



**Las Virgenes – Triunfo Joint Powers Authority**  
 4232 Las Virgenes Road, Calabasas, CA 91302  
 818.251.2100



**THIS MEETING WILL BE CONDUCTED PURSUANT TO THE PROVISIONS OF THE GOVERNOR’S EXECUTIVE ORDER, N-29-20, WHICH SUSPENDS CERTAIN REQUIREMENTS OF THE RALPH M. BROWN ACT TO SUPPORT SOCIAL DISTANCING GUIDELINES ASSOCIATED WITH RESPONSE TO THE CORONAVIRUS (COVID-19) PANDEMIC. BOARD MEMBERS AND STAFF MAY PARTICIPATE IN THE MEETING BY TELECONFERENCE. THE PUBLIC IS STRONGLY ENCOURAGED TO PARTICIPATE ELECTRONICALLY AT [www.lvmwd.com/JPALiveStream](http://www.lvmwd.com/JPALiveStream).**

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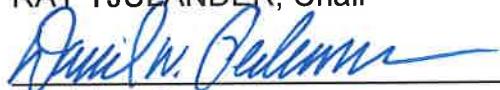
Call and Notice of Special Meeting of the Governing Board of the  
 Las Virgenes – Triunfo Joint Powers Authority

A Special Meeting of the Governing Board of the Las Virgenes – Triunfo Joint Powers Authority (JPA) is hereby called, and notice of said Special Meeting is hereby given for **9:00 a.m. on Wednesday, June 16, 2021**, at Las Virgenes Municipal Water District, 4232 Las Virgenes Road, Calabasas, California 91302, to consider the following:

PLEDGE OF ALLEGIANCE

1. Call to Order and Roll Call
2. Approval of Agenda
3. Public Comments
4. Pure Water Project Las Virgenes-Triunfo Program Implementation Plan Workshop
5. Adjourn

By Order of the Board of Directors  
 RAY TJULANDER, Chair



David W. Pedersen, P.E.  
 Administering Agent/General Manager

Dated: June 9, 2021

**Ray Tjulander**  
 Chair, Las Virgenes-Triunfo  
 Joint Powers Authority  
 Chair, Triunfo Water & Sanitation District  
 Board of Directors

**Jay Lewitt**  
 Vice Chair, Las Virgenes-Triunfo  
 Joint Powers Authority  
 President, Las Virgenes Municipal Water District  
 Board of Directors

**LAS VIRGENES - TRIUNFO  
JOINT POWERS AUTHORITY  
AGENDA**

**4232 Las Virgenes Road, Calabasas, CA 91302**

**June 16, 2021, 9:00 AM**

Public Participation for Meetings of Las Virgenes - Triunfo Joint Powers Authority in Response to COVID-19

On March 4, 2020, Governor Newsom proclaimed a State of Emergency in California as a result of the threat of COVID-19. On March 17, 2020, Governor Newsom issued Executive Order N-29-20 (superseding the Brown Act-related provisions of Executive Order N-25-20 issued on March 12, 2020), which allows a local legislative body to hold public meetings via teleconferencing and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body. Pursuant to Executive Order N-29-20, please be advised that members of the Las Virgenes - Triunfo Joint Powers Authority Board of Directors will participate in meetings via teleconferencing.

**PUBLIC PARTICIPATION:** Pursuant to Executive Order N-29-20 and given the current health concerns, this meeting is being conducted via Zoom Webinar and all attendees are muted by default. To join via computer, please use the following Zoom Webinar ID:

Webinar ID: <https://us06web.zoom.us/j/84774049489>

To join by telephone, please dial (669) 900-6833 or (346) 248-7799 and enter Webinar ID: 847 7404 9489

For members of the public wishing to address the Board during Public Comment or during a specific agenda item, please press "Raise Hand" if you are joining via computer, or press \*9 if you are joining via phone.

Members of the public can also access and request to speak at meetings live on-line, with audio and limited video, at [www.LVMWD.com/JPALiveStream](http://www.LVMWD.com/JPALiveStream). In addition, members of the public can submit written comments electronically for consideration at [www.LVMWD.com/JPALiveStream](http://www.LVMWD.com/JPALiveStream). To ensure distribution to the members of the Las Virgenes - Triunfo Joint Powers Authority Board of Directors prior to consideration of the agenda, please submit comments 24 hours prior to the day of the meeting. Those comments, as well as any comments received after 5:00 P.M., will be distributed to the members of the Board of Directors and will be made part of the official public record of the meeting. Contact Josie Guzman, Executive Assistant/Clerk of the Board at (818) 251-2123 or [jguzman@lvmwd.com](mailto:jguzman@lvmwd.com) with any questions.

**ACCESSIBILITY:** If requested, the agenda and backup materials will be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Any person who requires a disability-related modification or accommodation, in order to observe and/or offer public comment may request such reasonable modification, accommodation, aid, or service by contacting the Executive Assistant/Clerk of the Board by telephone at (818) 251-2123 or via email to [jguzman@lvmwd.com](mailto:jguzman@lvmwd.com) no later than 8:00 AM on the day of the scheduled meeting.

