City of Palo Alto
Recycled Water Project

Final Environmental Impact Report
Response to Comments Document

State Clearinghouse No. 2011062037

Prepared by:

July 2015

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Chapter 6 Introduction

6.1 Purpose of the Final Environmental Impact Report

This report has been prepared to accompany the Public Draft Environmental Impact Report (EIR) for the Palo Alto Recycled Water Project. The Public Draft EIR identified the impacts / environmental consequences associated with construction and operation of the proposed Project and recommended mitigation measures to reduce potentially significant impacts. This document (Response to Comments) responds to the comments on the Public Draft EIR and makes revisions to the Public Draft EIR, as necessary, in response to these comments. Together with the Public Draft EIR, this document constitutes the Final EIR for the proposed project. A Mitigation Monitoring and Reporting Program (MMRP) for the proposed project is included in this document as Appendix A.

The Final EIR consists of the following:

(a) The Public Draft EIR; and

(b) Response to Comments document containing the following:

- Comments received on the Public Draft IS/MND.
- A list of persons, organizations, and public agencies commenting on the Public Draft EIR.
- The response of the lead agency to significant environmental points raised in the review and consultation process.
- Staff-initiated text changes added by the lead agency to clarify information presented in the Public Draft EIR.

6.2 Environmental Review Process

The Palo Alto Regional Water Quality Control Plant (RWQCP) is owned and operated by the City of Palo Alto for the communities of Los Altos, Los Altos Hills, Mountain View, Palo Alto, Stanford University and the East Palo Alto Sanitary District. The City and the RWQCP member agencies prepared the Water Reclamation (now referred to as Recycled Water) Master Plan (Master Plan) for the Palo Alto RWQCP in 1992 and the accompanying Final Program Environmental Impact Report (EIR) in 1995 (CH2MHill, 1995). The Master Plan included a phased approach to the expansion of treatment, distribution, storage, and use of recycled water and evaluated, at a program-level, development of a regional water reuse system that could ultimately provide service to the entire RWQCP service area including the cities of Palo Alto, Mountain View, Los Altos, East Palo Alto, Los Altos Hills, part of Menlo Park, as well as Stanford University. The proposed Project is Phase 3 of the RWQCP recycled water system.

On April 20, 2015, the City of Palo Alto (lead agency) released the Palo Alto Recycled Water Project Public Draft EIR for public review (State Clearinghouse No. 2011062037). The Public Draft EIR evaluates project-specific impacts of the Palo Alto Recycled Water Project, which is the next phase of the Recycled Water Master Plan. The public review and comment period on the Public Draft EIR began on April 20, 2015 and closed on June 4, 2015. The public review period was extended to June 8 at the request of the Santa Clara Valley Audubon Society. The City of Palo Alto City Council is scheduled to consider certifying the Final EIR (a finding that the EIR complies with the requirements of CEQA) at a regularly scheduled Council meeting in October 2015. Following Final EIR certification, the City Council may proceed with consideration of project approval actions.

In accordance with CEQA Guidelines Section 15087, the City provided a Notice of Availability (NOA) notifying the public of the publication of the Public Draft EIR. The notice was sent via regular mail and email. Copies of the Public Draft EIR were sent to responsible agencies as well as the State Clearinghouse. Additional notification was provided through the publication of a legal notice in the Palo Alto Weekly on April 24, 2015[1].

During the 49-day public comment period, two public meetings were held on May 19, 2015 and May 21, 2015 at the Mitchell Park Community Center in the City of Palo Alto to discuss the proposed project and receive comments on the Public Draft EIR. The date, time, and place of the meeting were identified in the NOA, the Palo Alto Weekly on April 24, 2015, as well as the City's website. Public meeting sign-in sheets were passed around at the meeting and are included in this document as Appendix B. Two public citizens attended the meeting on May 19 and four public citizens attended the meeting on May 21[2]. No verbal or written comments were made at the first meeting, and verbal comments from the second meeting were provided in letter format subsequent to the meeting. In addition, the City met with Stanford University separately on May 18 to discuss comments on the Public Draft EIR.

6.3 Report Organization

Chapter 7 of this Response to Comments document contains copies of comment letters received during the comment period followed by the City's responses to those comments. Each comment is numerically coded in the margin of the comment letter, based on the number assigned for each letter (see **Table 6-1** below) and the order of the comments. For example, the first comment in the letter from the State Water Resources Control Board (SWRCB) is 1-1. Because many of the comments concerned the issue of recycled water quality and effects on redwood trees/urban forest, a master response regarding this topic has been prepared and is presented up front, before the responses to the individual comments.

Revisions to the Public Draft EIR are made as a staff-initiated change or in response to comments, and are shown in **Chapter 8, EIR Revisions**. Text revisions are formatted in revision fashion: ~~strikeouts~~ indicate removed text and <u>underlines</u> indicate new text. The Public Draft EIR is not reprinted with the revisions included. Rather, as discussed above, the Public Draft EIR, along with the Responses to Comments document, together constitute the Final EIR.

Table 6-1 lists all persons and organizations that submitted comments on the Public Draft EIR during the comment period, the date of the letters, and the numbers used to identify each letter. Each communication is identified below by number, comment author and date.

[1] http://www.paloaltoonline.com/morguepdf/2015/2015_04_24.paw.section1.pdf

[2] More than two individuals attended the meeting on May 19 and included representatives of the City. One of the private citizens attending the meeting on May 19 elected not to be included on the sign-in sheet.

Table 6-1: Comment Letters

Comment Letter Number	Comment Author, Title and Affiliation	Comment Letter Date
1	Ahmad Kashkoli, Senior Environmental Scientist, State Water Resources Control Board	May 13, 2015
2	Patricia Maurice, District Branch Chief, Local Government – Intergovernmental Review, California Department of Transportation	June 3, 2015
3	Dawn S. Cameron, County Transportation Planner, County of Santa Clara Roads and Airports Department	June 4, 2015
4	Jim Inglis, Director of Design & Construction, and Jean McCown, Assistant Vice-President, Stanford University Real Estate Office.	June 4, 2015
5	Catherine Martineau, Executive Director, Canopy	June 4, 2015
6	Roy Molseed, Senior Environmental Planner, Santa Clara Valley Transportation Authority	June 4, 2015
7	Linda Ruthruff, Chair, Conservation Committee, California Native Plant Society, Santa Clara Valley Chapter	June 4, 2015
8	Scott Morgan, Director, State Clearinghouse	June 4, 2015
9	Shani Kleinhaus, Ph.D., Environmental Advocate, Santa Clara Valley Audubon Society	June 8, 2015

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Chapter 7 Response to Comments

7.1 Master Response (Recycled Water Quality and Trees)

A number of individuals commented on the issue of recycled water quality and its effects on salt-sensitive trees. For that reason, a master response has been developed to provide a discussion of this issue in one location. This master response addresses comments made by the following (please see individual comment letters for verbatim comments):

- Stanford University (Comment 4-1)
- Canopy (Comments 5-1, 5-2, and 5-3)
- California Native Plant Society (Comment 7-1)
- Santa Clara Valley Audubon Society (Comment 9-1)

The commenters expressed both support and concerns about the use of recycled water for irrigation and the effects of recycled water on the City's urban forest/redwood trees. The City recognizes the value of the urban forest and street trees and thus has prepared an Urban Forest Master Plan (UFMP) and Tree Technical Manual, and has a Tree Ordinance in place to address these resources. The UFMP, summarized in Section 1.6.3 (on p. 1-13 in Chapter 1, Introduction and Project Background, of the Public Draft EIR) establishes long-term management goals and strategies to foster a sustainable urban forest in Palo Alto. The UFMP identifies alternative water sources for landscape irrigation, including recycled water.

The City has been aware of public concerns regarding the local use of recycled water for irrigation prior to 2009, and thus has proactively addressed this issue by adopting the City's Salinity Reduction Policy (2010), promoting commitment by the Regional Water Quality Control Plant (RWQCP) Partners to adopt their own salinity reduction policies (2010-2011) and implement projects that would reduce saline infiltration in sewers, implementing and identifying projects within the City to reduce the infiltration of saline groundwater into its sewers, engaging with stakeholders (e.g., Stanford University and Canopy), and preparing an EIR that focuses on this matter. The Public Draft EIR provides an analysis of project effects of using RWQCP-produced recycled water for irrigation of salt-sensitive trees, and outlines the comprehensive strategy that the City has already initiated to reduce salinity in recycled water. Specifically, Section 2.4, Recycled Water Quality (starting on p. 2-11 in Chapter 2, Project Description of the Public Draft EIR) describes recycled water quality produced at the RWQCP and the actions that the City has already initiated and will continue to take to reduce the levels of total dissolved solids (TDS) and related parameters in recycled water.

The recycled water that would be provided to landscape customers would be Title 22 disinfected, tertiary recycled water. This level of water is permitted for general use in landscape irrigation and restricted use in recreational impoundments. Recycled water, in general, but also that produced at the RWQCP, has historically had higher salinity compared to the existing potable water supply (Hetch Hetchy water from SFPUC). Because of the City's recently completed and ongoing projects to address saline infiltration, water quality has improved substantially, as shown in Figure 2-7 of the Public Draft EIR. While the drought has increased TDS levels in the last couple of years, this is anticipated to be a short-term effect that would tend to be reversed over time.

As discussed in Section 2.4, the City will continue to strive to meet the goals of the City of Palo Alto Salinity Reduction Policy, which has established a goal of lowering TDS levels for recycled water (see a discussion of this Policy on p. 1-12 in Section 1.5.4 of the Public Draft EIR). The City expects that TDS would cumulatively reduce to below 650 mg/L, which is the impact level for salt-sensitive trees suggested by Stanford University (based on studies conducted by

HortScience) and is the value when the salinity hazard is eliminated. The City's approach to addressing salinity would also involve monitoring of water quality and the implementation of other actions as needed to reduce salinity.

Impact HYD-3 in Chapter 3 of the Public Draft EIR analyzes the effects on health of salt-sensitive trees of using recycled water to irrigate landscapes. HYD-3d lays out the variety of factors that affect the response of landscapes to recycled water (e.g., water quality of irrigation water, soil characteristics, salt-tolerance of landscape plants) and references the HortScience study that describes the constituents of concern in recycled water that could affect landscapes as well as the impacts that elevated TDS (in the range of 870 to 1,000 mg/L) could have on certain types of landscapes. As stated on page 3-23 of the Draft EIR: "The study also indicated that the salinity hazard would be eliminated if TDS levels were maintained below 650 mg/L, Ec_w below 1,000 µmoh/cm, chloride below 100 mg/L, sodium below 70 mg/L, and specific ranges for the combination of SAR and EC_w (HortScience, 2011). This high level of water quality (Category 1 water as defined by HortScience), is appropriate for use for all soil types and salt-sensitive plants[3]. Because TDS of the RWQCP recycled water would improve toward, and is projected to reach, the 600 mg/L goal by the time the Project is implemented in 2019, it is expected that the salinity hazard from recycled water would be eliminated and it could be used for landscape irrigation without any substantial issues."

Impact HYD-3 also recognizes that the health of trees could decline based on unfavorable circumstances that may not be related to the quality of the water supply. These conditions, including a soil regime that is not suitable for the tree species it supports; pre-existing, suboptimal health of trees; hydrological and climatic conditions (e.g., drought); and diseases, are all factors outside of the City's control. These conditions, coupled with poor site management, could affect tree health even if the salinity hazard in recycled water is eliminated. Page 3-24 of the Draft EIR notes that: "Despite the potential for a combination of unfavorable conditions where some trees may decline in health and/or appearance, or die (which could occur even if other water sources are used), it is not expected that such fate would occur en masse for substantial numbers of landscaped trees, including protected trees."

The EIR also conservatively analyzes the unlikely possibility that the salinity hazard is not eliminated by the time the Project is operated. Because the City is sensitive to concerns of landowners whose properties are dominated by salt-sensitive tree species, it has identified other actions that would mitigate the potential for damage to those trees.

The City has identified a comprehensive mitigation strategy to address potential significant impacts of using recycled water for irrigation on redwood trees and other salt-sensitive species. While recycled water is routinely used for landscapes throughout the state, including in the San Francisco Bay Area, and recycled water with TDS greater than 650 mg/L could be safely used on many landscaped areas, the City has identified a set of mitigation measures that would address the proposed Project's potential effects on salt-sensitive species, including redwood trees. These measures, specified as Mitigation Measures HYD-3a, HYD-3b, HYD-3c and HYD-3d, have been clarified since publication of the Public Draft EIR as a result of the City's discussions with Stanford University. The revised mitigation measures, shown with underline for new text and strike-out for deleted text, are included below.

[3] HortScience prepared Recycled Water Guidelines for Stanford University which included a discussion of four categories of water quality based on the tolerance of the plant materials to salts in the water source and degree to which soil is expected to become degraded. Category 1 is defined as good water quality with no restrictions on site use. The TDS, chloride and sodium concentrations for a Category 1 source water are <650 mg/L, 100 mg/L and 70 mg/L, respectively, and specific ranges for the combination of SAR and EC_w are met, similar to the recommendation provided in the 2011 HortScience report (see **Appendix C** for the HortScience Guidelines include in the Stanford comment letter).

Mitigation Measure HYD-3a. Source Control of Saline Groundwater. The City shall continue to line and repair existing sewers to minimize saline groundwater Infiltration.

Mitigation Measure HYD-3b. Monitoring. The City shall immediately begin ~~quarterly~~ monthly monitoring of the salinity (and related constituents) of the recycled water and shall report the rolling 12-month average for comparison to the Palo Alto City Council goal of 600 mg/l TDS. Monthly electronic reporting to those requesting it will be performed for two years, and then the frequency will be re-evaluated. The City shall monitor soil salinity and SAR through semi-annual soil analyses, preferably taken early and late in the irrigation season (approximately April and October).

