

As a matter of proper business decorum, the Board of Directors respectfully request that all cell phones be turned off or placed on vibrate. To prevent any potential distraction of the proceeding, we request that side conversations be taken outside of the meeting room.

**AGENDA
REGULAR BOARD MEETING
THREE VALLEYS MUNICIPAL WATER DISTRICT**

Wednesday, September 6, 2017 at 8:00 AM

The mission of Three Valleys Municipal Water District is to supplement and enhance local water supplies to meet our region's needs in a reliable and cost-effective manner.

Item 1 – Call to Order

Kuhn

Item 2 – Pledge of Allegiance

Kuhn

Item 3 – Roll Call

**Executive
Assistant**

- Bob Kuhn, President, Division IV
- David De Jesus, Vice President, Division II
- Brian Bowcock, Secretary, Division III
- Joe Ruzicka, Treasurer, Division V
- Dan Horan, Director, Division VII
- Carlos Goytia, Director, Division I
- John Mendoza, Director, Division VI

Item 4 – Additions to Agenda *(Government Code Section 54954.2(b)(2))*

Kuhn

Additions to the agenda may be considered when two-thirds of the Board members present determine a need for immediate action, and the need to act came to the attention of TVMWD after the agenda being posted; this exception requires a degree of urgency. If fewer than two-thirds of the Board Members are present, all must affirm the action to add an item to the agenda. *The Board shall call for public comment prior to voting to add any item to the agenda after posting.*

Item 5 – Reorder Agenda

Kuhn

Item 6 – Public Comment *(Government Code Section 54954.3)*

Kuhn

Opportunity for members of the public to directly address the Board on items of public interest that is within the subject matter jurisdiction of TVMWD. The public may also address the Board on items being considered on this agenda. TVMWD requests that all public speakers complete a speaker's card and provide it to the Executive Assistant.

We request that remarks be limited to five minutes or less.

Item 7 – Board Presentations

Item 7.A – Chandler Asset Management

Representatives from Chandler Asset Management will provide the Board with an annual update of TVMWD's investment portfolio.

Item 8 – General Manager's Report

Hansen

Item 8.A – Finance-Personnel staff will provide brief updates on existing matters under their purview and will be available to respond to any questions thereof.

8.A.1 – Annual Investment Policy Review [enc]

The Board will receive an update on recommendations for revisions to TVMWD's Investment Policy and provide direction to staff for action at a future meeting.

8.A.2 – Employee Health Care Costs CY 2018 [enc]

The Board will be provided a summary of JPIA's health care premiums for the upcoming year. The Board may provide direction to staff for action at a future meeting.

Item 8.B – Administration staff will provide brief updates on existing matters under their purview and will be available to respond to any questions thereof.

8.B.1 – Redevelopment Oversight Board Appointments [enc]

The Board will be provided with the outcomes of the recent appointments to the Redevelopment Agency Oversight Boards.

8.B.2 – District Practices & Policies – What Defines TVMWD

The Board will be provided with a presentation that outlines typical practices and policies that regularly occur while providing service to our member agencies and the public.

Item 8.C – Engineering-Operations staff will provide brief updates on existing matters under their purview and will be available to respond to any questions thereof.

8.C.1 – CEQA Lead Agency for Six Basins Watermaster Strategic Plan [enc]

The Board will review information regarding a request received from Six Basins Watermaster for TVMWD to serve as its CEQA Lead Agency in their Strategic Plan. The Board may direct staff to return this item to the next meeting for action.

8.C.2 – TVMWD Grand Avenue Well [enc]

The Board will be provided with documentation for the Initial Study/Mitigated Negative Declaration (IS/MND) for the Grand Avenue Well Project.

8.C.3 – Project Summary Update [enc]

The Board will review a summary update of ongoing projects.

Item 9 – Closed Session

Kuhn

9.A Conference with Real Property Negotiators *[pursuant to Government Code Section 59456.8]*

- Property: Baseline Road / Wiley Court, Claremont, CA, APN 8670-007-030
- District Negotiator: Richard W. Hansen, General Manager
- Negotiating Parties: Vortex Properties, Inc. / Six Basins Watermaster
- Under Negotiation: Quitclaim Deed / Memorandum of Understanding

9.B Conference with Legal Counsel – Existing Litigation *[pursuant to Government Code Section 59456.9(d)(1)]*

1. Chino Basin Municipal Water District v. City of Chino, et.al., State of California Court of Appeal, Fourth Appellate District, Division Two, Case No. E068640
2. San Diego County Water Authority v. Metropolitan Water District of Southern California, State of California Court of Appeal, First Appellate District, Division Three, Case Nos. A146901 and A148266
3. San Diego County Water Authority v. Metropolitan Water District of Southern California, Los Angeles County Superior Court Case No. BS169881

Item 10 – Report out of closed session

Item 11 – Future Agenda Items

Item 12 – Adjournment

Board will adjourn to a Regular Board Meeting on September 20, 2017 at 8:00 a.m.

American Disabilities Act Compliance Statement

Government Code Section 54954.2(a)



Any request for disability-related modifications or accommodations (including auxiliary aids or services) sought to participate in the above agendized public meeting should be directed to the TVMWD’s Executive Assistant at (909) 621-5568 at least 24 hours prior to meeting.

Agenda items received after posting


Government Code Section 54957.5

Materials related to an item on this agenda submitted after distribution of the agenda packet are available for public review at the TVMWD office located at, 1021 East Miramar Avenue, Claremont, CA, 91711. The materials will also be posted on the TVMWD website at www.threevalleys.com.

Three Valleys MWD Board Meeting packets and agendas are available for review on its website at www.threevalleys.com. The website is updated on Sunday preceding any regularly scheduled board meeting.



Staff Report/Memorandum

To: TVMWD Board of Directors
From: Richard W. Hansen, General Manager 
Date: September 6, 2017
Subject: Annual Investment Policy Review

<input type="checkbox"/> For Action	<input type="checkbox"/> Fiscal Impact	<input type="checkbox"/> Funds Budgeted
<input checked="" type="checkbox"/> Information Only	<input type="checkbox"/> Cost Estimate:	\$

Background:

Board policy dictates that an annual review of TVMWD’s investment policy take place. This stems from Government Code section 53646 requiring agencies to develop an investment policy and implement periodic changes that may occur in reporting requirements. If changes to the existing policy are recommended, a new resolution is issued with the Board approved recommendations.

During this last fiscal year TVMWD’s investment policy successfully completed CMTA’s (California Municipal Treasurers Association) Investment Policy Certification program.

Discussion:

Attached for Board review is a new resolution containing the most recent TVMWD investment policy (adopted September 21, 2016) with changes noted as suggested by Chandler Asset Management and CMTA. None of the changes are considered major or alter current practices.

Staff is planning to bring this item for action at the September 20th board meeting.

Strategic Plan Objective(s):

- 3.1 – Utilize and comply with a set of financial policies to maintain TVMWD’s financial health
- 3.3 – Be accountable and transparent with major decisions

RESOLUTION NO. 17-09-807 (DRAFT)

**A RESOLUTION OF THE BOARD OF DIRECTORS OF
THREE VALLEYS MUNICIPAL WATER DISTRICT
ESTABLISHING AN INVESTMENT POLICY**

1.0 POLICY

WHEREAS; the Legislature of the State of California has declared that the deposit and investment of public funds by local officials and local agencies is an issue of statewide concern; and

WHEREAS; the legislative body of a local agency may invest monies not required for the immediate necessities of the local agency in accordance with the provisions of California Government Code Sections 5922 and 53601 et seq.; and

WHEREAS; the General Manager of the Three Valleys Municipal Water District ("TVMWD") shall annually prepare and submit a statement of investment policy and such policy, and any changes thereto, shall be considered by the Board of Directors at a public meeting;

NOW THEREFORE, it shall be the policy of TVMWD to invest funds in a manner which will provide the highest investment return with the maximum security while meeting the daily cash flow demands of TVMWD and conforming to all statutes governing the investment of TVMWD funds.

2.0 SCOPE

This investment policy applies to all financial assets of TVMWD except bond funds and funds held in trust for pension and OPEB liabilities. All funds are accounted for in the annual audit.

Commented [JL1]: Assets not subject to investment policy

3.0 PRUDENCE

When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of TVMWD, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of TVMWD. Investments shall be made with judgment and care, under circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of TVMWD, which persons of prudence, discretion and intelligence exercise in the management of their own affairs; not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived. The standard of prudence to be used by investment officials shall be the "prudent investor" standard California Government Code 53600.3 and shall be applied in the context of managing an overall portfolio. Investment officers acting in accordance with

Commented [JL2]: Updated language to be consistent with California Government Code

written procedures and the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

4.0 OBJECTIVES

When investing, reinvesting, purchasing, acquiring, exchanging, selling and managing public funds, the primary objectives, in priority order, of the investment activities shall be:

1. Safety: Safety of principal is the foremost objective of the investment program. Investments of TVMWD shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. To attain this objective, diversification is required in order that potential losses on individual securities do not exceed the income generated from the remainder of the portfolio.

2. Liquidity: The investment portfolio will remain sufficiently liquid to enable TVMWD to meet all operating requirements which might be reasonably anticipated.

3. Return on Investments: The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints and the cash flow characteristics of the portfolio.

5.0 DELEGATION OF AUTHORITY

Authority to manage the investment program is derived from California Government Code 53607~~0~~, et seq. ~~By annually adopting this investment policy, Management~~ responsibility for the investment program is hereby delegated ~~by~~ the Board ~~to, who with~~ the General Manager ~~who~~ shall establish written procedures for the operation of the investment program consistent with this investment policy. Procedures should include references to: safekeeping, PSA repurchase agreements, wire transfer agreements, collateral/depository agreements and banking service contracts, as appropriate. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the ~~General Manager Board under section 6.5 of the TVMWD Policy Manual~~. The ~~General Manager Board~~ shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials. Under the provisions of California Government Code 53600.3, the General Manager is a trustee and a fiduciary subject to the prudent investor standard.

Commented [JL3]: 53607 states investment authority resides with the Board, who on an annual basis may delegate authority.

TVMWD may engage the services of one or more external investment managers to assist in the management of the TVMWD's investment portfolio in a manner consistent with the TVMWD's objectives. Such external managers may be granted discretion to purchase and sell investment securities in accordance with this Investment Policy. Such managers must be registered under the Investment Advisers Act of 1940.

6.0 ETHICS AND CONFLICTS OF INTEREST

Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution of the investment program, or which could impair their ability to make impartial investment decisions.

Employees and investment officials shall disclose to the General Manager any material interests in financial institutions with which they conduct business, and they shall further disclose any large personal financial/investment positions that could be related to the performance of the investment portfolio. Employees and officers shall refrain from undertaking any personal investment transactions with the same individual with whom business is conducted on behalf of TVMWD.

7.0 AUTHORIZED FINANCIAL INSTITUTIONS AND DEALERS

The General Manager will maintain a list of financial institutions, selected on the basis of credit worthiness, financial strength, experience and minimal capitalization authorized to provide investment services. In addition, a list will also be maintained of approved security broker/dealers selected by credit worthiness who are authorized to provide investment and financial advisory services in the State of California. No public deposit shall be made except in a qualified public depository as established by state laws.

For brokers/dealers of government securities and other investments, TVMWD shall select only broker/dealers who are licensed and in good standing with the California Department of Securities, the Securities and Exchange Commission, the National Association of Securities Dealers or other applicable self-regulatory organizations.

Before engaging in investment transactions with a broker/dealer, the General Manager shall have received from said firm a signed Certification Form. This form shall attest that the individual responsible for TVMWD's account with that firm has reviewed TVMWD's Investment Policy and that the firm understands the policy and intends to present investment recommendations and transactions to TVMWD that are appropriate under the terms and conditions of the Investment Policy. An annual review of the financial condition and registrations of qualified bidders will be conducted by the General Manager. A current audited financial statement is required to be on file for each financial institution and broker/dealer in which TVMWD invests.

All financial institutions and broker/dealers who desire to conduct investment transactions with TVMWD must supply the General Manager with the following: audited financial statements, proof of ~~FINRANASD~~ certification, trading resolution, proof of State of California registration, completed broker/dealer questionnaire, certification of having read the TVMWD's investment policy and depository contracts.

Commented [JL4]: NASD merged with NYSE's regulations committee; now known as FINRA

Selection of broker/dealers used by an external investment adviser retained by TVMWD will be at the sole discretion of the investment adviser. Where possible, transactions with broker/dealers shall be selected on a competitive basis and their bid or offering prices shall be recorded. If there is no other readily available competitive offering, best efforts will be made to document quotations for comparable or alternative securities. When purchasing new issue securities, no competitive offerings will be required as all dealers in the selling group offer those securities at the same original issue price.

Commented [GL5]: CAM recommends adding language requiring a competitive process when transacting securities wherever possible.

8.0 AUTHORIZED AND SUITABLE INVESTMENTS

TVMWD is empowered by California Government Code 53601 et seq. to invest in the following:

- a. Bonds issued by TVMWD.
- b. United States Treasury Bills, Notes and Bonds.
- c. Registered state warrants or treasury notes or bonds issued by the State of California.
- d. Bonds, notes, warrants or other evidence of debt issued by a local agency within the State of California, including pooled investment accounts sponsored by the State of California, County Treasurers, other local agencies or Joint Powers Agencies.
- e. Federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by, or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises.
- f. Bankers' acceptances otherwise known as bills of exchange or time drafts that are drawn on and accepted by a commercial bank. Purchases of bankers' acceptances may not exceed 180 days maturity or 40% of the TVMWD's money that may be invested pursuant to this policy. However, no more than 30% of TVMWD's moneys may be invested in the bankers' acceptances of any one commercial bank pursuant to this policy. They are issued by institutions which have short-term debt obligations rated "A-1" or higher, or the equivalent, by at least one NRSRO; or long-term debt obligations which are rated in the "A" category or higher, or the equivalent, by at least one NRSRO.
- g. Commercial paper of "prime" quality of the highest ranking or of the highest letter and number rating as provided for by a NRSRO. Eligible commercial paper shall have a maximum maturity of 270 days or less. TVMWD shall invest no more than 25% of its money in eligible commercial paper. TVMWD may purchase no more than 10% of the outstanding commercial paper of any single issuer. ~~Moody's Investors Service, Inc. (Moody's), Standard and Poor's (S&P), or Fitch Financial Services, Inc. (Fitch). The~~

Commented [JL6]: Updated language to be consistent with California Government Code

~~corporation that issues the commercial paper shall be organized and operating within the United States, shall have total assets greater than \$500 million and shall issue debt, other than commercial paper, if any, that is rated "A" or higher or the equivalent, by at least one NRSRO. The entity that issues the commercial paper shall meet all the following conditions in either paragraph 1 or 2:~~

- ~~1. The entity meets the following criteria:

 - ~~a. Is organized and operating in the US as a general corporation.~~
 - ~~b. Has total assets in excess of \$500,000,000~~
 - ~~c. Has debt other than commercial paper, if any, that is rated in a rating category of "A" or its equivalent or higher by an NRSRO.~~~~
- ~~2. The entity meets the following criteria:

 - ~~a. Is organized within the US as a special purpose corporation, trust, or limited liability company.~~
 - ~~b. Has programwide credit enhancements including, but not limited to, overcollateralization, letters of credit, or a surety bond.~~
 - ~~c. Has commercial paper that is rated "A-1" or higher, or the equivalent, by an NRSRO.~~~~

~~Eligible commercial paper shall have a maximum maturity of 270 days or less. TVMWD shall invest no more than 25% of its money in eligible commercial paper.~~

- h. Negotiable certificates of deposit issued by a nationally or state-chartered bank, a savings association or a federal association (as defined by Section 5102 of the Financial Code), ~~a state or federal credit union,~~ or by a ~~federally licensed or~~ state-licensed branch of a foreign bank. Purchases of negotiable certificates of deposit may not exceed 30% of TVMWD's money which may be invested pursuant to this policy.
- i. Repurchase/Reverse Repurchase Agreements of any securities authorized by Section 53601. Securities purchased under these agreements shall be no less than 102% of market value and are subject to the special limits in California Government Code 53601(i). Repurchase Agreements are subject to a Master Repurchase Agreement between TVMWD and the provider of the repurchase agreement. The Master Repurchase Agreement will be substantially in the form developed by the Securities Industry and Financial Markets Association (SIFMA). ~~The total of all reverse repurchase agreement and securities lending agreements on investments owned by TVMWD may not exceed 20% of the base value of the portfolio.~~
- j. Medium term notes, defined as all corporate and depository institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States. Notes eligible for investment under this

Commented [JL7]: Updated language to be consistent with California Government Code

Commented [JL8]: Updated language to be consistent with California Government Code

Commented [JL9]: Updated language to be consistent with California Government Code

subdivision shall be rated in the “A” category or better, or the equivalent, by a NRSRO. Purchases of medium-term notes shall not include other instruments authorized by this policy and may not exceed 30% of TVMWD’s money which may be invested pursuant to this policy.

k. ~~Shares of beneficial interest issued by diversified management companies (mutual funds) investing in the securities and obligations authorized by this policy, and shares in money market mutual funds, subject to the restrictions of California Government Code Section 53601(k). The purchase price of investments under this subdivision shall not exceed 20% of TVMWD’s investments under this policy, and no more than 10% of the portfolio may be invested in any one fund. Mutual funds and money market mutual funds that are registered with the Securities and Exchange Commission under the Investment Company Act of 1940, provided that:~~

~~1. Mutual Funds that invest in the securities and obligations as authorized under California Government Code, Section 53601 (a) to (k) and (m) to (q) inclusive and that meet either of the following criteria:~~

~~a. Attained the highest ranking or the highest letter and numerical rating provided by not less than two NRSROs; or~~

~~b. Have retained an investment adviser registered or exempt from registration with the Securities and Exchange Commission with not less than five years’ experience investing in the securities and obligations authorized by California Government Code, Section 53601 and with assets under management in excess of \$500 million.~~

~~c. No more than 10% may be invested in the shares of any one mutual fund.~~

~~2. Money Market Mutual Funds registered with the Securities and Exchange Commission under the Investment Company Act of 1940 and issued by diversified management companies and meet either of the following criteria:~~

~~a. Have attained the highest ranking or the highest letter and numerical rating provided by not less than two NRSROs; or~~

~~b. Have retained an investment adviser registered or exempt from registration with the Securities and Exchange Commission with not less than five years’ experience managing money market mutual funds with assets under management in excess of \$500 million.~~

~~c. No more than 20% of the portfolio may be invested in Money Market Mutual Funds.~~

~~3. No more than 20% of the portfolio may be invested in these securities.~~

l. Moneys held by a trustee or fiscal agent and pledged to the payment or security of bonds or other indebtedness, or obligations under a lease, installment sale, or other agreement of a local agency, or certificates of participation in those bonds, indebtedness, or lease installment sale, or other agreements, may be invested in accordance with the statutory provisions governing the issuance of those bonds, indebtedness, or lease installment sale, or other agreement, or to the extent not inconsistent

Commented [GL10]: We recommend updating mutual fund and money market mutual fund limits and language to be more consistent with CGC.

therewith or if there are no specific statutory provisions, in accordance with the ordinance, resolution, indenture, or agreement of the local agency providing for the issuance.

- m. Notes, bonds, or other obligations that are at all times secured by a valid first priority security interest in securities of the types listed by California Government Code Section 53651 as eligible securities for the purpose of securing local agency deposits having a market value at least equal to that required by California Government Code Section 53652 for the purpose of securing local agency deposits. The securities serving as collateral shall be placed by delivery or book entry into the custody of a trust company or the trust department of a bank which is not affiliated with the issuer of the secured obligation, and the security interest shall be perfected in accordance with the requirements of the Uniform Commercial Code or federal regulations applicable to the types of securities in which the security interest is granted.
- n. Any mortgage pass-through security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-backed certificate, consumer receivable pass-through certificate, or consumer receivable-backed bond of a maximum of five years maturity. Securities eligible for investment under this subdivision shall be issued by an issuer having a rating in the "A" category or higher, or the equivalent, by at least one NRSRO and rated in a rating category of "AA" or higher, or the equivalent, by at least one NRSRO. Purchase of securities authorized by this subdivision may not exceed 20% of TVMWD's money that may be invested pursuant to this policy.
- o. Supranationals, provided that issues are US dollar denominated, senior unsecured, unsubordinated, obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or Inter-American Development Bank. Securities eligible under this subdivision will be rated in the "AA" category or higher, or the equivalent, by a NRSRO. No more than 30% of the total portfolio may be invested in these securities. No more than 10% of the portfolio may be invested in any single issuer, and the maximum maturity may not exceed five years.
- p. Any other investment security authorized under the provisions of California Government Code 5922 and 53601.

9.0 INVESTMENT POOLS / MUTUAL FUNDS

TVMWD shall conduct a thorough investigation of any pool or mutual fund prior to making an investment, and on a continual basis thereafter. The General Manager shall develop a questionnaire which will answer the following general questions:

1. A description of eligible investment securities, and a written statement of investment policy and objectives.
2. A description of interest calculations and how it is distributed, and how gains and losses are treated.
3. A description of how the securities are safeguarded (including the settlement processes), and how often the securities are priced and the program audited.
4. A description of who may invest in the program, how often, what size deposit and withdrawal are allowed.
5. A schedule for receiving statements and portfolio listings.
6. Are reserves, retained earnings, etc. utilized by the pool/fund?
7. A fee schedule, and when and how is it assessed.
8. Is the pool/fund eligible for bond proceeds and/or will it accept such proceeds?

10.0 MAXIMUM MATURITIES

Such investments shall be limited to securities that at the time of the investment have a term remaining to maturity of five years or less, or as provided above. To the extent possible, investments shall be matched with anticipated cash flow requirements and known future liabilities.

11.0 PROHIBITED INVESTMENTS AND PRACTICES

TVMWD shall not invest any funds covered by this Investment Policy in inverse floaters, range notes, interest-only strips derived from mortgage pools, options and futures, or any investment that may result in a zero interest accrual if held to maturity, Also prohibited is trading securities for the sole purpose of speculating on the future direction of interest rates, purchasing or selling securities on margin, securities lending or any form of borrowing or leverage, and the purchase of foreign currency denominated securities.

12.0 REVIEW OF INVESTMENT PORTFOLIO

The General Manager shall periodically, but no less than quarterly, review the portfolio to identify investments that do not comply with this investment policy and establish protocols for reporting major and critical incidences of noncompliance to TVMWD.

13.0 MITIGATING CREDIT RISK IN THE PORTFOLIO

Credit risk is the risk that a security or a portfolio will lose some or all of its value due to a real or perceived change in the ability of the issuer to repay its debt. TVMWD shall mitigate credit risk by adopting the following strategies:

- a. TVMWD may elect to sell a security prior to its maturity and record a capital gain or loss in order to improve the quality, liquidity or yield of the portfolio in response to the market conditions or TVMWD's risk preferences; and.
- b. If securities owned by the TVMWD are downgraded to a level below the credit quality required by this Investment Policy, it shall be the TVMWD's

policy to review the credit situation and make a determination as to whether to sell or retain such securities in the portfolio. If a decision is made to retain a downgraded security in the portfolio, its presence in the portfolio will be monitored and reported quarterly to the governing board.

- c. No more than 5% of the total portfolio may be invested in securities of any single issuers, except where the issuer is the US Government, its Agencies and GSEs, an authorized Supranational issuer, or where the security is a Money Market Mutual Fund, Local Agency Investment Fund (LAIF), or other Local Government Investment Pool, or where otherwise specified in this investment policy.

Commented [MA11]: Added this statement to clarify that any other exposures above 5% authorized in the policy are permitted.

14.0 COLLATERALIZATION

All certificates of deposit must be collateralized by United States Treasury Obligations. Collateral must be held by a third-party trustee and valued on a monthly basis. The percentage of collateralizations on repurchase and reverse agreements will adhere to the amount required under California Government Code 53601(i)(2).

Certificates of Deposit (CDs). TVMWD shall require any commercial bank or savings and loan association to deposit eligible securities with an agency of a depository approved by the State Banking Department to secure any uninsured portion of a Non-Negotiable Certificate of Deposit. The value of eligible securities as defined pursuant to California Government Code, Section 53651, pledged against a Certificate of Deposit shall be equal to 150% of the face value of the CD if the securities are classified as mortgages and 110% of the face value of the CD for all other classes of security.

Collateralization of Bank Deposits. This is the process by which a bank or financial institution pledges securities, or other deposits for the purpose of securing repayment of deposited funds. TVMWD shall require any bank or financial institution to comply with the collateralization criteria defined in California Government Code, Section 53651.

Repurchase Agreements. TVMWD requires that Repurchase Agreements be collateralized only by securities authorized in accordance with California Government Code:

- The securities which collateralize the repurchase agreement shall be priced at Market Value, including any Accrued Interest plus a margin. The Market Value of the securities that underlie a repurchase agreement shall be valued at 102% or greater of the funds borrowed against those securities.
- Financial institutions shall mark the value of the collateral to market at least monthly and increase or decrease the collateral to satisfy the ratio requirement described above.
- TVMWD shall receive monthly statements of collateral.

