



# PALMDALE WATER DISTRICT

## A CENTURY OF SERVICE

July 21, 2021

### BOARD OF DIRECTORS

AMBERROSE MERINO

Division 1

DON WILSON

Division 2

GLORIA DIZMANG

Division 3

KATHY MAC LAREN-GOMEZ

Division 4

VINCENT DINO

Division 5

## AGENDA FOR REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT TO BE HELD AT 2029 EAST AVENUE Q, PALMDALE OR VIA TELECONFERENCE

**FOR THE PUBLIC: VIA TELECONFERENCE ONLY**

**DIAL-IN NUMBER: 571-748-4021 ATTENDEE PIN: 923-073-515#**

**Submit Public Comments at: <https://www.gomeet.com/923-073-515>**

**MONDAY, JULY 26, 2021**

**6:00 p.m.**

DENNIS D. LaMOREAUX

General Manager

ALESHIRE & WYNDER LLP

Attorneys

**NOTES:** 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 **comments** 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 **comentarios** 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.

**PUBLIC COMMENT GUIDELINES:** The prescribed time limit per speaker is three-minutes. 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.



- 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 Board Meeting held July 12, 2021.
  - 6.2) Payment of bills for July 26, 2021.
  - 6.3) Approval of updated job descriptions for the Administration, Resource and Analytics, Information Technology, and Operations Departments. (No Budget Impact – Human Resources Director Emery/Personnel Committee)
  - 6.4) Approval of Ernst & Young Statement of Work for 2021-2022 State Water Project Procedures related to the 2022 Statement of Charges. (\$9,449.00 – Budgeted – Budget Item No. 1-02-4150-000 – 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 awarding contract to De Nora Water Technologies for the replacement of two on-site sodium hypochlorite generators. (\$132,500.00 – Budgeted – Project No. 21-608 – Facilities Manager Bligh)
  - 7.2) Consideration and possible action on authorizing the General Manager to execute a contract with Aspen Environmental Group for Professional Services for the Permitting, Design, and Construction Services for Sediment Removal at Littlerock Dam Reservoir over the next three years with additional two years. (\$1,634,567.00 – Budgeted – Work Order No. 21-417 – Engineering/Grant Manager Rogers)
  - 7.3) 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 2021 Budget:
    - a) California Foundation on the Environment and the Economy (CFEE) Conference on Water to be held December 8 – 9, 2021 in Palm Springs.
- 8) Information Items:
  - 8.1) Reports of Directors:
    - a) Standing Committees; Organization Appointments; Agency Liaisons:
      - 1) Antelope Valley East Kern Water Agency-AVEK. (Director Dino/Director Mac Laren-Gomez, Alternate)
      - 2) Outreach Committee. (Director Mac Laren-Gomez, Chair/Director Wilson)
      - 3) Personnel Committee. (Director Mac Laren-Gomez, Chair/Director Merino)



- b) General Meetings Reports of Directors.
- 8.2) Report of General Manager.
  - a) July 2021 written report of activities through June 2021.
- 8.3) Report of General Counsel.
- 9) Board members' requests for future agenda items.
- 10) Adjournment.



---

DENNIS D. LaMOREAUX,  
General Manager

DDL/dd

**P A L M D A L E   W A T E R   D I S T R I C T**  
**B O A R D   M E M O R A N D U M**

**DATE:** July 19, 2021 **July 26, 2021**  
**TO:** BOARD OF DIRECTORS **Board Meeting**  
**FROM:** Jennifer Emery, Human Resources Director  
**VIA:** Mr. Dennis D. LaMoreaux, General Manager  
**RE:** ***AGENDA ITEM NO. 6.3 – APPROVAL OF UPDATED JOB DESCRIPTIONS FOR THE ADMINISTRATION, RESOURCE AND ANALYTICS, INFORMATION TECHNOLOGY, HUMAN RESOURCES, AND OPERATIONS DEPARTMENTS. (NO BUDGET IMPACT – HUMAN RESOURCES DIRECTOR EMERY)***

---

**Recommendation:**

Staff and the Personnel Committee recommend approval of the revised job descriptions for the Administration, Resource and Analytics, Information Technology, Human Resources, and Operations Departments.

**Impact of Taking No Action:**

Our prior job descriptions would remain active.

**Background:**

Every three years the District updates job descriptions to make sure that they list the current essential job functions and requirements for the position. The job descriptions for the Operations Supervisor-Plant/Water Quality, Laboratory Analyst 1/2, and Laboratory Technician in the Operations Department are under revision and will be presented to the Personnel Committee for consideration at their next meeting.

**Strategic Plan Initiative/Mission Statement:**

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

**Budget:**

There is no effect on budget.

**Supporting Documents:**

Administration Job Descriptions  
Resource and Analytics Job Descriptions  
Information Technology Job Descriptions  
Human Resources Job Descriptions  
Operations Job Descriptions except for Operations Supervisor-Plant/Water Quality, Laboratory Analyst 1/2, and Laboratory Technician

## PALMDALE WATER DISTRICT

### EXECUTIVE ASSISTANT

FLSA Status: Non-Exempt

#### DEFINITION

To provide responsible and confidential secretarial and administrative support to the General Manager/CEO, the District Board of Directors, and Department Heads; to prepare and distribute the Board agenda; to maintain official records related to Board proceedings and actions; and to oversee filings of Conflict of Interest statements.

#### SUPERVISION RECEIVED AND EXERCISED

Receives direction from the General Manager/CEO.

Exercises direct supervision over assigned administrative support staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Perform a wide variety of secretarial and clerical administrative duties in support of the daily operations of the General Manager/CEO's office, including related support to members of the Board of Directors and Department Heads.

Independently and under direction, prepare Board and Board Committee meeting agendas; accept, review, write, and proof-read staff report submissions for format and procedural correctness; distribute agenda for the public and to interested parties, including the news media; prepare, post, and distribute legally required notices.

Attend regular and special meetings of the Board, Board Committees, and other meetings as required; take and transcribe minutes of Board proceedings from meetings and actions and follow-up with proper distribution of information directed through Board action; prepare, distribute, and maintain files of official records related to Board proceedings; prepare routine resolutions for consideration by the Board.

Prepare periodic reports regarding status of activities authorized by Board action or work projects approved by the General Manager/CEO; maintain suspense files to monitor outstanding activities; maintain contact with interested parties regarding scheduling of activities and exchange of information.

Maintain official District records and public documents; oversee viability of technical methods for maintaining and retrieving records; establish and maintain recordkeeping systems.

## Executive Assistant

- 2 -

Coordinate activities related to required Conflict of Interest statements from staff and Board members.

Act as receptionist in the General Manager/CEO's office; greet and screen visitors and the general public in person, by telephone, or by electronic mail; answer questions or refer inquiries to appropriate District personnel.

Accept, screen, and prioritize correspondence for the General Manager/CEO and Board members; respond independently to correspondence of a routine nature or as directed.

Maintain appointment calendars and schedules; arrange meetings for the General Manager/CEO and Board members; make travel arrangements; organize, oversee and implement arrangements for a variety of District events as directed.

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

#### Knowledge of:

Modern office technology and related computer equipment and programs including word processing, spreadsheet, and database applications.

Principles and practices of recordkeeping, and file and records management practices.

Pertinent local, State and Federal rules, regulations and laws, including the Ralph M. Brown Act and the California Fair Political Practices Commission rules and regulations.

Notification and publication requirements for Board actions, ordinances, and resolutions.

English usage, spelling, punctuation and grammar, including proofreading and principles of business letter writing and report preparation.

Standard business arithmetic and related recordkeeping.

#### Ability to:

Provide responsible and confidential secretarial support to the General Manager/CEO, the Board of Directors, and Department Heads in preparing the Board agenda and maintaining official District records.

Preserve confidentiality of sensitive material routinely encountered as part of work assignments.

Review documents related to the General Manager/CEO's office operations and Board agenda preparation; observe, identify and problem solve office operations and procedures; understand, interpret and explain District policies and procedures; explain operations and problem solve office issues for the public and with staff.

Plan and organize work to carry out difficult secretarial and clerical assignments and meet routine deadlines; when required, work under prolonged and unexpected time constraints to meet required deadlines.

Attend regular and special Board, Board Committee, and other meetings as required, including in the evenings, on weekends, or hours outside of regular work schedule.

Take, transcribe, and prepare minutes of official and routine meetings and record documents and actions.

Read, understand and apply complex materials; proofread and detect errors in typing, spelling, grammar, syntax, and punctuation.

Establish and maintain recordkeeping systems.

Prepare reports and correspondence, minutes, ordinances, resolutions, proclamations, and other written materials independently or from brief instruction.

Pay specific attention to detail.

Operate a personal computer with proficiency and familiarity and effectively use word processing, spreadsheet, and database applications.

Type at a speed of no less than 60 words net per minute.

Ability to take dictation by hand or stenographic machine at a rate of 80 words per minute; or transcribe notes/tapes at 30 words per minute highly desired.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

#### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:



Executive Assistant

- 4 -

Experience:

Seven years of responsible secretarial or office administrative experience. Experience working within a governmental or special district setting is desirable.

Training:

Equivalent to a bachelor's degree from an accredited college or university with major course work in accounting, finance, business administration, public administration or a related field or Associate degree with coursework in related field and three additional years' experience.

License and Certificate

Possession of, or ability to obtain, a valid California driver's license.

Possession of, or ability to obtain, California Public Notary.

PHYSICAL REQUIREMENTS:

On a continuous basis, sit at desk for long periods of time; intermittently stand; walk, bend, twist, squat, and kneel while performing work; twist to reach office equipment surrounding desk; perform simple and power grasping, pushing, pulling and fine manipulation; use telephone and write or use a keyboard to communicate through written means; and lift or carry weight up to 25 pounds.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### MANAGEMENT ANALYST - ADMINISTRATION

FLSA Status: Non-Exempt

#### DEFINITION

Under general supervision, the Management Analyst assists the Executive Assistant and serves as support to Department Heads and the Board of Directors as assigned, relieving them of a variety of routine administrative details and performs difficult and complex office support work.

#### SUPERVISION RECEIVED AND EXERCISED

Receives immediate supervision from the Executive Assistant.

EXAMPLES OF ESSENTIAL DUTIES – Duties may include, but are not limited to, the following:

Gather and organize a variety of information and materials for assigned District management positions.

Establish and maintain a variety of office and Department files.

Attend Board and Board Committee meetings as needed. Take and transcribe minutes from meetings following as necessary with proper distribution of information directed through Board action.

Prepare correspondence and memoranda, Board agenda packets and other items as assigned.

Make appointments and maintain appointment calendars for department heads and other staff, as assigned.

Administrate billing/records and prepares financial reports as needed for JPA's.

Coordinate activities related to Conflict-of-Interest statements from staff and Board members of JPA's, as assigned.

Answer telephone and receive office visitors, providing a variety of information about District and Department policies, programs, and functions.

Review letters, reports, records, and other items for accuracy, completeness, and compliance with established standards; perform variety of special studies and reports.



## Management Analyst

- 2 -

Assist in maintaining central filing system.

Make travel arrangements for District staff and Board of Directors for seminar/conference attendance.

Serve as back-up administrative support in the absence of the Executive Assistant.

Establish and maintain cooperative working relationships with co-workers, outside agencies, and the public.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS:

#### Knowledge of:

Modern office technology and related computer equipment and programs including word processing, spreadsheet, and database applications.

Principles and practices of recordkeeping and file and records management practices.

Computer systems and software applications related to District management support and administrative functions, including word processing and spreadsheet software, as appropriate.

English usage, spelling, punctuation, and grammar, including proofreading and principles of business letter writing and report preparation.

Standard business arithmetic and related record-keeping.

#### Ability to:

Operate a variety of office equipment and computers in the performance of work assignments.

Perform a variety of complex and responsible administrative support work.

Pay specific attention to detail.

Work under specific deadlines to meet agenda preparation requirements.

Perform a variety of office management and support functions.

Type at a rate of 50 words per minute from clear, legible copy.

## Management Analyst

- 3 -

Take and transcribe minutes and notes at an acceptable rate for assigned responsibilities.

Perform research and prepare a variety of correspondence.

Maintain confidentiality when working with sensitive information.

Effectively represent the District, including its programs and policies, with the public and other agencies.

Work irregular or extended hours; occasionally required to change working hours or work overtime.

### Experience and Training

Any combination of education and experience that would likely provide the necessary knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

#### Experience

Five years of increasingly responsible experience in performing a variety of office and administrative support work.

#### Training

Equivalent to a bachelor's degree from an accredited college or university with major course work in accounting, finance, business administration, public administration or a related field or Associate's degree with three additional years of experience.

### License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Possession of, or ability to obtain, California Public Notary.

### PHYSICAL REQUIREMENTS:

On a continuous basis, sit at desk for long periods of time; intermittently stand; walk, bend, twist, squat, and kneel while performing work; twist to reach office equipment surrounding desk; perform simple and power grasping, pushing, pulling and fine manipulation; use

Management Analyst

- 4 -

telephone and write or use a keyboard to communicate through written means; and lift or carry weight up to 25 pounds.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### PUBLIC AFFAIRS DIRECTOR

#### DEFINITION

To plan, implement, and coordinate public information for the Palmdale Water District; and perform a variety of professional and highly technical tasks relative to the community, communications, and public relations. To act as the agency spokesperson in dealing with the media and community groups.

#### SUPERVISION RECEIVED AND EXERCISED

Receives administrative direction from the General Manager/CEO.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Manage the activities of the Public Affairs Department. Establish the workflow surrounding all District publications, electronic media, outreach at community events, school and adult education programs.

Manage media information; serve as District spokesperson with print & electronic media; establish and maintain a portfolio of media contacts; prepare/direct the preparation of news releases, opinion pieces, letters to the editor, rebuttals, and other communications to explain and promote the District's programs, activities, and position; consult with the Board, General Manager, Assistant General Manager and other District staff concerning methods for communicating the District's mission and position.

Plan and manage community outreach and activities; network with other water district to develop and coordinate public outreach messages and advocacy on behalf of the Board.

Monitor state and federal legislation and regulatory issues; ensure legislators are apprised of District activities and events affecting their constituents. Provide input and commentary on legislation as authorized by the Board; alert management as to issues and opportunities (eg: grants) arising from legislative or regulatory actions.

Respond to requests for information from the public, media, and legislators' staff; interpret and communicate complex issues and technical data to others with limited technical knowledge of the subject matter.

Direct and participate in the development of the District publications program including informational brochures, flyers, reports, videos, and multi-media presentations; design and



prepare written materials including speeches, letters, and articles for use by the Board and other District managers.

Develop strategic partnerships with other government agencies and private sector entities in communicating areas of common interest to the public using a variety of media or activities.

Represent the District to outside organizations and committees and provide staff assistance to these respective groups.

Develop and implement systems, policies and procedures for the crisis communication program.

Develop effective working relationships with legislative staff, local public officials, and civic groups; promotes and presents the District's interests and position.

Read and remain current on breakthroughs in communications technologies, water, politics and emerging issues related to the District's operations and policies.

Act as the Public Information Officer for the District's Emergency Response Plan.

Responsible for updating and maintaining the content of the District website.

Supervise and participate in the development and administration of the Public Affairs budget.

Select, train, motivate and evaluate personnel; provide and coordinate staff training; conduct performance evaluations; implement discipline procedures; maintain discipline and high standards necessary for the efficient and professional operation of the department.

Build and maintain positive working relationships with co-workers, other District employees and the public.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

#### Knowledge of:

Principles and practices of community and public relations, advertising, and design.

Media relations, promotional writing and collateral development.

Desktop publishing software and design.

Possess excellent interpersonal communication skills.

Ability to

Analyze communication issues and special projects related to public relations.

Identify and interpret technical and numerical information.

Organize, implement and direct community and public relations operations and activities.

Conduct training classes for District staff in the area of crisis communication.

Interpret and explain pertinent PWD and departmental policies and procedures.

Develop and monitor a public relations and media relations budget.

Develop and recommend policies and procedures related to public relations activities.

Establish and maintain effective working relationships with those contacted in the course of work including District staff and the general public.

Develop brand and image.

On a continuous basis, sit for prolonged periods of time; intermittently twist to reach office equipment; walk and stand in office and at public counter; bend and kneel while retrieving files; perform simple grasping and fine manipulation; use telephone; write and use keyboard to communicate through written means; run errands; and lift, carry, push, pull 25 pounds.

Use a computer, Microsoft Office Suite and desk-top publishing software.

Communicate clearly and concisely, both orally and in writing.

Hear normal conversation sufficient to accomplish duties, in person and/or on the telephone; vision must be sufficient to accomplish the duties of the position which may include operating a District vehicle.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Ten years of increasingly responsible experience in public affairs including five years of administrative and management responsibility.

Training:

A bachelor's degree or equivalent from an accredited college or university with major course work in public relations, public affairs or a related field.

License and Certificate:

Possession of, or ability to obtain, a valid California driver's license. Must have a driving record acceptable to the District.

Membership in the Public Relations Society of America.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of the job description are not intended to be all inclusive. They represent typical elements and criteria necessary to successfully perform the job.



## PALMDALE WATER DISTRICT

### PUBLIC AFFAIRS SPECIALIST 1/2

FLSA Status: Non-Exempt

#### DEFINITION

To perform a variety of duties related to the development and preparation and implementation of strategic internal and external communications, public information and customer and community relations activities to build trust and support for Palmdale Water District programs, projects, policies and goals, to protect and enhance Palmdale Water District's image and reputation, and to represent Palmdale Water District's interests to customers, community groups, employees, news media, elected officials and other stakeholder groups. Prepares informational materials for dissemination through a variety of media; fosters relationships with and builds trust among key stakeholders to communicate and garner support for Palmdale Water District's short and long-term communication goals;; and performs related duties as required.

#### DISTINGUISHING CHARACTERISTICS

Public Affairs Specialist 1 - This is the entry level class in the Public Affairs Specialist series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. The Public Affairs Specialist 1 class is distinguished from the 2 level by the performance of less than the full range of duties assigned to the 2 level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

Public Affairs Specialist 2 - This is the journey level class in the Public Affairs Specialist series and is distinguished from the 1 level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the 1 level.

#### SUPERVISION RECEIVED AND EXERCISED

Receives immediate supervision from the Public Affairs Director.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Works closely with subject matter experts and reviews technical materials and government documents to gather, fact-check and synthesize information for the development of

materials about Palmdale Water District's programs, projects, policies and goals; customizes tone and approach of messages for a variety of audiences, as directed; coordinates the distribution of such information and communications through a variety of methods including web, publications, advertising, media relations, social media, internal and external contacts and others.

Create original content for Palmdale Water District's websites, publications and social media; plan, write, design, edit and produce annual reports, fact sheets, brochures, bill inserts, newsletters, speaker notes, news releases, editorials, articles, advertising, social media posts, scripts, audio and video recordings, films, slide shows, exhibits and other informational materials.

Takes photographs and shoots video for Palmdale Water District's use for web, publications, advertising, media relations and social media; selects images for a broad range of communications; updates photo library as directed.

Monitors and tracks internal developments and external news and trends to anticipate questions, forecast changes, and prepare informational materials for stakeholders; responds as directed to issues generated by or affecting Palmdale Water District's image, reputation, policies, programs, projects and goals.

Obtains information from internal subject matter experts, technical materials or official documents to answer a wide range of public inquiries and explains and represents Palmdale Water District programs, projects, policies and goals, as directed.

Assists in producing media events and coordinating logistics and creating informational materials for press conferences, editorial board visits, studio interviews and other events. Coordinates and guides media representatives attending Palmdale Water District sponsored events, meetings and site visits.

Conducts on-the-record media interviews as directed.

Under direction, creates, edits, monitors and posts social media content; responds to inquiries and commentary on social media per Palmdale Water District guidelines; edits and fact-checks social media content created by staff.

Fosters relationships with customer, community, employee, news media and other stakeholder groups to protect Palmdale Water District's image and reputation and build trust and support for programs, projects, policies and goals.

Works irregular hours to respond to media inquiries and attend local community meetings.

Performs other related duties and responsibilities as required.

#### MINIMUM QUALIFICATIONS

Public Affairs Specialist 1

Knowledge of:

English grammar, composition, spelling, punctuation, and vocabulary.

Spanish grammar, composition, spelling, punctuation, and vocabulary.

Principles, techniques, and methods of public information and strategic communications.

Local and state government functions, organization, and procedures.

Elements of the functions and workings of local government.

Effective use of public information channels including websites, publications, news and social media.

Principles and techniques of evaluating public opinion and community interests.

Techniques to communicate with general audiences.

Photographic techniques.

Graphic arts, specifically InDesign, and printing methods, materials, and terminology.

Techniques of working with the public on an individual or group basis.

Ability to:

Write, edit and proofread effective informational material for a variety of audiences in a variety of media.

Orally communicate effectively to individuals and small and large groups.

Express complex technical subjects using simple language and images to lay persons.

Prepare, evaluate, and disseminate public information.

Understand government documents, technical reports and water jargon.



Develop and maintain effective working relationships with Palmdale Water District staff, news media and other stakeholder groups.

Work effectively on several concurrent assignments under deadline in unpredictable environments.

Use sound judgment in the preparation and dissemination of information.

Must have visual acuity to read written materials in print and on the computer.

Must have hearing sufficient to communicate in person and on the telephone.

Sufficient physical mobility to conduct tours of Palmdale Water District facilities.

Physical capacity to sit for long periods of time.

On a continuous basis, sit at desk for long periods of time; intermittently stand, walk, bend, twist, squat, and kneel while performing field work; twist to reach office equipment surrounding desk; perform simple and power grasping, pushing, pulling and fine manipulation; use telephone and write or use a keyboard to communicate through written means; and live or carry weight up to 25 pounds.

#### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

##### Experience:

A minimum of two years experience in public and media relations or communications.

##### Training:

Bachelor's degree in Public Affairs, Journalism, Graphic Design or related field from an accredited college or university.

##### License and Certificate:

Possession of, or ability to obtain, a valid California driver's license. Must have a driving record acceptable to the district.

#### Public Affairs Specialist 2

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

A minimum of three years' experience in public and media relations or communications.

Training:

Bachelor's degree in Public Affairs, Journalism, Graphic Design or related field from an accredited college or university.

License and Certificate:

Possession of, or ability to obtain, a valid California driver's license. Must have a driving record acceptable to the district.

PHYSICAL REQUIREMENTS:

Position requires prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting, and stooping in the performance of daily activities. The position also requires grasping, repetitive hand movement and fine coordination in preparing statistical reports and data using a computer keyboard. Additionally, the position requires near vision in reading correspondence, statistical data and using a computer. Acute hearing is required when providing phone and personal service. The need to lift, drag, and push files, paper, and documents weighing up to 25 pounds also is required. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### PUBLIC AFFAIRS INTERN

FLSA Status: Non-Exempt

#### DEFINITION

To perform a variety of duties related to customer and community relations. Prepares informational materials for dissemination through a variety of media.

#### DISTINGUISHING CHARACTERISTICS

This is the educational class in the Public Affairs series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. Incumbents must be enrolled in an accredited college or university with major coursework related to Public Affairs. Experience gained as a Public Affairs Intern may be considered qualifying for entry level professional classifications.

#### SUPERVISION RECEIVED AND EXERCISED

Receives immediate supervision from the Public Affairs Director; may receive technical and functional supervision from other Public Affairs staff as directed by the Public Affairs Director.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Takes photographs and shoots video for Palmdale Water District's use for web, publications, advertising, media relations and social media; selects images for a broad range of communications; updates photo library as directed.

Assists in producing media events and coordinating logistics and creating informational materials for press conferences, editorial board visits, interviews and other events. Coordinates and guides media representatives attending Palmdale Water District sponsored events, meetings and site visits.

Under the direction of Public Affairs staff, create original content for Palmdale Water District's websites, publications and social media; plan, write, edit and produce fact sheets, brochures, bill inserts, newsletters, speaker notes, news releases, editorials, articles, advertising, social media posts, scripts, audio and video recordings, films, slide shows, exhibits and other informational materials.

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.



Perform related duties as assigned.

EDUCATIONAL OPPORTUNITY

The intern position will provide the following educational experiences:

Knowledge of:

English grammar, composition, spelling, punctuation, and vocabulary.

Spanish grammar, composition, spelling, punctuation, and vocabulary.

Principles, techniques, and methods of public information and strategic communications.

Local and state government functions, organization, and procedures.

Elements of the functions and workings of local government.

Effective use of public information channels including websites, publications, news and social media.

Principles and techniques of evaluating public opinion and community interests.

Techniques to communicate with general audiences.

Photographic techniques.

Graphic arts and printing methods, materials, and terminology.

Techniques of working with the public on an individual or group basis.

Ability to:

Write, edit and proofread effective informational material for a variety of audiences in a variety of media.

Orally communicate effectively to individuals and small and large groups.

Express complex technical subjects using simple language and images to lay persons.

Prepare, evaluate, and disseminate public information.

Understand government documents, technical reports and water jargon.

Develop and maintain effective working relationships with Palmdale Water District staff, news media and other stakeholder groups.

Work effectively on several concurrent assignments under deadline in unpredictable environments.

Use sound judgment in the preparation and dissemination of information.

REQUIREMENTS:

Must be enrolled in college full time.

PHYSICAL REQUIREMENTS:

Position requires prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting, and stooping in the performance of daily activities. The position also requires grasping, repetitive hand movement and fine coordination in preparing statistical reports and data using a computer keyboard. Additionally, the position requires near vision in reading correspondence, statistical data and using a computer. Acute hearing is required when providing phone and personal service. The need to lift, drag, and push files, paper, and documents weighing up to 25 pounds also is required. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

PALMDALE WATER DISTRICT

RESOURCE AND ANALYTICS DIRECTOR

FLSA Status: Exempt

DEFINITION

To plan, organize, oversee, and manage acquisition of water and energy resources for the District; to provide highly complex technical and professional support to the General Manager/CEO or Assistant General Manager/COO, in the absence of the General Manager/CEO.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from the General Manager/CEO or Assistant General Manager/COO, in the absence of the General Manager/COO.

Exercises direct supervision over assigned staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Secure adequate water and energy resource supplies to meet the District's current and future demands; acquire short-term and long-term water supplies to provide reliable sources; participate in long-term planning activities.

Schedule and maintain water deliveries and various State Water Project resource programs; negotiate water and energy supply contracts for the District; prepare and update the District's water production and energy resource plans.

Represent the District on various State Water Contract committees; oversee administration of the District's agreement relative to the State Water Contract; prepare reports and updates regarding water supply and acquisition.

Evaluate contracts, projects, and procedures related to resource acquisitions; identify and respond to current and future water supply demands.

Monitor current and proposed energy and water resource programs; manage the District's energy accounts relative to ensuring adequate energy resources to convey, treat, and distribute water to District customers; evaluate the District's rate structure and make recommendations related to recovering water purchase and energy costs.

Provide strategic planning and oversight for the development of data analytics tools to help drive data driven decisions for the efficient use of water and energy resources.

Work with the Resource and Analytics Supervisor to expand and centralize the District's data resource; and to make data analytics tools available to all departments.

Prepare and present information to the District Board regarding water resource and energy supply issues; attend Board meetings, various planning meetings and conferences as appropriate.

Prepare, and administer the District's water resource budget; prepare cost estimates for budget recommendations; submit justifications for water purchases and related energy costs; monitor and control expenditure.

Represent the District at various community organization and outside agency meetings; serve on staff subcommittees as necessary; and coordinate water and energy resource activities with District departments and outside agencies.

Advocate on behalf of the District to governmental and regulatory authorities as directed.

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.

#### MINIMUM QUALIFICATIONS

##### Knowledge of:

Principles and practices of water and energy resource management and planning, including contract negotiation and administration, and related rate structures.

Operational characteristics of water production facilities and related energy needs.

Principles and practices of budget preparation and administration, and technical reporting writing.

Pertinent local, State and Federal laws, ordinances and rules.



Ability to:

Plan, organize, oversee, and manage acquisition of water and energy resources for the District.

On a continuous basis, analyze technical, operational, and budget reports; interpret and evaluate various technical reports and data; know and interpret laws, regulations, codes and procedures; and explain and interpret policy.

On a continuous basis, sit at desk and in meetings for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone; write or use a keyboard to communicate through written means; and lift or carry weight up to 20 pounds.

Interpret and explain pertinent District policies and procedures.  
Prepare and administer a budget; prepare and present technical reports to a variety of audiences.

Use sophisticated computer software related to engineering and resource analysis.

Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Ten years of increasingly responsible experience in water and energy resource management and planning in a public or private sector environment including five years of administrative and management responsibility.

Training:

Equivalent to a bachelor's degree from an accredited college or university with major course work in civil engineering, resource management, land use planning or a related field.

License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Required use of cell phone with data plan.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### RESOURCE AND ANALYTICS SUPERVISOR

FLSA Status: Exempt

#### DEFINITION

Under general supervision, assigns, and reviews the work of water use efficiency personnel who plan, administer and execute water conservation programs and outreach. Under general supervision, assigns, and reviews the work of management analyst(s) who enter and review data, operate analytics programs, and provide analytic services to District staff as needed. Develop and coordinate plans for efficient use of the District's water and energy resources; Develops and coordinates data analytics strategies to provide staff with better information and backup for decisions; handles difficult, complex analytics problems; prioritizes and reviews tasks relative to assigned area of responsibility.

This is the first-line supervisor level classification in the Resource and Analytics Department. The Resource and Analytics Supervisor provides direction to the Resource and Analytics Department by assigning, directing and reviewing work of staff. Supervisory duties include training, writing, conducting performance appraisals, and assisting in department budget preparation. Incumbents provide coaching and guidance to representatives.

#### SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Resource and Analytics Director.

Exercises supervision over Water Use Efficiency staff and Management Analyst(s).

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Provides day-to-day leadership to ensure a high performance, analysis-oriented work environment that supports achieving the Department's and the District's mission, objectives and values.

Prioritize, assign, evaluate and supervise the work of all Water Use Efficiency staff and Management Analyst(s). Provides coaching and guidance for performance improvement and development; directs and oversees the training of new staff.

Plans and implements data management and data analytics plans modifies departmental procedures and processes; creates quality assurance tools to ensure completion, quality and timeliness.



## Resource and Analytics Supervisor

- 2 -

Provides oversight and evaluation of water use efficiency programs; provides support and prioritization in evaluating and modifying rebate, outreach and education plans; creates quality assurance tools to ensure completion, quality and timeliness.

Write and conduct formal performance appraisals; participates in a variety of personnel actions including hiring, counseling, training, promotion, discipline, and termination.

Interacts effectively and diplomatically in all areas of employee relations, always projecting a professional image in keeping with the District's goals and objectives while exercising the highest degree of confidentiality.

Assumes difficult and specialized data analysis needs, including one off special requests from District Management; short- and long-term reporting assistance such as monthly conservation reporting to SWRCB; long term reporting assistance such as Urban Water Management Plan; and primary responsibility for completing the annual Water Loss Audit.

Attends and participates in professional group meeting; stays abreast of new trends and innovations in utility billing and customer service; directs and participates in the incorporation of new developments into program areas, as appropriate.

Reviews, analyzes, and recommends participation in emerging energy programs and technologies; changes Edison rates schedules, and adjustments in production strategies for energy efficiency purposes.

Works with Resource and Analytics Director to develop and update water resource production plan and coordinates with Operations to facilitate the plan.

Assists and participates in the development and administration of the Water Use Efficiency budget.

Utilize all skills to communicate and provide exceptional customer care including language skills and all specialized skills possessed by employee.

Assists the Resource and Analytics Director in administration of Antelope Valley State Water Contractors Association and Antelope Valley Water Master as needed.

Provides presentations and training as needed on energy, production, data and water use efficiency programs to District staff.

Reads, understands, and ensures compliance with the PWD's Safety Policies; attends safety, meetings, as required; reports all accidents, violations, or infractions to manager.

## Resource and Analytics Supervisor

- 3 -

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

#### Knowledge of:

Data base and data analysis software, tools, reporting and practices.

Water use efficiency programs and reporting.

District personnel rules and policies.

Energy rate structures, specialized energy programs such as: Demand Response and Over-Gen.

Water resource planning and components.

Principles and methods of business correspondence, recordkeeping and filing.

Principles and practices of sound business communications and correct English use, including spelling, grammar and punctuation.

Appropriate safety precautions, procedures, practices and regulations related to maintain a department safety program, safe working conditions, and operating equipment.

Modern office equipment, software programs, and computerized record keeping and filing methods.

Business mathematics, calculations and statistical analysis.

Principles and practices of effective leadership and employee supervision, including training and performance evaluation.

Principles and practices of budget monitoring.

Pertinent local, State and Federal laws, ordinances and rules.

#### Ability to:

Supervise, assign, inspect and evaluate the work of others.

## Resource and Analytics Supervisor

- 4 -

Communicate effectively, both verbally and in written formats.

Motivate and evaluate staff and provide for their training and development.

Develop and implement work standards.

Plan and organize work to meet changing priorities and deadlines.

Analyze and resolve complex analysis and reporting problems.

Exercise independent judgment and initiative.

Train and orient new and existing employees.

Maintains and directs the daily activities such as: analysis projects, water use efficiency tasks, energy and water resource plan coordination, and any departmental duties.

Establish and maintain cooperative working relationships with those contacted in the course of work.

Establish and prioritize action items and multitask effectively.

Prepares concise records, reports and other written materials.

Use creative thought to problem solve including the use of new and innovative technologies and techniques.

Participate in groups and committees that affect District operations, policies and procedures.

Use Microsoft Outlook including accessing forms within public folders, send and receive email and use the calendar and scheduling functions effectively.

Make sound decisions and demonstrate analytical capabilities.

Make observations, communicating with others, reading, writing, and operating assigned equipment.

Assist in the development and monitoring of an assigned program budget.

## Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Seven years of increasingly responsible experience in in data analysis, water and energy resource planning, credit operations, or utility billing; including three years providing technical and functional supervision over assigned personnel.

Training:

Equivalent to Associates Degree in construction, engineering, business, or a related field.

License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Possession of a Distribution Operator Grade 2 Certificate as issued by the State of California Department of Public Health.

Possession of a Water Treatment Operator Grade 2 Certificate as issued by the State of California Department of Public Health.

Possession of a Grade 2 Water Use Efficiency Certificate issued by the AWWA is required.

PHYSICAL DEMANDS AND WORKING CONDITIONS

*The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform essential job functions.*

Environmental Conditions:

On continuous basis employees are required to sit at desk for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, write or use a keyboard to communicate through written means; and lift or carry weight up to 20 pounds.

Mental Demands

While performing the duties of this class, an employee is regularly required to use written and oral communication skills, read and interpret complex data and information; use math and mathematical reasoning; analyze and solve problems; observe and

Resource and Analytics Supervisor

- 6 -

interpret people and situations; learn and apply new information; perform highly detailed work on multiple, concurrent tasks; work with constant interruptions; interact with District managers and staff, customers and the public.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.



## PALMDALE WATER DISTRICT

### WATER USE EFFICIENCY TECHNICIAN I/II

FLSA Status: Non-Exempt

#### DEFINITION

To assist with the planning, implementation and coordination of education, public information and community outreach activities for the District; to perform a variety of tasks related to water awareness in the community; and to assist in the implementation of conservation programs, rebates and documentation.

#### DISTINGUISHING CHARACTERISTICS

Water Use Efficiency Specialist I - This is the entry level class in the Water Use Efficiency series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. The Water Use Efficiency Specialist I class is distinguished from the II level by the performance of less than the full range of duties assigned to the II level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

Water Use Efficiency Specialist II - This is the journey level class in the Water Use Efficiency series and is distinguished from the I level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the I level.

#### SUPERVISION RECEIVED AND EXERCISED

##### Water Use Efficiency Specialist I

Receives general supervision from the Resource and Analytics Supervisor; receives technical and functional supervision from a Water Use Efficiency Specialist II.

##### Water Use Efficiency Specialist II

Receives general supervision from the Resource and Analytics Supervisor.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

## Water Use Efficiency Specialist I/II

- 2 -

Assist with planning, implementation and coordination of District water awareness programs, public information, and community outreach activities.

Utilize all skills to communicate and provide exceptional customer care including language skills and all specialized skills possessed by employee.

Assist in the coordination and execution of special events.

Assist in maintaining inventory for water use efficiency supplies and giveaways.

Make presentations to classrooms and organized tours.

Assist in preparing the annual report on Water Use Efficiency events.

Assist other District personnel in all phases of activities and operations as needed, including after-hours, on-call and other unusual times.

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.

Performs and documents meter testing duties.

### Additional Duties of the Water Use Efficiency Specialist II:

Prepares annual report on water use efficiency programs and activities.

Prepares and updates water conservation program.

Evaluates all water use efficiency programs for effectiveness and presents suggested changes to supervisor on as needed basis and at a minimum of annually.

Assist in the completion of the annual water loss audit.

Assist in budget preparation.

Orders supplies for events and programs.

Plans and coordinates water use efficiency outreach for the year including: school visits and tours, landscape workshops, Water Smart Expo, Earth Day, and contests.

Coordinates messaging and events with Public Relations staff for updating the water use efficiency messaging on all sources of District media.

## Water Use Efficiency Specialist I/II

- 3 -

Maintains records of all water use efficiency programs and activities.

Assist in the preparation and submission of grants to appropriate agencies.

Completes Drinc Portal Monthly Reporting

Research new and up-to-date educational ideas.

Trains Water Use Efficiency Specialist I's and other support staff

Performs all the duties of a Water Use Efficiency Specialist I.

Prepares and delivers water use efficiency related presentations to the District board of directors.

### MINIMUM QUALIFICATIONS

#### Water Use Efficiency Specialist I

##### Knowledge of:

Report preparation and analysis, including use of various personal computer applications such as word processing, spreadsheet, and database programs.

Modern office procedures, practices, and equipment, including use of a personal computer.

English usage, spelling, punctuation, and grammar.

Water use efficiency principals.

##### Ability to:

Assist with planning, implementation and coordination of a variety of public water use efficiency outreach activities.

Intermittently, review documents related to department operations; observe, identify and problem solve office operations and procedures; understand, interpret and explain department policies and procedures; explain operations and problem solve office issues for the public and with staff.

Make educational presentations to groups of diverse customers, including varying ethnic groups, children, employees or other organizations.

Assist in developing and implementing sponsorship packages, including solicitation of sponsors for water conservation events.

Understand and communicate water waste and rebate policies both in the office and in the field to customers and staff.

Perform field work related to water waste complaints and rebate programs.

Analyze reports and special projects; prepare routine reports and correspondence.

Perform general clerical work, including maintenance of appropriate records and preparation of general reports; verify and check files and data.

Perform simple arithmetic calculations.

Operate a variety of office equipment, such as a calculator, computer and related software.

Type at a speed necessary for successful job performance.

Prioritize work and meet required deadlines.

Communicate clearly and concisely, both orally and in writing.  
Establish and maintain effective working relationships with those contacted in the course of work.

#### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

##### Experience:

Two years of customer service experience that required the understanding and communication of policies to customers is desirable.

##### Training:

Equivalent to high school diploma/GED.

#### License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.



## Water Use Efficiency Specialist I/II

- 5 -

Possession of a Grade I Water Use Efficiency Certificate issued by the American Water Works Association (AWWA).

### Water Use Efficiency Specialist II

In addition to the qualifications for the Water Use Efficiency Specialist I:

#### Knowledge of:

Advanced knowledge of District Water Use Efficiency policies and programs.

Knowledge of water use efficiency regulations.

#### Ability to:

Independently interpret and apply District policy when administering Water Use Efficiency programs and water waste investigations.

Evaluate and suggest changes to Water Use efficiency policies and programs for effectiveness.

### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

#### Experience:

Three years of responsible journey experience performing duties similar to a Water Use Efficiency Specialist I with the Palmdale Water District.

#### Training:

Equivalent to high school diploma/GED.

### License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Possession of a Grade 2 Water Use Efficiency Certificate issued by the AWWA is required.

**PHYSICAL DEMANDS AND WORKING CONDITIONS**

*The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform essential job functions.*

**Environmental Conditions:**

On continuous basis employees are required to sit at desk for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, write or use a keyboard to communicate through written means; and lift or carry weight up to 20 pounds.

**Mental Demands**

While performing the duties of this class, an employee is regularly required to use written and oral communication skills, read and interpret complex data and information; use math and mathematical reasoning; analyze and solve problems; observe and interpret people and situations; learn and apply new information; perform highly detailed work on multiple, concurrent tasks; work with constant interruptions; interact with District managers and staff, customers and the public.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### MANAGEMENT ANALYST (Resource and Analytics Department)

FLSA Status: Non-Exempt

#### DEFINITION

To perform technical level administrative and/or program related duties in assistance to District's Departments or divisions; to research, collect, and analyze data and prepare draft reports; to provide some highly responsible administrative duties in support of the Department heads and supervisors.

#### SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Resource and Analytics Supervisor.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Respond to requests for documentation related to assigned area of responsibility; explain and interpret assignment area policies and procedures to internal or external customers.

Perform technical and paraprofessional duties related to area of assignment including interpreting, analyzing, and determining compliance or acceptance of information and materials; prepare reports to document results of duties performed. Review verify and process documents related to department activities including budgets, contracts, grants, claims, legislation, and other specialized documents based on area of assignment. Track, plan and oversee an energy program.

Prepare various reports on operations and activities of assigned departments.

Provide or coordinate staff training.

Coordinate with District regulators regarding scheduled maintenance; coordinate with other utilities and agencies about energy needs and programs.

Answer questions and provide information to the public; investigate complaints and recommend corrective action as necessary to resolve complaints.

Assist professional staff in performing and conducting studies, special projects, administrative and technical functions; perform data collection and analysis; prepare draft reports and technical documents.

Ensure areas of responsibilities are in compliance with related laws, codes, ordinances, and legislation; advise staff of any irregularities in compliance.

## Management Analyst (Resource and Analytics Department)

- 2 -

Establish and maintain a wide variety of filing and reporting systems as necessary; develop record keeping procedures; provide relevant information to relevant parties; prepare and type correspondence, and compile and type reports.

Compile and develop information for special studies and reports from a variety of resources; assist with various special projects, including coordination, research and development of systems.

Assist with maintenance and implementation of new software technologies and systems.

Assist supervisor with a variety of administrative operations and prepare or recommend procedural modifications.

Coordinate and assist in the development and administration of a department or division budget; prepare budget reports; compile annual budget requests; monitor and control expenditures; and, track and reconcile invoices. Prepare cost estimates for budget recommendations; submit justifications for materials, equipment and supplies; monitor and control expenditure.

Independently respond to letters, electronic mail, and general correspondence based on areas of assignment.

May perform a wide variety of complex, responsible, secretarial and administrative duties for executive staff and other management personnel; provide routine analytical support.

Build and maintain positive working relationships with co-workers, other District employees, and the public using principles of good customer service.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

#### Knowledge of:

Principles and practices of administrative and/or technical area to which assigned including, but not limited to, claims, legislation, budget, grants, and personnel.

Principles and practices of intermediate analytical research methods, project coordination, training, budget monitoring, safety management, and report writing techniques.

Modern office equipment, procedures computer hardware, and software, including word processing, database, spreadsheet and accounting applications.



## Management Analyst (Resource and Analytics Department)

- 3 -

Techniques and principles of effective written and oral communication.

Pertinent local, State and Federal laws, codes, ordinances, District functions, policies, rules and regulations.

General functions and objectives of governmental utility services.

English usage, basic mathematical calculations and statistical methods.

Advanced knowledge of excel spreadsheets.

### Ability to:

Perform technical level administrative and/or program related duties.

On a continuous basis, know and understand all aspects of the job; intermittently review documents related to department or division operations; analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe, identify and problem solve office operations and procedures; understand, interpret and explain policies and procedures; explain operations and problem solve office issues for the public and with staff; observe and problem solve operational and technical policy and procedures.

On a continuous basis, sit at desk for long periods of time; intermittently walk or stand in the field and sit while driving in vehicle or operating equipment; twist and reach office equipment; write and use keyboard to communicate through written means; perform simple grasping and fine manipulation; lift or carry weight up to 25 pounds.

Operate a personal computer utilizing spreadsheet, word processing and database software at an intermediate to advanced level.

Interpret and explain pertinent water system construction, installation, repair, and maintenance practices and department policies and procedures.

Perform independent research in carrying out technical administrative and technical duties.

Collect, compile, analyze and present a variety of data in a meaningful way.

Develop and implement various data collection and reporting systems.

## Management Analyst (Resource and Analytics Department)

- 4 -

Review budget submissions and revisions for mathematical and accounting accuracy. Assist in the development and monitoring of an assigned program budgets.

Understand District policies and practices to objectively analyze situations to determine proper course of action.

Understand and interpret complex policies, procedures and regulations of outside agencies as necessary to assume assigned technical responsibilities.

Obtain information through interview; handle multiple project assignments; deal firmly and courteously with the public.

Analyze situations quickly and objectively to determine proper course of action.

Coordinate the development and monitoring of an assigned program project budget; project, track and reconcile expenses, schedule appropriate staff training.

Compose professional quality correspondence; write highly detailed technical and analytical reports.

Maintain a high level of confidentiality of a wide range of sensitive information.

Establish and maintain effective working relationships with those contacted in the course of work.

Communicate clearly and concisely, both orally and in writing.

---

### Experience and Training

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

#### Experience:

Five years of responsible administrative support or technical experience preferably in the subject area to which assigned. One year of lead supervisory experience is highly desirable.

#### Education:

Equivalent to a bachelor's degree from an accredited college or university with major course work in accounting, finance, business administration, public administration or a related field or Associate degree with three additional years of experience.

License and Certificate

Possession of, or ability to obtain a valid California Driver's License.

May be required to obtain special certifications, depending on area of assignment.

PHYSICAL DEMANDS AND WORKING CONDITIONS

*The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform essential job functions.*

Environmental Conditions:

On continuous basis employees are required to sit at desk for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, write or use a keyboard to communicate through written means; and lift or carry weight up to 20 pounds.

Mental Demands

While performing the duties of this class, an employee is regularly required to use written and oral communication skills, read and interpret complex data and information; use math and mathematical reasoning; analyze and solve problems; observe and interpret people and situations; learn and apply new information; perform highly detailed work on multiple, concurrent tasks; work with constant interruptions; interact with District managers and staff, customers and the public.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

## Management Analyst (Resource and Analytics Department)

- 6 -

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.



## PALMDALE WATER DISTRICT

### RESOURCE AND ANALYTICS INTERN

FLSA Status: Non-Exempt

#### DEFINITION

To perform a variety of duties related to water resources and water use efficiency. Prepares informational materials for dissemination through a variety of media.

#### DISTINGUISHING CHARACTERISTICS

This is the educational class in the Resource and Analytics series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. Incumbents must be enrolled in an accredited college or university with major coursework related to engineering. Experience gained as a Resource and Analytics Intern may be considered qualifying for entry level professional classifications.

#### SUPERVISION RECEIVED AND EXERCISED

Receives immediate supervision from the Resource and Analytics Supervisor; may receive technical and functional supervision from other Resource and Analytics staff as directed by the Resource and Analytics Supervisor.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Assist with planning, implementation and coordination of District water awareness programs, public information, and community outreach activities.

Utilize all skills to communicate and provide exceptional customer care including language skills and all specialized skills possessed by employee.

Assist in the coordination and execution of special events.

Assist in maintaining inventory for water use efficiency supplies and giveaways.

Make presentations to classrooms and organized tours.

Assist in preparing the annual report on Water Use Efficiency events.  
Perform related duties as assigned.

Assist in the data and analytical needs of the Resource and Analytics Department.

### EDUCATIONAL OPPORTUNITY

The intern position will provide the following educational experiences:

#### Knowledge of:

Report preparation and analysis, including use of various personal computer applications such as word processing, spreadsheet, and database programs.