Mitigation Measure HYD-3c: Site Management. ~~As a condition of recycled water use, the City shall require the site owners to: 1) Continue to irrigate with recycled water, even during droughts, (because recycled water is a drought proof supply), to meet the water demand of the subject plants and trees; and 2) conduct appropriate best management practices/management actions specified below in the event that protected, low salt tolerant trees irrigated with recycled water show signs of decline.~~ If at a particular site receiving recycled water, monitoring identifies an increase in soil salinity and SAR over historical levels, the City in cooperation with the owner of that site shall conduct a site-specific evaluation. That evaluation would consider (1) the extent to which the site contains protected trees (including redwood trees and oaks) that might be impacted by soil salinity, (2) the extent to which the elevated salinity is at a level that poses a threat to such protected trees, and (3) the extent to which the elevated salinity is the result of the use of the City's recycled water. If a threat is found, the City shall work cooperatively with the site owner to develop a site-specific mitigation plan, including the site owner's implementation of best management practices which are described below:

- To avoid plant damage to salt sensitive landscape plants, site owners can implement a leaching program to maintain soil salinity within the root zone below 2.0 dS/m[4] and SAR below 6.0. For moderately salt-tolerant plants, maintain soil salinity below 4.0 dS/m. Where subsoils do not drain adequately, installation of subsurface drainage systems may be needed ~~recommended~~. Rainfall will satisfy a portion of the leaching requirement, depending on the rate, volume, and distribution through the season. The frequency with which leaching applications should be made depends on several variables, and is typically triggered by approaching soil salinity thresholds defined above.
- Site owners can a~~A~~pply gypsum prior to leaching when indicated by soil analysis. Gypsum is a soil amendment that, when combined with leaching, helps lower soil sodium concentrations. Gypsum application can ~~shall~~ be considered when soil analyses reveal one or more of the following conditions: SAR exceeds 6.0, SAR increases 2 units or more (e.g., 2.3 to 4.3), and/or sodium concentration exceeds 5 meq/l (115 mg/L). The amount of gypsum needed and the frequency of application depend on site-specific soil and water characteristics, and can ~~shall~~ be determined by laboratory analysis.

[4] ds/m is decisiemen/meter. A dS/m is a measure of electrical conductivity, and 1.0 dS/m approximates to 640 mg/L TDS.

Mitigation Measure HYD-3d: Other Options to Protect Salt-Sensitive Plants. In the event that monitoring results (see Mitigation Measure HYD-3b) show that optimal concentrations of TDS and related parameters will not be achieved prior to operation of the Project (i.e., recycled water application), the City will ~~consider~~ evaluate and implement one or more of the following ~~other~~ actions to reduce ~~improve~~ TDS levels~~, as follows~~:

- ~~The City shall amend~~ Utilize its existing Recycled Water Ordinance exemption process (Palo Alto Municipal Code 16.12.050) ~~to include an exemption for~~ to exempt redwood trees (and/or other salt sensitive species) from the use of recycled water ~~and allow for the use of dual systems so the exempted trees could be irrigated separately using potable water, if desired by individual landowners~~;
- ~~The City shall b~~Blend recycled water and other lower salinity ~~potable~~ water prior to application; and/or
- ~~The City shall t~~Treat recycled water to reduce~~d~~ TDS prior to application, or shortly thereafter (the City is initiating an investigation of the feasibility of Reverse or Forward Osmosis treatment of its recycled water, combined with blending of appropriate water).

These measures are not intended to be standalone measures. That is, they are part of a larger vision to ensure that salinity hazard is eliminated and recycled water is safely used on landscapes. The measures involve the City continuing to line and repair existing sewers to minimize saline groundwater infiltration, concurrent monitoring by the City to track success, concurrent best management practices by site owners as needed, and if deemed necessary (in the event the salinity hazard has not been eliminated), other actions to be implemented by the City.

With respect to the changes shown above, the first bullet under HYD-3d has been revised because the City will not need to amend its existing Recycled Water Ordinance for the exemption process. Section 16.12.050 of the Ordinance already provides for an exemption from the use of recycled water if recycled water has an adverse effect on an applicant's landscaping (see Section 1.5.3, City of Palo Alto Recycled Water Ordinance on p. 1-12 in Chapter 1, Introduction and Project Background, of the Public Draft EIR). The last bullet in Mitigation Measure HYD-3d has been revised to include the text "or shortly thereafter" to clarify that if additional treatment is not ready immediately when the recycled water system is ready, it would be ready shortly thereafter. This text is consistent with the discussion on p. 3-24 of the EIR that discusses the unlikely event that TDS and other related parameters in recycled water are not achieved by the time of Project operation. Another change in this bullet is mention of the fact that the City is initiating an investigation of the feasibility of Reverse and Forward Osmosis treatment of its recycled water, combined with blending of appropriate water, because upfront planning is needed in the event that additional treatment is deemed necessary to address recycled water quality.

The City is committed to implementing one or a combination of the measures described above and ensuring that impacts to salt-sensitive tree species are less than significant. As part of the CEQA process, these measures will be included in the MMRP as a condition of approval for the proposed Project.

It should be noted that despite the changes shown above, the analysis provided in the EIR is adequate, the conclusions remain the same, and the mitigation measures identified are appropriate. The revisions to the mitigation measure were not made in response to an increase in severity of impact as presented in the EIR or any new finding of significant impact. The implementation of these mitigation measures will ensure that impacts would be less than significant.

The EIR also addresses the effects of using recycled water to irrigate landscapes on visual quality (see Impact AES-1 on pp. 3-31 and 3-32 in Chapter 3), and on habitat and special-status wildlife (see checklist item a in Section E.3, Biological Resources, on p. E-20 in Appendix E [Volume 2 of the Pubic Draft EIR).

The objectives of the Project are listed in Section 1.4.2, Project Objectives (on p. 1-10 to 1-11 of Chapter 1, Introduction and Project Background in the Public Draft EIR). These include the following:

- Improve potable water supply reliability by conserving drinking water, currently used for irrigation and other non-potable uses, for potable purposes;
- Provide a dependable, locally controlled non-potable water source;
- Increase recycled water use from the Regional Water Quality Control Plant;
- Secure a non-potable water source that will be available even in droughts to serve irrigation and other non-potable uses; and
- Reduce reliance on imported water.

As discussed under the No Project Alternative in Chapter 4, Other CEQA and NEPA Considerations (starting on page 4-15 of the Public Draft EIR): "imported water from SFPUC could diminish over time because of droughts, climate change effects, or regulatory actions, which could reduce potable supply for the City in the long term. In the short-term, emergencies such as an earthquake damaging the SFPUC water system could also affect the availability of water supplies for the City. The effects of a diminished supply would be more severe rationing during droughts, and an inability to accommodate future demands associated with approved growth." The current drought has resulted in mandatory conservation across the state, imposed by the Governor, enacted by the SWRCB, and implemented by local municipalities and public agencies (see p. 4-30 of the Public Draft EIR for a discussion of the actions by the Governor and the SWRCB). Because of this drought, and anticipated droughts in the future, it is critical for the City to find alternative, sustainable water supplies to offset potable water use. Otherwise, during droughts, there would be rationing (in accordance to the stages of actions identified in the Urban Water Management Plan) that could increase in severity depending on the length and duration of the shortage. Under the worst-case situation when there is insufficient potable supply to meet demand, the City could adopt regulations that restrict the use of potable water for landscape irrigation and other non-potable uses for commercial and industrial users entirely (see the No Potable Water Supply for Landscape Irrigation or Other Non-Potable Uses Alternative discussion in Chapter 4 of the Public Draft EIR, starting on page 4-30). With reduced or no potable water for outdoor uses during droughts, there could be substantial impacts on the health and quality of the urban forest due to the reduction or absence of any water for irrigation of the landscape. In such a case, the availability of water (in the form of recycled water) would be critical to maintain landscapes and preserve the urban forest. In response to Comment 5-2, it is not the intent of the City to imply that high quality potable water is wasteful in the landscape; rather, given the reality that droughts are inevitable and could result in insufficient demand to meet potable water needs, it is important to conserve potable water for drinking water uses, and to find alternative, sustainable supplies for non-potable uses, in keeping with the objectives of the project. In addition, the proposed Project would ensure "a reliable supply of water for landscape irrigation" which is "of paramount importance for the function of the urban forest as a whole over the long-term" (p. 3-25 in Chapter 3 of the Public Draft EIR). In response to Comment 9-1, as described above, there would be insufficient water supply to meet the needs of outdoor use if rationing were imposed. It is the intent of the proposed Project to provide a sustainable, alternative water supply that could be used even during droughts, in keeping with the Project objectives, and for the benefit of the urban forest.

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7.2 Individual Comments and Responses

CLEAR
6-3-15
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CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

Comment Letter 1

MAY 13 2015

Karin North
City of Palo Alto
2501 Embarcadero Way
Palo Alto, CA 94303

RECEIVED
MAY 15 2015
STATE CLEARING HOUSE

Dear Ms. North:

ENVIRONMENTAL IMPACT REPORT (EIR) FOR CITY OF PALO ALTO (CITY); PALO ALTO RECYCLED WATER PROJECT (PROJECT); SANTA CLARA COUNTY; STATE CLEARINGHOUSE NO. 2011062037

We understand that the City may be pursuing Clean Water State Revolving Fund (CWSRF) financing for this Project. As a funding agency and a state agency with jurisdiction by law to preserve, enhance, and restore the quality of California's water resources, the State Water Resources Control Board (State Water Board) is providing the following information and comments for the environmental document prepared for the Project.

The State Water Board, Division of Financial Assistance, is responsible for administering the CWSRF Program. The primary purpose for the CWSRF Program is to implement the Clean Water Act and various state laws by providing financial assistance for wastewater treatment facilities necessary to prevent water pollution, recycle water, correct nonpoint source and storm drainage pollution problems, provide for estuary enhancement, and thereby protect and promote health, safety and welfare of the inhabitants of the state. The CWSRF Program provides low-interest funding equal to one-half of the most recent State General Obligation Bond Rates with a 30-year term. Applications are accepted and processed continuously. Please refer to the State Water Board's CWSRF website at: www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml.

The CWSRF Program is partially funded by the United States Environmental Protection Agency and requires additional "CEQA-Plus" environmental documentation and review. Three enclosures are included that further explain the CWSRF Program environmental review process and the additional federal requirements. For the complete environmental application package, please visit: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/srf_forms.shtml. The State Water Board is required to consult directly with agencies responsible for implementing federal environmental laws and regulations. Any environmental issues raised by federal agencies or their representatives will need to be resolved prior to State Water Board approval of a CWSRF financing commitment for the proposed Project. For further information on the CWSRF Program, please contact Mr. Ahmad Kashkoli, at (916) 341-5855.

It is important to note that prior to a CWSRF financing commitment, projects are subject to provisions of the Federal Endangered Species Act (ESA), and must obtain Section 7 clearance from the United States Department of the Interior, Fish and Wildlife Service (USFWS), and/or the United States Department of Commerce National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) for any potential effects to special status species.

1-1

Please be advised that the State Water Board will consult with the USFWS, and/or the NMFS regarding all federal special-status species that the Project has the potential to impact if the Project is to be financed by the CWSRF Program. The City will need to identify whether the Project will involve any direct effects from construction activities, or indirect effects such as growth inducement, that may affect federally listed threatened, endangered, or candidate species that are known, or have a potential to occur in the Project site, in the surrounding areas, or in the service area, and to identify applicable conservation measures to reduce such effects.

In addition, CWSRF projects must comply with federal laws pertaining to cultural resources, specifically Section 106 of the National Historic Preservation Act (Section 106). The State Water Board has responsibility for ensuring compliance with Section 106 and the State Water Board must consult directly with the California State Historic Preservation Officer (SHPO). SHPO consultation is initiated when sufficient information is provided by the CWSRF applicant. The City must retain a consultant that meets the Secretary of the Interior's Professional Qualifications Standards (http://www.nps.gov/history/local-law/arch_stnds_9.htm) to prepare a Section 106 compliance report.

Note that the City will need to identify the Area of Potential Effects (APE), including construction and staging areas, and the depth of any excavation. The APE is three-dimensional and includes all areas that may be affected by the Project. The APE includes the surface area and extends below ground to the depth of any Project excavations. The records search request should extend to a ½-mile beyond Project APE. The appropriate area varies for different projects but should be drawn large enough to provide information on what types of sites may exist in the vicinity. 1-1

Other federal environmental requirements pertinent to the Project under the CWSRF Program include the following (for a complete list of all environmental requirements, please visit: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/forms/application_environmental_package.pdf):

A. Compliance with the Federal Clean Air Act: (a) Provide air quality studies that may have been done for the Project; and (b) if the Project is in a nonattainment area or attainment area subject to a maintenance plan; (i) provide a summary of the estimated emissions (in tons per year) that are expected from both the construction and operation of the Project for each federal criteria pollutant in a nonattainment or maintenance area, and indicate if the nonattainment designation is moderate, serious, or severe (if applicable); (ii) if emissions are above the federal de minimis levels, but the Project is sized to meet only the needs of current population projections that are used in the approved State Implementation Plan for air quality, quantitatively indicate how the proposed capacity increase was calculated using population projections.

B. Compliance with the Coastal Zone Management Act: Identify whether the Project is within a coastal zone and the status of any coordination with the California Coastal Commission.

C. Protection of Wetlands: Identify any portion of the proposed Project area that should be evaluated for wetlands or United States waters delineation by the United States Army Corps of Engineers (USACE), or requires a permit from the USACE, and identify the status of coordination with the USACE.

D. Compliance with the Farmland Protection Policy Act: Identify whether the Project will result in the conversion of farmland. State the status of farmland (Prime, Unique, or Local Statewide Importance) in the Project area and determine if this area is under a Williamson Act Contract.

E. Compliance with the Migratory Bird Treaty Act: List any birds protected under this act that may be impacted by the Project and identify conservation measures to minimize impacts.

F. Compliance with the Flood Plain Management Act: Identify whether or not the Project is in a Flood Management Zone and include a copy of the Federal Emergency Management Agency flood zone maps for the area.

G. Compliance with the Wild and Scenic Rivers Act: Identify whether or not any Wild and Scenic Rivers would be potentially impacted by the Project and include conservation measures to minimize such impacts.

1-1

Following are specific comments on the City's draft EIR:

1. Page 3-1 of the City's Draft EIR, Volume 1, describes the risk of flooding in regards to the proposed Project. Please provide a map depicting the FEMA-designated flood zones in relation to the proposed Project.

1-2

2. Table E-3 and E-4 of the Air Quality section in Appendix E: Environmental Checklist shows that NO_x thresholds may be exceeded during construction of the Project unless Mitigation Measure AIR-1 is implemented. Please provide a table showing NO_x emissions after Mitigation Measure AIR-1 is applied. Appendix I: Air Quality Emissions Calculations show unmitigated and mitigated construction emissions, however there is no difference in NO_x levels among the two scenarios.

1-3

3. The Biological Resources Assessment indicated that a search of the California Native Plant Society, California Natural Diversity Database, and United States Fish and Wildlife Service species lists were reviewed for the Project. Please include these lists in the Assessment.