**Members of the public wishing to address the Las Virgenes-Triunfo Joint Powers Authority (JPA) Board of Directors are advised that a statement of Public Comment Protocols is available from the Clerk of the Board. Prior to speaking, each speaker is asked to review these protocols, complete a speakers' card, and hand it to the Clerk of the Board. Speakers will be recognized in the order the cards are received.**

The Public Comments agenda item is presented to allow the public to address the Board on matters not on the agenda. The public may also present comments on matters on the agenda; speakers for agendized items will be recognized at the time the item is called up for discussion.

Materials prepared by the JPA in connection with the subject matter on the agenda are available for public inspection at 4232 Las Virgenes Road, Calabasas, CA 91302. Materials prepared by the JPA and distributed to the Board during this meeting are available for public inspection at the meeting or as soon thereafter as possible. Materials presented to the Board by the public will be maintained as part of the records of these proceedings and are available upon request to the Clerk of the Board.

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## **PLEDGE OF ALLEGIANCE**

### **1 CALL TO ORDER AND ROLL CALL**

### **2 APPROVAL OF AGENDA**

### **3 PUBLIC COMMENTS**

Members of the public may now address the Board of Directors **ON MATTERS NOT APPEARING ON THE AGENDA**, but within the jurisdiction of the Board. No action shall be taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of Government Code Section 54954.2

### **4 PURE WATER PROJECT LAS VIRGENES-TRIUNFO PROGRAM IMPLEMENTATION PLAN WORKSHOP**

#### **A Review and Discussion of Program Implementation Plan (Pg. 3)**

Review and provide feedback on the key elements of the Program Implementation Plan for the Pure Water Project Las Virgenes-Triunfo.

### **5 ADJOURNMENT**

Pursuant to Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and applicable federal rules and regulations, requests for a disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the Executive Assistant/Clerk of the Board in advance of the meeting to ensure availability of the requested service or accommodation. Notices, agendas, and public documents related to the Board meetings can be made available in appropriate alternative format upon request.

June 16, 2021 JPA Board Meeting

TO: JPA Board of Directors

FROM: Engineering and External Affairs

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**Subject : Review and Discussion of Program Implementation Plan**

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**SUMMARY:**

The Program Implementation Plan (PIP) will provide the comprehensive programmatic delivery framework for the suite of projects and studies that comprise the Pure Water Project Las Virgenes-Triunfo. The PIP will establish a clear roadmap for project delivery and execution, including clarity and collaboration through planning, design, construction and commissioning to meet the objectives and vision of the JPA. The document will cover technical services, regulatory and environmental planning, finance and funding and project delivery. The PIP will also include the charter, program management plan, readiness assessment, delivery approaches, regulatory strategy, environmental/CEQA strategy, public outreach strategy, risk assessment and cost-loaded baseline schedule with affordability curve. Once approved, the PIP will be foundational for successful completion of the Pure Water Project Las Virgenes-Triunfo.

The Program Implementation Plan workshop is intended to review the key elements of the draft PIP and seek feedback from the JPA Board on the preliminary recommendations contained in the document. Based on the discussion and feedback received during the workshop, a final PIP will be prepared and presented to the JPA Board for adoption on July 5, 2021. Adoption of the PIP will serve as a key milestone to transition to implementation of the actions to advance the next phases of the Pure Water Project Las Virgenes-Triunfo. Attached for reference is a copy of the Pure Water Project Las Virgenes-Triunfo Program Implementation Plan Executive Summary.

**RECOMMENDATION(S):**

Review and provide feedback on the key elements of the Program Implementation Plan for the Pure Water Project Las Virgenes-Triunfo.

**FISCAL IMPACT:**

No

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

There is no financial impact associated with this action.

Prepared by: Eric Schlageter, P.E., Principal Engineer

**ATTACHMENTS:**

Program Implementation Plan Executive Summary



# PURE WATER PROJECT LAS VIRGENES-TRIUNFO

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Bringing Our Water Full Circle

## Program Implementation Plan Executive Summary

Prepared by

**Jacobs**

Las Virgenes - Triunfo Joint Powers Authority

June 2021

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# 1. Executive Summary

## 1.1 Purpose of the Program Implementation Plan

The purpose of the Program Implementation Plan (PIP) is to set the foundation and provide overall guidance to the Program Management Team (PMT) to successfully implement the Las Virgenes - Triunfo Pure Water Project (PWP or Program). Las Virgenes Municipal Water District (LVMWD) is the administering agent of the Las Virgenes - Triunfo Joint Powers Authority (JPA). The PMT comprises LVMWD staff; Triunfo Water & Sanitation District (TWSD) staff; and the Jacobs Team, consisting of staff from Jacobs, Woodard & Curran, and Katz & Associates. The Jacobs Team serves as the Owner's Agent and Program Manager Advisor and will assist the JPA with management and delivery of the Program, working with design consultants and construction contractors contracted directly by LVMWD.

Programmatic delivery is based on a broad and encompassing management approach to achieve benefits through delivery of identified projects by addressing technical, environmental, regulatory, delivery, and financial elements. The PIP is intended to accomplish the following objectives:

- Identify approaches, develop strategies, and define requirements for all aspects of Program delivery.
- Define the Program implementation processes, which include communication, management approaches, project execution, and overall Program strategy.
- Define approaches, strategy, and results for this phase of the Program, including the elements on Figure 1-1.