Modern office procedures, practices, and equipment, including use of a personal computer.

English usage, spelling, punctuation, and grammar.

Water use efficiency principals.

#### Ability to:

Assist with planning, implementation and coordination of a variety of public water use efficiency outreach activities.

Intermittently, review documents related to department operations; observe, identify and problem solve office operations and procedures; understand, interpret and explain department policies and procedures; explain operations and problem solve office issues for the public and with staff.

Make educational presentations to groups of diverse customers, including varying ethnic groups, children, employees or other organizations.

Assist in developing and implementing sponsorship packages, including solicitation of sponsors for water conservation events.

Understand and communicate water waste and rebate policies both in the office and in the field to customers and staff.

Perform field work related to water waste complaints and rebate programs.

Analyze reports and special projects; prepare routine reports and correspondence.

Perform general clerical work, including maintenance of appropriate records and preparation of general reports; verify and check files and data.

Perform simple arithmetic calculations.

Operate a variety of office equipment, such as a calculator, computer and related software.

Type at a speed necessary for successful job performance.

Prioritize work and meet required deadlines.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

**REQUIREMENTS:**

Must be enrolled in college full time.

**PHYSICAL REQUIREMENTS:**

*The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform essential job functions.*

**Environmental Conditions:**

On continuous basis employees are required to sit at desk for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, write or use a keyboard to communicate through written means; and lift or carry weight up to 20 pounds.

**Mental Demands**

While performing the duties of this class, an employee is regularly required to use written and oral communication skills, read and interpret complex data and information; use math and mathematical reasoning; analyze and solve problems; observe and interpret people and situations; learn and apply new information; perform highly detailed work on multiple, concurrent tasks; work with constant interruptions; interact with District managers and staff, customers and the public.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.



## PALMDALE WATER DISTRICT

### INFORMATION TECHNOLOGY MANAGER

FLSA Status: Exempt

#### DEFINITION

To plan, organize, and direct the activities of personnel and contractors engaged in professional and technical support of District-wide computer systems and data networks, including hardware and software maintenance and development including the District's Geographic Information System (GIS). Serves as primary advisor to District management in setting the strategic direction of technology for the District; and performs related duties as assigned.

#### SUPERVISION RECEIVED AND EXERCISED

Receives administrative direction from the General Manager/CEO and Assistant General Manager/COO.

Exercises direct supervision over assigned supervisory and technical staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Assumes management responsibility for assigned services and activities of the Information Technology Department. Manages and participates in the development and implementation of goals, objectives, and priorities for assigned programs; recommends and administers policies and procedures.

Monitors and evaluates the efficiency and effectiveness of service delivery methods and procedures; recommends, within departmental policy, appropriate service and staffing levels.

Plans, directs, coordinates, and reviews the work plan for assigned staff; assigns work activities, projects, and programs; reviews and evaluates work products, methods, and procedures; meets with staff to identify and resolve problems.

Plans and manages the District's centralized automated systems and related services, including personnel and equipment; provides strategic development and use of information technologies; oversees design and implementation of new systems; coordinates District-wide acquisition of software and hardware including development and implementation of a long-range funding plan for maintenance and replacement of hardware; manages operations and customer support functions for software applications, telecommunications systems, and network systems and services.

## Information Technology Manager

- 2 -

Oversees and participates in the development and administration of the Information Technology Department's annual budget; participates in the forecast of funds needed for staffing, equipment, materials, and supplies; monitors and approves expenditures; and implements adjustments.

Oversees the operations of computer, network and telecommunication systems, ensuring adequate security, performance, and reliability. Establishes District-wide standards for hardware, software and local and wide area networks. Evaluates software for computer, network and telecommunication systems and makes recommendations to ensure compatibility and effectiveness.

Provides GIS application support. Manages selection, evaluation, and implementation of new GIS applications.

Reviews departments' requests for hardware and software and makes recommendations, as appropriate, on alternative system or service options.

Assists with integrating other technologies, including SCADA, with the District's network and computer systems; assumes responsibility for the integration of the District network with remote sites.

Serves as the liaison for the Information Technology Department to other departments and outside agencies; negotiates and resolves sensitive and controversial issues.

Provides responsible staff assistance to the General Manager/CEO and Assistant General Manager/COO; conducts a variety of organizational studies, investigations, and operational studies; recommends modifications to information technology programs, policies and procedures as appropriate.

### MINIMUM QUALIFICATIONS

#### Knowledge of:

Operational characteristics, services, and activities of an information technology program.

Advanced principles and practices of information management including computer, network, and telecommunication systems and services.

Advanced software such as ArcGis 9.2, AutoCad 2000, and Win2data.

Principles, methods and techniques of systems and procedures analysis, design, and maintenance.

Operational characteristics of multiple operating systems, platforms, and environments.

Functions, capabilities and limitations of hardware and software.

Microsoft Server tools such as Active Directory (dhcp, dns, Domain Controllers, etc.), Microsoft Exchange and software such as Accounting software, Contact Management systems, Customer Service Information systems, Human Resource, Payroll and Project Management systems, as well as other tools such as Microsoft Office software (WORD, Excel, Power Point, and Access).

Through knowledge of Microsoft operating systems, UNIX operating systems, networks including switches, routers, firewalls, network security, and network monitoring.

Concepts, principles, practices, and operational characteristics of emerging technologies in information technology.

Principles and practices of program development and administration.

Principles and practices of budget preparation and administration.

Principles of supervision, training, and performance evaluation.

Pertinent federal, state, and local laws, codes, and regulations.

Principles and procedures of record keeping.

Principles of business letter writing and report preparation.

Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

Ability to:

Oversee and participate in the management of a comprehensive information technology program.

Oversee, direct, and coordinate the work of lower level staff. Select, train, and evaluate staff.

Oversee and participate in the development and administration of departmental goals, objectives and procedures.

Research, analyze, and evaluate new service delivery methods and techniques.

Research and evaluate new technology in assigned area of responsibility.

Plan, organize, and manage systems, applications, and network projects and programs.

Preserve a high level of confidentiality of information encountered as part of work.

Analyze problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.

Evaluate new client business requirements to determine information technology solutions.

Understand the organization and operation of the District and of outside agencies as necessary to assume assigned responsibilities.

Understand, interpret, and apply general and specific administrative and departmental policies and procedures as well as applicable federal, state, and local policies, laws, and regulations.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

On a continuous basis, sit at desk for long periods of time; intermittently twist to reach office equipment surrounding desk; bend, squat, climb, kneel, reach and twist when working on and performing installation of equipment; perform simple and power grasping, pushing, pulling and fine manipulation; use telephone and write or use a keyboard to communicate through written means; and lift or carry weight up to 50 pounds.

#### Experience and Training

Any combination of education and experience that would likely provide the necessary knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

##### Experience:

Ten years of increasingly responsible experience in information technology including five years of administrative and management responsibility.

##### Training:



Equivalent to a bachelor's degree from an accredited college or university in Information Technology Management, Computer Science or Information Science or a related field.

License Requirement

Possession of, or ability to obtain, a valid California Driver's License.

Microsoft certification including Advanced MS, MCSE, and Certified Professional.

Current CompTIA A+ certification, Linux + certification, Network+ certification, Security + certification.

CCNA Certification.

VMware Certification.

Desktop Certified Associate Certification and Desktop Certified Professional Certification.

Enterprise Associate and Professional Certification.

Developer Entry and Associate Certification.

Cisco and virtualization certifications,

SQL Certification.

PHYSICAL REQUIREMENTS

Position requires prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting, and stooping in the performance of daily activities. The position also requires grasping, repetitive hand movement and fine coordination in preparing statistical reports and data using a computer keyboard. Additionally, the position requires near vision in reading correspondence, statistical data and using a computer. Acute hearing is required when providing phone and personal service. The need to lift, drag, and push files, paper, and documents weighing up to 25 pounds also is required. In addition, this position works in all weather conditions, including hot, wet, and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:



Information Technology Manager

- 6 -

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### NETWORK ADMINISTRATOR

FLSA Status: Non-Exempt

#### DEFINITION

To provide technical assistance and support related to computer systems, hardware, and software. Responds to queries, runs diagnostic programs, isolates problems, determines and implements solutions. Provide District employees with information by designing methods to collect and retrieve data. Responsible for the local area network, wide area network, infrastructure, and District specific applications.

#### SUPERVISION RECEIVED AND EXERCISED

Receives immediate supervision from Information Technology Manager.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Provide technical assistance and support for incoming queries and issues related to computer systems, software, and hardware.

Provide 24/7 technical support to mission critical employees and systems.

Day to day operation of VMWare environment to include, but not limited to: daily monitoring of VMWare environment; troubleshooting and resolution of VM issues; adding and upgrading VM hosts and clients as needed.

Day to day backup operations to include, but not limited to: daily monitoring of backup jobs; troubleshooting backup issues; file and folder restoration; quarterly test of backups.

Day to day operations of the Storage Area Network (SAN) to include but not limited to: monitoring storage health; monitoring storage connections to hosts; troubleshooting and resolving storage issues.

Configuration, setup, and deployment of new or replacement desktops, laptops, tablets and printers.

## Network Administrator

- 2 -

Insure replacement devices match old device, insure all needed applications are installed, and functional, on replacement device.

Insure Operating System (OS) and application updates are deployed in a timely fashion.

Respond to queries either in person or over the phone.

Respond to email and voice messages for customers seeking help.

Ask diagnostic questions to determine nature of problem.

Use available tools and resources to research, design and resolve issues.

Walk customer through problem-solving process.

Resolve technical problems with Local Area Networks (LAN), Wide Area Networks (WAN), and other systems.

Follow up with customers to ensure issue has been resolved.

Gain feedback from customers about computer usage.

Run reports to determine malfunctions that continue to occur.

Determine users' technical needs and provide them with appropriate solutions.

Install and configure computer networks including LAN and WAN.

Test computers peripherals, hardware and software to ensure that they are working appropriately.

Upgrade software, patches and operating systems on a continuous basis.

Act as a technical resource to assist users with resolving computer issues.

Ensure that all computers are secured effectively by installing and updating District approved antivirus and / or antimalware software.

Train users on District approved software.

Explain the role of network applications and equipment to end users.

## Network Administrator

- 3 -

Maintain documentation of technical maintenance procedures carried out

Maintain and update all hardware and application documentation.

Help desk functions.

Reset user network and application passwords.

Assist in development, troubleshooting and repair of existing applications.

Assist District personnel as needed, including after-hours, on-call, weekends, holiday, etc.

Assist in preparation of system specifications.

Build and test network patch cables.

Basic understanding of Microsoft Active Directory (AD), creation of network users, DNS, DHCP and networking protocols like TCP/IP.

Basic understanding of cloud computing.

Administer District access control and surveillance systems.

Assists in research and procurement of computer accessories, software and supplies.

Provide IT support to District staff.

Support and maintain District hardware and software systems.

Set up user accounts, permission and passwords.

Serve as technical liaison to hardware, software, and application vendors.

Server administration, including file and print services.

Install, maintain, troubleshoot and repair network systems and equipment.

Monitor hardware, software, and applications; respond to service outages.

Ensure high network availability to staff and the public.

## Network Administrator

- 4 -

Assist in evaluating networking hardware/software requests.

Define network policies and procedures.

Assist in the creation of Request for Proposal (RFP) for IT related projects.

Assist in the creation of annual IT budget.

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

#### Knowledge of:

Methods and techniques of computer programming and computer equipment and related hardware.

Computer logic; and capabilities, characteristics and limitations of automated systems.

Working knowledge of Windows Desktop, Server, Workstation and mobile Operating Systems like Windows 10, iOS and Android.

Demonstrates advanced knowledge in the following software packages; Word, Excel, Access, Acrobat, FrontPage and Project or comparable software.

Hardware, software, and application troubleshooting skills.

Virtual servers and WiFi networks.

Firewalls and VPN's.

VoIP.

Principles and practices of good customer service.

#### Ability to:

Analyze problems, identify alternatives, and implement recommendations.



Troubleshoot problems related to computer equipment and programming.

Learn and correctly interpret and apply the policies and procedures of the District.

Establish and maintain effective working relationships with those contacted in the course of work including District staff and the general public.

Uses office equipment such as computers, copiers, and FAX machines but not limited to these items.

Ability to obtain higher level IT certifications like VMWare, CCNA, Security+.

Operate a calculator, computer-related equipment, and other office equipment.

Willingness to learn and take classes focused upon new technologies and programming utilized by the District.

On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; research, identify and interpret technical information; observe and problem solve technology issues.

Preserve a high level of confidentiality of information encountered as part of work.

Learn to maintain and administer District security systems and methods.

Assist users; explain clearly and provide technical training to others in the use of various systems hardware and software.

Work scheduled and emergency overtime; be available for call back as required to meet the operational requirements of the District.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

#### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Seven years of increasingly responsible experience in in networks, PC, and information systems; including three years providing technical and functional supervision over assigned personnel.

Training:

Equivalent to a bachelor's degree from an accredited college or university with major course work in Computer Information Technology, Computer Information Systems, Science in Information Technology or Computer Information Management or a related field.

License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Microsoft certification including Advanced MS.

Current CompTIA A+ certification, Linux + certification, Network+ certification, Security + certification.

CCNA Certification.

VMware Certification.

Desktop Certified Associate Certification and Desktop Certified Professional Certification.

Enterprise Associate and Professional Certification.

Developer Entry and Associate Certification.

Cisco and virtualization certifications,

SQL Certification.

PHYSICAL REQUIREMENTS:

Position requires prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting, and stooping in the performance of daily activities. The position also requires grasping, repetitive hand movement and fine coordination in preparing statistical reports and data using a computer keyboard. Additionally, the position requires near vision

in reading correspondence, statistical data and using a computer. Acute hearing is required when providing phone and personal service. The need to lift, drag, and push files, paper, and documents weighing up to 50 pounds also is required. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

PALMDALE WATER DISTRICT

INFORMATION TECHNOLOGY TECHNICIAN 1  
INFORMATION TECHNOLOGY TECHNICIAN 2

FLSA Status: Non-Exempt

DEFINITION

To provide technical, operational, and internal customer service computer support to District departments; to introduce, implement, and maintain computers and related hardware and software, operating systems and networks; and to perform a variety of related technical tasks.

DISTINGUISHING CHARACTERISTICS

Information Technology Technician 1 - This is the entry level class in the Information Technology Technician series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. The Information Technology Technician 1 class is distinguished from the 2 level by the performance of less than the full range of duties assigned to the 2 level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

Information Technology Technician 2 - This is the journey level class in the Information Technology Technician series and is distinguished from the 1 level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the 1 level.

SUPERVISION RECEIVED AND EXERCISED

Information Technology Technician 1

Receives immediate supervision from Information Technology Manager or other assigned management or supervisory staff; may receive technical and functional supervision from an Information Technology Technician 2.

Information Technology Technician 2

Receives general supervision from Information Technology Manager or other assigned management or supervisory staff.



EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Perform a variety of responsible technical duties in support of District computer operations, functions or programs and help desk customer service functions.

Answer questions and respond to help desk requests in a timely manner; provide technical support and information, assistance and training over the phone and in person related to computer technology related issues.

Analyze, diagnose, test, and recommend solutions for problems with computers, terminals, operating systems, software and hardware problems.

Maintain systems including installing patches, downloading changes, and upgrading systems as needed.

Provide network support relative to mail servers, connection problems, switches, and related back-ups; update District web page as needed.

Implement internal controls, network security methods and other security systems for data, systems, and hardware protection.

Create user ID's and troubleshoot logins; create, modify, copy or delete files; install, upgrade, configure, and program software and hardware; monitor systems for viruses and take corrective action, as needed.

Prepare and maintain documentation; maintain and update manuals, codebooks, templates, and related documents; follow recommended protocols and procedures; perform back ups.

Prioritize project schedules and work requests; monitor, coordinate and report project status and problems; research and prepare technical and administrative reports as necessary.

Research and make recommendations related to new systems and equipment, maintain parts inventory for personal computer equipment.

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.



MINIMUM QUALIFICATIONS

Information Technology Technician 1

Knowledge of:

Methods and techniques of computer programming and computer equipment and related hardware.

Computer logic; and capabilities, characteristics and limitations of automated systems.

Common software used in personal computers, such as Microsoft Office, FrontPage, Acrobat, and Project.

Principles and practices of good customer service.

Ability to:

Provide technical, operational, and internal customer service computer support to District departments.

On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; research, identify and interpret technical information; observe and problem solve technology issues.

On a continuous basis, sit at desk for long periods of time; intermittently twist to reach office equipment surrounding desk; bend, squat, climb, kneel, reach and twist when working on and performing installation of equipment; perform simple and power grasping, pushing, pulling and fine manipulation; use telephone and write or use a keyboard to communicate through written means; and lift or carry weight up to 50 pounds.

Test programs and debug application programs; perform maintenance on computer systems.

Preserve a high level of confidentiality of information encountered as part of work.

Learn to maintain and administer District security systems and methods.

Assist users; explain clearly and provide technical training to others in the use of various systems hardware and software.

Work scheduled and emergency overtime; be available for call back as required to meet the operational requirements of the District.

## Information Technology Technician 1/2

- 4 -

Operate a personal computer with proficiency to produce highly complex and technical reports, charts, spreadsheets and other documents; maintain databases and records.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

#### Experience:

One year of responsible experience performing technical computer support duties.

#### Training:

Equivalent to high school diploma/GED.

### License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Microsoft certification preferred.

Current CompTIA A+ certification.

Current CompTIA Linux +.

## Information Technology Technician 2

In addition to the qualifications for the Information Technology Technician 1:

#### Knowledge of:

Methods and techniques used to evaluate software, hardware, and application systems.

Practices of business office automation and information technology including database administration, operating systems, software and hardware.

Advanced software such as ArcGis, AutoCad, MSSQL, SharePoint mobile device management (MDM), CMMS, VoIP and industry standard backup software.  
Basic Cisco IOS administration commands.

Pertinent District functions, policies, rules and regulations.

Advanced troubleshooting techniques used in resolving problems with operating systems, computer software, and related systems and equipment.

Ability to:

Independently provide technical, operational, and internal customer service computer support.

Prepare documentation for computer procedures and practices; write and perform programming functions as needed.

Build and test network patch cables.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Five years of intermediate experience performing technical computer support duties.

Training:

Equivalent to Associates Degree in computer science, or a related field.

License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Possession of Microsoft certifications like MTA, MCSA, MCSE, or MOS.

Current CompTIA Network + certification.

Current CompTIA Security +.

CCNA Certification.

VMware Certification.

PHYSICAL REQUIREMENTS:

Position requires prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting, and stooping in the performance of daily activities. The position also requires grasping, repetitive hand movement and fine coordination in preparing statistical reports and data using a computer keyboard. Additionally, the position requires near vision in reading correspondence, statistical data and using a computer. Acute hearing is required when providing phone and personal service. The need to lift, drag, and push files, paper, and documents weighing up to 50 pounds also is required. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### GIS COORDINATOR

FLSA Status: Non-Exempt

#### DEFINITION

To perform a wide variety of routine to complex technical duties in developing, implementing and supporting the District's geographic information systems (GIS) database; and performs related duties as assigned.

#### DISTINGUISHING CHARACTERISTICS

This is the journey level class. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed.

#### SUPERVISION RECEIVED AND EXERCISED

Receives supervision from the IT Manager.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Maintain parcel base map and street center line data.

Assist in establishing, coordinating and implementing long-range GIS planning; forecast and analyze system needs.

Assist users in identifying and meeting their automation needs and developing alternative solutions.

Assist in planning, preparation and implementation of GIS related projects.

Help to create, maintain and validate GIS layers and attribute data created by staff or vendors. Integrate various data sets with GIS base map layers.

Prepare technical documentation such as requirement specifications, data definitions and instructional manuals relevant to the functionality and use of GIS software.

Instruct department personnel on GIS software and prepare course materials as needed.

Assist in communicating system status and planned upgrades to end users.



## GIS Coordinator

- 2 -

Provide GIS technical support to all levels of staff in response to requests received by the Information Technology Help Desk Support Line.

Implement and troubleshoot GIS software.

Coordinate the management of GIS related projects that may reach across multiple departments.

May act as a liaison with local and state agencies and vendors in the development of programs, policies, guidelines, and service levels related to GIS.

Responsible for developing and maintaining standards for GIS layers.

Assist in producing maps to support District needs and prepare customized reports.

Prepare and review technical designs, maps, drawings, visual aids, and graphic presentation materials related to District facilities projects.

Using a variety of technical engineering software including computer aided design/drafting (CAD), produce and maintain maps via geographic information systems (GIS); maintain and make adjustments to the District's distribution system hydraulic model.

Maintain mapping and recording of the District's conveyance and distribution systems and related water facilities.

Provide database management of maps and records; add new layers, edit documents or make corrections as needed to document project and engineering/construction history and maintain District mapping records in an up-to-date status.

Create and run queries and prepare format output for various routine and special reports required by District departments; update programs and systems with patches and service pack releases provided by outsourced vendors.

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

Knowledge of:

Advanced computer software applications such as CAD and ESRI ArcGIS.

Relational database structure.

Basic network operations.

Global Positioning System (GPS)

Property research and real property legal descriptions.

District policies and procedures, engineering standards, and pertinent local, State, and Federal laws, ordinances and rules.

Principles and practices of technical report writing and data presentation.

Principles of algebra, geometry, and trigonometry.

Basic surveying practices and related equipment.

Principles and practices of recordkeeping.

Microsoft software used in word processing, spreadsheet, and database applications.

Web and GIS application development using HTML, Active Server Pages (ASP), Python and ESRI plug ins.

English usage, spelling, punctuation, and grammar.

Principles and practices of good customer service.

Use a variety of computer software to maintain databases and records.

Maintain and update a variety of electronic and hardcopy files.

Learn District policies and procedures and engineering standards.

Learn principles and practices of property research, including boundary determination and land title examination.

Work outside under a variety of climatic and geographic conditions.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Ability to:

Work independently or as a team member.

Work on multiple projects, multitask.

Maintain work effectiveness and meet deadlines with frequent changes in workload and priority of assignment while keeping affected parties apprised of progress.

Establish and maintain effective working relationships with District staff, external customers and vendors.

Exercise independent judgment to identify and resolve problems effectively and efficiently without supervision.

Communicate clearly and concisely, both orally and in writing highly technical content in terminology easily understood by the end user.

Utilize knowledge of production systems to minimize downtime during the deployment of new software or update.

Quickly adapt to, learn and apply new technologies as they may be applied to GIS applications.

Maintain a high degree of confidentiality while working with privileged, sensitive and highly personal information.

On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; research, identify and interpret technical and numerical information, including engineering calculations; observe and problem solve operational and technical policy and procedure; and explain regulations and procedures to others.

On a continuous basis, sit at desk for long periods of time; intermittently stand at counter; walk, bend, twist, squat, and kneel while performing field work; twist to reach office equipment surrounding desk; perform simple and power grasping, pushing, pulling and fine manipulation; use telephone and write or use a keyboard to communicate through written means; and lift or carry weight up to 25 pounds.

Perform mathematical calculations with speed and accuracy.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Seven years of increasingly responsible experience in GIS operations and maintenance including analysis, design, support, training and documentation; including three years providing technical and functional supervision over assigned personnel.

Training:

Equivalent to an Bachelor's degree from an accredited college with an emphasis in GIS or a closely related field and specialized certifications applicable to current trends in GIS. Major course work in relational database management is highly desirable.

License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Microsoft Certification.

Current CompTIA A+ certification, Linux + certification, Network+ certification, Security + certification.

CCNA Certification.

VMware Certification.

Desktop Certified Associate Certification and Desktop Certified Professional Certification.

Enterprise Associate and Professional Certification.

Developer Entry and Associate Certification.

PHYSICAL REQUIREMENTS:

Position requires prolonged sitting, standing, walking, reaching, twisting, turning, kneeling, bending, squatting, and stooping in the performance of daily activities. The position also requires grasping, repetitive hand movement and fine coordination in preparing statistical reports and data using a computer keyboard. Additionally, the position requires near vision in reading correspondence, statistical data and using a computer. Acute hearing is required when providing phone and personal service. The need to lift, drag, and push files,

paper, and documents weighing up to 25 pounds also is required. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.



## PALMDALE WATER DISTRICT

### SCADA/INSTRUMENTATION TECHNICIAN 1/2/3

FLSA Status: Non-Exempt

#### DEFINITION

##### Electronic Technician Team

To install, maintain, calibrate, and repair micro computer based supervisory data acquisition and control (SCADA) systems, and programmable logic controllers (PLC), and hydraulic and mechanical process controls in support of the District's water distribution system and treatment plant operations.

#### DISTINGUISHING CHARACTERISTICS

SCADA/Instrumentation Technician 1 - This is the entry level class in the SCADA/Instrumentation Technician series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. The SCADA/Instrumentation Technician 1 class is distinguished from the 2 level by the performance of less than the full range of duties assigned to the 2 level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

SCADA/Instrumentation Technician 2 - This is the journey level class in the SCADA/Instrumentation Technician series and is distinguished from the 1 level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the 1 level.

SCADA/Instrumentation Technician 3 - This is an experienced and skilled position responsible for programming process control equipment to control water distribution, maintain and measure gas pressures, and manage water through the operation of motors, electronic valves, variable frequency drives (VFD), and remote terminal units (RTU). Mentors less senior Technicians, serves as the lead worker on difficult projects, and handles the most complex SCADA issues. Ensures all preventative maintenance, corrective maintenance, and predictive maintenance tasks are complete and accurate.

#### SUPERVISION RECEIVED AND EXERCISED

##### SCADA/Instrumentation Technician 1

## SCADA/Instrumentation Technician 1/2

- 2 -

Receives general supervision from the Information Technology Manager; may receive technical and functional supervision from a SCADA/Instrumentation Technician 2.

### SCADA/Instrumentation Technician 2

Receives general supervision from the SCADA/Instrumentation Technician 3 or Information Technology Manager.

### SCADA/Instrumentation Technician 3

Receives general supervision from the Information Technology Manager.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.

Troubleshoot and diagnose electronic, electromechanical and pneumatic instrumentation malfunctions; complete component level repairs or notify system contractors of other repair requirements as appropriate.

Use software diagnostic routines and test equipment to verify and/or adjust control system equipment according to manufacturer's recommendations.

Monitor communication links of the telemetry system to ensure sustained functioning of signals; install test points and conduct field tests.

Install, test, maintain, and replace telemetry instruments, components and equipment, including receivers, transmitters, analyzers, and switchgear.

Transport and install temporary generators as needed due to electrical power outages; shut down wells as necessary according to District procedures.

Read and interpret wiring schematics, mechanical drawings and specifications related to installation, service, or repair of equipment.

Prepare specifications for computer software and hardware related to SCADA system.

Repair and maintain computers and peripherals related to the SCADA system.

Estimate labor, materials and supplies necessary to perform assignments.

Review and inspect work performed by contractors installing or repairing electronic equipment in District facilities.

Keep and maintain accurate logs, records, schematics, flow charts and ladder logic; prepare required reports.

### MINIMUM QUALIFICATIONS

#### SCADA/Instrumentation Technician 1

##### Knowledge of:

Applied principles of electronic and electrical theory.

Common equipment, tools, and materials used in electronic instrument installation, maintenance, and repair.

Basic understanding of networking protocols like TCP/IP.

##### Ability to:

Learn to install, maintain, calibrate, repair, and program SCADA systems, PLCs, and other telemetry, monitoring and process control equipment and instrumentation.

On a continuous basis, know and understand operations, and observe safety rules; intermittently analyze problem equipment; identify and locate equipment; interpret work orders; remember equipment location; and explain jobs to others.

Learn to troubleshoot and diagnose electronic and electromechanical instrumentation malfunctions.

Learn operational characteristics of hydraulic systems as related to use of electronic signaling, communication, and control systems.

Learn pertinent local, State, and Federal laws, rules and regulations related to electronic systems/equipment installation and maintenance.

Read and interpret wiring schematics, mechanical drawings and specifications.

Keep and maintain logs and records of work activities; prepare required reports.

Work assigned shift schedules; be available for after-hours or call back emergencies.



Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

#### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

##### Experience:

One year of electronics equipment/component installation, SCADA, maintenance, repair, and programming.

##### Training:

Equivalent to high school diploma/GED with college course work in electronics, computer science or a related field.

#### License and Certificate

Possession of a valid California Driver's License.

Possession of a Distribution Operator Grade 2 Certificate as issued by the State of California Department of Public Health.

Possession of a Water Treatment Operator Grade 2 Certificate as issued by the State of California Department of Public Health.

#### SCADA/Instrumentation Technician 2

In addition to the qualifications for the Electronic Technician 1:

##### Knowledge of:

Instrumentation, computer input system facilities and telemetry, including computer based data acquisition and control systems.

Methods and techniques of troubleshooting and diagnosing electronic systems monitoring and control systems problems.

Advanced knowledge of networking protocols like TCP/IP.

Pertinent local, State, and Federal laws, rules and regulations related to electronic systems/equipment installation and maintenance.

Ability to:

Independently install, maintain, calibrate, repair, and program SCADA systems, PLCs, and other telemetry, monitoring and process control equipment and instrumentation.

Recommend and prepare specifications for new/modified control/monitoring systems.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Three years of responsible journey experience performing duties similar to an Electronic Technician 1 with the Palmdale Water District.

Training:

Equivalent to an Associate degree from an accredited college with major course work in electronics, computer science or a related field.

License and Certificate

Possession of a valid California Driver's License.

Possession of a Distribution Operator Grade 3 Certificate as issued by the State of California Department of Public Health.

Possession of a Water Treatment Operator Grade 2 Certificate as issued by the State of California Department of Public Health is desired.

SCADA/Instrumentation Technician 3



In addition to the qualifications for the Electronic Technician 1 and 2:

Knowledge of:

Methods and techniques of troubleshooting and diagnosing electronic systems monitoring and control systems problems.

Advanced knowledge of networking protocols like TCP/IP.

Responsible for writing documentation as needed to support job functions.

Expert knowledge of the operational impacts of Control, PID and Process Schematics.

Knowledge of SCADA communication using wireless, fiber, coaxial or wired media.

Coordinate with vendors for product support and negotiates pricing, service delivery, and equipment needs.

Maintain records on computer system to ensure compliance with state, federal, and District policies and regulations.

Pertinent local, State, and Federal laws, rules and regulations related to electronic systems/equipment installation and maintenance.

Ability to:

Train and mentor new SCADA technicians and ensure their work is accurate and efficiently delivered.

Train District personnel in the operational use of SCADA software.

Manages projects, software updates, and other major issues related to SCADA operations to include developing time lines, establishing accountabilities, monitoring work progress, and handling problems.

Establishes short term and long term objectives for SCADA operations and coordinates with the management team/operational personnel to meet their needs and goals.

Assigns tasks, monitor progress, and provide direction as needed to improve overall SCADA operations quality.

Maintain and update the Supervisory Control and Data Acquisition (SCADA) system to insure uninterrupted, safe, reliable, and efficient operations.

Design, develop, document, coordinate and implement changes to the SCADA system to support operational changes and engineering projects.

Install, program, inspect, calibrate, maintain, operate, troubleshoot, repair and adjust various electric, electronic, and pneumatic devices, including Programmable Logic Controllers (PLC) and Supervisory Control and Data Acquisition (SCADA) systems

Build the SCADA databases to acquire data from remote PLC sites including drawing in tags of information to collect from various instruments. Automate data collection and streamline reporting using SCADA and office tools.

Design and draw graphic displays for plants and other operations as it relates to SCADA software.

Monitor operations using troubleshooting computer software tools.

Work closely with operations personnel on a daily basis and respond to their needs.

Investigate, evaluate, and recommend hardware, software, or service required to repair, replace, enhance, update or improve the SCADA environment.  
Resolve data communication problems during outages.

Test and update software and software configurations as needed to maintain system integrity.

Independently install, maintain, calibrate, repair, and program SCADA systems, PLCs, and other telemetry, monitoring and process control equipment and instrumentation.

Recommend and prepare specifications for new/modified control/monitoring systems.

Ensure all technical drawings and documentation are kept current and secure, both electronically and hard copy.

Respond appropriately to abnormal operating conditions as identified through SCADA or calls regarding leaks/electrical issues in order to maintain a safe and reliable operating environment.

### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

#### Experience:

Three years of responsible journey experience performing duties similar to an Electronic Technician 1 and 2 with the Palmdale Water District.

Seven years' experience working with process control systems, PLC protocols, or other networking and computer communications systems.

#### Training:

An Associate Degree in Drafting, Industrial Engineering Technology, Electronics, Electrical Technology, Process and Maintenance Technology, or other related field will substitute for some of the required experience.

Military training as well as experience in industrial controls as an apprentice will also substitute for some of the required experience.

Experience managing employees, project management, and asset management/maintenance is also desired.

### License and Certificate

Possession of a valid California Driver's License.

Possession of a Distribution Operator Grade 3 Certificate as issued by the State of California Department of Public Health.

Possession of a Water Treatment Operator Grade 2 Certificate as issued by the State of California Department of Public Health is desired.

## PHYSICAL REQUIREMENTS

Constantly, walk stand, kneel, climb, and bend in the field; sit while studying or preparing reports and driving in vehicle or operating equipment; perform simple and power grasping, pushing, pulling and fine manipulation; intermittently write or use a keyboard to communicate; and lift or carry weight up to 25 pounds. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### HUMAN RESOURCES DIRECTOR

FLSA Status: Exempt

#### DEFINITION

To plan, organize, direct and review the activities and operations of the Human Resources and Safety Department including recruitment/selection, classification/compensation, benefits administration, employee relations, and risk management/safety; to coordinate assigned activities with other departments and outside agencies; and to provide highly responsible and complex administrative support to the General Manager/CEO and Assistant General Manager/COO.

#### SUPERVISION RECEIVED AND EXERCISED

Receives administrative direction from the General Manager/CEO and Assistant General Manager/COO.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Develop, plan and implement department goals and objectives; recommend and administer policies and procedures.

Coordinate department activities with those of other departments and outside agencies and organizations; provide staff assistance to the Board of Directors, General Manager/CEO, and Assistant General Manager/COO; prepare and present staff reports and other necessary correspondence.

Direct, oversee and participate in the development of the department's work plan; assign work activities, projects and programs; monitor workflow; review and evaluate work products, methods and procedures.

Supervise and participate in the development and administration of the Human Resources budget; direct the forecast of additional funds needed for staffing, equipment, materials, supplies, services, and benefit and liability insurance requirements; monitor and approve expenditures; implement mid-year adjustments.

Participate in budget preparation and administration; prepare cost estimates for budget recommendations; submit justifications for staff, supplies, equipment, and services; monitor and control expenditure.



Select, train, motivate and evaluate personnel; provide or coordinate staff training; conduct performance evaluations; implement discipline procedures; maintain discipline and high standards necessary for the efficient and professional operation of the department.

Plan, coordinate, and participate in recruitment/selection activities, perform classification audits and maintain the District's classification plan; conduct periodic or special compensation surveys and prepare recommendations related to the District's compensation plan.

Administer the District's benefits program, including health and retirement programs; ensure and monitor appropriate coverage in consultation with brokers and insurers.

Mediate problems and resolve employee relations issues; develop and initiate solutions and monitor results.

Oversee risk management and safety functions, including on-going training and work-site inspections, and coordination of Worker's Compensation activities.

Represent the department to outside groups and organizations; participate in outside community and professional groups and committees; provide technical assistance as necessary.

Research and prepare technical and administrative reports and studies; prepare written correspondence as necessary.

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

#### Knowledge of:

Principles and practices of human resources administration, including methods and techniques used in recruitment/selection, classification/compensation, and benefits administration.

Principles and practices of risk management and liability.

Principles and practices of leadership, motivation, team building and conflict resolution.

Pertinent local, State and Federal laws, rules and regulations.

Organizational and management practices as applied to the analysis and evaluation of programs.

Principles and practices of organization, administration and personnel management.

Principles and practices of budget preparation and administration.

Ability to:

Plan, direct and control the administration and operations of the Human Resources Department.

On a continuous basis, analyze budget and technical reports; interpret and evaluate staff reports and related documents; know and interpret laws, regulations, codes and procedures; observe performance and evaluate staff; problem solve department related issues; and explain and interpret policy.

On a continuous basis, sit at desk and in meetings for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone; write or use a keyboard to communicate through written means; and lift or carry weight up to 20 pounds.

Prepare and administer department budgets.

Develop and implement department policies and procedures.

Supervise, train and evaluate assigned personnel.

Gain cooperation through discussion and persuasion.

Analyze problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.

Interpret and apply District and department policies, procedures, rules and regulations.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Ten years of increasingly responsible experience in human resource management including five years of administrative and management responsibility.

Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in human resource management, business or public administration or a related field.

License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Possession of SPHR or SHRM-SCM Certification.

Required use of cell phone with data plan.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### SAFETY AND TRAINING TECHNICIAN 1/2

FLSA Status: Non-Exempt

#### DEFINITION

Performs duties implementing and coordinating the District's safety and training program in compliance with federal, state and local safety, health and environmental laws and regulations; performs inspections of all District's facilities, equipment and job sites to ensure training and compliance with regulations' and industry standards; maintains and coordinates safety training programs; coordinates loss prevention program to identify and control potential hazards and injuries; administers the District's Injury and Illness Prevention Program (IIPP); assists with the District's Emergency Response Plan.

#### DISTINGUISHING CHARACTERISTICS

Safety and Training Technician 1 - This is the entry level class in the Safety and Training Technician series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. The Purchasing Technician 1 class is distinguished from the 2 level by the performance of less than the full range of duties assigned to the 2 level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

Safety and Training Technician 2 - This is the journey level class in the Safety and Training Technician series and is distinguished from the 1 level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the 1 level.

#### SUPERVISION RECEIVED AND EXERCISED

Receives direct supervision from the Human Resources Director.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Maintain the District's risk management and safety programs in compliance with local, state, and federal laws and accreditation standards related to safety and risk management.



## Safety and Training Technician 1-2

- 2 -

Maintain District's safety and training records including but not limited to OSHA 300 log, safety training scheduling and documentation, injury reporting, SOPs, SDS, and emergency response plans.

Chair the Safety Committee and facilitate safety meetings and trainings.

Oversee and respond to the "How Am I Driving Program" and report information to the Safety Committee for action.

Oversee and coordinate Workers' Compensation injury and claims processes.

Maintain the District's written Injury and Illness Prevention Program.

Act as liaison with insurance carriers.

Develop and implement systems, policies and procedures for the identification, collection and analysis of risk-related information.

Lead, facilitate, and advise on the designing of risk management programs to minimize potential safety risks to employees, visitors and property.

Regularly conduct a comprehensive, focused risk management assessment of potential risks to the District.

Build and maintain positive working relationships with co-workers, other District employees, and the public using principles of good customer service.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

#### Safety and Training Technician 1

##### Knowledge of:

Safety program administration, risk management, and public health policy.

Statistics, data collection, analysis and data presentation.

Current local, state and federal laws; OSHA regulations and accreditation standards.

Safety programs, training, and insurance requirements and practices.

##### Ability to:



Read, interpret and update safety and risk management data.

Coordinate safety programs throughout the organization.

Conduct on-going preventative safety programs and maintain training records.

Conduct most training classes for District staff.

Develop and monitor District risk management plan, including emergency response. Make recommendations for any changes necessary.

Perform assigned work in accordance with appropriate safety practices and regulations.

Analyze safety and risk management problems, evaluate alternative approaches, and adopt effective solutions.

Prepare and maintain accurate and complete confidential records and reports.

Establish and maintain effective working relationships with those contacted in the course of work including District staff and the general public.

Communicate clearly and concisely, both orally and in writing.

Possess excellent interpersonal communication skills.

#### Experience and Training

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

##### Experience:

One year of experience in one or more of the following areas: risk management, safety, construction, administration or insurance desired.

##### Education:

Equivalent to high school diploma/GED .

#### License and Certificate

Possession of, or ability to obtain a valid California Driver's License.

OSHA Certification.

### Safety and Training Technician 2

#### Experience and Training

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

##### Experience:

Three years of experience in one or more of the following areas: risk management, safety, construction, administration or insurance.

##### Education:

Equivalent to high school diploma/GED .

#### License and Certificate

Possession of, or ability to obtain a valid California Driver's License.

Possession of Certified Safety Professional (CSP), Certification as an Associate Safety Professional (ASP), or Occupational Health & Safety Technologist (OHST), or Certified Occupational Safety Specialist (COSS) or ability to obtain within two (2) years.

Possession of a Distribution Operator Grade 2 Certificate as issued by the State Water Resources Control Board desired.

### PHYSICAL REQUIREMENTS

Constantly, walk stand, kneel, climb, and bend in the field; sit while studying or preparing reports and driving in vehicle or operating equipment; perform simple and power grasping, pushing, pulling and fine manipulation; intermittently write or use a keyboard to communicate; and lift or carry weight up to 25 pounds. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

Safety and Training Technician 1-2

- 5 -

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### HUMAN RESOURCES INTERN

FLSA Status: Non-Exempt

#### DEFINITION

To perform a variety of duties related to human resources, safety and training. Prepares informational materials for dissemination through a variety of media.

#### DISTINGUISHING CHARACTERISTICS

This is the educational class in the Human Resources series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. Incumbents must be enrolled in an accredited college or university with major coursework related to engineering. Experience gained as a Human Resources Intern maybe considered qualifying for entry level professional classifications.

#### SUPERVISION RECEIVED AND EXERCISED

Receives immediate supervision from the Human Resources Director or; may receive technical and functional supervision from other Human Resources staff as directed by the Human Resources Director.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Assist with planning, implementation and coordination of District training programs.

Utilize all skills to communicate and provide exceptional customer care including language skills and all specialized skills possessed by employee.

Assist in the coordination and execution of special events.

Assist in District's recruitment activities.

Assist employees with benefit questions.

Assist in preparing the annual report on Water Use Efficiency events.

Perform related duties as assigned.

### EDUCATIONAL OPPORTUNITY

The intern position will provide the following educational experiences:

#### Knowledge of:

Report preparation and analysis, including use of various personal computer applications such as word processing, spreadsheet, and database programs.

Modern office procedures, practices, and equipment, including use of a personal computer.

English usage, spelling, punctuation, and grammar.

Human Resources and safety principals.

#### Ability to:

Assist with planning, implementation and coordination of a variety of Human Resources activities.

Intermittently, review documents related to department operations; observe, identify and problem solve office operations and procedures; understand, interpret and explain department policies and procedures; explain operations and problem solve office issues for the public and with staff.

Understand and communicate handbook policies to staff.

Analyze reports and special projects; prepare routine reports and correspondence.

Perform general clerical work, including maintenance of appropriate records and preparation of general reports; verify and check files and data.

Perform simple arithmetic calculations.

Operate a variety of office equipment, such as a calculator, computer and related software.

Type at a speed necessary for successful job performance.

Prioritize work and meet required deadlines.

Communicate clearly and concisely, both orally and in writing.

Re

Establish and maintain effective working relationships with those contacted in the course of work.



REQUIREMENTS:

Must be enrolled in college full time.

## PHYSICAL REQUIREMENTS

Constantly, walk stand, kneel, climb, and bend in the field; sit while studying or preparing reports and driving in vehicle or operating equipment; perform simple and power grasping, pushing, pulling and fine manipulation; intermittently write or use a keyboard to communicate; and lift or carry weight up to 25 pounds. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

---

Employee Signature

---

Date

---

Supervisor Signature

---

Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### OPERATIONS MANAGER

FLSA Status: Exempt

#### DEFINITION

To plan, organize, direct and review the activities and operations of the Operations Department (Systems, Treatment Plant and Water Quality divisions) including facility operations, water quality laboratory testing/analysis and treatment plant processing operations; to coordinate assigned activities with other departments and outside agencies; and to provide highly responsible and complex administrative support to the General Manager/CEO and Assistant General Manager/COO.

#### SUPERVISION RECEIVED AND EXERCISED

Receives administrative direction from the General Manager/CEO and Assistant General Manager/COO.

Exercises direct supervision over assigned supervisory and technical staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Develop, plan and implement department goals and objectives; recommend and administer policies and procedures.

Coordinate department activities with those of other departments and outside agencies and organizations; provide staff assistance to the Board of Directors, General Manager/CEO, and Assistant General Manager/COO; prepare and present staff reports and other necessary correspondence.

Direct, oversee and participate in the development of the department's work plan; assign work activities, projects and programs; monitor work flow; review and evaluate work products, methods and procedures.

Supervise and participate in the development and administration of the Operations Department budget; direct the forecast of additional funds needed for staffing, equipment, materials, supplies, and services; monitor and approve expenditures; implement mid-year adjustments.

Select, train, motivate and evaluate personnel; provide or coordinate staff training; conduct performance evaluations; implement discipline procedures; maintain discipline and high standards necessary for the efficient and professional operation of the department.

## Operations Manager

- 2 -

Ensure regulatory compliance with State and Federal agencies regarding water quality testing, analysis, and production.

Oversee operation of the water distribution system relative to water quality issues and monitor water production from a variety of sources, including groundwater, surface water, and the State water project.

Represent the department to outside groups and organizations; participate in outside community and professional groups and committees; provide technical assistance as necessary.

Research and prepare technical and administrative reports and studies; prepare written correspondence as necessary.

Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Perform related duties as assigned.

### MINIMUM QUALIFICATIONS

#### Knowledge of:

Principles and practices of water utility operations and related facilities, including water treatment and distribution systems.

Principles and practices of water quality assurance and control testing and analysis.

Principles and practices of leadership, motivation, team building and conflict resolution.

Pertinent local, State and Federal laws, rules and regulations.

Organizational and management practices as applied to the analysis and evaluation of programs.

Principles and practices of organization, administration and personnel management.

Principles and practices of budget preparation and administration.

Ability to:

Plan, direct and control the administration and operations of all facilities.

On a continuous basis, analyze budget and technical reports; interpret and evaluate staff reports and related documents; know and interpret laws, regulations, codes and procedures; observe performance and evaluate staff; problem solve department related issues; and explain and interpret policy.

On a continuous basis, sit at desk and in meetings for long periods of time; intermittently walk and stand while visiting field sites; twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone; write or use a keyboard to communicate through written means; and lift or carry weight up to 20 pounds.

Prepare and administer department budgets.

Develop and implement department policies and procedures.

Supervise, train and evaluate assigned personnel.

Gain cooperation through discussion and persuasion.

Analyze problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.

Interpret and apply District and department policies, procedures, rules and regulations.

May occasionally perform field site visits.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Ten years of increasingly responsible experience in Treatment Plant, including five years of administrative and management responsibility.

Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in civil engineering, chemistry, biology or a related field.

License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Possession of a Water Treatment Operator Grade 5 Certificate as issued by the State of California Department of Public Health.

Possession of a Water Distribution Operator Grade 5 Certificate as issued by the State of California Department of Public Health is highly desired.

PHYSICAL REQUIREMENTS

Intermittently, walk stand, kneel, climb, and bend in the field; sit while studying or preparing reports and driving in vehicle or operating equipment; perform simple and power grasping, pushing, pulling and fine manipulation; intermittently write or use a keyboard to communicate; and lift or carry weight up to 35 pounds. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date



## Operations Manager

- 5 -

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

## PALMDALE WATER DISTRICT

### PLANT OPERATOR 1 PLANT OPERATOR 2 PLANT OPERATOR 3

FLSA Status: Non-Exempt

#### DEFINITION

To perform a variety of skilled duties related to the continuous maintenance and operation of the water treatment plant.

#### Plant Operator 3:

Under the direction of the operation Manager plans, organizes and directs water treatment plant maintenance within the Operations department; and performs a variety of technical tasks relative to assigned area of responsibility. Functions as the Chief Plant Operator and fills in for the Operations Manager when assigned.

