to confirm that each of the right staff are invited to participate in the process (including directors, engineering, planning, human resources, finance, information technology [IT], and safety representatives) our team proposes the activities to complete the ERP for the Participating Agencies.

Kick-off and Information Gathering:

For the ERP Kickoff Meeting, Claris team's agenda will include:

- Ensure that the ERP meets the compliance requirements of AWIA and serves the needs of emergency preparedness for the Participating Agencies
- Relate how the RRAs informs the development of the ERP
- Project logistics and information confidentiality
- Document review processes
- Roles of project participants
- Review of the risk assessment
- Standards and Guidance for the ERP including the National Incident Command System (NIMS), the Incident Command System (ICS), the Standardized Emergency Management System (SEMS), FEMA's CPG 101 and Emergency Response Planning for a Water Utility in California.
- A discussion of specific information for the ERP document.

The team may require some additional information gathering including:

- Field visit of the Participating Agency's EOC
- Staff meetings to discuss emergency response procedures
- Internal and external emergency communication protocols and channels
- Maturity level of emergency training and response and adherence to ICS
- Interaction with external first responder agencies during emergencies (e.g. water utility support for CalFire, L.A. County Fire fand local city fire departments for wildland fires)
- PWAG Emergency Response Plan

AWIA Compliance offers PWAG and its Member Agencies a rare opportunity to standardize your emergency preparedness approach. Our team can help develop common and shared emergency components which may include:

- Crisis communication protocols using traditional and social media which may include pre-set media messaging, boil water notices, and emergency notifications
- Incident Command structures, processes and terminology that will allow staff from member agencies to work together in responding to an emergency
- Common technology platforms such as emergency notification systems, incident management software, and GIS systems
- An inventory of PWAG agencies' resources that can be made available during a disaster
- Procedures for disaster fund reimbursement
- Definition of the role and responsibilities of the water liaison coordinator position at the County EOC

By leveraging the requirement for AWIA ERP compliance, PWAG can build on its foundation of improving emergency communication, coordination and collaboration among its Member Agencies.

- Crisis communications plan
- Evacuation plans

Based on the information gathered, the Claris team will refine the Participating Agency's ERP Concept of Operations (CONOPS) which include:

• Organization of the emergency response teams (Policy Group, EOC responders and Incident Response team in the field)

WORK PLAN (CONTINUED)

- Emergency activation and emergency operations procedures
- Communications with internal and external stakeholders
- Emergency Response Levels (SEMS)

ERP Workshop 1:

The Claris team will facilitate a workshop with attendees from the Participating Agency to review the revised ERP CONOPS and a draft Table of Contents (TOC).

Once the CONOPS and TOC is approved, we will develop a draft basic plan and annexes for the ERP that will comply with AWIA requirements. The plan will include:

- Emergency response org. charts
- ICS structured roles and responsibilities
- Position checklists
- Activation, escalation, and EOC Operations procedures
- Emergency declarations
- Attachments and appendices
- Hazard-specific annexes

ERP Workshop 2:

The Claris team will facilitate a workshop to review and discuss the draft ERP basic plan.

After the workshop, the team will finalize the ERP based on the comments received from the Participating Agency and develop an implementation plan which will include a training, exercise and plan maintenance recommendations.

Report Briefing and Review:

The Claris team review the finalized ERP and an implementation plan with the Participating Agency staff.

ERP Certification Letter to the EPA:

Our team can advise and assist the Participating Agency in submitting the ERP Certification Letter to the EPA if necessary.

Task 2: Participating Agency Executive Summary

The Claris team will develop a high-level executive summary for the Participating Agency's elected officials and to present to the Local Emergency Planning Partners. The document will summarize the Agency's overall risk and resiliency and emergency response planning readiness.



ERP Innovation

Emergency response plans (ERPs) are critical for preparing water agencies for quick and effective response to malevolent acts and natural disasters. Claris Strategy has worked closely with water districts to develop an innovative approach to preparing emergency plans. Using the National Incident Management System (NIMS), the Incident Command System (ICS) and the State of California's Standardized Emergency Management System (SEMS) as foundational principles, our team has developed an ERP approach that allows water agency staff to quickly transition from their day-to-day roles into their emergency response positions.

Our emergency planning components include:

- A determination of the maturity of the agency in understanding NIMS/ICS/SEMS concepts
- A customized plan built on where the agency is in the maturity cycle, with the ability to change as the agency gains experience and understanding
- A diagrammatic approach to illustrate concepts to help staff better understand the structure and processes of the emergency operations cycle
- Leveraging current innovative practices in areas such as social media and technology tools to better gain situational awareness and respond
- Alignment within the overall Los Angeles County Operational Area framework, PWAG's emergency strategy, and the various State and Federal response structures to coordinate a cohesive response
- The role of the ERP in an overall emergency preparedness program

This approach will be used in developing the ERPs for all of the Participating Agencies.

PROJECT TIMELINE

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PROJECT TIMELINE

On the following pages, the project timeline indicates the approximate time to complete major phases and sub-tasks and the completion of the deliverables to meet the AWIA compliance deadlines.


PWAG America's Water Infrastructure Act Compliance Crosswalks, RRAs and ERPs

August 19, 2019 | 66

PROPOSED PROJECT TIMELINE

	PHASE	9.19	10.19	11.19	12.19	1.20	2.20	3.20	4.20	5.20	6.20	7.20	8.20	9.20	10.20	11.20	12.20	1.21	2.21	3.21	4.21	5.21	6.21	7.21	8.21	9.21	10.21	11.21	12.21
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	Phase 2: Risk & Resilience Assessments																												
	2.0 Agency Specific Kickoff Workshop																												
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Month / Year = M.YY

PWAG America's Water Infrastructure Act Compliance Crosswalks, RRAs and ERPs

August 19, 2019 | 67

PROPOSED PROJECT TIMELINE

	PHASE	9.19	10.19	11.19	12.19	1.20	2.20	3.20	4.20	5.20	6.20	7.20	8.20	9.20	10.20	11.20	12.20	1.21	2.21	3.21	4.21	5.21	6.21	7.21	8.21	9.21	10.21	11.21	12.21
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FEE SCHEDULE

FEE SCHEDULE

As requested in the RFP, the **Scope of Work Fee Schedule, Attachment E**, is provided with an additional break down of fees by tasks demonstrating how the fee was calculated with subtotals.

It is submitted as a separate document.







Claris Strategy PWAG America's Water Infrastructure Act Compliance Crosswalks, RRAs and ERPs August 19, 2019 75

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CONTRACT

Claris Strategy has reviewed PWAG's Attachment F Agreement for Consultant Services. We will accept the terms and conditions of the agreement.







Claris Strategy PWAG America's Water Infrastructure Act Compliance Crosswalks, RRAs and ERPs August 19, 2019 79



APPENDIX RESUMES OF KEY PERSONNEL



EDUCATION Master of Business Administration, Dean's List, Anderson School of Business, UCLA

Master of Architecture, University of Washington

Bachelor of Applied Science (Civil Engineering), University of British Columbia

CERTIFICATIONS

AWWA Utility Risk and Resilience Certification

Incident Command System, ICS 100, 200, 700, 701, 702, 703, 775

City of Los Angeles EOC Training 101, 201, 301

Crime Prevention Through Environmental Design (CPTED)

Certification of Business Continuity Planning, DRII (CBCP)

William Lim Project Manager

As the founder of Claris Strategy, William brings a unique blend of talents and experience as a project manager, emergency planner and operations expert. Prior to forming Claris Strategy in 2012, William's seventeen-year career at Gensler, an international design firm, garnered him a broad and deep experience in areas including transportation operations, emergency operations and critical infrastructure assessments.

William, who is assigned as the project manager, has successfully managed and delivered emergency planning projects of similar scope and complexity. William has dedicated the majority of his 30 years in the industry to delivering and managing projects for critical infrastructure organizations. His work includes most recently managing projects for Municipal Water District of Orange County/Water Response Organization of Orange County, Irvine Ranch Water District, Orange County Water District, LA Metro, Orange County Transportation Authority, Los Angeles World Airports, Denver International Airport, the Transportation Research Board, Federal Aviation Administration, Southern California Edison, San Diego Gas and Electric, the City of Los Angeles and the County of Los Angeles. He has managed projects with budgets up to \$20 million and was a key member of the leadership team with project budgets of \$1 billion.

William is a charter member of the Southern California Critical Lifelines working group, a consortium of over 40 critical infrastructure public and private organizations working to increase communication and coordination during major disasters. He also currently serves on the Board of Directors for the Los Angeles Emergency Preparedness Foundation, assisting the City of Los Angeles' Emergency Management Department to integrate businesses, non-profits, faith-based organizations, and NGOs into the process of preparing for disasters.

BENEFIT TO THE PROJECT

- Very knowledgeable of water operations and man-made and natural hazards in Los Angeles County. Currently working with Irvine Ranch Water District, Orange County Water District and El Toro Water District on updating their emergency response plans.
- Nearly three decades dedicated to the planning and design of critical infrastructure across the United States.
- Extensive experience of managing projects with multiple stakeholders, critical infrastructure organizations and resource agencies.
- Proven track record of successfully managing and delivering large-scale multidisciplinary security and emergency planning projects in Southern California on behalf of local cities, counties, special districts and federal agencies.

William Lim Project Manager

RELEVANT EXPERIENCE

Southern California Water District Emergency Response Plan Projects.

William is leading teams working with Irvine Ranch Water District, Orange County Water District and El Toro Water District in updating their emergency response plans, providing training to their staff and conducting exercises to practice on the plan. The emergency response plans utilize the fundamentals of the Incident Command System, the National Incident Management System, and California's Standardized Emergency System as their foundation. As well, we draw from the deep and broad experiences of project team members' experiences in responding to local, national and global disasters.

LACMTA Security Assessments, Los Angeles, CA.

William recently led multidisciplinary teams in successfully completing threat and vulnerability assessments for Los Angeles County Metropolitan Transportation Authority (LA Metro). On one project, the team conducted vulnerability assessments on eighteen bus and rail operating divisions over a six month period. The team performed a site assessment identifying vulnerabilities in security; assessed the threats, including multiple types of terrorist attack, criminal behavior and the homeless issue;

interviewed over 80 stakeholders: developed a risk profile; made recommendations in a final report; and presented to LA Metro senior executives and security staff A second project, the team completed a threat and vulnerability assessment of the iconic Union Station, the rail yards, the Metro Rail stations and the LA Metro 25-story headquarters building. Both projects were delivered on time and on budget and to the complete satisfaction of the LA Metro client. The total fee for the projects was \$1 million.

LAX Airport Response Coordination (ARCC) and Department Operations Center (DOC), Los Angeles, CA.