1-4

4. If the City is seeking CWSRF funding for the proposed Project, please consider the following in regards to cultural resources:

   i. The records search conducted for the Cultural Resources Assessment Report extends beyond the Project APE ¼ of a mile. Please be advised that CWSRF program requirements specify that the records search should extend to a ½ mile beyond the Project APE.

   ii. Page 45 of the Cultural Resources Assessment Report states that a records search was conducted for the Project at Northwestern Information Center on October 23, 2014. The References Cited beginning on page 70 of the Report shows that cultural resource records searches were requested by William Self Associates, Inc. on September 6, 2007, March 12, 2008, and March 14, 2008. Please include the most current request for the cultural resource records search in the References Sited for the Report.

   iii. Please include the email sent to the NAHC requesting information on sacred lands and Native American contacts on October 22, 2014. In addition, please provide documentation of follow-up phone calls made to the Native American contacts provided by the Native American Heritage Commission and the responses from any of these contacts.

1-5

Please provide us with the following documents applicable to the proposed Project if seeking CWSRF or other State Water Board funding: (1) one copy of the draft and final EIR, (2) the resolution certifying the EIR and a Mitigation Monitoring and Reporting Program (MMRP) making California Environmental Quality Act (CEQA) findings, (3) all comments received during the review period and the City's response to those comments, (4) the adopted MMRP, and (5) the Notice of Determination filed with the Santa Clara County Clerk and the Governor's Office of Planning and Research, State Clearinghouse. In addition, we would appreciate notices of any hearings or meetings held regarding environmental review of any projects to be funded by the State Water Board.

1-6

Thank you for the opportunity to review the City's draft EIR. If you have any questions or concerns, please feel free to contact me at (916) 341-5855, or by email at Ahmad.Kashkoli@waterboards.ca.gov, or contact Elysar Naja at (916) 327-9117, or by email at Elysar.Naja@waterboards.ca.gov.

Sincerely,

Ahmad Kashkoli
Senior Environmental Scientist

Enclosures (3)

1. Clean Water State Revolving Fund Environmental Review Requirements
2. Quick Reference Guide to CEQA Requirements for State Revolving Fund Loans
3. Basic Criteria for Cultural Resources Reports

cc: State Clearinghouse
(Re: SCH# 2011062037)
P.O. Box 3044
Sacramento, CA 95812-3044

Comment Letter 1 – State Water Resources Control Board (SWRCB)

Response to Comment 1-1

Because the City intends to apply for the Clean Water State Revolving Fund (CWSRF) funding, the City has prepared an EIR to meet CEQA-Plus requirements, as specified in the Executive Summary chapter in the Public Draft EIR (see p. ES-5). It should be noted that because the City is also seeking funding from the United States Bureau of Reclamation (Reclamation) through the Title XVI Program, it is also meeting NEPA requirements, which fulfills the CEQA-Plus requirements. Based on a kick-off meeting with Reclamation and SWRCB on August 12, 2010, staff from both agencies agreed that Reclamation would take the lead on United States Fish and Wildlife Service (USFWS) informal consultation and Section 106 consultation. Based on the results of the Biological Resources Assessment, Reclamation has already requested concurrence from USFWS that the proposed Project may affect, but is not likely to adversely affect, federally-listed species (May 19, 2015). The Section 106 process is not yet complete, and subsurface testing may be needed depending on the method that the City will ultimately select for construction of the proposed pipelines. Once complete, Reclamation Staff will complete the Section 106 process and sign off on the Finding of No Significant Impact, to complete the NEPA process. Please refer to Appendix E of the Public Draft EIR for discussions of air quality conformity, biological resources and cultural resources effects associated with the proposed Project. Section 4.5.4 (starting on p. 4-33 of Chapter 4, Other CEQA and NEPA Considerations in Volume 1 of the Public Draft EIR), discusses compliance with relevant federal laws, executive orders, and policies, in keeping with CEQA-Plus requirements.

Response to Comment 1-2

A map of FEMA-designated flood zones is provided in Chapter 8 of this document, EIR Revisions. The section on flooding in Chapter 3 (p. 3-1 of the Public Draft EIR) has been updated to include a reference to the figure and minor staff-initiated changes to the text to clarify the description of flood zones. The analysis of potential flood risks does not change. The significance determination remains the same and no changes are warranted to the conclusions presented in the Public Draft EIR.

Response to Comment 1-3

Appendix I (Volume 2 of the Public Draft EIR) includes the results of air quality modeling conducted for the project. In the table "Maximum Daily Construction Emission (lbs/day) on p. 1 of the appendix, it shows that NO_x for the 2-crew scenario (for the pipeline) is 85.0 lbs/day and for the 1-crew scenario is 51.1 lbs/day. The subsequent tables in Appendix I that show results for mitigated / unmitigated construction are for the pump station; the CalEEMOD results automatically identify both scenarios, even though there is no difference because the City did not include any mitigation in the analysis. The results of the air quality modeling for pipeline construction assuming both 2- and 1-crew scenarios are shown in the section of results titled "Road Construction Emissions Model, Version 7.1.5.1". The 1-crew scenario is the scenario described in Mitigation Measure AIR-1. Dust control mitigation using watering trucks is assumed in the model runs for pipeline construction under all pipeline construction scenarios.

It should be noted that those tables erroneously show "Pasadena RW" in the "Emission Estimates for" field. They should state "City of Palo Alto RW." These changes have been addressed in **Chapter 8, EIR Revisions** below, and do not affect the analysis or conclusions in the Public Draft EIR.

Response to Comment 1-3

Because the SRF application materials will require database searches that are less than one year old, the City will provide the requested information (USFWS, CDFW Natural Diversity Database, and CNPS species list), when it submits the SRF application.

Response to Comment 1-5

The City notes the need to conduct a cultural resources record search that extends ½ mile beyond the Project APE. As indicated in Section E.4, Cultural Resources (p. E-28 in Appendix E, Volume 2 of the Public Draft EIR), the latest records search of the proposed Project area, which extends ¼ mile beyond the Project APE, was conducted on October 23, 2014. Because the SRF application materials will require a record search that is less than one year old, the City will conduct a new record search when it submits the SRF application. It should be noted that the current search is adequate for the evaluation of impacts in the Public Draft EIR because the ¼ mile area covers all potential resources within the APE that could be affected. Thus, the analysis and conclusions for cultural resources in the Public Draft EIR are adequate and do not need to be revised.

In addition to the City providing an updated cultural resource records search at the time of SRF application submittal, the City will provide the correspondence with NAHC requesting information on sacred lands and Native American contacts, as well as follow-up documentation to the Native American contacts. The absence / inclusion of this material does not affect the analysis or conclusions in the Public Draft EIR.

Response to Comment 1-6

The City will provide the requested information when it submits the SRF application. The City will also notify SWRCB regarding any hearings/meetings held regarding environmental review for this Project.

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
P.O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
FAX (510) 286-5559
TTY 711
www.dot.ca.gov

Comment Letter 2

Serious Drought. Help save water!

June 3, 2015

SCLVAR013
SCL/VAR/PM VAR
SCH# 2011062037

Ms. Karin North
Planning and Community Environment Department
City of Palo Alto
250 Hamilton Avenue
Palo Alto, CA 94301

Dear Ms. North:

Palo Alto Recycled Water Project – Draft Environmental Impact Report (DEIR)

Thank you for continuing to include the California Department of Transportation (Caltrans) in the environmental review process for the project referenced above. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Caltrans District 4 Local Development-Intergovernmental Review (LD-IGR) Program reviews land use and plans to ensure consistency with our mission and state planning priorities of infill, conservationism, and efficient development. We have reviewed the DEIR and have the following comments to offer. Please also refer to our previous comment letters, dated April 8, 2009, and July 18, 2011, on this project's Mitigated Negative Declaration and Notice of Preparation, respectively. We provide these comments consistent with the State's smart mobility goals to support a vibrant economy and build communities, not sprawl. 2-1

Project Understanding

The proposed project would construct a recycled water pipeline and associated facilities to provide an alternative water supply for non-potable uses. The proposed Project would involve the construction and operation of the following:

- About 5 miles of 12- to 18-inch backbone pipelines;
- About 5 miles of 6- to 10-inch lateral pipelines to over 50 use sites;
- Up to 1,500-square-foot booster pump station along the proposed pipeline;
- Up to 1,600-square-foot pump station at the Regional Water Quality Control Plant (RWQCP);
- ~0.15 mile of connection pipeline in and north of the RWQCP (on Embarcadero Road); and
- Up to 0.15 mile of connection pipeline on East Bayshore Road to connect the proposed pipeline to the existing Mountain View recycled water pipeline.

The Project would initially provide approximately 900 acre-feet per year (AFY) of recycled water, primarily to the Stanford Research Park Area. Future extensions could serve Stanford University and Los Altos Hills, as well as provide a loop by making a second connection to the Phase 2 Mountain View Project. The predominant use of recycled water for this Project would be landscape irrigation. Some industrial use, such as commercial and light industrial cooling towers, could also be included at a later date.

Lead Agency

As the lead agency, the City of Palo Alto (City) is responsible for all project mitigation, including any needed improvements to State highways. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Transportation Management Plan (TMP)

If it is determined that traffic restrictions and detours are needed, a TMP or construction TIA may be required for approval by Caltrans prior to construction. Traffic Management Plans must be prepared in accordance with Caltrans' *TMP Guidelines*. Further information is available for download at the following web address:
http://www.dot.ca.gov/hq/traffops/trafmgmt/tmp_lcs/index.htm. 2-2

Please ensure that such plans are also prepared in accordance with the TMP requirements of the corresponding jurisdictions. For further TMP assistance, please contact the Caltrans District 4 Office of Traffic Management Operations at (510) 286-4579.

Cultural Resources

Caltrans requires that a project's environmental document include documentation of a current archaeological record search from the Northwest Information Center of the California Historical Resources Information System if construction activities are proposed within State right-of-way (ROW). Current record searches must be no more than five years old. Caltrans requires the records search, and if warranted, a cultural resource study by a qualified, professional archaeologist, and evidence of Native American consultation to ensure compliance with CEQA, Section 5024.5 and 5097 of the California Public Resources Code, and Volume 2 of Caltrans' Standard Environmental Reference (http://www.dot.ca.gov/ser/vol2/vol2.htm). 2-3

These requirements, including applicable mitigation, must be fulfilled before an encroachment permit can be issued for project-related work in State ROW. Work subject to these requirements includes, but is not limited to: lane widening, channelization, auxiliary lanes, and/or modification of existing features such as slopes, drainage features, curbs, sidewalks and driveways within or adjacent to State ROW.

Transportation Permit

Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, a completed transportation permit application with the determined specific route(s) for the shipper to follow from origin to destination must be submitted to: David Salladay, District Office Chief, Office of Permits, 2-4

California Department of Transportation, District 4, P.O. Box 23660, Oakland, CA 94623-0660. See the following website for more information: http://www.dot.ca.gov/hq/traffops/permits. 2-4

Encroachment Permit

Please be advised that any work or traffic control that encroaches onto the State ROW requires an encroachment permit that is issued by Caltrans. Work within State ROW at State Route (SR) 82 (El Camino Real) and U.S. Highway (U.S.) 101 should be done using the "jack and bore" method, which is preferred over the open-cut trench method. Neither open-cut trenching in a lane of a State facility nor hanging or attaching a utility such as a pipeline to a bridge or overpass structure will be permitted. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to: David Salladay, District Office Chief, Office of Permits, California Department of Transportation, District 4, P.O. Box 23660, Oakland, CA 94623-0660. Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process. See this website for more information: http://www.dot.ca.gov/hq/traffops/developserv/permits. 2-5

Should you have any questions regarding this letter, please contact Brian Ashurst at (510) 286-5505 or brian.ashurst@dot.ca.gov.

Sincerely,

PATRICIA MAURICE
District Branch Chief
Local Development - Intergovernmental Review

c: Scott Morgan, State Clearinghouse

DEPARTMENT OF TRANSPORTATION
111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 622-5491
FAX (510) 286-5559
TTY 711

Flex your power!
Be energy efficient!

April 8, 2009

SCL-082-24.04
SCL082418
SCH2009032065

Ms. Clare Campbell
City of Palo Alto
250 Hamilton Avenue
Palo Alto, CA 94301

Dear Ms. Campbell:

Palo Alto Recycled Water Project - Mitigated Negative Declaration (MND)

Thank you for including the California Department of Transportation (Department) in the environmental review process for the proposed project. We have reviewed the MND for the proposed Palo Alto Recycled Water Project and have the following comments to offer.

As lead agency, the City of Palo Alto is responsible for all project mitigation, including any needed improvements to state highways. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures and the project's traffic mitigation fees should be specifically identified in the environmental document.

Any required roadway improvements should be completed prior to issuance of project occupancy permits. An encroachment permit is required when the project involves work in the State Right of Way (ROW). Therefore, we strongly recommend that the lead agency ensure resolution of the Department's concerns prior to submittal of the encroachment permit application. Further comments will be provided during the encroachment permit process as required; see the end of this letter for more information regarding the encroachment permit process.

Cultural Resources
The cultural resource study satisfies the Department's cultural resource legal requirements. Although there is no known site within State ROW for this project, should ground-disturbing activities take place within State ROW and there is an inadvertent archaeological or burial discovery, all construction within 50 feet of the find shall cease in compliance with CEQA, PRC 5024.5, and Department Standard Environmental Reference (SER) Chapter 2 (at http://ser.dot.ca.gov). The Department's Cultural Resource Studies Office, District 4, shall be immediately contacted at (510) 286-5618. A staff archaeologist will evaluate the finds within one business day after contact.

Permits
Transportation Permit - Project work that requires movement of oversized or excessive load vehicles on State roadways, such as State Route (SR) 82 and US 101 requires a transportation permit that is issued by the Department. To apply, a completed transportation permit application with the determined specific route(s) for the shipper to follow from origin to destination must be submitted to the address below.

Office of Transportation Permits, California DOT Headquarters
P.O. Box 942874
Sacramento, CA 94274-0001

See the following website link for more information: http://www.dot.ca.gov/hq/traffops/permits/.

Encroachment Permits – Additionally, any work that encroaches onto the State ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the address below. Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process.

Office of Permits
California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660

See the website link below for more information:
http://www.dot.ca.gov/hq/traffops/developserv/permits/

Should you require further information or have any questions regarding this letter, please call José L. Olveda of my staff at (510) 286-5535.