15.0 SAFEKEEPING AND CUSTODY

All security transactions entered into by TVMWD shall be conducted on delivery-versus-payment (DVP) basis. All securities purchased or acquired shall be ~~delivered to TVMWD by book entry, physical delivery or held by a third-party custodian, designated by the General Manager and evidenced by safekeeping receipts agreement.~~

Commented [JL12]: Updated to reflect all securities held by third party custodian

16.0 DIVERSIFICATION

TVMWD will diversify its investments by security type and institution. Assets shall be diversified to eliminate the risk of loss resulting from over concentration of assets in a specific maturity, a specific issuer or a specific class of securities. No more than 5% of the total portfolio may be invested in securities of any single issuer, except where the issuer is the US Government, its Agencies and GSEs, an authorized Supranational issuer or where the security is a Money Market Mutual Fund, Local Agency Investment Fund (LAIF) or other Local Government Investment Pool, unless otherwise specified in this investment policy. Diversification strategies shall be reviewed and revised periodically. In establishing specific diversification strategies, the following general policies and constraints shall apply:

Commented [MA13]: Added this statement to clarify that any other exposures above 5% authorized in the policy are permitted.

- a. ~~Portfolio maturity dates shall be matched versus liabilities to avoid undue concentration in a specific maturity sector.~~
- ab. Maturities selected shall provide for stability of income and liquidity.
- bc. Disbursement and payroll dates shall be covered through maturities of investments, marketable United States Treasury bills or other cash equivalent instruments such as money market mutual funds.

Commented [GL14]: This statement is not needed since not all TVMWD may have funds that do not have known liabilities

17.0 INTERNAL CONTROLS

The General Manager shall establish an annual process of independent review by an external auditor. This review will provide internal control by assuring compliance with policies and procedures.

18.0 REPORTING

The General Manager shall submit to each member of the Board of Directors an investment report monthly, within 30 days after the end of the reporting period in accordance with California Government Code Section 53607. These reports will disclose, at minimum, the following information about the characteristics of the portfolio:

Commented [MA15]: This is consistent with California Government Code.

1. An asset listing showing par value, cost and independent third-party fair market value of each security as of the date of the report, the source of the valuation, type of investment, issuer, maturity date and interest rate.
2. Monthly transactions for the period.
3. A one-page summary report that shows:

- a. Average maturity of the portfolio and modified duration of the portfolio;
 - b. Maturity distribution of the portfolio;
 - c. Average portfolio credit quality; and,
 - d. Time-weighted total rate of return for the portfolio for the prior one month, three months, twelve months and since inception compared to TVMWD's market benchmark returns for the same periods;
4. A statement of compliance with investment policy, including a schedule of any transactions or holdings which do not comply with this policy or with the California Government Code, including a justification for their presence in the portfolio and a timetable for resolution.
 5. A statement that TVMWD has adequate funds to meet its cash flow requirements for the next six months.

A comprehensive annual report will be presented. This report will include comparisons of the portfolio's return to the benchmark return, suggest policies and improvements that might enhance the investment program, and will include an investment plan for the coming year.

19.0 INVESTMENT POLICY ADOPTION

The Investment Policy shall be adopted by resolution of TVMWD. Moreover, the Policy shall be reviewed on an annual basis, and modifications must be approved by the Board of Directors.

The General Manager shall establish written investment policy procedures for the operation of the investment program consistent with this policy. The procedures should include reference to: safekeeping, master repurchase agreements, wire transfer agreements, banking service contracts and collateral/depository agreements. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the TVMWD.

20.0 PERFORMANCE EVALUATION

The investment portfolio shall be designed to attain a market-average rate of return throughout budgetary and economic cycles, taking into account TVMWD's risk constraints, the cash flow characteristics of the portfolio, state and local laws and ordinances or resolutions that restrict investments.

The General Manager shall monitor and evaluate the portfolio's performance relative to market benchmark, which will be included in the General Manager's quarterly report. The General Manager shall select an appropriate, readily available index to use as a market

benchmark. ~~The current benchmark is the Bank of America Merrill Lynch 1-5 Year US Treasury/Agency Index.~~

Commented [GL16]: We recommend omitting specific benchmark information from the investment policy so that it can be changed easily if the District financial position changes along with its investment strategy.

22.0 GLOSSARY

Agencies. Shorthand market terminology for any obligation issued by a government-sponsored entity (GSE), or a federally related institution. Most obligations of GSEs are not guaranteed by the full faith and credit of the US government. Examples are:

FFCB. The Federal Farm Credit Bank System provides credit and liquidity in the agricultural industry. FFCB issues discount notes and bonds.

FHLB. The Federal Home Loan Bank provides credit and liquidity in the housing market. FHLB issues discount notes and bonds.

FHLMC. Like FHLB, the Federal Home Loan Mortgage Corporation provides credit and liquidity in the housing market. FHLMC, also called "Freddie_Mac" issues discount notes, bonds and mortgage pass-through securities.

FNMA. Like FHLB and Freddie_Mac, the Federal National Mortgage Association was established to provide credit and liquidity in the housing market. FNMA, also known as "Fannie_Mae," issues discount notes, bonds and mortgage pass-through securities.

GNMA. The Government National Mortgage Association, known as "Ginnie_Mae," issues mortgage pass-through securities, which are guaranteed by the full faith and credit of the US Government.

PEFCO. The Private Export Funding Corporation assists exporters. Obligations of PEFCO are not guaranteed by the full faith and credit of the US government.

TVA. The Tennessee Valley Authority provides flood control and power and promotes development in portions of the Tennessee, Ohio, and Mississippi River valleys. TVA currently issues discount notes and bonds.

Asked. The price at which a seller offers to sell a security.

Asset Backed Securities. Securities supported by pools of installment loans or leases or by pools of revolving lines of credit.

Average Life. In mortgage-related investments, including CMOs, the average time to expected receipt of principal payments, weighted by the amount of principal expected.

Banker's Acceptance. A money market instrument created to facilitate international trade transactions. It is highly liquid and safe because the risk of the trade transaction is transferred to the bank which "accepts" the obligation to pay the investor.

Benchmark. A comparison security or portfolio. A performance benchmark is a partial market index, which reflects the mix of securities allowed under a specific investment policy.

Bid. The price at which a buyer offers to buy a security.

Broker. A broker brings buyers and sellers together for a transaction for which the broker receives a commission. A broker does not sell securities from his own position.

Callable. A callable security gives the issuer the option to call it from the investor prior to its maturity. The main cause of a call is a decline in interest rates. If interest rates decline since an issuer issues securities, it will likely call its current securities and reissue them at a lower rate of interest. Callable securities have reinvestment risk

as the investor may receive its principal back when interest rates are lower than when the investment was initially made.

Certificate of Deposit (CD). A time deposit with a specific maturity evidenced by a certificate. Large denomination CDs may be marketable.

Collateral. Securities or cash pledged by a borrower to secure repayment of a loan or repurchase agreement. Also, securities pledged by a financial institution to secure deposits of public monies.

Collateralized Mortgage Obligations (CMO). Classes of bonds that redistribute the cash flows of mortgage securities (and whole loans) to create securities that have different levels of prepayment risk, as compared to the underlying mortgage securities.

Commercial Paper. The short-term unsecured debt of corporations.

Cost Yield. The annual income from an investment divided by the purchase cost. Because it does not give effect to premiums and discounts which may have been included in the purchase cost, it is an incomplete measure of return.

Coupon. The rate of return at which interest is paid on a bond.

Credit Risk. The risk that principal and/or interest on an investment will not be paid in a timely manner due to changes in the condition of the issuer.

Current Yield. The annual income from an investment divided by the current market value. Since the mathematical calculation relies on the current market value rather than the investor's cost, current yield is unrelated to the actual return the investor will earn if the security is held to maturity.

Dealer. A dealer acts as a principal in security transactions, selling securities from and buying securities for his own position.

Debenture. A bond secured only by the general credit of the issuer.

Delivery vs. Payment (DVP). A securities industry procedure whereby payment for a security must be made at the time the security is delivered to the purchaser's agent.

Derivative. Any security that has principal and/or interest payments which are subject to uncertainty (but not for reasons of default or credit risk) as to timing and/or amount, or any security which represents a component of another security which has been separated from other components ("Stripped" coupons and principal). A derivative is also defined as a financial instrument the value of which is totally or partially derived from the value of another instrument, interest rate, or index.

Discount. The difference between the par value of a bond and the cost of the bond, when the cost is below par. Some short-term securities, such as T-bills and banker's acceptances, are known as discount securities. They sell at a discount from par, and return the par value to the investor at maturity without additional interest. Other securities, which have fixed coupons, trade at a discount when the coupon rate is lower than the current market rate for securities of that maturity and/or quality.

Diversification. Dividing investment funds among a variety of investments to avoid excessive exposure to any one source of risk.

Duration. The weighted average time to maturity of a bond where the weights are the present values of the future cash flows. Duration measures the price sensitivity of a bond to changes in interest rates. (See modified duration).

Federal Funds Rate. The rate of interest charged by banks for short-term loans to other banks. The Federal Reserve Bank through open-market operations establishes it.

Federal Open Market Committee. A committee of the Federal Reserve Board that establishes monetary policy and executes it through temporary and permanent changes to the supply of bank reserves.

Haircut. The margin or difference between the actual market value of a security and the value assessed by the lending side of a transaction (i.e. a repo).

Leverage. Borrowing funds in order to invest in securities that have the potential to pay earnings at a rate higher than the cost of borrowing.

Liquidity. The speed and ease with which an asset can be converted to cash.

Make Whole Call. A type of call provision on a bond that allows the issuer to pay off the remaining debt early. Unlike a call option, with a make whole call provision, the issuer makes a lump sum payment that equals the net present value (NPV) of future coupon payments that will not be paid because of the call. With this type of call, an investor is compensated, or "made whole."

Margin. The difference between the market value of a security and the loan a broker makes using that security as collateral.

Market Risk. The risk that the value of securities will fluctuate with changes in overall market conditions or interest rates.

Market Value. The price at which a security can be traded.

Marking to Market. The process of posting current market values for securities in a portfolio.

Maturity. The final date upon which the principal of a security becomes due and payable.

Medium Term Notes. Unsecured, investment-grade senior debt securities of major corporations which are sold in relatively small amounts on either a continuous or an intermittent basis. MTNs are highly flexible debt instruments that can be structured to respond to market opportunities or to investor preferences.

Modified Duration. The percent change in price for a 100 basis point change in yields. Modified duration is the best single measure of a portfolio's or security's exposure to market risk.

Money Market. The market in which short-term debt instruments (T-bills, discount notes, commercial paper, and banker's acceptances) are issued and traded.

Mortgage Pass-Through Securities. A securitized participation in the interest and principal cash flows from a specified pool of mortgages. Principal and interest payments made on the mortgages are passed through to the holder of the security.

Municipal Securities. Securities issued by state and local agencies to finance capital and operating expenses.

Mutual Fund. An entity which pools the funds of investors and invests those funds in a set of securities which is specifically defined in the fund's prospectus. Mutual funds can be invested in various types of domestic and/or international stocks, bonds, and money market instruments, as set forth in the individual fund's prospectus. For most large, institutional investors, the costs associated with investing in mutual funds are higher than the investor can obtain through an individually managed portfolio.

Nationally Recognized Statistical Rating Organization (NRSRO). A credit rating agency that the Securities and Exchange Commission in the United States uses for regulatory purposes. Credit rating agencies provide assessments of an investment's risk. The issuers of investments, especially debt securities, pay credit rating agencies to provide them with ratings. The three most prominent NRSROs

are Moody's, S&P and Fitch.

Commented [GL17]: We recommend adding NRSRO to the glossary.

Premium. The difference between the par value of a bond and the cost of the bond, when the cost is above par.

Prepayment Speed. A measure of how quickly principal is repaid to investors in mortgage securities.

Prepayment Window. The time period over which principal repayments will be received on mortgage securities at a specified prepayment speed.

Primary Dealer. A financial institution (1) that is a trading counterparty with the Federal Reserve in its execution of market operations to carry out U.S. monetary policy, and (2) that participates for statistical reporting purposes in compiling data on activity in the U.S. Government securities market.

Prudent Person (Prudent Investor) Rule. A standard of responsibility which applies to fiduciaries. In California, the rule is stated as "Investments shall be managed with the care, skill, prudence and diligence, under the circumstances then prevailing, that a prudent person, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of like character and with like aims to accomplish similar purposes."

Realized Yield. The change in value of the portfolio due to interest received and interest earned and realized gains and losses. It does not give effect to changes in market value on securities, which have not been sold from the portfolio.

Regional Dealer. A financial intermediary that buys and sells securities for the benefit of its customers without maintaining substantial inventories of securities and that is not a primary dealer.

Repurchase Agreement. Short-term purchases of securities with a simultaneous agreement to sell the securities back at a higher price. From the seller's point of view, the same transaction is a reverse repurchase agreement.

Safekeeping. A service to bank customers whereby securities are held by the bank in the customer's name.

Structured Note. A complex, fixed income instrument, which pays interest, based on a formula tied to other interest rates, commodities or indices. Examples include inverse floating rate notes which have coupons that increase when other interest rates are falling, and which fall when other interest rates are rising, and "dual index floaters," which pay interest based on the relationship between two other interest rates - for example, the yield on the ten-year Treasury note minus the Libor rate. Issuers of such notes lock in a reduced cost of borrowing by purchasing interest rate swap agreements.

Total Rate of Return. A measure of a portfolio's performance over time. It is the internal rate of return, which equates the beginning value of the portfolio with the ending value; it includes interest earnings, realized and unrealized gains, and losses in the portfolio.

U.S. Treasury Obligations. Securities issued by the U.S. Treasury and backed by the full faith and credit of the United States. Treasuries are considered to have no credit risk, and are the benchmark for interest rates on all other securities in the US and overseas. The Treasury issues both discounted securities and fixed coupon notes and bonds.

Treasury Bills. All securities issued with initial maturities of one year or less are issued as discounted instruments, and are called Treasury bills. The Treasury currently

issues three- and six-month T-bills at regular weekly auctions. It also issues “cash management” bills as needed to smooth out cash flows.

Treasury Notes. All securities issued with initial maturities of two to ten years are called Treasury notes, and pay interest semi-annually.

Treasury Bonds. All securities issued with initial maturities greater than ten years are called Treasury bonds. Like Treasury notes, they pay interest semi-annually.

Volatility. The rate at which security prices change with changes in general economic conditions or the general level of interest rates.

Yield to Maturity. The annualized internal rate of return on an investment which equates the expected cash flows from the investment to its cost.

ADOPTED and **PASSED** at a meeting of the Three Valleys Municipal Water District’s Board of Directors, on this 20th day of September, 2017 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

Bob G. Kuhn, President

Brian Bowcock, Secretary

SEAL:



Staff Report/Memorandum

To: TVMWD Board of Directors
From: Richard W. Hansen, General Manager *RH*
Date: September 6, 2017
Subject: Employee Health Care Costs CY 2018

<input type="checkbox"/> For Action	<input type="checkbox"/> Fiscal Impact	<input checked="" type="checkbox"/> Funds Budgeted
<input checked="" type="checkbox"/> Information Only	<input type="checkbox"/> Cost Estimate:	\$

Background:

TVMWD’s policy requires employees to contribute 10% towards their individual medical premiums, with the following exceptions:

- Employees hired before 12/31/10 under the previous allowance method
- Single employees enrolled in Kaiser (JPIA requires 100% to be paid by TVMWD)
- Employees enrolled in Anthem Blue Cross CDHP (Consumer Driven Health Plan)
 - For employees enrolled in the CDHP, TVMWD contributes to an employee’s HSA (Health Savings Account) plan (single - \$400; two-party or more - \$800).

Employees may opt themselves and/or family members out of medical coverage with proof of comparable alternative medical coverage. The employee receives cash in the amount of 75% of the savings to TVMWD. JPIA requires that no more than 25% of TVMWD employees may opt out of medical coverage, so the opt out is on a first-come first-serve basis. For CY 2017, employees were only allowed to opt out if they had opted out the previous year.

Discussion:

In June 2017, the JPIA Executive Committee approved plan rates for 2018. Listed below is a summary of recent changes. These changes reflect the aggregate rate change and vary depending on status (single, two-party, family).

Item 8.A.2

Plan	% change 2017 to 2018	% change 2016 to 2017	% change 2015 to 2016
Anthem Blue Cross PPO	4.50%	12.00%	3.00%
Anthem Blue Cross HMO	8.26%	12.00%	-8.00%
Anthem Blue Cross CDHP	4.50%	12.00%	0.49%
Kaiser HMO	13.05%	2.41%	2.13%
Delta Dental PPO	0.00%	0.00%	-3.82%
DeltaCare HMO	0.00%	0.00%	0.00%
VSP	0.00%	0.00%	0.00%

Staff completed a survey this past winter on the medical opt out plans of other agencies. After careful evaluation, staff has concluded the cash employees receive for opting out should be reduced from 75% to 70% of the average plan cost. This will increase TVMWD's annual cost savings from \$20,000 to \$23,000, while maintaining the same dollar amounts as 2017 for the employees. The opt out will be available to all employees on a first-come first-serve basis.

Staff's recommendation is to continue the existing policy for employee's 10% contribution to health care costs and to allow opting out of the medical plan for all employees with cash back in the amount of 70% of the average plan cost.

Staff will bring this item back for board consideration at the September 20, 2017 meeting.

Attached is a summary of TVMWD's health care costs for 2018 based on the proposed policy. Open enrollment for JPIA benefits is scheduled for October 2, 2017 through November 1, 2017.

Strategic Plan Objectives

3.3 – Be accountable and transparent with major decisions

Health Care Costs 2018 - Monthly

PLAN	STATUS	Medical Cost	Dental Cost	Vision Cost	Benefits Cost	Employer Cost	Employee Cost
BC HMO	single	732.32	33.72	17.21	783.25	710.02	73.23
BC HMO	two-party	1,454.78	69.09	17.21	1,541.08	1,395.60	145.48
BC HMO	family	1,951.02	122.90	17.21	2,091.13	1,896.03	195.10
BC PPO	single	836.61	33.72	17.21	887.54	803.88	83.66
BC PPO	two-party	1,704.69	69.09	17.21	1,790.99	1,620.52	170.47
BC PPO	family	2,291.67	122.90	17.21	2,431.78	2,202.61	229.17
BC CDHP PPO	single	671.27	33.72	17.21	722.20	722.20	0.00
BC CDHP PPO	two-party	1,365.73	69.09	17.21	1,452.03	1,452.03	0.00
BC CDHP PPO	family	1,835.31	122.90	17.21	1,975.42	1,975.42	0.00
KAISER	single	607.82	33.72	17.21	658.75	658.75	0.00
KAISER	two-party	1,204.96	69.09	17.21	1,291.26	1,170.76	120.50
KAISER	family	1,700.90	122.90	17.21	1,841.01	1,670.92	170.09

Employee Cost - Employee pays 10% of medical premium, with the following exceptions:

- JPIA requires no cost for employee-only portion of least expensive medical plan (Kaiser).
- employee hired before 12/31/10 are subject to HBA (\$550 single, \$1,230 two-party, \$1,450 family)
- employee in CDHP pays no premium & receives annual contribution to HSA (\$400 single, \$800 two-party or family)

Medical Opt Out - Employee may opt themselves and/or family members out of medical coverage during open enrollment with proof of comparable alternative medical coverage. The opt out amount is 70% of the average plan cost (based on status). JPIA requires medical coverage for 75% of TVMWD employees. Cash back is not available for elected officials.

<u>Opt Out Cash Back</u>	
single	498
two-party	1,003
family	1,361



Local Agency Formation Commission
for the County of Los Angeles

Item 8.B.1

RECEIVED

AUG 8 2017

THREE VALLEYS MWD

MEMORANDUM

Commission

Jerry Gladbach
Chair

Donald Dear
1st Vice-Chair

Gerard McCallum
2nd Vice-Chair

Kathryn Barger
Richard Close
Margaret Finlay
Janice Hahn
David Ryu
David Spence

Alternate Members

Lori Brogin-Falley
Marqueece
Harris-Dawson
Sheila Kuehl
Judith Mitchell
Joseph Ruzicka
Greig Smith

Staff

Paul Novak
Executive Officer

Amber De La Torre
Doug Dorado
Michael Henderson
Alisha O'Brien
Patricia Wood

80 South Lake Avenue
Suite 870
Pasadena, CA 91101
Phone: 626/204-6500
Fax: 626/204-6507

www.lalafco.org

To: General Managers, Independent Special Districts in L.A. County
From: Paul Novak, Executive Officer
Re: **Redevelopment Oversight Board Appointments**
Date: August 24, 2017

As a follow-up to previous correspondence concerning the appointment of special district representatives to serve on the five Redevelopment Agency Oversight Boards ("RDA Oversight Boards" or "Boards") in Los Angeles County, I am writing to alert you to the outcome of the nominating process.

The appointment process is governed by Government Code Section 56332. Subsection (f)(2) of Government Code Section 55632 states: "At the end of the nominating period, if only one candidate is nominated for a vacant seat, that candidate shall be deemed appointed." At the close of the nomination period (Monday, August 21, 2017, at 5:00 p.m.), I received nominations for only one candidate for several positions.

Pursuant to Government Code Section 56332(f)(2), and for these positions, **the following candidates are hereby appointed to the respective positions:**

- | | |
|--|---|
| William "Bill" R. Rojas, La Puente Valley
County Water District | RDA Oversight Board No. 1
Voting Member |
| Anthony J. Lima, Rowland Water District | RDA Oversight Board No. 1
Alternate Member |
| Micah Ali, Compton Creek Mosquito
Abatement District | RDA Oversight Board No. 2
Voting Member |
| Catherine Houwen, Greater Los Angeles
Vector Control District | RDA Oversight Board No. 3
Voting Member |
| Theodore Ebenkamp, Walnut Valley
Water District | RDA Oversight Board No. 4
Voting Member |
| Szu Pei Lu-Yang, Rowland Water District | RDA Oversight Board No. 4
Alternate Member |
| Joseph T. Ruzicka, Three Valleys
Municipal Water District | RDA Oversight Board No. 5
Voting Member |

Item 8.B.1

RDA Oversight Board Appointments
August 24, 2017
Page 2 of 2

By contact with their respective general managers, all appointees have been notified of these outcomes.

The Los Angeles Auditor-Controller is responsible for managing and staffing the five RDA Oversight Boards, and I will therefore notify the Auditor-Controller of these appointments. It is my understanding that the Auditor-Controller will follow-up with appointees at the appropriate time.

Should you have any questions or concerns, please do not hesitate to contact me directly via e-mail (pnovak@lalafo.org) or telephone (626/204-6500) with any questions.

Thank you.



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pagination purposes

September 6, 2017

District Practices & Policies

What Defines TVMWD?



Mission Statement

The mission of Three Valleys Municipal Water District is to supplement and enhance local water supplies to meet our region's needs in a reliable and cost-effective manner.



Vision Statement

The district meets its regional water supply needs through:

- Collaboration with its member agencies to understand short/long-term needs.
- Development and implementation of a plan to address these needs in a cost-effective manner based on water conditions.
- Periodic update of the plan as needs or as major changes in water conditions occur.



Core Values

To achieve success, TVMWD bases its policies and actions on adherence to specific values:

- Teamwork
- Communication
- Customer Service
- Personal Responsibility
- Professional Integrity
- Employee Development
- Innovation
- Recognition





Adopted by the board each year, includes:

- District Mission, Vision, Core Values
- Industry Outlook, District Outlook, Goals
- Financial & Reserve Policies, Debt Mgt. Analysis
- 5-Year Capital Program & Budget Priorities

Work Plans

Prepared each year and tied to annual performance evaluations



- **General Manager Work Plan** – Activities assigned to the managers to be carried out through each department (Administration, Finance, Engineering, Operations)
- **Executive Managers Work Plan** – Activities assigned to individual managers within each department
- **Work Goals** - assigned to each department employee



Several items are carefully prepared each year.
The more visible documents include:

- The award winning Comprehensive Annual Financial Report (**CAFR**), which details the financial findings of the district in compliance with GASB requirements.
- The annual fiscal year **budget** and rate structure
- The **investment policy** is reviewed and updated to ensure safe and secure management of all district reserve funds.



Several insurance policies are in force through ACWA/JPIA, providing a variety of coverages specific to water agencies:

- **Property** - protects physical assets, such as buildings and infrastructure, vehicles, and equipment
- **Liability** - provides protection for bodily injury, property damage, errors and omissions, employment practices, fiduciary responsibilities
- **Workers Compensation** – includes coverage for injuries and lost time and includes effective loss prevention programs and claims handling

TRAINING Programs

Ongoing training is encouraged and often required of district staff.

- Target Solutions – online program to complete assigned training and review district policies, manuals and safety procedures
- Safety/Emergency – includes EOC/building evacuations, Great CA Shakeout, MWD-coordinated training, tailgate discussions, DHS, ACWA, AWWA, CSDA training sessions
- Liebert Cassidy Whitmore – legal compliance training sessions in house and through the consortium membership
- CPR/First Aid – conducted every two years for all staff

HANDBOOK Manuals

Key district manuals updated and distributed to board and staff.

- Policy – provides the governance, planning and oversight of critical district functions
- Personnel – covers the administrative and human resource functions that impact each staff member
- Benefits – overview description of major employee benefits
- Emergency/Safety – rules and procedures followed to ensure a safe & stable working environment.

Supplemental Policies



Keeping the district functioning professionally and ethically.