Los Angeles World Airports engaged William and his consultant team to assist in developing ways to improve emergency/security operations and normal operations at LAX. The team's responsibility included developing a CONOPS for the ARCC and DOC, defining the organization and staffing of the two operations centers, developing preliminary procedures, defining space and technology requirements, designing the facility and managing construction. The result, a new Airport Response and Coordination Center and **Department Operations Center** was opened in January 2011

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incorporating Airport Police, TSA, Airport Operations, **Emergency Operations**, Customer Services and Maintenance. These operations centers have redefined the way LAX operates on a day-to-day basis in responding to incidents and during emergencies. As events happen, departments and outside agencies in their response, communicate better, are more tightly coordinated, and collaborate closer. Other airports around the country are using this as a new operating model. The fee for the consulting part of the budget was \$1 million. The construction budget was \$20 million.

MWDOC/WEROC

EOC Assessment; EOC Space Program and Concept Design

Irvine Ranch Water District

Emergency Operations Plan, Training and Exercise

Orange County Water District

Emergency Response Plan, Training and Exercise

El Toro Water District

Emergency Response Plan, Training and Exercise

Southern California Edison

Business Resiliency Strategy; Emergency Concept of Operations; Emergency Operations Center Design



EDUCATION BS Mechanical Engineering, Michigan Technological University

FBI Academy NCIS Academy

Engineer in Training Program, Army Corps of Engineers Officer Training: USMC

CERTIFICATIONS

AWWA Utility Risk and Resilience Certification

Top Secret/Sensitive Compartmental Information (1972 - 2004)

American Society of Industrial Security

Association of Certified Fraud Examiners

Tom Lafreniere Physical Security

With an educational foundation in engineering and a background in crisis management, criminal investigation and counter-terrorism; Tom has developed expertise in performing security assessments, vulnerability analysis, and security design.

Tom's experience include Combat Engineer in the United States Marine Corps, Project Engineer for the Army Corps of Engineers, Special Agent for the Naval Criminal Investigative Service, Special Agent and Supervisory Special agent for the FBI, along with security consulting in the private sector.

As Special Agent and Supervisory Special Agent for the Federal Bureau of Investigation and the Naval Criminal Investigative Service, Tom conducted criminal and counter-terrorism investigations. Tom supervised the FBI San Francisco Joint Terrorism Task Force (JTTF) in the aftermath of the 2001 attack of the World Trade Center. He was, subsequently, designated the Coordinator for the International Terrorism Program for the San Francisco Division of the FBI. He was designated the coordinator for the first FBI violent gangs task force in San Francisco. Tom also served as the Primary Crisis Management Coordinator, overseeing the crisis management team for FBI San Francisco, and as the Senior Team Leader for the FBI SWAT program. Tom wrote the Crisis Response plan for San Francisco FBI and designed both the FBI Emergency Operations Center and the Mobile Command Post.

As the program coordinator for the International Terrorism Program for the FBI in San Francisco, Tom coordinated with the planners for the various critical infrastructure to include water and wastewater systems.

Over the past 13 years, Tom has provided security consulting services to the government, the corporate sector and individuals. He has specialized in threat assessments, vulnerability analysis, and security design. Tom has provided security services for municipalities, school districts, corporate offices, factories, and port facilities. Tom is also provisional auditor for ISO 27000, Supply Chain Security, which encompasses physical security attributes throughout the entire supply chain from factory to conveyances, to distribution centers.

BENEFIT TO THE PROJECT -

- Nearly three decades of analyzing criminal behavior, tendencies, and methodology.
- Experience in counter-terrorism investigations and preparedness.
- Experience with water utility security through the FBI Crisis Management Program and the Office of Emergency Services for the City of San Francisco.
- Certification as a provisional auditor for Supply Chain Security, to include conveyances.
- Performed multiple water utility threat and vulnerability assessments.
- Technical background in Engineering.

Tom Lafreniere Physical Security

Claris Strategy

RELEVANT EXPERIENCE

As an FBI and NCIS special agent, Tom has become familiar with criminal methodologies and with security vulnerabilities exploited by criminal elements.

His experience in crisis management planning for both the FBI and the City of San Francisco has heightened his familiarity with protecting critical infrastructure from bridges to buildings, to include strategic security planning for facilities and services.

Tom, as a member of American Society of Industrial Security, brings with him the training and the security resources, research, and guidelines available through ASIS. Tom has the training and the certification for supply chain security, which includes conveyances.

Tom's experience as an engineer provides a common foundation from which to communicate with contributors to a renovation or upgrade project. Tom has completed numerous security assessments and designs for various government infrastructure and private or corporate entities, to include the following:

Livermore Water Resources Division, City of Livermore Threat and Vulnerability Assessment

San Joaquin Valley Irrigation District, CA

Security assessment and system design for six facilities and pump stations that support the irrigation district

Patterson Irrigation District, Patterson, CA Threat and Vulnerability

Assessment

Fairfield Water District, Fairfield, CA. Threat and

Fairfield, CA. Threat and Vulnerability Assessment

Contra Costa Wastewater District, Concord, CA Threat and Vulnerability Assessment

Los Angeles Metropolitan Transportation Authority Threat and Vulnerability Assessment of Union Station and the Gateway Building; Physical Security Assessment of 18 Metro Bus and Rail Operating Divisions

Port of Richmond, Richmond, CA

Security assessment and system design for the buildings and perimeter of the multi-acre Port site.

Castro Valley School District, Castro Valley, CA

Threat assessment and security design for 19 schools

Other threat and vulnerability assessments include

- Factories that manufacture security products
- Office buildings
- Wineries
- Country clubs
- Municipal parks



EDUCATION Leadership In Counter-Terrorism, Harvard University, MA

FBI Academy, Quantico, Virginia

Los Angeles Police Academy, Los Angeles, California

IRS Revenue Agent Training, Los Angeles,

California Bachelor of Science (BS), Accounting, California State Polytechnic University

Steve Gomez Threat Assessment

With over twenty-nine years of security and risk management experience, Steven is a leader in security assessments, counter-terrorism and crisis management, Steven is an acknowledged expert in providing security consulting services for government agencies, private corporations and individuals. His broad experience as a security consultant, as Special Agent in Charge for Counter-Terrorism with the FBI, as a Police Officer for the Los Angeles Police Department and as a Revenue Agent for the Internal Revenue Service provides him with the strategic vision for developing security plans and the tactical understanding for how best to respond to security threats.

Steven has led or participated in over 250 security and investigative engagements worldwide including projects in North and South America, Asia, Europe, Australia and Africa. Specifically, these engagements have included evaluating business facilities and operations, recommending security measures and procedures, and responding to non-compliance and work-place threats that arise. Additionally, Steven is called upon as a security analyst and news contributor for national and local media outlets including television, radio and digital media. Topics of analysis include security preparedness and crisis response.

During his long and distinguished career with the FBI, Steven has served in many leadership positions in Los Angeles and at FBI headquarters including Special Agent in Charge of Counter-Terrorism, Section Chief of the Directorate of Intelligence, and Supervisory Special Agent in the Criminal Division. His responsibilities included ensuring the safety and security of all critical infrastructure in the Los Angeles region including the Los Angeles rail and surface transportation systems, Ports of Los Angeles and Long Beach, the Los Angeles International Airport (LAX), the San Onofre nuclear facility and other key private sector assets. Steven led the team that investigated the 2011 Santa Monica Synagogue bombing and the 2008 Mumbai, India terror attacks. As Chair of the Counter-Terrorism Committee for the Los Angeles Mayor's Blue Ribbon Panel, Steve led the review of security procedures at LAX, identified weaknesses and best practices, and prepared a summary report with recommendations for publication by the Panel.

BENEFIT TO THE PROJECT -

- Nearly three decades of experience dedicated to the safety and security of the citizens of Los Angeles.
- An acknowledged national expert in counter-terrorism.
- As FBI Special Agent in Charge of Counter-Terrorism, was responsible for the safety and security of critical infrastructure in the Southern California region.

Steve Gomez Threat Assessment

RELEVANT EXPERIENCE

250 Security and Investigative Consulting Engagements

Worldwide. Steve has led or participated in more than 250 security and investigative engagements in North and South America, Asia, Europe, Australia and Africa. In these assignments he has performed security assessments of business facilities, probed internal misconduct and alleged illegal activities, traced and vetted companies and individuals around the world, performed due diligence and corporate compliance projects and prepared security policies and procedures.

Special Agent in Charge, Federal Bureau of Investigation.

Steve has managed international and domestic terrorism cases investigated by over 300 multiagency personnel throughout the greater Los Angeles area and Southeast Asia. As part of his responsibilities, he managed the daily impact of counterterrorism threats and criminal investigations and developed and coordinated investigative strategies and procedures to prevent a terrorist attack from occurring. In 2011, he chaired the Los Angeles Mayor's Blue Ribbon Panel that reviewed the security procedures at the Los Angeles International Airport (LAX), led the inspection of LAX's security measures and crafted a report for submission to the Mayor's Office. Among his investigations, Steve led the

U.S. investigation into the 2008 Mumbai, India terror attacks, which killed six U.S. citizens and 164 Indian nationals, conducting key liaison meetings in India and the U.S. with government officials from India.

Security Consultant for ABC

News. For the past 3 years, Steve has provided guidance, commentary and analysis on law enforcement and national security related stories and breaking news worldwide. During this time, he has appeared on over 110 interviews including ABC TV, Radio, and Digital forums, to include 20/20, Nightline Good Morning America, World News Tonight and ABC TV/Radio affiliates around the country. His detailed commentary and analysis have dealt with high-profile issues such as terrorism, active shooters, security preparedness, police use of force, civil unrest, special event security, gang violence, and other major crimes.

Los Angeles Metropolitan Transportation Authority

Threat and Vulnerability Assessment of Union Station and the Gateway Building; Physical Security Assessment of 18 Metro Bus and Rail Operating Divisions

Los Angeles World Airports

Security Assessment of Airport Operations

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Irvine Company Office Properties

Security Assessment of Parking Facilities

City of Sunnyvale

Security Assessment and Recommendations for Building Design

City of Santa Clara, CA

Santa Clara Crime Lab Security

- Security Assessments of Facilities
- Security Response Plans for Hostile
 Work Environments and Workplace
 Violence
- Corporate Compliance and Due
 Diligence
- Development of Security Policies
 and Procedures
- Tracking and Vetting of Companies, Assets and Individuals
- Staff Training and Instruction on Security Preparedness, Travel Protocols and Counter-Terrorism Response Measures
- Security Consultant and Contributor for National and Local Television, Radio and Digital Media Outlets
- Federal Bureau of Investigation Section Chief, Directorate of Intelligence Supervisory Special Agent, Los Angeles
- Police Officer, Los Angeles Police
 Department
- Revenue Agent, Internal Revenue
 Service



EDUCATION Bachelor of Science, University of Southern California

Archeology Studies University of Southampton, UK

Biochemistry Studies Cal State Northridge, Los Angeles

CERTIFICATIONS & AWARDS

Humanitarian Award, Government of Sri Lanka for Tsunami efforts

Brent Woodworth Emergency Response Plan Advisor

Brent's career spans over 40 years with extensive experience in global risk analysis, crisis management research, business continuity, systems and collaborative partnership development. He has a distinguished history in emergency preparedness, mitigation, response and recovery working with governments, private sector corporations, academic institutions, faith based leaders, and non-profit organizations both domestically and internationally.