#### DISTINGUISHING CHARACTERISTICS

Plant Operator 1 - This is the entry level class in the Plant Operator series. Positions in this class typically has three years work experience and work under immediate supervision while learning job tasks. The Plant Operator 1 class is distinguished from the 2 level by the performance of less than the full range of duties assigned to the 2 level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned. Positions in this class are flexibly staffed.

Plant Operator 2 - This is the journey level class in the Plant Operator series and is distinguished from the 1 level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the 1 level.

Plant Operator 3 - This is the advanced journey level class in the Plant Operator series and is distinguished from the 1 level and 2 level by the assignment of the full range of duties. Employees at this level receive limited instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Employees at this level provide guidance and task distribution to Level 1 and Level 2 employees. Positions in this class are flexibly staffed and are normally filled by advancement from the 2 level.

### SUPERVISION RECEIVED AND EXERCISED

#### Plant Operator 1

Receives Immediate supervision from the Operations Manager; may receive technical and functional supervision from a Plant Operator 3.

#### Plant Operator 2

Receives general supervision from the Operations Manager; may exercise technical and functional supervision over Plant Operator 3.

#### Plant Operator 3

Receives supervision from the Operations Manager; exercises technical and functional supervision over Plant Operator 1 and Plant Operator 2.

### EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Operate SCADA (Supervisory Control and Data Acquisition) computer equipment to control and monitor flow of water treatment and processing of chemicals through the treatment plant and water distribution system; operate control systems manually, as needed; monitor gauges and meters and record meter readings; maintain shift log.

Observe variations in operating conditions; interpret computer, meter and gauge readings; check, standardize and calibrate instruments, analyzers and chemical feed pumps; start and stop electric driven pumps and motors to control and adjust flow and treatment processes.

Collect samples and perform routine laboratory tests and analysis; determine chemical and physical characteristics of raw, settled, filtered, and finished water.

Oversee sludge pond operation including monitoring of removal and transfer of sludge.

Receive delivery of materials, parts, and supplies; store in accordance with accepted safety standards and requirements.

Inspect mechanical equipment for proper working order and prepare/submit work orders for mechanical and/or electrical maintenance attention; perform routine maintenance work as necessary.

Participate in preparation of reports to various external regulatory agencies and District divisions and departments.

Maintain records and documentation.

Build and maintain positive working relationships with co-workers, other District employees, and the public using principles of good customer service.

Perform related duties as assigned.

Plant Operator III specialized job duties:

Recommend and assist in the implementation of goals and objectives; establish methods for water treatment plant maintenance activities; Follows policies and procedures.

Plan, prioritize, assign, direct and review the work of staff involved in water treatment plant maintenance activities.

Assists Operations Manager in activities of assigned responsibilities; recommend improvements and modifications; prepare various reports on operations and activities.

Provides or coordinate staff training; work with employees to correct deficiencies under the direction of Operations Manager.

Review treatment plant operations and logs/reports to ensure compliance with regulatory requirements; take corrective action as necessary and prepare related reports.

Provide trouble shooting expertise relative to difficult mechanical, hydraulic, and chemical operation of the treatment plant and related facilities.

Develop and recommend operating protocols for additional/new plant equipment and processes.

Assist Operations Manager to ensure that regular and special reports are prepared and submitted to management to meet a variety of regulatory requirements.

Recommend to Operations Manager, purchase of and ensure safe storage of materials, supplies, and parts needed to perform treatment plant/maintenance operations.

Work closely with water quality laboratory staff relative to raw water and finished water samples; modify sampling and treatment plant testing procedures as needed.

MINIMUM QUALIFICATIONS

Plant Operator 1

Knowledge of:



Operating characteristics of a water treatment plant facility including SCADA automated control system, and use of pumps, gauges, and chemical feeds.

Principles, practices, and regulations related to operating a water treatment plant and related facilities.

Pertinent local, State, and Federal laws, rules and regulations.

Safety practices and procedures related to area of assignment.

Computer use in record keeping and reporting methods.

Arithmetic computations including calculation of percentages, decimals, and fractions.

Ability to:

Perform a variety of skilled duties related to the continuous operation of a water treatment plant.

On a continuous basis, know and understand operations, and observe safety rules; intermittently analyze problem processes and equipment; identify and locate equipment; interpret work orders; remember equipment location; and explain jobs to others.

Perform routine laboratory tests and analysis; determine chemical and physical characteristics of raw, settled, filtered, and finished water.

Use a computer to maintain required records and documentation; respond to customer questions and complaints.

Use various hand and power tools to perform basic mechanical maintenance.

Operate light mechanical equipment such as skip loaders, backhoes and front end loaders, as needed.

Work assigned shift schedules; be available for call back.

Work outdoors in a variety of weather conditions.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.



### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

#### Experience:

Two years of responsible experience in a water utility performing maintenance and repair of mechanical equipment.

#### Training:

Equivalent to high school diploma/GED. Some information science college work is preferred.

### License and Certificate

Possession of, or ability to obtain, a valid California Driver's License.

Possession of a Water Treatment Operator Grade 3 Certificate as issued by the State Water Resources Control Board.

Possession of a Distribution Operator Grade 3 Certificate as issued by the State Water Resources Control Board is desired.

### Plant Operator 2

In addition to the qualifications for the Plant Operator 1:

#### Knowledge of:

Principles, practices, and regulations related to operating a water treatment plant and related facilities in accordance with the scope of duties allowed by a Water Treatment Plant Operator Grade 3. Principles, practices, and regulations related to operating a water distributions system and related facilities in accordance with the scope of duties allowed by a Water Distribution Operator Grade 3.

Ability to:

Perform water treatment plant operations/activities as provided within the scope of a Water Treatment Plant Operator Grade 3.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Three years of responsible journey experience performing duties similar to a Plant Operator 1 with the Palmdale Water District.

Training:

Equivalent to high school diploma/GED. Some information science college work is preferred.

License and Certificate

Possession of, or ability to obtain, a valid California driver's license.

Possession of a Water Treatment Operator Grade 3 Certificate as issued by the State Water Resources Control Board and Possession of a Distribution Operator Grade 4 Certificate as issued by the State Water Resources Control Board is required or possession of a Water Treatment Operator Grade 4 Certificate as issued by the State Water Resources Control Board and Possession of a Distribution Operator Grade 3 Certificate as issued by the State Water Resources Control Board is required.

Plant Operator 3

In addition to the qualifications for the Plant Operator 2:

Knowledge of:

Principles, practices, and regulations related to operating and maintaining a water treatment plant and related facilities in accordance with the scope of duties allowed by a Water Treatment Plant Operator Grade 4.

Equipment, tools and materials used in water treatment operations and maintenance activities.

Current and emerging water issues and regulation.

Principles and practices of safety.

Pertinent local, State and Federal laws, ordinances and rules.

Ability to:

Assist Operations Manager to Organize, implement and direct water treatment plant and related maintenance operations/activities.

On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures; explain regulations, policies, and procedures.

Interpret and explain pertinent District and department policies and procedures.

Assist in the development and recommend policies and procedures related to assigned operations.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Five years of responsible journey experience performing duties similar to a Plant Operator 2 with the Palmdale Water District.

Training:

Equivalent to high school diploma/GED. Some information science college work is preferred.

License and Certificate

Possession of, or ability to obtain, a valid California driver's license.

Possession of a Water Treatment Operator Grade 5 Certificate as issued by the State Water Resources Control Board and possession of a Distribution Operator Grade 4 Certificate as issued by the State Water Resources Control Board is required or Possession of a Water Treatment Operator Grade 4 Certificate as issued by the State Water Resources Control Board and possession of a Distribution Operator Grade 5 Certificate as issued by the State Water Resources Control Board

Possession of a Water Treatment Operator Grade 5 Certificate as issued by the State Water Resources Control Board is desired.

#### PHYSICAL REQUIREMENTS

Intermittently, walk stand, kneel, climb, twist and bend in the field; sit while studying or preparing reports and driving in vehicle or operating equipment; perform simple and power grasping, pushing, pulling and fine manipulation; continuously write or use a keyboard to communicate; and lift or carry weight up to 50 pounds. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold with extreme sun exposure. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

Approved:

I have reviewed this job description with my supervisor and agree with its contents.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.

**P A L M D A L E   W A T E R   D I S T R I C T**  
**B O A R D   M E M O R A N D U M**

**DATE:** July 19, 2021 **July 26, 2021**  
**TO:** BOARD OF DIRECTORS **Board Meeting**  
**FROM:** Mr. Dennis D. LaMoreaux, General Manager  
**RE:** ***AGENDA ITEM NO. 6.4 – APPROVAL OF ERNST & YOUNG  
STATEMENT OF WORK FOR 2021-2022 STATE WATER PROJECT  
PROCEDURES RELATED TO THE 2022 STATEMENT OF CHARGES.  
(\$9,449.00 NOT-TO-EXCEED – BUDGETED – BUDGET ITEM NO. 1-02-  
4150-000 – GENERAL MANAGER LaMOREAUX)***

---

**Recommendation:**

Staff recommends approval of the Statement of Work between the District and Ernst & Young for 2021-2022 State Water Project Procedures related to the Department of Water Resources' 2022 Statement of Charges in the not-to-exceed amount of \$9,449.00.

**Alternative Option:**

The alternative option would be to not participate in the Ernst & Young contract.

**Impact of Taking No Action:**

The District will not be involved in auditing activities for State Water Project procedures.

**Background:**

The Palmdale Water District is a member of the State Water Contractors Independent Audit Association (IAA) and has been involved in these auditing activities for several years. The IAA hires an accounting/auditing firm on an annual basis to review the billings and financial statements prepared by the Department of Water Resources for State Water Project costs. The IAA has reviewed Ernst & Young's audit procedures and recommends IAA members approve the 2021-2022 Statement of Work.

The cost to the District will range from \$7,045.00 to \$8,806.00 depending upon how many members of the IAA approve the Statement of Work for core services (Exhibit "A"). Additional services may be requested for an amount not-to-exceed \$643.00 (Exhibit "B").



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

July 19, 2021

**Strategic Plan Initiative/Mission Statement:**

Strategic Initiative No. 1 – Water Resource Reliability

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

**Budget:**

These services are under Administration budget line item 1-02-4150-000 – Accounting Services.

**Supporting Documents:**

- July 16, 2021 letter from Ernst & Young regarding Statement of Work.



Ernst & Young LLP  
Sacramento Office  
Suite 900  
400 Capitol Mall  
Sacramento, CA 95814

Tel: +1 916 218 1900  
Fax: +1 916 218 1999  
ey.com

July 16, 2021

Mr. Dennis Lamoreaux  
Palmdale Water District  
2029 East Avenue "Q"  
Palmdale, California 93550

Dear Mr. Lamoreaux:

In coordination with the Independent Audit Association (IAA), we have developed the Statement of Work (SOW) for the 2021-2022 Procedures to be performed related to the 2022 Statement of Charges. This SOW is pursuant to the Master Services Agreement (MSA) by and between EY and Palmdale Water District dated May 31, 2017, which describes the annual approval process of each SOW performed under the MSA.

Please return the signed SOW to EY via mail at 400 Capitol Mall, Suite 900, Sacramento, CA 95814 (Attn. Scott Enos) or email to [scott.enos@ey.com](mailto:scott.enos@ey.com). We have also enclosed your copy of the support letter from Chantal Ouellet, IAA Secretary, recommending the approval of the SOW by Palmdale Water District.

If you have any questions about the enclosed SOW, please feel free to call me at (916) 218-1960.

Very truly yours,

Joe Pirnik  
Managing Director

Enclosures



**MEMORANDUM**

Date: July 6, 2021  
To: Members of the Independent Audit Association (IAA)  
From: Chantal Ouellet, IAA Secretary  
Subject: Ernst and Young 2021/2022 State Water Project Professional Services Contract –

Enclosed is the 2021/22 Statement of Work (SOW) which includes the State Water Project procedures to be performed in relation to the Department of Water Resources' (DWR) Statement of Charges.

The Exhibit B budget limit is only billed by Ernst and Young if additional work is reviewed and approved by the IAA and remains at \$50,000. Exhibit C allows individual IAA Members to request Ernst and Young to undertake additional services beyond those included in Exhibit A of the SOW.

The IAA team has reviewed Ernst and Young's proposed procedures and recommends that IAA Members approve and execute the 2021/2022 SOW. If you have any questions, please contact me at (559) 992-4127 or [couellet@tlbwsd.com](mailto:couellet@tlbwsd.com).

Sincerely,

Chantal Ouellet  
Tulare Lake Basin Water Storage District

CC: Joe Pirnik, EY

## **Statement of Work**

This Statement of Work with the attached Exhibits, dated July 16, 2021 (this SOW) is made by Ernst & Young LLP (“we” or “EY”) and Palmdale Water District on behalf of itself (“you” or “Client”), pursuant to the Master Services Agreement, dated May 31, 2017 (MSA), between EY and Palmdale Water District (the Agency).

The additional terms and conditions of this SOW shall apply only to the Services covered by this SOW and not to Services covered by any other SOW pursuant to the MSA. Capitalized terms used, but not otherwise defined, in this SOW shall have the meanings defined in the MSA, including references in the Agreement to “you” or “Client” shall be deemed references to you.

### **Scope of services**

Except as otherwise set forth in this SOW, this SOW incorporates by reference, and is deemed to be a part of, the MSA. This SOW sets forth the terms and conditions on which EY will perform certain professional services as described in Exhibit A (the Services) for Agency, a member of the State Water Contractors (the “Contractors” or “SWC”) Independent Audit Association (IAA), for the twelve months ending June 30, 2022.

Any changes to the above scope of work will be agreed upon in writing and signed by both parties and will amend this original SOW.

The Services are advisory in nature and will not constitute an audit performed in accordance with Generally Accepted Accounting Principles. EY will perform the Services in accordance with the Statement of Standards for Consulting Services (CS100) of the American Institute for Certified Public Accountants (AICPA). As part of your review of the terms of this Agreement, please refer to the enclosed letter from Chantal Ouellet of the IAA Audit Contract Negotiating Committee.

### **Your specific obligations**

You acknowledge that the Services are sufficient for your purposes.

You will not, and you will not permit others to, quote or refer to the Reports, any portion, summary or abstract thereof, or to EY or any other EY Firm, in any document filed or distributed in connection with (i) a purchase or sale of securities to which the United States or state securities laws (Securities Laws) are applicable, or (ii) periodic reporting obligations under Securities Laws. You will not contend that any provisions of Securities Laws could invalidate any provision of this agreement.

We also draw your attention to the reservations set out in paragraph 5 of the General Terms and Conditions of the MSA, as well as your management responsibilities under paragraph 6, your obligations under paragraphs 11 and 12, and your representation, as of the date hereof, under paragraph 26 thereof.

### **Specific additional terms and conditions**

The Services are advisory in nature. EY will not render an assurance report or opinion under the Agreement, nor will the Services constitute an audit, review, examination, or other form of attestation as those terms are defined by the American Institute of Certified Public Accountants. None of the Services or any Reports will constitute any legal opinion or advice. We will not conduct a review to detect fraud or illegal acts, nor will we test compliance with the laws or regulations of any jurisdiction.

Notwithstanding anything to the contrary in the Agreement or this SOW, we do not assume any responsibility for any third-party products, programs or services, their performance or compliance with your specifications or otherwise.

We will base any comments or recommendations as to the functional or technical capabilities of any products in use or being considered by you solely on information provided by your vendors, directly or through you. We are not responsible for the completeness or accuracy of any such information or for confirming any of it.

Where our written consent under the MSA is required for you to disclose to a third party any of our Reports (other than Tax Advice), we will also require that third party to execute a letter substantially in the form of Exhibit D to this SOW. To the extent the Agency is permitted to disclose any written Report as set forth herein, it shall disclose such Report only in the original, complete and unaltered form provided by EY, with all restrictive legends and other agreements intact.

Unless prohibited by applicable law, we may provide Client Information to other EY firms, EY Persons and external third parties, who may collect, use, transfer, store or otherwise process such information in various jurisdictions in which they operate in order to provide support services to any EY Firm and/or assist in the performance of the Services.

After the Services under this SOW have been completed, we may disclose or present to prospective clients, or otherwise in our marketing materials, that we have performed the Services for you, and we may use your name solely for that purpose, in accordance with applicable professional obligations. In addition, we may use your name, trademark, service mark and logo as reasonably necessary to perform the Services and in correspondence, including proposals, from us to you.

Compliance with U.S. immigration requirements may require EY to provide certain information to the U.S. Citizenship and Immigration Services ("USCIS") to confirm that EY employees on certain visas are, in fact, EY employees and not employees of the Client or other clients of EY. This will include providing certain information regarding work locations to support compliance with the visa requirements. As such, EY may disclose to USCIS information regarding this SOW, including the Client's identity and location, as well as a redacted copy of this SOW. Upon providing this information, EY will request that USCIS keep any such information confidential. In further support of these legal requirements, the U.S. Department of Labor (DOL) regulations, at 20 CFR § 655.734(a)(1)(ii)(A), require the posting of notice of a Labor Condition Application (LCA) in instances where individuals holding H-1B visas will be working on the Client's premises. EY and the Client will work together to develop an appropriate notice as required. The Client acknowledges that EY



resources will be operating at all times as an employee of and under the direction and control of Ernst & Young U.S. LLP's management, and all activities including supervision, hiring and firing decisions, and performance evaluations are controlled by Ernst & Young U.S. LLP. The Client will not have the right to control EY resources. At all times, EY resources will receive direction from an EY manager while on-site at the Client premises.

You shall not, while we are performing the Services hereunder and for a period of 12 months after they are completed, solicit for employment, or hire, any EY personnel involved in the performance of the Services, provided, that you may generally advertise available positions and hire EY personnel who either respond to such advertisements or who come to you on their own initiative without direct or indirect encouragement from you.

The Agency shall, among other responsibilities with respect to the Services, (i) make all management decisions and perform all management functions, including applying independent business judgment to EY work products, making implementation decisions and determining further courses of action in connection with any Services; (ii) assign a competent employee within senior management to make all management decisions with respect to the Services, oversee the Services and evaluate their adequacy and results; and (iii) accept responsibility for the implementation of the results or recommendations contained in the Reports or otherwise in connection with the Services. The Agency hereby confirms that management of the Agency accepts responsibility for the sufficiency of the Services. In performing the Services neither EY nor EY's partners or employees will act as an employee of the Agency.

The Agency represents and warrants to EY that the Agency's execution and delivery of this Agreement has been authorized by all requisite corporate or other applicable entity action and the person signing this Agreement is expressly authorized to execute it on behalf of, and to bind, the Agency.

The performance of the Services and the parties' obligations in connection therewith are subject to the additional terms and conditions set forth in the MSA.

It is understood that the Agency is not bound by our findings in any controversy or disagreement between the Agency and the Department of Water Resources (the "Department") should the Agency disagree with our findings.

We would also request that, if any IAA member discovers discrepancies in billings or other financial statements relative to their State Water Project costs, in addition to your working with the Department to correct the error, please notify EY for potential future inclusion as part of their procedures related to all IAA members.

## **Fees and billing**

The General Terms and Conditions of the Agreement address our fees and expenses generally.

The total fees for these Services to be rendered to the Agency, as well as an allocation of the total fees for each member Agency of the IAA, appear in Exhibits A and B attached (no procedures or fees have been allocated

to Exhibit B in this contract). Our total fees pursuant to Exhibit A to be charged to all members of the IAA entering into agreements with us shall not exceed \$548,000 for the twelve months ending June 30, 2022. This agreement will not be effective unless, in addition to the Agency, a sufficient number of other IAA agencies enter into agreements with us for such Services whose combined allocated fee would represent not less than 80% of \$548,000 based on the 100% participation fee allocation (see column 2 at A-4). If all agencies who are presently participating in the Services rendered by our firm enter into agreements with us for this twelve-month period, the maximum fees for our Services to your Agency will not exceed \$7,045 for Exhibit A. However, if not all of the participating agencies enter into agreements with us for services during the twelve-month period ending June 30, 2022, the maximum fees to your Agency will vary between the above-mentioned amount and \$8,806, which represents the maximum fees should sufficient agencies enter into agreements with us with a combined allocated fee of not less than 80%, as stated above.

In addition to the maximum fees under Exhibit A, maximum fees under Exhibit B shall not exceed a total of \$50,000 or \$643 for the Agency unless agreed to by the IAA. As noted above, no procedures have been allocated to Exhibit B. Prior to any expenditures under Exhibit B, said work must be specifically requested in writing in advance of any work being performed. Areas of potential focus for Exhibit B projects could include procedures agreed to by EY and the IAA in advance related to one or more of the items identified in Exhibit A. In prior years Exhibit B special projects have included projects such as assessing implementation and billing issues relating to the new SAP-based Cost Allocation and Repayment Analysis System (CARA), and studies to evaluate a pay-as-you-go system for funding conservation related operating costs incurred by the Department.

We have also included Exhibit C as part of this contract, which provides the opportunity for individual Contractors to enter into separate agreements for additional services with EY. There are currently no fees related to Exhibit C included herein.

The results of our procedures will include a presentation of our findings, observations and recommendations to be held in Sacramento, California for any interested Contractors. Any presentations requested at individual Contractor locations will be negotiated with the individual Contractor under Exhibit C and will be paid for by that Contractor.

Invoices for time and expenses will be billed monthly and are due upon receipt.



In witness whereof, the parties have executed this SOW as of the date set forth above.

**Palmdale Water District**

**Ernst & Young, LLP**

**Representative**

**Representative**

**Signature**

**Signature**

Dennis D. LaMoreaux  
**Printed Name**

Joe Pirnik  
**Printed Name**

General Manager  
**Title**

Authorized Signatory  
**Title**

Palmdale Water District  
2029 East Avenue Q  
Palmdale, CA 93550

Ernst & Young LLP  
400 Capitol Mall  
Suite 900  
Sacramento, CA 95814

**Address**

**Address**

July 26, 2021  
**Date**

July 16, 2021  
**Date**

**EXHIBIT A****I. SCOPE OF ENGAGEMENT**

- A-1 EY will work with the IAA, the SWC Audit/Finance Committee, and any subcommittees thereof, and the Department during the twelve months ending June 30, 2022 relating to matters currently being discussed between the SWC and the Department.

EY's Services to be rendered as described in this Exhibit shall be determined by the IAA at its discretion. These Services shall include:

1. Completion of the 2021/2022 procedures as outlined further below
2. Participation in all meetings of the SWC Audit/Finance Committee, which is a basic forum for communications between the State Water Project Contractors and the Department's staff on financial and accounting matters.
3. Cooperation with any subcommittees of the IAA assigned to study and resolve specific problem areas, such as the dispute resolution work group.
4. Review of reports and other documents prepared by the Department and disseminated at these meetings.
5. Provide an annual report setting forth the findings and recommendations related to our Services.

**Report definitions**

The assessment of risk of future occurrence, included in the findings summary tables in the report, provides the IAA with a meaningful measurement of the likelihood of similar findings in subsequent years if this issue is not addressed by the appropriate parties. This assessment of risk of future occurrence is based on knowledge obtained during discussions with the Department personnel and performance of procedures under this Exhibit A. Below are the definitions used in the report of findings and recommendations for the twelve months ending June 30, 2022 and we concur with these definitions.

Risk of Future Occurrence:

- A. High – it is highly likely (or probable) that the error or process failure will be repeated
- B. Medium – it is more likely than not that the error or process failure will be repeated
- C. Low – it is possible that the error or process failure will be repeated

During the twelve months ending June 30, 2022, the Services will include the following procedures.

## 2021/2022 Procedures

The procedures for the fiscal year ended June 30, 2022 were designed using estimated budgeted hours of 3,000. We will perform all procedures included in items 1-6 below. We will perform the procedures in items 7-8 if time permits. As a part of these procedures, we will regularly meet with the IAA to discuss the progress under this engagement. We will also submit the Report to each Agency setting forth the findings, observations, and recommendations related to our Services.

The following items represent the risks, risk factors, and procedures requested and determined by the IAA for the Contractors to be performed for the 2022 Statement of Charges (SOC) engagement:

### **Primary Procedures (Items 1-6)**

#### **1. Statement of Charges Testing**

##### *Risk:*

- Incorrect amounts billed to contractors for each component by the Department.

##### *Risk Factors:*

- Manual adjustments made to SAP data to arrive at amounts billed. Manual processes create opportunities for errors.
- High importance of accurate contractor bills.
- Actual costs reported in the bills can be misstated.

##### *Areas of Focus:*

- Determine that all SOC amounts are internally consistent and agree to the Bulletin 132-21 for the contractors selected for testing (to be provided by IAA).
- Agree the debt service amounts in the SOC attachments to the appropriate debt service schedule.
- Comparison of the current year SOC attachments to the prior year SOC attachments.
- Assessment of manual adjustments.
- Assess the actual costs charged to various areas of the project.
- Assess the factors for distributing reach capital and minimum costs among the contractors.



## 2. Delta Water Charge

*Risk:*

- Incorrect amounts charged to contractors for conservation based on actual and estimated costs.

*Risk Factors:*

- Calculation of delta water charge is a manual process.
- Tracking of Oroville Spillway costs and reimbursement and segregation between response and recovery costs is a manual process.
- Potential for high dollar impact (\$292 million in delta water charges in 2019 per Table B-21)

*Areas of Focus:*

- Recalculate the delta water charge used in the SOC.
- For prior year actual costs included in the calculation, compare costs in SAP to the Department's calculation and investigate variances.
- Obtain an understanding of future estimates included in the calculation and perform appropriate procedures to assess such estimates.
- Assess the Hyatt-Thermalito credit to the delta water charge.

### 3. Alpha Allocation Cycles

*Risk:*

- Incorrect contractor charged and/or incorrect allocation of costs between contractors.

*Risk Factors:*

- The F-series and S-series alpha allocation cycles update performed on an annual basis is a manual process. Manual processes create opportunities for errors.
- Potential for errors in determining work performed that falls under direct to reach, field division, and state-wide allocations.
- Potential for high dollar impact (\$283 million allocated by alpha allocation cycles in 2019).

*Areas of Focus:*

- Examine all cost centers from SAP to determine which cost centers represent alpha cost centers.
- Select alpha cost centers with the largest total annual costs.
- Review costs being posted to selected alpha cost centers based on activities charged to the alpha cost center through examination of invoices posted and discussions with the project managers, as necessary.
- Review the current year alpha update activity performed by the Department.
- Review the current year alpha update performed by the Department.
- Review the F-series and S-series updates performed by the Department.

#### 4. Transportation Minimum and Capital Direct and Indirect Analysis

*Risk:*

- Incorrect amounts billed to contractors for the transportation minimum and capital component by the Department.

*Risk Factors:*

- Direct and indirect costs may be allocated incorrectly through corresponding reaches.
- Judgment involved in selecting internal orders and work breakdown structures for billing to the contractors create opportunities for incorrect allocations.
- Project manager's and employee's lack of understanding of importance of accurate time charging to correct internal orders and work breakdown structures create opportunities for incorrect allocations.

*Areas of Focus:*

- Obtain a listing of internal orders associated with costs for selected reaches and group like internal orders to perform a fluctuation analysis to the prior year.
- Assess or obtain the Department's grouping of like internal orders to assess if the Department is able to group information for managerial reporting. This could include internal order hierarchies in SAP that could be used to group like internal orders.
- Assess a sample of internal orders with the largest increase in costs from group like internal orders for direct and indirect cost allocations.
- Obtain supporting documentation to assess the work was performed for the selected reaches.

## 5. System Power Costs – Variable Transportation

### *Risk:*

- Incorrect contractor charged and/or incorrect allocation of costs between contractors.

### *Risk Factors:*

- Calculation of the allocation factors is a manual process. Manual processes create opportunities for errors.
- Estimated Table 2 projected costs (invoicing rate) may not reflect actual costs incurred.
- Potential for high dollar impact (\$285 million net system power costs in 2019 per Table B-3).

### *Areas of Focus:*

- Vouch power costs and power revenues from SAP and assess the classification of costs.
- Reconcile the 2020 Preliminary Allocation of Power Costs (PALPOC) to UCABS (SAP). Recalculate appropriate inputs to the 2020 PALPOC (e.g., value of recovery generation credits, direct-to-plant transmission, etc.).
- Recalculate the 2020 calendar year power allocation factors used in UCABS (SAP) to allocate net power costs.
- Recalculate the billed amounts for the transportation variable cost component for 2020 for the contractors selected (to be provided by the IAA).

## 6. Debt Service Procedures

*Risk:*

- Incorrect bond debt service charged to the contractors.

*Risk Factors:*

- Water System Revenue Bond (WSRB) Surcharge calculation is a manual process. Manual processes create opportunities for errors.
- Debt service not subsequently adjusted to provide the benefits of any refinancing to the contractors.
- Cost/debt reconciliation project ongoing adjustments to the calculation creates opportunities for errors.
- WSRB Surcharge currently does not reflect the results of the cost/debt reconciliation project.

*Areas of Focus:*

- Reconcile any new bond offerings to the debt service schedules.
- Determine whether refinanced bonds were credited to the debt service schedules to provide the benefits of such refinancing to the contractors.
- Assess changes made to the cost/debt reconciliation project from previous versions.



**Other Procedures (Items 7-8)**

These procedures will only be performed as time permits after completion of items 1-6 above and consideration of the estimated 3,000 hour time budget.

**7. Rate Management Calculation Including Revenue and Cost Data***Risk:*

- Rate management credits are improperly allocated among the contractors.
- Rate management credits are improperly calculated based on the revenue and expenditure data in the funds available for rate management credits statement prepared by the Department.

*Risk Factors:*

- Calculation of rate management credits is a manual process.
- Lack of review and approval process for the rate management credit calculation.
- Outdated information used to calculate credits due to the contractors.

*Areas of Focus:*

- Obtain the rate management allocation schedule used for the 2022 SOC and review the allocation methodology for sample selected.
- Obtain the most recent funds available data schedule for the rate management credits and assess a sample of the largest balances.
- Compare the figures selected to the future forecasts and investigate any significant differences.
- Perform a review of revenues including systems revenue and 51e (amount in excess of rate management credits).
- Perform a review of revenues and related cash funds.
- Assess the impact of findings on the revenues available for rate management credits.

**8. Reconciliation between PR5 and UCABS and SWRDS Funds Analysis***Risk:*

- Costs and revenues are not accurately billed to the contractors based on inconsistencies between PR5 and UCABS.

*Risk Factors:*

- Costs and revenues do not accurately match between both systems.
- Manual process of moving costs between systems create opportunities for errors.
- Potential for movement of costs and revenues outside the SWRDS funds used for the state water project.

*Areas of Focus:*

- Gain an understanding of the reconciliation process performed by the Department.
- Reconcile all SWRDS PR5 costs and revenues included in the bond fund (0502), the construction fund (0506), and the revenue fund (0507) to the UCABS system.
- Identify, document, and investigate all variances between the two systems (PR5 and UCABS).
- Assess and classify all variances into two categories, (1) valid variance and (2) errant variance.
- Provide final assessment on the Department's recovery of all SWRDS costs.
- Perform an analysis of the movement of costs and revenues outside the SWRDS funds used for the state water project.

**II. FEES FOR EY SERVICES**

- A-2. Total fees for Exhibit A services performed by EY will not exceed \$548,000, including reasonable and necessary out-of-pocket expenses, which represent an estimated 3,000 hours to be incurred.

**III. ALLOCATION OF FEES**

- A-3. The maximum aggregate fee set forth in paragraph A-2 shall be apportioned among the agencies named in paragraph A-4 based on a basis consistent with prior years.

**IV. MAXIMUM AGGREGATE FEE FOR EACH AGENCY**

A-4. The portion of the maximum aggregate fee set forth in paragraph A-2 applicable to each Agency in conformity with the methodology set forth in paragraph A-3 is shown below:

Agency	Maximum fee for each Agency, provided all agencies listed below enter into agreements with EY	Maximum fee for each Agency, provided 80% of agencies listed below enter into agreements with EY	Percent of total
Alameda County Flood Control and Water Conservation District, Zone No. 7	\$ 26,665	\$ 33,330	4.9%
Alameda County Water District	13,891	17,363	2.5
Antelope Valley-East Kern Water Agency	47,906	59,882	8.7
Casitas Municipal Water District	6,615	8,268	1.2
Central Coast Water Authority	15,044	18,804	2.7
City of Yuba City	3,175	3,969	0.6
Coachella Valley Water District	45,758	57,198	8.4
County of Kings	3,078	3,848	0.6
Crestline-Lake Arrowhead Water Agency	1,918	2,398	0.4
Desert Water Agency	18,439	23,049	3.4
Dudley Ridge Water District	14,999	18,749	2.7
Empire West Side Irrigation District	992	1,240	0.2
Kern County Water Agency	137,000	171,250	25.0
Littlerock Creek Irrigation District	761	951	0.1
Mojave Water Agency	28,378	35,473	5.2
Napa County Flood Control and Water Conservation District	9,600	12,000	1.8
Palmdale Water District	7,045	8,806	1.3
San Bernardino Valley Municipal Water District	33,934	42,418	6.2
San Gabriel Valley Municipal Water District	9,525	11,906	1.7
San Geronio Pass Water Agency	5,722	7,153	1.0
San Luis Obispo County Flood Control and Water Conservation District	8,269	10,336	1.5
Santa Clara Valley Water District	33,074	41,343	6.0
Santa Clarita Valley Water Agency	31,487	39,359	5.7
Solano County Water Agency	15,795	19,744	2.9
Tulare Lake Basin Water Storage District	<u>28,930</u>	36,163	<u>5.3</u>
Total	<u>\$ 548,000</u>		<u>100.0%</u>

**V. PAYMENT SCHEDULE**

This is the payment schedule for the Agency.

<u>August 10, 2021 Billing</u>	<u>September 10, 2021 Billing</u>	<u>October 8, 2021 Billing</u>	<u>November 10, 2021 Billing</u>	<u>December 10, 2021 Billing</u>	<u>Total Billing</u>
\$2,114	\$1,409	\$1,409	\$1,409	\$704	\$7,045



**EXHIBIT B****I. OTHER CONSULTING SERVICES**

EY shall, during the twelve months ending June 30, 2022, perform other services if requested by the IAA. No such work shall be performed unless specifically authorized by the IAA in writing. Areas of potential focus for Exhibit B projects could include in depth procedures agreed to by EY and the IAA in advance related to one or more of the items identified in Exhibit A.

Total fees for such other consulting services shall 1) be agreed to prior to commencement of work, 2) be allocated among the agencies based on the same procedures included in the Exhibit A allocation, and 3) shall not exceed \$50,000, which represents an estimated 274 hours to be incurred, unless agreed to by the IAA, for the year ended June 30, 2022. Any part of the \$50,000 which is unused shall not be billed.

<u>Agency</u>	<u>Maximum fee for each Agency, provided all Agencies listed below enter into agreements with EY</u>	<u>Percent of total</u>
Alameda County Flood Control and Water Conservation District, Zone No.7	\$ 2,432	4.9%
Alameda County Water District	1,267	2.5
Antelope Valley-East Kern Water Agency	4,371	8.7
Casitas Municipal Water District	604	1.2
Central Coast Water Authority	1,373	2.7
City of Yuba City	290	0.6
Coachella Valley Water District	4,175	8.4
County of Kings	281	0.6
Crestline-Lake Arrowhead Water Agency	175	0.4
Desert Water Agency	1,682	3.4
Dudley Ridge Water District	1,369	2.7
Empire West Side Irrigation District	91	0.2
Kern County Water Agency	12,500	25.0
Littlerock Creek Irrigation District	69	0.1
Mojave Water Agency	2,589	5.2
Napa County Flood Control and Water Conservation District	876	1.8
Palmdale Water District	643	1.3
San Bernardino Valley Municipal Water District	3,096	6.2
San Gabriel Valley Municipal Water District	869	1.7
San Geronio Pass Water Agency	522	1.0
San Luis Obispo County Flood Control and Water Conservation District	754	1.5
Santa Clara Valley Water District	3,018	6.0
Santa Clarita Valley Water Agency	2,873	5.7
Solano County Water Agency	1,441	2.9
Tulare Lake Basin Water Storage District	<u>2,640</u>	<u>5.3</u>
Total	<u>\$ 50,000</u>	<u>100%</u>

**EXHIBIT C****I. INDIVIDUAL CONTRACTOR AGREEMENTS**

EY may, during the twelve months ending June 30, 2022, perform other consulting services as requested by individual Contractors. These services will be performed and billed separately from the services outlined in Exhibits A and B.

The terms and conditions of any procedures performed under Exhibit C, including payment terms, will be outlined in a separate Statement of Work (SOW). These services, which will be agreed to by EY and the requesting Contractor in advance, will be documented in the example SOW attached to herein as Exhibit C-1. An Exhibit C-1 statement of work will be made available to any Contractor upon request. All other provisions of the Contractor's signed contract with EY for the twelve months ending June 30, 2022 will continue to be in effect.

Total fees for such other consulting services shall be agreed to with the individual Contractor prior to commencement of work. The fees for services provided under Exhibit C will be outside of those referenced in Exhibits A and B, and will be paid for directly by the requesting Contractor.

**EXHIBIT C-1****Statement of Work**

This Statement of Work with the attached Exhibit, dated July 16, 2021 (this SOW) is made by Ernst & Young LLP (“we” or “EY”) and Palmdale Water District on behalf of itself (“you” or “Client”), pursuant to the Agreement, dated July 16, 2021 (the Agreement), between EY and Palmdale Water District (the Agency).

Except as otherwise set forth in this SOW, this SOW incorporates by reference, and is deemed to be a part of, the Agreement. The additional terms and conditions of this SOW shall apply only to the Services covered by this SOW and not to Services covered by any other Statement of Work pursuant to the Master Services Agreement (MSA) by and between EY and the Agency dated May 31, 2017. Capitalized terms used, but not otherwise defined, in this SOW shall have the meanings defined in the MSA, including references in the Agreement to “you” or “Client” shall be deemed references to you.

**Scope of services**

Except as otherwise set forth in this SOW, this SOW incorporates by reference, and is deemed to be a part of, the Agreement. This SOW sets forth the terms and conditions on which EY will perform certain professional services as described [INSERT DEFINITION OF SERVICES] (the Services) for Agency, a member of the State Water Contractors Independent Audit Association (IAA), for the twelve months ending June 30, 2022.

Any changes to the above scope of work will be agreed upon in writing and signed by both parties and will amend this original SOW.

The Services are advisory in nature and will not constitute an audit performed in accordance with Generally Accepted Accounting Principles. EY will perform the Services in accordance with the Statement of Standards for Consulting Services (CS100) of the American Institute for Certified Public Accountants (AICPA).

**Your specific obligations**

You acknowledge that the Services are sufficient for your purposes.

You will not, and you will not permit others to, quote or refer to the Reports, any portion, summary or abstract thereof, or to EY or any other EY Firm, in any document filed or distributed in connection with (i) a purchase or sale of securities to which the United States or state securities laws (Securities Laws) are applicable, or (ii) periodic reporting obligations under Securities Laws. You will not contend that any provisions of Securities Laws could invalidate any provision of this agreement.

We also draw your attention to the reservations set out in paragraph 5 of the General Terms and Conditions of the MSA, as well as your management responsibilities under paragraph 6, your obligations under paragraphs 11 and 12, and your representation, as of the date hereof, under paragraph 26 thereof.

**Specific additional terms and conditions**

The Services are advisory in nature. EY will not render an assurance report or opinion under the Agreement, nor will the Services constitute an audit, review, examination, or other form of attestation as those terms are defined by the American Institute of Certified Public Accountants. None of the Services or any Reports will constitute any legal opinion or advice. We will not conduct a review to detect fraud or illegal acts, nor will we test compliance with the laws or regulations of any jurisdiction.

Notwithstanding anything to the contrary in the Agreement or this SOW, we do not assume any responsibility for any third-party products, programs or services, their performance or compliance with your specifications or otherwise.

We will base any comments or recommendations as to the functional or technical capabilities of any products in use or being considered by you solely on information provided by your vendors, directly or through you. We are not responsible for the completeness or accuracy of any such information or for confirming any of it.

Where our written consent under the MSA is required for you to disclose to a third party any of our Reports (other than Tax Advice), we will also require that third party to execute a letter substantially in the form of Exhibit D to the Agreement. To the extent the Agency is permitted to disclose any written Report as set forth herein, it shall disclose such Report only in the original, complete and unaltered form provided by EY, with all restrictive legends and other agreements intact.

Unless prohibited by applicable law, we may provide Client Information to other EY firms, EY Persons and external third parties, who may collect, use, transfer, store or otherwise process such information in various jurisdictions in which they operate in order to provide support services to any EY Firm and/or assist in the performance of the Services.

After the Services under this SOW have been completed, we may disclose or present to prospective clients, or otherwise in our marketing materials, that we have performed the Services for you, and we may use your name solely for that purpose, in accordance with applicable professional obligations. In addition, we may use your name, trademark, service mark and logo as reasonably necessary to perform the Services and in correspondence, including proposals, from us to you.

Compliance with U.S. immigration requirements may require EY to provide certain information to the U.S. Citizenship and Immigration Services ("USCIS") to confirm that EY employees on certain visas are, in fact, EY employees and not employees of the Client or other clients of EY. This will include providing certain information regarding work locations to support compliance with the visa requirements. As such, EY may disclose to USCIS information regarding this SOW, including the Client's identity and location, as well as a redacted copy of this SOW. Upon providing this information, EY will request that USCIS keep any such information confidential. In further support of these legal requirements, the U.S. Department of Labor (DOL) regulations, at 20 CFR § 655.734(a)(1)(ii)(A), require the posting of notice of a Labor Condition Application (LCA) in instances where individuals holding H-1B visas will be working on the Client's premises. EY and the Client will work together to develop an appropriate notice as required. The Client acknowledges that EY resources will be operating at all times as an employee of and under the direction and control of Ernst & Young U.S. LLP's management, and all activities including supervision, hiring and firing decisions, and performance evaluations are controlled by Ernst & Young U.S. LLP. The Client will not have the right to control EY resources. At all times, EY resources will receive direction from an EY manager while on-site at the Client premises.

You shall not, while we are performing the Services hereunder and for a period of 12 months after they are completed, solicit for employment, or hire, any EY personnel involved in the performance of the Services, provided, that you may generally advertise available positions and hire EY personnel who either respond to such advertisements or who come to you on their own initiative without direct or indirect encouragement from you.

The Agency shall, among other responsibilities with respect to the Services, (i) make all management decisions and perform all management functions, including applying independent business judgment to EY work products, making implementation decisions and determining further courses of action in connection with any Services; (ii) assign a competent employee within senior management to make all management decisions with respect to the Services, oversee the Services and evaluate their adequacy and results; and (iii) accept responsibility for the implementation of the results or recommendations contained in the Reports or otherwise in connection with the Services. The Agency hereby confirms that management of the Agency accepts responsibility for the sufficiency of the Services. In performing the Services neither EY nor EY's partners or employees will act as an employee of the Agency.

The Agency represents and warrants to EY that the Agency's execution and delivery of this Agreement has been authorized by all requisite corporate or other applicable entity action and the person signing this Agreement is expressly authorized to execute it on behalf of, and to bind, the Agency.



The performance of the Services and the parties' obligations in connection therewith are subject to the additional terms and conditions set forth in the MSA.

It is understood that the Agency is not bound by our findings in any controversy or disagreement between the Agency and the Department of Water Resources should the Agency disagree with our findings.

We would also request that, if any IAA member discovers discrepancies in billings or other financial statements relative to their State Water Project costs, in addition to your working with the Department to correct the error, please notify EY for potential future inclusion as part of their procedures related to all IAA members.

### **Project deliverables**

The matrix below lists the specific deliverables and related timelines that EY will provide to **(insert Contractor)**.

Deliverable	Timeline	Comments

### **Additional responsibilities**

EY will provide **(insert Contractor)** with a timeline/schedule related to all project deliverables prior to the start of work on the project.

EY will notify **(insert Contractor)** in writing of any incremental changes to the original project estimate.

Production of all elements described in the "Project deliverables" section of this SOW is to be included in the cost breakdown under the "Pricing and payment terms" section below, agreed upon by **(insert Contractor)** and EY for this project.

**Fees and billing**

Below is a summary of the current cost estimates for this SOW. Due to the complexities and variable nature of this project, actual costs could vary from these estimates. In the event costs are expected to exceed the estimate, EY will contact **(insert Contractor)** before performing any additional work.

---

---

---

---

---

---

Out-of-pocket expenses incurred during this contract are not included in the above SOW estimated cost. Expenses include such items as travel, meals, accommodations, and other administrative expenses based on actual amounts incurred.

Invoices for time and expenses will be billed monthly and are due upon receipt.

**IN WITNESS WHEREOF**, the parties hereto have executed this SOW as of the day and year written below.

**Palmdale Water District****Ernst & Young, LLP****Representative****Representative**

---

**Signature**

---

**Signature**

---

**Printed Name**

---

**Printed Name**

---

**Title**

---

**Title**

---

**Address**

---

**Address**

---

**Date**

---

**Date**

**EXHIBIT D****FORM OF ACCESS LETTER**

[Letterhead of EY]

[Addressee (e.g., third party seeking access to EY Report)]

[Month XX, 20XX]

[Street Address]

[City, State Zip]

Dear [ ] :

[Client] (the "Client") has informed Ernst & Young LLP ("EY") that it wishes to disclose to [party seeking access] (the "Recipient") EY's [describe report(s)] , dated [ ] , relating to [describe subject] (the "Report(s)"). EY has not placed any limitations on the Client's ability to disclose any contents of the Report relating to the tax aspects or structure of any transaction proposed by the Client.

EY performed Services only for the Client. EY did not undertake the Services on behalf of, or to serve the needs of, the Recipient or any other third party. As part of such services, EY did not audit the Client's financial statements, subsequent to the date(s) of the Report(s).

EY prepared the Report(s) solely for the Client. The Report(s) address[ es] only the issues identified by the Client, and [ is/are] based solely on information obtained by EY using the procedures specified by the Client or otherwise provided by or on behalf of the Client. The Report(s) [ is/are] subject to many limitations and [ do/does] not provide any form of assurance with respect to any of the information referred to therein. The Recipient understands and accepts the scope and limitations of the Report(s).

Except (1) where compelled by legal process (of which the Recipient will immediately notify EY and tender to EY, if it so elects, the defense thereof), (2) with respect to any contents of the Report relating to the tax treatment and tax structure of the proposed transaction (including any facts that may be relevant to understanding the proposed tax treatment of the proposed transaction), or (3) with EY's prior written consent, the Recipient will not, circulate, quote, disclose or distribute any of the Report(s) or any information contained therein, or any summary or abstract thereof, or make any reference thereto or to EY, to anyone other than the Recipient's directors, officers or employees or legal advisors who, in each case, need to know its contents in order to \_\_\_\_\_ , and who have agreed to be bound by the terms and conditions of this agreement to the same extent as the Recipient.

The Recipient further agrees that it will not, and will not permit others to, quote or refer to the Report, any portion, summary or abstract thereof, or to EY, in any document filed or distributed in connection with (a) a purchase or sale of securities to which the United States or state securities laws ("Securities Laws") are applicable or (b) periodic reporting obligations under Securities Laws. The Recipient will not contend that any provisions of Securities Laws could invalidate any provision of this agreement.

In further consideration of EY allowing the Recipient access to the Report(s) and the information contained therein, the Recipient agrees that:

1. It does not acquire any rights against EY, and EY does not assume any duties or obligations to the Recipient or otherwise, as a result of such access.
2. It will not rely on the Report(s) or any portion thereof and will make no claim that it has done so.
3. It will make no claim against EY, its partners, employees or affiliates, or other members of the global Ernst & Young network (collectively, the "EY Parties" that relates in any way to the Report(s), any information contained therein, or the Recipient's access to the Report(s).
4. To the fullest extent permitted by applicable law, it will indemnify, defend and hold harmless the EY Parties from and against any claim or expense, including reasonable attorneys' fees, suffered or incurred by any EY Party relating to any breach by the Recipient of any of its representations or agreements contained herein or the use or disclosure of the Report(s) or any portion thereof by anyone who received it directly or indirectly from or at the request of the Recipient.