Sincerely,

for LISA CARBONI
District Branch Chief
Local Development – Intergovernmental Review

c. Scott Morgan (State Clearinghouse)

Comment Letter 2 - California Department of Transportation (Caltrans)

Response to Comment 2-1

Caltrans' April 8, 2009 comment letter to the Palo Alto Recycled Water Project Initial Study/Mitigated Negative Declaration (IS/MND) (March 2009) is included above following the June 3, 2015 letter. Caltrans' July 18, 2011 comment letter on the Palo Alto Recycled Water Project Notice of Preparation (NOP) is included in Appendix C of the Public Draft EIR (see Volume 2 of the Public Draft EIR). Because the comments in the April 8, 2009 letter are very similar to those specified in Caltrans' June 3, 2015 letter, and the Public Draft EIR was prepared in consideration of NOP comments, no additional responses to the July 2011 letter are warranted (and the April 2009 letter is not bracketed).

As indicated above, the City considered comments on the NOP in preparing the Public Draft EIR. The need for a Traffic Impact Study was considered and described in Response to Comment 2-2 below.

Response to Comment 2-2

The City is responsible for all project mitigation. All standard project requirements and mitigation measures identified in the Public Draft EIR will be incorporated into the MMRP, and implementation of the MMRP will be a condition of approval for the proposed Project.

Chapter 2 of the Public Draft EIR discusses the proposed Project, and identifies the potential for the Project to cross under US 101 and for construction to occur along El Camino Real or State Route (SR) 82 (between Page Mill Road and Hanson Way). Figure 2-2 illustrates the options to cross US-101. The proposed alignment would cross under US 101 using trenchless construction (i.e., bore and jack, microtunneling, or horizontal directional drilling [HDD]) within the area defined by the polygon in **Figure 2-2**; Option 1 is to cross under US 101 by hanging from the pedestrian bridge along the south side of Adobe Creek. As described on page 2-20 of the EIR, the precise option and locations would be determined during design.

The Project proposes to cross SR 82 using trenchless construction techniques, as shown in **Table 2-1** (see p. 2-8) and discussed in Section E.4 (p. E-65) of the Public Draft EIR. Option 2 would include installation of the pipeline alignment on El Camino Real between Page Mill Road and Hanson Way via open-cut construction or HDD. Open-cut construction would likely require a minimum one-lane of traffic and the adjacent shoulder, resulting in a construction corridor of approximately 20 to 30 feet wide.

As specified in the Public Draft EIR, under the proposed Project, the precise location and method of construction will be determined by the City during design. Caltrans has indicated in the June 2015 comment letter that "work within State ROW at State Route (SR 82 (El Camino Real) and U.S. Highway (U.S.) 101 should be done using the 'jack and bore' method, which is preferred over the open-cut trench method. Neither open-cut trenching in a lane of a State facility nor hanging or attaching a utility such as a pipeline to a bridge or overpass structure will be permitted" (see Comment 1-5). It should be noted that the Public Draft EIR specifies that the pipeline crossing US-101 could be hung from the bridge along Adobe Creek. Existing pipelines are currently hung from the bridge. The City will discuss the crossing design with Caltrans to confirm whether this is acceptable given that current, existing use of the bridge. The Draft EIR has been clarified to show that hanging from the bridge is allowed only with approval from Caltrans. Because the proposed Project would cross State facilities using trenchless construction,

no direct impacts to traffic along US 101 or SR 82 would occur[5]. In addition, the City proposes implementation of a Traffic Control Plan as part of the proposed Project (see Chapter 2, Project Description). The avoidance of State facilities and implementation of the Traffic Control Plan would ensure that any potential traffic-related effects would be less than significant.

The City previously assessed the need to prepare a Traffic Impact Analysis (TIA) based on Caltrans comments received during the NOP period and determined that the threshold for preparing a TIA was not triggered. As described in the Caltrans Guide for the Preparation of Traffic Impact Studies (December 2002), a TIS is needed if a project generates over 50 or more peak hour trips assigned to a State highway facility or if a project generates 1 to 49 peak hour trips with specific conditions met (e.g., affected State highway facilities experiencing significant delay, the potential risk for a traffic accident is significantly increased, or change in local circulation networks that impact a State highway facility). Based on the criteria above, and the fact that the proposed alignment would not directly affect State highway facilities, the City did not prepare a TIA. The City acknowledges Caltrans comment that a Transportation Management Plan (TMP) or construction TIA may be required if it is determined that the traffic restrictions and detours are needed. The City has clarified in **Chapter 8, EIR Revisions** below, that Option 2 would utilize trenchless construction methods, and would not be conducted using open-cut construction. Because the Public Draft EIR evaluates both open-cut construction and trenchless construction for pipeline construction, all anticipated impacts have been evaluated and no additional modification of the Public Draft EIR is needed.

Response to Comment 2-3

A Cultural Resources Assessment Report was conducted for the proposed Project and is included as Appendix K of the Public Draft EIR (see Volume 2). As described in the report and summarized in Section E.4 (Cultural Resources) of Appendix E, a records search was conducted at the Northwest Information Center at Sonoma State University and Native American Consultation was conducted in October 2014. The report describes the effects of the proposed Project on cultural resources along the proposed pipelines, including areas in and around Caltrans facilities as describe in Response to Comment 2-2 above. Standard project requirements to protect cultural resources, including human remains, and paleontological resources have been incorporated as part of the Project to ensure potential impacts are reduced to less than significant. These measures are intended to be implemented during construction, in the event that previously unrecorded or unknown cultural resources are discovered. The Public Draft EIR did not find areas of high archaeological sensitivity in the areas around Caltrans facilities and thus no additional mitigation measures apply to these specific areas. This information would support the City's application for an encroachment permit.

Response to Comment 2-4

The City acknowledges the need for a transportation permit from Caltrans for the movement of oversized or excessive load vehicles on State roadways, and, if needed, will submit an application accordingly prior to construction.

Response to Comment 2-5

The City acknowledges the need for an encroachment permit prior to construction and Caltrans' preference for bore and jack construction on State ROW. The City will submit the appropriate application forms for this process prior to construction.

[5] Construction of Option 2, which is not part of the proposed Project, had previously been identified as open-cut. Based on CalTrans' comments, Table 2-1 in Chapter 2, Project Description, has been revised to shown trenchless construction. Please see **Chapter 3, EIR Revisions**, for the change.

Comment Letter 3

County of Santa Clara

Roads and Airports Department

101 Skyport Drive
San Jose, California 95110-1302
1-408-573-2400

June 4, 2015

Karin North
City of Palo Alto
2501 Embarcadero Way
Palo Alto, CA 94303

SUBJECT: Draft Environmental Impact Report – Palo Alto Recycled Water Project

Dear Ms. North:

The County of Santa Clara Roads and Airports Department appreciates the opportunity to review to the draft EIR and is submitting the following comments.

1. Page Mill Road from Alma Street to I-280 is a County-maintained expressway. Table 2-1 on page 2-8 notes that the pipeline would be located in the Page Mill Road right-of-way from Alma Street to Hanover Street with a proposed construction method of open-cut trenching. The County does not permit open-cut trenching of the expressways. The construction method for all expressway alignments and crossings (Page Mill Road and Foothill Expressway) is to be bore and jack. The EIR should be updated to reflect the proper construction method for the expressways. 3-1

2. The EIR should include Santa Clara County Roads and Airports Department as a listed agency for which encroachment permits and approvals are required (Section 2.6, page 2-30). Please contact Permits at (408) 573-2475 to obtain further instructions in receiving an Encroachment Permit before work begins within County right-of-way. As part of the submittal, the City should submit plans, specifications, and a traffic control plan to County Roads for review and approval prior to beginning the construction work. The design plans shall be consistent with the September 1997 Standard Detail Manual, County of Santa Clara, Roads and Airports Department and all subsequent Notices of Change, the most current dated July 1, 2014. 3-2

If you have any questions or concerns about these comments, please contact me at (408) 573-2465 or dawn.cameron@rda.sccgov.org.

Sincerely,

Dawn S. Cameron
County Transportation Planner

cc: Masoud Akbarzadeh, *County Traffic Engineer*
Ananth Prasad, *Senior Traffic Engineer*

Comment Letter 3 – County of Santa Clara Roads and Airports Department

Response to Comment 3-1

The County of Santa Clara Roads and Airports Department has specified that the construction method for all expressway alignments and crossings is not open-cut trenching but rather using a trenchless technique. The City will revise the EIR to show that Page Mill Road from Alma Street to Hanover Street would be conducted using trenchless methods. Because the Public Draft EIR evaluates both open-cut and trenchless construction of its pipeline alignments, all anticipated impacts have been evaluated and no additional modification of the Public Draft EIR is needed.

Response to Comment 3-2

The Roads and Airports Department specified that the City should include the Department as a listed agency for which encroachment permits and approvals are required. This change has been made as shown in **Chapter 8, EIR Revisions** below. The City will design its facilities within the County's jurisdiction in accordance with the Department's standards and submit the appropriate applications and supplemental information to the Department as part of the encroachment permit process.

Comment Letter 4

Stanford University

REAL ESTATE
Land, Buildings and Real Estate

June 4, 2015

VIA EMAIL

Ms. Karin North
Watershed Protection Program Manager
Palo Alto Regional Water Quality Control Plant
3501 Embarcadero Way
Palo Alto, CA 94303
Karin.north@cityofpaloalto.org

Re: Draft Environmental Impact Report for City of Palo Alto Recycled Water Project, State Clearinghouse No. 2011062037

Dear Karin:

We appreciate this opportunity to present Stanford University's comments on the Draft Environmental Impact Report for the City of Palo Alto's Recycled Water Project. We support the City's efforts to reduce potable water use in the Stanford Research Park through this important project, and we appreciate the revisions that City staff have made to the water quality mitigation measures in the Draft EIR, as memorialized in the May 21 correspondence from the City on this issue, in response to the concerns raised by Stanford about the potential impacts of recycled water use on redwood trees and other salt-sensitive plantings.

With respect to the revised Mitigation Measure HYD-3d, we support the City's firm commitment to implement mitigation that will ensure that recycled water that fails to meet the City's salinity goals will not be applied to salt-sensitive plantings. Accordingly, it is our understanding that, if the City's monitoring shows that the constituent levels in the recycled water exceed the City's goal of 600 milligrams per liter of total dissolved solids, the City will take one of the following mitigation actions: (a) the City will treat the recycled water (for example, through reverse or forward osmosis), or will blend it with potable water, so that the salinity goal is achieved prior to use on salt-sensitive plantings; or (b) the City will grant an exemption under the provisions of its recycled water ordinance (see Palo Alto Municipal Code § 16.12.050) to allow for the use of potable water for landscape irrigation, in lieu of recycled water, to avoid salinity impacts to salt-sensitive plantings. We would like to discuss with City staff the mechanics and triggers for implementing this mandatory mitigation.

4-1

In addition to the salinity issues, as we have discussed with you, we believe it is important that the City update its project demand data and financial assumptions, in light of the implementation of water conservation measures and practices in recent years at the Stanford Research Park, which has reduced the demand for water. We also believe there

4-2

should be a provision to allow businesses in the Stanford Research Park that use treated, non-potable groundwater associated with remediation efforts to opt out of the requirements to use recycled water for landscape irrigation. Moreover, it is important that the City coordinate closely with Stanford prior to and during project construction, in order to ensure that the specific project pipeline alignment and construction methods are designed and implemented to avoid potential impacts to groundwater remediation pipelines and subsurface archeological resources. It is also important to coordinate with us in regard to the operation of the project in order to avoid potential impacts to biological resources in creeks within the area covered by the Stanford Habitat Conservation Plan that could result from potential runoff of recycled water from irrigation sites.

4-3

4-4

4-5

It is clear that City staff have put a tremendous amount of work into this project. We support the City's efforts to move forward with the project and we look forward to continuing to work with you to ensure that the project is implemented in a way that protects the environment of the Stanford and Palo Alto communities.

Sincerely yours,

Jim Inglis
Director of Design & Construction
Real Estate Group

Jean McCown
Assistant Vice-President
Government and Community Relations

STANFORD UNIVERSITY REAL ESTATE OFFICE
3160 Porter Drive, Suite 200 • Palo Alto, CA 94304 •T: 650.724.7990 • F: 650.724.5059

Comment Letter 4 – Stanford University

Response to Comment 4-1

The City acknowledges Stanford University's support of the proposed Project. The revisions to the mitigation measures (HYD-3b, HYD-3c, and HYD-3d) referenced in this comment are shown in **Chapter 8, EIR Revisions** below. Please refer to the Master Response, Recycled Water Quality and Trees, above for more information regarding changes to the mitigation measures.

Response to Comment 4-2

The City acknowledges Stanford University's suggestion regarding the need for the City to revisit the project demand data and financial assumptions. As part of the Facility Planning phase for this Project, the City will determine the demands of the end users to confirm the sizing of the proposed facilities.

Response to Comment 4-3

Please refer to the Master Response above (and Section 1.5.3, City of Palo Alto Recycled Water Ordinance, on p. 1-12 in Chapter 1, Introduction and Project Background of the Public Draft EIR) for a summary of the exemption process to opt out of using recycled water. While the Recycled Water Ordinance does not specifically address opting out of recycled water use in cases where the landowner has available treated, non-potable groundwater associated with remediation efforts, the City would be amendable to granting the exemption if other non-potable water is available for irrigation.

Response to Comment 4-4

The City has been actively engaging Stanford University regarding the proposed Project and will continue to do so. The EIR includes standard project requirements and mitigation measures that will be included in the MMRP to reduce potential impacts, including on archaeological resources and related to hazardous materials, to less than significant (see Appendix E, Environmental Checklist in Volume 2 of the Public Draft EIR). Implementation of the MMRP is a condition of approval for the proposed Project, and thus would ensure that impacts would be less than significant.

Response to Comment 4-5

As discussed in E.3, Biological Resources (Volume 2 of the Public Draft EIR), the use of recycled water would not affect habitat or special-status species due to the strict prohibitions of the City's existing Permit (Order No. 93-160) that would be imposed to ensure that recycled water is applied during dry weather and that recycled water is not allowed to escape to areas outside the designated use areas (p. E-20). As part of the City's recycled water permitting process, site supervisors would be required to participate in training on the safe uses of recycled water. Compliance by site supervisors with the City's requirements would ensure that use of recycled water would not result in any operational impacts on biological resources in areas covered by the Habitat Conservation Plan.

Comment Letter 5

CANOPY plants and cares for trees where people need them the most. We bring the life-giving benefits of trees to the schools, neighborhoods, and public spaces of the San Francisco Mid-Peninsula.