- [Ticket Policy](#) – provides a process for the distribution of complimentary tickets in accordance with the FPPC regulations
- [Gift Policy](#) – sets forth the guidelines for ethical conduct to be followed by all employees regarding the acceptance of gifts
- [Cell Phone Policy](#) – guidelines for the use of employee-owned cellular telephone plans utilized by employees of the District
- [iPad Policy](#) – established rules for the provision of an electronic tablet for conducting district-related business and communication

Supplemental Policies (cont.)

- Internet & Email Policy – provides an efficient and effective means of internal and external communications and to improve the overall work product
- Retirement Medical Policy – sets guidelines for the level of medical coverage for qualified retired employees of the district
- Purchasing Policy – ensures maximum use of fair and open competition and receipt of the best value for funds available





In place to standardize normal operating procedures of the district.

- Responsibilities & Authority of the G.M. – summarizes the key areas of oversight and accountability among major duties
- Request for Proposal (RFP) – a document that solicits proposals, usually via the bidding process, for planned services or projects
- Professional Services Agreement – a “blanket agreement” to contract with a consultant for a specific period of time & purpose
- Facility Tour Agreement – establishes rules and expectations for groups touring Miramar and protects the district from liability



Documents to guide the employment experience.

- Employment Application – updated periodically to capture clarity and implement the most current legal terminology
- Job Descriptions – reviewed annually for recommended format modifications and to reflect current duties and salary ranges
- Performance Evaluation Form – assessments prepared annually, reflecting adherence to core values and achievement of goals
- Employee Directory – furnished to all employees and includes contact information, policies and pertinent district information

Ongoing

PROGRAMS

Furthering the outreach practices of the district.

- Sunshine Ordinance – reviewed every couple of years to ensure easier access to public records and to strengthen open meeting laws.
- Illness & Injury Prevention Program – the IIPP is a written workplace safety program that seeks improved health and minimize costs
- Legislative Program – tracking federal/state legislation, meeting with legislators and actively taking action on bills that could impact the district
- Conservation Program – promoting public awareness through media ads, press releases, MWD-sponsored rebates and member agency driven conservation courses and educational programs
- Apprentice Program – training program for students/professionals seeking hands-on experience in treatment and distribution





Staff Report/Memorandum

To: TVMWD Board of Directors
From: Richard W. Hansen, General Manager
Date: September 6, 2017
Subject: CEQA Lead Agency for Six Basins Watermaster Strategic Plan

Form with checkboxes for: For Action, Information Only, Fiscal Impact, Cost Estimate, Funds Budgeted.

Discussion:

Over the past several years, Six Basins Watermaster (6BWM) has been developing a Strategic Plan that basin stakeholders can use to help chart out future projects and programs. The Strategic Plan is now at a stage wherein projects previously identified by the stakeholders can be presented for potential implementation. The 6BWM Board has determined that it would be beneficial to move the Strategic Plan forward with the evaluation of a set of identified projects. As part of this process, an environmental review that complies with the California Environmental Quality Act (CEQA) must be conducted.

Through the CEQA process, a public agency must act as the lead agency to offer public review and evaluation of relevant data, receive and address comments associated with the environmental assessment, and to adopt appropriate findings associated with that review. Since 6BWM is not a public agency, but rather an arm of the court, its Board of Directors have requested that Three Valleys MWD serve as the lead agency for the CEQA proceedings associated with the Six Basins Watermaster Strategic Plan.

The 6BWM administrative staff has recommended that a Programmatic Environmental Impact Report (PEIR) be the avenue that the CEQA process followed in this case. If the TVMWD Board agrees that Three Valleys will serve as the lead agency, TVMWD staff will begin coordinating with 6BWM administrative staff to undertake the necessary activities for future review, notifications, advertisements, etc. It is anticipated that 6BWM administrative staff will continue to do the bulk of the work associated with this CEQA process, and TVMWD staff will assume some of the resulting administrative and clerical tasks along the way. Any costs incurred by Three Valleys will be reimbursed by 6BWM.

Strategic Plan Objectives:

- 3.3 – Be accountable and transparent with major decisions
3.4 – Communicate TVMWD’s role in the delivery of water



Staff Report/Memorandum

To: TVMWD Board of Directors
From: Richard W. Hansen, General Manager
Date: September 6, 2017
Subject: TVMWD Grand Avenue Well

Form with checkboxes for For Action, Fiscal Impact, Funds Budgeted, Information Only, and Cost Estimate.

Discussion:

A brief status report for the Grand Avenue Well Project is provided below:

TVMWD Grand Avenue Well Project – Project No. 58446

Staff has continued to discuss and coordinate the proposed well project with the city of Claremont, LDS Church, Caltrans, LA County Fire Department, and the state’s Division of Drinking Water.

The District’s consultant has prepared the environmental (CEQA) documentation for this project which includes the initial study and mitigated negative declaration (IS & MND) that was recently completed in mid-August.

TVMWD’s engineering consultant completed the Preliminary Design Report (PDR) for the Grand Avenue Well in mid July.

Strategic Plan Objectives:

- 1.4 – Capable of delivering 10,000 AFY from local sources in case of drought or catastrophe.
2.3 – Manage water infrastructure and staff operations to minimize costs.
3.3 – Be accountable and transparent with major decisions

**INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION**
Three Valleys Municipal Water District
New Groundwater Production Well No. 4
Grand Avenue, Claremont, California
Three Valleys Municipal Water District
Proposed Grand Avenue Well



Prepared for:

Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711

Prepared by:

Stantec Consulting Services Inc.
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361



August 31, 2017

**INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
THREE VALLEYS MUNICIPAL WATER DISTRICT PROPOSED GRAND AVENUE WELL**

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INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
THREE VALLEYS MUNICIPAL WATER DISTRICT PROPOSED GRAND AVENUE WELL

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ABBREVIATIONS

AFY = Acre-Feet Per Year

AQMP = Air Quality Management Plan

BGS = Below Ground Surface

BMP = Best Management Practices

CAAQS = California Ambient Air Quality Standards

CalEEMod = California Emissions Estimator Model

CARB = California Air Resources Board

Church = Church of Jesus Christ of Latter-day Saints

CML&C = Cement Mortar Lined and Coated

CNEL = Community Noise Exposure Level

CO = Carbon Monoxide

EIR = Environmental Impact Report

Farmland = Farmland of Statewide Importance

FTA = United States Department of Transportation Federal Transit Administration

GHG = Greenhouse Gas

H₂S = Hydrogen Sulfide

LF = Linear Feet

LSTs = Localized Significance Thresholds

MRZ-2 = Mineral Resource Zone 2

MWD = Metropolitan Water District of Southern California

NAAQS = National Ambient Air Quality Standards

NO₂ = Nitrogen Dioxide

O₃ = Ozone

Pb = Lead

PM_{2.5} = Particulate Matter

Proposed Project = Proposed Grand Avenue Well

SCAB = South Coast Air Basin

SCAG = Southern California Association of Governments

SCAQMD = South Coast Air Quality Management District

State Route 210 = Foothill Freeway

SWPPP = Stormwater Pollution Prevention Plan

TVMWD = Three Valleys Municipal Water District

USEPA = U.S. Environmental Protection Agency

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1.0 INTRODUCTION

1.1 OVERVIEW

Three Valleys Municipal Water District (TVMWD) is a wholesale water purveyor that provides water to the cities of Claremont, Pomona, Walnut, and east San Gabriel Valleys. TVMWD operates the Miramar Water Treatment Plant located in the City of Claremont, which has a capacity of approximately 25 million gallons of water per day (mgd). Two groundwater production wells are located at the Miramar Treatment Plant and a third groundwater production well is currently being designed on a vacant lot along Baseline Road and between Mountain Avenue and North Indian Hill Boulevard. TVMWD proposes to construct a fourth production well within the City of Claremont in order to increase TVMWD's capability to extract groundwater within the Six Basins of the San Gabriel Valley. The Six Basins include: the Ganesha Basin, Pomona Basin, Live Oak Basin, Lower Claremont Basin, Upper Claremont Heights Basin, and Canyon Basin, which are all naturally separated by geologic fault lines (Figure 1).

The Proposed Grand Avenue Well (Proposed Project) would enhance TVMWD's groundwater production capability and supplement Miramar Treatment Plant's high-quality treated drinking water supply for its member agencies. In addition, the new well would strengthen local supply reliability and add consistency to TVMWD's existing groundwater production system. The Proposed Project consists of construction of a new groundwater production well in a vacant Public Facilities lot located on Grand Avenue, and the construction of a pipeline that would connect the well to the Miramar Treatment Plant (Figure 2). The Proposed Project would pump groundwater from either the Upper Claremont Heights Basin or the Lower Claremont Heights Basin and would discharge it into an 8-inch diameter untreated water main that would be routed along Grand Avenue and Baseline Road to its intersection with Padua Avenue. A 12-inch diameter pipe would be proposed from this intersection to the Miramar Treatment Plant. The 8-inch pipeline section would be approximately 1,800 linear feet (LF) and the 12-inch pipeline would be approximately 4,300 LF, for a total of 6,100 LF. The 8-inch pipeline within the well site would be constructed out of cement mortar lined and coated (CML&C) steel pipe. The 8-inch and 12-inch pipelines in Grand Avenue, Baseline Road, and Padua Avenue would be PVC.

The preferred alignment route of the new water transmission main line is north along Grand Avenue from the Proposed Project site to East Baseline Road (Figure 2). From the intersection of Grand Avenue and East Baseline Road, the new pipeline would be routed approximately 1,300 LF to the east to Padua Avenue. The pipeline would then travel north along Padua Avenue approximately 3,200 LF to the west entrance of the Miramar Treatment Plant, and then approximately 1,050 LF to the east to the tie-in point (Figure 2).

Initial Study / Mitigated Negative Declaration
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1.2 PROJECT TITLE

Proposed Grand Avenue Well (Proposed Project)

1.3 LEAD AGENCY

Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, California 91711

1.4 INTENDED USES OF THE INITIAL STUDY

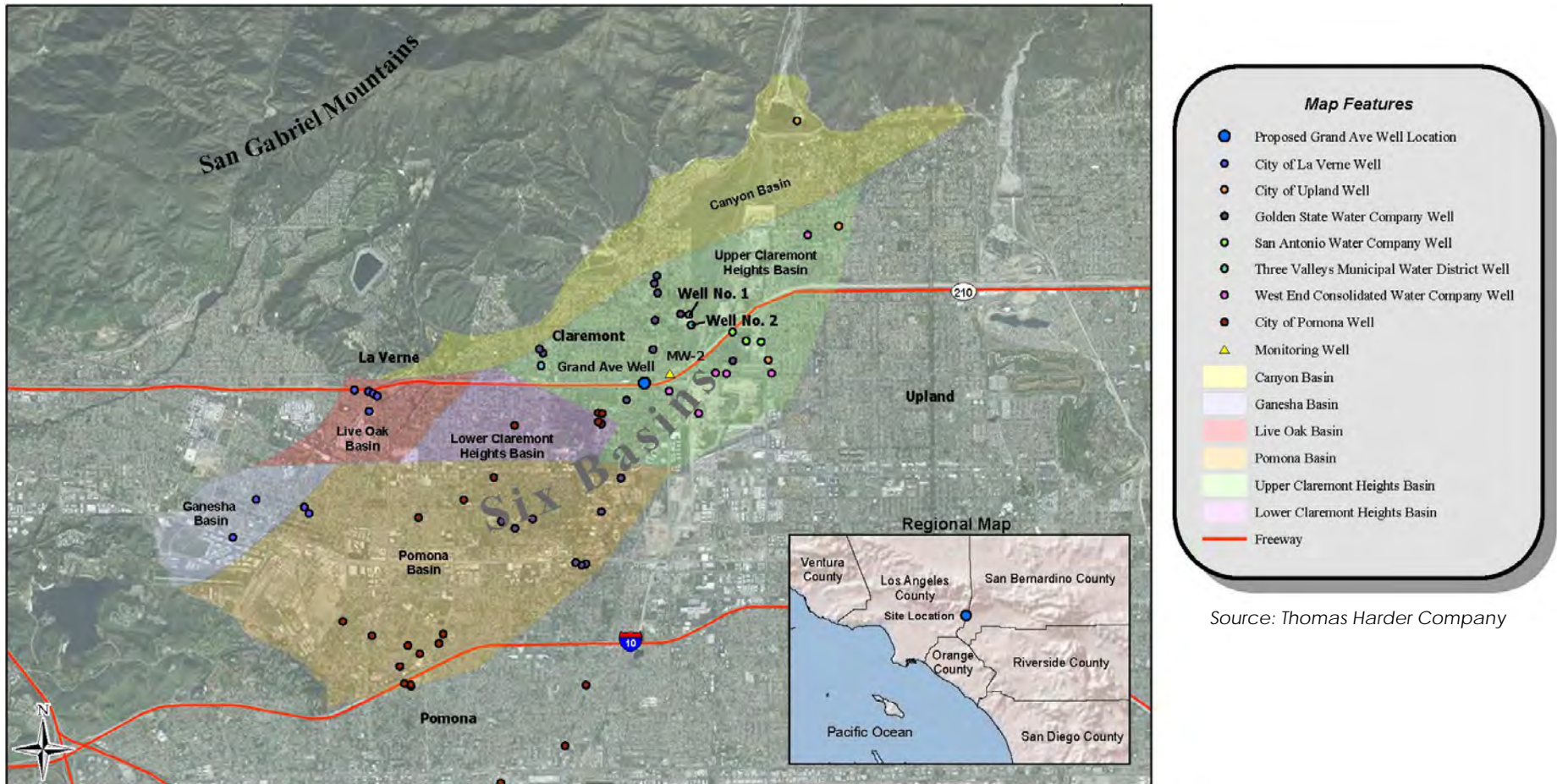
This Initial Study is an informational document intended to inform the lead agency, other responsible or interested agencies, and the public of potential environmental effects of the Proposed Project. The environmental review process has been established to enable public agencies to evaluate potential environmental consequences and to examine and implement methods of eliminating or reducing any potential significant adverse impacts.

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1.5 PROJECT DESCRIPTION SUMMARY

Figure 1 Vicinity Map



Source: Thomas Harder Company

Item 8.C.2

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Figure 2 Proposed Project Location



Source: Thomas Harder Company

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Figure 3 Proposed Project Conceptual Construction Layout



Map Features

- Proposed Grand Ave Well Location
- Sewer Manhole
- ⬠ Discharge Water Location
- Hydrant
- Approximate Site Boundary
- Easement Reserved by the State (10 ft wide)

Note

The proposed site layout assumes the following:

- * The masonry wall on the north end of the site would be temporarily removed and replaced at the end of the Proposed Project.
- * The staging area will include the storage of: Drilling and development tools, Filter Pack during and Casting during well construction, sound pallets, and backhoe.
- * A second settling tank will be temporarily stored in the staging area during the duration of the Proposed Project.
- * An optional sound wall layout is shown as the dashed line.



Source: Thomas Harder Company

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2.0 PROJECT DESCRIPTION

2.1 LOCATION

The Proposed Project is located on a former Caltrans property at the southeast end of the Grand Avenue cul-de-sac in the City of Claremont. The property is bounded by Grand Avenue to the west, the Foothill Freeway (SR 210) to the south and east, and the Church of Jesus Christ of Latter-day Saints (Church) to the north (Figure 2). The well site property is roughly triangular in shape and is bounded by a Caltrans sound wall to separate it from the Foothill Freeway (Figure 3). The lot size is relatively small, with an area of approximately 3,400 square feet.

2.2 ENVIRONMENTAL SETTING

The City of Claremont is within the eastern portion of Los Angeles County. The cities of Montclair and Upland are located to the east, City of Pomona to the south, City of La Verne to the west, and unincorporated areas of Los Angeles County to the north. The City of Claremont is situated on an alluvial fan stemming from the San Gabriel Mountains to the north. San Antonio Wash is located along the eastern side of Claremont. Unincorporated areas of Los Angeles County to the north of Claremont include parks, wilderness areas, Angeles and San Bernardino National Forests. Similar to the majority of southern California, Claremont is located within a seismically active area.

2.3 GENERAL PLAN LAND USE DESIGNATION

The Proposed Project is in the jurisdiction City of Claremont and is designated as a County of Los Angeles parcel. Therefore, the County of Los Angeles General Plan Land Use Designation for the Proposed Project is Public Facilities.

2.4 ZONING

The County of Los Angeles Zoning for the Proposed Project is Public Facilities.

2.5 SURROUNDING LAND USES

North: E Baseline Road, existing parking lot and the Church of Jesus Christ of Latter-day Saints.

East: SR 210 Foothill Freeway, existing sound wall and CalTrans vacant property.

South: SR 210 Foothill Freeway.

West: Grand Avenue, existing multi-family residential.

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3.0 EVALUATION OF ENVIRONMENTAL IMPACTS

3.1 AESTHETICS

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>AESTHETICS:</u> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Have a substantial adverse effect on a scenic vista?*

No Impact. According to the Claremont General Plan, there are no scenic vistas within the City of Claremont. Therefore, the Proposed Project would not have substantial adverse effect on a scenic vista. The Proposed Project is located in the eastern region of the City of Claremont and is surrounded by urban residential land uses. Therefore, no impact would occur to scenic vistas.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No Impact. The Proposed Project would not damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. According to the Claremont General Plan, there are no state-designated scenic highways in the City of Claremont. The nearest designated state scenic highway to the Proposed Project site is Highway 39, which is approximately 20 miles west of the site. Therefore, no damage to scenic resources would result from the Proposed Project.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

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Less Than Significant Impact. The Proposed Project would not degrade the existing visual character or quality of the site and its surroundings. The Proposed Project is located on a former Caltrans property at the southeast end of the Grand Avenue cul-de-sac in the City of Claremont. The property is bound by Grand Avenue to the west, the Foothill Freeway (SR 210) to the south and east, and the Church of Jesus Christ of Latter-day Saints (Church) to the north. During construction, the portion of the lot frontage along West Baseline Road would be secured with a temporary chain link fence and sliding gate, which is consistent with the fencing of the adjacent properties. Overall, the Proposed Project is consistent with the public facilities land use designation and would have a less than significant impact on the existing visual character of the surrounding area.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Impact. The Proposed Project is in a well-lit urban portion of the City of Claremont, which has higher levels of ambient nighttime lighting including residential, street, and adjoining freeway lighting. Neighborhoods in the view shed of the Proposed Project would not be exposed to an increase in outdoor night lighting. Furthermore, due to the urbanized nature of the area, the Proposed Project would have less than significant impact on the light environment visible from surrounding properties.

Highly polished materials or highly reflective metal material and glass that could reflect light and create glare are not proposed. The Proposed Project would not introduce any new sources of glare that are incompatible with the surrounding areas. Therefore, the Proposed Project would have a less than significant impact on new sources of substantial light or glare, which would adversely affect day or nighttime views in the area.

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3.2 AGRICULTURE AND FORESTRY RESOURCES

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE AND FORESTRY RESOURCES: Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526, or timberland zoned Timberland Protection (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact. The Proposed Project is located on a former Caltrans property at the southeast end of the Grand Avenue cul-de-sac in the City of Claremont and would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. The Proposed Project does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). Consequently, the Project would not convert Farmland to a non-agricultural use. No impact would occur.

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b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. Williamson Act contracts restrict land development of contract lands. The contracts typically limit land use in contract lands to agriculture, recreation, and open space, unless otherwise stated in the contract. The Proposed Project is not in the Williamson Act Conservation Contract database and would not conflict with existing zoning for agricultural use.

c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526, or timberland zoned Timberland Protection (as defined by Government Code section 51104(g))?*

No Impact. The Proposed Project is not zoned as forest land or timberland and does not include any timberland resources. The Project would have no impact on forest or timberland.

d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. There is no forest land or any land that is designated to the conservation of forest land within the Proposed Project. Therefore, the Proposed Project would have no impact on forest land.

e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?*

No Impact. The Proposed Project is not located within proximity to any land zoned or utilized for farmland or forest land. The Proposed Project is within an urbanized area of the City of Claremont and would not result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest uses. No impact would occur.

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3.3 AIR QUALITY

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>AIR QUALITY:</u> Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

Less Than Significant Impact. Within the Proposed Project area, the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) have the responsibility for preparing an Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act requirements. The AQMP details goals, policies, and programs for improving air quality and establishes thresholds for daily operational emissions. Environmental review of individual projects within the region must demonstrate that daily construction and operational emissions thresholds as established by the SCAQMD would not be exceeded nor would the number or severity of existing air quality violations be increased. Construction and operation of the Proposed Project would not exceed any SCAQMD construction or operational emissions thresholds.

Although the overall air quality in the region is characterized as "poor", the City enjoys generally good air quality due to the nature of the prevailing winds. Actions in the General Plan undertaken

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to ensure the protection of good air quality include encouraging the use of green building technologies and cleaner fuels. Projects that are consistent with the local General Plan are consistent with the AQMP assumptions. Further, the Proposed Project would not have an impact on the type, size, or location of transportation infrastructure in the long-term and would thus be consistent with SCAG's Regional Mobility Plan. The construction and operation of the Proposed Project is not anticipated to exceed the AQMP's daily emissions thresholds (as discussed in items b) and c) below) and would therefore not conflict with or obstruct the implementation of the AQMP. Operation of the Proposed Project would be below grade and within a proposed building structure. Therefore, no impacts to arterial corridors or intersections would occur after construction and during operation. As such, the impacts to the local or regional air quality or congestion management plans would be less than significant.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less Than Significant Impact. Emissions below the SCAQMD mass emissions thresholds of significance presented in Table 1 below would not be expected to violate any air quality standard or contribute substantially to an existing or projected air quality violation. As shown in Table 2 below, estimated Proposed Project emissions are lower than the applicable SCAQMD regional and localized mass emissions thresholds of significant. The localized thresholds are based on a conservative approach in assuming a one-acre project site and a distance to the nearest sensitive receptor of 25 meters. The Proposed Project site is approximately 0.3 acres for the installation of the new well and approximately 6,100 LF for the installation of the new pipeline. The nearest sensitive receptor is approximately 25 meters west to the Proposed Project and would not be impacted during operation, and emissions during construction based on these assumptions are below the applicable LSTs, and would have less than significant impact to any air quality standards or project air quality violations.

c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

Less Than Significant Impact. The Proposed Project would be located in the Northwest San Bernardino Valley, directly adjacent to the Central San Bernardino Valley, of the South Coast Air Basin (SCAB or Basin). San Bernardino County as part of the Basin is designated as a "non-attainment" area for ozone (O₃), respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}). The SCAB is a maintenance area for carbon monoxide (CO) and oxides of nitrogen (NO_x), which denotes that it had once been a non-attainment area for the pollutant. The SCAQMD, the regional agency that regulates stationary sources, maintains an extensive air quality-monitoring network to measure criteria pollutant concentrations throughout the Basin. The closest air monitoring station to the project is the Pomona site. The SCAQMD has prepared the CEQA Air Quality Handbook to provide guidance to those who analyze the air quality impacts of proposed projects. Based on Section 182(e) of the Federal Clean Air Act, the SCAQMD has set

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significance thresholds for five criteria pollutants. The SCAQMD significance threshold criteria are shown in the table below.

Table 1 SCAQMD Air Quality Impact Significance Thresholds

Pollutant (Air Pollutant)	Construction (lbs/day)	Operational (lbs/day)
Nitrogen Oxide (NO _x)	100	55
Volatile Organic Compounds (VOC)	75	55
Particulate Matter (PM ₁₀)	150	150
Particulate Matter (PM _{2.5})	55	55
Sulfur Oxide (SO _x)	150	150
Carbon Monoxide (CO)	550	550
Lead (Pb)	3	3
<i>Source: SCAQMD, CEQA Air Quality Handbook, 1993.</i>		

The construction air quality analysis was conducted for the Proposed Project to determine construction-related emissions using the CalEEMod (Appendix A). Air contaminant emissions would result from the use of construction equipment and construction worker vehicles. Diesel emissions would result from truck trips associated with supply delivery, transport of excavated soil from pipeline trenching and well drilling, transport of backfill and paving materials to the site, and construction of a small well head and electrical facilities building. Fugitive emissions would result from soil hauling dust, paved road dust, and road re-paving. The analysis assumes that well installation and pipeline construction do not occur simultaneously, but potentially roadway re-paving and pipeline construction could overlap. The 6,100 LF of pipeline, well drilling, well head, and electrical facilities building would take approximately 230 days to complete. See table below for estimated daily construction emission totals.

Construction activities are not anticipated to generate significant amounts of PM₁₀. The emissions estimates in the table below for PM₁₀ include dust from site preparation activities and from on-site construction equipment. As indicated in the table below, the daily emissions of this pollutant would be well below SCAQMD significance thresholds.

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Table 2 Estimated Construction Air Quality Impact Significance Thresholds

Maximal Construction Emissions (lbs/day)	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Construction of Well	0.8	8.1	6.2	0.0	0.5	0.4
Construction of Pipeline	1.9	16.5	14.3	0.0	1.2	1.0
Total Construction Impacts:	<u>2.7</u>	<u>24.7</u>	<u>20.5</u>	<u>0.0</u>	<u>1.7</u>	<u>1.4</u>
SCAQMD Regional Thresholds	75	100	550	150	150	55
SCAQMD Localized Thresholds	N/A	1.3	612	N/A	4	3

SOURCE: SCAQMD Air Quality Significance (Mass Daily) Thresholds, 2015; SCAQMD Mass Rate LST Lookup Tables, Appendix C, 2008 Notes: Localized significance thresholds are from the SCAQMD lookup tables assuming a one-acre project site and a distance to the nearest sensitive receptor of 25 meters (Proposed Project site is 0.3 acres & 6,100 LF).