Very truly yours,

Ernst & Young LLP

Accepted by:

[Addressee]

By: \_\_\_\_\_

**P A L M D A L E   W A T E R   D I S T R I C T**

**B O A R D   M E M O R A N D U M**

**DATE:** July 20, 2021 **July 26, 2021**

**TO:** BOARD OF DIRECTORS **Board Meeting**

**FROM:** Chris Bligh, Facilities Manager

**VIA:** Mr. Adam Ly, Assistant General Manager  
Mr. Dennis D. LaMoreaux, General Manager

**RE:** ***AGENDA ITEM NO. 7.1 – CONSIDERATION AND POSSIBLE ACTION ON  
AWARDING CONTRACT TO DE NORA WATER TECHNOLOGIES FOR THE  
REPLACEMENT OF TWO ON-SITE SODIUM HYPOCHLORITE  
GENERATORS. (\$132,500.00 – BUDGETED – PROJECT NO. 21-608 –  
FACILITIES MANAGER BLIGH)***

**Recommendation:**

Staff recommends that the Board award a contract to De Nora Water Technologies for the replacement of two of our on-site sodium hypochlorite generators in the amount of \$132,500.00.

**Alternative Options:**

The Board can choose not to do so at this time and continue running the old generators.

**Impact of Taking No Action:**

The impact from no action would be risking expensive repairs to the old generators and the wells being offline during those repairs or ordering more expensive bulk sodium hypochlorite deliveries during those repairs.

**Background:**

The District has budgeted for the annual replacement of one sodium hypochlorite generator, as part of the Capital Improvement Project (CIP), to replace field on-site sodium hypochlorite generators. There are several versions of the old units in the distribution system and supports are costly for cell replacement and repair. A Request For Proposals (RFP) was drafted and three vendors submitted proposals. After an evaluation, De Nora Water Technologies is recommended to supply the unit. Below is a chart of the rating. The District will be purchasing two units to cover 2020 and 2021 budget years. Future units will be purchased as outlined in the CIP Program.

Vendor	Evaluator 1	Evaluator 2	Evaluator 3	Evaluator 4	Total Score
D&H	100	90	154	90	108.5
De Nora	192	169.5	156	173.5	172.75
UGSI	180	150.5	163	166.5	165

BOARD OF DIRECTORS  
PALMDALE WATER DISTRICT

VIA: Mr. Adam Ly, Assistant General Manager  
Mr. Dennis D. LaMoreaux, General Manager

July 20, 2021

**Strategic Plan Initiative/Mission Statement:**

This item is under Strategic Initiative No. 3 – Systems Efficiency  
This item directly relates to the District’s Mission Statement.

**Budget:**

This item is budgeted under Project No. 21-608 at \$66,250 ea., totaling \$132,500.

**Supporting Documents:**

- None.



**P A L M D A L E   W A T E R   D I S T R I C T**  
**B O A R D   M E M O R A N D U M**

**DATE:** July 20, 2021 **July 26, 2021**  
**TO:** Board of Directors **Board Meeting**  
**FROM:** Mr. Scott Rogers, Engineering Manager  
**VIA:** Mr. Adam Ly, Assistant General Manager  
Mr. Dennis LaMoreaux, General Manager  
**RE:** ***AGENDA ITEM NO. 7.2 – CONSIDERATION AND POSSIBLE ACTION ON AUTHORIZING THE GENERAL MANAGER TO EXECUTE A CONTRACT WITH ASPEN ENVIRONMENTAL GROUP FOR PROFESSIONAL SERVICES FOR THE PERMITTING, DESIGN, AND CONSTRUCTION SERVICES FOR SEDIMENT REMOVAL AT LITTLEROCK DAM RESERVOIR OVER THE NEXT THREE YEARS WITH ADDITIONAL TWO YEARS. (\$1,634,567.00 – BUDGETED – WORK ORDER NO. 21-417 – ENGINEERING/GRANT MANAGER ROGERS)***

---

**Recommendation:**

Staff recommends that the Board approve and authorize the General Manager to execute a contract in a not-to exceed amount of \$1,634,567.00 with Aspen Environmental Group for professional services for the permitting, design, and construction services for sediment removal at Littlerock Dam Reservoir over the next three years with additional two years.

**Alternative Options:**

There is no alternative option.

**Impact of Taking No Action:**

The District would benefit from the planning and design of sediment removal over a seven-to-twelve-year period. The impact of taking no action would result in additional capacity reduction of the reservoir storage.

**Background:**

Staff received two proposals from qualified consultants to renew permits, design, and construction services for the removal of 1.2 million cubic yards of sediment from the Littlerock Dam Reservoir located in the Angeles National Forest. The work includes the renewal of permits with the California Department of Fish and Wildlife, Lahontan Regional Water Quality Control Board, and the United State Forest Service. Additionally, the work will include design of grading plans for the removal of the sediment for a three to five-year period. The grading plan will be updated for each construction year. Consultant will be expected to prepare the plans and specifications for the project and provide biological and construction inspection services over the same period. Construction phase services include biological monitoring services, construction observation, and coordination between permitting agencies and the District. The overall objective is to restore and preserve the Reservoir capacity, which has been substantially reduced over time by the accumulation of sediment behind Littlerock Reservoir during seasonal inflows.

BOARD OF DIRECTORS  
PALMDALE WATER DISTRICT

VIA: Mr. Adam Ly, Assistant General Manager  
Mr. Dennis LaMoreaux, General Manager

July 20, 2021

The District plans to enter into a three-year contract with the selected Consultant with additional two one-year renewals.

Staff received two qualified proposals from Aspen Environmental Group and Hazen and Sawyer, P.C. Both consultants developed project teams to address the project. Aspen Environmental Group has teamed with Stantec, and Hazen and Sawyer P.C. teamed with Psomas. The consultants presented project teams with extensive experience and qualified staff. Both proposals were evaluated and scored based on the requirements set forth in the RFP. Aspen Environmental Group was selected based on their experience, availability, and low proposed fee to complete the work requested by the District.

The scores are presented below.

<u>Proposal Firm</u>	<u>Score</u>
Aspen Environmental Group	91
Hazen and Sawyer, P.C.	87

The quotes received:

1. Aspen Environmental Group.: \$1,634,567.00
2. Hazen and Sawyer, P.C.: \$2,374,043.00

**Strategic Plan Initiative/Mission Statement:**

This item is under Strategic Initiative No. 1- Water Resource Reliability.  
This item directly relates to the District's Mission Statement.

**Budget:**

This item is under Specification 21-417 (Fiscal Year 2021).

**Supporting Documents:**

- Attachment A: Aspen Environmental Group Proposal
- Attachment B: Aspen Environmental Group Fee Schedule



## Permitting, Design and Construction Services for Sediment Removal at Littlerock Dam Reservoir

Prepared for:



Submitted by:



July 12, 2021



## Contents

<b>1. Letter of Introduction</b>	
<b>2. Profile of Firm</b>	<b>1</b>
2.1 Firm Description	1
2.2 Litigation	1
<b>3. Qualification of the Firm</b>	<b>2</b>
3.1 Aspen Qualifications and Relevant Experience	2
3.2 Stantec Qualifications and Relevant Experience	3
3.3 Project Experience	3
<b>4. Project Understanding</b>	<b>7</b>
4.1 Project Location and History	7
4.2 Project Status and Needs	8
4.3 Similar Projects and Technical/Procedural Innovations	8
<b>5. Project Staffing and Availability</b>	<b>8</b>
5.1 Key Personnel	8
<b>6. Work Plan</b>	<b>11</b>
6.1 Approach	11
Task 1: Project Management	11
Task 2: Assistance with Permits	11
Task 3: Special Use Authorization	11
Task 4: Sediment Removal Update 100 Percent Master Excavation and Phasing Plans	12
Task 5: Design Services – Phase 2–1 Excavation Bid Documents (Phase 2, Year 1)	12
Task 6: Design Services – Phase 2–2 Excavation Bid Documents (Phase 2, Year 2)	13
Task 7: Design Services – Phase 2–3 Excavation Bid Documents (Phase 2, Year 3)	14
Task 8: Environmental Construction Services Phase 2, Years 1–3	14
Task 9: Construction and Post-Construction Support Services Phase 2, Years 1–3	15
Task 10: Project Management (Phase 2, Years 4 and 5)	15
Task 11: Design Services – Phase 2–4 Excavation Bid Documents (Phase 2, Year 4)	16
Task 12: Design Services – Phase 2–5 Excavation Bid Documents (Phase 2, Year 5)	16
Task 13: Environmental Construction Services (Phase 2, Years 4 and 5)	17
Task 14: Construction and Post-Construction Support Services (Phase 2, Years 4 and 5)	17
6.2 Project Schedule	18
<b>7. Unique Qualities or Qualifications</b>	<b>18</b>
<b>8. References</b>	<b>19</b>
<b>9. Acceptance of Professional Services Agreement</b>	<b>20</b>

## Tables

Table 2-1 Documents that Have Been Challenged in the Past 5 Years	1
Table 3-1 Project Experience	3
Table 5-1 Key Personnel	10
Table 8-1 References for Aspen Environmental Group	19
Table 8-2 References for Chris Huntley	20

## Exhibits

Exhibit 5-1 Organization Chart	9
--------------------------------	---

## Appendices

Appendix A Fee estimate (submitted separately)	
Appendix B Resumes of Key Personnel	

## 1. Letter of Introduction

July 12, 2021

Scott Rogers, Engineering/Grants Manager  
Palmdale Water District  
2029 East Ave Q  
Palmdale, CA 93550

Subject: Permitting, Design and Construction Services for Sediment Removal at Littlerock Dam Reservoir

Dear Mr. Rogers:

Aspen Environmental Group (Aspen) is pleased to present our proposal to provide permitting, design and construction services for sediment removal at Littlerock Dam Reservoir in response to the Request for Proposal (RFP) released on June 5, 2021. Aspen has been working with the Palmdale Water District (District) on the Littlerock Sediment Removal Project since 2004 and is intimately familiar with the project. No other firm has the direct knowledge or experience that Aspen has with this project, the regulatory agencies, or the National Forest Service staff and we would like the opportunity to continue to provide our expertise and assistance to the District. As part of this commitment, Aspen will ensure that all calls or emails will be returned within eight hours or less.

In preparing this proposal, we have diligently followed the instructions in the RFP and have fulfilled all of the requirements for submission. The Aspen Team includes experienced professionals with expert qualifications in all of the requested services. We are confident that we have assembled an outstanding team that meets and exceeds all of the requirements described in the RFP.

In reviewing our proposal, we ask you to consider the following strengths of the Aspen Team:

- ***Experience with the Littlerock Sediment Removal Project.*** Aspen has completed extensive multiple year biological surveys and jurisdictional waters/wetlands delineations for the project. We also prepared a delineation for the Reservoir and streams and are preparing permit applications for the California Department of Fish and Wildlife (CDFW) 1605 agreement. If needed, we will also coordinate with the United States Army Corps of Engineers (USACE) to support any Clean Water Act (CWA) permits such as the 404 and 401. Aspen prepared the Biological Assessment to evaluate project effects to arroyo toad and least Bell's vireo. In 2020, Aspen supported the District during emergency sediment removal due to the Bobcat fire by conducting surveys, reviewing plans and specifications for the bid packet, and obtaining permits.
- ***Focus on providing environmental services for infrastructure and public works projects.*** Over 98 percent Aspen's work has been related to infrastructure and public works projects, including substantial water resources infrastructure. Aspen's clients have included local, state, and federal agencies across the western U.S., including prominent water agencies such as Metropolitan Water District of Southern California, California Department of Water Resources, Los Angeles Department of Water and Power, and USACE.

- **Expert biological resources staff.** The Aspen Team provides expertise with the varied habitats and species found across southern California, including endangered, threatened, and rare species. Our Team is experienced in conducting protocol surveys for all sensitive species in the region and holds the needed agency authorizations for listed species. Aspen's biologists are extremely familiar with the project area having worked on the Littlerock Sediment Removal Project for the past 17 years.
- **Expertise in regulatory permitting.** Aspen has expertise in compliance with a wide range of environmental regulations, including the Clean Water Act, Endangered Species Acts, California Fish and Game Code, and Porter-Cologne Water Quality Control Act. Our regulatory specialists have obtained permits in accordance with these regulations for infrastructure and public works projects across California.
- **Expertise in Engineering and construction services.** Stantec, who is a subconsultant to Aspen for this project has worked on over 100 dredging and restoration projects across the United States for the past 25 years, and understands several dredging systems and approaches from many different perspectives.

Chris Huntley, who is currently serving as Deputy Project Manager and Lead Biologist on the Littlerock Sediment Removal Project, will serve as the Project Manager and provide direct management and coordination for the contract. He will be supported by a team of experienced biologists and technical specialists. Our subcontractor, Stantec augments Aspen's core capabilities by providing the expertise, experience, and capacity needed to successfully complete services for engineering and land surveying.

I will represent Aspen during the selection process and any contract negotiations that may result. If you have any questions or require any additional information about our proposal or fee estimate (Appendix A), please contact Mr. Huntley at (818) 292-2327 or by e-mail at [chuntley@aspeneg.com](mailto:chuntley@aspeneg.com). I can also be reached at (818) 597-3407 or by email at [hrastegar@aspeneg.com](mailto:hrastegar@aspeneg.com).

Sincerely yours,

ASPEN ENVIRONMENTAL GROUP



Hamid Rastegar, D.Env  
President



## 2. Profile of Firm

### 2.1 Firm Description

Aspen Environmental Group (Aspen) is incorporated as a “C” corporation in California. The company was incorporated in 1991 and has been doing business under the name “Aspen Environmental Group” continuously since that time. Since incorporation 30 years ago, Aspen has grown from a staff of 3 to a staff of 57 (Aspen also has 17 seasonal employees). Aspen has experienced a very low rate of staff turnover in its 30 years of existence, demonstrating our stability as a company. Aspen’s founder and Chief Executive Officer, Dr. Hamid Rastegar, continues to play an active role in the company. Aspen maintains five offices (Agoura Hills, Inland Empire, Sacramento, San Francisco, Palm Springs), with our corporate headquarters located in Agoura Hills, Los Angeles County. This contract will be staffed primarily from our Los Angeles office with support from our Inland Empire office, but we have a wealth of resources in Southern California to draw upon to immediately meet all potential staffing needs of this contract.

Aspen maintains a healthy backlog of contracts and previously had and currently has several long-term, multi-million dollar, on-call services contracts with public agencies in charge of water and energy infrastructure projects, such as the Los Angeles Department of Water and Power (LADWP), Metropolitan Water District (MWD), Department of Water Resources (DWR), California Energy Commission (CEC), California Public Utilities Commission (CPUC), and several municipal utility districts throughout the State, which contribute to the success and health of our company and the local Los Angeles area office.

Aspen is an expert interdisciplinary environmental services firm, specializing in the management of environmental assessment efforts for infrastructure and public works projects under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). Over the past 30 years, Aspen has conducted environmental analysis and permitting for numerous infrastructure and public works projects, often characterized by highly visible and controversial projects, extensive public participation programs, and coordination with numerous local, state, and federal agencies. We believe that we have served our clients exceptionally well on these projects, and we intend to build and improve upon that record of service under this contract.

Aspen has been working with the Palmdale Water District (District) on the Littlerock Sediment Removal Project since 2004 and is intimately familiar with the project. No other firm has the direct knowledge or experience that Aspen has with this project. Proposed Project Manager, Chris Huntley has been working on this project for the past 17 years and understands the work required to successfully complete this contract.

### 2.2 Litigation

While none of Aspen’s CEQA documents have resulted in a successful court challenge, controversial projects often are challenged by interest groups or affected parties. Such actions are a right afforded to the parties of interest. Issues raised by opponents often include the adequacy of the environmental review and compliance with CEQA and/or NEPA requirements. Therefore, the quality of the analysis and adherence to legal requirements are factors critical to a successful defense. In our 30 years in business, no Aspen-prepared MND has been the subject of a legal action. We attribute this to the care with which these documents are prepared. We pay very close attention to detail generally and CEQA requirements in particular, and successfully advise our clients as to when an MND is appropriate and when an EIR is required. In addition, we are careful to ensure that the analyses in the Initial Study are thorough and well-substantiated, and that all comments and known concerns are acknowledged and specifically addressed.

A number of Aspen’s EIRs and EIR/EISs have been challenged, as shown in the table below, *but not one such challenge has succeeded*. None of these legal actions have overturned the public agency’s approval or required the revision or recirculation of the document.

**Table 2-1. Documents that Have Been Challenged in the Past 5 Years**

Document and Client	Summary of Complaint	Findings
Panoche Valley Solar Farm Project EIR, San Benito County	Challenge to the decision to approve the project and to cancel Williamson Act contracts, claiming the decisions were made without substantial supporting evidence.	Court upheld document’s adequacy.

**Table 2-1. Documents that Have Been Challenged in the Past 5 Years**

Document and Client	Summary of Complaint	Findings
CleanTech Hazardous Waste Facility Permit EIR	Lawsuit filed for CEQA adequacy.	In an unpublished tentative decision, the Superior Court dismissed five of the plaintiff's claims regarding EIR inadequacy but ruled in favor of the plaintiff's claim that the EIR's cumulative analysis was too narrowly focused.
SONGS Decommissioning EIR	Lawsuit filed by nonprofit organization, Samuel Lawrence Foundation, claiming California Coastal Commission violated objectives and standards under Coastal Act when it approved the 2019 coastal development permit for SCE to deconstruct power plant.	Judge made tentative ruling that the California Coastal Commission did not violate statutory requirements or that the dismantlement of the plant were inconsistent with regulations.

### 3. Qualification of the Firm

#### 3.1 Aspen Qualifications and Relevant Experience

Aspen has conducted biological surveys, environmental analyses and compliance services for nearly 200 water projects alone and has direct knowledge of the Littlerock Sediment Removal Project, having worked with the District on this project for the past 17 years. Aspen's in-house biological resource experts have conducted surveys for and completed State and federal permitting through environmental contracts with public agencies including but not limited to DWR, US Army Corps of Engineers (USACE), LADWP, Los Angeles County Public Works (LACPW), and MWD. Aspen has also successfully conducted extensive surveys, planning, and restoration services for a variety of projects in Los Angeles, Orange, San Bernardino, Riverside, San Diego, Kern, and Ventura Counties.

Aspen routinely conducts surveys, permitting, and monitoring for our clients. Some of Aspen's recent project experience includes:

- Aspen is currently assisting LACPW with a sediment removal project at Cogswell Reservoir, located along the West Fork of the San Gabriel River within the Angeles National Forest (ANF). Aspen prepared a jurisdictional delineation, conducted pre-construction biological surveys, prepared a habitat restoration plan, and assisted with agency coordination including California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), USACE, US Fish and Wildlife Service (USFWS), and US Forest Service (USFS). Aspen is currently monitoring construction, conducting water quality monitoring, and relocating downstream fish and special-status species for the project that will remove two million cubic yards of sediment from the reservoir over the next three years. This emergency project is being completed as a result of the 2009 Station Fire and 2020 Bobcat Fire which burned much of the watershed and caused sediment to fill much of the reservoir.
- Aspen recently completed construction monitoring at Live Oak Dam on behalf of LACPW. The Live Oak Dam project included replacement of the gate structure, electrical upgrades, a new access ramp, and various other upgrades. The project was completed in 2019 and Aspen is currently monitoring and maintaining the habitat restoration areas and completing annuals reports for the RWQCB and CDFW.
- Aspen assisted MWD by preparing a jurisdictional delineation at three locations along the Colorado River Aqueduct near Cabazon and preparing a planning level jurisdictional delineation of State and federal waters for the Copper Basin Access Road Project.
- Aspen completed delineations and supported regulatory permitting for the Lincoln Avenue Water Company Pipeline Repair Project. This involved obtaining a long-term agreement with CDFW to allow for the continued diversion of stream water and the operation and maintenance of diversion structures.
- Aspen is preparing the 1602 Amendment for LADWP for the 61-mile Barren Ridge Renewable Transmission Project. Aspen has conducted all the preconstruction surveys, construction monitoring, and reporting for 1602 sites for this project. To support the amendment, Aspen conducted delineations at over 90 different drainages.
- Aspen conducted the delineations and is preparing regulatory permits for the West Fontana Channel Flood Control Improvement Project and Elder Creek Channel Improvement Project.

- Aspen conducted the delineation and is preparing regulatory permits for the Santa Clara River Levee Improvement Project located in Ventura County. The delineation involved mapping over two miles of braided stream channel occupied by several endangered species.
- Aspen conducted the delineation and is preparing regulatory permits for the Thousand Palms Flood Control Project located in the Coachella Valley. This project involved extensive mapping along a broad alluvial fan system to support the construction of flood control structures.

On the **Littlerock Sediment Removal Project**, Aspen has completed extensive multiple year biological surveys and a jurisdictional waters/wetlands delineation for the project. Surveys included desert tortoise, least Bell's vireo, golden eagles, riparian song birds, bats, small mammals, and arroyo toads. Aspen prepared a delineation for the Reservoir and streams and is preparing permit applications for CDFW 1602 and Clean Water Act (CWA) permits including 404 and 401. Aspen prepared the Biological Assessment to evaluate project effects to arroyo toad and least Bell's vireo. Aspen is also developing the operations and maintenance plan that will ensure annual sediment removal activities and water deliveries do not result in the "take" of arroyo toad. In 2020, Aspen supported the District during emergency sediment removal due to the Bobcat fire by conducting surveys, reviewing plans and specifications for the bid packet, and obtaining permits.

In order to facilitate project development, Aspen worked with the District and the USFS ANF in formulating and finalizing the Project Memorandum of Understanding and Cost Share Agreement. Aspen prepared and submitted an application to the USFS for the Project Special Use Authorization, and prepared the Project Timeline. In addition, Aspen assisted the District's efforts to find a suitable and environmentally sustainable location to dispose of 1,100,000 cubic yards of sediment to be removed from reservoir. Aspen has overseen multiple borings and sample evaluations from within the reservoir to determine sediment composition, size, and extraction moisture content. Based on these findings, Aspen is currently providing engineering and planning support to the District during negotiations with several large-scale quarry operators to accept material for use as both mining pit backfill and engineering grade material supply.

**Aspen does not foresee any capacity issues with the proposed team to conduct all work on this contract.** Please see Table 5-1, Key Personnel, for availability of proposed staff. In the event of unforeseen circumstances, Aspen has ample capacity of staff personnel to enter the project and continue work. Aspen has a total of 28 biologists (18 in Agoura Hills and 10 in the Inland Empire) on staff that will be available to the proposed project.

## 3.2 Stantec Qualifications and Relevant Experience

Stantec's team of dredging professionals has the depth of applicable experience. Stantec understands several dredging systems and approaches from many different perspectives and will make that institutional knowledge available to the District. The members of the Stantec Team have worked together on over 100 dredging and restoration projects across the United States for the past 25 years. These working relationships have fostered their ability as a team to provide exceptional project efficiency.

Staff specializes in the following: Dredge and Dewatering Site Design and Feasibility Analysis; Sediment Management, Remediation, Alternative Disposal Options; Beneficial Reuse of Sediment; Cost Estimating; Habitat Restoration and Environmental Mitigation; Stormwater System Design and Management; Water Quality, Ecology, Fisheries, Avian and Wildlife Biology; and Geographic Information Systems.

## 3.3 Project Experience

Presented in Table 3-1 below is a list of project experience directly relevant to the proposed project. Work products have been completed on time and within budget for each project presented below.

**Table 3-1. Project Experience**

Aspen Environmental Group	
<b>Project Title</b>	<b>Littlerock Reservoir Sediment Removal Project</b>
Client	Palmdale Water District
Dates of Performance	2004-present
Description	Since 2004, Aspen has been assisting PWD in in designing the proposed Project and developing best management practices. Project design support has included over-

**Table 3-1. Project Experience**

	<p>seeing development of Project alternatives, design of the proposed grade control structure, preparation of a sediment removal plan, and assisting PWD with preparing and selecting a construction contractor. Aspen prepared the environmental analyses and agency decision documents under CEQA and NEPA. The Final EIS/EIR analyzed 12 key environmental resource areas.</p> <p>Aspen obtained all necessary permits to cover actions of the Project, including a CDFW Lake and Streambed Alteration Agreement (LSAA), USACE 404 Regional General Permit, and RWQCB 401 Permit, and recently obtained permit amendments due to some construction variances. Currently, Aspen is overseeing the mitigation monitoring and enforcement program prepared for the Project, which incorporates mitigation measures and standard project commitments developed during the CEQA/NEPA process to proactively protect sensitive resources at the Reservoir and reduce or avoid environmental impacts associated with proposed activities. This includes conducting worker training and oversight of mitigation and permit compliance requirements throughout annual construction and sediment removal. The Grade Control Structure component of the project is currently under construction.</p>
Project Cost (% of Work)	\$3,244,374 (75%)
<b>Project Title</b>	<b>Cogswell Reservoir Restoration Project</b>
Client	Los Angeles County Department of Public Works
Dates of Performance	2018-present
Description	<p>Aspen is supporting the County with the environmental review and permitting of this sediment removal project. The County anticipates removing approximately 2.0 million cubic yards of sediment from Cogswell Reservoir, which is in the south-central portion of the ANF along the West Fork of the San Gabriel River. The Cogswell Reservoir Restoration Project (CRRP) is a continuation of sediment removal activities that have been carried out since 1991 and 1995-1997. The CRRP is needed to address accumulated sediment and sediment added after the 2009 Station Fire and in anticipation of sediment that is expected to be added as a result of the 2020 Bobcat Fire.</p>
Project Cost (% of Work)	\$766,409 (100%)
<b>Project Title</b>	<b>Matilija Dam Ecosystem Restoration Project</b>
Client	United States Army Corps of Engineers, Ventura County Public Works Agency
Dates of Performance	2001-2004, 2017-present
Description	<p>Aspen prepared a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) that examined seven project alternatives that were comprised of alternative strategies for removal of the dam and the disposal of sediment that has accumulated behind the dam. The project also entailed downstream improvements to maintain the flood-carrying capacity of the river and prevent deterioration of drinking water quality. The joint EIS/EIR was certified in 2004.</p> <p>In June 2017, the updated plan to remove Matilija Dam incorporated new information garnered from recent dam removal projects as well as modifications to downstream infrastructure. Preparation of a subsequent EIR will provide a complete and objective analysis of the revised scheme for dam removal and will function as a Program EIR that can be used in the environmental review of subsequent component development projects during project implementation.</p>
Project Cost (% of Work)	\$900,000 (80%)
<b>Project Title</b>	<b>Prado Basin</b>
Client	United States Army Corps of Engineers
Dates of Performance	2002-2021
Description	<p>Aspen has provided a variety of services to the USACE for the Prado Dam and Basin components of the Santa Ana River Mainstem Project. Aspen prepared a supplemental EIS/EIR to examine impacts associated with stabilizing erosion at Norco Bluffs, changes in inundation levels behind the dam, increased release volumes under new</p>

**Table 3-1. Project Experience**

	dam operations, and bank stabilization downstream (Reach 9) from the dam. Aspen supported the USACE in Section 7 consultation with the USFWS for this project. Aspen also prepared a series of series of supplemental environmental assessments to address dike the construction of a series of dikes around Prado Basin and downstream bank protection within Reach 9. Aspen has monitored construction at fourteen project features that have been constructed over the course of the three contracts. Aspen has also conducting a wide variety of survey, noise monitoring, and restoration tasks for nearly 20 years to comply with mitigation requirements and permit conditions.
Project Cost (% of Work)	\$1,518,498 (67%)
<b>Project Title</b>	<b>Live Oak Dam Inlet/Outlet Works Rehabilitation Project</b>
Client	Los Angeles County Public Works
Dates of Performance	2020-present
Description	This project included rehabilitating the inlet and outlet works of Live Oak Dam. Live Oak Dam provides critical flood control and stormwater capture capabilities for the benefit of downstream communities. The Live Oak Dam Inlet/Outlet Works Rehabilitation Project modernized the operational support systems at this facility and improved its reliability to retain water during storms and release water for conservation after storms. Aspen conducted the following tasks for this project: pre-construction survey and review of permits; nesting bird management plan and pre-construction nesting bird surveys, habitat restoration plan, biological monitoring and on-site environmental training, and invasive plant removal.
Project Cost (% of Work)	\$152,580 (100%)
<b>Project Title</b>	<b>Sheep Creek Annual Vegetation Monitoring</b>
Client	San Bernardino County Flood Control District
Dates of Performance	2020-present
Description	The restoration Project consists of restoring portions of Sheep Creek that that were temporarily impacted by construction of the Sheep Creek Channel Invert flood control project. The District constructed the flood control project in 2014 to stabilize the Sheep Creek channel invert and to reduce sediment erosion. The flood control project included the improvement of a 0.6-mile length of trapezoidal earth channel. The District installed rock revetments along the low flow channel side slopes and several concreted rock grade stabilization structures in the channel bed. The flood control project also widened the channel and graded the side slopes to a 2:1 slope. Aspen is conducting vegetation monitoring at the Sheep Creek revegetation site.
Project Cost (% of Work)	\$22,290 (100%)
<b>Project Title</b>	<b>Colorado River Aqueduct (CRA) Structural Protection Project</b>
Client	Metropolitan Water District of Southern California
Dates of Performance	2019
Description	Metropolitan proposes to repair erosion at the CRA at five locations in vicinity of the San Geronio Pass. The repairs will be made with a combination of concrete slurry, 24-inch riprap, and other methods. Aspen prepared an Initial Study/Mitigated Negative Declaration and Biological and Cultural Resources field reconnaissance. Aspen also conducted general evaluation for environmental clearance and construction monitoring for emergency repairs to the CRA from extensive storm damage and routine O&M activities, as needed; and prepared daily monitoring logs of work completed, photo documentation of work completed, including GIS coordinates to document work performed under emergency permits and in support of the Lake or Streambed Alteration Program Notification of Emergency Work and follow-up reports.
Project Cost (% of Work)	\$229,088 (100%)



**Table 3-1. Project Experience**

<b>Project Title</b>	<b>Santa Clara River (SCR-1) Levee Improvement Project</b>
Client	Ventura County Watershed Protection District
Dates of Performance	2017-present
Description	The District proposed to rehabilitate the Santa Clara River levee system upstream of Highway 101 to provide adequate protection from a one percent annual chance (formerly known as 100-year) flood event along the Santa Clara River for approximately 1,400 structures (residential, public, commercial, industrial, and agricultural) located in North Oxnard (El Rio area), Ventura County. Aspen supported the District by providing environmental input to the proposed design, participating in pre-scoping meetings, preparing the Initial Study per the Ventura County Initial Study Assessment Guidelines (2011), and coordinated with the District and USACE to prepare a joint CEQA/NEPA document (EIR/EA or EIR/EIS) in combination with the engineering Feasibility Study to meet the requirements of the USACE's Section 203 process. Permitting support was also provided by Aspen, including CWA Section 401 and 404 (Nationwide Permit authorization anticipated), and Section 1602 Streambed Alteration Agreement.
Project Cost (% of Work)	\$690,041 (85%)
<b>Project Title</b>	<b>Ventura River (VR-1) Levee Rehabilitation Project</b>
Client	Ventura County Watershed Protection District
Dates of Performance	2017-present
Description	The project extends approximately 2.65 miles from the Pacific Ocean to Cañada Se San Joaquin and includes adding grouted riprap toe protection to the scour limit, raising the levee, adding a flood wall, and constructing an access road at the bottom of the levee. Aspen supported the District with AB 52 tribal consultation, performed cultural and historic surveys, and prepared a Cultural Resources Records Search and Pedestrian Survey Report. Aspen also completed biological surveys and a jurisdictional waters/wetlands delineation. Aspen supported the District in obtaining a 408 Permit from the USACE to allow geotechnical testing along the levee alignment. Aspen completed a Cultural Resources Monitoring Plan approved by the State Historic Preservation Officer and performed the cultural monitoring during geotechnical testing. Aspen participated in a pre-scoping meeting in September 2018. Currently, Aspen is preparing the Initial Study. Aspen will also support the District with permitting, including the CDFW 1602 Permit (Lake and Streambed Alteration Agreement), USACE Section 404 Permit (CWA), and Section 401 Water Quality Certification (CWA) from the Los Angeles RWQCB.
Project Cost (% of Work)	\$674,530 (80%)
<b>Project Title</b>	<b>Barren Ridge Renewable Transmission Project</b>
Client	Los Angeles Department of Water and Power
Dates of Performance	2015-2019
Description	Aspen supported construction of the Barren Ridge Renewable Transmission Project (BRRTP) by providing biological resource surveys, mitigation monitoring, and reporting. The purpose of the BRRTP is to access renewable energy facilities in the Tehachapi Mountain and Mojave Desert areas of Southern California, transporting the power to LADWP's customers. Located in Kern and Los Angeles Counties, the Project included the construction and rebuild of approximately 75 miles of transmission line from Barren Ridge Switching Station to Rinaldi Substation and 12 miles in length from Castaic Power Plant to the proposed Haskell Switching Station. Aspen provided extensive pre-construction, compliance reporting, and construction monitoring support to LADWP for all transmission line components of the project. Prior to ground disturbance, Aspen conducted pre-construction surveys for sensitive plants, vegetation, trees, reptiles, small mammals, and birds along the entire project alignment.
Project Cost (% of Work)	\$6,772,112 (95%)



**Table 3-1. Project Experience**

<b>Project Title</b>	<b>Bee Canyon Sag Pipe Biological Support</b>
Client	Los Angeles Department of Water and Power
Dates of Performance	2018-2019
Description	<p>Aspen provided biological resources technical support for recoating a portion of the first Los Angeles Aqueduct (LAA) in the Bee Canyon area of ANF. This work included sand blasting and recoating of the exterior surface of the LAA, approximately 984 linear feet of 13-inch-diameter steel pipe. Soil excavation in the area surrounding the pipe would be necessary to restore the canyon to the original grade. Approximately 2,200 cubic yards would be disturbed, and grading was expected to extend up to 20 feet on either side of the pipe.</p> <p>Aspen provided the following support to LADWP: Conducting biological surveys for plants and wildlife; Preparing vegetation maps of the project alignment and access road areas; Preparing a jurisdictional delineation of State and federal waters; and Preparing a Biological Evaluation/Biological Assessment (BE/BA) to address potential effects to Forest Sensitive and Federally Listed Species.</p>
Project Cost (% of Work)	\$21,438 (84%)
<b>Stantec</b>	
<b>Project Title</b>	<b>Prime Hook National Wildlife Refuge Dredging</b>
Client	U.S. Fish and Wildlife Service
Dates of Performance	2012-2017
Description	Dredging approximately 1.1 million cubic yards of sand from an offshore borrow area along the shoreline and reconstructing a 40ft wide dune, 150ft beach berm and back-bay marsh platform
Project Cost (% of Work)	\$562,000 (100%)
<b>Project Title</b>	<b>Strategic Placement of Dredged Sediment in San Francisco Bay</b>
Client	USACE
Dates of Performance	2018–present
Description	Strategic placement of dredged sediment to help restore and enhance the sustainability of tidal marshes and mudflats in response to SLR, for both habitat conservation and flood-risk management.
Project Cost (% of Work)	TBD
<b>Project Title</b>	<b>Perico Preserve Dredging and Ecosystem Restoration</b>
Client	Manatee County (Florida)
Dates of Performance	2015-2017
Description	Excavation of over 160,000 cubic yards of sediment to create an open water body
Project Cost (% of Work)	Engineering \$666,000 (100%)

## 4. Project Understanding

### 4.1 Project Location and History

The project is located within Littlerock Reservoir within County of Los Angeles, and the ANF. The Reservoir is approximately 4 miles south of the community of Littlerock and 10 miles southeast of the City of Palmdale. Originally constructed in 1924, the Reservoir had a capacity of 4,300 acre-feet, and by 1991 the capacity had been reduced to approximately 1,600 acre-feet. In 1992, the height of the Littlerock Dam was increased. The 1992 design capacity of the reservoir is 3,500 acre-feet of water storage, which has since been reduced by almost 500-acre feet as a result of

continued sediment buildup. The need to remove sediment from the Reservoir to restore and maintain capacity has been complicated due to the presence of the federally listed arroyo toad (*Anaxyrus californicus*) and established critical habitat upstream of the Reservoir.

In response to potential environmental impacts, an EIR/S was prepared and published in 2017 describing three phases of the project:

- Phase I: Construction of a subterranean grade control structure within the Reservoir at Rocky Point.
- Phase II: Total initial removal of approximately 1,165,000 cubic yards of accumulated sediment from within the Reservoir to restore 1992 design water storage and flood control capacity, and would include annual restoration activities.
- Phase III: Ongoing annual sediment removal (estimated at 38,000 cubic yards per year) to maintain Reservoir design capacity, including annual restoration activities.

To prevent head-cutting in critical habitat due to future sediment removal activity and maintenance (Phases II and III), a large subterranean grade-control structure was designed and constructed in the upstream end of the Reservoir at a natural narrowing of the canyon called Rocky Point (Phase I). Following the application of appropriate permits from the USACE, CDFW, and Lahontan RWQCB, and a series of protocol level and pre-construction surveys for sensitive species including arroyo toad and least Bell's vireo (*Vireo bellii pusillus*), construction for the grade-control structure started in the fall 2018. Construction at the grade-control structure was completed in January 2020, and restoration of temporary work areas and establishment of mitigation areas was established starting in February 2020.

In early 2021 following the Bobcat fire which burned a large portion of the watershed above the Reservoir, the District sought an emergency permit to remove approximately 19,000 cubic yards of sediment immediately downstream of the grade-control structure to prevent the potential increased sediment load and debris that could enter the Reservoir.

## 4.2 Project Status and Needs

The District is prepared to move to Phase II and commence sediment removal activities. Prior to starting sediment removal, permits will need to be reviewed for potential renewal, coordination with lead agencies, and pre-construction surveys conducted in compliance with all environmental documents and permits. Coordination will need to occur with local quarries and appropriate permits will need to be obtained for sediment deposition. During sediment removal activities, monitors are needed for environmental trainings, biological monitoring, provide project oversight during construction, and summarize daily activities. In addition, continued reporting and restoration efforts are needed in compliance with permits including the Lahontan RWQCB 401, USACE 404, CDFW Streambed Alteration Agreements, and the Final EIS/EIR.

## 4.3 Similar Projects and Technical/Procedural Innovations

Aspen has been supporting the District through the preparation and publication of the Final EIS/EIR, conducting a variety of surveys, obtaining the appropriate permits, monitoring Phase I efforts, and preparing reports. Aspen has worked on similar projects that include Cucamonga Basin (Biological Assessment and permitting support in San Bernardino County, CA), Sheep Creek (Biological surveys and restoration monitoring, San Bernardino County, CA), San Gabriel Tower (Biological and pre-construction surveys, and permitting support in Los Angeles County, CA), repairs on the California Aqueduct (Pre-construction surveys and monitoring in Riverside County, CA), and Virginia Colony (Biological Assessment and Constraints Analysis in Ventura County, CA).

# 5. Project Staffing and Availability

## 5.1 Key Personnel

Staff included on the organization chart (Exhibit 5-1) are those personnel we intend to use, and we understand that any changes will need to be approved by the District prior to those changes becoming effective. Table 5-1 lists proposed key personnel, their location, responsibility on the project, and availability to work on the project. Resumes for each of the Team members identified below and in the organization chart (Exhibit 5-1) are provided in Appendix B (Resumes).

Proposed Project Manager **Chris Huntley** is serving as the deputy project manager and project biologist for the sediment removal activities associated with the Littlerock Dam and Reservoir. Mr. Huntley developed project alternatives for sediment disposal while avoiding impacts to federally endangered arroyo toads, managed the sensitive species surveys, and was the primary author of the biological resource section of the EIR/EIS, Management Indicator Species Report, Biological Evaluation and Biological Assessment. Currently, Mr. Huntley is acquiring regulatory permits for compliance with Section 404/401 of the CWA and Section 1602 and 1605 of the California Fish and Game Code. He is also directing a team of biologists during the construction of the facility.

Mr. Huntley has worked on several projects similar in scope to the proposed project. In addition to the District, Mr. Huntley is currently providing services to the following agencies:

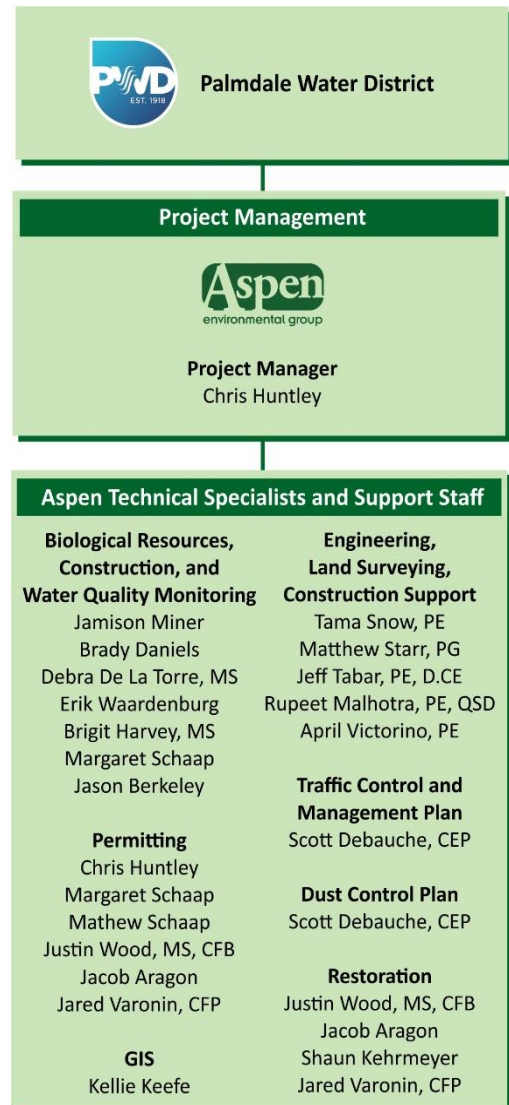
- **Los Angeles County Public Works.** Provided a variety of services including field surveys and the verification of existing studies for the Cogswell Reservoir Restoration Project. The project would remove 2.5 million cubic yards of sediment from the reservoir.
- **Ventura County Watershed Protection District.** Lead biologist for a Subsequent EIR analyzing the impacts and benefits from the removal of the Matilija Dam located in Ventura County, CA. Also served as Lead Biologist preparing the biological resources section of the EIR for the Santa Clara River Levee improvement project along the Santa Clara River, and managed the team of monitors during construction of the levees.
- **Metropolitan Water District of Southern California.** Lead Biologist providing CEQA and permitting services for improvements to the San Gabriel Tower, which regulates, and isolates flows from Morris Dam (and the Morris Reservoir) into the Monrovia Tunnel system. He is also supporting several repair and maintenance projects located along the Colorado River Aqueduct.
- **Los Angeles Department of Water and Power/U.S. Forest Service.** Managing and leading a team of biologists, paleontologists, and other technical staff to conduct pre-construction surveys, clearance surveys, nest monitoring, and reporting in support of a 75-mile 230-kV transmission line project that crosses the ANF.

Mr. Huntley will be supported by a team of biologists at Aspen. The proposed team of biologists listed in Exhibit 5-1 (Organization Chart) and Table 5-1 (Key Personnel) have worked together for several years at Aspen on projects similar in scope to the proposed project for multiple clients, including the District. This team of biologists are currently working together on multiple projects (see Table 3-1, Project Experience, and Appendix B – Resumes) for the LACPW, LADWP, MWD, and Ventura County Public Works Agency.

Table 5-1 (Key Personnel) also presents the availability of each staff member to work on this project. Aspen has repeatedly been able to successfully handle the complex scheduling and management issues required for large individual projects. Aspen has kept dozens of simultaneous task orders and projects on schedule using electronic scheduling and tracking systems and by utilizing the Team resources. Because project workloads will vary, we have provided a depth of resources to allow for flexibility in Team assignments. We also recognize that there will be times when we will need to work up to 100% time for short durations on the project to meet deadlines. Table 5-1 (Key Personnel) provides availability of staff across the Aspen Team, including our subcontractor (Stantec). As previously mentioned, Aspen does not foresee any capacity issues with the proposed team to conduct all work on this contract.

**Stantec** will be serving as subconsultant to Aspen and will be providing services related to engineering, land surveying, construction support, restoration, and permitting. Stantec has supported Aspen on the Littlerock Sediment Removal Project for the past few years and is familiar with the project.

**Exhibit 5-1. Organization Chart**



**Communicating effectively with District Staff.** Aspen will work closely with District staff to develop an agreed upon approach to internal communication on a project level. Upon contract award, the Aspen Project Manager (Chris Huntley) will work with the District project manager to set up a format for receiving and responding to Work Order Requests. We will also identify and document for all team members the protocol for communicating with the District staff and within the Aspen Team. All Team Members will be briefed on the project management approach and requirements of the contract. Mr. Huntley will maintain periodic communication with the District project manager to gain information on the upcoming tasks for the project and to keep pulse with the status and performance of Aspen's work on the project. Any problems or issues will be dealt with immediately and fixes put in place as needed to make sure work is completed to the District's satisfaction and within the desired timeframe.

Mr. Huntley will not coordinate with other agencies or other District department representatives unless approved by the District Project Manager. No information will be provided to the public or other agencies or District departments unless authorized by the District Project Manager. A project kick-off meeting will be scheduled to allow for the District and Aspen to set the protocol for internal project communication and allow for exchange of information regarding the project.

**Table 5-1. Key Personnel**

Name	Location	Project Role	Availability
<b>Aspen Environmental Group</b>			
Chris Huntley	Agoura Hills	Project Manager, Permitting	50%
Justin Wood, CFB	Upland	Restoration, Permitting	55%
Jamison Miner	Agoura Hills	Biological Resources, Construction, Water Quality Monitoring	60%
Brady Daniels	Agoura Hills	Biological Resources, Construction, Water Quality Monitoring	55%
Debra De La Torre	Agoura Hills	Biological Resources, Construction, Water Quality Monitoring	70%
Erik Waardenburg	Agoura Hills	Biological Resources, Construction, Water Quality Monitoring	70%
Brigit Harvey	Agoura Hills	Biological Resources, Construction, Water Quality Monitoring	65%
Margaret Schaap	Agoura Hills	Biological Resources, Construction, Water Quality Monitoring, Permitting	65%
Matthew Schaap	Agoura Hills	Permitting	75%
Jason Berkeley	Agoura Hills	Biological Resources, Construction, Water Quality Monitoring	60%
Jacob Aragon	Upland	Restoration, Permitting	70%
Shaun Kehrmeyer	Upland	Restoration	60%
Kellie Keefe	Agoura Hills	GIS	65%
<b>Stantec</b>			
Tama Snow, PE	San Diego	Engineering, Land Surveying, Construction Support	30%
Matthew Starr, PG	Tampa, FL	Engineering, Land Surveying, Construction Support	75%
Jeff Tabar, PE, D.CE	Laurel, MD	Engineering, Land Surveying, Construction Support	65%
Rupeet Malhotra, PE, QSD	San Jose	Engineering, Land Surveying, Construction Support	50%
April Victorino, PE	Chandler, AZ	Engineering, Land Surveying, Construction Support	45%
Jared Varonin, CFP	Thousand Oaks	Restoration, Permitting	35%

## 6. Work Plan

Below is a description of the scope of work proposed by the Aspen team for completion of the pre-construction and construction activities associated with sediment removal for the Project.