The PWP is a unique opportunity to proactively address three major challenges facing the JPA:

- 1) Comply with more stringent regulatory requirements for discharging to Malibu Creek
- 2) Balance the seasonal variations of recycled water demand
- 3) Create a valuable resource to supplement the region's water supplies, enabled by California's 2018 SBDDW-16-02 Surface Water Augmentation (SWA) Regulations.

The fundamental plan, as shown in Figure 1-2, is to build an advanced water purification facility (AWPF) to treat tertiary effluent from the Tapia Water Reclamation Facility (TWRF) for indirect potable reuse (IPR), and convey the purified water to the Las Virgenes Reservoir, where it will be blended with Metropolitan Water District of Southern California (MWD) supply. The water from the Las Virgenes Reservoir will then be treated at the Westlake Filtration Plant (WFP) prior to distribution.

Additionally, pipelines will be constructed to extend the recycled water pipeline from the TWRF to the AWPF, convey purified water from the AWPF to the Las Virgenes Reservoir, and convey reverse osmosis (RO) concentrate to the Calleguas Salinity Management Pipeline (SMP) for ocean discharge. This plan must be achieved by 2030 to meet National Pollutant Discharge Elimination System (NPDES) permit requirements for TWRF.

The TWRF will provide treated tertiary effluent to the new, 7.5 million gallons per day (mgd) AWPF. The 12 mgd WRF currently produces approximately 7.5 mgd of tertiary effluent in the winter months. However, there is no available effluent flow in the summer months due to the effective non-potable reuse program. Seasonal variation in flow to the AWPF will complicate operations and create an underused asset for half of the year. Achieving a steady state operation for the AWPF would improve systemwide operational



Figure 1-1. Components of the PIP



efficiency and continuously produce the valuable product of purified water. In support of this goal, the PWP is conducting a water augmentation evaluation to identify and evaluate feasible options for augmenting sources of influent water to the Tapia WRF and/or directly to the AWP. The results of this evaluation will be considered as the conceptual design for the PWP progresses.



**Figure 1-2. Pure Water Project Overview**

TWSD will receive its share of the resulting purified water through an exchange via an interconnect with Calleguas Municipal Water District (CMWD). While complex, the Program is exciting and offers an array of opportunities to the JPA that will enhance plant operations, contribute to ecosystem protection, offer community benefits, and promote sustainable solutions.

## 1.2 Programmatic Approach, Benefits, and Objectives

The Program is a complex set of individual projects that must be delivered in a coordinated fashion to achieve the vision, mission, goals, and intended benefits for the JPA. Important to successful Program management is to translate the JPA’s vision for the PWP and its corporate governance into a series of Program governance approaches, which are the foundation for Program delivery approaches, as shown on Figure 1-3.

*PWP Vision Statement: A sustainable partnership to bring water full-circle through commitment, collaboration, trust, transparency, innovation and environmental stewardship; resulting in a cost-effective and regulatory compliant local water source that is seen by the public as best in the industry.*



**Figure 1-3. Translating Vision and Governance to Delivery**

## 1.2.1 Primary Program Objectives

Programmatic services will be provided to achieve the following primary objectives:

- Incorporate the JPA’s vision and target goal of having a new AWPf operational by 2030
- Deliver the Program within established budgets and schedules
- Deliver the Program to manage risk, changes, and quality, and enhance earlier project delivery cost certainty

The PMT will provide leadership, management, and direction on all aspects of Program delivery to achieve these objectives and to meet required regulatory requirements and financial milestones. The PMT will engage experts and the technical team to assist in delivery, financial, environmental, regulatory, and public outreach support as needed.

## 1.3 Summary of Each Program Component

### 1.3.1 Chartering Benefits and Results

Chartering is the first major step in establishing a meaningful collaborative governance structure for Program delivery, focusing on an integrated One Team framework. Chartering involves a series of workshops to build relationships and clearly establish expectations, Program vision and mission, Program goals, critical success factors (CSFs), and roles and basic responsibilities. Chartering is a critical element for Program success. Establishing these items early sets the tone for the entire Program effort; however, chartering is not a one-time effort. It is an engagement of delivery resources throughout the life of the Program.

The chartering process is designed to set the stage for successful resource interaction and maturation for a high-performing team that efficiently produces effective results and can handle decision making, change, and challenges both smoothly and gracefully. Experience has shown that early engagement by the entire resource team in establishing these basic performance expectations sets the effort on the appropriate pathway to team and Program delivery success.

The Chartering Poster in Figure 1-4 shows the results of our workshops together. In addition to the tangible outcome is a new clarity of the shared vision and strengths of the team members to work together to achieve those goals. Program Management Plan Benefits and Results

The Program Management Plan (PMP) provides accountability, consistency, and transparency to the Program team by establishing the Program’s policies and procedures, decision-making authority, and performance metrics. The PMP is divided into sections that outline the strategies, responsibilities, processes, key performance indicators (KPIs), and templates to deliver the overall Program and its individual projects.