Ms. Karin North
Watershed Protection Manager
City of Palo Alto
2501 Embarcadero Road
Palo Alto, CA 94303

June 4, 2015

Dear Ms. North:

Thank you for giving us an opportunity to comment on the Recycled Water Project draft Environmental Impact Report dated April 2015.

What is missing from this report are the risks and deleterious consequences of long term application of recycled water to a variety of trees. What is addressed in the report is simply the impact of the construction of the pipeline on trees. 5-1

The report fails to recognize the value of the trees in the proposed recycled water distribution area and the value of the ecosystem services these trees provide. Consequently, the report implies that using high quality Hetch Hetchy potable water is wasteful in the landscape and fails to make a distinction between low value elements of the landscape (lawns, annuals, etc.) and trees which are the most valuable element of the urban landscape. 5-2

However Canopy recognizes the need for innovative solutions to address current and future constraints on the availability of potable water. Canopy thus supports the Recycled Water Project under the following conditions: 5-3

1. The pipeline or other means of transportation will not be used to distribute recycled water destined for the landscape unless that water meets the standards defined by the Recycled Water Salinity Reduction Policy adopted by City Council on 1/25/2010 (600 ppm TDS maximum.) At a minimum, blending with potable water will occur before distribution.
2. The City will actively explore alternative m for recycled water, such as groundwater recharge. 5-4
3. The City will actively pursue measures described in Mitigation Measure HYD-3d (new language provided on 5/22/15) such as Reverse or Forward Osmosis with the goal of lowering salinity dramatically and opening new markets for the recycled water.

The mission of Canopy is to engage the community in growing and caring for our urban forest. Trees bring many tangible benefits to Palo Alto. Palo Alto's public trees (only a fraction of the entire forest) represent a cost-effective resource that provides net benefits of $4.6 million per year. These benefits include energy savings, air quality improvements, stormwater interception, atmospheric CO2 reduction, and aesthetic contributions to the social and economic health of the community. 5-5

Best regards,

C. Martineau

Catherine Martineau
Executive Director

Comment Letter 5 - Canopy

Response to Comment 5-1

The Public Draft EIR evaluates more than the impact of the construction of the pipeline but also includes a discussion of effects of the using recycled water on salt-sensitive tree species. Please see the Master Response on Recycled Water Quality and Trees.

Response to Comment 5-2

Please refer to the Master Response on Recycled Water Quality and Trees. The Master Response also addresses the City's need to manage its water supply sustainably, particularly in light of the current drought.

Response to Comment 5-3

The City acknowledges Canopy's support of the proposed Project based on the conditions specified in its subsequent comment.

Response to Comment 5-4

Please refer to the Master Response on Recycled Water Quality and Trees for a discussion of the City's approach to addressing salinity in recycled water, and the clarifications to the mitigation measures HYD-3a through HYD-3d, which would ensure that impacts to salt-sensitive tree species would be less than significant. The City is exploring alternative uses of recycled water with the Santa Clara Valley Water District.

Response to Comment 5-5

The City acknowledges the ecosystem value of trees.

Comment Letter 6

SANTA CLARA
Valley Transportation Authority

June 4, 2015

City of Palo Alto
Planning Department
P.O. Box 10250
Palo Alto, CA 94303

Attention: Karin North

Subject: Palo Alto Recycled Water Project

Dear Ms. North

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Draft EIR for 5 miles recycled water pipeline and pump stations in central Palo Alto and Stanford University. We have the following comments.

Traffic Control Plan

In response to VTA's comments on the NOP requesting that the project prepare a Traffic Control Plan and route it to VTA for review, the DEIR states, "Chapter 2, Project Description describes the Traffic Control Plan. The Final Traffic Control Plan will be provided to VTA upon completion and prior to construction and prior to construction activities." 6-1

VTA commends the City for including this response and looks forward to reviewing the final Traffic Control Plan when available.

Access to Adobe Creek Undercrossing During Construction

Will the Adobe Creek Undercrossing be closed during construction? If so, appropriate notice should be given to trail users. 6-2

Thank you for the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

Roy Molseed
Senior Environmental Planner

PA0901

Comment Letter 6 - Santa Clara Valley Transportation Authority

Response to Comment 6-1

The City will provide a final Traffic Control Plan for VTA's review prior to construction.

Response to Comment 6-2

If the City were to hang the proposed pipeline from the Adobe pedestrian bridge, then the City would require temporary closure of the Adobe Creek pedestrian trail during construction. While the impact to this resource would be considered less than significant and no mitigation measures would be required, the City would provide appropriate, advanced notice of its closure to users of the trail.

Comment Letter 7

California Native Plant Society

Santa Clara Valley Chapter
3921 East Bayshore Rd.
Palo Alto, CA 94303

Ms. Karin North
Watershed Protection Manager
City of Palo Alto
2501 Embarcadero Road
Palo Alto, CA 94303

June 4, 2015

Dear Ms. North:

Thank you for this opportunity to comment on the draft EIR of the Recycled Water Project. We have concerns that are not adequately addressed in this DEIR.

Impact HYD-3. Impact on Redwoods and other salt sensitive species. The analysis for this impact is based on very short-term studies of impacts on Redwoods over periods of less than 10 years of monitoring. Redwoods, even in landscaping situation have lifespans of hundreds of years. The fact that many of the redwoods that were monitored were showing damage over such a short period of time does not bode well for the ultimate survival of these trees after many years of irrigation with recycled water. Even if the quality of the water improves in the manner the city is striving to achieve, we feel that the current studies do not support the determination that with mitigation—landowners can be expected or required to subject their redwood trees to this type of irrigation. There are many reasonable uses for recycled water that will do minimal harm. We think that there is insufficient scientific support to suggest that watering redwood trees is one of these acceptable uses. Our city forests are a valuable asset to be protected not experimented upon.

7-1

Sincerely,

Linda Ruthruff, Chair
Conservation Committee
California Native Plant Society
Santa Clara Valley Chapter

Comment Letter 7 – California Native Plant Society (CNPS)

Response to Comment 7-1

The City acknowledges the concerns expressed by CNPS. Please see the Master Response on Recycled Water Quality and Trees regarding the City's approach to ensure that impacts are less than significant, as well as the availability of an exemption by landowners from the use of recycled water for irrigation of redwood trees. It should be noted that HortScience, on behalf of both the City and Stanford University, had identified that salinity hazards would be eliminated if TDS were to be less than 650 mg/L, and other water quality parameters were to meet the Category 1 standards specified in HortScience's 2011 study (see p. 3-23 in Chapter 3 of the Public Draft EIR, as well as Appendix G for the original HortScience Study). Thus, there is scientific information to support the analysis presented in the Public Draft EIR.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

June 4, 2015

Comment Letter 8

RECEIVED
JUN 0 8 2015
WQCP

Karin North
City of Palo Alto
2501 Embarcadero Way
Palo Alto, CA 94301

Subject: Recycled Water Project
SCH#: 2011062037

Dear Karin North:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on June 3, 2015, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

8-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2011062037
Project Title Recycled Water Project
Lead Agency Palo Alto, City of

Type EIR Draft EIR

Description The proposed Project involves the construction and operation of an expanded recycled water system to deliver recycled water produced by the Regional Water Quality Control Plant to customers in the City, potentially including Alta Mesa Memorial Park, Stanford Research Park, and others. The proposed Project includes about 10 miles of pipeline (backbone, lateral, and connecting pipelines) and two pump stations (one at the RWQCP and another at Mayfield Soccer Fields, along the pipeline alignment). The Project would initially provide approximately 900 acre-feet per year of recycled water, primarily to the Stanford Research Park Area.

Lead Agency Contact

Name Karin North
Agency City of Palo Alto
Phone 650 329 2104 **Fax**
email
Address 2501 Embarcadero Way
City Palo Alto **State** CA **Zip** 94301

Project Location

County Santa Clara
City Palo Alto
Region
Lat / Long 37° 25' 22" N / 122° 08' 33" W
Cross Streets E. Meadow Dr.'; Cowper St; El Dorado Ave; Alma St; Page Mill Road; Hanover St; Hillview Ave
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 101
Airports Palo Alto Airport
Railways Caltrain along Alma Ave
Waterways SF Bay, Adobe Creek, Barron Creek, Matadero Creek
Schools Multiple
Land Use Various

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 3; Department of Parks and Recreation; San Francisco Bay Conservation and Development Commission; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 4; Air Resources Board; State Water Resources Control Board, Divison of Financial Assistance; Regional Water Quality Control Board, Region 2; Native American Heritage Commission; Public Utilities Commission

Date Received 04/20/2015 **Start of Review** 04/20/2015 **End of Review** 06/03/2015

Note: Blanks in data fields result from insufficient information provided by lead agency.

Comment Letter 8 –Governor's Office of Research and Planning, State Clearinghouse and Planning Unit

Response to Comment 8-1

The City acknowledges the comment. The comment letters attached to the State Clearinghouse letter are separated in this document, as Comment Letter 1 (SWRCB) and Comment Letter 2 (Caltrans).

Comment Letter 9

Santa Clara Valley Audubon Society

June 8, 2015 via email

Ms. Karin North
Watershed Protection Manager
City of Palo Alto

Re: Recycled Water Project draft Environmental Impact Report

Dear Ms. North,

The Santa Clara Valley Audubon Society (SCVAS) has reviewed the draft Environmental Impact Report (DEIR) for the Palo Alto Recycled Water Project.

SCVAS' mission is to preserve, to enjoy, to restore and to foster public awareness of native birds and their ecosystems, mainly in Santa Clara County. As stewards for avian species and their environmental resources and habitat, we are interested in innovations and improvements that help conserve resources and yet include nature, trees and birds into the planning.

Due to high salt content, irrigation with recycled water can be expected to harm existing trees in Palo Alto and neighboring cities, and to change tree and other plant selection forever. This would impose a significant impact on trees and landscaping, on urban and park ecosystems and on aesthetic resources in Palo Alto and other Cities in the service area. If mature trees die, and new trees are planted, there will also be long-term, significant changes to tree canopy in the service area. If high-quality habitat trees are replaced with drought tolerant trees of lesser habitat value, there will be an impact on bird and pollinator community. 9-1

We believe that loss of trees and tree canopy, especially in years of drought, should be considered a significant unavoidable impact – especially if ancient oak trees and sycamores are lost. There should be special mitigation afforded to trees of high habitat value such as oaks and sycamores. Furthermore, mitigation should allow irrigation of trees with potable water especially in years of drought. We believe that Mitigation Measure HYD-3c may have significant and deleterious impacts to biological and aesthetic resources, and should be modified or removed

In addition to these comments, we wish to express support to Catherine Martineau's comments, as submitted in Canopy's letter dated June 4th, 2015. 9-2

Thank you for the opportunity to comment on the proposed project and for providing an extension. Please keep SCVAS on the notification list for the proposed project site. 9-3

Sincerely,

Shani Kleinhaus

Shani Kleinhaus, Ph.D., Environmental Advocate
shani@scvas.org

Comment Letter 9 – Santa Clara Valley Audubon Society

Response to Comment 9-1

The City acknowledges the Santa Clara Valley Audubon Society's concerns. Please refer to the Master Response on Recycled Water Quality and Trees summarizing the evaluation of using recycled water for irrigation and its effects on trees and the visual environment. The area of potential effects associated with the use of recycled water is only those areas that would be irrigated using recycled water. The project has the potential to impact oaks and sycamores, but implementation of Mitigation Measures HYD-3a through HYD-3d will mitigate any such impact to a level of less-than-significant. Oaks and sycamores are more tolerant of salinity than sensitive species like redwoods. As explained in the Draft EIR, tree species with moderate salt tolerance could experience some impacts with recycled water at higher salinity levels, but such impacts could be managed even at those levels. Furthermore, those impacts would not occur if salinity levels are brought below 650 mg/l TDS. The recycled water used in the project is expected to have TDS concentrations below this level, and the mitigation measures mandate soil testing, plant health monitoring, and salinity monitoring in the recycled water to ensure that optimal concentrations of TDS and related parameters will be achieved, as well as implementation of a range of additional feasible mitigation measures if these levels are not achieved (including exemption of salt sensitive species from use of recycled water, blending, and/or further treatment of recycled water to further reduce TDS). The proposed Project would not affect other areas within the City or neighboring cities. There is a movement in California to replace existing landscapes with landscapes that are drought tolerant. Such changes are based on the decisions of individual landowners and are not the responsibility of the City.

The Master Response describes Mitigation Measure HYD-3c (site management actions that would be implemented by site owners as needed) as part of a comprehensive mitigation strategy that would ensure that potential impacts would be reduced to less than significant; it should be noted that the master response does make significant modification to this measure; contrary to the commenter's suggestion, Mitigation Measure HYD-3c, which involves monitoring soil salinity, implementation of a leaching program, and use of gypsum prior to leaching, would not generate additional impacts on the environment that would warrant evaluation in the EIR; the analysis presented in the Public Draft EIR is adequate, and Mitigation Measure HYD-3c is appropriate and does not need to be removed.

Response to Comment 9-2

It should be noted Canopy is in support of the proposed Project with the conditions specified in its letter (see Comment Letter 5 above).

Response to Comment 9-3

The City will include the Santa Clara Valley Audubon Society on future correspondence related to this Project.

Chapter 8 EIR Revisions

This section addresses changes to the EIR that are either staff-initiated or made in response to public comments on the Public Draft EIR. These changes are primarily for clarification. They would not result in any change to the analyses provided in the EIR; specifically, they do not include significant new information that would warrant recirculation of the EIR pursuant to Section 15088.5 of the CEQA Guidelines (Recirculation of an EIR Prior to Certification). The changes do not result in an increase in the severity of impacts already identified in the Public Draft EIR and do not result in a new finding of significant impact. For that reason, the analyses and conclusions drawn in the EIR are adequate and applicable to the proposed Project as described, and recirculation of the EIR is not needed.