### 6.1 Approach

#### Task 1: Project Management

The purpose of this task is to manage the Aspen Project Team and maintain close communication between lead agencies (i.e., District and USFS), staff members, and the project team members during years 1-3. This task is also intended to ensure that the project is running on time and within budget, and that all work products are of the highest quality.

**Local Agency Quarry Permit Coordination.** Sediment deposition at quarries would require permits from the City of Palmdale. Based on initial discussions with the quarry operators, Aspen has included analysis in the EIS/EIR that addresses the requirements of these permits to ensure that the quarries can use the EIS/EIR to support their permit filings. Aspen will work with the District (and support quarries, as requested by the District) to ensure that the quarries obtain the local agency permits they would need for sediment deposition. Additionally, Aspen will be available to support District efforts in any negotiations with quarries or in determining other sediment disposal options, as necessary.

**Project Coordination Activities.** The Aspen Project Manager would communicate, as necessary, with the project team members, lead agency, and permitting agency staff to ensure compliance with the schedule, scope of services, and budget. The Project Manager would coordinate the team's work and provide management liaison between the project team and lead agencies for communication of issues, transmittal of comments, financial management, and other project management matters, such as contract processing. As part of this task and based on previous activities for the project, Aspen will prepare periodic status updates for distribution to the team. In addition, based on the current practice for the project, this task assumes the Aspen Project Manager's coordination of, and participation in, periodic status updates via phone and/or email. Assuming a three-year schedule for this scope of work, up to 36 status updates (approximately one each month) would be provided.

**Project Meetings.** Based on our experience with the project thus far and other similar project efforts, Aspen's Project Manager or one other senior staff member would attend up to 12 project meetings (assumes one every quarter for three years) at the District, USFS District Office, or the Reservoir site. It is assumed that one to two meetings would occur after the kick-off for construction. Other meetings may be attended on a time-and-materials basis, additional to the proposed budget and with prior authorization of the District.

#### Deliverables

- 36 Bi-Weekly Status Reports and/or Bi-Weekly Status Calls
- 12 Meetings
- 36 Monthly Invoices and Progress Reports

#### Task 2: Assistance with Permits

This task identifies specific permit and regulatory conditions that need to be completed prior to the anticipated start date of September 15. This includes conducting pre-construction surveys for sensitive species within the appropriate distance of the work area required by the permits; survey and monitor for weed infestations; inspect vehicles and equipment for invasive species or weeds; submit any remaining annual reporting; coordinate with the ANF regarding exclusion fencing, and monitor the restoration areas.

#### Deliverables

- Pre-construction survey memo
- Annual Reports for submittal to CDFW and LRWQCB

#### Task 3: Special Use Authorization

The Special Use Authorization (SUA) amendment will be issued by the USFS after the completion of all environmental clearance documents, acquisition of permits, issuance of District and USFS decisions. Aspen will continue to support the District by providing any additional information required by the USFS to finalize the SUA for the remainder of project activities.

The District's Standard Project Commitments (SPCs) for this project require the preparation of plans that must be reviewed by the District and USFS. These include environmental best management practices, restoration guidance,



and biological resource actions that would be employed during construction and sediment removal activities. Aspen will prepare the required plans associated with sediment removal activities identified in the SPCs presented in the adopted Mitigation Monitoring and Reporting Program (MMRP) and USFS Record of Decision (ROD), and coordinate with agency staff to ensure each environmental document is completed in a format acceptable to the District, USFS, and the regulatory agencies. Many of the required plans were prepared prior to initiation of grade control structure construction and will continue to be applicable during sediment removal activities. These plans will be updated (if necessary) and include:

- Worker Environmental Training Plan
- Sensitive Species Relocation Plan
- Exotic Species Removal Plan
- Cultural Resources Monitoring Program (CRMP)
- Dust Control Plan (DCP)
- Spill Response Plan (SRP)

For the sediment removal phase of the project, the following additional plans will also need to be prepared:

- **Traffic Control and Management Plan (TCMP).** Aspen will prepare a TCMP utilizing the fundamental principles outlined in the California Joint Utility Traffic Control Manual, the California Manual of Uniform Traffic Control Devices (CA MUTCD), and other applicable manuals and guidelines. The TCMP is intended to be flexible and a "living document" that may be revised to address unanticipated/differing conditions and potential improvements. Because the project does not require encroachment into public roadways, no permits are necessary. The TCMP is intended to present the actions to be implemented to minimize impacts to the traveling public by haul truck trips during sediment removal of the project, including provisions for construction site safety and temporary traffic controls. The roles and responsibilities of key project stakeholders related to the TCMP prior to and during construction will be described in the TCMP. The preparation of the TCMP also assumes potential coordination with local and State transportation agencies to ensure that their requirements have been addressed adequately.
- **Roadway Restoration Plan (RRP).** The RRP will outline procedures for conducting Pavement Condition Index (PCI) and as-needed repair strategies for roadway damage on Reservoir access roads and paved parking areas for review and approval by the Forest Service. The RRP will also include terms and conditions addressing potential damage along public roads, for the approval by the City of Palmdale, Los Angeles County, and/or Caltrans, as appropriate for public roadways comprising the sediment disposal truck travel routes. Aspen will provide technical support for all negotiations and correspondence with all jurisdictions regarding any fair-share funding agreements for roadway damage repairs.

#### Deliverables

- Traffic Control and Management Plan
- Roadway Restoration Plan

### Task 4: Sediment Removal Update 100 Percent Master Excavation and Phasing Plans

Based on comments from the District, the Aspen Team will prepare 100 percent (final) master excavation plans based off of the previously prepared 90-percent plans to include data from the survey completed following the emergency sediment removal (dated March 2021) to indicate the proposed finished grades in the Reservoir.

#### Deliverables

- 100 percent Master Plans and Specifications for final Reservoir contours to bring the Reservoir to 3,500-acre-foot capacity in a phase approach. Utilizing the 90 percent plans previously prepared and dated March 2020, Stantec shall prepare the updated 100 percent Master Plans for the reservoir to obtain a 3,500-acre-foot capacity. The District shall provide all AutoCAD files to Stantec. This task does not include conducting an aerial survey and preparation of an additional topographical map.

### Task 5: Design Services – Phase 2–1 Excavation Bid Documents (Phase 2, Year 1)

Based on the final master excavation and phasing and logistics plans developed, the Aspen team will prepare 90 percent excavation plans, specifications, cost estimate and Stormwater Pollution Prevention Plan (SWPPP) for a first phase of excavation. The Phase 1 plans will indicate proposed grades for a first year of sediment removal in a designated Phase 1 excavation area. The excavation work is expected to be completed on a unit price basis with the excavation quantities determined by pre-construction surveys. Based on comments from the District, the Aspen team will prepare final (100 percent) Phase 1 excavation plans, specifications, cost estimate and SWPPP. Stantec shall prepare a new SWPPP for Phase 2, Year 1 sediment removal activities. Stantec will make a site visit to take pre-construction



photos to support SWPPP preparation. This task includes updating the site plan to support SWPPP documents as well as preparing the Notice of Intent (NOI) form electronically in the SMARTS database. The District to provide Stantec the additional information necessary to complete the NOI. Inspection services are to be provided by others.

It is assumed that the excavation phasing and logistics plan will recommend topographic mapping to be conducted each year after draining the Reservoir and before the start of excavation for use as a basis for the year's work and payment. An update to the currently available topography will be performed by aerial survey when the Reservoir is drained for construction of the Phase 2–1 excavation plan.

In each year of construction, we assume that the topography will be updated following construction, and that this will be used as the basis for quantities and payment in the construction contract and would also be used in the design of the subsequent phase of sediment removal. Task 13 includes the cost of the post-construction survey for Phase 1 but does not include the surveys for subsequent years.

The excavation phasing and logistics plan assumes that the removed sediment would be transported to quarries in Palmdale as analyzed in the EIS/EIR. If a change in the sediment disposal location were to result in changes to the method or conditions that are needed for transportation and disposal of the material, a commensurate scope and budget modification may be needed to include changed location/conditions into the plan. The costs for this task assume that Phase 1 excavation is performed in the dry with the Reservoir drawn down. If dredging or excavation in the wet is needed in the Phase 1 area, the design costs would need to be adjusted.

### Deliverables

- Stantec shall set targets and coordinate the aerial survey for Littlerock Reservoir prior to and following excavation. Deliverables from aerial survey shall include a drawing file in AutoCAD, Civil3D, plan and contours at a scale of 1"= 40' with 1' contours.
- 90 percent Phase 2–1 excavation plans, specifications, cost estimate and SWPPP.
- 100 percent Phase 2–1 excavation plans, specifications, cost estimate and SWPPP.

## Task 6: Design Services – Phase 2–2 Excavation Bid Documents (Phase 2, Year 2)

Based on the final master excavation and phasing and logistics plans developed, the Aspen team will prepare 90 percent excavation plans, specifications, cost estimate and SWPPP for a first phase of excavation. The Phase 1 plans will indicate proposed grades for a first year of sediment removal in a designated Phase 1 excavation area. The excavation work is expected to be completed on a unit price basis with the excavation quantities determined by pre-construction surveys. Based on comments from the District, Aspen team will prepare final (100 percent) Phase 1 excavation plans, specifications, cost estimate and SWPPP. Stantec shall prepare a new SWPPP for Phase 2, Year 2 sediment removal activities. Stantec will make a site visit to take pre-construction photos to support SWPPP preparation. This task includes updating the site plan to support SWPPP documents as well as preparing the Notice of Intent (NOI) form electronically in the SMARTS database. Inspection services are to be provided by others.

In each year of construction, we assume that the topography will be updated following construction, and that this will be used as the basis for quantities and payment in the construction contract and would also be used in the design of the subsequent phase of sediment removal. This task includes the cost of the post-construction survey for Phase 2–2 but does not include the surveys for subsequent years.

The excavation phasing and logistics plan assumes that the removed sediment would be transported to quarries in Palmdale as analyzed in the EIS/EIR. If a change in the sediment disposal location were to result in changes to the method or conditions that are needed for transportation and disposal of the material, a commensurate scope and budget modification may be needed to include changed location/conditions into the plan. The costs for this task assume that Phase 2–2 excavation is performed in the dry with the Reservoir drawn down. If dredging or excavation in the wet is needed in the Phase 2–2 area, the design costs would need to be adjusted.

### Deliverables

- Stantec shall set targets and coordinate the aerial survey for Littlerock Reservoir prior to and following excavation. Deliverables from aerial survey shall include a drawing file in AutoCAD, Civil3D, plan and contours at a scale of 1"= 40' with 1' contours.
- 90 percent Phase 2–2 excavation plans, specifications, cost estimate and SWPPP.
- 100 percent Phase 2–2 excavation plans, specifications, cost estimate and SWPPP.

## Task 7: Design Services – Phase 2–3 Excavation Bid Documents (Phase 2, Year 3)

Based on the final master excavation and phasing and logistics plans developed, the Aspen team will prepare 90 percent excavation plans, specifications, cost estimate and SWPPP for a first phase of excavation. The Phase 1 plans will indicate proposed grades for a first year of sediment removal in a designated Phase 2–3 excavation area. The excavation work is expected to be completed on a unit price basis with the excavation quantities determined by pre-construction surveys. Based on comments from the District, the Aspen team will prepare final (100 percent) Phase 2–3 excavation plans, specifications, cost estimate and SWPPP. Stantec shall prepare a new SWPPP for Phase 2, Year 3 sediment removal activities. Stantec will make a site visit to take pre-construction photos to support SWPPP preparation. This task includes updating the site plan to support SWPPP documents as well as preparing the Notice of Intent (NOI) form electronically in the SMARTS database. Inspection services are to be provided by others.

In each year of construction, we assume that the topography will be updated following construction, and that this will be used as the basis for quantities and payment in the construction contract and would also be used in the design of the subsequent phase of sediment removal. This task includes the cost of the post-construction survey for Phase 2–3 but does not include the surveys for subsequent years.

The excavation phasing and logistics plan assumes that the removed sediment would be transported to quarries in Palmdale as analyzed in the EIS/EIR. If a change in the sediment disposal location were to result in changes to the method or conditions that are needed for transportation and disposal of the material, a commensurate scope and budget modification may be needed to include changed location/conditions into the plan. The costs for this task assume that Phase 2–3 excavation is performed in the dry with the Reservoir drawn down. If dredging or excavation in the wet is needed in the Phase 2–3 area, the design costs would need to be adjusted.

### Deliverables

- Stantec shall set targets and coordinate the aerial survey for Littlerock Reservoir prior to and following excavation. Deliverables from aerial survey shall include a drawing file in AutoCAD, Civil3D, plan and contours at a scale of 1"= 40' with 1' contours.
- 90 percent Phase 2–3 excavation plans, specifications, cost estimate and SWPPP.
- 100 percent Phase 2–3 excavation plans, specifications, cost estimate and SWPPP.

## Task 8: Environmental Construction Services Phase 2, Years 1–3

In support of the ongoing construction and continued post-construction support following the completion of the grade control structure, Aspen will support the District in conducting the required biological surveys and associated reports identified in the SPCs during years 1–3. It is understood, that the USFS has requested assistance with monitoring in the Final EIS/EIR and ROD. Surveys that may be required if sediment removal activities are expected to occur prior to September 1 include pre-construction surveys for least Bell's vireo and nesting birds, protocol level arroyo toad surveys in areas downstream of designated critical habitat, and general pre-construction clearance surveys to sediment removal activities. If work is expected during the nesting bird season (January-September), the biological monitor present on site will conduct 4-hour pre-construction sweeps in the areas that have been left idle for more than three or four days for nesting birds.

All surveys will be conducted in compliance with the permits and environmental documents. Locations of sensitive wildlife or plants identified will be flagged in the field, and recorded utilizing a Trimble GPS (of equivalent) and utilizing approved forms.

**Worker Training.** Aspen will conduct worker training for all project personnel as identified in the approved Worker Environmental Training Plan. The information will be provided through a Power Point presentation addressing the sensitivity of all biological, cultural, and other resources in the project area. The presentation will be fully explanatory and presented in laymen's terms, so it can be included with any other worker training presented by the District. Worker training will also include contractor requirements under the Dust Control Plan, Fire Management Plan, SWPPP, and Spill Response Plan. Each worker will be provided a hard hat sticker and small pamphlet that describes the key contact information and sensitive resources that may occur. Each worker will be asked to sign a sheet acknowledging that the training was understood prior to the commencement of work.

### General Assumptions

- Aspen assumes surveys will be conducted for species identified in the permits including least Bell's vireo, south-west willow flycatcher, arroyo toads, sensitive herpetofauna, ringtail, American badger, burrowing owl, nesting birds, bats, and sensitive plants, per Task 2.

- Aspen assumes one biologist (with support by technical specialists) will conduct three annual trainings at the job site or at the District office located in Palmdale. The biologist will also provide daily tailgate briefings to the crews prior to the start of work.
- Aspen assumes a biological monitor for up to 90, 10-hour monitoring days per year.

#### Deliverables

- Monthly Compliance Reporting
- Copy of training material and worker handouts.
- Biological Survey Report documenting current site conditions and the results of the field surveys.

### Task 9. Construction and Post-Construction Support Services Phase 2, Years 1–3

The Aspen team is prepared to provide inspections during sediment removal operations during years 1–3. It is expected to include the following:

- Provide project oversight for construction.
- Attend construction progress meetings.
- Inspect site conditions during construction for compliance with all permit requirements.
- Provide general assistance as needed to ensure work is completed in compliance with permit requirements.
- Prepare daily construction inspection reports following each site visit that include number of truck trips, and documenting any conversations held with the contractor, permit agency, or corrections in work.
- Review contractor pay requests, assist with contract change orders, and compile final construction documents.
- Review and approve shop drawings (up to 10 submittals).
- Review and approve RFIs (up to 15 submittals).

#### Deliverables

- Attendance to a pre-construction conference
- Daily construction inspection reports
- Review pay requests, and change orders
- Shop Drawing Responses (10)
- RFI responses (15)

### Task 10: Project Management (Phase 2, Years 4 and 5)

The purpose of this task is to manage the Aspen Project Team and maintain close communication between lead agencies (i.e., District and USFS), staff members, and the project team members during years 4 and 5. This task is also intended to ensure that the project is running on time and within budget, and that all work products are of the highest quality.

**Local Agency Quarry Permit Coordination.** Sediment deposition at quarries would require permits from the City of Palmdale. Based on initial discussions with the quarry operators, Aspen has included analysis in the EIS/EIR that addresses the requirements of these permits to ensure that the quarries can use the EIS/EIR to support their permit filings. Aspen will work with the District (and support quarries, as requested by the District) to ensure that the quarries obtain the local agency permits they would need for sediment deposition. Additionally, Aspen will be available to support District efforts in any negotiations with quarries or in determining other sediment disposal options, as necessary.

**Project Coordination Activities.** The Aspen Project Manager would communicate, as necessary, with the project team members, lead agency, and permitting agency staff to ensure compliance with the schedule, scope of services, and budget. The Project Manager would coordinate the team's work and provide management liaison between the project team and lead agencies for communication of issues, transmittal of comments, financial management, and other project management matters, such as contract processing. As part of this task and based on previous activities for the project, Aspen will prepare periodic status updates for distribution to the team. In addition, based on the current practice for the project, this task assumes the Aspen Project Manager's coordination of, and participation in, periodic status updates via phone and/or email. Assuming a three-year schedule for this scope of work, up to 36 status updates (approximately one each month) would be provided.

**Project Meetings.** Based on our experience with the project thus far and other similar project efforts, Aspen's Project Manager or one other senior staff member would attend up to 12 project meetings (assumes one every quarter for three years) at the District, USFS District Office, or the Reservoir site. It is assumed that one to two meetings would occur after the kick-off for construction. Other meetings may be attended on a time-and-materials basis, additional to the proposed budget and with prior authorization of the District.

### Deliverables

- 24 Biweekly Status Reports and/or Bi-Weekly Status Calls
- 2 Meetings
- 24 Monthly Invoices and Progress Reports

### Task 11: Design Services – Phase 2–4 Excavation Bid Documents (Phase 2, Year 4)

Based on the final master excavation and phasing and logistics plans developed, the Aspen team will prepare 90 percent excavation plans, specifications, cost estimate and SWPPP for a first phase of excavation. The Phase 2–4 plans will indicate proposed grades for a first year of sediment removal in a designated Phase 2–4 excavation area. The excavation work is expected to be completed on a unit price basis with the excavation quantities determined by pre-construction surveys. Based on comments from the District, the Aspen team will prepare final (100 percent) Phase 2–4 excavation plans, specifications, cost estimate and SWPPP. Stantec shall prepare a new SWPPP for Phase 2, Year 4 sediment removal activities. Stantec will make a site visit to take pre-construction photos to support SWPPP preparation. This task includes updating the site plan to support SWPPP documents as well as preparing the Notice of Intent (NOI) form electronically in the SMARTS database. Inspection services are to be provided by others.

In each year of construction, we assume that the topography will be updated following construction, and that this will be used as the basis for quantities and payment in the construction contract and would also be used in the design of the subsequent phase of sediment removal. This task includes the cost of the post-construction survey for Phase 2–4 but does not include the surveys for subsequent years.

The excavation phasing and logistics plan assumes that the removed sediment would be transported to quarries in Palmdale as analyzed in the EIS/EIR. If a change in the sediment disposal location were to result in changes to the method or conditions that are needed for transportation and disposal of the material, a commensurate scope and budget modification may be needed to include changed location/conditions into the plan. The costs for this task assume that Phase 2–4 excavation is performed in the dry with the Reservoir drawn down. If dredging or excavation in the wet is needed in the Phase 2–4 area, the design costs would need to be adjusted.

### Deliverables

- Stantec shall set targets and coordinate the aerial survey for Littlerock Reservoir prior to and following excavation. Deliverables from aerial survey shall include a drawing file in AutoCAD, Civil3D, plan and contours at a scale of 1"= 40' with 1' contours.
- 90 percent Phase 2–4 excavation plans, specifications, cost estimate and SWPPP.
- 100 percent Phase 2–4 excavation plans, specifications, cost estimate and SWPPP.

### Task 12: Design Services – Phase 2–5 Excavation Bid Documents (Phase 2, Year 5)

Based on the final master excavation and phasing and logistics plans developed, the Aspen team will prepare 90 percent excavation plans, specifications, cost estimate and SWPPP for a first phase of excavation. The Phase 2–5 plans will indicate proposed grades for a first year of sediment removal in a designated Phase 2–5 excavation area. The excavation work is expected to be completed on a unit price basis with the excavation quantities determined by pre-construction surveys. Based on comments from the District, the Aspen team will prepare final (100 percent) Phase 2–5 excavation plans, specifications, cost estimate and SWPPP. Stantec shall prepare a new SWPPP for Phase 2, Year 4 sediment removal activities. Stantec will make a site visit to take pre-construction photos to support SWPPP preparation. This task includes updating the site plan to support SWPPP documents as well as preparing the Notice of Intent (NOI) form electronically in the SMARTS database. Inspection services are to be provided by others.

In each year of construction, we assume that the topography will be updated following construction, and that this will be used as the basis for quantities and payment in the construction contract and would also be used in the design of the subsequent phase of sediment removal. This task includes the cost of the post-construction survey for Phase 2–5 but does not include the surveys for subsequent years.

The excavation phasing and logistics plan assumes that the removed sediment would be transported to quarries in Palmdale as analyzed in the EIS/EIR. If a change in the sediment disposal location were to result in changes to the method or conditions that are needed for transportation and disposal of the material, a commensurate scope and budget modification may be needed to include changed location/conditions into the plan. The costs for this task assume that Phase 2–5 excavation is performed in the dry with the Reservoir drawn down. If dredging or excavation in the wet is needed in the Phase 2–5 area, the design costs would need to be adjusted.

### Deliverables

- Stantec shall set targets and coordinate the aerial survey for Littlerock Reservoir prior to and following excavation. Deliverables from aerial survey shall include a drawing file in AutoCAD, Civil3D, plan and contours at a scale of 1"= 40' with 1' contours.
- 90 percent Phase 2–5 excavation plans, specifications, cost estimate and SWPPP.
- 100 percent Phase 2–5 excavation plans, specifications, cost estimate and SWPPP.

### Task 13: Environmental Construction Services (Phase 2, Years 4 and 5)

In support of the ongoing construction and continued post-construction support following the completion of the grade control structure, Aspen will support the District in conducting the required biological surveys and associated reports identified in the SPCs during years 4 and 5. It is understood, that the USFS has requested assistance with monitoring in the Final EIS/EIR and ROD. Surveys that may be required if sediment removal activities are expected to occur prior to September 1 include pre-construction surveys for least Bell's vireo and nesting birds, protocol level arroyo toad surveys in areas downstream of designated critical habitat, and general pre-construction clearance surveys to sediment removal activities. If work is expected during the nesting bird season (January-September), the biological monitor present on site will conduct 4-hour pre-construction sweeps in the areas that have been left idle for more than three or four days for nesting birds.

All surveys will be conducted in compliance with the permits and environmental documents. Locations of sensitive wildlife or plants identified will be flagged in the field, and recorded utilizing a Trimble GPS (of equivalent) and utilizing approved forms.

**Worker Training.** Aspen will conduct worker training for all project personnel as identified in the approved Worker Environmental Training Plan prepared under Task 1. The information will be provided through a Power Point presentation addressing the sensitivity of all biological, cultural, and other resources in the project area. The presentation will be fully explanatory and presented in laymen's terms, so it can be included with any other worker training presented by the District. Worker training will also include contractor requirements under the Dust Control Plan, Fire Management Plan, SWPPP, and Spill Response Plan. Each worker will be provided a hard hat sticker and small pamphlet that describes the key contact information and sensitive resources that may occur. Each worker will be asked to sign a sheet acknowledging that the training was understood prior to the commencement of work.

### General Assumptions

- Aspen assumes surveys will be conducted for species identified in the permits including least Bell's vireo, southwest willow flycatcher, arroyo toads, sensitive herpetofauna, ringtail, American badger, burrowing owl, nesting birds, bats, and sensitive plants.
- Aspen assumes one biologist (with support by technical specialists) will conduct three annual trainings at the job site or at the District office located in Palmdale. The biologist will also provide daily tailgate briefings to the crews prior to the start of work.
- Aspen assumes a biological monitor for up to 90, 10-hour monitoring days per year.

### Deliverables

- Monthly Compliance Reporting
- Copy of training material and worker handouts.
- Biological Survey Report documenting current site conditions and the results of the field surveys.

### Task 14: Construction and Post-Construction Support Services (Phase 2, Years 4 and 5)

The Aspen team is prepared to provide inspections during sediment removal operations during years 4 and 5. It is expected to include the following:

- Provide project oversight for construction.
- Attend construction progress meetings.
- Inspect site conditions during construction for compliance with all permit requirements.
- Provide general assistance as needed to ensure work is completed in compliance with permit requirements.
- Prepare daily construction inspection reports following each site visit that include number of truck trips, and documenting any conversations held with the contractor, permit agency, or corrections in work.
- Review contractor pay requests, assist with contract change orders, and compile final construction documents.
- Review and approve shop drawings (up to 10 submittals).
- Review and approve RFIs (up to 15 submittals).

## Deliverables

- Attendance to a pre-construction conference
- Daily construction inspection reports
- Review pay requests, and change orders
- Shop Drawing Responses (10)
- RFI responses (15)

## 6.2 Project Schedule

**Table 6-1. Project Schedule**

Deliverable/Event	Timeframe
Status Reports or Status Calls	Bi-weekly
Pre-Construction Surveys	August 15-September 15
Pre-Construction Memo	1 week following completion of surveys
Annual report to CDFW	Draft to CDFW in December
Annual report to LRWQCB	Draft to LRWQCB by July 15
Aerial imagery	September 2021
Traffic Control and Management Plan	September 2021
Roadway Restoration Plan	September 2021
100% Master Excavation and Phasing Plans	September 2021
90% excavation plans and draft SWPPP	Yearly by September
100% excavation plans and final SWPPP	Yearly by September
Daily biological Monitoring and reports	September 15-January 15
Monthly Compliance Reporting	September-January
Review shop drawings	As needed
Review RFIs	As needed

## 7. Unique Qualities or Qualifications

As mentioned previously, Aspen has been working with the District on the Littlerock Sediment Removal Project since 2004 and is intimately familiar with the project. No other firm has the direct knowledge or experience that Aspen has with this project. Proposed Project Manager, Chris Huntley has been working on this project for the past 17 years and understands the work required to successfully complete this contract.

Aspen has provided support to the District on the Project during the planning phase by conducting the initial surveys in support of the EIR/EIS. Following these initial surveys, the Aspen team continued to work with the District in preparing the EIR/EIS, coordinating with the ANF and agencies including CDFW, LRWQCB, and USACE. As the Project progressed, Aspen pre-construction surveys in compliance with the permits and regulatory documents, biological monitoring during the construction of the grade control structure and emergency sediment removal. Several members of the Aspen team have been a part of the Project from the beginning, or for numerous years, and are familiar with the ongoing needs and efforts at the Reservoir, and can speak knowledgeably with regulators in support of continued permitting, monitoring, and survey efforts.



## 8. References

Table 8-1 below presents references for Aspen. Tables 8-2 presents references for proposed Project Manager Chris Huntley.

**Table 8-1. References for Aspen Environmental Group**

<b>Name &amp; Title</b>	<b>Dennis D. LaMoreaux, General Manager, Palmdale Water District</b>
Email & Phone	<a href="mailto:dlamoreaux@palmdalewater.org">dlamoreaux@palmdalewater.org</a> , (661) 456-1017
Project Name	Littlerock Reservoir Sediment Removal Project
Value	Engineering Services – NA / Construction costs – NA
<b>Name &amp; Title</b>	<b>Nadia Parker, Environmental Planning and Assessment, Los Angeles Department of Water and Power</b>
Email & Phone	<a href="mailto:Nadia.parker@ladwp.com">Nadia.parker@ladwp.com</a> , (213) 367-1745
Project Name	On-Call Environmental and Air Quality Services
Value	Engineering Services – NA / Construction costs – NA
<b>Name &amp; Title</b>	<b>Malinda Stalvey, Senior Environmental Specialist, Metropolitan Water District</b>
Email & Phone	<a href="mailto:MStalvey@mwdh2o.com">MStalvey@mwdh2o.com</a> , (213) 217-5545
Project Name	Desert Tortoise Monitoring at Lake Havasu, Environmental Monitoring for Emergency Repairs
Value	Engineering Services – NA / Construction costs – NA
<b>Name &amp; Title</b>	<b>Chris Jones, Project Manager II, San Bernardino Valley Municipal Water District</b>
Email & Phone	<a href="mailto:chrisj@sbvmwd.com">chrisj@sbvmwd.com</a> , (909) 387-9255
Project Name	On-Call Environmental Services
Value	Engineering Services – NA / Construction costs – NA
<b>Name &amp; Title</b>	<b>Pam Lindsey, Watershed Ecologist, Ventura County Public Works Agency</b>
Email & Phone	<a href="mailto:pam.lindsey@ventura.org">pam.lindsey@ventura.org</a> , (805) 654-2036
Project Name	Santa Clara River Levee Improvement Project, Ventura River Levee Rehabilitation Project
Value	Engineering Services – NA / Construction costs – NA
<b>Name &amp; Title</b>	<b>Nancy Sansonetti, Senior Planner, San Bernardino County Depart. of Public Works</b>
Email & Phone	<a href="mailto:Nancy.sansonetti@dpw.sbcounty.gov">Nancy.sansonetti@dpw.sbcounty.gov</a> , (909) 387-1866
Project Name	Rimforest Storm Drain Project, West Fontana Channel Flood Control Improvement Project
Value	Engineering Services – NA / Construction costs – NA
<b>Name &amp; Title</b>	<b>Kaitlin Hannon, Associate Civil Engineer, Los Angeles County Public Works</b>
Email & Phone	<a href="mailto:KHannon@dpw.lacounty.gov">KHannon@dpw.lacounty.gov</a> , (626) 458-6130
Project Name	Cogswell Reservoir Restoration Project
Value	Engineering Services – NA / Construction costs – NA

**Table 8-2. References for Chris Huntley**

<b>Name &amp; Title</b>	<b>Dennis D. LaMoreaux, General Manager, Palmdale Water District</b>
Email & Phone	<a href="mailto:DLamoreaux@palmdalewater.org">DLamoreaux@palmdalewater.org</a> , (661) 456-1017
Project Name	Littlerock Reservoir Sediment Removal Project
Value	Engineering Services – NA / Construction costs – NA
<b>Name &amp; Title</b>	<b>Nadia Parker, Environmental Planning and Assessment, Los Angeles Department of Water and Power</b>
Email & Phone	<a href="mailto:Nadia.parker@ladwp.com">Nadia.parker@ladwp.com</a> , (213) 367-1745
Project Name	On-Call Environmental and Air Quality Services
Value	Engineering Services – NA / Construction costs – NA
<b>Name &amp; Title</b>	<b>Ed Cuevas, Environmental Planning and Assessment, Los Angeles Department of Water and Power</b>
Email & Phone	<a href="mailto:Eduardo.cuevas@ladwp.com">Eduardo.cuevas@ladwp.com</a> , (213) 367-3553
Project Name	On-Call Environmental and Air Quality Services
Value	Engineering Services – NA / Construction costs – NA
<b>Name &amp; Title</b>	<b>Paul Hauser, General Manager, Trinity Public Utilities District</b>
Email & Phone	<a href="mailto:PHauser@trinitypud.com">PHauser@trinitypud.com</a>
Project Name	Wildlife Risk Reduction, Reliability, and Asset Protection Project
Value	Engineering Services – NA / Construction costs – NA

## 9. Acceptance of Professional Services Agreement

Aspen has reviewed and accepts the District's professional services agreement.

# Appendix B

## Resumes of Key Personnel



# Christian S. Huntley

VICE PRESIDENT / BIOLOGICAL RESOURCES  
DIRECTOR

## EDUCATION

Graduate Studies, Biology,  
California State University  
Northridge

BA, Biology, University of California  
at Santa Cruz, 1992

## SUMMARY OF QUALIFICATIONS

Mr. Huntley is the Director of Biological Resources at Aspen and has been with the company for 23 years. He acts as the Program Manager or Deputy for several on-call contracts and has extensive experience conducting surveys for sensitive species and managing CEQA/NEPA projects in California, Nevada, and Arizona. He worked as part of an interagency team with the CDFW, USFWS, BLM, and CPUC to develop nesting bird management strategies for large construction projects and worked with the USFWS, BLM, CDFW, and CEC to address impacts to birds from landscape level solar energy projects.

## PROFESSIONAL EXPERIENCE

### **LITTLEROCK DAM AND RESERVOIR RESTORATION PROJECT EIR/EIS-BE/BA**

*Palmdale Water District/U.S.  
Forest Service  
2020-present*

Deputy project manager/project biologist for the sediment removal activities associated with the Littlerock Dam and Reservoir. Developed project alternatives for sediment disposal while avoiding impacts to federally endangered arroyo toads. Managed the sensitive species surveys and was the primary author of the biological resource section of the EIR/EIS, Management Indicator Species Report, Biological Evaluation and Biological Assessment. Currently acquiring regulatory permits for compliance with Section 404/401 of the Clean Water Act and Section 1602 and 1605 of the California Fish and Game Code. Also directing a team of biologists during the construction of the facility.

### **ON-CALL SERVICES CONTRACT**

*Metropolitan Water District of  
Southern California  
2019*

Program Manager for this contract and is responsible for the daily management of biological resource tasks and environmental permitting for this multi-year, multi-task, contract. He has supported over 16 Task orders and completed biological surveys, monitoring, and CEQA tasks for metropolitan.

### **AIR QUALITY AND ENVIRONMENTAL SERVICES AGREEMENT ON-CALL CONTRACT**

*Los Angeles Department of  
Water and Power  
Ongoing*

Mr. Huntley serves as the Deputy Program Manager for this contract and is responsible for the daily management of biological resource tasks and environmental permitting for this multi-year, multi-task, contract. He manages teams of in-house staff and sub-contractors to support LADWP projects. Project budgets range from a few thousand dollars to over nine million dollars.

**BARREN RIDGE RENEWABLE TRANSMISSION PROJECT**

*Los Angeles Department of  
Water and Power/U.S. Forest  
Service  
2015-present*

Managing and leading a team of biologists, paleontologists, and other technical staff to conduct pre-construction surveys, clearance surveys, nest monitoring, and reporting in support of this 75 mile 230-kV transmission line project that crosses the Angeles National Forest. He manages the construction monitoring team and works closely with LADWP staff to support agency coordination.

**MATILAJA DAM ECOSYSTEM RESTORATION PROJECT EIR**

*Ventura County Watershed  
Protection District  
2018-present*

Lead biological resource specialist for this Subsequent Environmental Impact Report SEIR analyzing the impacts and benefits from the removal of the Matilija Dam located in Ventura County, CA. The project would restore access to historic spawning habitat for southern steelhead and restore natural stream hydrology to the watershed.

**COGSWELL RESERVOIR RESTORATION PROJECT**

*Los Angeles County Public  
Works  
2019-present*

Provided a variety of services including field surveys and the verification of existing studies for this large-scale sediment removal project. The project would remove 2.5 million cubic yards of sediment from the reservoir. Completed numerous tasks including a jurisdictional delineation, hydrology study, vegetation mapping, habitat restoration plan, a CEQA addendum, regulatory permit support, construction monitoring, and numerous other tasks.

**TEHACHAPI RENEWABLE TRANSMISSION PROJECT**

*California Public Utilities  
Commission/U.S. Forest Service  
2007-2018*

Issue area coordinator and principal author for biological resources on this 500-kV transmission line project proposed by Southern California Edison in support of wind energy projects. Surveyed for arroyo toads and other species and was one of the primary authors for the Biological Assessment.

**THOUSAND PALMS WHITEWATER RIVER BASIN FLOOD CONTROL PROJECT SUBSEQUENT EIR/ SUBSEQUENT EIS**

*Riverside County  
2010-present*

Project Manager/biological resource specialist for this SEIR/ SEIS for a proposed flood control improvement project located in the Thousand Palms area of Riverside County. The proposed project includes a series of levees and channels to direct stormwater flows from the Indio Mountains away from developed areas and into an existing stormwater conveyance system, to protect community areas from flooding hazards.

**SANTA CLARA RIVER LEVEE (SCR-3) IMPROVEMENT PROJECT**

*Ventura County Watershed  
Protection District*

Lead Biologist preparing the biological resources section of the EIR for a levee improvement project along the Santa Clara River in Ventura. He also managed the team of monitors during construction of the levees.

**SANTA CLARA RIVER LEVEE (SCR-1) PROJECT**

*Ventura County Watershed  
Protection District*

Lead Biologist preparing the biological resources section of the EIR for a levee improvement project along the Santa Clara River in Ventura. He is also part of an interagency team working to develop educational benefits to the Rio School district for a new elementary school being constructed adjacent to the levee.



# Jacob M. Aragon

WILDLIFE BIOLOGIST

## SUMMARY OF QUALIFICATIONS

Jacob M. Aragon is an associate biologist at Aspen with over 13 years of experience with wildlife surveys, botanical surveys, technical writing, serving as a lead to mitigation monitoring, and providing third-party environmental compliance monitoring in California and the western United States. He is based out of Aspen's Inland Empire Office. His knowledge of California natural history is broad and includes aquatic life, upland wildlife species, and vascular plants. His areas of expertise include bird surveys, biological monitoring, and reptile and amphibian surveys. He also has experience with revegetation planning and implementation, non-native species removal, freshwater fish surveys, and various habitat assessments. He has extensive experience working throughout southern California and is a CRAM practitioner and wetland delineator.

## EDUCATION

BA, Organismal Biology, Pitzer College, Claremont, CA, 2021

AS, Biological, Physical Sciences and Mathematics, Citrus College, Glendora, CA, 2013

## PROFESSIONAL EXPERIENCE

### COGSWELL RESERVOIR SEDIMENT REMOVAL PROJECT

*Los Angeles County Public Works*

2019-present

Mr. Aragon is serving as a biologist for the project to remove 2.5 million cubic yards of sediment from the reservoir. He has completed numerous tasks including a hydrology study, SWAMP assessment, vegetation mapping, habitat restoration plan, a special-status species relocation plan, water quality monitoring plan, regulatory permit support, construction monitoring, and numerous other tasks. Project activities started in early 2021 and are expected to last for at least two years.

### PALM CANYON WASH SEDIMENT EXCAVATION & LEVEE RESTORATION PROJECTS

*Riverside County Flood Control and Water Conservation District*

2019-2021

Mr. Aragon is the lead biologist that completed special-status plant and wildlife surveys, nesting bird surveys, and compliance monitoring on both projects. He also assisted as a technical writer to prepare reports. Important issues include the federally listed Casey's June beetle.

### COLORADO RIVER AQUEDUCT CONDUIT STRUCTURAL PROTECTION PROJECT

*Metropolitan Water District of Southern California*

2020

Mr. Aragon served as the lead biologist conducting California Rapid Assessment Method (CRAM) wetland analyses at eight evaluation sites along the Colorado River Aqueduct in Riverside County. Mr. Aragon was the primary author of the CRAM technical reports and coordinated regularly with MWD and resource agencies.



**CALLEGUAS CREEK AT UPLAND  
MAINTENANCE**

*Ventura County Watershed  
Protection District  
2019*

Mr. Aragon conducted vegetation transects and biological surveys at the habitat restoration site located along Calleguas Creek at Upland Road in Camarillo, Ventura Co., CA. He also conducted annual vegetation monitoring and assisted with the preparation of the annual report for 2019.

**REPAIRS TO BARRELS ON  
COLORADO RIVER**

*Metropolitan Water District of  
Southern California  
2020-present*

Mr. Aragon is part of a team of biologists that completed protocol-level surveys for Mojave desert tortoise for five proposed repair locations along MWD's Colorado River Aqueduct in the western Coachella Valley. Mr. Aragon served as the lead biologist conducting CRAM analysis at several sites and assisted with surveys for special-status plants and animals and is the primary author of a Biological Resources Technical Report.

**MOJAVE RIVER WEST LEVEE  
PHASE II MITIGATION**

*San Bernardino County  
Department of Public Works  
2019-present*

Mr. Aragon is assisting with land management of the 200-acre conservation lands within the Mojave River, downstream of Victorville, CA. He is monitoring non-native plant removal during the nesting season. He is also assisting with regular vegetation transect monitoring, reporting, and photo documentation.

**LIVE OAK INLET/OUTLET  
WORKS REHABILITATION**

*Los Angeles County Department  
of Public Works  
2019-present*

Mr. Aragon conducted nesting bird surveys and is the lead biological monitor responsible for compliance monitoring on the dam rehabilitation project in Claremont, CA. He also assisted with the preparation of the nesting bird management plan, project report preparation, and is implementing a habitat restoration plan.

**SANTA ANA SUCKER  
TRANSLOCATION SITE  
EVALUATIONS**

*San Bernardino Valley Municipal  
Water District  
2019-present*

Mr. Aragon is on a team of biologists implementing a translocation plan for the federally threatened Santa Ana sucker. Mr. Aragon has assisted with site evaluations using SWAMP-protocols, reporting, and was also one of the key team members responsible for conducting Santa Ana sucker habitat assessments in several tributaries to the Upper Santa Ana River including Bear Creek, Deer Creek, and others. The translocation plan is in coordination with the U.S. Fish and Wildlife Service as part of the recovery plan for the species.

**LITTLEROCK DAM & RESERVOIR  
RESTORATION PROJECT**

*Palmdale Water District/  
U. S. Forest Service  
2019-present*

Mr. Aragon is part of a team of biologists conducting biological compliance monitoring and wildlife surveys for the sediment removal activities associated with the Littlerock Dam and Reservoir in the Angeles National Forest.

**SANTA ANA RIVER MAINSTEM  
PROJECT**

*U. S. Army Corps of Engineers  
2019-present*

Biological monitor on the Corps Santa Ana River Mainstem Project. He has completed focused surveys for least Bell's vireo, burrowing owl, nesting birds, and southwestern pond turtle. He has also mapped vegetation and assessed habitat for special-status species. He has worked on several of the project components located within the Prado Basin and downstream along the Santa Ana River.



# Brady Daniels

WILDLIFE BIOLOGIST / ENVIRONMENTAL MONITOR

## EDUCATION

BS, Fisheries and Wildlife Biology,  
Utah State University, 1998

## SUMMARY OF QUALIFICATIONS

Mr. Daniels has over 16 years of experience working as a wildlife biologist in the western U.S. supporting and managing a variety of large-scale construction and infrastructure projects. Prior to his employment with Aspen Environmental Group (Aspen), Mr. Daniels completed thousands of hours of biological surveys as a small business owner and subcontractor, often working as a subcontractor for Aspen. Mr. Daniels has a long-standing successful working relationship with Aspen, and now serves as one of Aspen's lead field specialists and biologists. Mr. Daniels' survey experience ranges from short reconnaissance-level surveys to extensive long-term efforts to provide inventory and analysis of groundwater wells, and document sensitive species populations, among others. Mr. Daniels also has extensive experience conducting biological surveys for a suite of State and federally listed species including but not limited to San Joaquin kit fox, California tiger salamander, California red-legged frog, arroyo toad, and least Bell's vireo. His strong background in fisheries biology extends to marine and coastal ecosystems supporting species such as tidewater goby, steelhead trout, arroyo chub, and stickleback.

## PROFESSIONAL EXPERIENCE

### **BARREN RIDGE RENEWABLE TRANSMISSION PROJECT**

*Los Angeles County Department  
of Public Works  
2015-present*

As Lead Environmental Monitor. Mr. Daniels is responsible for organizing and conducting biological clearance surveys, installing and monitoring plant and wildlife buffers, managing biological monitors in accordance with the Project Mitigation Monitoring and Reporting Plan (MMRP). Mr. Daniels reviews implementation of the Nesting Bird Management and Reporting Plan (NBMRP), which requires regular observation of nesting bird buffers, behaviors, and success. Monitoring of MMRP COAs also includes review of mitigation requirements across all issue areas, including air quality, water and cultural resources, noise, and transportation.

### **SANTA CLARA RIVER LEVEE PROJECT SCR-3**

*Ventura County Watershed  
Protection District  
2017-2018*

Mr. Daniels currently assisting with biological surveys for nesting birds, south western pond turtle, Southern steelhead trout, and wetland delineations.

**LINCOLN AVENUE WATER**  
*Lincoln Avenue Water District*

Mr. Daniels is providing biological and monitoring task within the Angeles Crest National Forest for a maintenance and replacement project. Biological and monitoring duties are to detect active bird nest, and avoidance of sensitive aquatic resources such as Coast range newt.

**RAPTOR SPECIALIST**  
*City of Moorpark*

Mr. Daniels was an on-call specialist primarily for great horned and barn owls. Biological services were required when Moorpark City Parks and Recreation needed to trim or remove potential nesting and roosting trees located within the city's jurisdiction. On a yearly basis up to four extensive analyses of the High Street pepper trees required onsite evaluations. Evaluations were completed using both on the ground and aerial assessments of cavities and potential nest sites.

**SALTON SEA DEBRIS REMOVAL  
PROJECT**  
*Los Angeles Department of  
Water and Power*

Mr. Daniels conducted Phase I, II, and III burrowing owl surveys at several sites scheduled for cleanup in the Imperial Valley. Mr. Daniels monitored cleanup activities and implemented mitigation strategies to comply with State and local permit requirements regarding the protection of this species.

#### ADDITIONAL TRAINING AND COURSES

- Alumni Member of Utah State Wildlife Society
- SWPPP Certified Inspector
- LSA 1600, CWA 401 and CWA 404 permitting and compliance
- 40-hour HAZWOPER certification
- Certified Caltrans Horizontal Directional Drilling Inspector
- Defensive Driving Course/Smith School of Defensive Driving 2009
- Licensed Hunting Guide
- Railroad Right-of-Way Safety Training
- Coast Guard Captains license (Western Waters six-pack)
- Small boat handling, licensed and certified
- CPR/First Aid Trained
- Approved by USFWS CTS monitor



# Scott Debauche, CEP

ENVIRONMENTAL PLANNER

## SUMMARY OF QUALIFICATIONS

Mr. Debauche is an environmental planner with over 20 years of experience preparing CEQA and NEPA documents, planning reports, and analytical technical studies for a variety of large-scale infrastructure and civil works projects. Additionally, Mr. Debauche's experience includes senior level preconstruction and construction compliance monitoring. Through his work, Mr. Debauche serves as a technical specialist for transportation/traffic, air quality, and construction-design issues. The experience described below is tailored to show his qualifications to provide the requested services to Palmdale Water District for sediment removal activities associated with the Littlerock Sediment Removal Project.

## EDUCATION & CREDENTIALS

BS, Urban Planning and Design,  
University of Minnesota, 1995

Board Certified Environmental  
Planner (CEP) #12040973, U.S.  
Council of Engineering & Scientific  
Specialty Boards/ABCEP

## PROFESSIONAL EXPERIENCE

### Mining and Material Transport Projects

#### LITTLEROCK RESERVOIR SEDIMENT REMOVAL PROJECT

*Palmdale Water District*  
2004-2019

Mr. Debauche served as a technical senior during preparation of the EIS/EIR covering construction of an upstream grade control structure and removal of over 1,000,000 cubic yards of sediment to restore the Reservoir to design capacity. Certified by the California Air Resources Board, Mr. Debauche prepared the Fugitive Dust Control Plan for the project and received approval from the AVAQMD. Mr. Debauche also prepared the Fire Plan (as approved by the Forest Service) and the Spill Response Plan, all necessary to complete construction of the grade control structure. Lastly, Mr. Debauche was the lead on preparing weekly construction monitoring reports for PWD and the Forest Service.