By setting the foundation for how the JPA, LVMWD, TWSD, Jacobs Team, and future consultants and contractors will interact and communicate on the Program early, transparency is increased and all contributors are aligned to the main objectives of the PWP. Establishing expectations for deliverables, risk and change management, schedule and budget reporting, and document management will result in team



Figure 1-4. Chartering Poster

clarity and delivery consistency and value. Clearly defining requirements for quality, safety, risk monitoring, and communication provide overall accountability through all phases of the Program.

The resulting PMP will be accessible through the Program Delivery Portal (Portal) to the members of the PMT (Figure 1-5). It is a living document and will be updated to reflect additional information or as changes occur.



**Figure 1-5. Project Management Plan on the Portal**

### **1.3.2 Readiness Assessment Benefits and Results**

The Readiness Assessment provided an objective perspective of the status of the PWP by identifying gaps in the baseline project definition and strategy established by previous planning studies, potential roadblocks that could impede progress, and an array of potential priorities for JPA’s consideration to set the PWP foundation. The main objectives of the Readiness Assessment included:

- Provide best value for JPA capital investment for current regulatory compliance
- Consider future-proofing facilities for pending regulatory requirements and ongoing Southern California drought impacts
- Understand PWP uncertainties to Program costs, schedule, and risk management
- Develop an integrated strategy for JPA facilities to increase operation and maintenance (O&M) flexibility and system storage, and best manage water resources in the service area

The purpose of the Readiness Assessment was to define the Program uncertainties to help guide the technical, regulatory, environmental, and financial efforts for the next 18 months. The team plans to focus the technical studies to address many of these uncertainties and include the results and recommendations in the AWP design criteria package and conveyance alignment studies.

The Readiness Assessment evaluated the following elements:

- Tapia Water Reclamation Facility
- Advanced Water Purification Facility
- Las Virgenes Reservoir
- Westlake Filtration Plant

- Concentrate (brine) stabilization
- Conveyance alignments

For each element, a set of recommendations were summarized to provide a roadmap for finalizing treatment concepts and alignments over the next 18 months. The main considerations brought forward during this assessment as recommendations for a modified baseline project include:

- Planning for higher pathogen log reduction credits to support a revised reservoir operating strategy with water augmentation
- Mitigating California Toxics Rule (CTR)-regulated disinfection by-products (DBPs), N-nitrosodimethylamine (NDMA), and brominated trihalomethanes (THMs)
- Purified water polishing prior to discharge to the reservoir
- Defining architectural theme and building programming
- Determining mitigation and control strategies for brine scaling
- Mitigating algal growth at the reservoir
- Determining the AWPf's impact on the existing recycled water system and better alignment approaches to mitigate impacts
- Managing excess recycled water and AWPf emergency discharge options

By identifying these requirements early, the team will be able to address the technical issues and recommend treatment and conveyance alignment strategies early in the design process. This approach provides the technical feasibility and cost implication for each potential system requirement to allow the JPA to make the most informed decision. The team will leverage the performance and testing at the Demonstration Facility to refine site-specific design criteria and facility needs, align the regulatory strategy through focused discussions with the regulators, and make conscientious decisions to provide the best value for capital investment.

### **1.3.3 Project Delivery Approaches Benefits and Results**

The purpose of evaluating different project delivery approaches is to provide prompt and effective acquisition of PWP products, materials, engineering services, and construction contracts. The recommended approach will achieve the goals of the Program, in accordance with the spirit and requirements of the LVMWD Code, LVMWD Purchasing Policy, and JPA agreement.

For each project element of the Program, there are different considerations for project delivery. Before choosing an approach, the team reviewed common considerations with the JPA during a special session on March 8, 2021. During the workshop, the team reviewed the main project priorities for the AWPf and conveyance projects, aligning them with the JPA's comfort zone for key project drivers. These common priorities and drivers include:

- Sharing of control and risk
- Schedule
- Innovation
- Early cost certainty
- Water industry experience with delivery approach
- Contracting ease

After careful consideration of these project delivery drivers, the PMT recommends using a combination of project delivery procurement mechanisms and approaches for the PWP to provide best value for the JPA's investment.

The PMT recommends proceeding with traditional design-bid-build (DBB) for the conveyance projects because:

- The conveyance design is alignment driven and is not motivated by innovative design or construction methods.
- There will be high agency interaction and permitting, requiring strong working relationships such that LVMWD would like to maintain this oversight with the designer.
- Subsurface conditions will require focused utility research early in the design and will require more time for investigation and coordination.
- The pipelines are commodity driven.

The PMT recommends proceeding with progressive design-build (PDB) for the AWPf because:

- Early cost certainty and control will inform design decisions and help the team understand cost impacts as the design progresses.
- Innovation and collaboration will allow for design-builder creativity and JPA input on design decisions.
- This method results in the best value to capitalize on cost-effective approaches and equipment selections.
- The method allows for better constructability and optimized layout, as the workable area on the two sites is a small footprint.
- PDB provides a single contract with one team for staff to manage, given competing commitments.

The current Program expertise supports both of these approaches.