Brent worked for IBM over a 32-year career, retiring in 2007 as the senior executive for the IBM Crisis Response Team. He was responsible for helping governments and businesses cope with catastrophic events. He has consulted on a global basis with heads of state, military leaders, senior elected officials, business leaders and government agencies. Brent and his team responded to over 70 major crisis events in 49 countries including the Indian Ocean tsunami, earthquakes in Pakistan, the Rwanda genocide, Indonesian tsunami and civil war, the Ecuadoran volcano eruption, Hurricanes Sandy and Katrina, the Oklahoma City bombing, Midwest floods and 9/11.

In 2008 Brent established the Los Angeles Emergency Preparedness Foundation (LA EPF) in cooperation with the City of Los Angeles Emergency Management Division and office of the Mayor. The Foundation is focused on coordinating emergency efforts between government agencies and businesses, academic institutions, faith based organizations, non-profits and associations in Southern California.

In 2012, LA EPF was selected by FEMA to lead their national Community Resilience Innovation Challenge Award program. Working with FEMA and the Rockefeller Foundation, LA EPF selected and funded 30 community resilience projects across the United States. This highly successful program became the proving ground for the Rockefeller 100 Resilient Cities international program. Brent is certified in disaster recovery, business continuity, incident management (NIMS and ICS), disaster communications, search & rescue, and emergency medical services.

BENEFIT TO THE PROJECT

- Over four decades of experience dedicated to responding to major disasters around the globe.
- A recognized, international expert in on-the-ground emergency response.
- Certified in disaster recovery, business continuity, incident management (NIMS and ICS), search & rescue, and emergency medical services.

Brent Woodworth Emergency Response Plan Advisor

RELEVANT EXPERIENCE -

Founder and Manager of IBM

Crisis Response Team. Brent established and led a team of independent international specialists (on-call 24x7x365) focused on helping governments and businesses to prepared, respond, and recover from catastrophic events. Brent has extensive experience in managing teams of private sector, government sector, academic, medical personnel, and operational specialists. Brent and his team have responded to over 70 major crisis events in 49 countries including: floods, earthquakes, hurricanes/cyclones, volcanic eruptions, tsunami, fires, manmade events, wars, civil unrest, and acts of terrorism.

Conducted over 120 Global Critical Infrastructure

Assessments. Brent developed, implemented, and managed programs for critical site assessment, mitigation practices, crisis response, insurance claim management, accelerated recovery and reputation management. Reduced loss exposures, improved accuracy of site valuations and developed modeling analysis for insurance coverage optimization. These services were structured into a commercial offering and produced savings of up to 2/3 per incident while reducing the

risk and impact of an outage or loss of service.

"Sahana" Open Source International Crisis Management System.

Brent co-founded the development and implementation of the Sahana open source international crisis management system and the Sahana Software Foundation (USA). Contributions included: initial concept creation support team member, high-level design, collaborative support base, corporate sponsorship and international deployment. "Sahana" is the acknowledged leader in global free open source crisis management systems. "Sahana" has been successfully deployed in over 27 countries along with the International Red Cross and the UN. Sahana is the recipient of multiple open source awards for excellence.

MWDOC/WEROC EOC Assessment

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Irvine Ranch Water District Emergency Operations Plan, Training and Exercise EOC Assessment

Orange County Water District

Emergency Response Plan, Training and Exercise **El Toro Water District** Emergency Response Plan, Training and Exercise

Natural Hazards Research Center, University of Colorado in Boulder California Under Fire: Stay and Defend

Los Angeles County Long-Term Recovery Group

President & CEO, LA Emergency Preparedness Foundation

Rockefeller/FEMA 2012 Community Resilience Innovation Challenge

Founding Principal of the Community Stakeholder Network for the Homeland Security Advisory Council

Founder of the IBM Crisis Response Team

Co-founder of the Sahana Open Source International Crisis Management System

Chairman of U.S. Congressional study on benefits for investment of government in pre-disaster mitigation

Claris Strategy



EDUCATION Master of Science (MS) Emergency Services Administration California State University Long Beach

Harvard Kennedy School of Executive Management, Leadership in Crisis: Preparation and Preparedness certification

Bachelor of Arts Political Science and Government California State Polytechnic University - Pomona

CERTIFICATIONS & AWARDS

Certified Emergency Manager International Association of Emergency Managers

SEMS, NIMS, ICS 100, 200, 300, 400, 700, 800

Diamond Award California Emergency Services Association (CESA)

Diamond Award Southern California Emergency Services Association

Kelly Hubbard Project Advisor

Kelly, who was recently appointed the Director of the Office of Emergency Management for Santa Barbara County, has over 18 years experience as a leader in emergency management. Her experience includes emergency planning, assessing facility vulnerabilities, disaster finance, coordination with nonprofit organizations, public-private partnerships and crisis management.

For the past decade and a half, she served as Director of Emergency Management Programs at the Municipal Water District of Orange County (MWDOC), a Metropolitan Water District member. While at MWDOC, Hubbard served as emergency services director for the Water Emergency Response Organization of Orange County (WEROC) which coordinated emergency preparedness, planning, response and recovery efforts among 37 water and wastewater utilities in Orange County.

Kelly was instrumental in building the WEROC program into one of the pre-eminent water emergency response organizations in the country. Her efforts to better coordinate efforts among water agencies in Orange County and with the Orange County Operational Area and other first responder organizations has greatly enhanced water infrastructure readiness and resiliency.

In addition, one of Kelly's committed passions is to disaster response. She has responded to more than 15 presidentially declared disasters, including wildland fires, storm events and the El Mayor-Cucapah Easter Sunday Earthquake.

BENEFIT TO THE PROJECT

- Almost two decades of experience in water emergency management
- A recognized leader in water emergency response and resilience programs
- Developed the WEROC program into one of the premier water emergency response mutual aid organizations in the country
- An expert in NIMS, SEMS, ICS, the Homeland Security Act (2004), the California Emergency Services Act, the Stafford Act, AWWA guidance and America's Water Infrastructure Act as it pertains to the water industry
- Certified in disaster recovery, incident management (NIMS and ICS), and disaster finance

Kelly Hubbard Project Advisor

RELEVANT EXPERIENCE –

Municipal Water District of Orange County / Water Emergency Response Organization of Orange County.

- Responsible for coordinating 37 water and wastewater utilities (city, special district & private entities) in all five phases of disaster management including prevention, preparedness, response, recovery and mitigation.
- Focused program on strong member agency support with the intention of increasing utility readiness to enhance resiliency.
- Acted as Liaison to the Orange County cities, the county, regional, state, federal and private sector emergency management and first responder community.
- Worked with all levels of personnel, from elected officials to field response staff, to ensure safe drinking water to 3 million Orange County residents.

- Assisted the water and overall Orange County emergency response community with State (SEMS) and Federal (NIMS) emergency preparedness compliance activities, as well as the integration of water utilities into traditional emergency response networks.
- Advocated for member agencies on a local, state and federal level by influencing policy, legislation, planning and coordination efforts of various sectors as it relates to the water sector and emergency management.
- Managed a \$650,000 annual budget with 7 funding agencies. Additionally, successfully applied for, managed and received the first Homeland Security Grant funds within Orange County to be provided to water utilities.

Claris Strategy

 Led a statewide water task force to write a template for implementing a Water Sector Liaison position on an emergency basis, which has been successfully used multiple times throughout California.

Vice-President of the California Emergency Services Association (2016) and Southern Chapter President (2015-2016)

Region 1 Chair/Mutual Aid Coordinator for the California Water and Wastewater Agency Response Network (CalWARN)

Published in UK-based Crisis Response Journal: "Water Supply and Climate" (V9.4) and "Drought from Policy to Emergency Response (V11.2) (2015)

Provided over 14,000 hours of emergency preparedness training to 3,000+ individuals, from elected officials to field crews

Responded to more than 15 presidentially declared disasters, including wildland fires, storm events & the El Mayor-Cucapah Easter Sunday Earthquake)



Dean Gipson, PE Deputy Project Manager

EDUCATION

Bachelor of Science, Engineering, Colorado School of Mines

REGISTRATIONS

Professional Engineer, California No. 49097;

Juris Doctor (Attorney), CA, US No. 220057

CERTIFICATION

AWWA Utility Risk & Resilience Certification 🥑

Dean has built his career finding cost effective solutions for renewing aging infrastructure. His experience in utility inspection and management, planning, design, capital improvement, and project prioritization has allowed him to help agencies to save millions of dollars by selecting appropriate capital and operational solutions. He has assisted the District in the past with updating your water, sewer and recycled water rates. He enjoys working with District staff and he as come to understand some of your challenges. As Project Manager, Dean will apply his extensive experience to quickly identify suggestions to optimize cost-effective solutions to extend asset life and work toward maximizing results for your rate payers.

RELEVANT EXPERIENCE

Confidential Client, EPA Region 9 Orange County, California

To determine options for reorganizing its water, recycled water and wastewater utilities, an Orange County, CA municipality engaged HDR to assess the value of its utility infrastructure. Dean led a team that created an asset register starting with the City's GIS database. HDR supplemented data using City records, documents, master plans, operational data, inspection data, reports, and discussions with City staff. Based on existing condition and operational data we projected a range of capital improvements required over the next ten years. HDR then developed a preliminary asset valuation using both the Original Cost Less Depreciation and Replacement Cost Less Depreciation. HDR summarized the utility assets and valuations in a confidential report that the City is using to negotiate with potential partners.

Confidential Client, EPA Region 6

Texas. A mid-sized Texan municipality is currently negotiating the terms of a consent decree with the Environmental Protection Agency. Dean provides on-going technical support to develop technical approaches and consent decree language that is favorable to the rate payers and still reduces sanitary sewer overflows and wastewater treatment plant permit violations. Areas of support include: inspection, assessment and remediation requirements for pipelines, manholes, force mains and lift stations; sanitary sewer overflow emergency response plans for pipelines and lift stations; capacity assessment evaluations; on-going CMOM activities; and identification of capital improvements.

As-Needed Consultant Services for Large Pipeline and Pump Station Facilities City of San Diego, CA As Project Manager Dean led this task ord

Project Manager Dean led this task order based condition assessment contract that assembled a team of technical and inspection experts to assess the condition of the City's interceptor structures, evaluate the screens and vibration issues at pump stations, and conduct emergency inspections of the Point Loma's South Effluent Outfall and North Metro Interceptor, among other tasks. Key activities included simultaneously managing multiple projects having variable deadlines, coordinating with multiple jurisdictions to conduct work, and producing concise and understandable reports that clearly describe needed improvements.

Water and Recycled Water SCADA Master Plan, City of San Diego, CA

The City's Water Department needed to upgrade and modernize all of its supervisory control and data acquisition (SCADA) and distributed control system (DCS) facilities. These include the nine raw water dams, three treatment plants, five recycled water pump stations, 49 pump stations, 27 distribution reservoirs and standpipes and 185 monitoring points.