#### SANTA MARGARITA QUARRY EXPANSION PROJECT

*San Luis Obispo County*  
2012-2015

Mr. Debauche served as a technical senior during preparation of the EIR that analyzed expanding the existing surface mine by adding an additional 41 acres to the existing entitled 85-acre mining footprint and buffer area. As proposed, the estimated duration of mining activities would be approximately 59 years with an additional 5 years to complete the proposed reclamation plan. After completion of CEQA, Mr. Debauche prepared the Traffic Control and Management Plan (TCMP) as required by mitigation certified in the EIR.

#### EAGLE ROCK TERMINAL PROJECT

*Port of Long Beach*  
2012-2014

Under contract to the Port of Long Beach (in cooperation with the Army Corps of Engineers), Mr. Debauche served as a technical senior for this project, which included constructing and operating a new sand, gravel, and granite aggregate receiving, storage and distribution terminal for construction uses throughout the Los Angeles area.

**TERMINAL C IMPROVEMENTS  
PROJECT, SAN DIEGO COUNTY**

*Port of San Diego*  
2016- 2018

Under a programmatic EIR/EIS (in cooperation with the Army Corps of Engineers), Mr. Debauche evaluated transportation impacts related to Terminal C improvements allowing for the import and distribute up to 600,000 million tons/year of cementitious material for ongoing construction needs throughout the San Diego area.

**ERG WEST CAT CANYON  
PROJECT**

*Santa Barbara County*  
2015-2019

Mr. Debauche served as a technical senior to expand development of the existing Cat Canyon Oilfield in northern Santa Barbara County with the addition of 233 new thermally enhanced production wells, development of 11 new pad locations of expanded use of 91 existing pad locations, reactivation of four steam generations, replacement of 3.5 miles of natural gas pipeline, and construction of various inner-field piping infrastructure to service existing and proposed wells. After completion of CEQA, Mr. Debauche prepared the Traffic Control and Management Plan (TCMP) as required by mitigation certified in the EIR for both construction trips and ongoing produced oil trips.

**Angeles National Forest Experience**

**U.S. FOREST SERVICE ANGELES  
NATIONAL FOREST PROJECTS**

*Angeles National Forest*  
2001-Current

Mr. Debauche's ANF experience includes several high-profile projects over the past 20 years, providing him with detailed knowledge of the ANF's environmental resources, the ANF Land Management Plan, and environmental directives that will be applicable to completing the Littlerock Sediment Removal Project. His qualifications include the following:

- **ANF Experience:** Mr. Debauche has served as a senior technical specialist for Aspen, which has completed approximately 40 projects within the ANF. Many of these include infrastructure projects (water, power, roads, recreation resources, etc.). For example, Mr. Debauche recently assisted the ANF and its ID Team with preparation of an EIS for the Williamson Rock/Pacific Crest Trail Project. Mr. Debauche also worked with the ANF on completing NEPA for the Powerhouse Vegetation and Sawmill-Liebre Reforestation Projects. In addition, Mr. Debauche recently worked with ANF specialists and NEPA coordinators preparing a Supplemental Information Report (SIR) ensuring prior Forest Service NEPA evaluation and decisions made on the Barren Ridge Renewable Transmission Project are not affected by design changes to the new transmission line during construction.
- Mr. Debauche has developed a strong working relationship with ANF staff and IDT specialists. The successful completion of many projects where the Forest Service has served as land manager and NEPA lead agency brings Mr. Debauche a proven track-record of completing environmental reviews and necessary documentation to the satisfaction of the Forest Service.

# Debra De La Torre

ENVIRONMENTAL COMPLIANCE SPECIALIST & WILDLIFE BIOLOGIST

## EDUCATION

MS, Environmental Policy and Management, American Public University, 2013

MS, Biology, Cal Poly Pomona (pending)

BS, Biology, Cal Poly Pomona, 2002

AA, Liberal Studies

## SUMMARY OF QUALIFICATIONS

Debra is a biologist with over 15 years of experience conducting wildlife surveys and monitoring in California and surrounding states. She has experience in environmental policy and management, and mitigation issues in California, with extensive renewable energy project experience, including linear projects, transmission line, wind, and solar. She has detailed knowledge of NEPA and CEQA, including EIR, EIS, ND, MND technical report writing and review.

## PROFESSIONAL EXPERIENCE

### BIOLOGICAL MONITORING FOR WATER TREATMENT PLANT CONSTRUCTION

*Twenty-Nine Palms*  
2018-2019

Authorized Biologist for pre-construction monitoring for Construction and Operation of a New Drinking Water Treatment Plant and Ancillary Infrastructure Improvements activities including geotechnical boring and potholing.

### AST REMOVAL PROJECT

*Twenty-Nine Palms*  
2018-2019

Authorized Biologist for removal and disposal of AST's various locations throughout Marine Corps Air Ground Combat Center (MCAGCC) Twentynine Palms, California.

### WEST OF DEVERS UPGRADE PROJECT

*California Public Utilities Commission*  
2017-2019

Conducted live trapping surveys for Palm Springs pocket mouse on sixteen grids near Palm Springs and Whitewater Canyon, CA. Assisted with Stephens' kangaroo rat trapping. Conducted preconstruction surveys and monitoring for nesting birds including coastal California gnatcatcher, least Bell's vireo, general nesting birds, American badger, Los Angeles and Palm Springs pocket mouse, and general wildlife during fiber optics installation, and tower upgrade activities. Assisted with contract compliance, and field staff scheduling and management.

### IR14 LANDFILL PROJECT

*Twenty-Nine Palms*  
2018-2019

Authorized desert tortoise biologist, conducted desert tortoise WEAP, and monitoring during subsurface surveys, seismic testing, and boring. 29 Palms MCAGCC

### NORTH MAGUNDEN

*Southern California Edison*  
2016

Conduct surveys for blunt-nosed leopard lizard, San Joaquin kit fox, burrowing owl, Swainson's hawk, golden eagle, and other raptors, Bakersfield cactus, and general wildlife.

### MAGUNDEN-SPRINGVILLE

*Southern California Edison*  
2015-2017

Construction monitoring for nesting birds including Golden eagle, Swainson's hawk, kit fox, blunt nosed leopard lizard, special status plants, and other associated species.



<b>RECTOR-VESTAL</b> <i>Southern California Edison</i> 2015	General biological surveys with emphasis on special status species and nesting birds, including San Joaquin kit fox, burrowing owl, blunt-nosed leopard lizard.
<b>DOWN SUBSTATION EXPANSION</b> <i>Southern California Edison</i> 2014-2016	Conducted protocol trapping for Mohave ground squirrel, desert tortoise surveys, and monitored desert tortoise and Mohave ground squirrel habitat during construction.
<b>MSHCP PROJECT SITES</b> <i>Riverside Conservation Authority</i> 2005-2008	Lead field work and crews on MSHCP project sites. Job duties included collection of ecological field data and biological monitoring and report drafting.

## SKILLS PROFILE

- USFWS Authorized Desert Tortoise Biologist-approved for 29 Palms MCAGCC
- Permitted for Mohave ground squirrel, Stephens' kangaroo rat, various pocket mice
- Nesting bird surveys and nest monitoring, general and special status bird surveys including Swainson's hawk and other raptors, coastal California gnatcatcher, least Bell's vireo, with extensive burrowing owl experience
- Habitat assessments, surveys, and monitoring for Quino Checkerspot butterfly, Delhi Sands Flower-loving fly, arroyo toad, red-legged frog, mountain yellow-legged frog, Western pond turtle, Blunt-nosed leopard lizard, horned lizards, and others with extensive Desert tortoise experience
- Small mammal specialist with substantial squirrel, kangaroo rat, pocket mouse, and kit fox experience.
- Bat surveys - exit counts and monitoring, alternative roosting structure installation, and usage monitoring
- Regulatory Permitting: NEPA, CEQA, CESA, EIR/EIS, USFWS, CDFW, U.S. Army Corps of Engineers, U.S. Forest Service, Regional Water Quality Control Board, Caltrans: Natural Environment Studies, coordination/compliance, biological technical report writing, Coachella and Western Riverside HCPs, State and local Ordinance compliance, Section 7 consultation, Conduct CNDDDB, IPaC, MSHCP, species research, authored white-papers
- Wetland delineation
- 40 Hour HAZWOPER-OSHA 10
- Defensive driving course



# Brigit Harvey

Wildlife Biologist

## SUMMARY OF QUALIFICATIONS

Ms. Harvey has two years of experience with Aspen supporting and preparing documents in compliance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and the federal and California Endangered Species Acts including preparing EIR/EIS, IS/MND, EA, BE/BA, and BA documents in northern and southern California. Ms. Harvey has also experience conducting endangered species surveys, nesting bird surveys, general wildlife surveys, habitat assessments, biological assessments, habitat restoration monitoring, rare plant surveys, streambed restoration, wetland/jurisdictional waters delineations, and construction/compliance monitoring.

## EDUCATION

MS, Biology, University of California, Los Angeles, 2018

BS, Biology, University of California, Los Angeles, 2015

## PROFESSIONAL EXPERIENCE

### THOUSAND PALMS WHITewater RIVER BASIN FLOOD CONTROL PROJECT DRAFT EIR/EIS

*Coachella Valley Water District*  
2020-present

Ms. Harvey is assisting with managing the completion of the BA and Draft EIR/EIS and is a biological resource specialist for this project. The proposed project includes a series of levees and channels to direct stormwater flows from the Indio Mountains away from developed areas and into an existing stormwater conveyance system, to protect community areas from flooding hazards.

### BARREN RIDGE-HASKELL LINE 1 (BAR-HSK L1)

*Los Angeles Department of  
Water and Power*  
2020-present

Ms. Harvey is part of the team conducting pre-construction and jurisdictional delineation surveys and preparing various documents including incidental take permits and BAs in support of improvements along the existing Barren Ridge-Haskell Line 1 in the Antelope Valley and Angeles National Forest. She has also conducted special-status plant surveys, tree inventories, sensitive wildlife surveys, and nesting bird surveys.

### BARREN RIDGE RENEWABLE TRANSMISSION LINE PROJECT

*Los Angeles Department of  
Water and Power*  
2019-present

Ms. Harvey is part of the team conducting clearance surveys for a transmission line through the Antelope Valley and the Angeles National Forest. This project involves the monitoring of active bird nests, and surveys for sensitive plant and wildlife species. Ms. Harvey has monitored road restoration work and vegetation clearing in the Angeles National Forest as part of this project. Ms. Harvey is familiar with the reporting and monitoring requirements of all the biological permits and environmental documents in order to work with the entire environmental team to keep the project in compliance with the mitigation measures.

### WILDFIRE RISK REDUCTION, RELIABILITY, AND ASSET PROTECTION (WRAP)

*Trinity Public Utilities  
Department and Western Area  
Power Administration  
2020-present*

Ms. Harvey is providing technical writing support for this high-profile and controversial project that is intended to reduce fire risk and maintain critical electrical services in Trinity County. The project is located within areas administered by a variety of land managers, including the BLM and the USFS. Presently, Ms. Harvey is assisting with the preparation of the Impact Analysis for the Biological Resources Technical and the Aquatic Resources Delineation Reports.

### EAST LOS ANGELES SUSTAINABLE MEDIAN STORMWATER CAPTURE PROJECT

*County of Los Angeles  
Department of Public Works  
2020-present*

Ms. Harvey is currently conducting nesting bird surveys for this project that includes the construction of low-impact development features used to capture and treat approximately 232 acre-feet per year of stormwater runoff in the City of Los Angeles.

### LITTLEROCK RESERVOIR SEDIMENT REMOVAL PROJECT

*Palmdale Water District/  
US Forest Service  
2019-present*

Ms. Harvey is part of the team conducting construction monitoring, preparing the biological and permit compliance reporting, and assisting with restoration planting and maintenance in coordination with CDFW, USACE, and LRWQCB. The Palmdale Water District (PWD) (CEQA Lead Agency) proposes to remove approximately 540,000 cubic yards of sediment from the reservoir (behind the dam) and haul it to off-site commercial gravel pits located 6 miles north of the dam site in the community of Littlerock.

### CALLEGUAS CREEK AT UPLAND MAINTENANCE

*Ventura County Watershed  
Protection District  
2019-2020*

Ms. Harvey conducted vegetation transects and biological surveys at the habitat restoration site located along Calleguas Creek at Upland Road in Camarillo, Ventura County, CA. She also conducted annual vegetation monitoring and assisted with the preparation of the annual reports for 2019 and 2020.

## SPECIAL CERTIFICATIONS

- FAA Remote Pilot Certificate

## SELECTED PRESENTATIONS & PUBLICATIONS

- M.S. Thesis, "Influences on Foraging Preference Development in the Endangered Pacific pocket mouse (*Perognathus longimembris pacificus*): Implications for a Novel Conservation Strategy." Published in eScholarship. Presented at The Wildlife Society W. Chapter Meeting, Feb 2018. Additional manuscript in progress.
- Logan, CJ, Harvey BD, Schlinger BA, and M Rensel. 2016. Western scrub-jays do not appear to attend to functionality in Aesop's Fable experiments. *PeerJ* 4: e1707.

## HONORS AND AWARDS

- UCLA Leaders in Sustainability Certificate (2018)
- La Kretz Conservation Research Grant (2017-2018)
- Departmental Schechtman Teaching Award (2017)



# Kellie A. Keefe

GIS Manager

## SUMMARY OF QUALIFICATIONS

Ms. Keefe is a Geographic Information Systems Specialist with over five years of experience utilizing geographic information systems (GIS) for projects in the environmental sector. She has created maps and performed spatial analyses to support various CEQA, NEPA, and other report documents. Ms. Keefe holds a certificate in GIS and is competent in vector and raster data analysis and manipulation. She is proficient with Esri's ArcGIS Spatial Analytical Software (ArcGIS Pro and ArcMap) and Google Earth. She has experience using Spatial, Network and 3-D Analyst extensions; ArcGIS Server; ArcGIS Online; Portal for ArcGIS; Operations Dashboard for ArcGIS; ESRI Maps for Office; ModelBuilder and has written basic Python scripts for automation in the GIS. Ms. Keefe has experience creating data from desktop digitizing, as well as collecting data in the field with GPS units and mobile mapping applications.

## EDUCATION

BS, Environmental Studies, Utah State University, 2012

GIS Certificate, University of California, Riverside, 2014

## PROFESSIONAL EXPERIENCE

### VARIOUS PROJECTS

*County of San Bernardino*  
2017-present

Provided GIS support for numerous projects. Assisted in with field data collection, post-processing, and figure creation.

- Bandicoot Flood Control Basin
- Chris Basin
- Cucamonga Basin No. 6
- Elder Creek Channel
- Etiwanda/San Sevaie
- Hawker-Crawford Channel
- Institution Road Reconstruction
- Lone Pine Culvert
- Mojave River Conservation Lands
- Rare Plant Surveys for Low Desert Flood
- Rare Plant Surveys for Valley and Mountains
- Rialto Channel
- Rimforest Storm Drain
- Sheep Creek Revegetation Monitoring
- West Fontana Channel, Banana Basin
- Wineville Basin

### THOUSAND PALMS FLOOD CONTROL PROJECT

*Coachella Valley Water District*  
2016-present

Ms. Keefe has been responsible for creating the 2021 EIR-EIS figures for this flood control project in the Coachella Valley desert. She also assisted biologists in mapping jurisdictional waters and calculating direct and indirect impacts for the Jurisdictional Delineation Report.

**VARIOUS PROJECTS IN THE PRADO BASIN***U.S. Army Corps of Engineers  
2015-present*

GIS point of contact for various USACE projects along the Santa Ana River throughout the Prado Basin. She has assisted biologists in creating numerous maps and calculations to support compliance monitoring, mitigation, quarterly and annual reports for the various proposed and completed projects in the area.

- Alcoa Dike Phase 1 & 2
- BNSF Bridge
- Norco Bluffs
- River Road Dike
- Prado Dam Spillway

**VENTURA COUNTY LEVEE PROJECTS***County of Ventura Public Works  
2016-present*

Assisted in the creation of numerous maps and calculations. Created several mobile applications and live web maps for the daily collection of data during construction monitoring activities. The web map allowed project managers and the client to stay up-to-date with information regarding the project including sensitive biological resource observations and the progress of construction.

- Santa Clara River Levee
- Sespe Creek Levee
- Ventura River Levee

**SAN BERNARDINO BASIN***Metropolitan Water District of  
Southern California  
2017-present*

Created figures for the IS/MND for the project-level impacts of the proposed 15 new water wells, 15,000 feet of 36-inch diameter pipeline, and enlargement wet well, and additional 60 cfs pumping capacity.

- Colorado River Aqueduct Repairs
- Repairs to Barrels on the Colorado River
- San Gabriel Tower Replacement

**CALLEGUAS CREEK AT UPLAND MAINTENANCE***Ventura County Watershed  
Protection District  
2019-2020*

Assisted field biologists with data collection and post-processing. Created several maps and photo logs for vegetation monitoring along the creek bed.

**UPPER SANTA ANA RIVER INTEGRATED GROUNDWATER MODEL***Private Client  
2017 -2018*

Digitized historical riparian vegetation using historical datasets of scanned hardcopy maps that required georeferencing. The vegetation layers were used to modeling water demand changes over a 50-year time frame in the Prado Basin.



# Shaun Kehrmeyer

ASSOCIATE BIOLOGIST

## SUMMARY OF QUALIFICATIONS

Shaun Kehrmeyer has four years of experience with biological surveys, botanical surveys, reporting, and mitigation monitoring in California. His knowledge of California natural history is broad and includes aquatic life, upland wildlife species, and vascular plants. Mr. Kehrmeyer is currently completing his thesis at Cal State Northridge under the supervision of plant ecologist Dr. Paula Schiffman. His thesis focuses on arthropod and plant assemblages of major riparian systems in southern California and looks for trends in diversity and abundance associated with anthropogenic influences. Mr. Kehrmeyer has extensive experience conducting general and focused wildlife surveys for reptiles, amphibians, fish, mammals, and birds. He has experience surveying for nesting birds and monitoring nesting birds at various project sites. He specializes in botanical surveys and is experienced with the regional flora, including rare, threatened, and endangered species.

## EDUCATION

MS, Biology, California State University, Northridge, anticipated 2021

BS, Ecology and Evolution, University of California, Santa Cruz, 2018

## PROFESSIONAL EXPERIENCE

**COGSWELL RESERVOIR  
SEDIMENT REMOVAL PROJECT**  
*Los Angeles County Department  
of Public Works*  
2021-present

Mr. Kehrmeyer is the lead biological monitor responsible for the day-to-day compliance monitoring of vegetation and sediment removal activities in the Cogswell Reservoir and associated facilities. His duties consist of nesting bird surveys, water quality monitoring, monitoring of construction activities, assisting in surface water ambient monitoring program (SWAMP) surveys, and focused surveys for sensitive biological resources.

**MILL CREEK WETLANDS  
BIOLOGICAL MONITORING**  
*City of Ontario*  
2020-present

Mr. Kehrmeyer is part of a team of biologists conducting annual mitigation monitoring for restoration areas within the Mill Creek Wetlands, a multipurpose natural water quality treatment facility. His duties include photo monitoring, assessing the health of restoration plantings, and surveying of plant and wildlife species.

**LIVE OAK DAM  
REHABILITATION PROJECT**  
*Los Angeles County Department  
of Public Works*  
2019-present

Mr. Kehrmeyer is part of a team of biologists implementing a habitat restoration plan after the completion of infrastructure upgrades to Live Oak Dam in Claremont, California. His duties include monitoring restoration success, weeding of non-native species, local seed collection, and installation of BMPs.



<b>MOJAVE RIVER WEST LEVEE MITIGATION</b> <i>San Bernardino County Flood Control District</i> 2019-present	Mr. Kehrmeyer is a biologist working on phase II of a mitigation project along the Mojave River. His duties include photo monitoring in mitigation and control sites, collecting data on vegetation structure and composition, and conducting focused surveys for sensitive biological resources. These data will ultimately be used to determine if the project's mitigation efforts were successful.
<b>SANTA ANA SUCKER IN-STREAM HABITAT ENHANCEMENT PROJECT</b> <i>U.S. Army Corps of Engineers</i> 2019-present	Mr. Kehrmeyer is a biologist working on a Santa Ana sucker habitat enhancement project in the Santa Ana River. The project includes enhancing in-stream habitat for sucker by adding gravel, cobble, and boulders to two portions of the river dominated by sand substrate. In addition to assisting with the design of the habitat enhancements, Mr. Kehrmeyer has assisted with pre-project and post-project surveys for sucker within the two enhancement reaches. The post-project surveys are being completed to evaluate the Santa Ana sucker population size and overall health which will be used to evaluate the success of the project.
<b>REPAIRS TO BARRELS ON COLORADO RIVER</b> <i>Metropolitan Water District of Southern California</i> 2020	Mr. Kehrmeyer is part of a team of biologists that completed protocol-level surveys for Mojave desert tortoise and burrowing owl for five proposed repair locations along MWD's Colorado River Aqueduct in the western Coachella Valley. Mr. Kehrmeyer also assisted with surveys for special-status plants.
<b>PARKWAY VILLAGE MASTER PLAN EIR</b> <i>City of Lancaster</i> 2020	Mr. Kehrmeyer is part of a team of biologists that completed protocol-level surveys for Mojave desert tortoise and burrowing owl for a proposed specific plan area within the city limits of Lancaster. Mr. Kehrmeyer also surveyed the site for other special-status species.
<b>SANTA ANA SUCKER TRANSLOCATION SITE EVALUATIONS</b> <i>San Bernardino Valley Municipal Water District</i> 2019-2020	Mr. Kehrmeyer is a biologist on a project to evaluate three sites for potential translocation of Santa Ana sucker. The three sites included the upper Santa Ana River, Bear Creek, and Lytle Creek which were selected because they provide suitable habitat and have indicator species present. Aspen completed a Phase 1 and Phase 2 site evaluation and is currently completing the site evaluation reports.
<b>SANTA ANA RIVER WASH HCP MONITORING</b> <i>San Bernardino County Flood Control District</i> 2019	Mr. Kehrmeyer worked as a biologist on a series of rare plant surveys for a habitat conservation plan, surveying habitat within flood control infrastructure in the lower reaches of Santa Ana River. His duties included general and focused surveys for sensitive biological resources in the area, such as slender horned spine flower, Santa Ana River woollystar, and Parry's spine flower.



## **Rupeet Malhotra** PE, QSD

Senior Water Resources Engineer  
15 years of experience · San Jose, California

Rupeet is a senior civil and water resources professional engineer licensed in California with more than 15 years of progressive experience in floodplain management, drainage design, water quality analysis, storm water management & design, green infrastructure design and implementation, NPDES permit compliance, erosion & sediment control design, and project management. She has considerable experience in developing and implementing Stormwater Pollution Prevention Plans for construction sites and industrial facilities pursuant to the requirements of the Construction General Permit and Industrial General Permit, respectively, and has been providing related services to private and public sector clients in Northern California for over 12 years.

### **EDUCATION**

Master of Science, Civil Engineering (Water Resources), Pennsylvania State University, University Park, Pennsylvania, 2005

Bachelor of Engineering, Civil Engineering, Punjab Engineering College, Panjab University, Chandigarh, India, 2003

### **REGISTRATIONS**

LEED AP Building Design + Construction  
#11267844-AP-BD+C, Green Building Certification Institute

Qualified Industrial Stormwater Practitioner,  
(QISP) # 78574, State of California

Qualified Stormwater Pollution Prevention Plan  
Developer (QSD) #23276, State of California

Professional Engineer #78574, California Board  
for Professional Engineers, Land Surveyors, and  
Geologists

### **PROJECT EXPERIENCE**

**Klamath River Restoration Project, Erosion and  
Sediment Control Plans, California and Oregon**

Rupeet developed the erosion and sediment control plans and technical specification for restoration, staging and access areas of the high-profile Klamath River Restoration Project. Pursuant to the 401 Permit, the project needed to comply with California Construction General Permit or a Water Quality Management Plan (WQMP) and an Erosion Sediment and Control Plan approved by Oregon Department of Environmental Quality (DEQ) during certain times of the restoration project post reservoir drawdown. The project team successfully developed documentation that met the intent of the project while also being protective of water quality.

**Water Pollution Control Plan (WPCP) for Colorado River  
Aqueduct Pumping Plan Rehabilitation, Various  
Locations, California**

Rupeet developed the WPCP for the rehabilitation of five pumping plants along the Colorado River Aqueduct for the Metropolitan Water District of Southern California. Our scope included developing the WPCP for the contractor's laydown yards. The WPCP included description of the field activities, existing storm water drainage system and materials, activities that might cause storm water pollution, description of BMPs, and monitoring schedule.

*\* denotes projects completed with other firms*

**Hydrologic & Hydraulic Model for Plummer Creek-Cargill (2017)\*, California, Project Engineer/Manager**

As project engineer/manager, Rupeet developed the hydraulic analysis of Plummer Slough, also known as Alameda County Flood Control and Water Conservation District (ACFCD) Line F-1 in Zone 5. The hydraulic analyses were performed to support the design of the proposed access road connection that would include the construction of access road improvements on existing Cargill access roads adjacent to the brine ditch approximately 1500 feet west of Hickory Street in the City of Newark. In a technical memo, she addressed the permitting requirements related to Sea Level Rise, as established by the San Francisco Bay Conservation and Development Commission (BCDC) San Francisco Bay Plan "Policies Concerning Safety of Fills in the Bay."

**Hunter/LSN Fiber Optic Program Stormwater Pollution Prevention Plan (2019)**

Rupeet developed the Stormwater Pollution Prevention Plan for a fiber optic installation project in Shasta County, California. The project site presented challenges that includes a mountainous terrain and several waterbodies along the project alignment. The SWPPP development involved close coordination between the Forest Services staff, Hunter, LSN and Stantec regarding scheduling of the project phases considering weather, habitat and other limitations. Stantec successfully met all deadlines to accomplish project completion per expectations.

**PG&E Environmental Water Quality and Compliance Services (2019)**

Rupeet is assisting PG&E's stormwater group with projects throughout PG&E's service area and across service lines. The SWPPP The WPCP included description of the field activities, existing storm water drainage system and materials, activities that might cause storm water pollution, description of BMPs, and monitoring schedule.

**Construction Storm Water Pollution Prevention Plan (SWPPP) Preparation for Facebook Inc, 1 Facebook Way\*, Menlo Park, California (2013)**

The approximately 22-acre Facebook West Campus is located at 1 Facebook Way. The project included site remediation, demolition of the two existing buildings and associated site improvements, and the construction of an approximately 433,555 square foot building on top of surface parking. Rupeet developed the SWPPP for site remediation activities, followed by the SWPPP for construction activities at the facility and performed monthly inspections at the site to review the contractor's inspection reports and BMPs implementation.

**Town of Hillsborough 30-Year Storm Water Master Plan (2013)\*, Hillsborough, California**

Rupeet was independently responsible for evaluation of existing data, identifying data gaps, and designing a program for collection of storm drainage system data by prioritizing the data collection areas based on drainage problems reports in those areas. She further assisted with the development of field data collection forms and asset management system to provide data to the Town. This project would organize the Town's entire storm drainage data into a centralized asset management system and identify projects that need to be completed. The projects will be prioritized on the basis of funding available and severity of issue.

*\* denotes projects completed with other firms*



# Jamison Miner

SENIOR BIOLOGIST/ENVIRONMENTAL  
COMPLIANCE SPECIALIST

## SUMMARY OF QUALIFICATIONS

Jamison Miner has 15 years of experience with Aspen conducting CEQA/NEPA analysis, providing technical writing support, managing groups of environmental monitors, conducting various surveys for sensitive biological resources, and serving as a Lead Third-Party Environmental Compliance Monitor on numerous projects throughout southern California. Mr. Miner has extensive experience with preparing a variety of CEQA/NEPA documents, including EIR/EISs, IS/MNDs, EAs, BE/BAs, and BA reports. He is also well versed in regulatory agency permitting processes including California Department of Fish and Wildlife (CDFW) Sections 1600 and 2081, U.S. Fish and Wildlife Service (USFWS) Sections 7 and 10, Regional Board Section 401, and U.S. Army Corps of Engineers (USACE) Section 404.

## EDUCATION

B.S. Biology, Minors in Chemistry  
and Geology

California State University,  
Fullerton 2006

## PROFESSIONAL EXPERIENCE

### COGSWELL RESERVOIR SEDIMENT REMOVAL PROJECT

*County of Los Angeles  
Department of Public Works  
2021-present*

Technical writing support for this project that includes the removal of 2.5 MCY of sediment from Cogswell Reservoir on the Angeles National Forest. He was the Lead Author of the HMMP and Water Quality Monitoring Plan and developed the Worker Environmental Awareness Program to be distributed to all project personnel.

### LITTLEROCK DAM AND RESERVOIR RESTORATION PROJECT

*Palmdale Water District/  
U.S. Forest Service  
2007-2010 and 2020-present*

Assistant to the Deputy Project Manager and a Project Biologist for the sediment removal and restoration activities associated with the Littlerock Dam and Reservoir on the Angeles National Forest. Mr. Miner was a Co-Author of the Draft EIR and BA. He also was a member of a small group of Wildlife Biologists that conducted surveys for arroyo toad and nesting birds. Mr. Miner served as a Biological Monitor during early phases of construction of the project.

### BARREN RIDGE RENEWABLE TRANSMISSION PROJECT

*Los Angeles Department of  
Water and Power  
2015-present*

Technical writing and management support for this project that consists of multiple complex components, including the construction of a new 61-mile 230 kV transmission line (Lines 2&3) crossing BLM and USFS lands in Los Angeles County. As the project Lead Biologist, Mr. Miner led a group of up to 25 specialists conducting survey and monitoring efforts during the development of Lines 2&3 of this project. He was also the Lead Author of the Joshua Tree Census Report and the co-author of the CDFW Section 2081 ITP Application Report for Line 1. Mr. Miner is coordinating all survey and monitoring efforts for all components of the project.

**THOUSAND PALMS FLOOD  
CONTROL PROJECT**

*Coachella Valley Water  
District/U.S. Army Corps of  
Engineers  
2009-present*

Mr. Miner is currently providing technical expertise and writing support for this project that includes the construction of an approximately 6-mile-long series of new flood control structures in Riverside County. Mr. Miner recently completed the Section 404(b)1 application report for submittal to the USACE. Prior to that, Mr. Miner was a Co-Author of the EA/MND and BA and conducted surveys for rare plants and burrowing owls.

**COLORADO RIVER AQUEDUCT  
CONDUIT STRUCTURAL  
PROTECTION PROJECT**

*Metropolitan Water District  
2019-2020*

Mr. Miner provided technical writing support for this project that included major repairs at 24 locations along the CRA in Riverside County. Mr. Miner was the Lead Author of the Biological Resources Section of the IS/MND.

**CRA EMERGENCY REPAIRS**

*Metropolitan Water District  
2018-2020*

Lead Biologist and liaison with MWD for this project that included repairs along approximately 20 miles of water pipeline in Riverside County. Mr. Miner led a small group of Biological Monitors during construction of the project that was located within occupied desert tortoise habitat. He also prepared the Final Monitoring Report.

**BALD EAGLE MONITORING  
PROJECT**

*Metropolitan Water District  
2018*

Biological Monitor for this project which included the transport and installation of new chlorination tanks to MWD's Gene Facility near Parker Dam, AZ. Specifically, Mr. Miner was responsible for monitoring an active bald eagle nest and assessing potential effects and providing avoidance strategies during the transport activities.

**ADDITIONAL AWARDS, TRAINING, COURSES, AND MEMBERSHIPS**

- Qualified SWPPP Practitioner/Qualified SWPPP Developer (QSP/QSD) (2017); pending CPESC certification expected early 2021
- 24-Hour HAZWOPER Certification #39085, ETAC, Anaheim, CA (2019)
- Certificate of Completion: Coachella Valley Air Pollution Control District – Dust Control Training (2017)
- Certificate of Completion: Burrowing Owl Workshop, Elkhorn Slough Training Program (2013)
- Certificate of Completion: Desert Tortoise Council Introduction to Surveying, Monitoring, and Handling Techniques Workshop (2011)
- Certificate of Completion: CNPS Vegetation Rapid Assessment Workshop (2007)
- Avian Power Line Interaction Committee Annual Conference, Sacramento, CA (2007)



# Margaret Schaap

BIOLOGIST

## SUMMARY OF QUALIFICATIONS

Ms. Schaap has more than ten years of experience in the field of wildlife biology, including an array of avian surveys, radio telemetry, habitat assessments, herpetological surveys, water quality, wetland studies, and laboratory research, with experience in Northern, Central, and Southern California. With over six years of her experience as a biological consultant, Ms. Schaap has prepared documents in compliance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and the federal and California Endangered Species Acts.

## EDUCATION

BS, Biology, Valparaiso University,  
Valparaiso Indiana, 2005.

## PROFESSIONAL EXPERIENCE

### **BARREN RIDGE SUBSTATION (BRSS) EXPANSION PROJECT**

*Los Angeles Department of  
Water and Power  
2018-present*

Ms. Schaap has conducted nesting bird surveys, monitored construction activities within the current footprint, and conducted a jurisdictional delineation as part of planned expansion. In addition, she has provided guidance to the monitors on site to establish appropriate buffers for nesting birds and monitor their behavior.

### **VENTURA RIVER LEVEE (VR-1)**

*Ventura County Watershed  
Protection District  
2017-present*

Ms. Schaap is part of the team providing wildlife surveys, including nesting and sensitive birds, jurisdictional delineation, and California Rapid Assessment Method (CRAM) along the Ventura River in Ventura, CA. in support of the environmental analysis process.

### **SANTA CLARA RIVER LEVEE (SCR-1) IMPROVEMENT PROJECT**

*Ventura County Watershed  
Protection District  
2017-present*

Ms. Schaap is part of the team providing wildlife surveys, including nesting and sensitive birds, jurisdictional delineation, and California Rapid Assessment Method (CRAM) along the Santa Clara River in Oxnard, CA. in support of the environmental analysis process.

### **BARREN RIDGE-HASKELL LINE 1 (BARREN-1)**

*Los Angeles Department of  
Water and Power  
2017-present*

Ms. Schaap is part of the team conducting pre-construction surveys, including documenting the avian species utilizing and nesting along the right-of-way, and jurisdictional delineation surveys in support of improvements along the existing Barren Ridge-Haskell Line 1 in the Antelope Valley and Angeles National Forest.



**SESPE CREEK LEVEE  
REHABILITATION PROJECT**

*Ventura County Watershed  
Protection District*  
2017

Ms. Schaap was part of the team providing pre-construction surveys and biological construction monitoring along the Sespe Creek in Fillmore, CA. This project involved surveying for nesting birds, providing appropriate buffers for active nests, and monitoring them until the nest was no longer active, the utilization of the project site by sensitive species, and providing on-site environmental training for construction crews.

**BARREN RIDGE RENEWABLE  
TRANSMISSION LINE PROJECT**

*Los Angeles Department of  
Water and Power*  
2015-present

Ms. Schaap is part of the team conducting clearance surveys for a transmission line through the Antelope Valley and the Angeles National Forest. This project involves the monitoring of active bird nests, and surveys for sensitive species including the California spotted owl (*Strix occidentalis occidentalis*), Swainson's hawk (*Buteo swainsoni*) and desert tortoise (*Gopherus agassizii*). Ms. Schaap is responsible for the daily data management and reporting, and coordination with field crews, office staff, client and agencies.

**SANTA CLARA RIVER LEVEE  
(SCR-3) IMPROVEMENT  
PROJECT**

*Ventura County Watershed  
Protection District*  
2016-2018

Ms. Schaap served as a biological monitor during some initial geotechnical and soil testing along the Santa Clara River in Ventura, CA. Ms. Schaap conducted pre-construction surveys to evaluate the biological resources including nesting birds and was present during all ground disturbing activities associated with the testing. Ms. Schaap then conducted pre-construction surveys for sensitive biological resources and is part of the team monitoring the construction of the levee, establishing appropriate buffers for nesting birds, and surveying for least Bell's vireo (*Vireo bellii pusillus*). Ms. Schaap supported the project by coordinating field efforts with the County and providing regular reporting in support of the existing permits.

**LITTLEROCK RESERVOIR  
SEDIMENT REMOVAL PROJECT**

*Palmdale Water District/US  
Forest Service*  
2014-present

Ms. Schaap is part of the team that prepared the permitting documents in support of impacts to waters and biological resources. In addition, Ms. Schaap has conducted nesting bird surveys, and surveys for least Bell's vireo in the project vicinity.

## ADDITIONAL TRAINING AND COURSES

- California Department of Fish and Wildlife Collection Permit No. 011905 for mammals, reptiles, amphibians, tidal invertebrates
- Marbled murrelet observer training (2008)
- Desert tortoise council's surveying, monitoring, and handling techniques workshop, (2011)
- California Rapid Assessment Method (CRAM) Training – Riverine (2012)
- Southwest willow flycatcher workshop and training (2012)
- Wetland Training Institute's wetland delineation course (2012)
- CRAM Training – Estuarine (2012)
- Wetland Training Institute's federal wetland/waters regulatory policy (2013)

# Matthew Schaap

WILDLIFE BIOLOGIST

## EDUCATION

BS, Natural Resource Management,  
Wildlife Biology, Grand Valley State  
University, 2005

## SUMMARY OF QUALIFICATIONS

Matthew Schaap has 15 years of professional consulting experience as a natural resource planner and field biologist. As a result, he has worked on a number of projects that include ecological surveys, GIS mapping, soil sampling, water quality monitoring, and wildlife surveys. Through his work, he has made connections with local, state, and federal agencies. Additionally, Mr. Schaap has conducted numerous species focused biological studies on a wide array of California flora and fauna including least Bell's vireo, southwestern willow flycatcher, blunt-nosed leopard lizard, California red-legged frog, desert tortoise, and burrowing owl. He also possesses a state scientific collecting permit and a federal recovery permit for California red-legged frog.

## PROFESSIONAL EXPERIENCE

**MCC-VIC**  
*Los Angeles Department of  
Water and Power*  
2021-present

Mr. Schaap is part of the team conducting surveys, including nesting birds, vegetation mapping, desert tortoise, burrowing owl, and rare plants, over 162 miles of transmission lines that extend from the Mojave Desert north into Nevada. Mr. Schaap is also responsible for reviewing the collected data, and preparing the biological resource technical report.

## PREVIOUS EMPLOYMENT

- **BioResource Consultants, Inc.** – Senior Biologist/Project Manager (2010-2021) Conducted and reviewed wetland delineations and preparers permitting under sections 401 and 404 of the clean water act and section 1600 of California fish & Game Code. Coordinated with U.S. Fish & Wildlife Service, California Department of Fish & Wildlife and Bureau of Land Management and military bases. Responsible for preparing cost estimates and budgets for clients. Managed a team of field staff of up to 15 biologist conducting wetland delineations, rare plant surveys, special-status wildlife surveys and invasive plant mapping. Conducted protocol surveys for special status species. Conducted surveys along public utility right of ways. Prepared annual monitoring reports, biological assessments and wetland delineation reports. Managed staff and project timelines and budgets and oversaw staff.
- **BRC-Equals 3, Inc.** – Senior Biologist/Project Manager (2014-2021) Conducted wetland delineations and preparers permitting under sections 401 and 404 of the clean water act and section 1600 of California fish & Game Code. Conducted surveys along public utility right of ways. Responsible for preparing cost estimates and budgets for clients. Conducted wetland delineations, rare plant surveys, special-status wildlife surveys and invasive plant mapping. Conducted protocol surveys for special status species. Prepared annual monitoring reports, biological assessments and wetland delineation reports. Conducted tree inventories and vegetation surveys and habitat mapping.

- **Rana Creek Habitat Restoration** – Wildlife Biologist (2008-2010) Responsible for preparing cost estimates and proposals for new projects. Conducted reconnaissance and protocol surveys for special-status plant and wildlife specials, tree inventories, GIS mapping and preparing figures for private and commercial development. Conducted habitat restoration of developed and degraded and restored native vegetation using plants propagated for the Rana Creek Habitat Restoration nursery. Prepares biological assessments annual monitoring reports and Habitat Conservation Plans.
- **California Department of Fish & Game** – Biologist (2007-2008) - Conducted protocol-level surveys for special-status species including California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), tri-colored blackbird (*Agelaius tricolor*) and rare plants. Conducted mule deer and diurnal raptor inventory surveys to document use of the cattle grazing regimes on the Lower Cottonwood wildlife area. Mapped non-native vegetation across wildlife areas targeted for treated. Conducted avian point count surveys, mist-netting, waterfowl brooding surveys and raptor nest monitoring. Upon completion of field components annual reports were prepared to document the results of the field. Assisted in waterfowl body condition study and checking hunters at the check station.
- **Institute for Bird Population** – Field/Research Assistant (2003-2005) Managed and trained a team of biologist to conduct mist netting and bird banding following protocols established by the Institute for Bird Populations. Coordinated military base access and establishing study areas. Oversaw and reviewed data collection by field staff. Prepared weekly, monthly and final reports to submit to the Institute for Bird Populations and the military bases.

#### CERTIFICATIONS AND PERMITS

- California Department of Fish and Game Scientific Collecting Permit (No. 10345) for: western pond turtle (*Actinemys marmorata*), California red-legged frog (*Rana draytonii*), two-striped garter snake (*Thamnophis hammondi*), coast horned lizard (*Phrynosoma coronatum*), California legless lizard (*Anniella pulchra*), foothills yellow-legged frog (*Rana boylei*), coast range newt (*Taricha torosa torosa*), western spadefoot (*Spea hammondi*), yellow-blotched salamander (*Ensatina escholtzii croceator*), large-blotched salamander (*Ensatina klauberi*), and south coast garter snake (*Thamnophis sirtalis*). (DFG Local Authority: Fresno Field Office). Valid December, 2011 through December, 2013 in Fresno, Kern, Kings, Los Angeles, Monterey, Napa, Orange, Riverside, Santa Barbara, San Benito, San Bernardino, Santa Clara, Santa Cruz, San Francisco, San Luis Obispo, San Mateo, and Ventura Counties.
- U.S. Fish and Wildlife Service Recovery Permit (No. TE 203074-0) for California red-legged frog. USFW Local Authority: Ventura Field Office.

#### ADDITIONAL TRAINING

- Wetland Delineation 40 Hour Training Conducted by the Wetland Training Institute. February 2019
- Hazwoper 40-hour safety training Conducted by F. Maria Athney, OHST OSHA360.com. June 2015
- Southwestern Willow Flycatcher Workshop conducted by the Southern Sierra Research Station, May 2012.
- Desert Tortoise Workshop conducted by the Desert Tortoise Council, November 2011;
- Monterey Bay Area Green Gardener Gray Water Certification Program, June 2010;
- California tiger salamander Workshop conducted by Dr. Pete Trenham, Elkhorn Slough National Estuarine Research Reserve Coastal Training Program. April, 2009;
- Giant garter snake Workshop conducted by Eric Hanson, North Grassland Water District, March 2008;
- Avian Banding Workshop conducted by Institute for bird populations, May 2003.



## Tama Snow PE

Principal in Charge  
30 years of experience · San Diego, California



Successful water projects have two things in common – great engineers and great communicators. Tama is both. For over 30 years she has been planning and executing projects that improve water resources management capabilities for public, private, and regulatory clients. Well respected in the industry, she is known as someone who pays close attention to details, is responsive to client needs and doesn't lose sight of the big picture. Tama seeks to improve the balance between human and environmental water needs—to serve the greater good. For the Palmdale Water District Permitting, Design and Construction Services for Sediment Removal at Littlerock Dam Reservoir, Tama will be acting as the Principal in Charge to coordinate activities with Aspen Environmental, coordinating resources and staffing and managing quality assurance quality control reviews and ensure that Stantec is meeting expectations.

### EDUCATION

Bachelor of Arts in Mathematics, University of California Riverside, Riverside, CA, 1988

Bachelor of Science in Civil Engineering, University of California at Irvine, Irvine, CA, 1991

Masters of Engineering, Cal-Poly Pomona, Pomona, CA, 2001

### REGISTRATIONS

Engineer #C 056934, State of California, 1997

### PROJECT EXPERIENCE

Lake Forest Zone B to C Pump Station | Irvine Ranch Water District | Lake Forest, California, United States | Design Manager

Stantec has been retained by the Irvine Ranch Water District to prepare construction plans and specifications for a new recycled water pump station. The project includes preparing a surged analysis, preparing plans and specifications for decommissioning an existing recycled water pump station and abandoning an existing groundwater well as well as preparing a preliminary design report, 60%, 90%, and 100% plans and specifications for a new recycled water pump station.

Lindley Reservoir Replacement Project ESDC | City of Escondido | Escondido, California, United States | Project Manager

Project included the design and construction of two 1.5 million-gallon prestressed concrete reservoirs and providing engineering services during construction. Currently in the construction phase, Tama is in charge of coordinating shop drawing review, responses to requests for clarifications and information, conflict resolution, and managing budget and schedule.

High Desert Water Banking Project | Kern Water Bank Authority | Kern County, California, United States | Project Engineer

Stantec was retained by the Antelope Valley-East Kern Water Agency to design a water banking operation to enhance water supply reliability to its customers, storing unused State Water Project water supplies for later recovery when SWP allocations are low. The scope of work for Phase 1 of the project includes developing a hydrogeological model, installation of piezometers and recovery wells, recharge monitoring, well field design, design of a turn-in and turn out structure from the SWP Canal, pipeline design, and well equipping.

1050 Zone Pump Station | Moulton Niguel Water District | Laguna Niguel, California | Project Engineer

Stantec was retained by the Moulton Niguel Water District to prepare plans and specifications for the 1050 Zone pump station that will provide the District additional system reliability as well as provide back-up fireflow. The project includes an environmental survey, preparation of environmental documents, surveying, potholing, geotechnical, civil, mechanical, electrical, I&C, SCADA, and completing a preliminary design report and construction plans and specifications for a 500-gpm pump station and 3000-gpm fire flow as well as design of approximately one mile of 16-inch suction and discharge pipelines.

Port of Long Beach Recycled Water Study | Port of Long Beach | Long Beach, California, United States | Quality Assurance/Quality Control Review

Stantec was retained by the Port of Long Beach to prepare a storm water harvesting study and recycled water feasibility study. The recycled water feasibility study included identifying and evaluating alternative sources of recycled water that could be available to supply the PoLB customers, evaluating the feasibility of constructing a wastewater treatment plant to be owned and operated by the POLB, as well as identifying potential recycled water customers, identifying acceptable recycled water uses and preparing an engineer's estimate of probable construction costs for the various identified alternatives.



## Matthew Starr PG

Dredging Technical Lead  
19 years of experience · Tampa, Florida

Matthew is a senior dredging project manager and Stantec's Dredging Subject Matter Expert with over 17 years of technical experience related to coastal engineering projects involving dredging and dewatering site design, beneficial reuse options, beach renourishment, port and marine facilities, coastal structures, hydrographic surveying, ecosystem restoration, asset management, natural resource mapping, water quality, and wildlife biology. Matthew has been responsible for large-scale dredging projects with the USACE and USFWS, as well as smaller projects for municipalities that have included feasibility studies, local/state/federal permitting, design services, construction plans, contract documents and bidding, contractor procurement, and CEI services. Matthew has also worked on both hydraulic and mechanical dredging projects using environmentally friendly dredge techniques to reduce sediment migration and turbidity during construction to help protect endangered species

### EDUCATION

Bachelor of Science, Marine Science/Coastal Geology, Coastal Carolina University, Conway, South Carolina, United States, 2006

### CERTIFICATIONS & TRAINING

100-Ton Vessel Captain, United States Coast Guard, #88206, Florida, 2006

Erosion, Sedimentation Control & Stormwater Control Inspector, FDEP, #29474, Florida, 2014

10-Hour/Competent person, OSHA, Evacuation, Florida, 2013

MHSA, Mine Hazard Safety Training, Florida, 2013

### REGISTRATIONS

Professional Geologist #2906, State of Florida

### MEMBERSHIPS

Member, American Professional Captains Association

Member, Florida Association of Environmental Professionals

Member, Florida Shore and Beach Preservation Association, 2016-Present

### PROJECT EXPERIENCE

East Naples Bay Dredging Project Design and Permitting Services | City of Naples, Florida | Project Manager

Matthew was responsible for an assessment of existing data, permitting coordination with the Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (USACE), field operations including a hydrographic survey, rock probe investigation, sediment core boring analysis, assessment of natural resources, subsurface side scan sonar investigation, design services from feasibility to 100% construction documents, bidding and contractor selection, and full-time construction oversight. During construction, approximately 22,000 cy of sediment and 2,000 cy of rock was dredged from 31 residential canals with no damages to existing docks or seawalls due to sediment removal.