As indicated in Table 2, criteria pollutants would be below SCAQMD significance thresholds for construction activities. Furthermore, construction emissions would be short-term in nature and would be limited only to the period when construction activity is taking place. Additionally, the construction emissions analysis incorporated conservative assumptions. As such, construction emissions are not expected to add to long-term air quality degradation. Furthermore, the Proposed Project would implement standard SCAQMD-approved construction procedures and would comply with applicable provisions of the most recently adopted SCAQMD Rule 403 (Fugitive Dust). As such, construction of the Proposed Project would not result in a violation of air quality standards or substantially contribute to existing or projected air quality violations, and the impact would be less than significant.

Operation of the Proposed Project would generate emissions of criteria pollutants from operational pumping and worker trips to the site for maintenance and monitoring activities, but emissions would be minimal. Electrical generation of power would be used for pumping. Electrical consumption has no single uniquely related air pollution emissions source because power is supplied to and drawn from a regional grid. Electrical power is generated regionally by a combination of non-combustion (nuclear, hydroelectric, solar, wind, geothermal, etc.) and fossil fuel combustion sources. There is no direct nexus between consumption and the type of power source or the air basin where the source is located. Operational air pollution emissions from electrical generation are therefore not attributable on a project-specific basis. As such, criteria pollutant emissions are expected to be negligible, and as such, operational air quality impacts would be less than significant.

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d) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact. The Proposed Project is bordered by sensitive receptors with single-family residential to the west and a church to the north. However, daily construction emissions would be below significance thresholds and construction activities would occur for no more than three months. Health impacts from pollutant exposure are modeled over the long term of several decades, and thus there is no known accepted methodology for determining health impacts from short-term construction exposure. However, because the Proposed Project would not result in the significant emissions of any pollutant of concern, it can be inferred that there would be no significant impact to sensitive receptors as a result of short-term exposure. Therefore, impacts from Proposed Project construction and operation would be less than significant.

e) *Create objectionable odors affecting a substantial number of people?*

Less Than Significant Impact. Odors (e.g., odors from construction vehicle emissions) would be controlled in accordance with SCAQMD Rule 402 (Nuisance Emissions). Other than construction vehicle operation, no activities are anticipated to occur and no materials or chemicals would be stored on-site that would have the potential to cause odor impacts during the construction of the Proposed Project. In addition, the operation of the well would not result in odors that would affect a substantial number of people because no odors are emitted by these types of wells. Therefore, construction and operation of the Proposed Project is anticipated to have less than significant odor impacts.

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3.4 BIOLOGICAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
<u>BIOLOGICAL RESOURCES: Would the Project:</u>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

No Impact. The Proposed Project is within an urbanized area in the City of Claremont. Proposed construction would occur below ground within an existing Caltrans paved vacant lot and within

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public right-of-way streets. The Proposed Project construction staging areas would be located in previously developed or highly disturbed areas along the public right-of-way with no likelihood of special-status plant and wildlife species in the area. Database searches determined that the Proposed Project area does not provide suitable habitat for any special-status wildlife, plant, or vegetation communities. The Proposed Project would not modify any natural habitats and no habitat impacts would be associated with construction and operation of the Proposed Project.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish or U.S. Fish and Wildlife Service?*

No Impact. Based on biological literature review, the Proposed Project would not fall within any riparian or sensitive natural community. Therefore, no impacts are associated with construction and operation of the Proposed Project.

c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No Impact. Based on biological literature review, the Proposed Project would not contain any water features that would qualify as a jurisdictional wetland as defined by Section 404 of the Clean Water Act. In addition, the Proposed Project would not directly remove, fill, or hydrologically interrupt federally protected wetlands. Therefore, no impacts are associated with construction and operation of the Proposed Project.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

No Impact. The Proposed Project is not identified as part of a linkage system used by wildlife as movement corridors. The Proposed Project is located in an urbanized and heavily disturbed area and would not impact or interfere with established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Therefore, no impacts would occur.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No Impact. The City of Claremont General Plan does not identify any biological resource protection policies applicable to the Proposed Project site. Tree removal is not anticipated as a result of the Proposed Project. Consequently, the Proposed Project would not conflict with local policies or ordinances protecting biological resources or trees and no impact would occur.

f) *Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?*

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No Impact. According to the Open Space Element of the City of Claremont General Plan, the Proposed Project would not conflict with the provisions of an adopted habitat conservation plan, natural community, conservation plan, or state habitat conservation plan.

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3.5 CULTURAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>CULTURAL RESOURCES:</u> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

Less Than Significant Impact. The City of Claremont General Plan identifies numerous nationally registered and significant historic buildings within the community. Buildings listed on the National Register of Historic Places include; the Pitzer House, the Claremont Depot, Padua Hills Theatre, Russian Village, and the original site of Scripps College. Other significant buildings include City Hall, the Post Office, Citrus Packing House, the Old School House, Claremont Club House, and old stone buildings scattered throughout northern Claremont. These highly recognizable buildings are important cultural resources to the community (City of Claremont, 2006). Additionally, numerous neighborhoods and areas of the City are designated as having cultural significance. The Historic Claremont Zoning District was established in 1970, and the Arbol Verde Zoning District was created in 1991. In 1979, Russian Village was listed in the National Register as a historic neighborhood.

The proposed well site at the southeast end of the Grand Avenue cul-de-sac is located along the southern boundary of the North Claremont neighborhood. The proposed pipeline alignment is within the neighborhoods of North Claremont, Northeast Claremont, and along the boundary of Northeast Claremont and the Pomona Valley Protective Association Spreading Grounds along Padua Road north of Baseline Road, as shown on the *Neighborhoods Map* within the City of Claremont General Plan. The Proposed Project site nor the pipeline alignment are within the vicinity of any of the historic neighborhoods, nationally registered buildings, or significant historic buildings mentioned within the City of Claremont General Plan. Therefore, the Proposed Project would have a less than significant impact on the significance of a historical resource.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

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Less Than Significant Impact. The Project site is located within a previously disturbed urban area. Due to the location of the site and proposed pipeline alignments in previously disturbed areas, it is unlikely that any archaeological resources would be encountered. The City of Claremont General Plan does not identify any specific archaeological features or resources within the City, though it does state the need for their preservation and protection within the goals and policies of the Land Use, Community Character, and Heritage Preservation Element. If any archaeological resources are encountered during construction or excavation activities, all work shall be halted near the archaeological discovery until a qualified archaeologist can assess the significance of the archaeological resource. Therefore, the Proposed Project would have a less than significant impact on the significance of an archaeological resource.

c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant Impact. Significant vertebrate fossils are not typically found in the uppermost layers of coarser grained alluvial deposits or previously disturbed and backfilled areas typical of the site. Therefore, construction and excavation activities are unlikely to encounter significant paleontological resources. Well drilling and development would occur in sedimentary deposits that may contain paleontological resources. However, the possibility of identification of paleontological resources is not feasible due to the nature of well drilling. If any paleontological resources are encountered during construction or excavation activities, a qualified paleontologist would be contacted to assess the significance of the paleontological resource. Due to the location of the site and proposed pipeline alignments in previously disturbed areas, it is unlikely that any unique geologic feature would be encountered. Therefore, the Proposed Project would have a less than significant impact on the significance of a paleontological resource or site or unique geologic feature.

d) *Disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant Impact. The Proposed Project would be constructed within an area of prior disturbance. There are no known human remains or known cemeteries within the vicinity of the project site, and no conditions exist that suggest human remains are likely to be found on the project site. It is not anticipated that implementation of the Proposed Project would disturb human remains, including those interred outside of formal cemeteries. However, ground-disturbing activities, such as grading or excavation, have the potential to disturb human remains. If human remains are found, those remains would require proper treatment, in accordance with applicable laws. As a result, less than significant impacts to human remains would occur from construction of the Proposed Project.

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3.6 GEOLOGY AND SOILS

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving?				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building code (1997), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving?

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- i. Rupture of a known earthquake fault, as delineated on the most recent AlquistPriolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

No Impact. The project site is not located in an Alquist-Priolo Special Studies Zone, and no known active faults are mapped as crossing or projecting toward the project site area. Due to the absence of active faults near the Proposed Project, the risk of damage due to fault rupture during an earthquake is limited. In addition, no faults within or near the City have been placed within State of California established Alquist-Priolo Earthquake Fault Zones, which are subject to special land use controls and building standards. Therefore, no impact would occur.

- ii. Strong seismic ground shaking?

Less Than Significant Impact. Claremont is in a seismically active region and residents could potentially be exposed to dangers caused by earthquakes and ground shaking. Construction of the well, pipeline, and building enclosure would comply with all relevant local and state seismic safety standards, including the California Building Code. Therefore, impacts associated with ground shaking would be less than significant.

- iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction occurs when ground water is forced out of the pores of soil as it subsides. This excess water momentarily liquefies the soil, causing an almost complete loss of strength. If this layer is at the surface, its effect is much like that of quicksand for any structure located on it. If the liquefied layer is in the subsurface, the material above it may slide laterally depending on the confinement of the unstable mass. The risk of liquefaction at the Project site is low due to the depth to groundwater being greater than 100 feet below ground surface (bgs). The unconsolidated alluvial-sized soil particles that underlay the Project site also reduce the chance of liquefaction. The Proposed Project area is generally flat with a zero to five percent slope. Areas subject to slope instability contain slopes of 30 percent or greater. The Project site is also shown to be outside of any area likely to be effected by landslides or liquefaction in the *Earthquake Induced Landslides and Liquefaction Map*, within the City of Claremont General Plan (City of Claremont, 2006). Therefore, effects related to slope instability, liquefaction, or landslides at the Project site would be less than significant.

- iv. Landslides?

Less Than Significant Impact. Landslides often occur during or after strong earthquakes. According to the City of Claremont General Plan Safety Element, the Project site is identified as susceptible to landslides. However, the Project does not involve construction of habitable structures. Therefore, Project impacts related to exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides would be less than significant.

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b) *Result in substantial soil erosion or the loss of topsoil?*

Less Than Significant Impact. There would be no loss of topsoil or erosion involved with subsurface trenching for the conveyance piping and underground utilities. Short-term erosion impacts due to general construction activities are anticipated. Exposed soils from excavation activities are susceptible to erosion by vehicle traffic, wind, and rain. Heavy rains may cause run off into public rights-of-way and/or storm drainage systems. The contractor would develop and implement an erosion control plan to mitigate the loss of soil from the Proposed Project site. The erosion control plan would implement Best Management Practices (BMPs) including, but not limited to, the placement of sandbags and straw waddles around the well drilling site and any soil stockpiles. The development and implementation of an erosion control plan would keep impacts resulting from construction to less than significant levels. The Proposed Project site would be paved or covered with gravel and no areas of exposed soil would be exposed to the erosional effects of wind or water. As such, a less than significant impact on soil erosion or loss of topsoil is expected as a result of construction and operation of the Proposed Project.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less Than Significant Impact. Temporary soil erosion that could occur during construction would be managed through the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) as required by State Water Resources Control Board Order No. 2009-0009-DWQ. Compliance with state and federal requirements would ensure less than significant impacts.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building code (1997), creating substantial risks to life or property?*

No Impact. Expansive soils generally have a significant amount of clay particles which can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The extent of shrink/swell is influenced by the amount and kind of clay in the soil. The occurrence of these soils is often associated with geologic units having marginal stability. The distribution of expansive soils can be widely dispersed and they can occur in hillside areas as well as low-lying alluvial basins. No expansive soil conditions are identified on the Project site. Consequently, there would be no impact related to expansive soils.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

No Impact. The Proposed Project does not include the construction of new septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

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3.7 GREENHOUSE GAS

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
GREENHOUSE GASES: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a)

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less Than Significant Impact. On-site grading and construction activities would generate carbon dioxide, which is a primary component of greenhouse gas (GHG) emissions. To assess the potential short-term air quality impacts of the Proposed Project, this analysis relies on the City of Claremont General Plan Final Environmental Impact Report (EIR). The Final EIR relies on compliance with AB 32 (California Global Warming Solutions Act of 2006) implementation guidance as a benchmark for evaluating the significance of greenhouse gas emissions associated with the General Plan. Implementation of the GHG reduction strategies and measures in the City of Claremont General Plan to achieve its GHG reduction target of 15 percent below 2009 levels by 2020. This is within the threshold set by AB 32. Consequently, the Final EIR finds that greenhouse gas emissions associated with the General Plan would be less than significant. Similarly, because the Proposed Project is consistent with the City of Claremont General Plan, it would result in less than significant greenhouse gas emissions.

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Less Than Significant Impact. The Legislature enacted AB 32 the California Global Warming Solutions Act of 2006, which was signed on September 27, 2006, to further the goals of Executive Order S-3-05. (Health and Safety Code, S38500 et seq.) AB 32 requires the California Air Resources Board (CARB) to adopt statewide greenhouse gas (GHG) emissions limits to achieve statewide GHG emissions levels realized in 1990 by 2020. A longer-range goal requires an eighty percent (80%) reduction in GHG emissions from 1990 levels by 2050. CARB adopted the 2020 statewide target and mandatory reporting requirements in December 2007 and a statewide scoping plan in December 2008 (the AB 32 Scoping Plan).

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The Proposed Project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Implementation of the GHG reduction strategies and measures in the City of Claremont General Plan to achieve its GHG reduction target consistent with AB 32. Consequently, the Final EIR finds that the General Plan would result in less than significant impacts relative to conflicts with applicable GHG policies. Similarly, because the Proposed Project is consistent with the City of Claremont General Plan, it also would result in less than significant impacts relative to conflicts with applicable GHG policies.

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3.8 HAZARDS AND HAZARDOUS MATERIALS

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant Impact. The Proposed Project would not utilize acutely hazardous materials (as defined in Title 22 Cal. Code Regs. § 66260.10). Hazardous materials that may be utilized include diesel fuel, gasoline, oils, and solvents typically associated with standard construction vehicles and equipment. All materials would be routinely transported, used, and disposed of in accordance with any applicable laws, regulations, and protocols that protect the environment, the public, and workers. Water to be pumped from the well shall be treated with chlorine. When mixed together, chlorine and ammonia produce chloramines, which are disinfectants that help to reduce the formation of trihalomethane within organic materials. When chloramines are used as disinfectants for municipal water systems, the concentration is low enough to not present a significant hazard. TVMWD currently has a Spill Prevention Control and Countermeasures Plan (SPCC), which helps to minimize occurrences and effects of hazardous or toxic spills and leaks during water treatment activities. Once the Proposed Project is constructed, TVMWD would update SPCC to include a site-specific plan for Well No. 4. Compliance with all applicable laws and regulations would reduce the potential impact associated with the routine transport, use, storage, or disposal of hazardous materials to a less than significant level.

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less Than Significant Impact. The Proposed Project would utilize limited amounts of hazardous materials such as gas, diesel fuel, oils, and solvents associated with standard construction vehicles and equipment. Reasonably foreseeable upset and accident conditions could include small spills or leaks. However, impacts are considered less than significant due to the limited amounts of hazardous materials that would be used.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant Impact. No existing or proposed schools have been identified within 0.25 mile of the Proposed Project site. However, one school, Western Christian School, is located on Padua Avenue directly adjacent to the west of the proposed pipeline route to the Miramar Treatment Plant. The Proposed Project would utilize limited amounts of hazardous materials such as gas, diesel fuel, oils, and solvents associated with standard construction vehicles and equipment, within the public right-of-way. All materials would be routinely transported, used, and disposed of in accordance with any applicable laws, regulations, and protocols that protect the environment, the public, and workers. Therefore, the Proposed Project would have less than significant impacts on existing or proposed schools.

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- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact. The Proposed Project is not located within any sites that are included on a list of hazardous materials sites pursuant to Government Code Section 65962.5. Therefore, the Proposed Project would not create a significant hazard to the public or environment.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. The Proposed Project is not located within an airport land use plan or within two miles of a public airport. Therefore, the Proposed Project would not result in a safety hazard for people working or residing in the Project area.

- f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. The Proposed Project is not located within the vicinity of a private airstrip. Therefore, there would be no impacts to people residing or working in the Project area.

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact. The Proposed Project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Proposed Project would build a new water well in a vacant CalTrans lot and install a new pipeline connecting the well to the Miramar Treatment Plant within public right-of-way. Grand Avenue is a public street that is located along the western property line of the vacant CalTrans lot. This portion of the street provides emergency access to the Stone Creek Apartments located to the west of Grand Avenue. Construction activities would not interfere with the emergency vehicles ability to access the apartment site. In addition, coordination of temporary lane closures would occur with the City of Claremont Public Works Department, City of Claremont Police Department, and Los Angeles County Fire Department, in order to ensure that all roadways along the installation of the new water pipeline route remain accessible to emergency vehicles. Any traffic detours would take into account emergency response and evacuation procedures. Therefore, construction activities and well operations would create a less than significant impact.

- h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

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No Impact. The Proposed Project is not located within wildlands. Construction activities related to installation of the water pipeline would be restricted to within the street. Appropriate fire safety and control measures shall be implemented throughout the duration of construction. Therefore, no impacts associated with construction are expected.

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3.9 HYDROLOGY AND WATER QUALITY

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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a) *Violate any water quality standards or waste discharge requirements?*

Less Than Significant Impact. During drilling and testing of the well, the water generated during pumping would be discharged to the local storm drain. Discharge of the test water would be completed under a General Permit issued by the State Regional Water Resources Control Board in a manner to avoid water quality impacts to waters downstream. In addition, soil bins and temporary holding tanks for drilling fluids would also be staged at the well location. Soil exposure during excavation, grading, and other construction activities may allow for possible erosion and runoff into storm drains. Proposed Project grading is anticipated to be less than 0.5 acre; therefore, a formal stormwater pollution prevention plan is not required. However, because of the proximity to residences adjacent to the project site, the contractor, as part of the standard contract, would utilize best management practices (BMPs) to minimize soil and debris from being tracked or otherwise distributed to the adjacent residences. Thus, although construction of the Proposed Project has the potential to violate water quality standards during construction, the soil exposure would be temporary, localized, and undertaken with BMPs to control runoff and erosion, thereby resulting in less than significant impact due to erosion or runoff.

b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

Less Than Significant Impact. The Three Valleys Municipal Water District Six Basins Strategic Plan identifies that the overall San Gabriel Valley Groundwater basin is designated as a “high priority” basin. It is not, however, considered a “critically over drafted” basin. The 1998 adjudication of the Six Basins and the Stipulated Judgement is in force and charges the Watermaster with operating the basin to maintain a “safe yield.” The Six Basins are not subject to compliance with the Sustainable Groundwater Management Act of 2014 (SGMA), but they are under the jurisdiction of the Six Basins Watermaster and subject to the Six Basins Judgment, which serves as the groundwater management plan for the basins. The Strategic Plan provides management strategies beyond the Stipulated Judgment. Wildermuth Environmental is the Watermaster for the basin and is responsible for ensuring that the basin is managed to meet sustainable safe yield goals. The Proposed Project would pump groundwater from the Upper Claremont Heights Basin and would discharge it into an 8-inch diameter untreated water main. The Upper Claremont Heights Basin is adjudicated and subject to a physical solution that stipulates it be operated within a sustainable yield. TVMWD has a storage account within the basin. Groundwater pumped from the well would be in accordance with the storage agreement in accordance with the Judgement. The groundwater quality in the vicinity of the Grand Avenue Well site is generally

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expected to be very good. That area includes geology and land use that promote natural and artificial replenishment through surface spreading. The more southerly and westerly portions of the Six Basins generally see higher levels of nitrate and volatile organic compounds (VOCs) due to past agricultural land use and industrial contamination, respectively. Many producers with wells in this area employ wellhead treatment facilities that allow delivery of the groundwater for potable use.

Pumping from the Grand Avenue Well would create a localized cone of depression that would extend out in accordance with the hydrogeologic properties of the aquifer. As there are existing wells located in the vicinity of the proposed Grand Avenue Well, there is the potential for pumping interference. Analysis of potential lowered groundwater levels as a result of Grand Avenue Well pumping was conducted by Wildermuth Environmental for the Six Basins Watermaster (Appendix B). The analysis predicted a maximum of approximately 20 feet. of groundwater level lowering at the well. Groundwater levels at the nearest existing wells, which are approximately 1,300 ft. away, are predicted to be as much as approximately 13 feet. lower as a result of Grand Avenue Well Pumping interference. In addition to the Grand Avenue Well, TVMWD may construct and pump an additional new well (Well 3), which is approximately 1.3 miles west of the Grand Avenue Well. The cumulative groundwater level lowering at the existing wells closest to the Grand Avenue Well is predicted to be on the order of 21 feet, if Well 3 is constructed and both the Grand Avenue Well and Well 3 are pumping. As documented in Wildermuth Environmental (Appendix B), maximum groundwater pumping from the Grand Avenue Well and Well 3 are unlikely to cause groundwater levels to decline below sustainability thresholds for other wells in the basin. It is possible that the resulting lower groundwater level would cause increased pumping lift for other wells, particularly during periods of below normal precipitation when groundwater levels are already low. During wet periods when groundwater levels are high, pumping of the Grand Avenue Well would be beneficial to mitigate high groundwater levels in areas of liquefaction potential. Therefore, the Proposed Project would have less than significant impacts to the potential depletion of groundwater supplies or interference with groundwater recharge.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*

Less Than Significant Impact. None of the facilities constructed as part of the Proposed Project would alter the drainage pattern of the area. The Proposed Project would be constructed on a vacant asphalt paved lot located at the end of the cul-de-sac of Grand Avenue. The current draining pattern of the Proposed Project site allows water runoff to flow to an existing storm drain at the end of the cul-de-sac near the Project site. The construction of the new water well would adhere to the existing drainage patterns of the site and would not alter the course of a stream or river. Therefore, there would be less than significant impact to this criterion.

- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

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No Impact. The Proposed Project would be constructed on a vacant asphalt paved lot abutting the 210 freeway. Construction of the Proposed Project would not alter the course of a stream or river nor would it change the rate or amount of surface runoff that would result in substantial erosion or flooding. Operation of the Proposed Project would occur at grade or below ground and would not alter the existing grade, drainage pattern of the area, or substantially increase the rate or amount of surface runoff. Therefore, no impact is anticipated as a result of construction and operation of the Proposed Project.

e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Less Than Significant Impact. None of the facilities constructed as part of the Proposed Project would alter the drainage pattern of the area. The Proposed Project facilities would be constructed within existing disturbed areas. Any new impervious surface areas would be minimal and be conveyed using standard drainage BMP. Thus, there would be less than significant impacts to this criterion.

f) *Otherwise substantially degrade water quality?*

Less Than Significant Impact. The Proposed Project would deliver groundwater to the Miramar Treatment Plant for treatment and disinfection prior to delivery to potable use customers. The well would be drilled utilizing standard well drilling procedures and sanitary seals. Therefore, the impact to water quality would be less than significant.

g) *Place housing within a 100-year flood hazard area as mapped on a federal flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

No Impact. No housing would be constructed as part of the Proposed Project. As a result, construction and operation of the Proposed Project would not place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Map or Federal Flood Insurance Map. Therefore, no impacts would occur under this criterion as a result of the Proposed Project.

h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

No Impact. The Proposed Project site is not located within a 100-year flood hazard area and no habitable structures would be constructed as part of the Proposed Project that would be placed within a 100-year flood hazard area. The Proposed project site is located in an area designated as "Zone X- Area of Minimal Flood Hazard" on the effective Flood Insurance Rate Map (FIRM) published by the Federal Emergency Management Agency (FEMA). As a result, no impacts would occur.

i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

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No Impact. The components of the Proposed Project are not located near a dam or levee, therefore, there would be no risk of injury or flooding as a result of a levee or dam failure. No impacts would occur.

j) *Inundation by seiche, tsunami, or mudflow?*

No Impact. A tsunami is a series of waves generated in a body of water by pulsating or abrupt disturbance that vertically displaces water. Inundation of the Proposed Project's site by a tsunami is highly unlikely as the Proposed Project site is approximately 50 miles northeast from the Pacific Ocean. In addition, there are no enclosed bodies of water within the vicinity of the Proposed Project. Because the Proposed Project is not located adjacent to any enclosed bodies of water, no seiche, mudflow or tsunami related flooding is anticipated to occur on site. No impacts would occur.

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3.10 LAND USE AND PLANNING

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Physically divide an established community?*

No Impact. The Proposed Project would not physically divide an established community. The Proposed Project consists of a groundwater well and associated underground piping. The Proposed Project would not construct any residential homes on the project site. The Proposed Project would include a small building to house the well head and electrical facilities only. There are no existing structures on the Proposed Project site. Therefore, the Proposed Project would not impact established communities.

b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

No Impact. The Proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency. The Proposed Project operations would occur mostly underground and would not impose impacts on surrounding or off-site land uses. The Proposed Project is designated as a Public Facilities land use, which permits construction of groundwater wells. Therefore, less than significant impacts are anticipated to result from the Proposed Project.