Dean Gipson, PE

Deputy Project Manager

RELEVANT EXPERIENCE

HDR performed a system assessment, staff interviews, and document review to develop sufficient understanding of the system in order to develop a SCADA Master Plan which will provide guidance and consistency for future SCADA-related projects.

North City Conveyance System, Pure Water Pump Station and Dechlorination Facility City of San Diego, CA

As Project Administrator, Dean oversees the entire \$12M design project that includes a 32.8 million gallon per day pure water pump station, 7.5 miles of 48-inch diameter steel pipe, a dechlorination facility and 1.5 miles of HDPE subaqueous pipeline in the Miramar Reservoir. This project is the first phase to allow the City produce up to 1/3 of its potable water supply from local sources. Dean provides guidance to the design team in achieving milestone deliveries, coordinates quality control efforts, interfaces with the Client and provides overall support to meet contract obligations.

As-Needed Engineering Services, County of San Diego San Diego, CA

As Project manager for this three-year, \$3M multidiscipline contract that provided master planning, utility rate development, regulatory support and water well planning and design, Dean was responsible for evaluating the benefits to consolidate all sanitation districts into one district, managing the sewer master plan several districts, and developing the county's Sewer System Management Plan. The County maintains approximately 450 miles of sewer pipelines and associated pump stations from nine sanitation districts that have been consolidated into one district.

City & County of Honolulu Dept. of Environmental Services | Wastewater Program Management , Honolulu, HI

As part of a United States Environmental Protection Agency Consent Decree, the City and County of Honolulu developed a program to systematically identify deficient collection system pipelines and rehabilitate and replace 144 miles by June 2020. Dean provided technical support and direction that developed an automated system to consistently identify the most deficient segments and then prepare preliminary reports that recommend repair, rehabilitation and replacement.

Padre Dam Municipal Water District, Comprehensive Water, Sewer and Recycled Water Rate Study, Santee,

CA As project manager, Dean managed a team of financial specialists who updated the rates and created a financial planning model to develop a long-term financial plan for each District utility. From the financial plan, a five-year plan for rate adjustments was developed. As a part of the work, we developed a cost of service study that provided the cost-basis for the allocation of the revenue requirements between each class of service, but also for elevation (pumping) charges.

Operational Study of O & M for Streets, Buildings, Parks and Water Town of Parker, AZ,

Dean prepared a study for the Town of Parker that evaluated the Town's then current operations and maintenance efforts for its parks, streets, buildings, and water system and provided recommendations for staffing and operational improvements. The project involved staff interviews, crew ride alongs, and evaluating the condition of some of the facilities. Using benchmarking of similarly sized municipalities, the study highlighted areas where Town staff exceeded the average, and also provided specific recommendations to bring the Town's performance up to the median.





Amy Omae, PE, LEED AP Physical Information

EDUCATION

Master of Science, Environmental Engineering, University of Miami, 2006 Bachelor of Science, Chemistry, University of Miami, 2004

REGISTRATIONS

Professional Engineer - Civil, CA, US; No. 76824 LEED Accredited Professional, No license state., US, No. 10328834 Amy is a proven project manager with extensive experience in water and wastewater master planning design and engineering services during construction projects throughout Southern California. Her expertise is in the design of treatment plant processes pipeline profiles and layouts mechanical pumping systems pilot testing and research alternative technology evaluations mass balance and financial model development sample collection data analysis for technically based local limits quality assurance and field engineering services during construction. Amy has worked closely with Irvine Ranch Water District throughout her tenure with HDR and is currently leading the District's Recycled Water Salt Management Plan. Her dedication to delivering quality projects has made her one IRWD's most trusted project managers.

RELEVANT EXPERIENCE

Water Reliability Study, Irvine Ranch Water District, Irvine CA. As assistant to the Project Manager, Amy performed a significant portion of the modeling and evaluating local and imported water supply reliability under a variety of emergency scenarios. The work, based on a rigorous and transparent probability of risk analysis, evauated a variety of failures and recommended mitigation measures. Recent climate change research and projected reliability of imported water resources will be incorporated into the analysis. Level of service expectations will be established and mitigation strategies developed.

Irvine Ranch Water District, Filter Pump Station No. 2 Discharge Header Replacement, Irvine, CA

Ms. Omae is responsible for coordinating and collaborating with Irvine Ranch Water District (IRWD), managing the project work, schedule, and team. HDR was selected to develop the design to replace the corroded discharge header for the Michelson Water Recycling Plant (MWRP) Filter Pump Station No. 2 (FPS-2) and incorporate cathodic protection measures on the new header. FPS-2 is part of the MWRP conventional treatment train to convey up to 22 mgd of secondary effluent to the tertiary filters, high-rate clarifier, or longterm storage. Bypass pumping was needed to cover the entire flow range. The project was expedited due to the critical nature of the FPS-2 to the overall plant operation and the poor condition of the discharge valves

and header for construction to occur when lower flows are expected at MWRP.

Irvine Ranch Water District, Cienega Selenium Treatment Facility, Pilot Test, Design Verification Study, Predesign and Design, Irvine, CA

Responsible for managing the project work, budget, schedule, and team. HDR performed an alternatives evaluation to identify and recommend the technology treatment alternatives to remove selenium from Peters Canyon Wash in Irvine, California. HDR pilot tested the Advanced Biological Metals Removal (ABMet) system, completed a 60% design of a 3-cfs Cienega Selenium Treatment Facility and the 100% design of the infiltration gallery and discharge systems for the facility.

Nutrient Removal and Wet Weather Flow Management Upgrade and Expansion, San Mateo, CA. HDR

provided schematic design, final design, permitting, and bid phase services for \$400 million improvements to the San Mateo/Estero Municipal Improvement District (EMID) Wastewater Treatment Plant. As a task lead, Amy was responsible for coordinating the technical issues related to the expansion and working to make the new elements fit and interconnect with the existing facility. This project was delivered using a Construction Manager at Risk delivery method.



Alex Shannon Financial Systems

EDUCATION

Bachelor of Arts, Economics, University of Puget Sound (UPS), 2014 Bachelor of Arts, International Political Economy, University of Puget Sound (UPS), 2014

Alex is an economist/business analyst working in HDR's Economic Modeling Practice within the Water Business Group. He brings a creative and analytical approach to complex scenarios, allowing clients to improve their strategic planning and business performance by using data to make informed strategic decisions. Alex approaches each issue with an economic mindset, encouraging clients to operate in a way that maximizes efficiency. He creates complex financial and economic models to help organizations and utilities make meaningful decisions, manage complexity, and develop program implementation strategies within the context of affordability. Alex has experience developing custom cash-flow, pricing, rate, and concession models, and has worked on models that marry capital, maintenance, and operations to explore various asset management strategies. Along with these skills, Alex has experience in political and public outreach to support strategic funding and revenue generation. He has served as the economic advisor for large infrastructure programs for the cities of San Mateo, CA, North Miami Beach, FL, and Wichita, KS. Key Skills and Knowledge Base: Visual Basic for Applications (VBA) and Advanced Microsoft Excel; Benefit/Cost Analysis; Business Case Evaluations; Econometrics Political/Public Engagement; Data Gathering and Analysis; Public Finance; State Revolving Funds, Federal Grant Programs, and WIFIA; Public Private Partnerships

RELEVANT EXPERIENCE

Business Case Evaluation, City of Sacramento | Business Case Evaluation

Development Lead. Alex led the development of a business case evaluation template to assist the City in making key decisions for asset management and repair, replacement, and renewal of aging infrastructure. The model was used to evaluate different construction methods for collection system pipes under the lens of total cost, benefits attainment, and risk.

Wet Weather Improvements, Johnson County Wastewater | Economist

Alex is leading the development of a CIP implementation model for the Johnson County Wet Weather Improvements program. This economic modeling platform prioritizes projects based on a multi-criteria decision analysis framework, sequences projects optimally within funding constraints, and evaluates required revenue from rates. Policy and CIP implementation option were presented on a dashboard to visualize the impact of different decisions in real time.

Comprehensive Systems Plan, King County | Economist

Alex is providing economic analysis and management consulting services to aid

King County in developing a comprehensive system-wide plan for a set of future scenarios.

Clean Water Program, City of San Mateo | Economic Advisor and Strategic Funding Lead.

Alex worked with the City of San Mateo to design and implement their Clean Water Program. The Program delivered innovate wet-weather flow management and wastewater system upgrade and expansion projects. The initial cost estimate for the program was over \$1.2 billion, however by optimizing funding packages and project scheduling, the Economics team demonstrated an overall savings of \$250 million. This was accomplished using an optimization algorithm for project sequencing and program duration, while achieving recycled water goals 10 years sooner than originally planned and reducing overall project costs by 30%. He also led an effort to prioritize collection projects with maximum SSO reduction. This effort uses the Program's hydraulic model and GIS to identify SSO frequency and assign benefits to individual project segments.As strategic funding lead, Alex was successful in obtaining \$250M in financing from EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program.



Todd Engstrand, PE Operations / Maintenance

EDUCATION

Bachelor of Science, Civil Engineering, San Diego State University, 1994

REGISTRATIONS

Professional Engineer, California No. C62867 Distribution Operator Certification - Grade 3, California No. 40365, Treatment Operator Certification - Grade 2, California No. 33985 Todd joined the HDR team more than three years ago as a Senior Project Manager from the Yuima Municipal Water District where over the past six years he served as the Director of Operations, Maintenance, and Engineering running the day to day operations of the water system, scheduling and supervising the facilities maintenance, and planning, design, quality control, environmental document review, bidding and construction management of the Capital Improvement Program as the District's Engineer. Through this unique experience, Todd brings a practicality to his design work of actually building and then operating those facilities for which he led the planning and design efforts. For the 13 years prior to the Water District, he served as a Senior Project Manager for a large national engineering firm and specialized in leading consultant teams in the planning, design, quality control program reviews and construction support services of water and wastewater facilities for numerous agencies throughout the Southwest.

RELEVANT EXPERIENCE

North City Conveyance System, Pure Water Pump Station and Dechlorination Facility, City of San

Diego, CA. Senior Project Manager leading the design team for the for the detailed design of the 32.8 million gallon a day capacity North City Pure Water Pump Station (NCPWPS) and the Pure Water Dechlorination Facility (PWDF) as part of the City of San Diego's Pure Water Program. The NCPWPS includes four (4) 1,000 horsepower pumps (three (3) duty with one (1) standby) to convey advanced treated water from the North City Pure Water Facility to Miramar Reservoir in an eight (8) mile 48-inch transmission pipeline. The PWDF is a CMU block building that hoses two 4,000 gallon FRP sodium bisulfite storage tanks, duty and standby chemical injection pumps and redundant ORP analyzers for measuring upstream and downstream chlorine residuals. An underground injection vault contains a 48-inch static mixer and magmeter with redundant water sampling and chemical injection lines.

Yuima Municipal Water District, Pauma Valley, California. Performed a facilities condition assessment and as the Engineer of the District, worked directly with the General Manager to update the five year Master Plan and develop the \$7 million Capital Improvement Program. Performed alternatives analysis for facilities design and prepared all engineering calculations, design plans and specifications, and the complete bid contract document package. Oversaw and managed all aspects of the bidding and construction phases including managing outside professionals and contractors, inspection, and supervision of self performed work by District crews. Managed outside professionals and contractors hired to perform projects for the District.