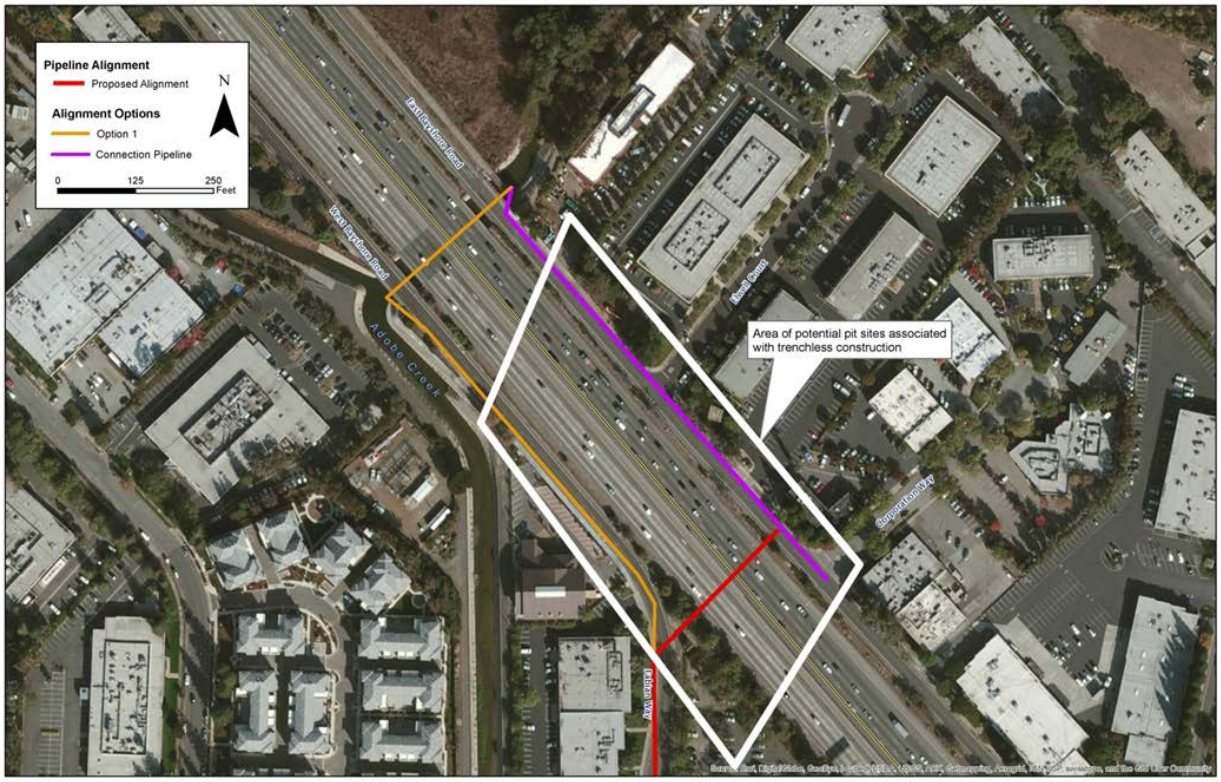
Staff-Initiated Changes and Changes in Response to Public Comments

The following addition has been made to the end of Section 2.6 Potential Permits and Approvals Required on page 2-30 in Chapter 2, Project Description (Volume 1 of the Public Draft EIR) in response to the comment letter from the County of Santa Clara Roads and Airports Department.

- County of Santa Clara Roads and Airports Department – encroachment permit.

The following note has been made in response to Caltrans comment letter regarding its preference for construction across highway crossings.

Figure 2-2: Proposed Work Area in the Vicinity of US 101[a]



a The City will work with CalTrans to confirm whether hanging from the bridge is acceptable for Option 1, as existing pipelines are already hung from the bridge.

Table 2-1 in Chapter 2, Project Description (p. 2-8 in Volume 1 of the Public Draft EIR) has been revised in response to comment letters from Caltrans and the County of Santa Clara Roads and Airports Department.

Table 2-1: Proposed Backbone Pipeline Alignment

Alignment Location	Starting Cross Street	Ending Cross Street	Proposed Construction Method at Crossings
Proposed Backbone Pipeline Alignment			
Under US 101	E. Bayshore Rd. at Corporation Way	Fabian Way	Trenchless under 101
Fabian Way	West Bayshore Road	East Meadow Drive	Open-Cut[1]
East Meadow Drive	Fabian Way	Cowper Street	Open-Cut; Potential trenchless[2] section across Adobe Creek Bridge
Cowper Street	East Meadow Drive	El Dorado Avenue	Open-Cut; Potential trenchless sections across Barron Creek Bridge and Matadero Creek Bridge
El Dorado Avenue	Cowper Street	Alma Street	Open-Cut
Alma Street	El Dorado Avenue	Page Mill Road	Open-Cut
Page Mill Road	Alma Street	Hanover Street	Trenchless ~~Open-Cut; Trenchless section under railroad crossing; Potential trenchless section under El Camino Real~~
Hanover Street	Page Mill Road	Hillview Avenue	Open-Cut
Hillview Avenue	Hanover Street	Arastradero Road	Open-Cut; Potential trenchless ~~section~~ across SFPUC Easement; trenchless under ~~and~~ Foothill Expressway
Proposed Pipeline Alignment Option 1			
Adobe Creek	US 101	West Bayshore Road	Potential trenchless[3] ~~(hang from the bridge)~~
West Bayshore Road	Adobe Creek	Fabian Way	Open-Cut
Pipeline Alignment Option 2			
El Camino Real	Page Mill Road	Hanson Way	Trenchless ~~Open-Cut~~
Palo Alto Square Parking	Hanson Way	Hanover Street	Open-Cut

[1] The open-cut construction method involves long, narrow excavations in the ground to accommodate the placement of the pipelines. An alternate construction method to open-trench is Horizontal Directional Drilling. Both types of construction methods are described in Section 2.5 below.

[2] All of the bridge crossings would be trenchless (constructed with the pipe attached to the side of the bridge or installed underneath the bridge). The construction method has not been finalized. Neither method would require work to be done in the creeks.

[3] The City will work with CalTrans to confirm whether hanging from the bridge is acceptable at this location, as existing pipelines are already hung from the bridge.

The last paragraph in Section 2.4 (at the bottom of p. 2-13 extending to the top of 2-14) has been revised as both a staff-initiated change and response to Stanford comments to clarify that an exemption is already allowed under the Recycled Water Ordinance (No. 5002) and to modify the text to reflect the changes in Mitigation Measure HYD-3b discussed further below.

> Salinity reductions due to the planned projects are expected to result in a cumulative reduction to below 650 mg/L within the next several years, before the Project is completed. Ongoing monitoring and surveillance would confirm reductions, track success and identify other potential sources. Key projects are due for completion in the next several years, in advance of the operation of the proposed recycled water delivery system (2019). Therefore, it is estimated that TDS levels would be below the commenter's indicated TDS impact level (650 mg/L) by the time this Project is completed and water is delivered. TDS levels in the RWQCP-effluent and recycled water will be reported to interested parties initially monthly ~~quarterly~~, using a rolling 12-month average to compare to the City's 600 mg/L goal. In the unlikely event that TDS levels do not drop below 650 mg/L by the time the Project is implemented (recycled water is delivered) or shortly thereafter, the City shall consider other actions, including utilizing its existing Recycled Water Ordinance exemption process ~~inclusion of a blanket exemption in the City's Recycled Water Permit~~ for salt-sensitive species (including redwood trees) from the use of recycled water, blending of recycled water with potable water, or other additional treatment of recycled water prior to application or shortly thereafter (the City is initiating an investigation of the feasibility of Reverse and Forward Osmosis treatment of its recycled water, combined with blending of appropriate water).

The following change has been made in response to Caltrans comment letter regarding its preference for construction across highway crossings.

> Three creeks would be crossed by the proposed alignment, alignment options, and laterals: Adobe Creek, Barron Creek, and Matadero Creek. The creek crossings would be constructed as follows:
>
> - **Adobe Creek.** There are three proposed Adobe Creek crossings. The first crossing is associated with the proposed alignment on East Meadow Drive, west of US 101. The pipeline would be attached to the existing East Meadow Drive Bridge on the south side of the bridge or installed in the roadway on the bridge. The second crossing is associated with the Option 1 alignment, where the existing Adobe Creek crosses under US 101. The pipeline may, with approval from Caltrans, ~~would~~ be hung on the south side of the existing bridge. The third crossing is associated with a lateral pipeline on Middlefield Rd, which would require crossing Adobe Creek using trenchless techniques at the Middlefield Road bridge.

The following change has been made in response to Caltrans comment letter regarding its preference for highway crossings. A footnote has been added to the section on US 101 on p. 2-20 (in Chapter 2 of the Public Draft EIR), as shown below. To reduce the change in numbering of footnotes, the footnote will be designated "9b'.

US 101 Crossing[9b]

As described above, the two options to cross underneath US 101 are using a trenchless construction technique under the proposed alignment and hanging from an existing bridge. The precise option and the locations would be determined during design. If trenchless construction is employed, the pits could be located within any open area shown in the polygon shown on **Figure**

2-2 (e.g., on existing parking lots). Depending on the location, landscaped trees may be trimmed and/or removed to accommodate the pits and other activities in the work area. Existing parking spaces would be temporarily eliminated. Construction would require the City to work with the land owner to accommodate temporary loss of parking and disruption. If the pipeline is hung from the existing bridge on the south side of Adobe Creek, then construction would likely occur during the non-rainy season (April 15 through October 15), when the Adobe Creek Pedestrian Path is open. However, installation of the proposed pipeline would require temporary closure of the existing path for several days to a week.

Text to footnote 9b: [9b] The City would work with CalTrans to confirm whether hanging from the bridge is acceptable at this location, as existing pipelines are already hung from the bridge.

The section on flooding in Chapter 3 (p. 3-1 of the Public Draft EIR) has been updated to include a figure showing 100-year flood plain and the text revised to reflect the figure, as a response to SWRCB comments and as a staff-initiated change for clarity of the flood zones.

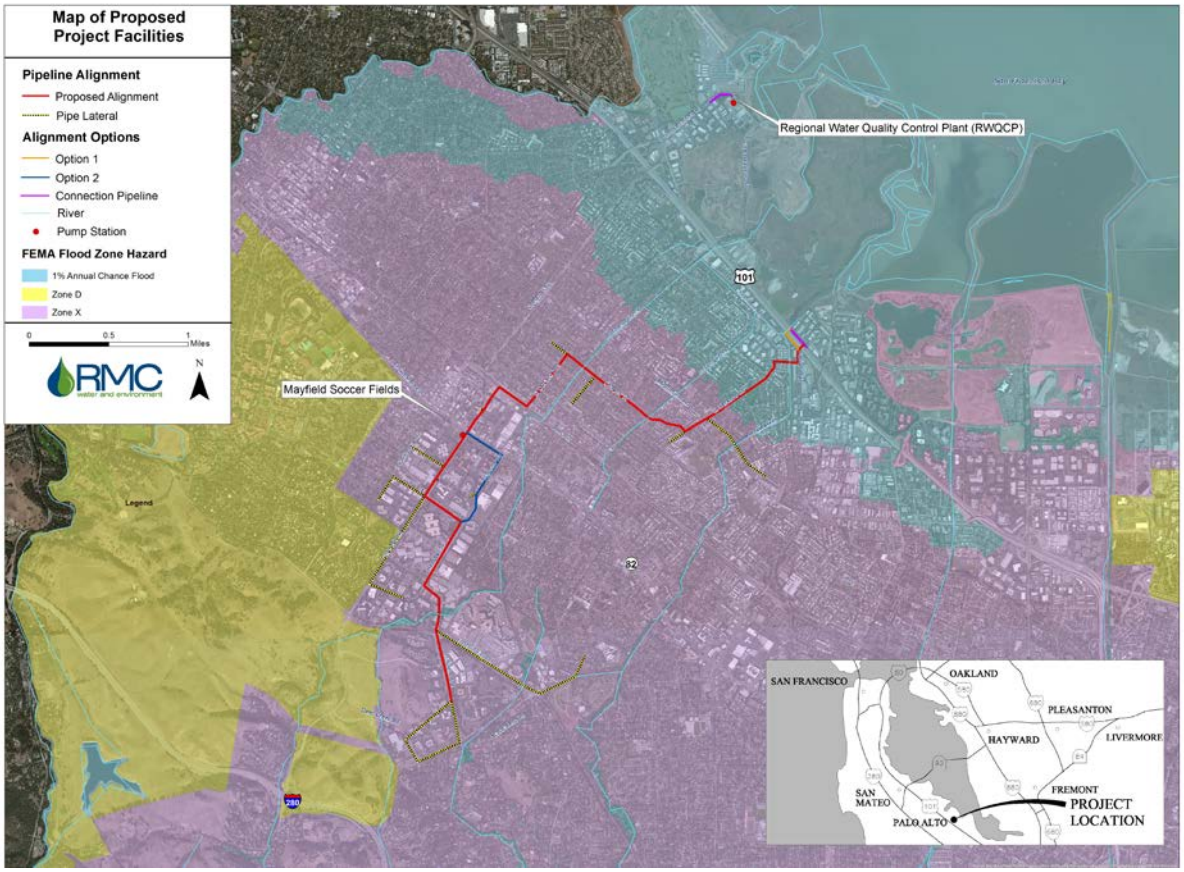
Flooding

The proposed pipeline alignment lies within two different flood zones as defined by the Federal Emergency Management Agency (FEMA). These zones are described below and shown in **Figure 3-0**.

- Zone AE. (Base Flood Elevations determined). Zone AE is the 100-year flood zone. The elevation of the base flood (i.e., 100-year flood level) has been determined by FEMA to be 8 feet above mean sea level.
- Zone X. Zone X is described as an area of moderate risk of flooding (roughly speaking, outside the 100-year flood but inside the 500-year flood limits). While some risk of flooding exists, structures within Zone X areas are not considered to be at substantial risk of flooding.

Most of the Project area is located within Zone X. The northeast part of the Project area between Middlefield Road and US 101 (as well as area further east to the Bay), including ~~and~~ the proposed pump station site at the RWQCP, are located in Zone AE.

Figure 3-0: FEMA-Designated Flood Zones within the Project Area



Page 3-24 of Chapter 3 has been revised to clarify that the existing Recycled Water Ordinance already allows for an exemption from use of recycled water.