Haldeman Creek Dredging Project Construction Services\* | Collier County, Florida

This project for the Collier County Streets and Stormwater Department involved the design and permitting of a dredge channel to improve stormwater conveyance in the East Naples area. Matthew provided oversight and supervision during dredging activities as well as water quality monitoring. Following construction, Matthew was responsible to collect sediment samples and provide a geotechnical analysis on the dredged material from the disposal area to identify any contamination at the site.

Clam Pass Maintenance Dredging and JCP Permitting\* | Collier County, Florida

This project involved obtaining state and federal permits for the purposing of dredging an inlet to enhance tidal flushing and mangrove habitats. Matthew was responsible for an assessment of existing data, permitting coordination with regulatory agencies, and field operations including hydrographic surveys, sediment core boring analysis, assessment of natural resources, sediment sampling and analysis, deployment and recovery of tide/current gages and a vibrocore investigation.

Hillsborough County Canals Dredge and Preventative Measures, Tampa, Florida | Hillsborough County | Tampa, Florida

Provided to Hillsborough County dredging feasibility analysis on eight canal systems adjacent to Tampa Bay: Baycrest, Essex Downs, Bay Crest, Bayport Channel A, Dana Shores, Alafia River, Apollo Beach North, Apollo Beach South, and Ruskin. Matthew served as lead coastal scientist responsible for sediment collection, geotechnical analysis, hydrographic data, dredge template design, and volume calculations.



**Matheny Creek Dredging, Sarasota County, Sarasota, Florida | Sarasota County | Sarasota County, Florida**

Responsible for public/neighborhood communications, feasibility studies, technical analysis, cost estimates, permitting, engineering analysis, specification/bid document development, bid analysis, construction management and oversight, public and commission meeting support, and other miscellaneous services as directed pertaining to the Sarasota County Coastal Program.

**Sawgrass Lake Dredging and Restoration, Southwest Florida Water Management District, St. Petersburg, Florida\* | Southwest Florida Water Management District | St. Petersburg, Florida**

This project involved the implementation of an action plan for the remediation and reclamation of spent lead shot and clay targets at the Sawgrass Lake Park & Water Management Area in Saint Petersburg, Florida. The goal was to dredge the lake and bind the lead contamination in the sediment in the lake from a shooting range along the western shore, build an earthen berm to prevent future shot from reaching the lake, and develop a filter marsh to improve the water quality of Sawgrass Lake which discharges into Tampa Bay. Matthew was responsible for providing field data collection services including hammer cores, sediment collection, and chemical analysis of lake sediment and engineering design related to lake dredging and volume calculations. He also provided construction oversight services during the hydraulic dredging and handling of the dredge material at the project area. His post-construction services included quarterly monitoring of surface water quality and groundwater constituents for heavy metals and Total Dissolved Solids with reporting to the FDEP.

**Grand Canal Muck Removal Dredging\* | City of Satellite Beach, Florida | Project Manager**

The residential canal system known as Grand Canal (and its finger canals) located within the City of Satellite Beach has experienced significant accumulation of muck since the upland cut canals were originally created in the 1950's and 1960s. The initial hydrographic survey and jet probes indicated approximately 605,000 cubic yards of muck to remove from the canal system. Matthew served as project manager responsible for permitting, geotechnical analysis, hydrographic survey/jet probes, project design, spoil site design, and construction documents. This project is also included under Brevard County's initiative to restore the Indian River Lagoon.

**Galeota Point Shoreline Protection and Revetment Design\* | BP | Trinidad and Tobago | Project Manager**

The purpose of this project was to design a structure to withstand a 10 to 15-year storm recurrence along the Atlantic Ocean at BP's Galeota Terminal Processing Facility comprised of pipelines carrying flammable gas and pipe racks within close vicinity of the coast. The installed steel sheet pile system used as shoreline protection had failed and was in need of a repair solution. The solution included a natural stone revetment combined with a concrete plinth repair. Matthew was responsible for the design, stone sizing, construction drawings and technical specifications.

**Lake Kiowa Dredging and Permitting\* | Cooke County, Texas | Project Manager**

This project for the Lake Kiowa Property Owners Association was to develop a conceptual assessment of alternatives to sediment removal and to provide a detailed preliminary design to dredge approximately 145,000 cubic yards of sediment from eight areas within the lake to allow residents to access deeper portions of the waterbody during periods of the year when the water level in the lake is lowered. The overall objective was to improve water quality, storage capacity, and navigation within the lake. Matthew served as the project manager responsible for benthic surveys, geotechnical analysis, dredge template design, upland disposal locations, and federal permitting.

**Mims Boat Ramp Muck Removal Dredging\* | Brevard County, Florida | Project Manager**

As an effort to restore the Indian River Lagoon (IRL), Brevard County initiated a county-wide effort to remove decades of muck accumulation from the bottom the IRL caused by agriculture, construction, stormwater runoff and erosion. This boat ramp facility at the end of Jones Road in Mims, Florida is a dirt boat ramp providing water access for small vessels into the north end of the Indian River Lagoon with approximately 42,000 cubic yards of muck to be removed to restore the sandy bottom and promote seagrass growth. Matthew served as project manager responsible for permitting, geotechnical analysis, hydrographic survey/jet probes, project design, spoil site design, construction documents, and contractor procurement.

**Smather's Beach Renourishment Construction Services, City of Key West, Florida | Key West, Florida**

Provided construction monitoring and permit compliance services. During construction, the project was monitored for sea turtles, marine lighting, placement of sand on the beach, sediment QA/QC, turbidity, topographic survey data collection, and JCP/USACE permit compliance. Matt was responsible for completing yearly post-construction monitoring reports from 2012 through 2016 to evaluate shoreline and volumetric change analysis within the project area and along profiles east of the project area within Cell 1.

**Naples Beach Renourishment Truck Haul Projects\* | Collier County, Florida | 2013-2014**

This was a project that was initiated in 2013 and was recurrent in 2014. This project was initiated as a result of storm erosion and consisted of hauling more than 225,000 cy of sand in 2013 and 52,000 cy of sand in 2014 from an upland mine more than 50 miles away from the project site utilizing dump trucks. Matthew was responsible for construction oversight, permit compliance, sediment analysis review, turbidity oversight, weekly, contractor/client meetings, and as-built profile review.





## Jeffrey Tabar PE, DCE

Dredging Technical Lead  
29 years of experience · Laurel, MD



Jeff is a coastal and civil engineer with 27 years of experience in dredging, coastal engineering, resiliency planning, post storm damage assessments, project management, structural design, hydrodynamics, and sediment transport. Jeff has a long history of providing technical assistance for coastal flood control risk analysis and has worked closely over the years with local, state and federal agencies to ensure that work performed is completed accurately and is meeting the proper guidelines and policies. Jeff's experience has included providing complete, turnkey coastal services, conducting public meetings, assisting government agencies with mitigation planning, design and construction administrative services.

### EDUCATION

Bachelor of Science, Civil Engineering, University of Rhode Island, Kingston, Rhode Island, 1992

Master of Science, Coastal Engineering, Florida Institute of Technology, Melbourne, Florida, 1994

### REGISTRATIONS

Professional Engineer #54094, State of Florida, First issued 1999

Professional Engineer #24GE05157900, State of New Jersey, First issued 1999

Professional Engineer #PE.0038077, State of Louisiana, First issued 2012

### MEMBERSHIPS

Member, Coasts, Oceans, Ports and Rivers Institute, An Institute of ASCE

Member, Florida Engineering Society

Member, Florida Shore and Beach Preservation Association

Member, American Society of Civil Engineers

### PROJECT EXPERIENCE

Prime Hook National Wildlife Refuge Dredging, Marsh Restoration and Shoreline Resiliency Project\* | U.S. Fish and Wildlife Service | Milton, Delaware, United States | Senior Coastal Engineer

Hired by the USFWS in 2012 to conduct a numerical modeling and erosion control study of the Prime Hook National Wildlife Refuge Estuarine System. The work assignment includes numerical modeling of the physical processes of the system including hydrodynamic circulation, erosion processes and residence time (flushing). In addition, water quality modeling of the distribution/diffusion of salinity were conducted. The development of a circulation/erosion/ salinity model provided insight into how the system behaves with respect to both freshwater inflows and saltwater intrusion due to the breaches and how potential variations in the system will affect these conditions. Once this analysis was complete, further modeling efforts or analyses with respect to morphology/sedimentary characteristics and water quality were developed and implemented. This staged approach was recommended in order to properly evaluate the system without performing unnecessary work, saving time and costs for the development of Restoration Plan Activities. Alternatives to reduce erosion are evaluated and dredging/filling (beneficial re-use of the Delaware River Channel Deepening Project spoils) of the estuary were explored to enhance the overall system stability. The resulting Marsh Restoration Plan included over 30 miles of new conveyance channel/canals, plantings, dredging and thin layering disposal of approximately 600,000 cubic yards of sediments. The project construction budget is \$40 million and is the largest post-Sandy restoration project through Department of the Interior (DOI) funding.

East Naples Bay Dredging Project Design and Permitting Services | City of Naples, Florida | Engineer of Record

Jeff was the EOR responsible for an assessment of existing data, permitting coordination with the Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (USACE), field operations including a hydrographic survey, rock probe investigation, sediment core boring analysis, assessment of natural resources, subsurface side scan sonar investigation, design services from feasibility to 100% construction documents, bidding and contractor selection, and full-time construction oversight. During construction, approximately 22,000 cy of sediment and 2,000 cy of rock was dredged from 31 residential canals with no damages to existing docks or seawalls due to sediment removal.

**New Orleans Levee Design for Lake Pontchartrain Hurricane Protection\* | New Orleans, Louisiana | Senior Coastal Engineer**

Managed and performed a design for the U.S. Army Corps of Engineers, New Orleans District (USACE-MVN) of overtopping calculations and levee crest elevations for the West Shore, Lake Pontchartrain Hurricane Protection Project for a variety of design scenarios. Design guidance, assumptions, recommendations and a discussion of uncertainty was provided. Established levee design crest elevations by using predicted storm surge elevations to include propagating waves to compute levee overtopping rates. Sized interior drainage pumps and collection systems by performing interior hydrology and hydraulic computations using the XP-SWMM model. Developed levee design cross-sections based on Institute of Professional Engineering Technologists (IPET) recommendations and existing soil foundation data. Quantified materials, equipment, and labor to construct. Determined preliminary costs for mitigation, engineering and design, construction supervision and administration, and future operations and maintenance.

**Bird Colony Island Living Shoreline and Wave Attenuation System\* | Project Manager**

This project involved the construction of a 1,250-linear-foot living breakwater and backfilling with dredged material to create an inland marsh. The focus was the enhancement and protection of a vital wading bird rookery. This area had experienced a considerable amount of erosion due to currents and waves from boat wakes. The project included the stabilization of the shorelines of three vegetated islands. Mr. Tabar was tasked by to provide turnkey professional coastal engineering services, including bathymetric surveys, geotechnical investigations, feasibility study drawings, volume calculations; construction plans, bidding support, and construction oversight. Staff managed the survey and geotechnical consultants, using this data to complete the project. Several ecologists supported the coastal engineering efforts by providing expert advice to establish marsh elevations for specific planting regimes. Dredge material was deposited to optimize planting success and further enhance erosion protection. Additional project elements included the siting and installing regulatory navigation signs and buoys. Seagrasses in the footprint of the breakwater were transplanted behind the islands prior to construction. Vegetation plugs were planted on the created marsh areas. Birds were monitored during the entire process, and construction had no significant impact on bird nesting activity.

**Clam Pass Living Shoreline and Restoration Management Plan\***

Mr. Tabar managed and performed design services, permitting and data collection for a dredging master plan to address inlet management for Clam Pass. This work included deployment of over ten instruments to measure water level, velocity and flushing time for the complex Clam Bay system. These data were used to provide the client with recommendations to complete permitting. Results provided guidance for frequency of Pass dredging, fill placement along County beaches, water quality standards, and estimates of habitat restoration.

**Alligator Bend Shoreline Protection and Resiliency Project\* | NRCS Louisiana Water Resources Program | Louisiana**

The landfall of Hurricane Katrina in southeast Louisiana damaged thousands of acres of marsh and other coastal habitats in the Pontchartrain basin. Along the shorelines of Lake Borgne, the storm created breaches between the lake and interior marshes and in some cases removed large expanses of wetlands. Loss of wetlands in the Alligator Bend area created more than 1,000 acres of open water in a complex that formerly supported relatively stable brackish marshes. Post-storm aerial photographs show the most significant losses occurred along the flanks of Bayou Platte leaving a large area of open water between eroding shorelines on Lake Borgne and the Gulf Intracoastal Waterway (GIWW). Continued shoreline erosion and future storms could create a direct path of open water connecting the GIWW and Lake Borgne and threaten the integrity of this important bridge. Under the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA), Provided engineering design services for a foreshore rock dike (breakwater) and vegetative plantings along the shoreline of Lake Borgne. Multidisciplinary capabilities enabled the firm to provide the full range of services required for this challenging project, offering NRCS a streamlined, one-stop approach to developing a sustainable solution. Among the issues faced were the area's poor soil conditions, which required elevated levels of testing and analysis to solve project design challenges.

**Tottenville Living Shoreline Protection Project | New York State Governor's Office of Storm Recovery (GOSR) and the NYC Parks Department | Staten Island, New York | Ongoing | Lead Coastal Engineer.**

A coastal and community resiliency project working in tandem with the Rebuild by Design Living Breakwaters team to provide a layered system of risk reduction, ecological resiliency, and social resiliency for the community of Staten Island's south shore. The design of the system incorporates structured dunes, eco-revetments, and a robust shoreline planting and restoration plan to reduce erosion and attenuate wave action. The management of this project is also layered with many State and City agencies involved. Stantec's direct client is DASNY, with the Governor's Office of Storm Recovery leading and funding the project. The location of the project is on NYC Parks land and requires coordination with DEC, DEP, DOT, USACE, FEMA, and the Mayor's Office of Recovery and Resiliency. Construction expected 2019.



## Jared Varonin

Principal Biologist, Ecosystems Practice Leader  
21 years of experience



Jared manages Stantec's biological services program in Southern California. He is an established thought leader on issues relating to stream and wetlands restoration, fish migration, rare plants, and endangered species. Over the past 21 years, Jared has earned a reputation for his scientific expertise and experience to overcome complex environmental challenges, develop creative mitigation strategies, and analyze impacts. For projects related to CEQA and NEPA analysis and document preparation, habitat/creek restoration, permitting, jurisdictional delineations, and biological resources investigations, Jared has earned the respect of his clients. He primarily works with regulatory agencies in California, Nevada, and Arizona responsible for building or reviewing infrastructure, industrial, and public works projects. A highly skilled biologist, Jared's experience includes implementing permit strategies for streambed alteration agreements, 404 permits, and other regulatory requirements. Jared will provide additional environmental construction services.

### EDUCATION

Bachelor of Science, Ecology and Systematic Biology, California Polytechnic State University San Luis Obispo, San Luis Obispo, California, 1999

### CERTIFICATIONS & TRAINING

38-Hour Army Corps of Engineers Wetland Delineation and Management Training Program, Richard Chin Environmental Training, Inc., Sacramento, CA, 2004

36-Hour Advanced Wetland Management Training Program, Richard Chin Environmental Training, Inc., San Diego, CA, 2006

California Rapid Assessment Method (CRAM) Riverine Module, Southern California Coastal Water Research Project, Costa Mesa, CA, 2009

California Rapid Assessment Method (CRAM) Estuarine Module, Southern California Coastal Water Research Project, Costa Mesa, CA, 2009

### REGISTRATIONS

Certified Fisheries Professional #Certificate No. 3232, American Fisheries Society, 2012-current

### MEMBERSHIPS

Member, American Fisheries Society

### PROJECT EXPERIENCE

Boxcar Bridge Project | Orange County Parks Dept. | Orange County, California, United States | 2017-Present | Principal Biologist

Jared led the effort to update existing biological and jurisdictional delineation reports to support the protection of an existing bridge across Modjeska Canyon Creek. Jared also prepared and coordinated the regulatory permitting effort with the CDFW, USACE, and RWQCB. The project is immediately upstream of critical habitat for the Arroyo toad (*Anaxyrus californicus*). Jared was the lead author for the biological resources section of an IS/MND prepared for the project to support CEQA compliance.

USACE Santa Ana River Mainstem Project\* | United States Army Corps of Engineers | Riverside/Orange Counties, California | 2009-2017 | Project Manager/Lead Biologist

Jared was the project manager/lead biologist overseeing a one-million dollar restoration and monitoring contract for activities within the Santa Ana River Mainstem Project near Prado Dam. This included restoration site monitoring, construction monitoring, protocol surveys for listed species, diversion monitoring and fish relocation, and agency coordination.

Bus Canyon RC Box Repair Project\* | Ventura County | Phelps Road Trunk Sewer | Goleta West Sanitary District | Goleta, California | 2019-Present | Principal Biologist/Environmental Task Manager

Currently Jared is overseeing all biological monitoring activities for this sewer line removal project. Portions of the project are adjacent to sensitive wetland habitats known to support special-status plants and wildlife.

Thousand Palms Flood Control Project\* | Coachella Valley Municipal Water District | Palm Desert, California | 2012-2017 | Lead Biologist

Jared conducted a delineation of jurisdictional wetlands/waters as part of the biological team conducting general wildlife, botanical, and focused burrowing owl surveys to support this flood control project. The project is within the known geographic range of a number of federally listed species, including desert tortoise, Coachella Valley fringe-toed lizard, Palm Springs round-tailed ground squirrel, and Coachella Valley milk-vetch.

*\* denotes projects completed with other firms*

**Cable Creek Maintenance Project | County of San Bernardino Public Works Department | San Bernardino County, California | 2019 | Principal Biologist/Project and Contract Manager**

Jared was the lead biologist conducting a jurisdictional delineation to support routine maintenance activities within Cable Creek.

**USACE Seven Oaks Dam Gate Testing/Water Release Monitoring\* | United States Army Corps of Engineers | San Bernardino, California | 2012 | Project Manager/Lead Biologist**

Jared participated in and supervised monitoring activities related to water releases from Seven Oaks Dam in San Bernardino County. This included relocation of federally listed Santa Ana Suckers stranded in side-channel habitat and an evaluation of the effects of the water release on aquatic habitat.

**Santa Ana Canyon Underground Project | Anaheim Public Utilities | Anaheim Hills, California | 2019 | Principal Biologist/Environmental Task Manager**

Jared was the lead biologist overseeing plant and wildlife surveys within and adjacent to areas proposed for the undergrounding of utility lines and the preparation of a Biological Resources Technical Report.

**High Speed Rail Construction Package 4 | California Rail Builders | Wasco/Bakersfield, California | 2019 | Principal/Lead Biologist/Task Manager**

Jared was the lead biologist supporting pre-construction surveys, biological monitoring, reporting, and agency coordination for Construction Package 4 of the High-Speed Rail Project.

**Plant and Wildlife Surveys | MB Development Company | Buelton, California | 2018 | Lead Biologist/Project Manager**

Jared oversaw and conducted baseline plant and wildlife surveys within and adjacent to a project site proposed for a residential development. Jared prepared a Biological Resources Technical Report to present the results of the surveys.

**Santa Clara River Bank Stabilization and Restoration Project\* | Confidential Client | Ventura, California | 2009-2014 | Lead Biologist**

Jared was the project manager and lead CDFW-approved ecologist responsible for the permitting and implementation of a CDFW mandated restoration project along the Santa Clara River in Santa Paula. He was the primary contact with the CDFW, Los Angeles Regional Water Quality Control Board, Corps, and County of Ventura Watershed Protection District, and he worked with each agency to complete the permitting requirements. Jared also managed and/or conducted pre-construction plant and wildlife surveys and biological monitoring for the project. He worked closely with the project's civil engineers to design a restoration project that will provide an overall benefit to the watershed and not impede or affect flows in the Santa Clara River which is home to many special status plant and wildlife species.

**Ortega Battery Energy Storage Project | Hecate | Lake Elsinore, California | 2021-Present | Principal/Lead Biologist**

Jared is the Principal/Lead Biologist overseeing an aquatic resource survey and jurisdictional determination, plant and wildlife surveys, and preparation of technical reports. Jared assisted with compliance with the Western Riverside Multiple Species Habitat Conservation Plan for potential impacts to suitable habitat for listed bird species.

**Ronald Casper's Wilderness Park Repairs Project | Orange County Parks Department | Orange County, California | 2018-Present | Principal Biologist**

Jared is the lead biologist conducting plant and wildlife surveys, and a jurisdictional delineation in support of the CEQA document for the project. Jared is the lead author preparing the biological resources section of the IS/MND for the project.

**San Diego Creek Trash Water Wheel Project | City of Newport Beach | Newport Beach, California | 2018-2019 | Principal Biologist**

Jared was the lead biologist conducting plant and wildlife surveys, and a jurisdictional delineation in support of the CEQA document for the project. Jared was the lead author preparing the biological resources section of the EIR for the project.

**Ballona Creek Trash Abatement Project | Los Angeles County Department of Public Works | Marina Del Rey, California | 2019-Present | Principal Biologist/Task Manager**

To support the CEQA process Jared oversaw plant and wildlife surveys and a jurisdictional delineation of the project site. Jared is also the lead in the preparation of regulatory agency permits from the CDFW, USACE, and RWQCB; this also included Section 408 authorization from the USACE.

**Littlerock Reservoir Sediment Removal Project \* | Palmdale Water Company | Los Angeles County, California | 2009-2017 | Biologist**

Jared was part of the team conducting field surveys and preparing the biological resources section of this joint EIS/EIR evaluating the impacts of sediment removal alternatives for the Littlerock Reservoir and Dam on USFS Angeles National Forest (NEPA Lead Agency) lands in Los Angeles County. The Palmdale Water District (PWD) (CEQA Lead Agency) proposes to remove approximately 540,000 cubic yards of sediment from the reservoir (behind the dam) and haul it to off-site commercial gravel pits located 6 miles north of the dam site in the community of Littlerock. The project involves impacts to the arroyo toad, extensive coordination with USFWS for a Section 7 consultation, incorporation of new Forest Service Plan updates and requirements into the analysis, and preparation of the Forest Service required BE/BA and MIS reports. Jared conducted focused arroyo toad (*Anaxyrus californicus*), conducted plant and wildlife surveys, and prepared a jurisdictional delineation in support of the project.





## **April Victorino** PE

Project Manager  
22 years of experience · Chandler, Arizona

April is a professional engineer with over 20 years of experience in the design and management of various land development, irrigation district, and municipal infrastructure projects. She has performed a broad range of civil engineering services, including grading, drainage, utility design, channel and irrigation facility hydraulic analysis and design, construction administration, and project management and accounting. April's broad experience allows her to effectively contribute to a project during all aspects of design, agency coordination, and construction.

### **Project Management Leader-Pacific**

April is responsible for the onboarding and training of all project managers assigned in her region. This includes assuring compliance with all regulatory requirements.

### **EDUCATION**

MS, Accounting, University of Phoenix, Phoenix, Arizona, US, 2011

BS, Environmental Engineering, Michigan Technological University, Houghton, Michigan, United States, 1997

AAS, Law Enforcement, Rio Salado Community College, Phoenix, Arizona, United States, 2003

### **REGISTRATIONS**

Professional Engineer #43811, State of Arizona, 12/1/2005

PMI-Project Management Professional #2174289

### **MEMBERSHIPS**

Member, American Public Works Association

### **PROJECT EXPERIENCE**

#### **WATER**

Roosevelt Irrigation District | Buckeye, Arizona | Program Manager and District Engineer

Managed over 100 projects involving the relocation of Roosevelt Irrigation District (RID) irrigation and drainage facilities, including both pipeline and open-channel conveyance and delivery systems. April's responsibilities include project management (scope, schedule and budget, invoicing and financials, and closeout), the technical design of hydraulic facilities and structures, supervision and management of design staff, technical review, and coordination with utility companies, developers, municipal agencies, and contractors on behalf of the RID. She regularly works with RID's legal representatives on right-of-way and easement agreements.

Mark Kia Auto Dealership Site Expansion | Marc Architecture | Scottsdale, Arizona | Design Engineer

This project involved grading of a five-acre site. Services included topographic survey and plan preparation for grading, drainage, paving, water, and sewer for the site.

Broadway Business Center | LGE Design Build | Phoenix, Arizona | Lead Design Engineer

This project consisted of the development of a 1.88-acre site for a commercial office and warehouse building. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for the site.

Horizon | LGE Design Build | Casa Grande, Arizona | Design Engineer

This project consisted of the development of a 1.95 -acre site for a new building. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for the site.

Select Air Office and Warehouse Site Development | LGE Design Build | Chandler, Arizona | Lead Design Engineer

This project consisted of the development of a 0.88-acre site for a new office and manufacturing warehouse in Stella Air Park. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for the site.

**Juanita Medical | LGE Design Build | Mesa, Arizona | Project Manager**

This project entailed development of a 7.44-acre site, including five medical office buildings. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for the site.

**Higley Gateway | LGE Design Build | Gilbert, Arizona | Project Manager**

This project entailed development of a 14-acre site, including two 3-story medical office buildings and two retail stores/restaurants. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for the site.

**Alphagraphics 3 | LGE Design Build | Mesa, Arizona | Lead Design Engineer**

This project consisted of the development of a 1.44-acre site for a new store. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for the site.

**White Tanks Solid Waste Transfer Station | Waste Management of Arizona | Goodyear, Arizona, US | Designer**

Assisted the project manager in completion of a Military Compatibility Permit Application for update of the site plan. This facility included inbound and outbound electronic deck scales with scale house, transfer building for processing of up to 2,500 tons of municipal solid waste per day, facility operations building and site utilities. The transfer station consisted of a 36,000 square foot, fully-enclosed metal building with a concrete tipping floor with load out openings above two tunnel bays and electronic in-ground tunnel scales. In addition, this facility required a vehicle maintenance facility at the site, which consisted of hoists, a crane, offices, restrooms, parts storage area, a truck wash and parking for 80 vehicles. The update is to include a beneficial re-use building, an office, and CNG gas facilities.

**Rose Garden Industrial | LGE Design Build | Phoenix, Arizona | Lead Design Engineer**

Topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for development of a 1.65-acre site for a gymnastics center. This site involved retaining walls and special attention to grading as the new center was located between two existing driveways built for the adjacent sites.

**Northwest Light Rail Transit Extension | Valley Metro Rail Inc. | Phoenix, Arizona, US | Design Engineer**

Assisted utilities project manager with quality control of the design for relocated water and sanitary sewer to avoid conflicts with new track and roadway improvements for approximately 3.2 miles of new light rail transit track and infrastructure on 19th Avenue from Bethany Home Road to Dunlap Avenue. The utility relocation for this project was complex due to a very congested utility corridor and included extensive coordination with dry utilities for relocated water, sanitary and storm lines, and review of proposed dry utility locations. The relocated mains varied in size from four-inch to 36-inch for water and six-inch to 24-inch for the sanitary sewer.

**Central Phoenix/East Valley Light Rail Transit Project - Line Section 3 | Valley Metro Rail, Inc. | Phoenix, Arizona, US | Design Engineer**

Assisted utility lead with quality control of the design for relocated water, sanitary sewer, and storm mains to avoid conflicts with new track and roadway improvements. The project covers approximately 8 miles through the downtown core of Phoenix. The utility relocation for this project was complex due to a very congested utility corridor and included extensive coordination with dry utilities for relocated water, sanitary and storm lines, and review of proposed dry utility locations. The relocated mains varied in size from four-inch to 42-inch for water, six-inch to 39-inch for the sewer and 12-inch to 48-inch for storm. In addition, off-set manholes were designed for storm mains as large as 96-inch.

**Concrete Batch Plant | Rinker Materials | Phoenix, Arizona | Lead Design Engineer**

This project entailed the development of a 10-acre site to be used by a concrete batch plant. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, a water main extension, septic system, and water services for the site.

**Canyon Pipe and Supply | LGE Design Build | Surprise, Arizona | Project Manager**

This project consisted of the development of a 4.22-acre site for a warehouse facility. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for the site.

**West 94 Commerce | LGE Design Build | Tolleson, Arizona | Project Manager**

This project consisted of the development of a 17.7-acre site for four commercial buildings. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for the site.

**PODS | LGE Design Build | Tolleson, Arizona | Project Manager**

This project consisted of the development of a 5.57-acre site for a PODS storage facility. Services included topographic survey and plan preparation for grading, drainage, paving, fire protection, and water and sewer services for the site.



# Erik R. Waardenburg

BIOLOGIST

## EDUCATION

BS, Wildlife Biology & Fisheries,  
Humboldt State University 1999

## SUMMARY OF QUALIFICATIONS

Mr. Waardenburg is a former biologist with the California Department of Fish and Game and United States Department of Agriculture. He has over 15 years of biological experience and provides a unique perspective because of his agency work. Recently he has been conducting surveys for sensitive plants and wildlife, monitoring nesting birds, and performing avian studies on levee and transmission line projects. His strong fisheries background and knowledge of regulatory work make him a capable and versatile biologist. .

## PROFESSIONAL EXPERIENCE

### **BARREN RIDGE RENEWABLE TRANSMISSION PROJECT**

*Los Angeles Department of  
Water and Power*

Mr. Waardenburg is one of several biologists assigned to this project. He has conducted special-status plant surveys, tree inventories, and nesting bird surveys.

### **BARREN RIDGE RENEWABLE TRANSMISSION PROJECT LINE 1**

*Los Angeles Department of  
Water and Power*

Mr. Waardenburg is one of several biologists assigned to this project. He has conducted special-status plant surveys and tree inventories for this 73-mile transmission line upgrade.

### **PRADO DAM/REACH 9 MITIGATION MONITORING**

*US Army Corps of Engineers*

Mr. Waardenburg is currently serving as an environmental monitor to ensure compliance with mitigation measures adopted for several regulatory agency documents. Monitoring activities include fish assessments.

### **SANTA CLARA RIVER LEVEE (SCR-3) IMPROVEMENT PROJECT**

*Ventura County Watershed  
Protection District*

Mr. Waardenburg surveyed the project site for nesting birds and monitored levee construction.

### **SESPE CREEK LEVEE IMPROVEMENT INITIAL STUDY, MND AND EA**

*Ventura County Watershed  
Protection District*

Mr. Waardenburg surveyed the project site for nesting birds and monitored levee construction on the east side of Sespe Creek just north of the Hwy. 126 bridge.

**SANTA ANA SUCKER  
MICROHABITAT ANALYSIS  
AND REPORT**

*San Bernardino Valley  
Municipal Water District*

Mr. Waardenburg served as part of the team to collect data on fish relocation associated with this study.

**ADDITIONAL TRAINING AND COURSES**

- Firearms Training, 2012: Wildlife Services
- Euthanasia training and certificate, 2010
- Defensive Driving, 2010: National Safety Council
- Qualified Applicator Certificate earned March 2004: Dept. of Pesticide Reg.
- ATV Trained and Certified 2002: CA Dept of Fish and Game

**HONORS AND AWARDS**

- Certificate of Merit, United States Department of Agriculture 2008



# Justin M. Wood

SENIOR BIOLOGIST

## SUMMARY OF QUALIFICATIONS

Justin M. Wood has twenty years of experience with biological surveys and reporting in California. He holds Master's and Bachelor's degrees in biology from California State Polytechnic University, Pomona. His interests in California natural history are broad, including aquatic life, upland wildlife species, and vascular plants. Wood has extensive experience conducting general and focused wildlife surveys for reptiles, amphibians, fish, mammals, and birds. He has extensive experience surveying for special-status animals including burrowing owl, Arroyo chub, Santa Ana sucker, least Bell's vireo, and desert tortoise. He specializes in botanical surveys and has a special interest in the flora of Southern California. He is experienced with the regional flora, including rare, threatened, and endangered species and has collected nearly 7,000 herbarium specimens. He is a Certified Field Botanist and holds permits to collect state and federally listed plants. He is also experienced with conducting jurisdictional delineations of state and federal waters as well as federal wetlands. He is active in the professional biological community and supplements his education through courses and symposia in botany, and biological survey methods.

## EDUCATION

MS, Biology, California State Polytechnic University, Pomona, 2011

BS, Biology, California State Polytechnic University, Pomona, 2006

## PROFESSIONAL EXPERIENCE

### COGSWELL RESERVOIR SEDIMENT REMOVAL PROJECT

*Los Angeles County Public Works*  
2019-present

Mr. Wood is serving as a lead biologist for the project to remove 2.5 million cubic yards of sediment from the reservoir. Aspen has completed numerous tasks include a jurisdictional delineation, hydrology study, vegetation mapping, habitat restoration plan, a CEQA addendum, regulatory permit support, construction monitoring, and numerous other tasks. Project activities started in early 2021 and are expected to last for at least two years.

### LITTLEROCK DAM AND RESERVOIR RESTORATION PROJECT EIR/EIS-BE/BA,

*Palmdale Water District/US Forest Service*  
2010-present

Aspen has been working on the Littlerock Dam and Reservoir Restoration Project for more than 10 years. The project includes the construction of a grade stabilization structure and sediment removal from the Littlerock Dam. Mr. Wood conducted focused rare plant and wildlife surveys, created vegetation maps, and assisted with the preparation of a jurisdictional delineation for the project.

**SAN GABRIEL TOWER & IMPROVEMENTS PROJECT**

*Metropolitan Water District of  
Southern California*  
2018-present

Mr. Wood currently serves as a Project Biologist providing CEQA and permitting services for improvements to the San Gabriel Tower, which regulates, and isolates flows from Morris Dam (and the Morris Reservoir) into the Monrovia Tunnel system. The water is then transported for treatment and delivery to Metropolitan customers in Los Angeles. The Project would lower the height of San Gabriel Tower and replace the originally-installed slide gates and actuators.

**PRADO DAM/REACH 9 MITIGATION MONITORING**

*U.S. Army Corps of Engineers*  
2009-present

Mr. Wood is currently serving as lead environmental monitor for the Santa Ana River Mainstem Project. His primary responsibility is to ensure compliance with mitigation measures adopted for several regulatory agency documents. His duties consist of nesting bird surveys, monitoring construction, vegetation mapping, and focused surveys for sensitive biological resources. He also prepared several restoration and revegetation plans for various project features and also prepared biology sections for several SEAs. He has worked closely with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and various other agencies throughout the project.

**LIVE OAK DAM REHABILITATION PROJECT**

*Los Angeles County Public  
Works*  
2019-present

Mr. Wood is serving as the lead biologist for the project to upgrade infrastructure of Live Oak Dam in Claremont, California. Aspen monitored construction, prepared, and implemented a habitat restoration plan, coordinated with CDFW, and completed other various tasks.

**MILL CREEK WETLANDS**

*City of Ontario*  
2020-present

Mr. Wood is the Project Manager and Lead Biologist monitoring implementation of maintenance at a series of water treatment ponds within Prado Basin. Aspen oversees landscape crews and coordinates with City personnel. Aspen was recently awarded a contract to monitor activities through 2024.

**SPECIAL CERTIFICATIONS AND PERMITS**

- California Native Plant Society, **Certified Field Botanist-#0011**
- State Plant Voucher Collecting Permit (**No. 2081 (a)-17-033-V**) to voucher state listed plants
- State Scientific Collecting Permit (**S-201570006-20177-001**) for working with mammals, reptiles, amphibians, vernal pool invertebrates, terrestrial invertebrates, freshwater fishes, freshwater invertebrates, anadromous fishes, marine fishes, marine tidal plants, and marine tidal invertebrates.

**ADDITIONAL TRAINING AND COURSES**

- Invasive plant management workshop, California Invasive Plant Council, 2009
- Vegetation mapping workshop. California Native Plant Society, 2011
- Southwestern willow flycatcher workshop. Southern Sierra Research Station, 2013
- Yellow-billed cuckoo workshop. Southern Sierra Research Station, Blythe, CA, 2013
- Army Corps of Engineers Wetland Delineation Training, Wetland Training Institute, 2014

- CEQA 101 workshop, California Native Plant Society, 2018.



Exhibit A

Aspen Environmental Group

Littlerock Reservoir Sediment Removal Project  
Palmdale Water District

EXHIBIT A-1: PROPOSED COST- SUMMARY SHEET  
Littlerock Sediment Removal 2020-2023

Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10	Task 11	Task 12	Task 13	Task 14	TOTAL
Plan Preparation	Surveys, Construction Period Sweeps & Worker Training	Construction Period Clearance, Monitoring & Reporting	Contract Bid Review Assitance	90-Percent Master Excavation Plan	100-Percent Master Excavation Plan	Preliminary Excavation Phasing and Logistics Plan	Final Excavation Phasing and Logistics Plan	30-Percent Road Repair Plans	90-Percent Road Repair Plans	100-Percent Road Repair Plans	Phase 1 Excavation Plan	Construction Staking	Project Management	
\$71,625	\$21,575	\$16,880	\$1,770	\$1,770	\$1,770	\$1,770	\$389,270	\$5,370	\$43,550	\$1,680	\$1,680	\$262,690	\$6,650	\$828,050
\$525	\$368	\$210					\$57,666					\$35,377		\$94,146
			\$21,575	\$136,992	\$130,849	\$132,726	\$1,523	\$22,411	\$5,040	\$104,137	\$136,672		\$20,446	\$712,371
			\$21,575	\$136,992	\$130,849	\$132,726	\$1,523	\$22,411	\$5,040	\$104,137	\$136,672		\$20,446	\$712,371
\$72,150	\$21,943	\$17,090	\$23,345	\$138,762	\$132,619	\$134,496	\$448,459	\$27,781	\$48,590	\$105,817	\$138,352	\$298,067	\$27,096	\$1,634,567



Aspen Environmental Group

Littlerock Reservoir Sediment Removal Project  
Palmdale Water District

EXHIBIT A-1: PROPOSED COST

Littlerock Sediment Removal 2020-2023

			Task 1		Task 2		Task 3		Task 4		Task 5		Task 6		Task 7		Task 8		Task 9		Task 10		Task 11		Task 12		Task 13		Task 14		TOTAL	
Role/Category	Key Personnel	Rate	Project		Assistance with		Special Use		Sediment		Design Services		Design Services		Design Services		Environmental		Construction		Project		Design		Design Services		Environmental		Construction and Post-			
			Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Quantity	Cost
Senior Biologist/Monitoring Lead	Chris Huntley	\$210.00	300	\$63,000	8	\$1,680	8	\$1,680	2	\$420	2	\$420	2	\$420	2	\$420	2	\$420	2	\$420	180	\$37,800	8	\$1,680	8	\$1,680	2	\$420	10	\$2,100	536	\$112,560
Associate III	S. Debauche, T. Inouye B.	\$160.00					80	\$12,800											10	\$1,600								10	\$1,600	100	\$16,000	
Senior Bio Supervisor	Brady Daniels, Jamie Minor, Justin Wood	\$160.00															75	\$12,000								50	\$8,000			125	\$20,000	
Senior Monitor	Margaret Schaap	\$135.00			90	\$12,150			10	\$1,350	10	\$1,350	10	\$1,350	10	\$1,350	2700	\$364,500	10	\$1,350						1800	\$243,000	10	\$1,350	4650	\$627,750	
Field Monitor II	Erik Wardenburg	\$130.00			24	\$3,120																								24	\$3,120	
Field Monitor I	Elliott D'Antin/AI Knight/ Wa	\$115.00																														
GIS/Graphics	Kellie Keefe/Jose/Chris No	\$100.00			40	\$4,000	24	\$2,400									50	\$5,000	20	\$2,000						50	\$5,000	16	\$1,600	200	\$20,000	
Graphics/Production	Kati Simpson	\$125.00			5	\$625											24	\$3,000							8	\$1,000				37	\$4,625	
Senior Cultural Resources Specialist	Lauren DeOliveira	\$145.00															30	\$4,350								30	\$4,350			60	\$8,700	
Cutlural Specialist	TBD	\$85.00																														
Project Accounting/Controls	Sevan Koshkarian	\$115.00	75	\$8,625																	50	\$5,750				8	\$920			133	\$15,295	
Total Labor			375	\$71,625	167	\$21,575	112	\$16,880	12	\$1,770	12	\$1,770	12	\$1,770	12	\$1,770	2881	\$389,270	42	\$5,370	230	\$43,550	8	\$1,680	8	\$1,680	1948	\$262,690	46	\$6,650	5865	\$828,050

Direct Project Cost Item		Unit Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Total
Copies/Printing																						
Lodging (\$120) and Meals (\$46)		\$166.00										\$270	\$44,820						\$180	\$29,880		\$74,700
Mileage		\$0.575	\$500	\$150								8000	\$4,600						5500	\$3,163		\$8,413
Postage/Delivery																						
Telephone (Cell+Conf Calls)																						
Aerial Topography (Imagery)																						
Equipment Rental													\$4,500						\$150			\$4,650
Document/Data Acquisition/Ads																						
Materials				\$200	\$200								\$1,000						\$500	150		\$1,900
Subtotal			\$500	\$350	\$200								\$54,920						\$33,693			\$89,663
Aspen Fee on all Non-Labor Costs & Subs (5%)			\$25	\$18	\$10								\$2,746						\$1,685			\$4,483
Total Non-Labor			\$525	\$368	\$210								\$57,666						\$35,377			\$94,146

Total Cost	\$72,150	\$21,943	\$17,090	\$1,770	\$1,770	\$1,770	\$1,770	\$446,936	\$5,370	\$43,550	\$1,680	\$1,680	\$298,067	\$6,650	\$922,196
------------	----------	----------	----------	---------	---------	---------	---------	-----------	---------	----------	---------	---------	-----------	---------	-----------

Cultural Assumptions:  
1 intermittent monitor, 1 day per week, 12 weeks  
1 supervisory visit  
8 hours of agency support per plan (3 documents)  
2 rounds of review each  
12 1/2 hour updates and status reports

# Aspen Environmental Group

## Littlerock Reservoir Sediment Removal Project Palmdale Water District

### EXHIBIT A-1: PROPOSED COST [DRAFT]

#### Littlerock Sediment Removal 2020-2023

## Stantec

		Task 4		Task 5		Task 6		Task 7		Task 8		Task 9		Task 10		Task 11		Task 12		Task 14		TOTAL	
		Sediment Removal Update 100-percent		Design Services Phase 2-1		Design Services Phase 2-2		Design Services Phase 2-3		Environmental Construction Services Phase 2, Years 1-3		Construction and Post-Construction Support		Project Management Years 4 and 5		Design Services Phase 2-4		Design Services Phase 2-5		Construction and Post-Construction Support			
Key Personnel/Category	Rate	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Quantity	Cost
Snow, Tama	\$260.00	4	\$1,040			6	\$1,560	6	\$1,560							6	\$1,560	6	\$1,560			28	\$7,280
Victorino, April	\$200.00	10	\$2,000			32	\$6,400	32	\$6,400					24	\$4,800	32	\$6,400	32	\$6,400			162	\$32,400
Senior project engineer	\$205.40																						
Senior engineer/scientist 1	\$181.49																						
Tabar, Jeff	\$234.00	2	\$468	28	\$6,552	20	\$4,680	20	\$4,680			16	\$3,744			20	\$4,680	20	\$4,680	8	\$1,872	134	\$31,356
Malhotra, Rupeet	\$200.00			5	\$1,000	5	\$1,000	5	\$1,000							5	\$1,000	5	\$1,000			25	\$5,000
Mstarr, Matt	\$200.00	24	\$4,800	74	\$14,800	68	\$13,600	68	\$13,600			88	\$17,600			68	\$13,600	68	\$13,600	88	\$17,600	546	\$109,200
Junior engineer/scientist	\$109.80																						
Gis analyst 1	\$133.56																						
Gis analyst 2	\$105.35																						
Heiat, Mohammed	\$215.00			24	\$5,160	18	\$3,870	18	\$3,870							18	\$3,870	18	\$3,870			96	\$20,640
Chambers, Rachel	\$153.00	80	\$12,240	217	\$33,201	190	\$29,070	190	\$29,070									190	\$29,070			867	\$132,651
Varonin, Jared	\$145.00									10	\$1,450											10	\$1,450
Agarwal, Shawn	\$150.00			32	\$4,800	20	\$3,000	20	\$3,000							20	\$3,000	20	\$3,000			112	\$16,800
Senior technical editor	\$142.77																						
Technical editor	\$110.04																						
Office administrator	\$88.13																						
Total Labor		120	\$20,548	380	\$65,513	359	\$63,180	359	\$63,180	10	\$1,450	104	\$21,344	24	\$4,800	169	\$34,110	359	\$63,180	96	\$19,472	1980	\$356,777

Direct Project Cost Item	Unit Cost		Cost		Cost		Cost		Cost		Cost		Cost		Cost		Cost		Cost		Cost		Total
Copies/Printing																							
Travel & Per Diem																							
Postage/Delivery																							
ODCs					\$1,500		\$1,500		\$1,500							\$1,500		\$1,500					\$7,500
Aerial Topography (GCPs: 5 new/update existing)																							
Survey Crew					\$15,756		\$10,808		\$11,116							\$11,448		\$11,784					\$60,912
Aerial Mapping					\$47,700		\$49,130		\$50,610							\$52,120		\$53,700					\$253,260
Subtotal Other Direct Costs					\$64,956		\$61,438		\$63,226							\$65,068		\$66,984					\$321,672
Subtotal Labor and ODCs			\$20,548		\$130,469		\$124,618		\$126,406		\$1,450		\$21,344		\$4,800		\$99,178		\$130,164		\$19,472		\$678,449
Aspen Fee on all Non-Labor Costs & Subs (5%)			\$1,027		\$6,523		\$6,231		\$6,320		\$73		\$1,067		\$240		\$4,959		\$6,508		\$974		\$33,922
Total Cost			\$21,575		\$136,992		\$130,849		\$132,726		\$1,523		\$22,411		\$5,040		\$104,137		\$136,672		\$20,446		\$712,371



# Hotel and Travel Accommodations

**Event Name/Date:****CONTACT INFORMATION**

First Name

Last Name

Date

**ACCOMMODATION INFORMATION**

*Rooms and rates are subject to availability. Complete and submit this form as soon as possible to guarantee a room at the host hotel. In the event that the host hotel is booked, every effort will be made to secure a room at the closest hotel within comparable rates to the event discounted rate.*

Arrival Date

Departure Date

No. of guests

Room Type

Do you require a smoking room?

☐ Yes ☐ No

Do you need transportation from the airport to the hotel?

☐ Yes ☐ No

Flight Number

Time

**ADDITIONAL INFORMATION/REQUESTS**

Staff Representative





CALIFORNIA FOUNDATION  
ON THE ENVIRONMENT  
AND THE ECONOMY

# HOLD THE DATE

## CFEE Conference on WATER

### December 8-9, 2021 Palm Springs | Parker Hotel

As California slips deeper into what may be its most dangerous drought yet, state leaders are once again confronted with wrenching decisions on how to immediately manage a scarce and essential resource while mapping out the next steps to further prepare for future dry spells.