#### **1.3.4 Regulatory Strategy**

The two most important regulatory agencies for PWP permitting are the Division of Drinking Water (DDW) and the Los Angeles Regional Water Quality Control Board (Los Angeles RWQCB). Both agencies operate under state law and the delegated authority of the U.S. States Environmental Protection Agency (EPA). These agencies will regulate different aspects of the Program based on their statutory responsibilities: DDW is responsible for the regulation of public drinking water systems to provide safe water, and Los Angeles RWQCB is responsible for protecting groundwater and surface water quality in the Los Angeles region.

SWA regulations, which are applicable to the PWP, became effective in 2018. To date, only one SWA project, the City of San Diego's North City Pure Water Project serving Miramar Reservoir, has received a conditional approval letter from DDW and a NPDES permit from the San Diego RWQCB (NPDES Number [No.] CA0109398, Order No. R9-2020-0183) that implements the DDW-imposed discharge requirements.

The PWP will need the following two permits:

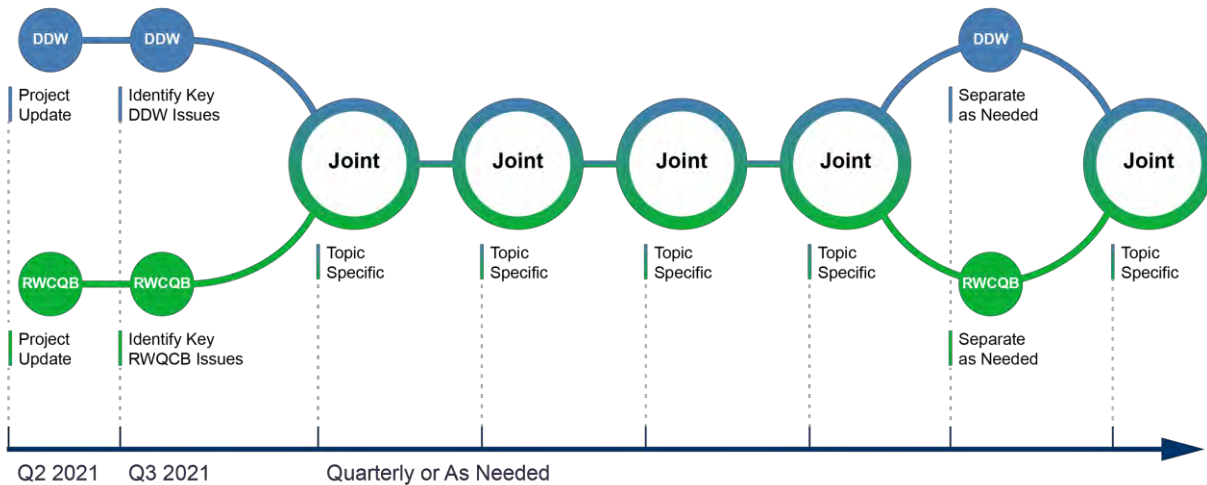
- 1) The Water Supply Permit Amendment issued by DDW, which regulates the withdrawal of water from Las Virgenes Reservoir for potable use
- 2) The NPDES permit issued by Los Angeles RWQCB, which regulates discharges to Las Virgenes Reservoir

To achieve this end goal, the main focus of the regulatory strategy is to understand and define the requirements that will govern the detailed PWP designs. The strategy includes the following components:

- Provide effective and efficient level of treatment to meet DDW requirements considering operational complexity
- Apply a multipronged strategy to address CTR-regulated compounds

- Enhance dilution in Las Virgenes Reservoir during the summer
- Leverage AWPf Demonstration Project and Independent Advisory Panel (IAP) results, insights, and inputs
- Collaborate early and continuously with regulators to develop workable and acceptable permit language

The PMT plans to initiate the permitting process with DDW and RWQCB over the next 18 months with regular meetings to align the technical approach (Figure 1-6). The regulatory compliance goal for the PWP is to provide a “regulatory standard practice” that expedites RWQCB and DDW permitting, and provides PWP operational flexibility with minimum compliance costs.



**Figure 1-6. Regulatory Meeting Approach**

### 1.3.5 Environmental (CEQA) Strategy

A Programmatic Environmental Impact Report (PEIR) provides early benefits and communication opportunities. A PEIR analyzes the PWP project portfolio and determines broad environmental effects. This approach allows the JPA (Lead Agency) to approve of the entire Program, even as some of the Program’s projects are still in concept development and design. This PEIR strategy provides overarching coverage or “an umbrella” for many of the key PWP projects and associated components.