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

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No Impact. According to the Open Space Element of the City of Claremont General Plan, the Proposed Project would not conflict with any applicable habitat conservation plan or natural community conservation plan. No off-site impacts are anticipated from the Project. The Proposed Project is consistent with the Los Angeles County land use designation and zoning. Therefore, no impacts are anticipated to occur from conflicts with any applicable habitat conservation plan or natural community conservation plan.

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3.11 MINERAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>MINERAL RESOURCES:</u> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

Less Than Significant Impact. The Proposed Project would not result in the loss of availability of a known mineral resource that would be of value because the Proposed Project and construction activities would not result in a significant removal amount of excess soil. The soil that would be displaced by the Proposed Project would be moved off-site and reused in order to preserve potentially significant minerals. The Proposed Project would not result in the loss or availability of mineral resources that would be of value to the region. Therefore, the Proposed Project would have a less than significant impact to mineral resources.

b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

Less Than Significant Impact. The City of Claremont General Plan states that the area outlined for the Proposed Project is classified as a Mineral Resource Zone 2 (MRZ-2). A MRZ-2 region is not known to have significant mineral resources. Therefore, the construction and operation of the Proposed Project would not result in significant loss of availability of locally important mineral resources as designated by the City of Claremont. The Proposed Project would not result in a significant removal amount of excess soil. Therefore, the Proposed Project would have a less than significant impact on the loss of availability of a locally important mineral resource.

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3.12 NOISE

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE: Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less Than Significant Impact with Mitigation Incorporated. The Noise Element regulates noise in the City of Claremont General Plan. The Noise Element references the community noise exposure level (CNEL) standard for single-family in the City of Claremont as 70 CNEL as “normally acceptable.” City of Claremont General Plan shows that existing residential noise levels surrounding the Proposed Project site are also no more than 70 CNEL. The Proposed Project abuts the 210 Freeway, which is a major source of noise with CNEL levels exceeding 72 decibels. The General Plan sets both day and night maximum allowable noise levels for residential land uses by designating “noise zones.” The Proposed Project site is surrounded by residential uses to the west and the 210 freeway to the south and east. Construction of the Proposed Project would include the operation of conventional construction equipment that could exceed noise level standards adopted by the

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City. However, the City of Claremont Municipal Code exempts construction activities from the City's noise level standards so long as they take place between the hours of 7 a.m. and 8 p.m. on any day except Sunday or a City-recognized holiday. Construction of the Proposed Project would be required to adhere to these permitted construction hours. Proposed Project operation would be supported by an electric pump, which produces limited noise. The well pump and motor would be housed in an enclosure that would also reduce noise levels associated with operation. The well enclosure would have engineered sound panels to reduce noise levels during well pump operation. Operation and construction of the Proposed Project is not expected to substantially increase ambient noise levels or exceed an established threshold. However, mitigation is identified below to reduce this potential impact to a less than significant level.

Mitigation Measures

NOS-1: For all construction related activities, noise attenuation techniques shall be employed as needed to ensure that noise remains as low as possible during construction. The following noise attenuation techniques shall be incorporated into contract specifications to reduce the impact of construction noise:

- Construction equipment shall be equipped with properly operating and maintained mufflers consistent with manufacturer's standards.
- Noise-generating construction equipment and construction staging areas shall be located away from sensitive receptors, where feasible.
- High noise-producing activities shall be scheduled between the hours of 7:00 a.m. and 5:00 p.m. to minimize disruption to sensitive receptors.
- All stationary construction equipment (e.g. air compressor, generators, impact wrenches, etc.) shall be operated as far away from residential uses as possible and shall be shielded with temporary sound barriers, sound aprons or sound skins.
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.
- During all construction activities, the job superintendent shall limit all construction-related activities to between the hours 6:30 a.m. and 8:00 p.m. Monday through Saturday.
- Clearly post construction hours, allowable workdays, and the phone number of the job superintendent at all construction entrances to allow the surrounding property owners/occupants to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective actions and report the actions to the complainant.
- Engineered sound panels on the wall of the facility building where the pump well is housed shall be installed in order to reduce potential operation noise levels.

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b) *Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?*

Less Than Significant Impact. Vibration refers to ground borne noise and perceptible motion. Typical sources of ground borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. The United States Department of Transportation Federal Transit Administration (FTA) provides guidelines for maximum-acceptable vibration criteria for different types of land uses. These guidelines allow 80 VdB for residential uses and buildings where people normally sleep. Construction activity can result in varying degrees of groundborne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. Occasionally large loaded trucks can cause perceptible vibration levels at close proximity. The FTA guidelines of 80 V dB for sensitive land uses provide the basis for determining the relative significance of potential Proposed Project related vibration impacts. The Proposed Project site would not be exposed to substantial groundborne vibration because large pieces of equipment would not be used in development of the ground well within the small vacant parcel. The well drilling rig is the largest piece of equipment. The Proposed Project anticipates that groundborne vibration activities would cause only intermittent, localized intrusion with no vibration exceeding the 80 VdB at the nearest offsite residences during construction. On the other hand, operation of the Proposed Project would not substantially increase ambient noise levels nor expose persons to excessive ground borne vibration since the new pipeline would be placed underground and the water well would be located in an enclosed storage facility. Therefore, Proposed Project impacts would be less than significant.

c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant Impact. Noise from the Proposed Project would typically be generated during temporary construction of the ground water well and pipeline in the public right-of-way. However, the Proposed Project abuts the 210 Freeway, which is a major source of noise in the City of Claremont. During operation, the Grand Avenue Well and associated pipelines in the public right-of-way would be underground or within a sound reducing structure that would not create any significant noise that would cause a substantial permanent increase in ambient noise. Therefore, the Proposed Project would have less than significant impacts to ambient noise levels in the vicinity of the project site.

d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant Impact with Mitigation Incorporated. Operations of the Proposed Project could potentially contribute to ambient noise levels. However, installation of the new pipeline would be placed underground and installation of the water well would be located in an enclosed structure that would be properly fitted with engineered sound panels to reduce long-term

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potential operational noise. In addition, temporary or periodic increases in ambient noise levels would occur during the construction of the Proposed Project. However, City noise standards limit construction hours for activities that may exceed an applicable noise standard. Therefore, construction activities occurring during these times must adhere to the City's noise level standards. Noise generated during the construction phase would be temporary and would cease once construction has been completed. Because construction activities generate noise in excess of City noise standards, Mitigation Measure NOS-1 has been identified. Adherence to this measure in addition to compliance with City noise regulations would reduce impacts associated with this issue to a less than significant level with mitigation incorporated.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the Project Area to excessive noise levels?*

No Impact. According to the City of Claremont General Plan, the Proposed Project is not located within an airport land use plan. Consequently, the Proposed Project would not expose people to excessive airport noise. No impact would occur.

f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the Project Area to excessive noise levels?*

No Impact. The Proposed Project is not within the vicinity of a private airstrip. No impact would occur.

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3.13 POPULATION AND HOUSING

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a)

a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

No Impact. The Proposed Project would not induce substantial population growth in the area, either directly or indirectly. Construction personnel is anticipated to come from local areas, with no impacts occurring on population growth. Construction and operation of the Proposed Project would increase TVMWD’s capability to extract groundwater within the Six Basins and would only benefit the existing regional TVMWD member agencies. No growth-inducing impacts are anticipated to occur from construction or operations of the Proposed Project as it would only benefit existing regional customers. Therefore, substantial population growth would not result from the Proposed Project.

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No Impact. The Proposed Project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. The Proposed Project includes the construction of a new ground water well on a vacant lot and associated pipelines that are subterranean along the public right-of-way. No existing residential homes would be displaced. Therefore, the construction of replacement housing due to the displacement of existing housing would not result from the Proposed Project.

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c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. The Proposed Project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. The Proposed Project includes the construction of a new ground water well on a vacant lot and associated pipelines that are subterranean along the public right-of-way. No existing residential homes would be displaced. Therefore, no impacts would occur.

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3.14 PUBLIC SERVICES

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>PUBLIC SERVICES:</u> Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact, in order to maintain acceptable service ratios for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact, in order to maintain acceptable service ratios for any of the public services:*

i. Fire protection?

No Impact. The Proposed Project would not result in the need for new or physically altered governmental facilities for fire protection causing adverse physical impacts. There would be no additional residential developments built because of the Proposed Project that would cause response times for fire protection and emergencies to increase. Therefore, no impacts would occur.

i. Police protection?

No Impact. The Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, such as police protection, or have the need for new or physically altered governmental facilities. Local population numbers would not increase due to the Proposed Project. Therefore, the police

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protection ratios would remain the same and there would be no additional need for police protection. Therefore, no impacts would occur.

ii. Schools?

No Impact. The Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, such as schools, or have the need for new or physically altered governmental facilities. The local population numbers would not increase due to the Proposed Project. There would be no need for construction of new school facilities. Therefore, no impacts would occur.

iii. Parks?

No Impact. The Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, such as parks, or have the need for new or physically altered governmental facilities. There would not be an increase in local population numbers due to the Proposed Project that would increase the demand for public services such as parks. Therefore, no impacts would occur.

iv. Other public facilities?

No Impact. The Proposed Project would not require the need for new or physically altered governmental public facilities. No other public facilities are located adjacent to the Proposed Project site. Therefore, no impacts would occur.

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3.15 RECREATION

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
RECREATION: Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

No Impact. The Proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Construction of the Proposed Project would occur on a vacant lot with no direct or indirect relation to recreational use. The construction and operation of the Proposed Project would provide a benefit to existing regional TVMWD member agencies and would not generate an increase of local population. No population growth would be generated that would increase the use and deterioration of existing recreational facilities. Therefore, no impacts to existing neighborhood and regional parks or other recreational facilities are anticipated to result from the Project.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

No Impact. The Proposed Project would not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The Proposed Project is comprised of a subterranean well and associated pipeline that would be implemented on a vacant lot and public right-of-way. The Proposed Project would not include recreational facility components. Therefore, no impacts to recreational facilities that would create an adverse physical effect on the environment would result from the Project.

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3.16 TRANSPORTATION AND TRAFFIC

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
TRANSPORTATION AND TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of*

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the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. The drill rig and equipment to construct the well site is considered a negligible increase for a temporary duration. Operations would require occasional deliveries and manpower. Therefore, the Proposed Project construction and operations would not conflict with any applicable plan that measures the effectiveness of the circulation system in the City. In addition, the proposed pipeline would have minimal traffic control impacts to the local circulation system. Construction related vehicles would only temporarily effect the performance of the local circulation system during the construction phase. In addition, the Proposed Project site is located at the end of a cul-de-sac and operational impacts would be less than significant and would not conflict with applicable plans, ordinance or policies.

b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. The Proposed Project would not conflict with an applicable congestion management program. The proposed pipeline would produce minimal traffic control impacts to the local circulation system. In addition, construction related vehicles would temporarily effect local circulation traffic during the construction phase of the Proposed Project. Therefore, the Proposed Project would result in less than significant impacts from conflict with an applicable congestion management program.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The Proposed Project would not result in a change in air traffic patterns. The nearest Airport to the Proposed Project is Brackett Field Airport, located six miles west. Air traffic levels would not increase as a result of the Proposed Project. Therefore, the Proposed Project would not impact air traffic patterns.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The Proposed Project would not substantially increase hazards due to a design feature or incompatible uses. The Proposed Project is comprised of a groundwater well and associated underground piping. Roads which undergo pipeline installation would be repaved following construction activities. Therefore, the Proposed Project would result in less than significant impacts for substantial increase in hazards due to a design feature or incompatible uses.

e) Result in inadequate emergency access?

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Less Than Significant Impacts. The Proposed Project is located on a vacant lot that abuts the 210 freeway and church parking lot. In addition, associated pipelines would be constructed within the public right-of-way and would not interview with emergency access. Roads may be temporarily limited to one lane during construction, however there would be no changes to the street system during operations. Therefore, the Proposed Project would not result in inadequate emergency access and less than significant impacts are anticipated.

f) *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

No Impact. The Proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance of safety of such facilities. Therefore, no impacts would occur.

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3.17 TRIBAL CULTURAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
TRIBAL CULTURAL RESOURCES: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or*
- b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe*

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3.18 UTILITIES AND SERVICE SYSTEMS

Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

No Impact. The Proposed Project would not exceed wastewater treatment requirement of the applicable Regional Water Quality Control Board. The Proposed Project would not produce an increase of wastewater or changes to any existing wastewater treatment facilities. Therefore, no impacts to wastewater treatment requirements would occur.

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- b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No Impact. The Proposed Project would not require the construction of new water or wastewater treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. The Proposed Project consists of a groundwater well and associated piping in the public right-of-way. Wastewater would not be generated as a result of the Proposed Project. The nature of the Proposed Project is to develop additional water supplies and construct new facilities, which would provide a beneficial source of ground water the Six Basins. Therefore, the Proposed Project would not result in or require the construction of new water or wastewater and no environmental effects are anticipated.

- c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less Than Significant Impact. The Proposed Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could result in significant environmental effects. The Proposed Project consists of a groundwater well and underground piping within the public right-of-way. Therefore, the Proposed Project would not result in or require the construction of new storm water drainage facilities and no environmental effects are anticipated.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Less Than Significant Impact. Groundwater accounts for about 7% of the District's water supply from the Miramar Plant and imported water the remaining 93%. The District has an annual pumping right of 3,500 AF from the Six Basins, based on the terms of the Judgment. Groundwater management is dictated by the terms of the Judgment and groundwater production in the basin is under the control of the Six Basin Watermaster and the new Strategic Plan. Production is managed to meet a level of sustainable safe yield. Therefore, the Proposed Project would have less than significant impacts to water supplies available from existing entitlements and resources.

- e) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

No Impact. The Proposed Project would not result in a determination from the wastewater treatment provider. The Proposed Project would not generate wastewater that would require treatment. Therefore, no impacts would occur.

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

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No Impact. The Proposed Project would result in minimal construction of waste products. The City of Claremont has a capable, existing solid waste system to accommodate the waste produced by construction activities. Therefore, the Proposed Project would not face conflicts regarding solid waste disposal needs, nor would it impose conflicts on existing landfills.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The Proposed Project would comply with federal, state, and local statutes and regulations related to solid waste. Solid waste generated by construction activities would be disposed of following all applicable federal, state, and local statutes. Therefore, no impacts from operations of the Proposed Project would occur.

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THREE VALLEYS MUNICIPAL WATER DISTRICT PROPOSED GRAND AVENUE WELL

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4.0 MANDATORY FINDINGS OF SIGNIFICANCE

- a. *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant Impact. The Proposed Project has a less than significant impact to potentially degrade the quality of the environment or reduce the habitat of a fish or wildlife species. In addition, the Proposed Project would not have substantial impacts to archeological resources. Consequently, the Proposed Project's Mandatory Finding of Significance relative to degrading the quality of the environment would be less than significant.

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)*

Less Than Significant Impact with Mitigation Incorporated. Subject to Mitigation Measure NOS-1, the Proposed Project would have less than significant impacts relative to cumulative incremental effects that are potentially considerable. The Proposed Project contribution to cumulative air quality would be less than significant. In addition, hydrology, public services, utilities, and traffic project level impacts would be less than significant. Therefore, the Proposed Project's contribution to cumulative impacts would not be considerable. Consequently, the Proposed Project's Mandatory Finding of Significance relative to incremental effects of a project would be less than significant with mitigation incorporated.

- c. *Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less Than Significant Impact with Mitigation Incorporated. Subject to Mitigation Measure NOS-1, the Proposed Project would have less than significant impacts relative to adverse effects on humans either directly or indirectly with mitigation incorporated.

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5.0 PROPOSED FINDING

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

I find that the proposed Grand Avenue Well Project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

I find that although the proposed Grand Avenue Well Project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A **MITIGATED NEGATIVE DECLARATION** will be prepared. *Attached Mitigation Measures and Monitoring Program.*

I find that the proposed Grand Avenue Well Project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

I find that the proposed Grand Avenue Well Project **MAY** have a significant effect on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed Grand Avenue Well Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, nothing further is required.

Signature:

Date:

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Appendix A AIR QUALITY

Well 4 - South Coast AQMD Air District, Summer

Well 4

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.03	3,400.00	0
User Defined Industrial	1.00	User Defined Unit	0.73	32,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot size is 3,400 SF; Trench dimensions disturbed: 32,000 SF

Construction Phase - Estimated time for construction

Off-road Equipment - Anticipated Building Construction Equipment

Off-road Equipment - Anticipated Well Construction Equipment

Off-road Equipment - Anticipated Pipeline Equipment

Construction Off-road Equipment Mitigation -

Well 4 - South Coast AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	100.00	5.00
tblConstructionPhase	NumDays	2.00	45.00
tblConstructionPhase	PhaseEndDate	7/10/2017	9/15/2017
tblConstructionPhase	PhaseEndDate	7/10/2017	9/11/2017
tblConstructionPhase	PhaseStartDate	7/11/2017	9/11/2017
tblLandUse	BuildingSpaceSquareFeet	0.00	3,400.00
tblLandUse	BuildingSpaceSquareFeet	0.00	32,000.00
tblLandUse	LandUseSquareFeet	0.00	3,400.00
tblLandUse	LandUseSquareFeet	0.00	32,000.00
tblLandUse	LotAcreage	0.00	0.03
tblLandUse	LotAcreage	0.00	0.73
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts

Well 4 - South Coast AQMD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	WorkerTripNumber	15.00	10.00

2.0 Emissions Summary

Well 4 - South Coast AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7909	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.7909	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000	0.0000	4.7000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7909	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.7909	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000	0.0000	4.7000e-004

Well 4 - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	9/11/2017	9/15/2017	5	5	
2	Well Construction	Grading	7/11/2017	9/11/2017	5	45	
3	Pipeline Construction	Trenching	9/11/2017	9/18/2017	5	6	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Well 4 - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cement and Mortar Mixers	1	4.00	9	0.56
Well Construction	Bore/Drill Rigs	1	8.00	221	0.50
Well Construction	Cranes	1	4.00	231	0.29
Pipeline Construction	Trenchers	1	8.00	78	0.50
Well Construction	Forklifts	1	2.00	89	0.20
Pipeline Construction	Concrete/Industrial Saws	1	4.00	81	0.73
Pipeline Construction	Forklifts	1	2.00	89	0.20
Pipeline Construction	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Pipeline Construction	Plate Compactors	1	4.00	8	0.43
Pipeline Construction	Rollers	1	4.00	80	0.38
Pipeline Construction	Paving Equipment	1	6.00	132	0.36
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Well Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Well Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Well Construction	Rubber Tired Dozers	1	1.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Pipeline Construction	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Well Construction	6	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Well 4 - South Coast AQMD Air District, Summer

Clean Paved Roads

3.2 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3105	12.9432	8.2242	0.0118		0.8665	0.8665		0.7977	0.7977		1,191.1746	1,191.1746	0.3599		1,200.1710
Total	1.3105	12.9432	8.2242	0.0118		0.8665	0.8665		0.7977	0.7977		1,191.1746	1,191.1746	0.3599		1,200.1710

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0290	0.7745	0.2013	1.5800e-003	0.0384	6.7000e-003	0.0451	0.0111	6.4100e-003	0.0175		167.6675	167.6675	0.0120		167.9678
Worker	0.0908	0.0665	0.8549	1.8900e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		188.1527	188.1527	7.0900e-003		188.3299
Total	0.1199	0.8410	1.0562	3.4700e-003	0.2061	8.0800e-003	0.2142	0.0555	7.6900e-003	0.0632		355.8202	355.8202	0.0191		356.2977

Well 4 - South Coast AQMD Air District, Summer

3.2 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3105	12.9432	8.2242	0.0118		0.8665	0.8665		0.7977	0.7977	0.0000	1,191.1746	1,191.1746	0.3599		1,200.1710
Total	1.3105	12.9432	8.2242	0.0118		0.8665	0.8665		0.7977	0.7977	0.0000	1,191.1746	1,191.1746	0.3599		1,200.1710

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0290	0.7745	0.2013	1.5800e-003	0.0384	6.7000e-003	0.0451	0.0111	6.4100e-003	0.0175		167.6675	167.6675	0.0120		167.9678
Worker	0.0908	0.0665	0.8549	1.8900e-003	0.1677	1.3800e-003	0.1691	0.0445	1.2800e-003	0.0457		188.1527	188.1527	7.0900e-003		188.3299
Total	0.1199	0.8410	1.0562	3.4700e-003	0.2061	8.0800e-003	0.2142	0.0555	7.6900e-003	0.0632		355.8202	355.8202	0.0191		356.2977

Well 4 - South Coast AQMD Air District, Summer

3.3 Well Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.6942	17.5183	9.9947	0.0224		0.9140	0.9140		0.8654	0.8654		2,240.7735	2,240.7735	0.5571		2,254.7016
Total	1.6942	17.5183	9.9947	0.0224	0.7528	0.9140	1.6668	0.4138	0.8654	1.2792		2,240.7735	2,240.7735	0.5571		2,254.7016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0605	0.0443	0.5699	1.2600e-003	0.1118	9.2000e-004	0.1127	0.0296	8.5000e-004	0.0305		125.4351	125.4351	4.7300e-003		125.5533
Total	0.0605	0.0443	0.5699	1.2600e-003	0.1118	9.2000e-004	0.1127	0.0296	8.5000e-004	0.0305		125.4351	125.4351	4.7300e-003		125.5533

Well 4 - South Coast AQMD Air District, Summer

3.3 Well Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.6942	17.5183	9.9947	0.0224		0.9140	0.9140		0.8654	0.8654	0.0000	2,240.7735	2,240.7735	0.5571		2,254.7016
Total	1.6942	17.5183	9.9947	0.0224	0.7528	0.9140	1.6668	0.4138	0.8654	1.2792	0.0000	2,240.7735	2,240.7735	0.5571		2,254.7016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0605	0.0443	0.5699	1.2600e-003	0.1118	9.2000e-004	0.1127	0.0296	8.5000e-004	0.0305		125.4351	125.4351	4.7300e-003		125.5533
Total	0.0605	0.0443	0.5699	1.2600e-003	0.1118	9.2000e-004	0.1127	0.0296	8.5000e-004	0.0305		125.4351	125.4351	4.7300e-003		125.5533

Well 4 - South Coast AQMD Air District, Summer

3.4 Pipeline Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4135	12.6960	9.1172	0.0130		0.8962	0.8962		0.8371	0.8371		1,298.9690	1,298.9690	0.3298		1,307.2136
Total	1.4135	12.6960	9.1172	0.0130		0.8962	0.8962		0.8371	0.8371		1,298.9690	1,298.9690	0.3298		1,307.2136

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959

Well 4 - South Coast AQMD Air District, Summer

3.4 Pipeline Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4135	12.6960	9.1172	0.0130		0.8962	0.8962		0.8371	0.8371	0.0000	1,298.9690	1,298.9690	0.3298		1,307.2136
Total	1.4135	12.6960	9.1172	0.0130		0.8962	0.8962		0.8371	0.8371	0.0000	1,298.9690	1,298.9690	0.3298		1,307.2136

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959

4.0 Operational Detail - Mobile

Well 4 - South Coast AQMD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Well 4 - South Coast AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991
User Defined Industrial	0.546418	0.044132	0.199182	0.124467	0.017484	0.005870	0.020172	0.031831	0.001999	0.002027	0.004724	0.000704	0.000991

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Well 4 - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Well 4 - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7909	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Unmitigated	0.7909	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	0.7909	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

Well 4 - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	0.7909	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Well 4 - South Coast AQMD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION THREE VALLEYS MUNICIPAL WATER DISTRICT PROPOSED GRAND AVENUE WELL

Appendix B Six Basins Watermaster Board Memo
August 31, 2017

Appendix B SIX BASINS WATERMASTER BOARD MEMO

Wildermuth Environmental, 2017. *“Evaluation of the Potential for Substantial Injury associated with the Proposed Grand Avenue Well.”* Memorandum to Six Basins Watermaster Board, dated July 26, 2017.

Memorandum

To: Six Basins Watermaster Board
From: Wildermuth Environmental, Watermaster Staff
Date: July 26, 2017
Subject: Evaluation of the Potential for Substantial Injury associated with the Proposed Grand Avenue Well

<input type="checkbox"/> For Action	<input type="checkbox"/> Fiscal Impact	<input type="checkbox"/> Funds Budgeted
<input checked="" type="checkbox"/> Information Only	<input type="checkbox"/> Cost Estimate:	\$

Background and Previously Related Actions by the Board

Pursuant to Section III.B.4.b of the Six Basins Judgment, any Party that intends to acquire, construct or operate a new well in the Four Basins must provide a 30-day advance written notice to the Watermaster. And, pursuant to Section III.B.4.a, groundwater production from a new location shall not cause Substantial Injury to another Party.

The Watermaster Board has drafted a proposed update to its Operating Plan describing a procedure to analyze certain “Actions” for the potential to cause Substantial Injury. The objective of the procedure is to establish a standard process to decide whether an Action should be evaluated for the potential to cause Substantial Injury, and if so, to conduct the evaluation. The proposed procedure is attached to this memo.¹

Substantial Injury is defined in the draft Operating Plan update as:

...injury to a Party, the basin, or the environment that is attributable to the implementation of an Action, including, but not limited to, rising groundwater, liquefaction, interference with the ability to pump OSY, increases in pump lift, degradation of water quality, or land subsidence.