> While TDS and other related parameters in recycled water are expected to achieve the desired concentrations by the time the Project is operated, in the unlikely event that they are not achieved by the time of Project operation, there is potentially a greater risk that certain salt-sensitive plants could be adversely affected by recycled water use. While TDS greater than 650 mg/L can be safely used on many landscaped areas, some salt-sensitive trees, such as redwood trees, could be affected, particularly under the combination of factors that are independent of recycled water quality. The City is sensitive to concerns of landowners whose properties may be dominated by salt-sensitive tree species, and thus has identified actions that would mitigate the potential for damage to those trees. Specifically, the City would consider other options prior to Project operation if anticipated recycled water quality is not achieved by the time of Project operation, and would select the best strategy moving forward. These actions would include ~~an amendment~~ utilizing ~~to~~ the City's existing Recycled Water Ordinance to allow for an exemption from use of recycled water on redwood trees (and other salt-sensitive trees) such that an individual site would have dual plumbing to allow potable water to be used on salt-sensitive species (if desired by the individual landowner), blending of the recycled water, or additional treatment of recycled water, based on available technology at the time

(see **Mitigation Measure HYD-3d**). The City's initiation of an investigation of the feasibility of Reverse or Forward Osmosis treatment of its recycled water, combined with blending of appropriate water, has also been included in Mitigation Measure HYD-3d to show the City's commitment to this measure. However, there may be a limited period at the beginning of Project operations when recycled water quality is not at the optimal level. In such an event, there is a potential for adverse effects similar to those described above for the use of any source water, particularly for salt-sensitive species. Given the expected short duration of recycled water use with less optimal recycled water quality, any effects on vegetation would occur for a limited time, and long-term damage to salt-sensitive species is not expected. Recycled water with higher TDS levels can be used on certain landscapes with minimal effect, and with proper site management (as required in **Mitigation Measure HYD-3c**), and the implementation of options to reduce TDS (**Mitigation Measure HYD-3d**), impacts would be less than significant.

The following revisions have been made to **Mitigation Measures HYD-3a** through **HYD-3c** (in Table ES-1 on page ES-11 in the Executive Summary (Volume 1 of the EIR) and pages 3-25 and 3-26 in Chapter 3, Environmental Setting, Impacts and Mitigation Measures (also Volume 1 of the EIR) to clarify the entities responsible for the actions, clarify that the City has in place an existing exemption process from use of recycled water for salt-sensitive trees, and the City's commitment to implement other actions. This change is a voluntary change by the District based on discussions with Stanford University. The analysis provided in the EIR is adequate and the level of mitigation proposed is appropriate. The revisions in the mitigation measure is not in response to an increase in severity of impact or any new finding of significant impact, is not required by CEQA, and does not create new significant environmental impacts. Similar to the original mitigation measures, the revisions would ensure that impacts would be less than significant.

Mitigation Measure HYD-3a. Source Control of Saline Groundwater. The City shall continue to line and repair existing sewers to minimize saline groundwater Infiltration.

Mitigation Measure HYD-3b. Monitoring. The City shall immediately begin ~~quarterly~~ monthly monitoring of the salinity (and related constituents) of the recycled water and shall report the rolling 12-month average for comparison to the Palo Alto City Council goal of 600 mg/l TDS. Monthly electronic reporting to those requesting it will be performed for two years, and then the frequency will be re-evaluated. The City shall monitor soil salinity and SAR through semi-annual soil analyses, preferably taken early and late in the irrigation season (approximately April and October).

Mitigation Measure HYD-3c: Site Management. ~~As a condition of recycled water use, the City shall require the site owners to: 1) Continue to irrigate with recycled water, even during droughts, (because recycled water is a drought proof supply), to meet the water demand of the subject plants and trees; and 2) conduct appropriate best management practices/management actions specified below in the event that protected, low salt tolerant trees irrigated with recycled water show signs of decline.~~ If at a particular site receiving recycled water, monitoring identifies an increase in soil salinity and SAR over historical levels, the City in cooperation with the owner of that site shall conduct a site-specific evaluation. That evaluation would consider (1) the extent to which the site contains protected trees (including redwood trees and oaks) that might be impacted by soil salinity, (2) the extent to which the elevated salinity is at a level that poses a threat to such

protected trees, and (3) the extent to which the elevated salinity is the result of the use of the City's recycled water. If a threat is found, the City shall work cooperatively with the site owner to develop a site-specific mitigation plan, including the site owner's implementation of best management practices which are described below:

- To avoid plant damage to salt sensitive landscape plants, site owners can implement a leaching program to maintain soil salinity within the root zone below 2.0 dS/m[6] and SAR below 6.0. For moderately salt-tolerant plants, maintain soil salinity below 4.0 dS/m. Where subsoils do not drain adequately, installation of subsurface drainage systems may be needed ~~recommended~~. Rainfall will satisfy a portion of the leaching requirement, depending on the rate, volume, and distribution through the season. The frequency with which leaching applications should be made depends on several variables, and is typically triggered by approaching soil salinity thresholds defined above.
- Site owners can a~~A~~pply gypsum prior to leaching when indicated by soil analysis. Gypsum is a soil amendment that, when combined with leaching, helps lower soil sodium concentrations. Gypsum application can ~~shall~~ be considered when soil analyses reveal one or more of the following conditions: SAR exceeds 6.0, SAR increases 2 units or more (e.g., 2.3 to 4.3), and/or sodium concentration exceeds 5 meq/l (115 mg/L). The amount of gypsum needed and the frequency of application depend on site-specific soil and water characteristics, and can ~~shall~~ be determined by laboratory analysis.

Mitigation Measure HYD-3d: Other Options to Protect Salt-Sensitive Plants. In the event that monitoring results (see Mitigation Measure HYD-3b) show that optimal concentrations of TDS and related parameters will not be achieved prior to operation of the Project (i.e., recycled water application), the City will ~~consider~~ evaluate and implement one or more of the following ~~other~~ actions to reduce ~~improve~~ TDS levels~~, as follows~~:

- ~~The City shall amend~~ Utilize its existing Recycled Water Ordinance exemption process (Palo Alto Municipal Code 16.12.050) ~~to include an exemption for~~ to exempt redwood trees (and/or other salt sensitive species) from the use of recycled water ~~and allow for the use of dual systems so the exempted trees could be irrigated separately using potable water, if desired by individual landowners~~;
- ~~The City shall b~~Blend recycled water and other lower salinity ~~potable~~ water prior to application; and/or
- ~~The City shall t~~Treat recycled water to reduce~~d~~ TDS prior to application, or shortly thereafter (the City is initiating an investigation of the feasibility of Reverse or Forward Osmosis treatment of its recycled water, combined with blending of appropriate water).

[6] ds/m is decisiemen/meter. A dS/m is a measure of electrical conductivity, and 1.0 dS/m approximates to 640 mg/L TDS.

The text in Impact AES-1 has been revised by staff to reflect changes in Mitigation Measure HYD-3d (last paragraph, 3rd line in Chapter 3 of the Public Draft EIR), as shown below:

> In the event that the combination of factors described in **Impact HYD-3** occur or in the unlikely event that recycled water quality does not achieve the desired concentrations by the time the Project is implemented (by the time of Project operation or shortly thereafter) additional actions are executed as specified in **Mitigation Measures HYD-3d**), some salt-sensitive plants could react poorly to recycled water (e.g., some salt-sensitive plants may show browning of leaves). Under this circumstance, the Project is not anticipated to result in a substantial change in the visual quality of the Project area from declines in the health of redwood trees and other salt-sensitive species. Any visual changes would likely occur gradually, over time, and with the site management actions described in **Mitigation Measure HYD-3c**, site managers would be able to monitor the appearance of trees and the quality of the soil and make necessary adjustments to maintain the health of its landscaped areas. Also, damage, if any, would unlikely occur in multiple locations simultaneously, due to the variations in site specific conditions of the tree, soil, and site management regime. Potential exposure of salt-sensitive plants to less optimal recycled water quality would be expected to be temporary. Also, recycled water with higher TDS levels could be used on a variety of landscapes with minimal effect, and with proper site management (as required in **Mitigation Measure HYD-3c**), even if some plants were to be affected, such visible effects would be scattered and unlikely to occur en masse. Because options (**Mitigation Measure HYD-3d**) are available to improve irrigation water quality, impacts to the visual environment would be less than significant. As discussed in the City's Draft UFMP, the future composition of Palo Alto's urban forest will be influenced by an emphasis on drought tolerant and recycled water tolerant species. Thus, any alterations in the visual environment associated with the conversion of the existing landscape to that containing more drought-tolerant regime should not be attributed to potential effects by the proposed Project. The choice to convert is an independent decision by each landowner.

Headings in three tables in Appendix I (Volume 2) have been revised to reflect the proposed Project name. The air quality modeling was not rerun and the results of the air quality modeling remain the same.

Open Trench Construction - 2 Crews

Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -> ~~Pasadena RW~~ City of Palo Alto RW Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	7.0	38.5	60.0	6.2	2.8	3.4	3.2	2.5	0.7	7,609.1
Grading/Excavation	8.7	53.0	85.0	7.2	3.8	3.4	4.1	3.4	0.7	13,427.5
Drainage/Utilities/Sub-Grade	8.0	44.1	66.4	6.9	3.5	3.4	3.9	3.2	0.7	8,508.2
Paving	3.7	23.7	21.7	1.3	1.3	-	1.1	1.1	-	3,828.5
Maximum (pounds/day)	8.7	53.0	85.0	7.2	3.8	3.4	4.1	3.4	0.7	13,427.5
Total (tons/construction project)	1.0	5.9	8.9	0.8	0.4	0.4	0.5	0.4	0.1	1,310.8

Notes:

Project Start Year ->	2019
Project Length (months) ->	12
Total Project Area (acres) ->	37
Maximum Area Disturbed/Day (acres) ->	0
Total Soil Imported/Exported (yd^3/day)->	307

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -> Pasadena RW City of Palo Alto RW Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	-	-	-	-	-	-	-	-	-	-
Grading/Excavation	4.8	31.4	34.8	1.6	1.5	0.1	1.3	1.3	0.0	7,470.6
Drainage/Utilities/Sub-Grade	-	-	-	-	-	-	-	-	-	-
Paving	4.1	26.7	26.7	1.4	1.4	-	1.3	1.3	-	4,525.7
Maximum (pounds/day)	4.8	31.4	34.8	1.6	1.5	0.1	1.3	1.3	0.0	7,470.6
Total (tons/construction project)	0.6	4.0	4.4	0.2	0.2	0.0	0.2	0.2	0.0	908.4

Notes:

Project Start Year ->	2019
Project Length (months) ->	12
Total Project Area (acres) ->	3
Maximum Area Disturbed/Day (acres) ->	0
Total Soil Imported/Exported (yd^3/day)->	24

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Open Trench Construction - 1 Crew

Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -> ~~Pasadena RW~~ City of Palo Alto RW Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	3.5	19.3	30.3	3.5	1.4	2.1	1.7	1.2	0.4	3,874.9
Grading/Excavation	4.8	28.8	51.1	4.3	2.2	2.1	2.4	1.9	0.4	8,736.9
Drainage/Utilities/Sub-Grade	4.3	23.8	35.9	4.0	1.9	2.1	2.2	1.8	0.4	4,676.4
Paving	2.1	14.6	13.5	0.8	0.8	-	0.7	0.7	-	2,368.4
Maximum (pounds/day)	4.8	28.8	51.1	4.3	2.2	2.1	2.4	1.9	0.4	8,736.9
Total (tons/construction project)	0.5	3.2	5.1	0.5	0.2	0.2	0.3	0.2	0.0	802.2

Notes:

Project Start Year ->	2019
Project Length (months) ->	12
Total Project Area (acres) ->	36
Maximum Area Disturbed/Day (acres) ->	0
Total Soil Imported/Exported (yd^3/day)->	307

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

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Appendix A - Mitigation Monitoring and Reporting Program

City of Palo Alto Recycled Water Project
MITIGATION MONITORING AND REPORTING PLAN

Item Number	Impact Summary	Mitigation No.[1]	Standard Project Requirement/Mitigation Measure (Exact Text)	Monitoring and Reporting Plan				
				Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule	Verification:
				Responsible Party	Review & Approval			Status/ Date Completed/ Initials
HYDROLOGY								
HYD-1	Have the potential violation of water quality standards and/or waste discharge requirements or otherwise substantially degrade water quality?	--	**Best Management Practices – Storm Water Quality.** The City shall require contractors to file a Notice of Intent with the Regional Water Quality Control Board (RWQCB) indicating compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit) and to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) outlining BMPs for construction/post-construction activities as specified by the City of Palo Alto's Pollution Prevention plan sheet, the California Stormwater Best Management Practices Handbook and/or the Association of Bay Area Governments' Manual of Standards for Erosion and Sediment Control Measures. The BMPs include measures guiding the management and operation of construction sites to control and minimize the potential contribution of pollutants to stormwater runoff from these areas. These measures address procedures for controlling erosion and sedimentation, and managing all aspects of the	City of Palo Alto and its contractors	City of Palo Alto	1. Include in plans and specifications. 2. Document contractor compliance with plans and specifications.	1. Pre-construction 2. Construction	1._____ 2._____

[1] Any cells marked "--" indicates a standard project requirement, which has no mitigation measure number.

			construction process to ensure control of potential water pollution sources. Erosion and sedimentation control practices typically include: • Performing equipment maintenance at least 100 feet from all water bodies and wetlands, with measures in place to contain spills of diesel fuel, gasoline, or other petroleum products. • Directing drainage from all work sites away from any water bodies or wetlands where feasible; • Preventing erosion of uplands and sedimentation of creeks, tributaries, and ponds; • Minimizing creek bank instability; • Preventing flooding; and • Returning grades to preconstruction contours. • Installation of silt fencing and/or straw wattle; • Soil stabilization; • Revegetation of graded and fill areas with a standard erosion control mix (approved by a native habitat restorationist); • Runoff control to limit increases in sediment in stormwater runoff (e.g., straw bales, silt fences, drainage swales, geofabrics, check dams, and sand bag dikes); A SWPPP that complies with the statewide General Permit shall be developed and implemented to protect water quality of the creeks that lie in the study area. Appropriate erosion and sediment control and non-sediment pollution control (i.e., sources of pollution generated by construction equipment and material) BMPs shall be prescribed in the SWPPP, and erosion and sediment control material included in the SWPPP shall be					

			certified as weed free. Dewatering operations are covered under the General Construction Permit as an authorized non-stormwater discharge. The discharge from dewatering operations would be evaluated and made part of the Project SWPPP. In addition, the Project shall comply with RWQCB regulations and standards to maintain and improve the quality of both surface water and groundwater resources.					
HYD-1	Have the potential violation of water quality standards and/or waste discharge requirements or otherwise substantially degrade water quality?	--	**Frac-Out Plan.** Prior to constructing underground crossings of creeks or channels, a Frac-out Contingency Plan shall be developed. At minimum, the plan shall prescribe the measures to ensure protection of water quality and related biological resources (e.g., aquatic resources, and special-status plants and wildlife) including: • Procedures to minimize the potential for a frac-out associated with horizontal directional drilling; • Procedures for timely detection of frac-outs; • Procedures for timely response and remediation in the event a frac-out; and • Monitoring of drilling and frac-out response activities by a qualified biologist.	City of Palo Alto and its contractors	City of Palo Alto	1. Verify that Frac-Out Contingency Plan is developed and that measures are outlined in the plans and specifications. 2. Monitor construction activities to verify that measures are implemented during construction.	1. Pre-construction 2. Construction	1._____ 2._____
HYD-1	Have the potential violation of water quality standards and/or waste discharge requirements or otherwise substantially degrade water quality?	--	**Discharge of Exceptional Wastewater.** Hydrostatic test water and water collected from dewatering activities (including contaminated water) are discharged to the sanitary sewer with an Exceptional Waste Discharge Permit from RWQCB. The permit requires chemical constituents to be sampled and identifies limits for these constituents. To minimize impacts to water quality, the City shall obtain an Exceptional Wastewater Permit prior to discharge of such waters into the sanitary sewer.	City of Palo Alto and its contractors	City of Palo Alto	1. Verify that permit is obtained. 2. Confirm that water is discharged appropriately.	1. Pre-construction 2. Construction	1._____ 2._____
HYD-2	Have the potential to substantially alter the	--	**See above for HYD-1 information.**					