The PEIR approach:

- Allows significant design flexibility – as concepts move to detailed designs, conveyance alignment selections are made, and regional partnership agreements are formed
- Provides regulatory environmental and permitting inputs, compliance requirements, and mitigation needs
- Is used for state and federal low-interest loans and Local Resource Program applications
- Allows internal and external stakeholders and local and regional communities to see PWP’s benefits, overall impacts, and mitigation needs
- Provides a Programmatic Delivery Platform without having to complete detailed, individual project CEQA analysis during conceptual designs
- Allows future project-specific environmental review, as required

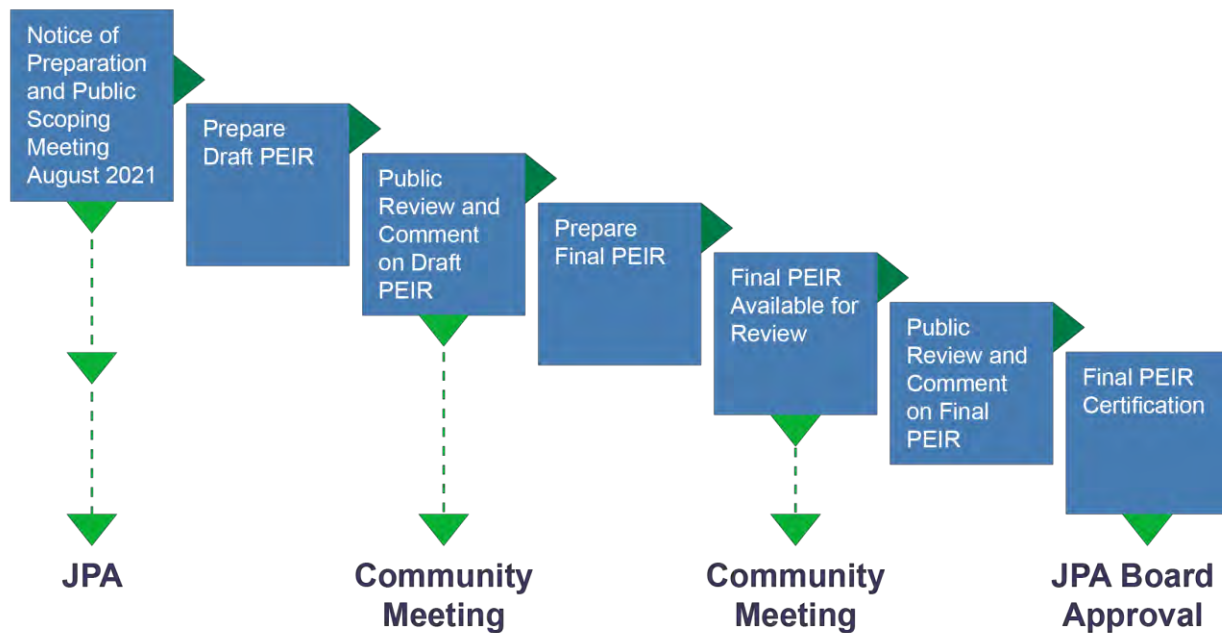
A certified PEIR demonstrates compliance with CEQA by evaluating and publicly disclosing a program’s potential environmental impacts. The PEIR is required to meet a Lead Agency’s CEQA obligations and

must be completed and certified before construction of individual projects. The PEIR is also required before discretionary permits can be issued by local or state agencies, such as California Department of Fish and Wildlife or the RWQCB. This document is also a critical prerequisite for governmental applications for low-interest loan programs, such as the EPA's Water Infrastructure Finance and Innovations Act (WIFIA) and State Revolving Fund (SRF) programs, and MWD's Local Resources Program.

For development of the Program description and resource needs, the team's current assessment of focus areas include:

- **Conveyance Alignment and Construction Details.** Various conveyance elements require definition for full project coverage in the PEIR, including selection of the preferred alignment, basic alignment plan and profile sheets (for example, pipe centerline), and construction methods.
- **Alternatives Definition.** The PEIR should consider alternatives at multiple levels, including alternatives to the PWP itself and a No Project Alternative. However, this requires an explanation of what would happen in the absence of the PWP—an important opportunity to discuss long-term water supply reliability within the Program area and concerns under the NPDES permit requirements.
- **Cultural Resources.** The Program area has moderate sensitivity for archaeological resources and low sensitivity for historic (built environment) resources.
- **Public Outreach and Communications.** The CEQA process requires various notification processes that, although focused on agency outreach, provide an important outreach opportunity to all stakeholders and the general public. Katz & Associates will coordinate to confirm that all required CEQA legal and regulatory obligations are met, but that the legal and regulatory obligations do not override meaningful engagement.
- **Construction Impacts to Public.** PWP construction activities will be noticeable and will require evaluation in the PEIR. For the AWP site, nuisance impacts to the adjacent properties will include noise and dust from all onsite construction activities. All PWP conveyance elements will have traffic and noise impacts.
- **Rare Plants and Oak Tree Removal.** The Agoura Road AWP site and the discharge pipeline alignment near Las Virgenes Reservoir present special challenges regarding protected resources, primarily removal of oak trees (loss of oak woodland habitat) and several species of obscure (and hard to identify) rare plants.
- **Discharges to Malibu Creek.** California Water Code Section 1211 requires a Change Petition when water reuse projects result in changes to the amount of water discharged to an inland waterway. Implementing the PWP will result in a decrease in discharges from the TWRF into Malibu Creek; therefore, the JPA will be required to file a Change Petition with the State Water Resources Control Board (SWRCB) Division of Water Rights.