On May 24, 2016, Three Valleys Municipal Water District (TVMWD) notified Watermaster staff of its intent to drill, construct, develop, and operate a new well: TVMWD-3. The Watermaster Board approved a Task Order for Watermaster Staff to perform an evaluation of the potential for Substantial Injury (Substantial Injury analysis) on TVMWD-3 as a “test case” for the proposed process to inform the Watermaster of the potential for Substantial Injury. The objectives of this “test case” were to: (i) demonstrate the proposed process for evaluating projects and (ii) describe the potential impacts from the operation of TVMWD-3 and potential mitigation measures, if deemed appropriate. The analysis

¹ All memos developed in support of the update to the Operating Plan and the test case are available on Watermaster’s website at: <http://www.6bwm.com/info.php?pnum=6> under the header “Proposed Operating Plan Updates to Support Strategic Plan Implementation”

could then be used by the individual Parties to determine if the project impacts are potentially “Substantial” or not and to recommend mitigation measures, if necessary.

The “test case” was a successful demonstration of the proposed process for evaluating projects for the potential to cause Substantial Injury. The evaluation described the potential impacts from the operation of TVMWD-3, as well as measures that can be implemented to mitigate those impacts. The main conclusions and recommendations of this “test” evaluation were documented in the August 24, 2016 memo *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*², and included:

- The new groundwater production planned by TVMWD from TVMWD-3, which is about 600 acre-feet per year (afy), will cause lower groundwater levels in the Six Basins, particularly in the Upper Claremont Heights Basin (UCHB) in the areas around TVMWD-3.
- The new groundwater production at TVMWD-3 will not cause groundwater levels to decline below a sustainability metric at any Party’s well. That said, lower groundwater levels at wells, particularly north of the Indian Hill Fault, can lead to decreased well capacities, particularly during dry periods when groundwater levels are low.
- Satisfying a Replacement Water obligation through wet-water recharge for overproduction that occurs north of the Indian Hill Fault is an effective strategy to mitigate for lower groundwater levels, particularly if the recharge occurs near the areas of the new production.
- During wet periods, the new production at TVMWD-3 can help to mitigate instances of high groundwater (*i.e.* rising groundwater and liquefaction potential).
- The conclusions above apply not only to TVMWD-3, but to any new wells that are installed north of the Indian Hill Fault for the purpose of producing groundwater in volumes higher than historical volumes. Hence, future evaluations of Substantial Injury for proposed new wells located north of the Indian Hill Fault can leverage the information derived in this analysis and may not necessitate the use of the groundwater model in those evaluations. That said, additional new wells and groundwater production will have a cumulative impact on groundwater levels.

New Well Notification: TVMWD Grand Avenue Well

On June 5, 2017, TVMWD submitted a notification to Watermaster of its intent to drill, construct, develop and operate an additional new well in the UCHB: the Grand Avenue Well. The proposed location of the Grand Avenue Well is within the City of Claremont on a property located at the southern end of the cul-de-sac on North Grand Avenue south of Baseline Road. Figure 1 is a map that shows the proposed location of the well and nearby active production wells. The nearest active production wells are the Golden State Water Company’s (GSWC) Mills 1, Mountain View 1, and Marlboro wells, all of which are located within 1,800 feet of the proposed Grand Avenue Well.

² Accessible at: <http://www.6bwm.com/info.php?pnum=6> under header “Proposed Operating Plan Updates to Support Strategic Plan Implementation”

TVMWD currently plans the following for the construction and operation of the Grand Avenue Well:

Casing depth: 880 ft-bgs

Casing diameter: 16 inches

Well-screen depth interval: 300-800 ft-bgs

Pumping rate: 600-800 gallons per minute

Estimated annual production: 775-1,030 afy

Well utilization: 80-85 percent of the time

Well use: Supplement imported water supplies from the Miramar Treatment Plant

Water rights: TVMWD is an overproducer of its Operating Safe Yield (OSY) rights, so production from the Grand Avenue Well will incur a Replacement Water obligation. TVMWD's preferred method for Replacement is to maximize transfers of unproduced OSY rights from other Parties and then utilize its Storage and Recovery account to make up the difference.

On June 28, 2017, Watermaster Staff advised the Board that the operation of the Grand Avenue Well should be evaluated for the potential to cause Substantial Injury and the evaluation could be performed based on the results of the *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*. The Board directed Watermaster Staff to perform a Substantial Injury analysis on TVMWD's Grand Avenue Well. This Substantial Injury analysis also considers the cumulative impacts of the TVMWD-3 and Grand Avenue wells.

Methods to Evaluate the Potential for Substantial Injury

The method to evaluate the impacts from operating the Grand Avenue Well is to utilize the results of the Substantial Injury analysis performed for TVMWD-3. The method that was used to evaluate the impacts of TVMWD-3 included:

1. Development of a "Baseline" planning alternative that does not include the operation of TVMWD-3.
2. Development of two project alternatives that included the operation of TVMWD-3 at a range of annual production rates of 450 afy in dry years and 685 afy in wet years, and replacement operations from most impactful to least impactful:
 - a. TVMWD Preferred Alternative: TVMWD satisfies its Replacement Water obligation for production from TVMWD-3 through increased transfers (assumed to be up to 10 percent of the OSY) and use of its Storage and Recovery account.
 - b. Replacement Alternative: TVMWD satisfies its Replacement Water obligation for production from TVMWD-3 through wet-water recharge at the San Antonio Spreading Grounds (SASG). The wet-water recharge is equal to the annual production of TVMWD-3.

3. Use of the Six Basins groundwater-flow model to simulate the hydrologic response of all three planning alternatives over a long-term (54-year) hydrologic period³, and compare and contrast the model-simulation results. The impacts evaluated included: changes in groundwater levels; production sustainability at wells; the threat of high groundwater; and the water budget of the Six Basins.

This evaluation of the operation of the proposed Grand Avenue Well is a qualitative analysis that references the model results from the analysis of TVMWD-3 and discusses potential changes in groundwater levels and water budget; production sustainability at wells; and the threat of rising groundwater.

Evaluation of the Potential for Substantial Injury

Table 1a summarizes the average and total planning period production, transfers, storage extractions and wet-water recharge associated with the operation of the Grand Avenue Well for the three planning alternatives assuming no production from TVMWD-3. Table 1b summarizes the same information for the three alternatives assuming production from both the TVMWD-3 and the Grand Avenue wells. Over the 54-year planning period, the proposed operation of the Grand Avenue Well will result in a total increase in production of about 52,000 af, or about 970 afy. If operated together with the TVMWD-3 well, the total increase in production over the Baseline is about 87,400 af, or about 1,600 afy.

TVMWD Preferred Alternative

Over the 54-year planning period, the proposed operation of the Grand Avenue Well under the TVMWD Preferred Alternative, as compared to the Baseline, will result in the following:

- A total increase in transfers from other Parties to TVMWD of about 34,600 af, or about 640 afy. If operated together with the TVMWD-3 Well, the total increase in transfers is about 34,800 af, or about 650 afy.
- A total increase in extractions from the TVMWD storage account of about 17,440 af, or about 320 afy. If operated together with the TVMWD-3 Well, the total increase in extractions from the TVMWD storage account is about 46,920 af, or about 870 afy.
- No increase in wet-water recharge for Replacement Water obligations due to the proposed operation of the Grand Avenue Well. If operated together with the TVMWD-3 Well, the total increase in wet-water recharge for Replacement Water obligations is about 4,000 af, or about 70 afy.
- A total increase in wet-water recharge to build the TVMWD storage account of about 18,540 af, or about 340 afy. If operated together with the TVMWD-3 Well, the total increase in wet-water recharge to build TVMWD storage account is about 48,800 af, or about 900 afy.

³ The planning period, defined as July 2013³ to June 2066, includes a variable hydrology based on the historical record of precipitation for the period of 1960 to 2013 and current land use.

Figure 2 shows the difference in groundwater levels between the TVMWD Preferred Alternative and the Baseline Alternative at the end of the driest period within the 54-year model simulation from the *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*. In this alternative, groundwater levels are projected to be lower across the Six Basins, compared to the Baseline, because groundwater production is about 600 afy higher on average, and artificial recharge of imported water is only about 70 afy higher. Groundwater levels are projected to decline by as much as 20 feet around TVMWD-3, where the new production occurs. The groundwater-level declines do not cause water levels to drop below the sustainability thresholds of any Party's wells in the Six Basins. During wet periods, the projected lower groundwater levels are beneficial because they reduce the amount of time that groundwater levels are within 40 feet of the ground surface, which is the threshold for liquefaction potential. Regarding the water budget, the projected lower groundwater levels will reduce subsurface outflow to the Two Basins and to the Chino Basin. This results in an increase to the overall developed yield of the Four Basins by about three percent relative to the Baseline, and decreases the developed yield of the Two Basins by about two percent.

The Grand Avenue Well is proposed to produce between 775 and 1,030 afy, which more than the 450 to 685 afy planned and evaluated for TVMWD-3. Therefore, under the TVMWD preferred operation of the Grand Avenue Well, there is likely to be similar or greater magnitudes of groundwater-level declines surrounding the Grand Avenue Well and reduction of outflow to the Chino Basin and Two Basins as was predicted for the TVMWD-3 well. If both wells are in operation at the same time, there will be cumulative effects of changes to groundwater levels and subsurface outflow that are greater than the effects of the wells individually. For example, Figure 2 shows that the groundwater levels at the Grand Avenue Well site are predicted to be about eight feet lower compared to the Baseline due to the operation of the TVMWD-3 well. If about 20 feet of groundwater-level decline is predicted to occur at the Grand Avenue Well site as a result of operating the Grand Avenue Well, groundwater levels at the Grand Avenue Well site could be about 28 feet lower compared to the Baseline. The potential impacts of the lower groundwater levels at other wells, particularly for those wells located within the UCHB in areas between the TVMWD-3 and Grand Avenue wells, include: (1) lower production capacities, (2) greater pumping lifts, and (3) increased cost due to the greater pumping lifts. The wells that are likely to experience the greatest cumulative effects under this alternative include:

- Indian Hills 3 (GSWC)
- Indian Hills 4 (GSWC)
- Marlboro (GSWC)
- Mountain View 1 (GSWC)
- Mills 1 (GSWC)
- Tunnel Well 1 (City of Pomona)
- Tunnel Well 2 (City of Pomona)
- Tunnel Well 3 (City of Pomona)
- Tunnel Well 4 (City of Pomona)

Figures B-3 to B-5 and B-6 to B-11 are time-history charts of projected groundwater elevations from the *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*. These charts show that the groundwater elevations at these wells under the TVMWD Preferred Alternative are up to about 13 to 16 feet lower compared to the Baseline. Therefore, the cumulative groundwater-level declines from production at both the TVMWD-3 and Grand Avenue wells are expected to be greater than 13 to 16

feet at these wells. These charts show that it is unlikely that the production of the proposed Grand Avenue Well, combined with the production at the proposed TVMWD-3 Well, will cause water levels to decline below the sustainability thresholds of any Party's wells in the Six Basins. For example, Figure B-5 shows the projected lowest groundwater level at Mills-1 is about 15 feet above its sustainability threshold; if the groundwater-level decline at Mills-1 were to double due to the production at the Grand Avenue Well, the lowest water level at Mills-1 would be about nine feet above its sustainability threshold.

Replacement Alternative

Over the 54-year planning period, the proposed operation of the Grand Avenue Well under the Replacement Alternative, as compared to the Baseline, will result in the following:

- No increase in transfers from other Parties to the TVMWD to offset Replacement Water obligations.
- No increase in extractions from the TVMWD storage account to offset Replacement Water obligations.
- A total increase in wet-water recharge for Replacement Water obligations of about 52,020 af, or about 960 afy. If operated together with the TVMWD-3 Well, the total increase in wet-water recharge for Replacement Water obligations compared to the Baseline is about 85,750 af, or about 1,590 afy.
- No increase in wet-water recharge to build the TVMWD storage account.

Figure 3 shows the difference in groundwater levels between the Replacement Alternative and the Baseline Alternative at the end of the driest period within the 54-year model simulation from the *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*. In this alternative, groundwater levels are projected to be up to seven feet lower around TVMWD-3 (where the new production occurs) compared to the Baseline. Groundwater levels are projected to be up to six feet higher compared to the Baseline in the southern portion of the SASG where the Replacement Water was assumed to be recharged. Regarding the water budget, the replacement will in part mitigate the reduction in subsurface outflow to the Two Basins, but will result in an increase in subsurface outflow to the Chino Basin.

Under the operating scheme of the Replacement Alternative, the cumulative effects on groundwater levels associated with pumping both TVMWD-3 and Grand Avenue wells will be mitigated by the greater volumes of recharge at the SASG that will be required to satisfy the TVMWD Replacement Water obligations. The declines in groundwater levels west of the Grand Avenue Well will be greater than the declines predicted in the Replacement Alternative for TVMWD-3, and the increases in groundwater levels in the vicinity of the southern SASG (where the recharge is assumed to occur) and outflow to Chino Basin are expected to be greater than predicted in the Replacement Alternative for TVMWD-3.

Conclusions and Recommendations

The main conclusions and recommendations of this evaluation of the potential for Substantial Injury associated with the Grand Avenue Well are similar to those stated in *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*:

- Groundwater levels will be lower across the Six Basins, particularly if both the TVMWD-3 and the Grand Avenue wells are operated at the same time and TVMWD chooses to utilize transfers and extractions from its Storage and Recovery account as the methods to satisfy its associated Replacement Water obligations. The declines in groundwater levels are predicted to be greatest during dry periods within the UCHB in areas nearby and in-between the two new wells.
- If both the TVMWD-3 and Grand Avenue wells are operated at the same time, the predicted declines in groundwater levels are unlikely to cause water levels to decline below sustainability thresholds at other Party's wells, but can lead to decreased well capacities and increased pumping lifts, particularly during dry periods when groundwater levels are low.
- The predicted lower groundwater levels will have the beneficial effects of mitigating instances of high groundwater during wet periods (*i.e.* mitigation for rising groundwater and liquefaction potential).
- Satisfying Replacement Water obligations through wet-water recharge for overproduction that occurs north of the Indian Hill Fault is an effective strategy to mitigate for lower groundwater levels during dry periods, particularly if the recharge occurs near the areas of the new production. During wet periods, wet-water recharge to satisfy Replacement Water obligations could increase the potential for high groundwater conditions and increase subsurface outflow to the Chino Basin. Thus, an operational strategy that combines aspects of the TVMWD Preferred Alternative during periods wet periods and the Replacement Alternative during dry periods could minimize the potential for Substantial Injury associated with the operation of the Grand Avenue and/or TVMWD-3 wells.

Enclosed

Tables 1a, 1b, 2a and 2b

Figures 1-3

Figures B-3 to B-5 and B-6 to B-11 (excerpts from Appendix B of the memo *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*, dated August 24, 2016)

Proposed Update to the Operating Plan: Evaluation for the Potential for Substantial Injury – Draft 4

Table 1a
Summary of Substantial Injury Analysis Alternatives for Grand Avenue Well

Alternative	Statistic	TVMWD Production	Transfers from Other Parties to Offset Replacement Water Obligation	Extractions from Storage Account to Offset Replacement Water Obligation	Wet Water Recharge for Replacement Water Obligation	Wet Water Recharge to Build Storage Account
Baseline - Agencies pump 75% of OSY; 7% of unpumped OSY available for transfer; TVMWD prioritizes transfers and utilizes storage to offset replacement	Average (afy)	1,400	1,250	130	0	100
	Total Over Planning Period (af)	76,040	67,740	6,970	0	5,200
TVMWD Preferred - Agencies pump 75% of OSY; 10% of unpumped OSY available for transfer; TVMWD prioritizes transfers and utilizes storage to offset replacement	Average (afy)	2,370	1,890	450	0	440
	Total Over Planning Period (af)	128,090	102,350	24,410	0	23,740
Replace - Agencies pump 75% of OSY; 7% of unpumped OSY available for transfer; Replacement is equal to production at Grand Avenue Well; TVMWD prioritizes transfers and utilizes storage for Wells #1 and #2	Average (afy)	2,370	1,250	130	960	100
	Total Over Planning Period (af)	128,090	67,740	6,970	52,050	5,200

Table 1b
Summary of Substantial Injury Analysis Alternatives for TVMWD-3 and Grand Avenue Wells

Alternative	Statistic	TVMWD Production	Transfers from Other Parties to Offset Replacement Water Obligation	Extractions from Storage Account to Offset Replacement Water Obligation	Wet Water Recharge for Replacement Water Obligation	Wet Water Recharge to Build Storage Account
Baseline - Agencies pump 75% of OSY; 7% of unpumped OSY available for transfer; TVMWD prioritizes transfers and utilizes storage to offset replacement	Average (afy)	1,400	1,250	130	0	100
	Total Over Planning Period (af)	76,040	67,740	6,970	0	5,200
TVMWD Preferred - Agencies pump 75% of OSY; 10% of unpumped OSY available for transfer; TVMWD prioritizes TVMWD prioritizes transfers and utilizes storage to offset replacement	Average (afy)	3,000	1,900	1,000	70	1,000
	Total Over Planning Period (af)	161,790	102,570	53,890	4,000	54,000
Replace - Agencies pump 75% of OSY; 7% of unpumped OSY available for transfer; Replacement is equal to production at Well #3 and Grand Avenue Well; TVMWD prioritizes transfers and utilizes storage for Wells #1 and #2	Average (afy)	3,000	1,250	130	1,590	100
	Total Over Planning Period (af)	161,790	67,740	6,970	85,750	5,200

Table 2a
Difference in Water Budget Summary
TVMWD Preferred minus Baseline

	Water Budget Term	Basin/Sub-Basin	Increase (Decrease) Compared to the Baseline	Percent Increase (Decrease) Compared to the Baseline
Average Annual Recharge (afy)	Storm-Water Infiltration at Spreading Grounds	Six Basins	0	0%
		Four Basins	0	0%
		UCH/Cyn Basins	0	0%
		Pomona Basin	0	-
		Two Basins	0	0%
	Artificial Recharge of Imported Water	Six Basins	74	77%
		Four Basins	74	77%
		UCH Basin	74	77%
		Pomona Basin	0	-
		Two Basins	0	-
Average Annual Discharge (afy)	Groundwater Production	Six Basins	624	4%
		Four Basins	624	4%
		UCH/LCH/Cyn Basins	624	8%
		Pomona Basin	0	0%
		Two Basins	0	0%
	Subsurface Outflow to Chino Basin	from the Six Basins	(138)	-1%
		from the Pomona Basin	(93)	-1%
		from the UCH Basin	(45)	-2%
	Subsurface Outflow to the Two Basins	from the LCH/Cyn Basin	(226)	-10%
	Subsurface Outflow to the Pomona Basin	from the CH Basins	(243)	-3%
		from the Two Basins	(17)	-1%
	Rising Groundwater Outflow	Six Basins	(228)	-27%
	Developed Yield	Six Basins	366	2%
		Four Basins	412	3%
		UCH/LCH/Cyn Basins	514	8%
		Pomona Basin	(102)	-1%
		Two Basins	(46)	-2%
Cumulative Change in Storage by the End of the Planning Period	Six Basins	(9,975)	-52%	
	Four Basins	(7,470)	-13%	
	UCH/LCH/Cyn Basins	(1,969)	-4%	
	Pomona Basin	(5,501)	-68%	
	Two Basins	(2,506)	-7%	

Table 2 from the memo *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*, dated August 24, 2016.

Notes:

UCH - Upper Claremont Heights

LCH - Lower Claremont Heights

CH - Upper and Lower Claremont Heights

Cyn - Canyon

Table 2b
Difference in Water Budget Summary
Replacement minus Baseline

	Water Budget Term	Basin/Sub-Basin	Increase (Decrease) Compared to the Baseline	Percent Increase (Decrease) Compared to the Baseline
Average Annual Recharge (afy)	Storm-Water Infiltration at Spreading Grounds	Six Basins	0	0%
		Four Basins	0	0%
		UCH/Cyn Basins	0	0%
		Pomona Basin	0	-
		Two Basins	0	0%
	Artificial Recharge of Imported Water	Six Basins	624	648%
		Four Basins	624	648%
		UCH Basin	624	648%
		Pomona Basin	0	-
		Two Basins	0	-
Average Annual Discharge (afy)	Groundwater Production	Six Basins	624	4%
		Four Basins	624	4%
		UCH/LCH/Cyn Basins	624	8%
		Pomona Basin	0	0%
		Two Basins	0	0%
	Subsurface Outflow to Chino Basin	from the Six Basins	64	1%
		from the Pomona Basin	27	0%
		from the UCH Basin	37	1%
	Subsurface Outflow to the Two Basins	from the LCH/Cyn Basin	(85)	-4%
	Subsurface Outflow to the Pomona Basin	from the CH Basins	30	0%
		from the Two Basins	(12)	-1%
	Rising Groundwater Outflow	Six Basins	48	6%
	Developed Yield	Six Basins	(112)	-1%
		Four Basins	(89)	-1%
		UCH/LCH/Cyn Basins	18	0%
Pomona Basin		(107)	-1%	
Two Basins		(23)	-1%	
Cumulative Change in Storage by the End of the Planning Period	Six Basins	(6,039)	-31%	
	Four Basins	(4,813)	-8%	
	UCH/LCH/Cyn Basins	956	2%	
	Pomona Basin	(5,769)	-71%	
	Two Basins	(1,225)	-3%	

Table 3 from the memo *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*, dated August 24, 2016.