Padre Dam Municipal Water District, Sky Ranch Water Facilities Design,

Santee, CA. Project manager for the design and engineering support during construction of water and sewer facilities to support the 280-unit, \$5-mitlion Sky Ranch development. Managed and reviewed all aspects of the project, including budget and schedule control, client, agency, and design team coordination, contract and supporting document oversight and approval, and construction cost reduction reviews. The Sky Ranch facilities, owned and operated by the Padre Dam Municipal Water District, included the design and construction of a 2,500 gpm capacity 900-hp booster pump station, 1-million gallon capacity dual basin prestressed concrete reservoir, pressure reducing station, and a small package sewer lift station.



Badri Badriyha, PHD, PE CHEMICAL OPERATIONS

EDUCATION

Doctor of Philosophy, Environmental Engineering, University of Southern California (USC), 1997

Master of Science, Environmental Engineering, University of Baghdad (UOB), 1980

Bachelor of Science, Civil Engineering, University of Baghdad (UOB), 1977

REGISTRATIONS

Professional Engineer, California, USA No. 65911 Arizona, USA, No. 37336

Water Distribution, California, United States, No. D2-46056

NASSCO-PACP, United States No. U-316-0700355 Badri Badriyha has designed wastewater treatment facilities, sludge handling, pump stations, water and wastewater pipelines and sewer systems for agencies throughout Southern California. He has vast experience assessing and designing wastewater treatment processes, biological treatment, sludge thickening and dewatering, and chemical addition and disinfection. He has significant experience in design of odor control systems, as well as odor collection and transport systems. He is an expert in hydraulic assessment for pipelines, treatment facilities and pump stations. He is NASSCO-PACP certified and an expert in condition assessment and inspection of wastewater pipelines, pump stations, treatment facilities, sewer outfalls, large diameter pipelines utilizing CCTV, non-invasive and advanced assessment techniques.

RELEVANT EXPERIENCE

Pure Water North City Conveyance System (NCCS), San Diego, CA

Badri was a lead designer for the 32.8 mgd of highly purified water from the North City Pure Water Facility to Miramar Reservoir 8 mile long, 48-inch steel pipeline. Key feature is chemical injection to treat the water and remove chlorine before entering the reservoir to protect aquatic life. Design included four 1,000 horsepower pumps (3 duty with 1 standby), each rated at nearly 7,600 gallons per minute with a total dynamic head of 410 feet with surge protection.

Coast Guard Training Center Water Main and Pump Station, Petaluma, CA

Lead designer for 7.5 mile of water main with horizontal directional drilling. Project included new booster pump station with chlorine dosing to bring the residual to recommended level and fluoride addition. Project included upgrades to four existing water storage tanks to enhance the turnover rate within the tanks. A new pumping control strategy to take advantage of lower electricity cost at off-peak hours, chlorine residual monitoring, new fiber optic and SCADA.

Orange County Sanitation District, Sludge Dewatering and Odor Control at Plant No. 1, Job No. P1-101, Fountain Valley, CA

Task leader responsible for designing the centrate pumping, odor control, centrifuge's polymer feed system, chemical storage and dosing. Key component of the new

thickening and dewatering facilities at Plant 1 with 6 centrifuges, solids handling and support systems including polymer and chemicals dosing. New high efficiency odor control and treatment with chemical scrubbers utilizing acid, hypochlorite, hydroxide dosing and carbon adsorbers. The project included engineering support during construction, commissioning and training.

Irvine Ranch Water District, Michelson Water Reclamation Plant Ph. 2

Expansion, Irvine, CA. Design Engineer for odor control, disinfection, chemical dosing and pumping hydraulics. Design included influent sewers and headworks, expanded primary sedimentation, new primary effluent pumping station, modified flow equalization basins, secondary treatment expansion with membrane bioreactor process (MBR), new highrate clarifier to treat filter backwash, new ultraviolet disinfection system and chemical facilities.

City of San Diego As-Needed Services, Filanc/HDR Design-Build JV, San Diego, CA. Senior Design Engineer responsible for design of pumping equipment, chemical feed systems, odor control scrubbers and hydraulics. Project included upgrades to the Metropolitan Biosolids Center pumping with rerouting of sludge, thickened sludge and scum piping, new chemicals dosing and modification to the odor control scrubbers. Project had significant challenges as the facility is congested with pipes and retrofitting is done without interruption to operation.



Bruce Johnston, PE SCADA / ICS Controls

EDUCATION

Bachelor of Science, Chemistry, University of California, Irvine (UC Irvine), 1988

REGISTRATIONS

Professional Engineer -Control Systems, MT, US; No. 19218 NC, US; No. 034194 CA, US; No. 7508 OR, US; No. 85755 NV, U; No. 022383 Bruce Johnston has 30 years of experience in control systems, information technology/ systems, data management, instrumentation and control (I&C), and electrical design for projects that include municipal water/wastewater facilities and industrial control systems. His experience includes planning, design and implementation of a variety of innovative treatment processes at municipal, private, and industrial sites. He has also worked to develop several SCADA and IT master plans for utilities. His key areas of expertise include project management, cost estimating, information technology planning, I&C design, supervisory control and data acquisition (SCADA) programming, applications development, data management, network security, quality assurance/quality control (QA/QC) review of I&C and electrical designs, and small-project electrical design and support. Bruce has extensive SCADA programming experience and has used many programming packages including Rockwell Automation, GE iFix, Wonderware, and many others. He has also provided construction management/oversight and has been a key player is many construction projects. Bruce has worked on all phases of large and small projects, from predesign to final commissioning, and has been frequently retained to provide ongoing support after completion.

RELEVANT EXPERIENCE

SCADA Design, Phase I, Long Beach Water Department, Long Beach, CA.

Bruce was the project manager on LBWD's SCADA Upgrade Project, Phase I, This project will take the recommendations published in the SCADA Master Plan and implement a SCADA system upgrade for a small subset of the entire system (three sites). This phased approach is designed to minimize risk and allow LBWD to gain comfort operating the system prior to full-scale implementation. The project includes enhancing our understanding of the system, working with LBWD staff to ensure consensus, and designing a scalable SCADA system as a proof of concept and to establish system-wide standards for design and upgrade projects in the future. Concurrently with each submittal, the project team will review and refine the estimated construction costs.

Water SCADA Master Plan, Public Utilities Department, San Diego, CA.

As lead engineer, Bruce led the City of San Diego's SCADA Master Planning Project. The project included documentation reviews, intensive staff interviews, site visits/assessments, a gap analysis, and various workshops to help the City staff come to consensus. The final Master Plan defined both the current state and the end goal of the upcoming Water Operations Services SCADA system upgrade. The plan detailed the steps that must be taken for successful implementation of a unified SCADA system that is future ready and included recommended standards, expected construction costs, and prioritization of projects.

American Water Services CDM, Inc., Tolt Water Treatment Facility SCADA Upgrade, Seattle, WA

Bruce provided SCADA design and engineering to upgrade the plant's iFix SCADA human machine interface (HMI) nodes. The plant's primary HMI failed and the iFix version they were running only operated under Windows XP. Bruce procured, installed and configured the latest version of the iFix software to allow the HMI to use Windows 7. Bruce provided configuration of a temporary system to allow operators to continue to run the plant with redundant HMIs.

City of St. Helens, Telemetry System Upgrade, St. Helens, OR

Bruce led the design team for a telemetry system upgrade project that included the addition of new radio communications sites and replacing out-dated radio telemetry system. Bruce also provided Support During Construction and helped define system integrator scope of work.



David Brearley, PMP Cybersecurity

EDUCATION

B.S. Computer Engineering – University of South Carolina

CERTIFICATIONS

Department of Homeland Security Industrial Control Systems Cybersecurity (301) Training

HDR National Risk and Resilience Training (2-day)

REGISTRATIONS

PMP #1327838 (April 2022)

David has 17 years of experience in providing IT & OT (SCADA) solutions, services, and consulting for Water/Wastewater, Military, Oil and Gas, Chemical, Transportation, Food & Beverage, Building Automation, Packaging, Discrete Manufacturing, Pulp and Paper, and Power Generation.

Providing hands-on, design and consulting services that cover the comprehensive control system lifecycle his experience is broad and deep. His primary technical background includes: Solutions Architecture and Assessment, Process Control and HMI Systems Design and Implementation, Risk Assessment and Mitigation, Master Planning, Network Design and Configuration, Installation/Construction Management, DoD RMF Compliance, and Project Management.

RELEVANT EXPERIENCE

Howard County - Little Patuxent Water Reclamation Facility, Biosolids Expansion Project | Control Systems Project Manager. Design of biosolids facility process control network following a zones and conduits model. Segregate business and process networks through design and implementation of a DMZ. Integration of Foxboro DCS and PLC based PCS control system networks.

Howard County – Little Patuxent Water Reclamation Facility, Wireless Tablet Design Project | Control Systems Project Manager. Phased design of in-plant wireless networks for tablets. Tablets initially will replace manual logging with integration to plant historian and reports. Future phases include tablets for monitoring and control of PCS system.

Billings WWTP Nutrient Expansion Upgrade | Control Systems Project Manager. Owner's application

programming services as part of expansion project and overall control system improvements. Upgrade of existing PLC-5 to ControlLogix, FTView SE, Factory Testing, I&C Design Submittal Review, Commissioning, Training.

Northeast Ohio Regional Sewer District (NEORSD) – Emergency Response Plan | Control Systems Project Manager. Development of an emergency response plan for process control and automation for incorporation into District-wide policies & procedures.

Northeast Ohio Regional Sewer District (NEORSD) - Network Architecture and PCN Remote Access | Control Systems Project Manager. Design network segregation for PLC/ HMI network. Segregate business and process networks through design and implementation of a DMZ. Develop and implement a secure remote HMI access solution.

Union County Public Works - SCADA Master Plan | Subject Matter Expert - I&C. Provide subject matter expert support for PLC, HMI, Remote Telemetry and networks as part of the SCADA Master Plan team.

Union County Public Works – SCADA Radio Path Study | Control Systems Project Manager. Complete radio path study including computer modeling and field verification for replacement of telemetry network.

Union County Public Works - PCS & SCADA Network Architecture | Subject Matter Expert. Development of a new county-wide network architecture for PCS & SCADA networks including remote access for troubleshooting and mobility in the collections and distribution networks.



Jennifer Duffy, pe Regulatory

EDUCATION

Bachelor of Science, Civil Engineering, Tufts University, 1982

REGISTRATIONS

Professional Engineer, AZ, US No. 52005 CA, US No. 40648 Jennifer has 37 years of civil and environmental engineering experience including an impressive background in water and recycled water master planning and design, sewer master planning and alignment studies sewer pipeline and pump station design, environmental permitting, water supply analysis and hydrologic studies. She has completed water supply assessments urban water management plans and master planning studies for numerous water districts throughout the region. Having worked in Southern California for the majority of her career she has a thorough understanding of the local water supply resources and imported delivery systems and the related risks associated with each.