Figure 1-7 illustrates the required process for CEQA document review and adoption, starting with scoping and ending with PEIR certification and project approval by the JPA Board. Nested within each step are critical meetings with agency reviewers and the general public. The environmental leads will collaborate with PMT and Katz & Associates so that the Program information to be shared publicly is developed to an appropriate level and presented in a way that fosters understanding of the PWP and its expected benefits and potential adverse effects (for example, construction disruptions) that we are addressing in the PEIR.



**Figure 1-7. PEIR Process and Public Engagement**

### 1.3.6 Public Outreach Strategy

All JPA Board and PWP staff are communication ambassadors. The team will support the general public outreach for the Program, while focusing on supporting the specific needs of the CEQA process.

PWP communication objectives include the following:

- Implement a public outreach program that transparently explains the PWP, the high quality and safety of the water it produces, and its benefits
- Provide consistent and complete information to stakeholders, including multicultural communities, so there are no surprises throughout the multiphased development process
- Foster understanding and acceptance of the science and advanced technology behind recycled water and IPR
- Minimize confusion, opposition, and discomfort with IPR
- Confirm consistency of information among all representatives and spokespersons
- Support the CEQA process with formal public engagement and communication

The main public outreach strategy includes:

- Balancing anticipated challenges with PWP opportunities and strengths
- Leveraging proven solutions, including facts, and matching the correct level of science for the audience
- Leveraging JPA benefits in already knowing the audience, and addressing information and communication needs using established pathways
- Maintaining consistent messaging using PWP branding materials, facts, and supporting scientific information
- Using successful peer applications and proven experiences when facing challenges



- Engaging and informing stakeholders throughout the PWP delivery life cycle and before key milestones, JPA actions, and major environmental documentation approvals

### 1.3.7 Risk Assessment Approach to Support Program Contingency

Managing risks to support the PWP at the lowest possible cost, with the fewest adverse environmental or human health impacts, and according to the defined schedule are critical aspects of successful Program implementation. Risks, either threats or opportunities, need to be identified; their potential impact on performance, human health, and the environment predicted; and mitigation strategies developed for avoiding, abating, minimizing, and mitigating the risks. This strategy also includes assigning risks and risk mitigations to the proper parties for resolution, tracking, and reporting.

The PMT's approach to risk management starts at the earliest stages of a project by detecting, identifying, and managing risks that have a high probability of negatively impacting safety, quality, budget, and schedule. In the same time frame, risks that impact the entire Program must quickly be identified and follow the same procedure as project-specific risks. Project- and Program-related risks are often different but are interconnected through cost and schedule impacts. In addition, opportunities will be identified, tracked, and managed using a similar approach to risks.

The Program is using an organized, systematic, decision-making process that identifies, assesses, evaluates, and prioritizes risk uncertainties identified as a threat to Program or project objectives. The risk management process has been initiated with development of the baseline cost-loaded schedule, will be updated as each project is initiated, and managed through the life of the Program.

Figure 1-8 shows the five basic steps of the risk management approach.

The Risk Register is the backbone of the risk management process and the mechanism to identify, assess, and document each project and Program risk to track significant threats and opportunity elements. The PMT held four Risk Management Workshops to initiate Risk Register development through identification, qualitative analysis, and quantitative analysis of risks. A Monte Carlo quantitative cost risk analysis estimated a \$79 million potential cost impact if identified risks are not mitigated. The results ranged from \$9 to 27 million for the planning, detailed design, procurement, construction, and operations phases. Based on the assessment and critical phase values, the PMT has elected to carry \$20 million in Program risk contingency.

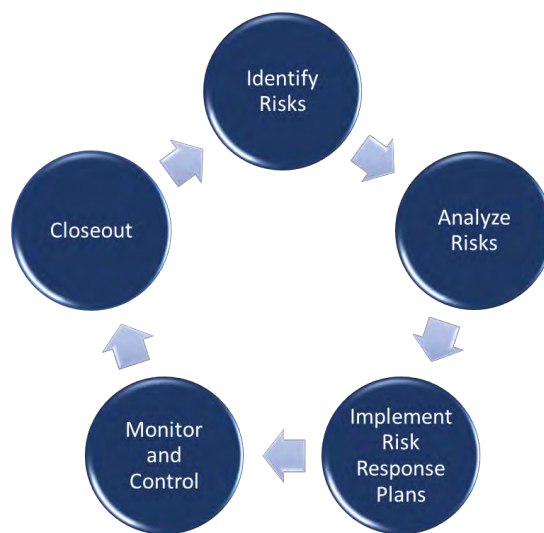


Figure 1-8. Risk Assessment Overview

### 1.3.8 Cost and Schedule

The Jacobs Team developed an independent cost estimate for the PWP to include capital costs, soft costs, and O&M costs, considering the recommendations from the Readiness Assessment. The baseline cost represents the elements in the baseline project, and the outcomes from the Readiness Assessment are included in the cost estimated for the other potential system requirements in Table 1-1. The results of the risk assessment established the risk contingency. The need for the other potential system requirements will be confirmed through technical evaluation, leveraging of the Demonstration Facility, and alignment of the regulatory strategy through the work to be completed over the next 18 months of Phase 1. Annual O&M costs (2021) are estimated at \$4.09 million for a production rate of 3,360 acre-feet per year, assuming operation at capacity for 6 months of the year.