On December 8-9 at the Parker Hotel in Palm Springs, the California Foundation on the Environment and the Economy (CFEE) will convene legislators and regulators alongside senior water managers, agricultural and environmental experts, and industry, community, and labor leaders for our **Roundtable Water Conference** to examine the latest drought conditions and our evolving response.

---

**Please save December 8<sup>th</sup> – 9<sup>th</sup>, 2021 on your calendar**

This invitation-only CFEE Conference will start on Wednesday, December 8<sup>th</sup> at noon with a buffet lunch and end no later than Thursday, December 9<sup>th</sup> at 1:00 pm. A formal invitation and details are to follow.

If you have any questions, please contact Celeste Cremen at 415-788-0812 or via email at [celeste@cfee.net](mailto:celeste@cfee.net).

**MINUTES OF MEETING OF THE OUTREACH COMMITTEE OF THE PALMDALE WATER DISTRICT, MAY 12, 2021:**

*A meeting of the Outreach Committee of the Palmdale Water District was held Wednesday, May 12, 2021, at 2029 East Avenue Q, Palmdale, CA 93550 and via teleconference. Chair Mac Laren called the meeting to order at 3:32 p.m.*

**1) Roll Call.**

**Attendance:**

Committee:

Kathy Mac Laren-Gomez, Chair

Don Wilson, Committee Member

**Others Present:**

Dennis LaMoreaux, General Manager

Adam Ly, Assistant General Manager

Judy Shay, Public Affairs Director

Dawn Deans, Executive Assistant

0 members of the public

**2) Adoption of Agenda.**

It was moved by Committee Member Wilson, seconded by Chair Mac Laren-Gomez, 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: (The Public Shall Have an Opportunity to Comment on Any Action Item as Each Item is Considered by the Committee Prior to Action Being Taken.)**

**4.1) Consideration and Possible Action on Approval of Minutes of Meeting Held April 14, 2021.**

It was moved by Committee Member Wilson, seconded by Chair Mac Laren-Gomez, and unanimously carried by all members of the Committee present at the meeting to approve the minutes of the Outreach Committee meeting held April 14, 2021, as written.

**4.2) Discussion of the District's Response to the Drought. (Public Affairs Director Shay/Resource and Analytics Director Thompson II)**

Public Affairs Director Shay stated that the District's response to the drought is for customers to voluntarily reduce their water use and that communication with customers includes press releases, social media Water Wednesdays, bill messaging, radio ads, targeted digital ads for smart phones, message banners, distribution of hose nozzles with water saving messages, drive-through events, a water saving tips flyer with the next issue of The Pipeline, customer care messaging, phone recordings, frequently asked questions on water supply, and tik-tok videos.

**4.3) Discussion of 2021 Outreach Activities. (Public Affairs Director Shay)**

**a) Outreach Report.**

Public Affairs Director Shay reviewed outreach events since the date of the last Committee meeting including press releases, articles in the Antelope Valley Press and ACWA News; a Café con Leche radio interview regarding water supply with Resource and Analytics Director Thompson II and Public Affairs Specialist Gallegos; a virtual Earth Day English and Spanish webinar; virtual Coffee-With-Director Wilson; an exploratory meeting regarding the Santa Clarita Chapter of the California Special Districts Association; interviews for the District's new website; PRWA website revisions; continued representation on the Board of Directors of the AVEDGE; Hazard Mitigation Plan outreach; the 2020 Consumer Confidence Report; and social media highlights followed by discussion of the election process for Directors of the AVEDGE.

**b) Upcoming Events/2021 Plans.**

She then stated that upcoming 2021 events include a virtual Let's Talk H2O! Hazard Mitigation Plan on May 19; Hazard Mitigation Plan survey from May 17 to May 27; and a virtual Coffee-With-Director Dizmang on May 25.

**5) Reports.**

**5.1) Lobbying Activities. (Assistant General Manager Ly)**

Assistant General Manager Ly stated that communications continue with Reeb Government Relations LLC regarding the Governor's drought proclamation and the COVID Relief Fund of \$27 billion with a certain percentage available for special districts, but there has been very little information on SB222 and SB223 followed by discussion of the establishment of a statewide assistance program and water theft.



6) **Board Members' Requests for Future Agenda Items.**

There were no requests for future agenda items.

7) **Date of Next Committee Meeting.**

It was stated that the next Outreach Committee meeting will be held July 14, 2021 at 3:30 p.m.

8) **Adjournment.**

There being no further business to come before the Outreach Committee, the meeting was adjourned at 4:11 p.m.

  
Chair

## **MINUTES OF MEETING OF THE PERSONNEL COMMITTEE OF THE PALMDALE WATER DISTRICT, JUNE 17, 2021:**

*A meeting of the Personnel Committee of the Palmdale Water District was held Thursday, June 17, 2021, at 2029 East Avenue Q, Palmdale, CA 93550 and via teleconference. Chair Mac Laren-Gomez called the meeting to order at 9:00 a.m.*

### **1) Roll Call.**

#### **Attendance:**

Committee:

Kathy Mac Laren-Gomez, Chair  
Amberrose Merino,  
Committee Member

#### **Others Present:**

Dennis LaMoreaux, General Manager  
Adam Ly, Assistant General Manager  
Mike Williams, Finance Manager  
Jennifer Emery, Human Resources Director  
Dennis Hoffmeyer, Accounting Supervisor  
Dawn Deans, Executive Assistant  
0 members of the public

### **2) Adoption of Agenda.**

It was moved by Committee Member Merino, seconded by Chair Mac Laren-Gomez, 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: (The Public Shall Have an Opportunity to Comment on Any Action Item as Each Item is Considered by the Committee Prior to Action Being Taken.)**

#### **4.1) Consideration and Possible Action on Approval of Minutes of Meeting Held May 20, 2021.**

It was moved by Committee Member Merino, seconded by Chair Mac Laren-Gomez, and unanimously carried by all members of the Committee present at the meeting to approve the minutes of the Personnel Committee meeting held May 20, 2021, as written.

**4.2) Consideration and Possible Action on a Recommendation on Updated Job Descriptions for the Customer Care and Finance Departments. (No Budget Impact – Human Resources Director Emery)**

Human Resources Director Emery provided an overview of the revised job descriptions for the Customer Care and Finance Departments after which it was moved by Committee Member Merino, seconded by Chair Mac Laren-Gomez, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to approve the updated job descriptions for the Customer Care and Finance Departments and that they be presented to the full Board for consideration at the June 28, 2021 Regular Board Meeting.

**5) Reports:**

**5.1) Human Resources Director Emery:**

**a) Personnel Policy Effects of COVID-19 Event.**

Human Resources Director Emery provided an overview of staff's efforts regarding COVID-19, including maintaining Cal-OSHA requirements regarding masks, ensuring proper staffing at all times, and quarantine requirements for vaccinated and unvaccinated employees followed by discussion of the new COVID-19 variant, proposed Cal-OSHA updated requirements, the Governor's mandates, and updating the District's COVID-19 Prevention Program Policy, and General Manager LaMoreaux stated that an update on any revisions and mandates will be provided at the June 28, 2021 Regular Board Meeting.

**6) Board Members' Requests for Future Agenda Items.**

There were no requests for future agenda items.

**7) Date of Next Committee Meeting.**

It was stated that the next Personnel Committee meeting will be held July 15, 2021 at 9:00 a.m.

8) **Adjournment.**

There being no further business to come before the Personnel Committee, the meeting was adjourned at 9:16 a.m.

  
Chair

<b>DATE:</b>	July 21, 2021	<b>July 26, 2021</b>
<b>TO:</b>	BOARD OF DIRECTORS	<b>Board Meeting</b>
<b>FROM:</b>	Mr. Dennis D. LaMoreaux, General Manager	
<b>RE:</b>	<b><i>AGENDA ITEM NO. 8.2.a – JULY 2021 GENERAL MANAGER REPORT</i></b>	

The following is the July 2021 report to the Board of activities through June 2021. It is organized to follow the District's 2020 Strategic Plan approved in August 2020 and composed of six strategic initiatives. The initiatives follow for reference. It is intended to provide a general update on the month's activities.

## PWD 2020 STRATEGIC PLAN SUMMARY



**Water Resource Reliability:** *Resilience, Development, Partnership*

**Support and participate with local agencies in the development of projects and policies that improve water reliability**

**Expand the recycled water distribution system for both public access and construction water**

**Continue the Palmdale Regional Groundwater Recharge and Recovery Project to maximize state and federal funding opportunities**

**Support projects and initiatives that increase the resilience of the State Water Project**

**Expand access to available water supplies to increase drought resiliency, develop water storage projects, and improve the ability to capture groundwater, local surface water, and recycled water**

**Update the 2010 Strategic Water Resources Plan and Water Supply Fee to ensure funding for needed projects**

## Strengthen stakeholder relationships and implement Littlerock Dam and Reservoir sediment removal



**Organizational Excellence:** Train, Perform, Reward

**Offer competitive compensation and benefits package for employee recruitment and retention**

### **Focus Succession Planning Program on ensuring an overlap of training for key positions**

### Continue providing transparency to our ratepayers

**Promote and support leadership training and professional development programs to enhance the District's customers' experience**

**Ensure employees are trained on the Strategic Plan and the District's Values of Diversity, Integrity, Teamwork, and Passion**

**Improve safety for Directors, employees, and customers**

**Develop career paths at the District for interns and pursue state and federal funding for intern programs**

**Involve employees in community engagement and professional platforms**



**Systems Efficiency:** *Independence, Technology, Research*

**Explore energy independence and evaluate the feasibility of energy options, including wind and solar**

**Incorporate more energy efficient technologies into the District's infrastructure**

**Advance new technologies to increase treatment efficiencies, including the use of Granular Activated Carbon (GAC)**

**Research state-of-the-art treatment techniques to help with systems efficiency and flexibility in using recycled water and surface water**

**Enhance technologies to increase efficiencies**

**Re-evaluate Lake Palmdale by-pass pipeline and pursue funding options**

**Improve Palmdale Ditch to reduce water loss**



**Financial Health and Stability:** *Strength, Consistency, Balance*

**Pursue grant funding for District projects and operations**

**Maintain the five-year financial plan adopted as part of the 2019 Water Rate Study, including the five-year Capital Improvement Plan**

**Build adequate reserve levels and achieve high-level bond rating**

**Seek potential revenue sources from vacant District properties**

**Monitor finances, operations, and projects affected by emergencies**

**Digitize and document departmental workflows**





**Regional Leadership:** *Engage, Lead, Progress*

**Increase involvement with water, business, and community partnerships**

**Provide opportunities for local businesses to contract with the District**

**Expand the Greater Antelope Valley Water Emergency Coalition by continuing to collaborate with neighboring water agencies and moving to include more agencies outside of the Antelope Valley**

**Develop working relationships and mutually beneficial projects with other water agencies in the District's state and federal representatives' districts**

**Develop events or activities with lessees of District properties**

**Host a 100<sup>th</sup> anniversary celebration for a fully re-opened Littlerock Dam and Reservoir recreation area in 2024**



**Customer Care, Advocacy and Outreach:** *Promote, Educate, Support*

**Enhance customers' experience through communication and feedback**

**Evaluate, develop, and market additional payment options**

**Develop the District's Public Outreach Plan and increase public awareness of current programs and services**

**Develop partnerships with various agencies to distribute information about resources available to the public**

**Engage elected officials and the public on the importance of local, state, federal, and global water reliability issues**

**Expand the District's social media platforms and find new avenues to share information and news**

**Plan and convert to an Advanced Metering Infrastructure (AMI) to increase customers' knowledge of water use**

**Continue to promote and expand school water education programs**

**Overview**

This report also includes charts that show the effects of the District's efforts in several areas. They are organized within each strategic initiative and include status of the State Water Resources Control Board's (SWRCB) former long-term conservation orders (20 x 2020), the District's total per capita water use trends, 2021 actual water production and customer use graph, mainline leaks, and the water loss trends for both 12- and 24-month running averages.



**Water Resource Reliability** *Resilience, Development, Partnership*

This initiative includes conservation efforts, water supply projects, and water planning.

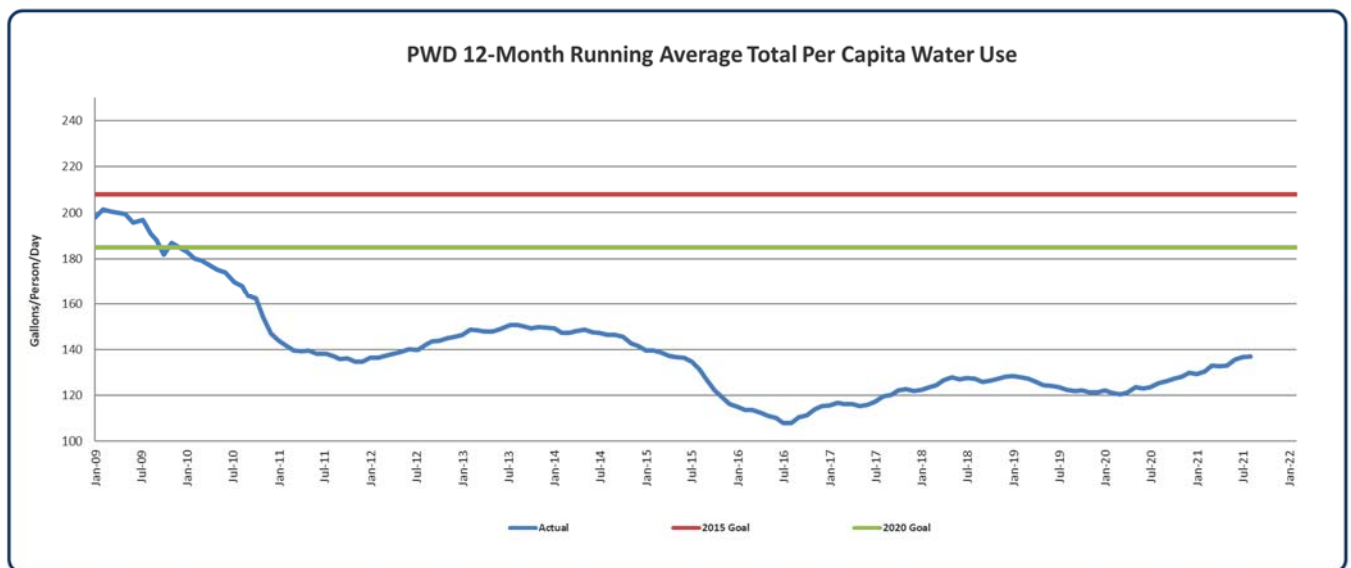
Recent highlights are as follows:

**Overall Water Use Goals and Compliance**

The 20 x 2020 per capita reduction goals passed by the legislature in 2009 with new long-term water budgeting requirements have now been replaced with new requirements and water agency water budgets. These follow through on the “Making Water Conservation a California Way of Life” plan. The District expects to easily comply with the new requirements as they are based on the same philosophy as the District’s water budget rate structure.

The 2020 Urban Water Management Plan was adopted by the District in June 2021. It does not relate the District’s water use to the upcoming agency water budget. Until these criteria are finalized, the customers’ performance is shown in this report using the 20 x 2020 requirements.

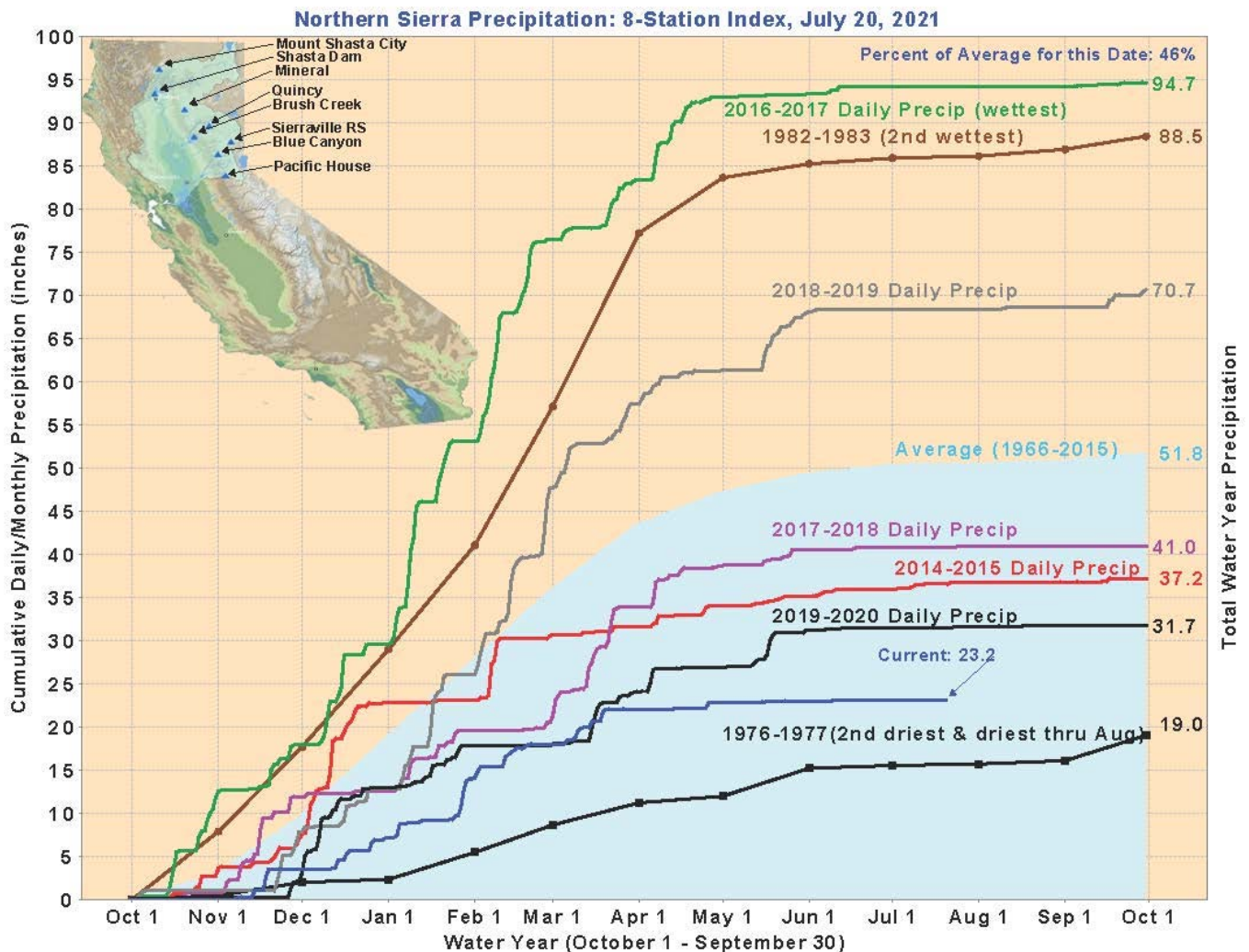
The District’s compliance with the former 20 x 2020 law is evident from the chart titled “PWD 12-Month Running Average Total Per Capita Water Use:”



The District’s customers have cut their water use by **40.7%** from the baseline number of 231 re-established in the 2020 Urban Water Management Plan and met the 2020 Goal in early 2010. The current Metered-GPCD is 137.

### 2021 Water Supply Information – Extremely Dry Year

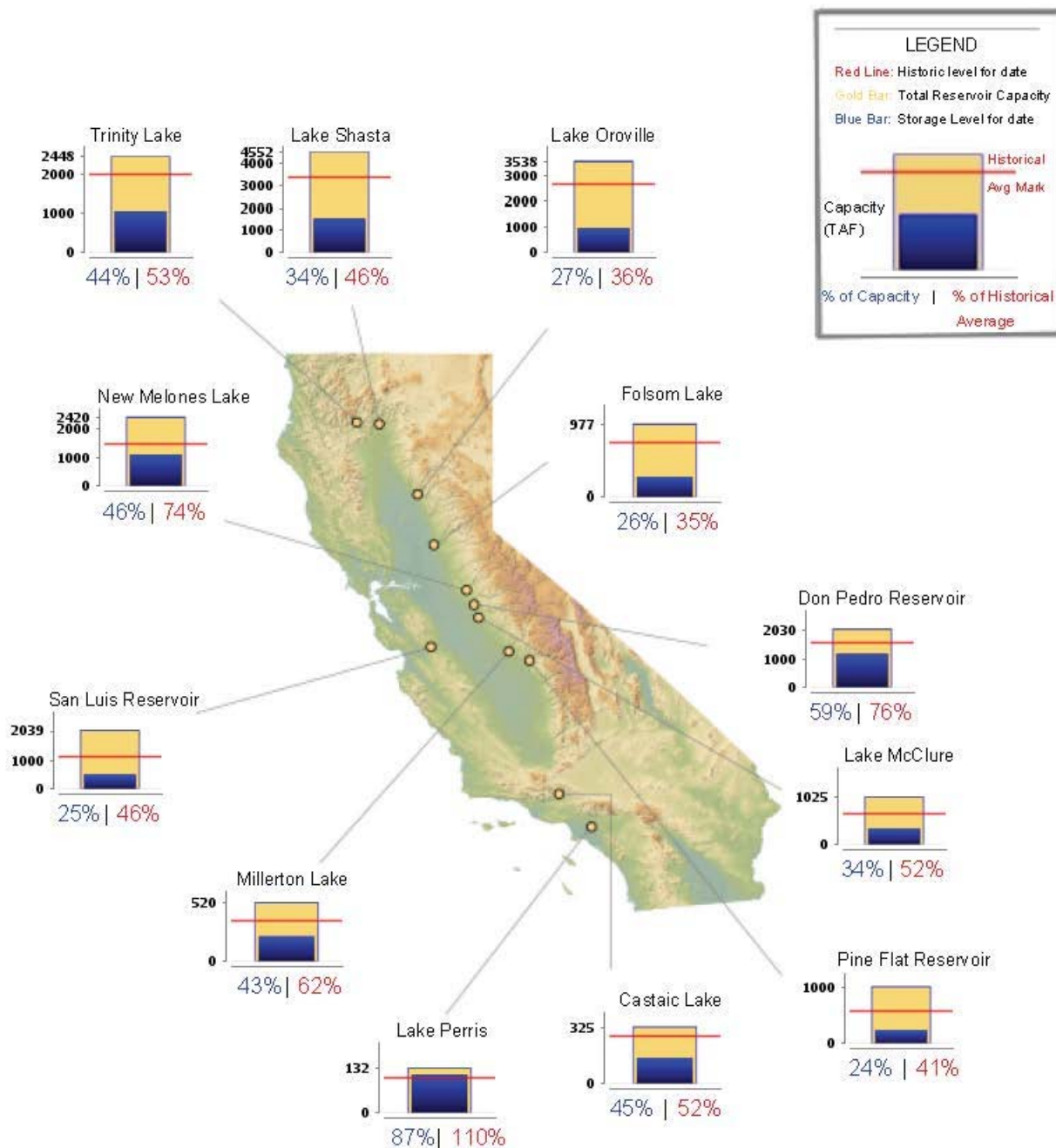
- The AV Adjudication is now entering its sixth year, and the reduction to the native safe yield is in its fourth year. The District's native groundwater right is 2,769.63 AF. The District's 2020 groundwater rights totaled 8,188 AF without the prior year's Carryover Rights. The District's 2021 groundwater rights are 8,359 AF with 10,260 AF of Carryover production rights from prior years for a total of 18,619 AF. This is more than the District's existing wellfield can pump.
- The 2021 water resources plan is mostly known at this point. Precipitation in the area that contributes to the State Water Project remains at 46% of average and the SWP allocation is 5%. The District is solidifying other water sources including the SWC Dry Year Program, Yuba Accord Water, return water from exchanges, new exchanges, LCID SWP water, Littlerock Reservoir water, and carryover SWP from 2020. These are expected to total approximately 9,000 AF. The current precipitation and state reservoir storage as of Tuesday, July 20, 2021 are as follows:





## SELECTED WATER SUPPLY RESERVOIRS

Midnight: July 19, 2021



Updated 07/20/2021 10:18 AM

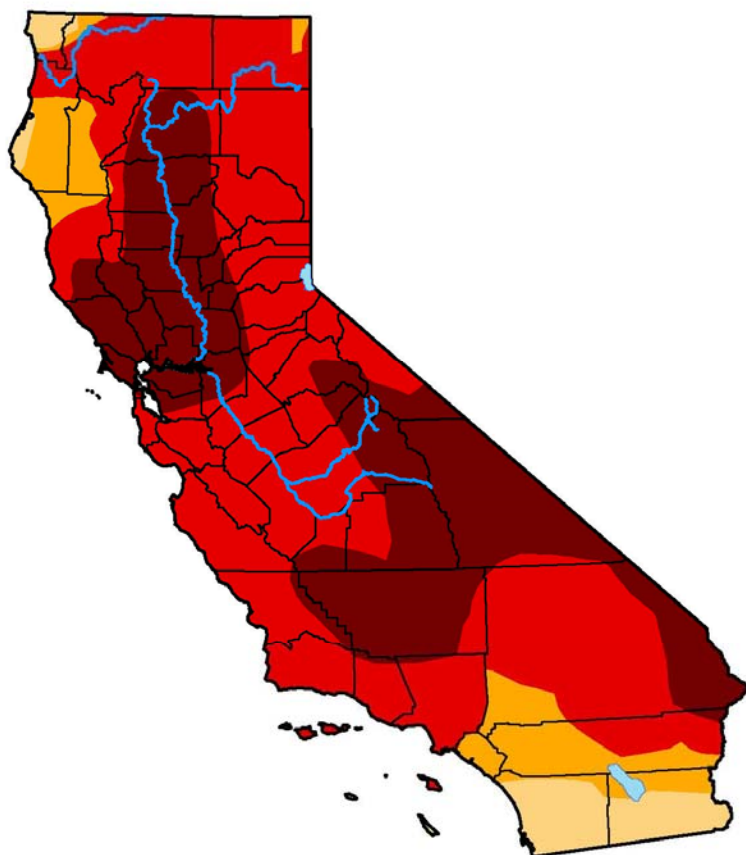


July 21, 2021

- The dry conditions shown above led to the District's implementation of its Stage 1 Water Shortage Contingency Plan in April. This stage is a request to our customers to voluntarily reduce their water use by 15%. The focus is on additional outreach, education, and coordination with the largest water users. The following map of California shows the levels of drought in the state. As can be seen, the Antelope Valley is in "Extreme Drought". Most of Kern County and the eastern Sierras are in "Exceptional Drought." This map is updated on a weekly basis and provides information that can help the District take needed steps to address the drought in the months ahead.

The 2020 Water Shortage Contingency Plan was approved by the Board in June. Under this Plan, the current 15% voluntary water use reduction is a Stage II response. Stage II consists of either voluntary or mandatory conservation when the goal is between 10% and 20%. Staff will ask the Board to formalize this soon.

## U.S. Drought Monitor California



**July 13, 2021**  
(Released Thursday, Jul. 15, 2021)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.00	100.00	100.00	94.75	85.73	33.32
<b>Last Week</b> 07-06-2021	0.00	100.00	100.00	94.73	85.44	33.32
<b>3 Months Ago</b> 04-13-2021	0.78	99.22	94.14	76.97	38.68	5.36
<b>Start of Calendar Year</b> 12-29-2020	0.00	100.00	95.17	74.34	33.75	1.19
<b>Start of Water Year</b> 09-29-2020	15.35	84.65	67.65	35.62	12.74	0.00
<b>One Year Ago</b> 07-14-2020	40.38	59.62	48.19	21.50	2.45	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

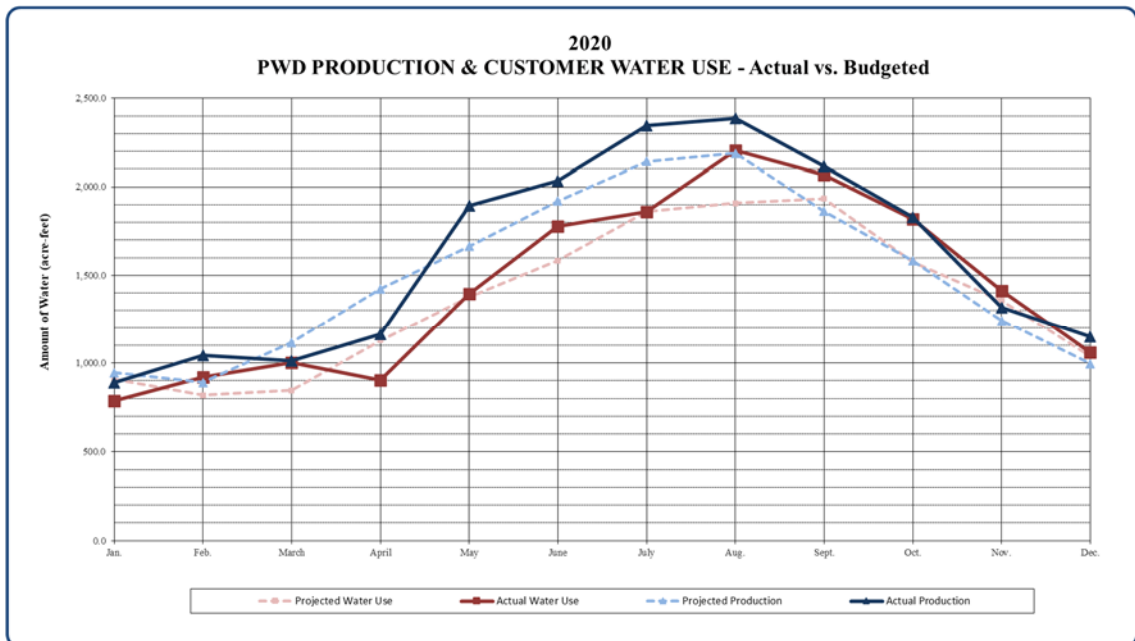
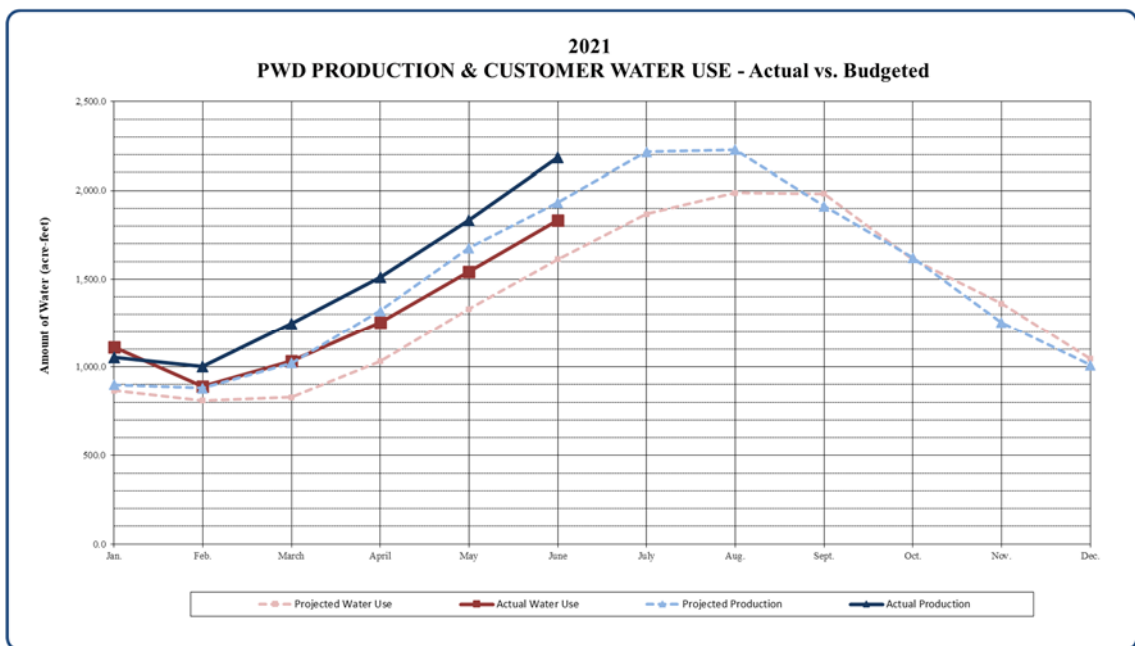
Adam Hartman  
NOAA/NWS/NCEP/CPC



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

- The following graph is the projected monthly water consumption and production for 2021 based on the prior five years of actual monthly information. The projected total consumption is based on the 2021 Budget amount of 16,341 AF. Actual amounts are shown through May with solid lines. The 2020 graph shows the projected and actual water use last year.

Customer water use in 2020 was 17,213 AF. This is the most water used by customers since 18,127 AF in 2014, before the 2015-2017 drought. The trend has continued through May 2021 with customers using 5,834.1 AF of water, a 16.4% increase over the first four months of 2020.





Other Items

- The Littlerock Reservoir Sediment Removal Project (Project) Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was fully approved in 2017. The Project consists of three phases. The Grade Control Structure is Phase 1 and was completed in January 2020.

Phase II is the removal of 1.2 million cubic yards (CY) of sediment from the reservoir. The District received a good, competitive response to the emergency 19,000 CY sediment removal project that included the disposal of the removed sediment. The interest is promising for starting Phase II of the Project later this year in the amount of about 120,000 CY. Staff sent out a request for proposals for an environmental firm to help manage all the regulatory permits and provide monitoring during the work. Next, staff will develop a multi-year contract for sediment removal, find a contractor, and recommend it to the Board for approval.

- The public review of the Draft California Environmental Quality Act (CEQA) EIR for the Palmdale Regional Groundwater Recharge and Recovery Project (PRGRRP) was completed in 2016. A test well was drilled at a different location on the proposed project site. The drilling is now complete, and it is being equipped as a monitoring well. The information learned about the aquifer show it is not adequate for the proposed project.

Stantec is contracted with the District to look at the feasibility of advanced treatment of the tertiary recycled water. If feasible, the highly treated recycled water can potentially be used in surface water or groundwater augmentation to meet the goal of adding recycled water as an additional potable water source for our customers. PRWA has also suspended work on additional purple pipe while advanced treatment is being evaluated.

- The Upper Amargosa Creek Recharge Project is complete. One contract is for the California Aqueduct turnout and transmission water main. The other is for the recharge basins. The project partners, City of Palmdale, LA County Waterworks, and AVEK, are now finalizing the operation and maintenance agreement.

The City of Palmdale recently notified the project partners about the mitigation requirements and costs. The two stages, 11.28 acres and 38.72 acres, of mitigation are being finalized with the regulatory agencies. The estimated construction costs are \$1,305,472 and \$3,100,000, respectively, and will be built several years apart. The City is planning meetings to discuss these costs and the responsibilities of the project partners.

- Delta Conveyance Facility (DCF): The State Water Contractors and the Department of Water Resources are continuing discussions about the Project's financing and operations. These discussions will result in a clearer picture of the effect on individual contractors. Staff is directly involved in these discussions and completing the Agreement in Principle.

- Delta Conveyance Design and Construction Authority (DCA): This joint power authority is responsible for the environmental, design, and engineering of the project and works with the Department of Water Resources (DWR) on the project. The Board is now reorganized with more representation from smaller agencies. This includes adding two seats for the East Branch, Class 8, of the California Aqueduct. The agencies are AVEK, PWD, Littlerock Creek Irrigation District (LCID), Mojave Water Agency (MWA), Crestline-Lake Arrowhead Water Agency, San Gabriel Valley Municipal Water District, San Bernardino Valley Municipal Water District (SBVMWD), San Geronio Pass Water Agency, Desert Water Agency, and Coachella Valley Water District (CVWD).
- A set of amendments to the State Water Project Contract was finalized in 2020. These changes provide for increased flexibility for SWP contractors to develop long-term exchanges of water within the SWP. This is beneficial for all the contractors and will help the District maintain the SWP's current level of reliability for our customers. Enough State Water Project Contractors have approved the amendment for it to be effective.

The District will work within these amendments with Littlerock Creek Irrigation District and other State Water Contractors for our customers' benefit.



### **Organizational Excellence**    *Train, Perform, Reward*

This initiative includes efforts to restructure staff duties and activities to more efficiently provide service to our customers. Recent highlights are as follows:

- Nearly 80 percent of the District staff is required to have certifications or licenses issued by the State of California. Many of these have continuing education requirements which must be met by technical training. The District provides for this in several ways including hosting classes given by the California Rural Water Association, having a training budget for staff to attend conferences, and providing an education tuition allowance for each employee.
- COVID-19 Pandemic Response: District staff initiated a draft Pandemic Response Plan on March 4, 2020 as the State of California and County of Los Angeles issued declarations of emergency. Over the next two weeks, many District events were canceled. These included the Water Ambassadors Academy third session and facility tour, Strategic Plan Workshop, director in person coffees, and all-staff lunch and meeting. The District also reduced the lobby's capacity and eventually closed it to the public due to Los Angeles County health orders. The other options to conduct business with the District, including using the website, calling Customer Care, using the automated phone system, and using remote payment sites, were promoted on social media, the website, and radio spots. The District has continued to comply with social distancing regulations by updating the

Pandemic Response Plan, rotating staff to work from home, staggering work hours, and providing non-medical face coverings for staff.

The District is beginning to transition back toward normal operations as the state and county regulations allow. In addition to appointments, the lobby was scheduled to open on Monday, July 12, 2021. Customer Care representatives will be available in the office and from home. Small meetings are being held in person.

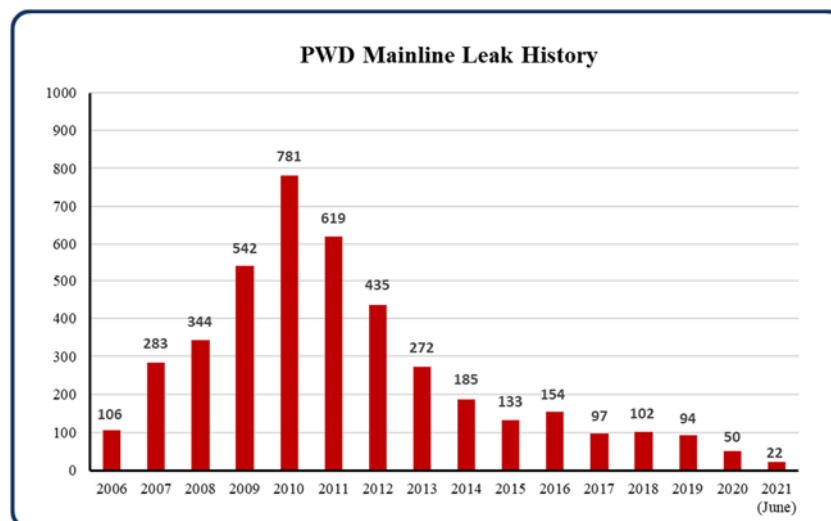
- Despite the pandemic, the District has continued to find ways for internships and training opportunities for college and high school students who are interested in the water industry.
- Work is continuing to review and update the District's job descriptions. Draft job descriptions will be vetted through the staff before being presented to the Personnel Committee and Board for adoption. The updated job descriptions will then be used as the basis of this year's salary survey with comparable water agencies.
- The Employee Handbook update is being reviewed by the District's general counsel. It will then be presented to the Ad-Hoc Committee to review and make a recommendation to the Board on its adoption.



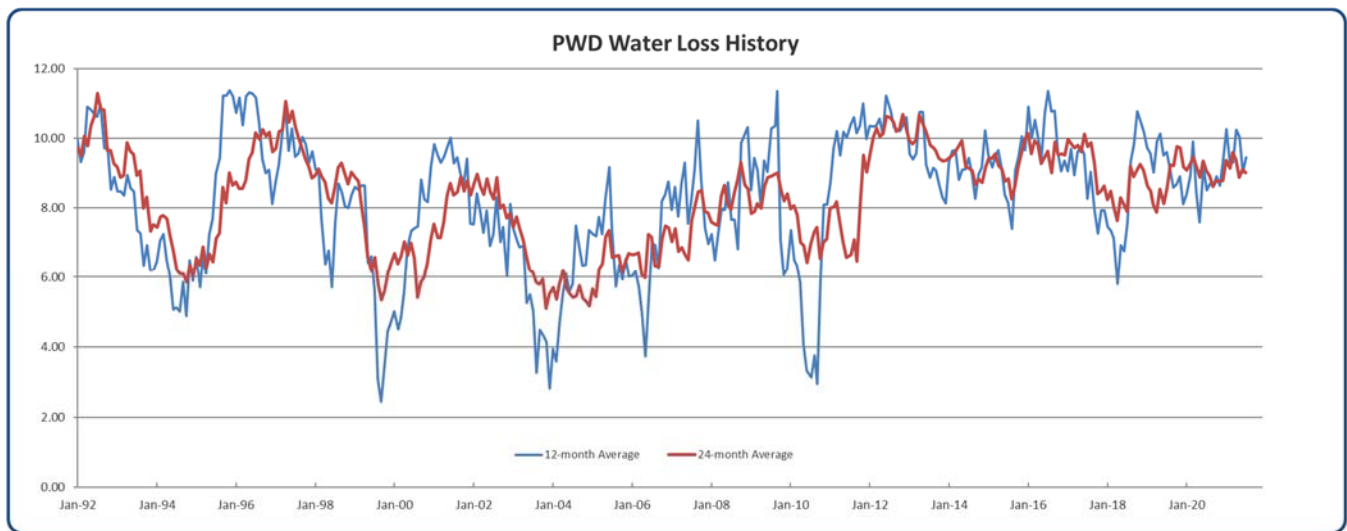
### **Systems Efficiency**    *Independence, Technology, Research*

This initiative largely focuses on the state of the District's infrastructure. Recent highlights are as follows:

- The effects of the District's past efforts in replacing failing water mains and meters can be seen in the reduced number of mainline leaks. This is illustrated in the chart titled "Mainline Leak History." The mainline leaks through June 2021 total 22, and there were 38 service line leaks.



- Additional water main replacement projects are being designed for construction as planned in the 2019 Water Rate Plan. The first project to be constructed is replacing water mains in and near Sierra Highway and Barrel Springs Road. Work on this project is expected to begin near the end of July.
- The positive effect of both water main and water meter replacement programs is shown on the chart titled “PWD Water Loss History.” The running average for water losses remains around 10%, though it is rising slightly.



- District staff is working on two energy technologies that will benefit our customers. One is the use of batteries for backup power at four booster facilities. The other is a demonstration project for the generation and storage of hydrogen from wind energy.

These programs are grant funded and managed by the California Public Utilities Commission and California Energy Commission, respectfully. The grant funds go directly to the technology providers, Tesla and DasH2Energy. Both projects involve the installation of pre-designed and assembled equipment at District facilities with minimal construction work at the sites. The approved sites are Well 5 Booster, Underground Booster, 45<sup>th</sup> Street East Booster, and the new 3M Booster Station. Construction is nearly complete at Well 5 and the Underground Booster.

- The wind turbine has been inoperable for several weeks due to a bad anemometer and the maintenance firm's unwillingness to comply with prevailing wage requirements. Staff is working on a couple fronts to resolve this. First, a maintenance contract is being negotiated with a new firm. When completed, the necessary repair parts will have a long lead time as they are only manufactured in Europe. Second, staff is looking into replacing

the wind turbine. The main considerations are maximizing the generation and availability of repair parts.



**Financial Health and Stability**    *Strength, Consistency, Balance*

- PWD and City of Palmdale staffs have worked together to obtain funding for the Palmdale Recycled Water Authority (PRWA) Phase II Project. However, PRWA will consider a change in direction to using advanced treatment for recycled water. Work on Phase II is now suspended while the advanced treatment project is studied.
- The Littlerock Sediment Removal Project was awarded nearly \$900,000 through the AVIRWMP Grant Program in the current round of funding. The approved grant for Phase II will be redistributed to other projects in the Antelope Valley. This will change the Littlerock grant to over \$1M.
- The 2019 Water Rate Study and Proposition 218 was completed when the Board unanimously approved Resolution No. 19-15. This set the water rate structure and water rates for 2020-2024 and includes criteria to evaluate the District's financial condition each year. It gives the Board the ability to reduce the water rates if the District's financial position meets four (4) of the criteria in an annual review while preparing the following year's budget.
- Fitch Ratings reviewed the District's bond rating in December 2020. The review affirmed the District's rating with them of "A+" with a stable outlook. This is a good result considering the uncertainty of unpaid water bills due to the COVID-19 shutoff moratorium. It will also be helpful for the planned bond issue this year.
- The District is seeking State and/or Federal assistance to provide water service to the Alpine Springs Mobile Home Park on Sierra Highway. It has poor water quality from its well and several health violations. Maria Kennedy, Kennedy Communications, is experienced with these programs and is contracted with the District to accomplish it.  
This activity has led to the State Water Resources Control Board to schedule a workshop about consolidations in the Antelope Valley in August. Staff will attend the workshop along with representatives from Los Angeles County LAFCO and other local agencies. The subject is also going to be studied in the Los Angeles County Water Plan. Staff is a part of that workgroup.
- The Finance Department is continuing to monitor the effect of the State's moratorium on shutoffs due to nonpayment on cash flow. The effect is fluctuating somewhat but is remaining 5% or less below what is usually expected. Customers with large outstanding

balances are being contacted to see what assistance the District can provide. Staff is also placing property liens as appropriate to help secure payment of large, outstanding bills.

- The 2019 Rate Plan called for a \$20M bond issue this year. However, the current plan is to split the \$20M into two separate bond issues with the second one in 2023. The 2021A Series \$10M bond issue was priced on June 30 with the very good result of a combined interest rate of 2.75%. It will close on July 20, 2021 and the funds will be transferred to the trustee for the District to use on projects.



### **Regional Leadership**    *Engage, Lead, Progress*

This initiative includes efforts to involve the community, be involved in regional activities, and be a resource for other agencies in the area. Recent highlights are as follows:

- Activities of the Palmdale Recycled Water Authority (PRWA), AV Integrated Regional Water Management Plan (IRWMP), and Antelope Valley State Water Contractors Association have continued. The District has leadership positions in these organizations.
- The PWRA Board consists of two Palmdale City Councilmembers, two PWD Board members, and a public director. The process of appointing a new public director began in December 2020 by advertising for interested members of the community. The new public member is Zakeya Anson. She took the Oath of Office at the April meeting.
- The District staff continues to share the administration of the Antelope Valley Watermaster Board (AVWB) with AVEK and related meetings.
- District staff is active in the local chambers, the transition of the AV Board of Trade and Greater Antelope Valley Economic Alliance into AV EDGE, regional human resources, and public information organizations.
- 2021 “PWD Water Ambassador Academy” (WAA) and Junior WAA are tentatively scheduled for this fall.
- The District and other members of the Public Water Agencies Group (PWAG) have hired and share the services of an Emergency Preparedness Coordinator. This approach also helped the District successfully comply with the America’s Water Infrastructure Act (AWIA) of 2018 and respond to the current COVID-19 event.
- Staff has taken a lead role in developing and implementing a valley-wide mutual aid agreement through AVSWCA.





**Customer Care, Advocacy, and Outreach**    *Promote, Educate, Support*

This initiative includes efforts to better serve our customers. Recent highlights are as follows:

- The Board approved moving forward with a new supplier, meter brand, and reading system at the first meeting in September 2020. This change moves the District toward being able to offer customers more information about their water use. The first large order of the new Neptune meters has been placed. A grant from the US Bureau of Reclamation is being sought to assist with implementing the Automated Meter Infrastructure (AMI).
- The ability to make payments at 7-Eleven and Family Dollar Store as well as all electronic forms of payment are continuing to grow due to the COVID-19 event.
- Staff successfully conducted virtual coffee meetings with Directors and their constituents, online “Let’s Talk H2O” meetings, issued regular internal and public newsletters, coordinated drive-through giveaways for customers, and monitored and maintained the District’s social media.
- Staff is beginning work with the consultant to update the public website and ensure it is fully compliant with all relevant regulations.