RELEVANT EXPERIENCE

Water Reliability Study, Irvine Ranch Water District, Irvine CA. Project Manager for the modeling and evaluating local and imported water supply reliability under a variety of emergency scenarios, based on a rigorous and transparent probability of risk analysis. Recent climate change research and projected reliability of imported water resources will be incorporated into the analysis. Level of service expectations will be established and mitigation strategies developed.

Recycled Water Salt Management Plan, Irvine Ranch Water District

Irvine, CA. Project Principal for development of a Salt Management Plan to better understand the contributing sources of salt in IRWD's recycled water product and conduct a salt balance analysis. The resulting Salt Balance Model is a tool that quantifies the flow total dissolved solids (TDS) concentration and salt loads at various locations within the system. The model is designed to predict the effluent TDS from a water recycling plant and the TDS in the recycled water distribution system from 2013 to 2035.

Water, Sewer and Recycled Water Master Plan, City of Carlsbad Public Utilities,

Carlsbad, CA. Project Manager overseeing development of water demand and sewer flow projections, hydraulic model updates, existing system improvements, future facilities assessment, staffing analysis, condition assessment and asset renewal decision-making and a Program EIR.

Collection System Capacity Study, Orange County Sanitation District,

Fountain Valley, CA. Project Manager overseeing the development of design storm criteria, flow projections and catchment basin delineation for updating the hydraulic model for the District's 250 MGD, 410 mile collection system. Assisted with workshop presentations and development of the Capacity Study report documentation.

Water Recycling Demonstration Project, City of Anaheim, Anaheim,

CA. Project Manager. Project manager responsible for the development of a Title 22 engineering report and other air and water quality permitting activities for the city of Anaheim's Water Recycling Demonstration project. The Demonstration project includes a new 100,000 gallon water reclamation facility and distribution system that serves landscape irrigation, an ice arena, cooling towers, and toilet flushing in a dual plumbed City Hall building.

Terra Firma Enterprises



EDUCATION Master of Public Administration in International Management

Monterey Institute of International Studies

Bachelor of Arts - Spanish

University of California at Santa Barbara

CERTIFICATIONS

Certified Emergency Manager Certified Hazardous Materials Manager Master Exercise Practitioner HSEEP Trainer NIMS/ICS 100, 200, 300, 400, 700 & 800

Wendy Milligan Emergency Response Planner

Wendy has worked in the field of Emergency Management since 1988. Eight of those years were spent with the Ventura County Sheriff's Office of Emergency Services (OES). As the Assistant Director of Ventura County Sheriff's OES, she met federal and state requirements with county response plans, created a nationally recognized community disaster training program, designed and implemented numerous training programs, and exercises for private and public sectors, coordinated the response to six presidential disasters, and has recovered millions of dollars for the County in the Federal and State reimbursement process.

Wendy has written over 60 comprehensive Emergency Response and Hazard Mitigation plans ranging from small jurisdictions to large counties and has designed and implemented over 60 exercises varying from specific drills to full-scale weapons of mass destruction exercises consistent with the Homeland Security Exercise Evaluation Program (HSEEP) and has trained thousands of professionals learning more about emergency management, SEMS, NIMS and HSEEP.

Wendy is a past member of the Board of Directors for the California Emergency Services Association (CESA), Southern Chapter and a current member and a long-standing member of IAEM. In 2015 CESA awarded Wendy the Diamond Award for outstanding service in the field of emergency management.

BENEFIT TO THE PROJECT

- Over thirty years of experience in the field of emergency management
- Developed over 60+ emergency response and hazard mitigation plans for cities, counties and special districts
- Built a standardized emergency plan template for the cities in Ventura County
- Certified in disaster recovery, incident management (NIMS and ICS), training, exercises and disaster reimbursement
- Responded to multiple disasters in Southern California

Wendy Milligan Emergency Response Planner

RELEVANT EXPERIENCE –

City of Ventura Water, Ventura, CA | ERP Planner Wendy worked with Ventura Water to update their Emergency Response Plan (ERP), their operational guidelines for operating in the Emergency Operations Center (EOC) and incorporate the National Incident Management System (NIMS) requirements into the ERP where appropriate. The revised EOP complied with the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, the Standardized **Emergency Management System** (SEMS) regulations, the Incident Command System (ICS) and NIMS.

Ventura County Sheriff's Office of Emergency Services, Ventura, CA | Project Manager

Wendy provided technical assistance to the County of Ventura and six cities (Fillmore, Moorpark, Ventura, Ojai, Santa Paula, Thousand Oaks) to update their Emergency Operations Plans (EOP) and operational checklists to comply with the SEMS, the NIMS and follow the guidance as set forth in the U.S. Department of Homeland Security's (DHS) Developing and Maintaining Emergency Operations Plans, **Comprehensive Preparedness** Guide (CPG) 101. The update process incorporated a series of stakeholder meetings/workshops to identify planning gaps, goals, objectives and identify courses of action.

City of Beverly Hills Public Works, Beverly Hills, CA | Project Manager Wendy currently serves the City of Beverly Hills Public Works Department with their emergency management program developing and updating plans (Public Works **Emergency Operations Plan**, Greystone Reservoir Emergency Action Plan, Water Main Break Plans, Department Operations Center (DOC) SOPs, and a Mass Debris Management Plan), providing DOC staff with specific position training and assisting and developing emergency exercises that challenge Public Works staff. Most recently, Wendy provided subject matter expertise on an Oil Well Control Response Plan and is developing the City's Emergency Action Plan for the Purple Line Extension project with LA Metro.

Los Angeles Unified School District, Los Angeles, CA Project Manager. Wendy has been working with LAUSD for the last 5 years to update EOPs, provide essential EOC training and exercises. In 2014 she provided two Table Top Exercises (TTXs). The first one focused on a fire scenario, and the second one focused on an earthquake. These exercises accentuated the District's need to have EOC staff better understand the main functions of the EOC, the various roles and responsibilities of each position. In 2015, Wendy addressed this gap by rewriting the District's



EOP and offering a 12-hour EOC Essentials course for all EOC staff. The course contains six separate training modules and culminates with a table top exercise to emphasize the course material. Each training module incorporates hands-on activities to underscore the module topic. In addition, another Earthquake TTX was provided to offer an opportunity for students to practice what they learned in the EOC Essentials Course. In 2016 Wendy provided the District Section-specific training (Management, Operations, Planning, Logistics and Finance) and Public Information Officer to further develop the District's capabilities in the EOC and followed up the training with another table top exercise. 2017, Wendy provided a 3-shift table top exercise that emphasized shift change issues and information gathering and dissemination. In 2018, TFE designed and implemented a functional exercise using a terrorism scenario involving multiple school sites. And finally in 2019, Wendy is developing 4 different table top exercises and facilitator guides for Local District Superintendents to use with their staff.

CPARS Consulting



EDUCATION

Graduate Certificate in Emergency and Disaster Management, American Military University, Charles Town, WV

Bachelor of Arts in Business and Public Administration, Honors, University of Puget Sound, Tacoma, WA

Bachelor of Arts in U.S. Political Science, Minor in Economics, University of Puget Sound, Tacoma, WA

CERTIFICATIONS

Certified Emergency Manager (CEM), IAEM

Certified Business Continuity Professional (CBCP), DRII

Master Exercise Practitioner (MEP), FEMA

Certified CSTI Outreach Instructor, CalOES

Nick Lowe Compliance Tool Training

Nick Lowe is a recognized emergency management, homeland security, and business continuity program expert with over 15 years of experience supporting efforts at the federal, state, and local levels, and in the private sector. Nick has led dozens of significant emergency preparedness efforts in Southern California, including the annual city-wide emergency preparedness exercises for the City of Los Angeles, the policy exercises for the County of Los Angeles, the emergency planning for the American Red Cross Los Angeles Region, and the emergency preparedness and business continuity efforts for the Port of Long Beach.

From 2010 through 2014, Nick served as the Southern Region Training and Exercise Program Lead for the California Governor's Office of Emergency Services (CalOES) where he was responsible for supporting all State involvement in the eleven-county region. Prior to that, Nick was a Manager with ICF International in its Emergency Management and Homeland Security Division based in Washington, DC and subsequently in Los Angeles, CA. During this time, he worked in more than 30 U.S. States and Territories, across disciplines, levels of government, and with the private sector on the full spectrum of emergency management phases and business continuity programs. Under contract to the National Oceanic and Atmospheric Administration's (NOAA's) Office of Coast Survey (OCS) and the U.S. Minerals Management Service (now the Bureau of Ocean Energy Management), Nick supported both agencies in the relocation of hundreds of personnel and resources from New Orleans to Houston and other areas in the aftermath of Hurricane Katrina to ensure their continuity. His preparedness expertise includes continuity of operations/government, homeland security strategy, and emergency operations planning. Nick has conducted over 250 trainings and exercises.

Nick was one of the original contributing authors to the National Infrastructure Protection Plan (NIPP) for DHS, which focused on identifying and addressing vulnerabilities to all critical infrastructure sectors, including the water sector.

BENEFIT TO THE PROJECT

- Recognized national expert on emergency preparedness training and exercises
- Conducted over 250 trainings and exercises throughout the country
- Familiar with AWIA compliance tools including VSAT
- Certified in disaster recovery, incident management (NIMS and ICS), training, exercises and business continuity
- Responded to multiple disasters across the nation

Nick Lowe Compliance Tool Training

RELEVANT EXPERIENCE –

Long Beach Water Department, 2015 - 2016 Under contract to the Long Beach Water Department, Nick assisted the department with the development of damage assessment policies and divisionspecific response guides, and then developed a series of discussionbased and then operationsbased exercise to test the newly created policies and guides. This culminated in a damage assessment full scale exercise that included a full activation of the **Department Operations Center** and emergency response team.

California Governor's Office of Emergency Services (CalOES), So. Region Training and Exercise Program Lead, 2010 - 2014

Nick pioneered a first-ever and tremendously successful State training and exercise program designed to support and facilitate the preparedness of all response, community, and infrastructure stakeholders in Southern California. On average, he personally implemented 30 -50 exercises/trainings per year and the team he oversaw, more than 100. A sampling of programs he directly supported included: City and County of Los Angeles, Ports of Los Angeles/Long Beach, Los Angeles County Metropolitan Transportation Authority (Metro), Los Angeles and Burbank Airports, Metropolitan Water District of Southern California, Los Angeles Unified School District, AEG/

Staples Center, and Southern California Edison.

One of Nick's s assignments with CalOES was leading the Southern Region's participation in the Statewide Exercise Series (a.k.a. Golden Guardian). The Statewide Exercise Series focused on California's Catastrophic Response Plans. He was responsible for designing and hosting trainings, and planning and conducting exercises that educated stakeholders on and evaluated capabilities related to California's Catastrophic Response Plans. This typically consisted of 8 - 20 events over a two year period and ranged from Task Force Workshops addressing water conveyance, port reconstitution, and Cajon Pass Critical Infrastructure Restoration to functional exercises for the State/Federal Unified Coordination Group (UCG).