**Table 1-1. Independent Cost Estimate**

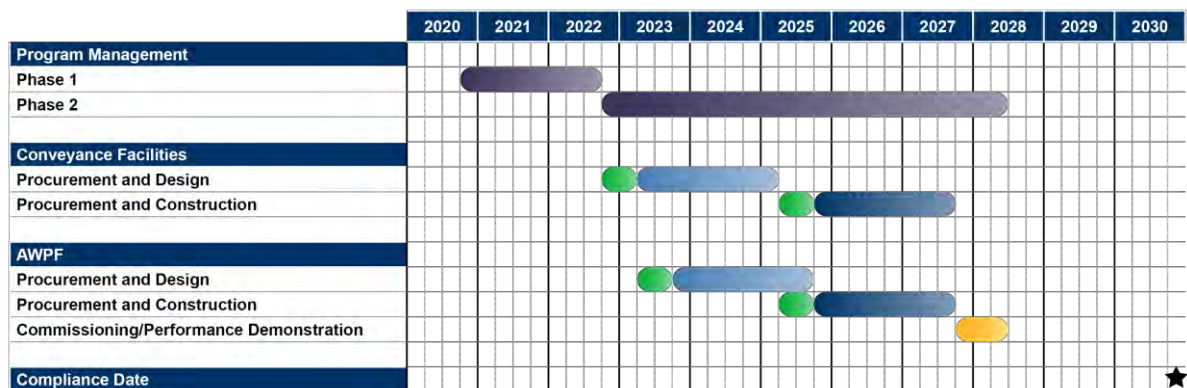
Parameter	Updated PWP Baseline Estimate (\$)	Other Potential System Requirements (\$)
Construction		
AWPF	79,000,000	45,100,000
Conveyance	65,100,000	7,200,000
Reservoir	2,740,000	1,300,000
Subtotal Construction <sup>a</sup>	147,000,000	53,600,000
Subtotal Soft Costs (Administration, Engineering, Construction Management, Permitting)	52,800,000	19,300,000
Escalation <sup>b</sup>	36,600,000	13,400,000
Program Contingency	20,000,000	--
<b>Total Estimated Capital Cost (YR2027\$)</b>	<b>256,000,000</b>	

<sup>a</sup> Includes 30 percent contingency.

<sup>b</sup> Assumes an inflation rate of 3% and midpoint of construction in December 2026.

The Jacobs Team also evaluated the cash flow expectations through the development of a cost-loaded schedule. The findings demonstrated that alternative funding, such as low-interest loans and reimbursement programs, are crucial to the Program’s affordability.

The preliminary PWP schedule is summarized in Figure 1-9 and outlines the estimated time frame for procurement, design, construction, and commissioning.



**Figure 1-9. Pure Water Project Schedule**

## 1.4 Phase 1, Programmatic Delivery

With the JPA Board approval of the PIP, the Jacobs Team will continue preparation of the technical studies to support regulatory, environmental, funding, and delivery activities for the identified projects. The team will integrate the results of the Readiness and Risk Assessments in preparing the evaluations and analysis described in this section. These efforts will further define the projects and provide cost clarity, project sequencing and scheduling, and opportunities for collaboration. Major deliverables completed and planned under Phase 1 include:

### Completed in the first 6 months:

- ✓ Chartering
- ✓ Program Delivery Portal (Portal), including Document Management System and Performance Dashboards
- ✓ PMP
- ✓ Quality Management Plan and Forms
- ✓ Change Management Plan and Forms
- ✓ Risk Management Plan and Forms
- ✓ Readiness Assessment
- ✓ Regulatory Strategy Plan
- ✓ Environmental Strategy Plan
- ✓ Public Outreach Strategy and Communication Plan
- ✓ Procurement Strategy Plan
- ✓ Cost-loaded Baseline Program Master Schedule
- ✓ PIP

### Planned for the next 18 months:

- Tailored Analytics and Comparative Techniques (TACT) Model Updates
- Funding Strategy Action Plan
- Procurement Packages for Design-Build (DB) and PDB Contracts
- Technical Studies, including:
  - Water Augmentation Strategies TM
  - Discharge 005 Capacity Analysis TM
  - Alternative Emergency Discharge Options TM
  - Reservoir Modeling and Recommendation for Air Curtain TM
  - TWRF Flow Equalization TM
  - Recycled Water Chlorination Evaluation TM
  - Integrated Operational Strategies for Westlake Filtration, TWRF, and new AWPf
  - Enhanced Source Control Plan
  - AWPf Site Evaluation TM
  - AWPf Preliminary Design Report
  - AWPf Alternative Project Delivery Specifications
  - Hydraulic Analysis TM
  - Preliminary Geotechnical (Desktop) Evaluation TM
  - Dual Direction, Multipurpose Brine Pipeline Analysis
  - Pipeline Alignment Study Report
- Environmental and Regulatory, including:
  - Notice of Preparation
  - CEQA Findings of Fact and Statement of Overriding Considerations
  - Administrative Draft and Final Program Environmental Impact Report
  - Public Draft and Final PEIR
  - List of Permitting for Program
  - Regulatory Coordination Meetings
  - Draft and Final Concept Report