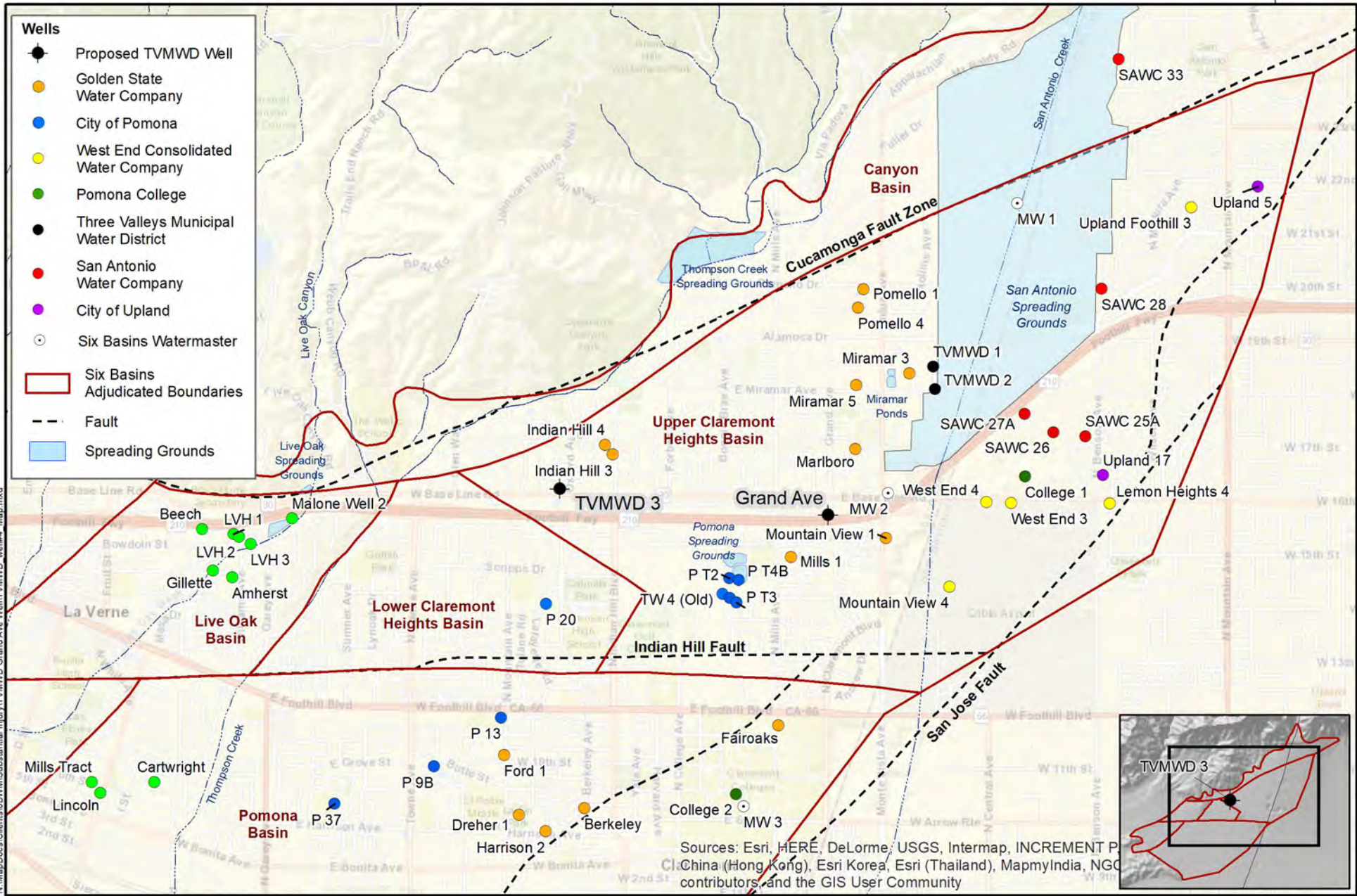
Notes:

UCH - Upper Claremont Heights

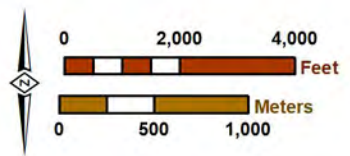
LCH - Lower Claremont Heights

CH - Upper and Lower Claremont Heights

Cyn - Canyon

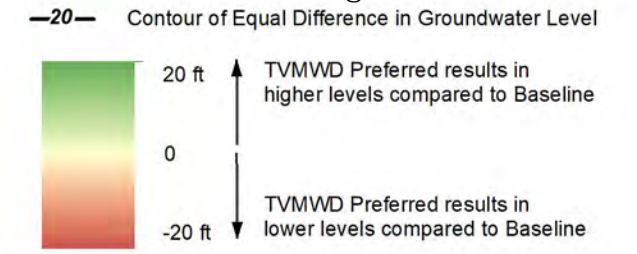
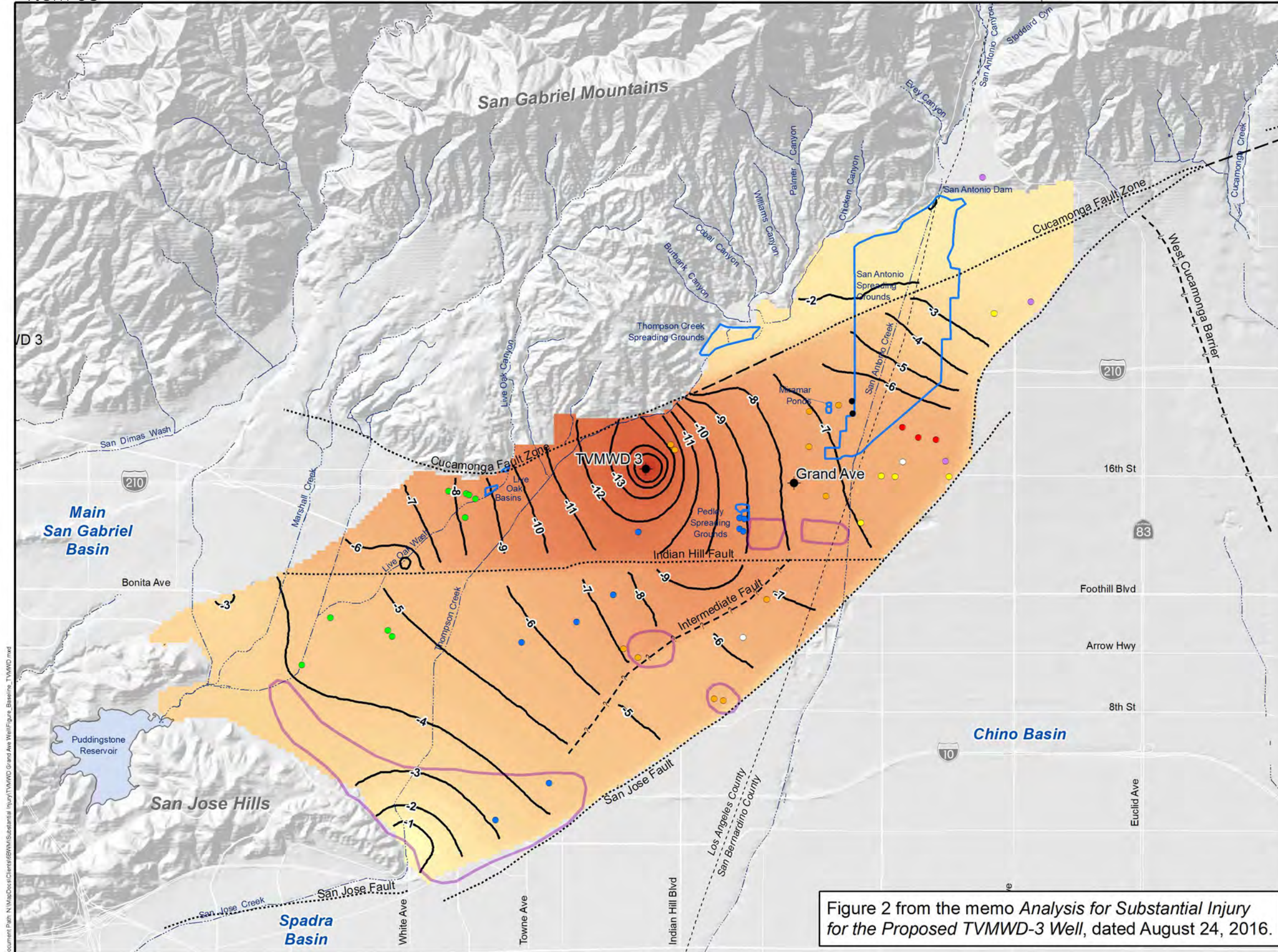


Author: CS
Date: 20170717



Well Location Map
Three Valleys Municipal Water District
Proposed Wells

Figure 1



- Wells**
- Proposed TVMWD Well
 - Golden State Water Company
 - City of La Verne
 - City of Pomona
 - San Antonio Water Company
 - Three Valleys Municipal Water District
 - City of Upland
 - West End Consolidated Water Company
 - Pomona College

- Historical Area of High Groundwater (Mendelhall, 1908; Bean, 1982; CDM, 2006)
- Spreading Grounds

- Location Certain
- Location Concealed
- Location Approximate
- Location Uncertain

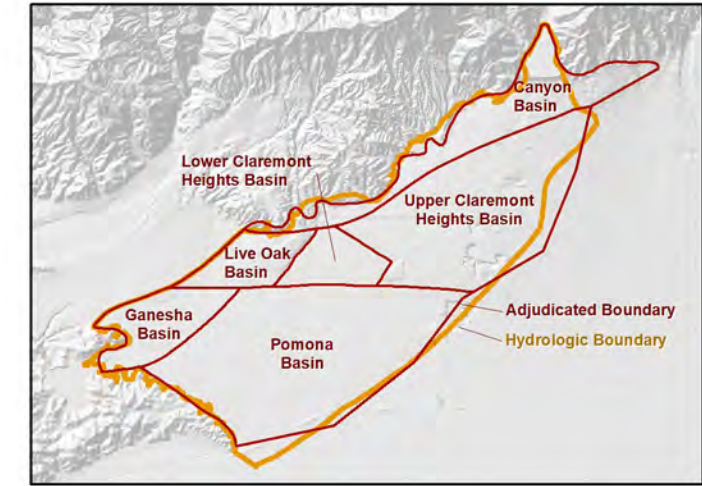


Figure 2 from the memo *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*, dated August 24, 2016.



Author: CS
Date: 20170713



Six Basins Watermaster
Substantial Injury Analysis

Groundwater-Level Difference:
TVMWD Preferred minus Baseline
End of Simulation (July 2066) - Model Run for TVMWD-3

Figure 2

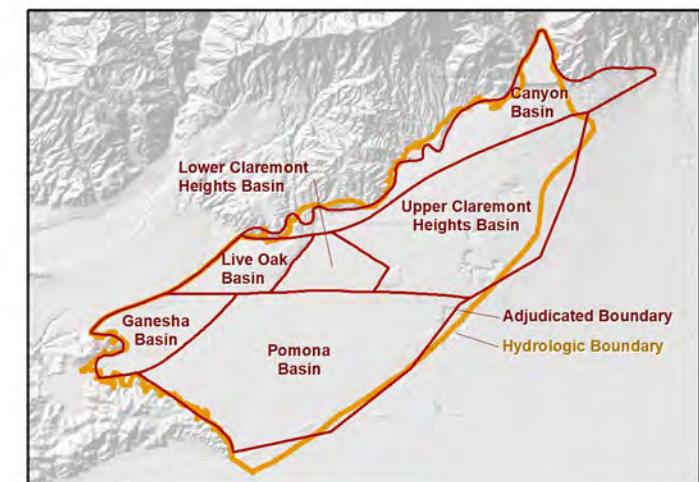
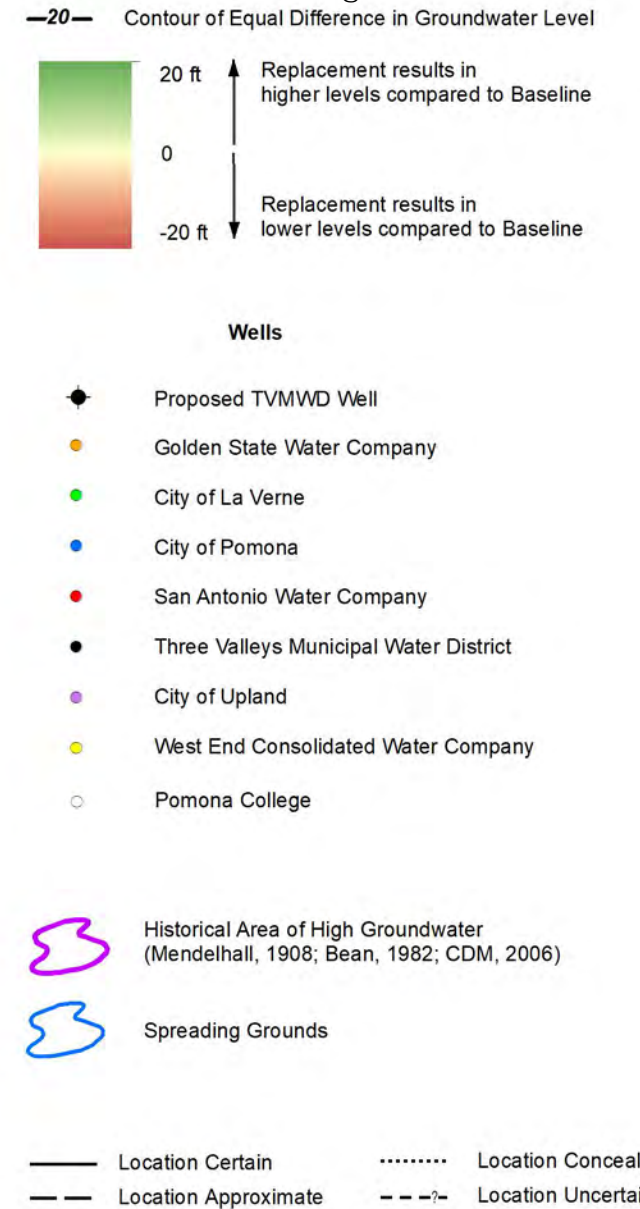
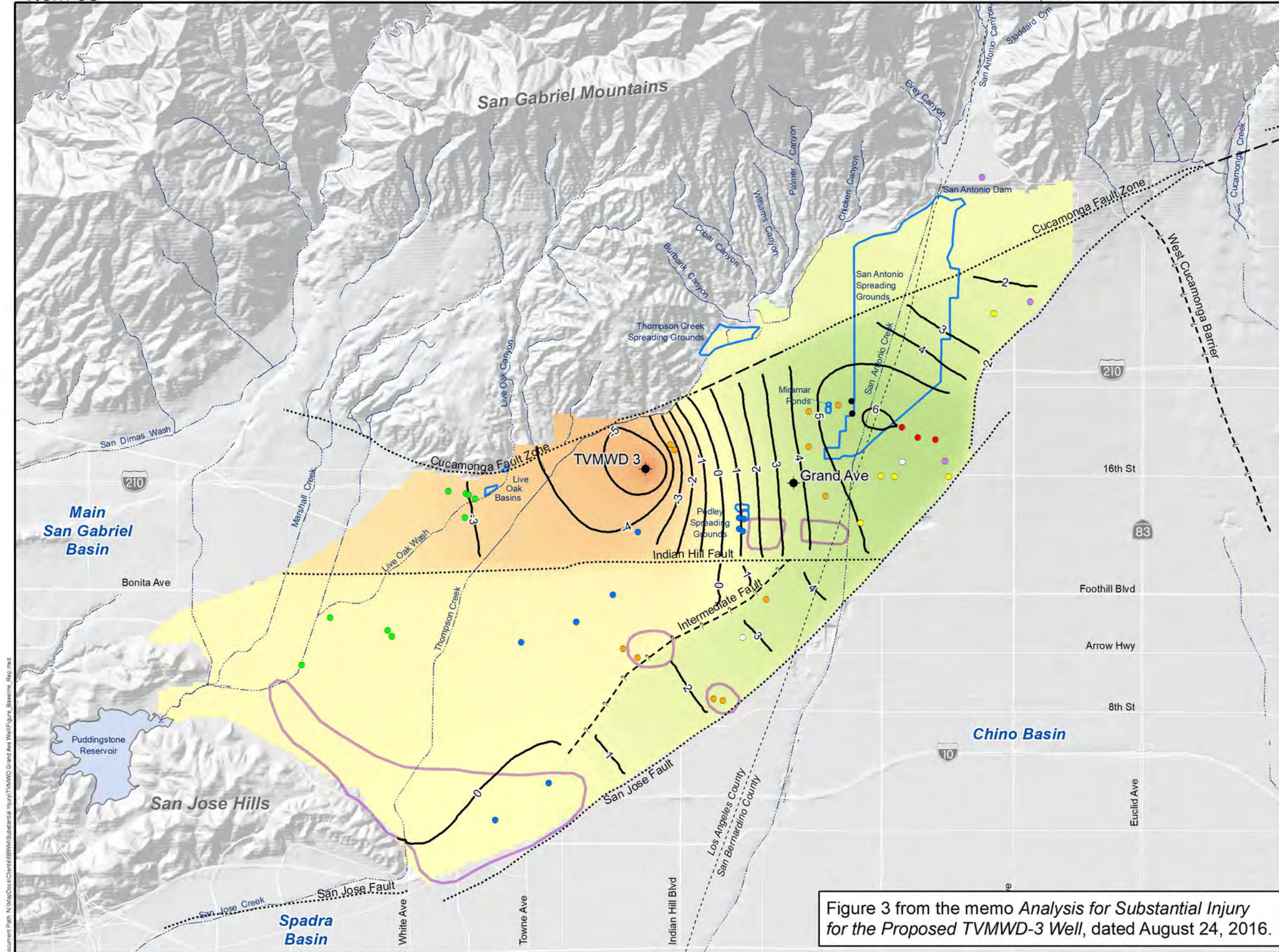
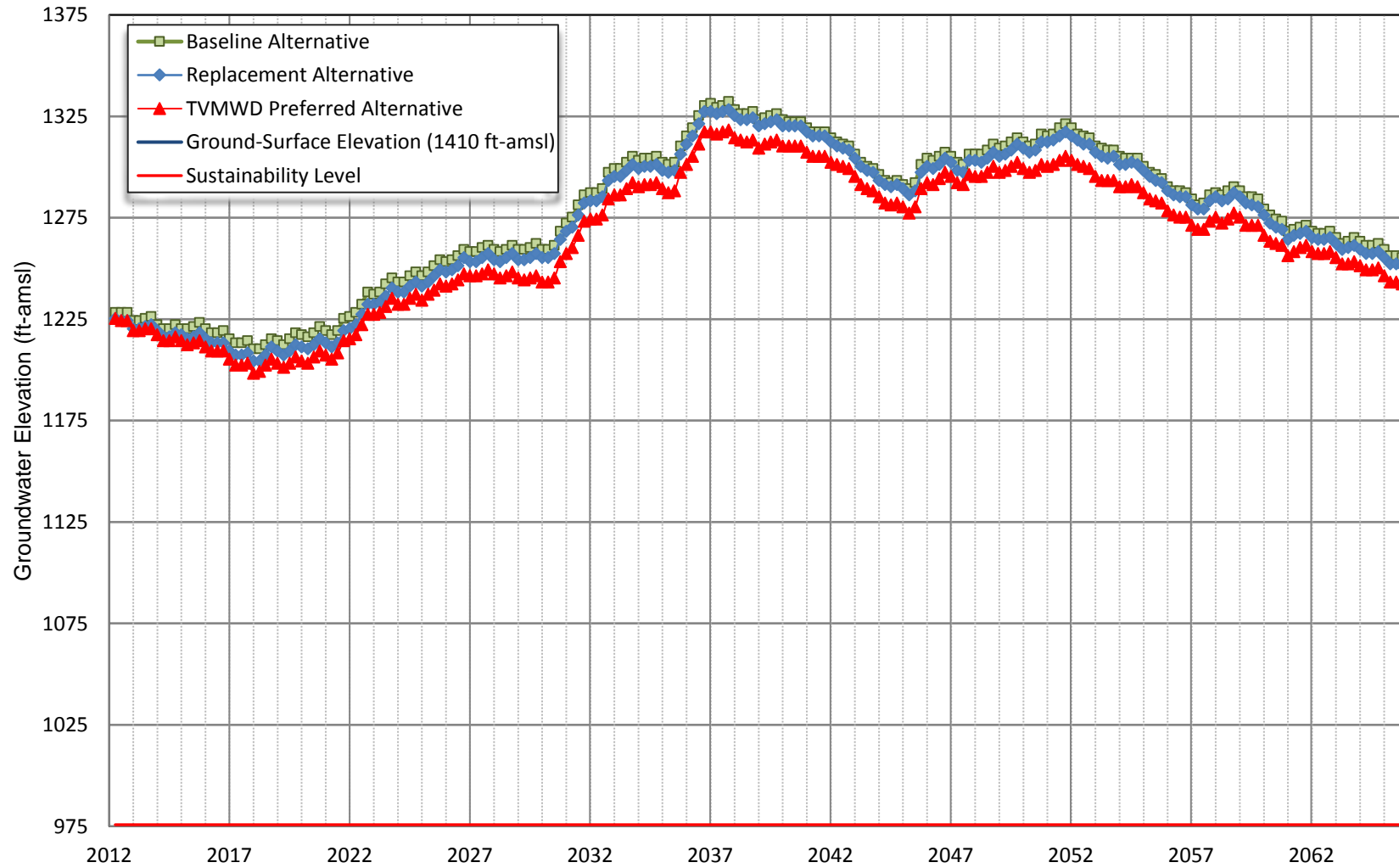


Figure 3 from the memo *Analysis for Substantial Injury for the Proposed TVMWD-3 Well*, dated August 24, 2016.

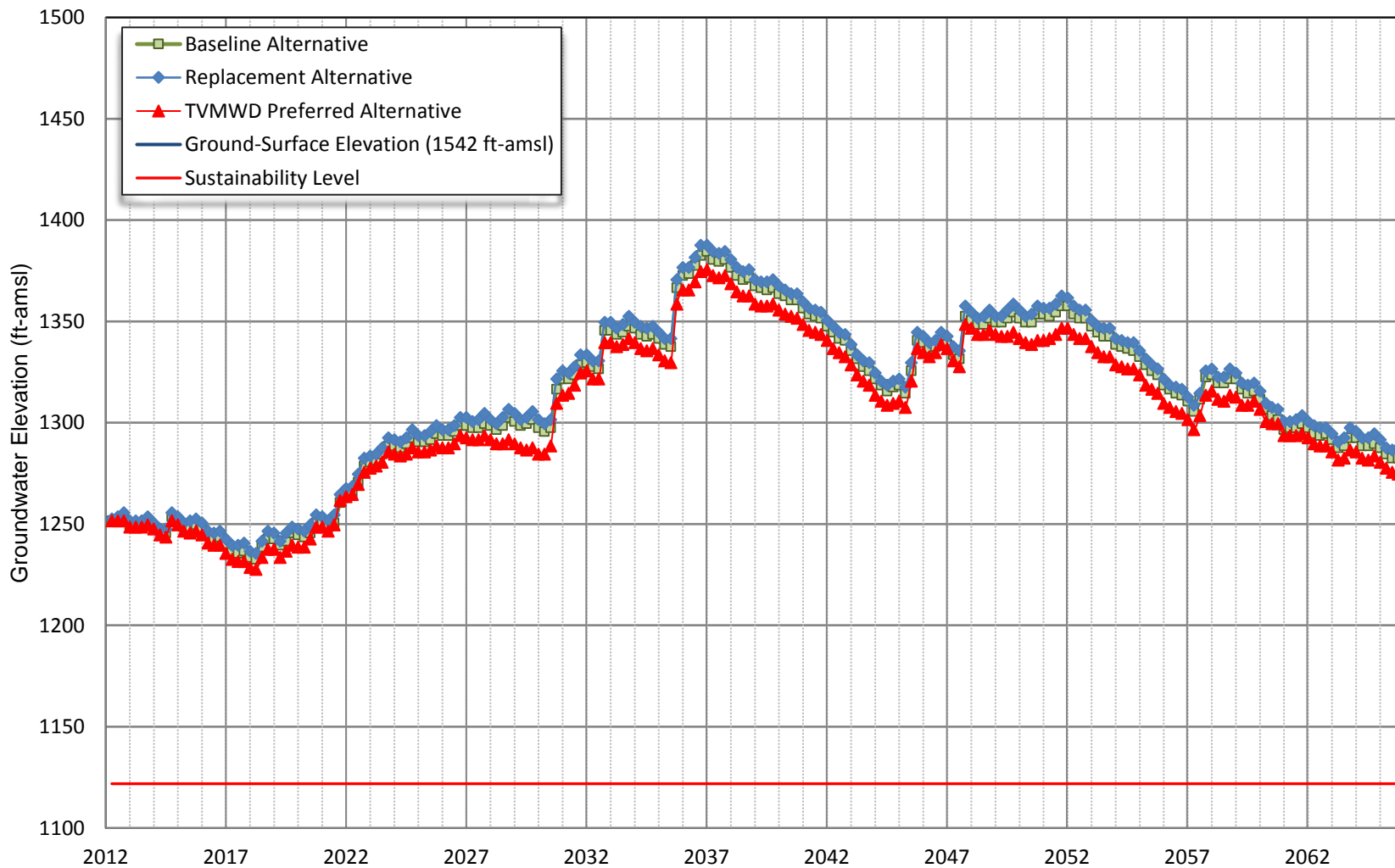
Upper Claremont Heights Basin

Figure B-3
Projected Groundwater Elevations at Well Indian Hill North #3 (GSWC)
Alternatives Compared to Baseline



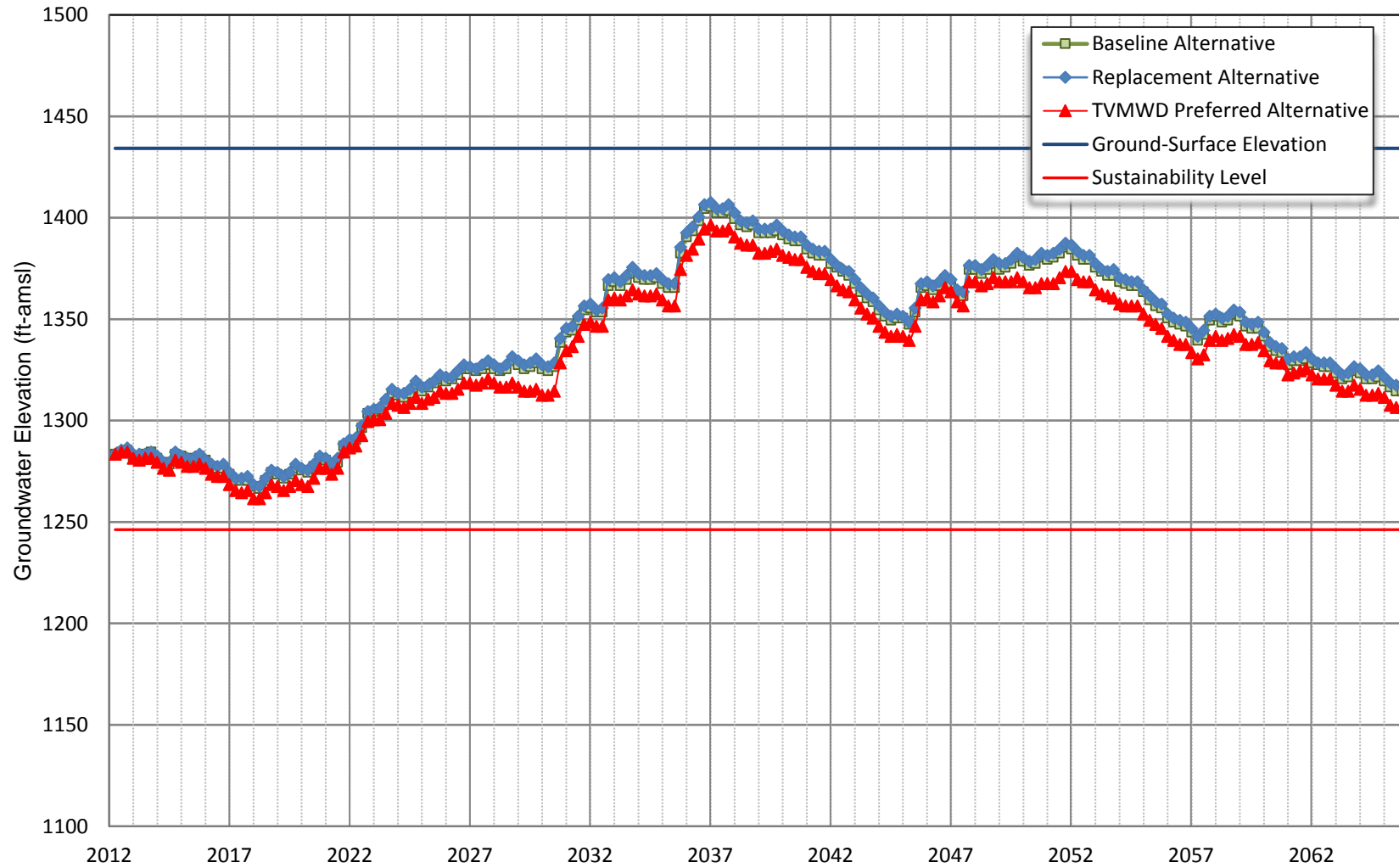
Upper Claremont Heights Basin

Figure B-4
Projected Groundwater Elevations at Well Marlboro #2 (GSWC)
Alternatives Compared to Baseline