Irvine Ranch Water District,

2019 Under subcontract to Claris Strategy, Nick is supporting the Irvine Ranch Water District with a series of exercises to improve the District's emergency operations. This included a tabletop exercise focused on communications and situational awareness and a functional exercise focused on the District's response to a complex coordinated terrorist attack.



SELECTED TRAINING AND EXERCISES

- California Specialized Training Institute
 Outreach Instructor for all EOC
 Courses, 2010 Present
- California Homeland Security Exercise and Evaluation Program (HSEEP) Course Instructor, CalOES, 2010 -Present
- Golden Guardian/ Capstone California Exercise Series, CalOES, 2010 2014
- Water Contamination Emergency Response Exercise Series, Los Angeles County Department of Public Health, 2009
- Los Angeles County Operational Area "Golden Guardian" Functional/Full Scale Exercise, 2008
- San Bernardino County Operational Area "Golden Guardian" Functional Exercise, 2008
- Public Health Tabletop Exercises, Los Angeles County Department of Public Health, 2008
- Public-Private Sector Pandemic Flu Exercises, Iowa Homeland Security and Emergency Management Division, 2007
- Iowa Public Health Exercises, Iowa Homeland Security and Emergency Management Division and Iowa Department of Public Health, 2006 -2007
- Radiological Emergency Preparedness (REP) Program Evaluator, Federal Emergency Management Agency, 2006 – Present
- Tactical Interoperable Communications Plan (TICP) Exercises, U.S. Department of Homeland Security, 2006

Launch! Consulting



Linda Warren, pe J100 Advisor

EDUCATION

MS, Civil Engineering, Water Resources, Tufts University BS (magna cum laude), Environmental Science, College of William & Mary

REGISTRATIONS

Professional Engineer, Civil, VA

CERTIFICATION

AWWA Utility Risk & Resilience Certification

BENEFIT TO PROJECT

- Extensive knowledge of AWIA requirements and J100 Assessment Methodology
- Performance of drinking water Vulnerability Assessments following 9/11
- Experience with utilities nationwide to improve readiness through risk and resilience assessments, emergency planning, and training

As the Principal of Launch! Consulting, Linda has been at the forefront of securing water and wastewater utilities since 9/11, before which she focused on source water protection. She brings extensive experience and knowledge in security and emergency planning from assisting more than 100 localities and utilities nationwide to improve readiness through risk and RRAs, emergency planning, training, and organizational change activities. She is an experienced trainer of resilience in the water sector, and the assistant chair of the AWWA Security and Emergency Preparedness Committee. Linda develops resilience projects for multiple agencies through interactive workshops that foster coordination. She recently led a team of consultants to develop the AWWA trainings for the AWIA in only three months. Linda is also an Adjunct Instructor of MGT 343 Disaster Management for Water and Wastewater Utilities, a FEMA-sponsored course through Texas A&M University's TEEX Program since 2013.

RELEVANT EXPERIENCE

Anchorage Water and Wastewater Utility, Water and Wastewater Risk and Resilience Assessment, Anchorage, AK | Subject Matter Expert. In preparation for compliance with the new AWIA requirements, Linda provided subject matter expertise to the HDR Team that developed AWWU's 2013 vulnerability assessment (VA). Launch! reviewed the VA report and developed the gap analysis memo to compare the original RAM-W methodology to the new J100 standards and describe how AWWU could best update the assessment to meet the new requirements.

Seattle Public Utilities Emergency Response Plan, Seattle, WA | Project Manager/Subject Matter Expert.

Linda developed, as a subconsultant to ECO Resource Group, the updated Comprehensive Emergency Management Plan (CEMP) for SPU. The final document was developed for all lines of business (Water, Drainage and Wastewater, Recycling and Solid Waste) as well as Customer Service. The project involved workshops with leaders from across SPU, and included the use of Emergency Support Functions. AWWA AWIA Trainings: Development of Certificate Program, Washington, DC | Project Manager. Linda developed, in conjunction with AWWA, the AWIA Certificate Program, which is a fivecourse online learning suite that launched in April 2019 prepares utilities for risk and resilience management and becoming AWIA compliant.

Broward County Water and Wastewater Services VA, ERP, Continuity of Operations Plan, Communications Plan, and Training, FL | Project Manager/Subject Matter Expert. The Launch! team conducted the VA using the J100 methodology in a series of workshops for the wastewater utility. As part of this process, the team evaluated existing response planning documents to suggest improvements. The project also connected the VA results to the asset management portion of the project for increased utility resilience and prioritized capital improvements. The team then developed the update for the Continuity of Operations Plan according to FEMA guidance with all five utility departments. Through a series of workshops with staff and outside agencies, the team developed the ERP, in addition to a Communications Plan, for the entire utility.

Launch! Consulting



Ike Eisenhart

EDUCATION

BS, Homeland Security/ Emergency Management, American Military University, 2015-Present Associates, Homeland Security, Keiser University

REGISTRATIONS

Certifications in EMT, FFI/II, HAZMAT operations FEMA certified in emergency and incident management

BENEFIT TO PROJECT

- Specialized experience in drinking water system security
- Use of diverse tools for cybersecurity assessments
- Hazardous materials/WMD trainer

Ike has extensive experience developing and implementing VAs, cyber assessments, and emergency plans for water systems and U.S. military bases, including a water VA at Quantico. His knowledge includes state and federal security and emergency management planning and requirements, including emergency operational command and explosive recognition. As a previous Director of Training, Security, Outreach, and Emergency Preparedness with Virginia Department of Health (VDH), Office of Drinking Water (ODW), Ike was a resource for security and emergency planning at all water systems in Virginia. He has directed, supervised, and supported training for the ODW security program (counterterrorism and physical). He also led the Utility Cybersecurity Initiative for VDH. Ike serves on the Working Group for the Water Sector Coordination Council to develop the "Roadmap to a Secure and Resilient Water and Wastewater Sector."

RELEVANT EXPERIENCE

Anchorage Water and Wastewater Utility, Water and Wastewater Risk and Resilience Assessment, Anchorage, AK | Security Specialist.

The HDR Team developed the most recent VA for AWWU, and Launch! reviewed the VA report and developed the gap analysis memo. The memo defines how to update the assessment to become an RRA that is compliant with AWIA. Ike reviewed the AWWU VA and defined the gaps for AWIA, as well as the scope of work for an update.

Broward County Water and Wastewater Services VA, ERP, Continuity of Operations Plan, Communications Plan, and Training, FL | Security Specialist. Ike advised on mitigation measures. Local engineers assisted in project workshops, field assessments, and development of mitigation measures. Vulnerability Assessments and Comprehensive Emergency Management Plan (City of Charlottesville Department of Utilities, Rivanna Water and Sewer Authority, University of Virginia, and Albemarle County Service Authority), VA | Security and Emergency

Preparedness Leader. Ike was working for the VDH as the Security and Emergency Preparedness Leader for all water systems throughout the state; he participated in the project workshops as a State representative, advising on all aspects of the project.

Risk and Resilience Assessment and Emergency Response Plan update/ Training, FL | Security Specialist. Launch! completed the RRA on the water, wastewater, and reclaimed water systems using the J100 Standard. Ike advised on mitigation measures and conducted the cyber assessment.



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PALMDALE WATER DISTRICT

BOARD MEMORANDUM

DATE:	October 7, 2019	October 14, 2019
то:	BOARD OF DIRECTORS	Board Meeting
FROM:	Mr. Dennis D. LaMoreaux, General Manager	
RE:	AGENDA ITEM NO. 7.2 – CONSIDERATIO TO RESCHEDULE THE FIRST REGULA NOVEMBER FROM NOVEMBER 11, 2019 DUE TO THE VETERAN'S DAY HOLIDAY GENERAL MANAGER LAMOREAUX)	AR BOARD MEETING IN TO NOVEMBER 12, 2019

Recommendation:

Staff recommends the first regular Board meeting in November be rescheduled from November 11, 2019 to November 12, 2019 due to the Veteran's Day holiday.

Alternative Options:

The Board could choose a different date rather than November 12, 2019.

Impact of Taking No Action:

The first Regular Board Meeting in November will be cancelled.

Background:

The first Regular Board Meeting in November is scheduled for Monday, November 11, 2019, which is Veteran's Day, creating the need to reschedule this meeting as the District office will be closed in observance of the Veteran's Day holiday.

Strategic Plan Initiative/Mission Statement:

This item is part of Strategic Initiative No. 2 – Organizational Excellence. This item directly relates to the District's Mission Statement.

Budget:

This item will not impact the Budget.

Supporting Documents:

None.

PALMDALE WATER DISTRICT

BOARD MEMORANDUM

DATE:	October 7, 2019	October 14, 2019
то:	BOARD OF DIRECTORS	Board Meeting
FROM:	Mr. Dennis D. LaMoreaux, General Manager	
RE:	AGENDA ITEM NO. 7.3 – CONSIDERAT TO RESCHEDULE THE FIRST REGU DECEMBER FROM DECEMBER 9, 2019 TO THE ACWA CONFERENCE. (NO BU MANAGER LAMOREAUX)	VLAR BOARD MEETING IN TO DECEMBER 16, 2019 DUE

Recommendation:

Staff recommends the first regular Board meeting in December be rescheduled from December 9, 2019 to December 16, 2019 due to the ACWA Conference.

Alternative Options:

The Board could choose a different date rather than December 16, 2019.

Impact of Taking No Action:

The first Regular Board Meeting in December will remain on December 9, 2019.

Background:

The first Regular Board Meeting in December is scheduled for Monday, December 9, 2019, the Monday after the ACWA Conference. A majority of the Board members will be attending the ACWA Conference the week of December 2 - 6, 2019 creating limited opportunities for Board briefings and agenda review.

Strategic Plan Initiative/Mission Statement:

This item is part of Strategic Initiative No. 2 – Organizational Excellence. This item directly relates to the District's Mission Statement.

Budget:

This item will not impact the Budget.

Supporting Documents:

None.

PALMDALE WATER DISTRICT

BOARD MEMORANDUM

DATE:	October 7, 2019	October 14, 2019
TO:	BOARD OF DIRECTORS	Board Meeting
FROM:	Mr. Dennis D. LaMoreaux, General Manager	
RE:	AGENDA ITEM NO. 7.4 – CONSIDERATION TO CANCEL THE SECOND REGULAR DECEMBER, DECEMBER 23, 2019, DUE SCHEDULED OFFICE CLOSURE. (NO GENERAL MANAGER LaMOREAUX)	BOARD MEETING IN TO THE DISTRICT'S

Recommendation:

Staff recommends that the second Regular Board Meeting in December, December 23, 2019, be cancelled due to the scheduled office closure.

Alternative Options:

The second Regular Board Meeting in December could be rescheduled to an earlier time in December.

Impact of Taking No Action:

The second Regular Board Meeting in December will not be held.

Background:

For the past several years, the District has closed from Christmas through New Year's as a cost saving measure with the Board of Directors cancelling the second Regular Board Meeting in December due to this closure. The date of the second Regular Board Meeting in December is December 23, 2019. The District office closure begins December 23, 2019 with the office reopening December 30, 2019. The office will then close again on January 1, 2019 for the New Year holiday reopening on January 2, 2019.

Strategic Plan Initiative:

This item is under Strategic Initiative No. 5 – Regional Leadership.

Budget:

Cancelling the second Regular Board Meeting in December will not affect the budget.

MINUTES OF MEETING OF THE RESOURCE RELIABILITY AND OPERATIONAL EFFICIENCY COMMITTEE OF THE PALMDALE WATER DISTRICT, AUGUST 6, 2019:

A meeting of the Resource Reliability and Operational Efficiency Committee of the Palmdale Water District was held Tuesday, August 6, 2019, at 2029 East Avenue Q, Palmdale, California, in the Board Room of the District office. Chair Mac Laren called the meeting to order at 3:00 p.m.

1) Roll Call.

Attendance:	Others Present:
Committee:	Dennis LaMoreaux, General Manager
Kathy Mac Laren, Chair	Adam Ly, Assistant General Manager
Robert Alvarado, Committee	Mike Williams, Finance Manager
Member	Judy Shay, Public Affairs Director
	Peter Thompson II, Deputy Water & Energy Res. Dir.
	Tara Rosati, Customer Care Supervisor
	Dawn Deans, Executive Assistant
	0 members of the public

2) Adoption of Agenda.

It was moved by Committee Member Alvarado, seconded by Chair Mac Laren, and unanimously carried by all members of the Committee present at the meeting to adopt the agenda, as written.

3) Public Comments.

There were no public comments.

4) Action Items:

4.1) Consideration and Possible Action on Approval of Minutes of Meeting Held February 22, 2018.

It was moved by Committee Member Alvarado, seconded by Chair Mac Laren, and unanimously carried by all members of the Committee present at the meeting to approve the minutes of the Facilities Committee meeting held February 22, 2018, as written.

4.2) Presentation of Proposition 218 Process and Timeline.

Finance Manager Williams provided an overview of the updated 2019 Rate Study Schedule, which includes upcoming Board Standing Committee meetings, workshops, an open house, and a potential date for a public hearing regarding the 2019 Rate Study.

The Committee then requested several local organizations be invited to the August 22 workshop for elected officials, community leaders, and water ambassadors.

4.3) Presentation on 2019 Rate Study Information Relative to the Resource Reliability and Operational Efficiency Committee and Review of Five-Year Capital Project Plan Incorporated in the 2019 Rate Study. (Assistant General Manager Ly)

Assistant General Manager Ly provided an overview of projects proposed to be included in the 2019 Rate Study for completion in the next five years related to the Resource Reliability and Operational Efficiency Committee and stated that there are \$29 million in total projects necessary over the next five years for the District to maintain operations followed by discussion of well maintenance, large meter and pump replacements, and improvements to stairs at dams.

4.4) Review Potential State Water Project Water Exchanges. (Deputy Water and Energy Resources Director Thompson II)

Deputy Water and Energy Resources Director Thompson II provided an overview of proposed State Water Project water exchanges for surplus water; short-, medium-, and long-term water supply goals; how the District is banking water through return water flows through the A.V. Watermaster; and the extension of the Big Rock Creek Project due to excess water.

4.5) Review the Use of Technology in All District Operations and Develop a Future Technology Direction. (General Manager LaMoreaux)

General Manager LaMoreaux stated that the District now uses iPads in its operations and that this item is presented for the Committee's review to determine the future use of technology in the District's operations followed by discussion of technology for assessing the operations of the water distribution system, the future use of SMART water meters, and the need to invest in infrastructure prior to new technologies. After a further discussion, staff was directed to stay abreast of and gather information on technologies of benefit to the District and to track the different technologies of area agencies for future discussion by the Committee.

4.6) Establishment of 2019 Resource Reliability and Operational Efficiency Committee Goals. (General Manager LaMoreaux)

After a brief discussion, the Committee developed 2019 goals as follows:

- 1) Be aware of evolving and transitional technologies the District may need in the future;
- 2) Review the five-year project plan included in the 2019 Water Rate Study and provide Committee input on identifying the top 10 projects;
- 3) Stay informed of regional partner technologies and work with area agencies for mutual assistance in the event of emergencies; and
- 4) Review five-year infrastructure plan included in the 2019 Water Rate Study to ensure projects are on track and scheduled for completion.

Committee Member Alvarado then suggested signage to help promote the new rate structure after the Proposition 218 process has been completed.

- 5) Information Items.
 - 5.1) Other.

There were no additional information items.

6) Board Members' Requests for Future Agenda Items.

There were no requests for future agenda items.

7) Date of Next Committee Meeting.

It was determined that the next Resource Reliability and Operational Efficiency Committee meeting will be held October 8, 2019 at 3:00 p.m.

8) Adjournment.

There being no further business to come before the Resource Reliability and Operational Efficiency Committee, the meeting was adjourned at 4:38 p.m.

Chair

MINUTES OF MEETING OF THE ORGANIZATIONAL EXCELLENCE COMMITTEE OF THE PALMDALE WATER DISTRICT, AUGUST 29, 2019:

A meeting of the Organizational Excellence Committee of the Palmdale Water District was held Thursday, August 29, 2019, at 2029 East Avenue Q, Palmdale, California, in the Board Room of the District office. Chair Dizmang called the meeting to order at 2:00 p.m.

1) Roll Call.

Attendance:	Others Present:
Committee:	Dennis LaMoreaux, General Manager
Gloria Dizmang, Chair	Adam Ly, Assistant General Manager
Kathy Mac Laren, Committee	Robert Alvarado, PWD Director
Member	Mike Williams, Finance Manager
	Jennifer Emery, Human Resources Director
	Judy Shay, Public Affairs Director
	Peter Thompson II, Deputy Water & Energy Res. Dir.
	Tara Rosati, Customer Care Supervisor
	Dawn Deans, Executive Assistant
	0 members of the public

2) Adoption of Agenda.

It was moved by Committee Member Mac Laren, seconded by Chair Dizmang, and unanimously carried by all members of the Committee present at the meeting to adopt the agenda, as written.

3) Public Comments for Non-Agenda Items.

There were no public comments for non-agenda items.

4) Action Items:

4.1) Consideration and Possible Action on Approval of Minutes of Meeting Held July 24, 2019.

It was moved by Committee Member Mac Laren, seconded by Chair Dizmang, and unanimously carried by all members of the Committee present at the meeting to approve the minutes of the Personnel Committee meeting held July 24, 2019, as written. 4.2) Overview of Vision for Water and Energy Resources Department. (Deputy Water and Energy Resources Director Thompson II)

Deputy Water and Energy Resources Director Thompson II provided an overview of the vision of the proposed Water-Energy-Data Resources Department, including additional duties for the Department, updated job titles and job descriptions, and the direction of the Department followed by discussion of the District's involvement with pilot programs to help reduce energy rates, the District's Organizational Structure chart, and the educational role of this Department for the District's customers.

4.3) Consideration and Possible Action to Rename the Position of Water and Energy Resources Director to Water-Energy-Data Resources Director and Approval of Job Description for This Position. (Human Resources Director Emery/Deputy Water and Energy Resources Director Thompson II)

It was moved by Committee Member Mac Laren, seconded by Chair Dizmang, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to rename the position of Water and Energy Resources Director to Water-Energy-Data Resources Director, to approve the job description for this position, and that the full Board consider this recommendation at the next Regular Board Meeting.

4.4) Consideration and Possible Action to Rename the Position of Deputy Water and Energy Resources Director to Water-Energy-Data Resources Supervisor and Approval of Job Description for This Position. (Human Resources Director Emery/Deputy Water and Energy Resources Director Thompson II)

It was moved by Committee Member Mac Laren, seconded by Chair Dizmang, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to rename the position of Deputy Water and Energy Resources Director to Water-Energy-Data Resources Supervisor, to approve the job description for this position, to approve the salary range for this position, and that the full Board consider this recommendation at the next Regular Board Meeting.

4.5) Consideration and Possible Action on Revised Job Description for Water Use Efficiency Specialist I/II. (Human Resources Director Emery/Deputy Water and Energy Resources Director Thompson II) It was moved by Chair Dizmang, seconded by Committee Member Mac Laren, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to revise the job description for the Water Use Efficiency Specialist I/II position and that the full Board consider this recommendation at the next Regular Board Meeting.

4.6) Consideration and Possible Action on Creation of Salary Range for Construction Inspector I Position. (Human Resources Director Emery)

After a brief discussion of this position, it was moved by Chair Dizmang, seconded by Committee Member Mac Laren, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to create a salary range for the Construction Inspector I position and that the full Board consider this recommendation at the next Regular Board Meeting.

4.7) Consideration and Possible Action on Updating Community Workforce Agreement. (Organizational Excellence Committee Goal)

General Manager LaMoreaux reviewed the current Project Labor Agreement and its expiration date, and after a brief discussion of this Agreement being renamed as a Community Workforce Agreement and of this update being an Organizational Excellence Committee goal, staff was directed to work with the appropriate parties on an updated Community Workforce Agreement and present same at a future Committee meeting for consideration.

4.8) Development of System for High-Quality Reporting From Committees to the Full Board. (General Manager LaMoreaux)

After a brief discussion of reporting from Committees to the full Board, it was moved by Committee Member Mac Laren, seconded by Chair Dizmang, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to approve a system for high-quality reporting from Committees to the full Board and that the full Board consider this recommendation at the next Regular Board Meeting.

5) Information Items:

5.1) Annual Review of Benefits Package. (Human Resources Director Emery/General Manager LaMoreaux)

Human Resources Director Emery provided an overview of the benefits package for 2020, along with the District's policy to cover the cost of the lowest priced family plan that all employees qualify for, followed by discussion of Kaiser health plans

5.2) Status on Ensuring Organizational Excellence Strategic Plan Components are Included in the 2019 Rate Study Plan and Are Approved in 2019. (Organizational Excellence Committee Goal)

General Manager LaMoreaux stated that the Board approved a rate package, which includes all projects for the Organizational Excellence Committee.

5.3) Status on Ensuring the District of Distinction and Transparency Renewal is Filed in 2019. (Organizational Excellence Committee Goal)

Public Affairs Director Shay stated that the District's Transparency application has been submitted and that several trainings need to be completed for the Distinction application.

5.4) Other.

There were no other information items.

6) Board Members' Requests for Future Agenda Items.

It was stated that an item for "Consideration and possible action on the District's benefits package" will be placed on the next Committee agenda and "Consideration and possible action on updating the Community Workforce Agreement" will be placed on a future Committee agenda.

There were no further requests for future agenda items.

7) Date of Next Committee Meeting.

It was determined that the next Organizational Excellence Committee meeting will be held September 19, 2019 at 4:30 p.m.

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8) Adjournment.

There being no further business to come before the Organizational Excellence Committee, the meeting was adjourned at 2:52 p.m.

 \leq nanc Chair