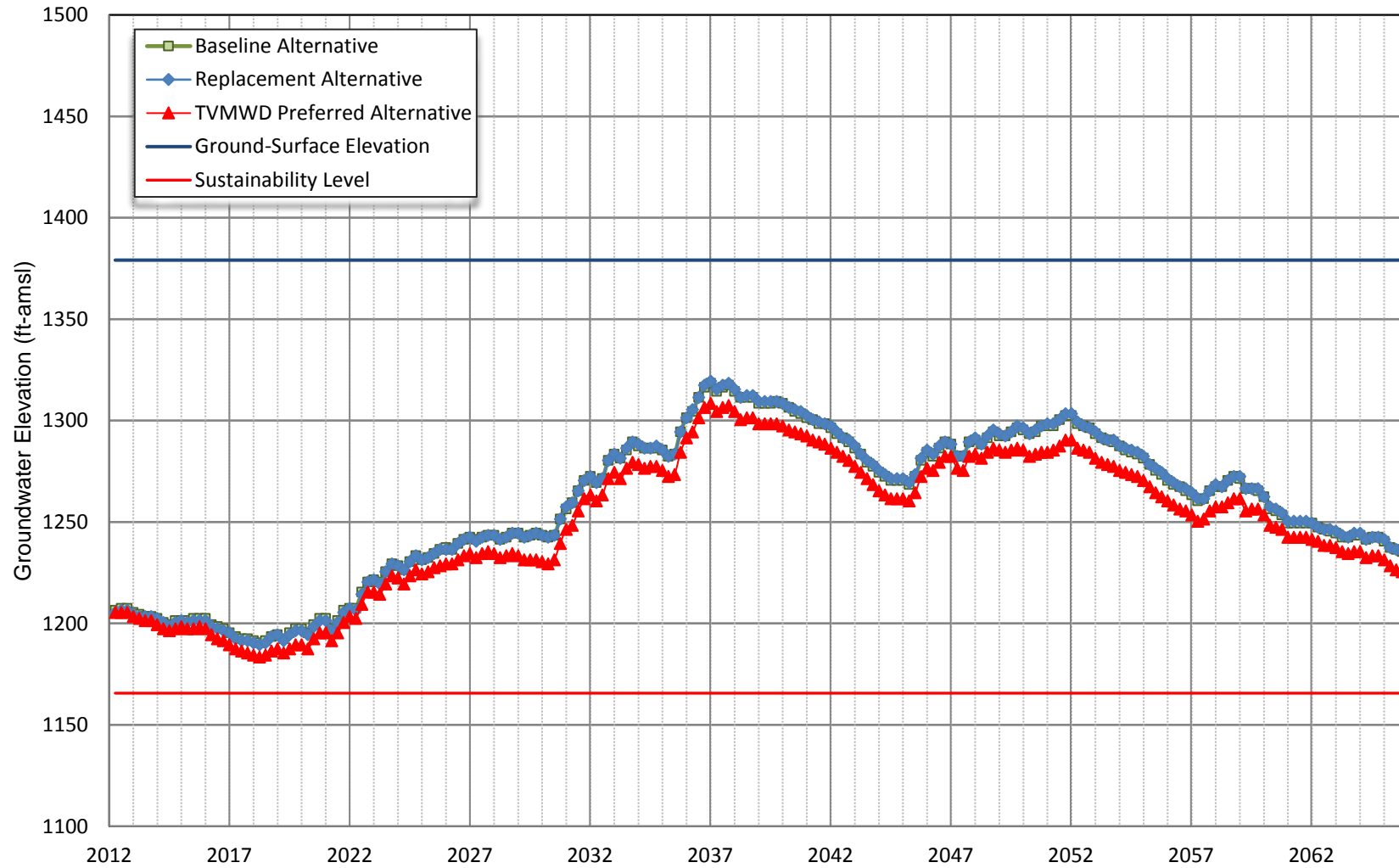
Upper Claremont Heights Basin

Figure B-5
Projected Groundwater Elevations at Well Mills #1 (GSWC)
Alternatives Compared to Baseline



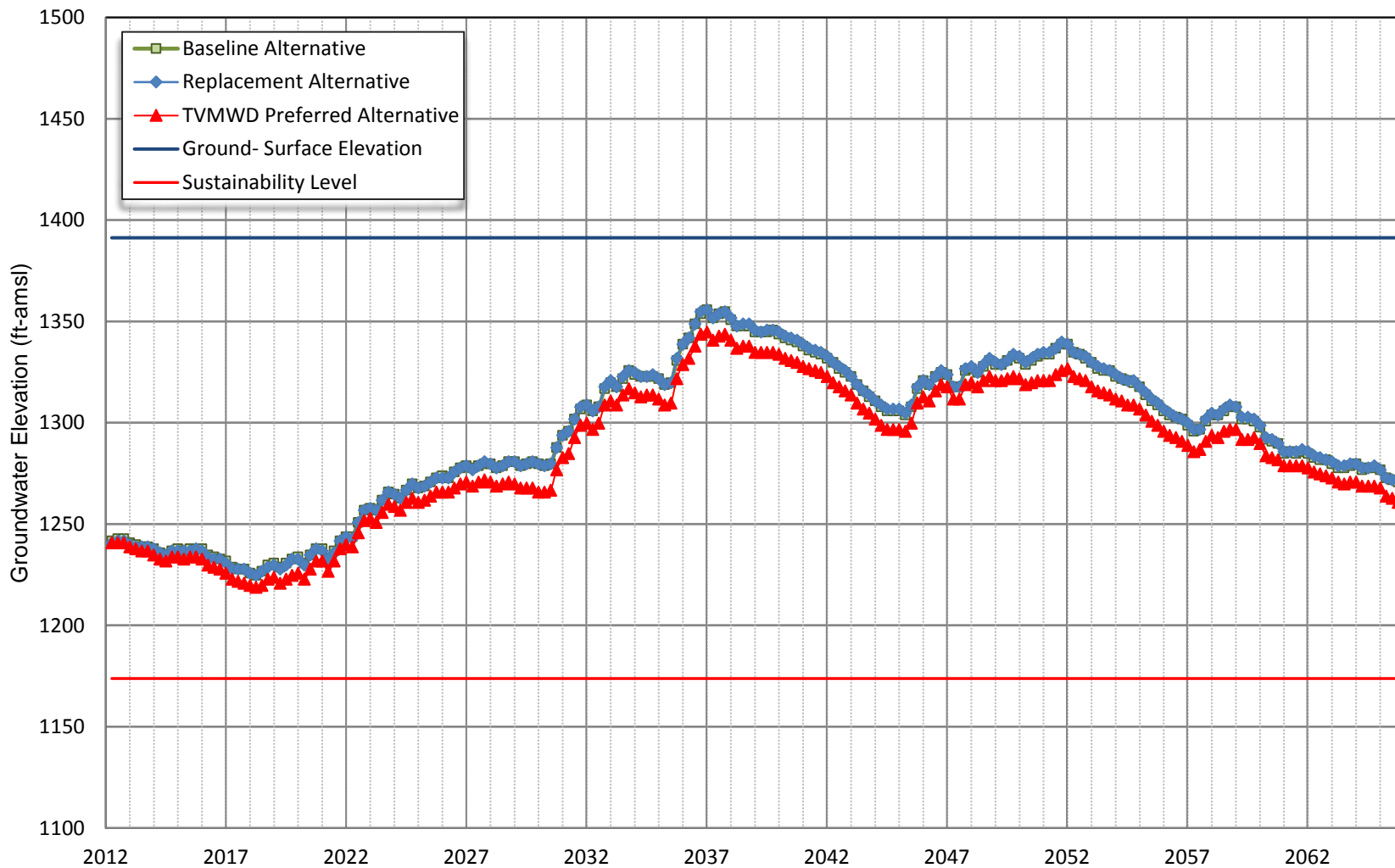
Upper Claremont Heights Basin

Figure B-8
Projected Groundwater Elevations at Well TW-1 (City of Pomona)
Alternatives Compared to Baseline



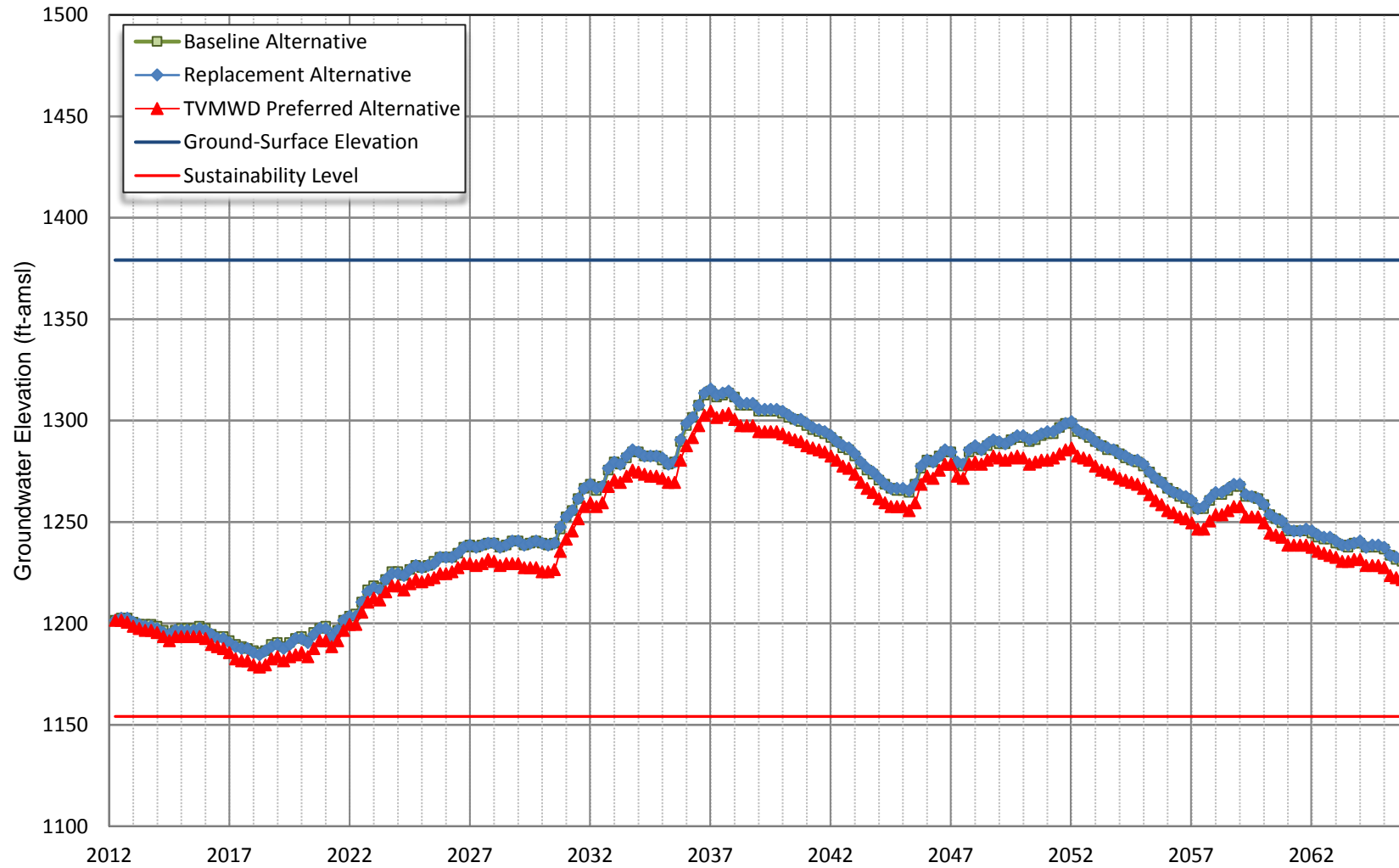
Upper Claremont Heights Basin

Figure B-9
 Projected Groundwater Elevations at Well TW-2 (City of Pomona)
 Alternatives Compared to Baseline



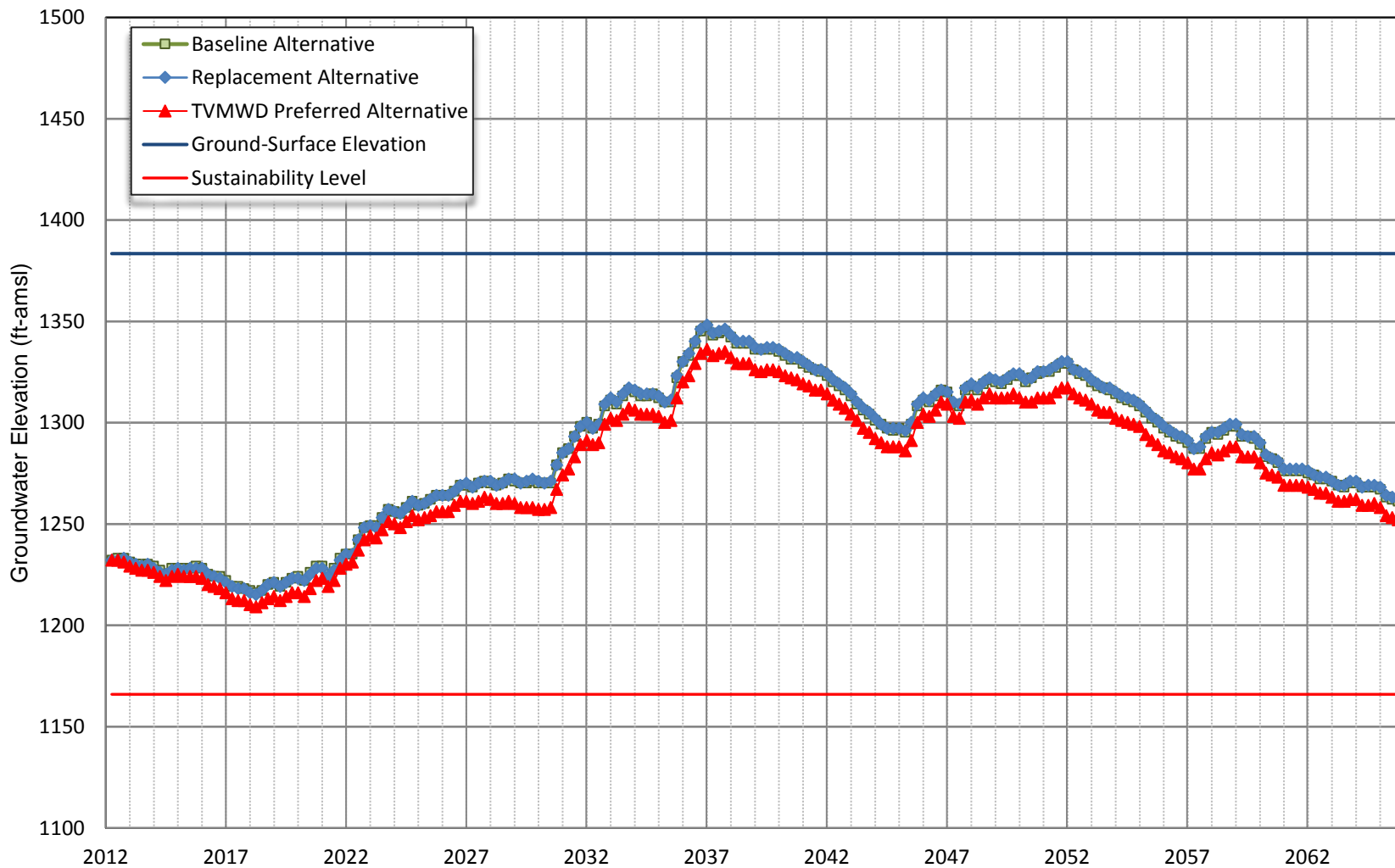
Upper Claremont Heights Basin

Figure B-10
Projected Groundwater Elevations at Well TW-3 (City of Pomona)
Alternatives Compared to Baseline



Upper Claremont Heights Basin

Figure B-11
Projected Groundwater Elevations at Well TW-4 (City of Pomona)
Alternatives Compared to Baseline



Proposed Update to the Operating Plan

Evaluation for the Potential for Substantial Injury – Draft 4

The following is recommended language (Draft 4, redlined changes from Draft 3) for an update to the Operating Plan regarding the Evaluation for the Potential for Substantial Injury in the Six Basins:

Evaluation for the Potential for Substantial Injury

Definitions:

Action means

- installing a new production facility,
- re-location of a production facility,
- constructing and operating a new recharge project,
- a new or revised storage and recovery agreement,
- transfers of production rights,
- a Special Project, as defined in Section VI.B.11 of the Judgment, or
- a combination of the any of the above,

Application means a written notice of a proposed Action or written request for Watermaster approval of a proposed Action submitted by any Party. **Applicant** means a Party that submits an Application, as defined in the prior section, to Watermaster.

Substantial Injury means injury to a Party, the basin, or the environment that is attributable to the implementation of an Action, including, but not limited to, rising groundwater, liquefaction, interference with the ability to pump OSY, increases in pump lift, degradation of water quality, or land subsidence. Actions are evaluated on a case-by-case basis to determine whether they have the potential to cause Substantial Injury.

Process to Evaluate for the Potential for Substantial Injury:

1. Applicant submits an Application to Watermaster staff that describes the proposed Action.
2. Within 30 days of receipt of the Application, Watermaster staff reviews the Application, and prepares a memorandum for Watermaster review that contains recommendations as to:
 - a. The need to evaluate the potential for the Action to cause Substantial Injury (or not).
 - b. The proposed method(s) to perform the evaluation.
 - c. A cost estimate and schedule to perform the evaluation.
3. The Watermaster, at its discretion, takes action on the recommendations in the memorandum at a Board meeting.
4. If directed by the Watermaster, the Substantial Injury evaluation is performed pursuant to the schedule set by Watermaster in (3). The Applicant may be asked to confer and

- cooperate with the Watermaster, its staff, or consultants to carry out the Substantial Injury evaluation.
5. Watermaster staff prepares a memorandum that describes the results of the Substantial Injury evaluation, including any recommendations for monitoring, mitigation, and reporting.
 6. The Watermaster takes action on the Substantial Injury evaluation at a Board meeting in one of the following ways:
 - a. For Actions requiring Watermaster approval, Watermaster may (i) approve the Application and prescribe any terms and conditions, (ii) order further Substantial Injury evaluation, or (iii) deny the Application.
 - b. For Actions requiring only notification to Watermaster, Watermaster may (i) adopt the findings of the Substantial Injury evaluation, (ii) order further Substantial Injury evaluation, or (iii) reject the findings of the Substantial Injury evaluation.
 7. For Actions requiring Watermaster approval, upon approval by Watermaster the Applicant shall have the right to proceed with the Action in accordance with the terms and conditions of said approval.



Staff Report/Memorandum

To: TVMWD Board of Directors
From: Richard W. Hansen, General Manager *RH*
Date: September 6, 2017
Subject: Projects Summary Update

<input type="checkbox"/> For Action	<input type="checkbox"/> Fiscal Impact	<input type="checkbox"/> Funds Budgeted
<input checked="" type="checkbox"/> Information Only	<input type="checkbox"/> Cost Estimate:	\$

Discussion:

Brief status reports for projects are provided below:

Williams/Fulton Hydroelectric Stations Analyses – Project Nos. 58149 / 58150

SCE completed its review and determination of the protection settings at the interconnections for both the Williams and Fulton Hydros in June 2017. TVMWD’s electrical contractor (Halcyon Electric) was then able to begin fabrication of the new electrical equipment. Halcyon began demolition of the old equipment in late July and completed construction in late August.

Williams Hydro Disconnect Switch and Junction Box

The equipment will be tested by a separate contractor, Power Testing and Energization (PTE). PTE will prepare a test report that will be sent to Southern California Edison (SCE) for review and approval. After SCE approves the report, they will schedule an on-site inspection. After successful inspection by SCE, TVMWD will be issued an official notice (i.e. Permission To Operate) allowing the TVMWD to operate the facilities. Staff anticipates



TVMWD will be able to operate the hydros by early October. The new five-year agreements with SCE will begin at that time.

TVMWD Baseline Road Well Project – Project No. 58458

No additional update available.

Leroy's Meter Connection Project – Project No. 58154

The contractor has completed the relocation and replacement of the meter vault within the project schedule and the facility is now operational. TVMWD staff coordinated with all affected agencies¹ throughout planning successfully minimizing construction activity impacts to neighboring residents and the Leroy Haynes Center throughout the project. ¹ (City of La Verne, LA County Department of Public Works, and SCE)



Reservoir Effluent Pump Station Project

The District's engineering consultant completed preparation of the preliminary design report (PDR) in June and recently completed the 95% detailed design. Staff is currently reviewing the 95% design to provide comments that will allow the consultant to complete the final design. Staff anticipates the final design will be completed in late September at which point staff will obtain informal quotes for construction from several contractors.

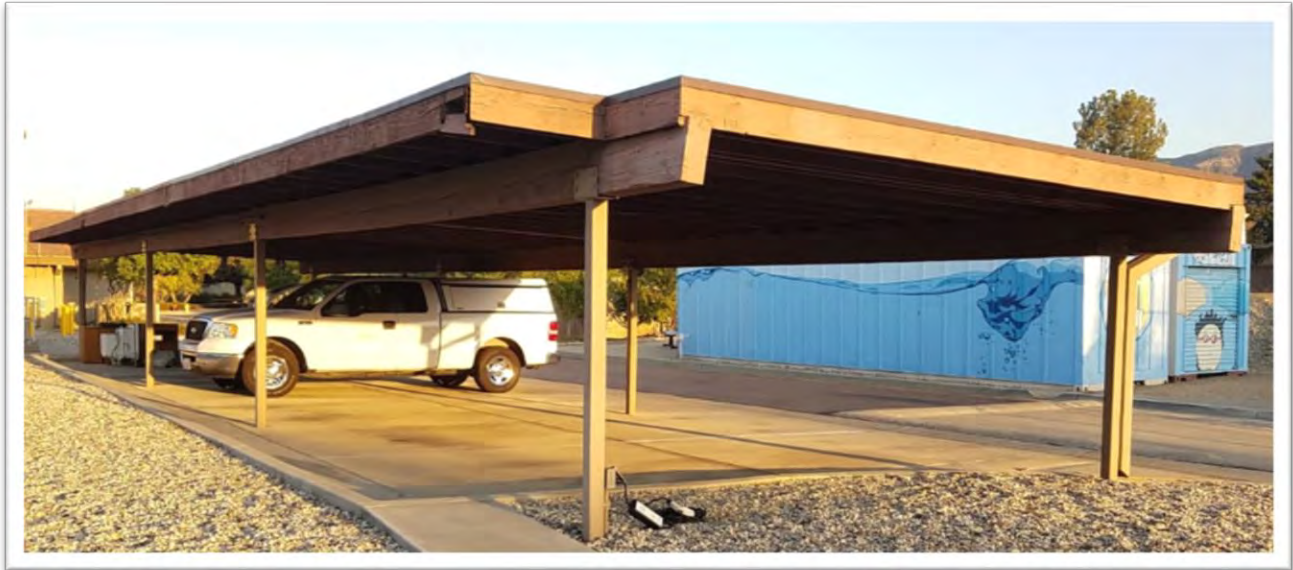
Carports Useful Life Structural Review

As part of its continuing assessment of the Miramar infrastructure, staff has reviewed and evaluated the existing onsite carports and have found them to be at the end of their useful life. There is observable evidence of wooden structural beams bowing and cracking, degraded fascia, decking, and asphalt roofing. In an effort to delay capital expenditures, spot repairs have been made in the past few years including sections of asphalt roof, fascia and underboards. The structures have also been painted in the past to improve their aesthetic appearance, but this did little to



Item 8.C.3

improve the overall physical structure. These repairs helped to delay the inevitable aging and structural deterioration. For these reasons, staff proposes replacement of existing carports and installation of new carports in portions of existing open parking spaces.



A design for new and replacement structural carports are in the process of being completed. The replacement carports will be a cantilever design with steel HSS tubing and metal roof deck, modernizing its form and function, and providing a minimum 50-year useful life. This all steel cantilever design will also provide a cleaner appearance with a single row of columns set “inside” the carports.

Staff has made the carport design flexible to be able to accept photovoltaic (PV) panels atop the roof deck in the future. Cost and contractual restrictions with Edison do not make it favorable at this time to add PV panels. If conditions change in the future, staff will re-evaluate the benefits of developing solar energy for the Miramar site.

Strategic Plan Objectives:

- 1.4 – Capable of delivering 10,000 AFY from local sources in case of drought or catastrophe.
- 1.5 – Maintain water infrastructure to assure 100% reliability.
- 2.3 – Manage water infrastructure and staff operations to minimize costs.
- 3.3 – Be accountable and transparent with major decisions