	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?							
HYD-3	Have the potential to result in the substantial decline in health of redwood trees and other salt-sensitive plant species?	HYD-3a	**Mitigation Measure HYD-3a: Source Control of Saline Groundwater**. The City shall continue to line and repair existing sewers to minimize saline groundwater infiltration.	City of Palo Alto	City of Palo Alto	1. For anticipated lining/repair projects identified in the EIR initiated by the City and any other future City projects that would minimize saline infiltration, confirm funding available for the work. 2. Retain the as-built drawings of the project in the project file.	1. Ongoing (throughout the life of this project) 2. Ongoing	1._____ 2._____
HYD-3	Have the potential to result in the substantial decline in health of redwood trees and other salt-sensitive plant species?	HYD-3b	**Mitigation Measure HYD-3b:** Monitoring: The City shall immediately begin monthly monitoring of the salinity (and related constituents) of the recycled water and shall report the rolling 12-month average for comparison to the Palo Alto City Council goal of 600 mg/l TDS. Monthly electronic reporting to those requesting it will be performed for two years, and then the frequency will be re-evaluated. The City shall monitor soil salinity	City of Palo Alto	City of Palo Alto	1. Monitor salinity (and related constituents) monthly. 2. Retain transmittal of results to those requesting this information.	1. Monthly, for two years (recycled water). The frequency will be reevaluated thereafter. 2. Ongoing 3. Semiannually for two years. The frequency will be	1._____ 2._____

			and SAR through semi-annual soil analyses, preferably taken early and late in the irrigation season (approximately April and October).			3. Document salinity monitoring and reporting and retain in the project file.	reevaluated thereafter. Retaining information will be ongoing.	3._____
HYD-3	Have the potential to result in the substantial decline in health of redwood trees and other salt-sensitive plant species?	HYD-3c	**Mitigation Measure HYD-3b: Site Management:** If at a particular site receiving recycled water, monitoring identifies an increase in soil salinity and SAR over historical levels, the City in cooperation with the owner of that site shall conduct a site-specific evaluation. That evaluation would consider (1) the extent to which the site contains protected trees (including redwood trees and oaks) that might be impacted by soil salinity, (2) the extent to which the elevated salinity is at a level that poses a threat to such protected trees, and (3) the extent to which the elevated salinity is the result of the use of the City's recycled water. If a threat is found, the City shall work cooperatively with the site owner to develop a site-specific mitigation plan, including the site owner's implementation of best management practices which are described below: • To avoid plant damage to salt sensitive landscape plants, site owners can implement a leaching program to maintain soil salinity within the root zone below 2.0 dS/m and SAR below 6.0. For moderately salt-tolerant plants, maintain soil salinity below 4.0 dS/m. Where subsoils do not drain adequately, installation of subsurface drainage systems may be needed. Rainfall will satisfy a portion of the leaching requirement, depending on the rate, volume, and distribution through the season. The frequency with which leaching applications should be made depends on several	Site owners	City of Palo Alto	1. Include requirements in use agreements for recycled water. 2. Confirm site owners implement BMPs if deemed necessary by the site owners in inspection reports. 3. Retain inspection reports in the project file.	1. Ongoing 2. Ongoing 3. Ongoing	1._____ 2._____ 3._____

			variables, and is typically triggered by approaching soil salinity thresholds defined above. • Site owners can apply gypsum prior to leaching when indicated by soil analysis. Gypsum is a soil amendment that, when combined with leaching, helps lower soil sodium concentrations. Gypsum application can be considered when soil analyses reveal one or more of the following conditions: SAR exceeds 6.0, SAR increases 2 units or more (e.g., 2.3 to 4.3), and/or sodium concentration exceeds 5 meq/l (115 mg/L). The amount of gypsum needed and the frequency of application depend on site-specific soil and water characteristics, and can be determined by laboratory analysis.					
HYD-3	Have the potential to result in the substantial decline in health of redwood trees and other salt-sensitive plant species?	HYD-3d	**Mitigation Measure HYD-3d: Other Options to Protect Salt-Sensitive Plants.** In the event that monitoring results (see Mitigation Measure HYD-3b) show that optimal concentrations of TDS and related parameters will not be achieved prior to operation of the Project (i.e., recycled water application), the City will evaluate and implement one or more of the following actions to reduce TDS levels: • Utilize its existing Recycled Water Ordinance exemption process (Palo Alto Municipal Code 16.12.050) to exempt redwood trees (and/or other salt sensitive species) from the use of recycled water; • Blend Recycled Water and other lower salinity water prior to application; and/or • Treat recycled water to reduce TDS prior to application, or shortly thereafter (the City is initiating an investigation of the feasibility of Reverse or Forward Osmosis treatment of its recycled water, combined with blending of appropriate water).	City of Palo Alto	City of Palo Alto	1. Initiate the investigation of the feasibility of Reverse and Forward Osmosis treatment of its recycled water, combined with blending of appropriate. 2. Retain final technical document in project file. 3. If the Project proceeds and TDS and optimal concentrations of TDS and related	1. Upon certification of the EIR and approval of the Project 2. Upon completion of the investigation, prior to construction. 3. Prior to and during operation (if necessary)	1._____ 2._____ 3._____

						parameters are not achieved, document implementation of selected option.		
ASETHETICS								
AES-1	Have a substantial degradation of the existing visual character or quality of the site and its surroundings or on a public view or view corridor?	--	**Compliance with the Tree Technical Manual** The City of Palo Alto Tree Technical Manual (Dockter 2001) is a separately published document issued by the City Manager, through the Departments of Planning and Community Environment and Public Works to establish specific technical regulations, standards and specifications necessary to implement the Tree Ordinance (Chapter 8.10, Tree Preservation and Management Regulations), and to achieve the City's tree preservation goals and natural resource conservation goals. Section 2.00 specifically addresses the protection of trees during construction; its objective is to reduce the negative impacts of construction on trees to a less than significant level. Construction projects within the tree protection zone (TPZ) of Regulated Trees are required to implement protective practices prior to and during construction. The City would be required to retain a certified arborist to prepare a Tree Protection and Preservation Plan if any activity is within the dripline of a Protected or Designated Tree. The Plan must include an assessment of impacts to trees, recommended mitigation to reduce impacts to a less than significant level, and identification of construction guidelines to be followed through all phases of a construction project.	City of Palo Alto and its contractors	City of Palo Alto	1. Document completion of Tree Protection and Preservation Plan. 2. Document compliance with requirements of 2.00 and 3.00 of the City of Palo Alto Tree Technical Manual.	1. Pre-construction 2. Pre-construction/ Construction	1._____ 2._____

			Section 3.00 of the Tree Technical Manual outlines requirements associated with the removal and replacement of regulated trees. The standards and specifications for replacements of trees are dependent on the location where a Protected or Designated Tree would be replaced. If a tree is to be replaced on site, the replacement tree must be the same species unless the Director determines that another species would be more suitable for the location. The location of the replacement tree on site must be approved by the Director. If it is not possible to replace the tree on site, funding for the replacement of trees is calculated using a Tree Value Replacement Standard. The funding is then applied for planting of trees elsewhere.					
AES-1	Have a substantial degradation of the existing visual character or quality of the site and its surroundings or on a public view or view corridor?	--	**Architectural Review and Site and Design Review** Architectural Review and/or Site and Design review will be required for all exterior modifications, including hanging pipes, pump stations, and landscaping. The individual components will require approval by the City's Architectural Review Board (ARB) for architectural review, and by the planning commission, ARB, and City Council for site and design review prior to project implementation.	City of Palo Alto and its contractors	City of Palo Alto	1. Document completion of Architectural Review and/or Site and Design review.	1. Pre-construction	1._____
AES-1	Have a substantial degradation of the existing visual character or quality of the site and its surroundings or on a public view or view corridor?	HYD-3a	**See above for HYD-3a information.**					
AES-1	Have a substantial degradation of the existing visual character or quality	HYD-3b	**See above for HYD-3b information.**					

	of the site and its surroundings or on a public view or view corridor?							
AES-1	Have a substantial degradation of the existing visual character or quality of the site and its surroundings or on a public view or view corridor?	HYD-3c	**See above for HYD-3c information.**					
AES-1	Have a substantial degradation of the existing visual character or quality of the site and its surroundings or on a public view or view corridor?	HYD-3d	**See above for HYD-3d information.**					
AES-1	Have a substantial degradation of the existing visual character or quality of the site and its surroundings or on a public view or view corridor?	AES-1	**Mitigation Measure AES-1: Restoration to Pre-construction Conditions.** The City shall require its contractors to restore disturbed areas to their pre-construction conditions, to the extent consistent with pipeline operations, so that short-term construction disturbance does not result in long-term visual impacts.	City of Palo Alto or its contractor	City of Palo Alto	1. Include in plans and specifications. 2. Document contractor has complied with plans and specifications.	1. Design 2. Post-Construction	1._____ 2._____
AIR QUALITY								
Item b	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	--	**Bay Area Air Quality Management District (BAAQMD) Dust Control Measures** The following basic construction measures are identified by BAAQMD and shall be incorporated into contract specifications and implemented by the contractor.	City of Palo Alto and its contractors	City of Palo Alto	1. Include in plans and specifications. 2. Document contractor has complied with plans and specifications.	1. Design 2. Construction	1._____ 2._____

			• All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; • All haul trucks transporting soils, sand, or other loose material off-site shall be covered; • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited; • All vehicle speeds on unpaved roads shall be limited to 15 mph • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used; • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. • Post a publicly visible sign with telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective					

			action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. The following additional construction mitigation measures identified by BAAQMD shall be incorporated into contract specifications and implemented by the contractor, to supplement the proposed standard project requirement. • All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. • All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. • Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum50 percent air porosity. • Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. • The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time. • All trucks and equipment, including their tires, shall be washed off prior to leaving the site. • Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch or gravel.					

			• Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent. • Idling time of diesel powered construction equipment shall be minimized to two minutes. • The project shall develop a plan demonstrating that off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. • Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings). • All construction equipment, diesel trucks and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM. • All contractors shall use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.					
Item c	Have the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the project	--	**See Item b above for Bay Area Air Quality Management District (BAAQMD) Dust Control Measures**					

	region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?							
Item d	Have the potential to expose sensitive receptors to substantial levels of toxic air contaminants?	--	**See Item b above for Bay Area Air Quality Management District (BAAQMD) Dust Control Measures**					
Items b, c, d	Violate any air quality standard or contribute substantially to an existing or projected air quality violation? Have the potential to 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	AIR-1	**Mitigation Measure AIR-1. Two Crew Construction of Proposed Pipeline (using open trench construction technique) and Pump Station Restrictions.** To ensure NOx emissions do not exceed the BAAQMD threshold, the City shall either: 1. Incorporate into contract specifications the requirement for contractors to limit open trench construction of the proposed pipeline to one crew (rather than two crews) and sequence the pump station construction so that it would be constructed one at a time, not concurrent with any other activity; or 2. Upon refinement of the construction details and assumptions for equipment use, dimensions of the trenches, rate of construction, backfill volume, the City shall rerun the air quality model analysis to confirm whether simultaneous construction of the proposed pipeline or pump stations would result in exceedance of BAAAMD NOx emissions threshold. If NOx threshold	City of Palo Alto and its contractor	City of Palo Alto	1. Document construction method to be used. 2. Confirm that appropriate limitations have been included in plans and specifications. 3. Include in plans and specifications the appropriate method for sequencing / limiting construction, as needed. If thresholds are not exceeded, the City may proceed with	1. Facility Planning / Design 2. Design 3. Construction	1._____ 2._____ 3._____

	thresholds for ozone precursors)? Have the potential to expose sensitive receptors to substantial levels of toxic air contaminants?		is exceeded, then the City shall implemented item 1 above. If NOx threshold is not exceeded, then the City would be able to proceed with concurrent construction of two pipelines (using open trench construction) / two pump stations accordingly.			construction using two crews. If thresholds are exceeded, sequence / limit construction such that NO_x emissions thresholds are not exceeded. 4. Document contractor has complied with plans and specifications.		4._____
BIOLOGICAL RESOURCES								
Item a	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	--	**Health and Safety and Hazardous Materials Management and Spill Prevention Control Plans.** The City shall require the contractor to prepare a Health and Safety Plan and Hazardous Materials Management and Spill Prevention and Control Plan prior to commencement of construction that includes a project-specific contingency plan for hazardous materials and waste operations. The Health and Safety Plan shall be applicable to all construction activities, and shall establish policies and procedures according to federal and California Occupational Safety and Health Administration (OSHA) regulations for hazardous materials Health and Safety Plans, and the City of Palo Alto's Pollution Prevention plan sheet. Elements of the plan shall include, but not be limited to, the following: • Discussion of hazardous materials management, including delineation of hazardous material storage areas, access	City of Palo Alto and its contractors	City of Palo Alto	1. Document that requirement is included in plans and specifications. 2. Document contractor has complied with the plans and specifications.	1. Design 2. Construction	1._____ 2._____

			and egress routes, waterways, emergency assembly areas, and temporary hazardous waste storage areas; • Notification and documentation of procedures; and • Spill control and countermeasures, including employee spill prevention/response training.					
Item a	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	--	**See HYD-1 for Best Management Practices – Stormwater Quality**					
Item b	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, including federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to,	--	**See Biological Resources, Item a above**					

	marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?							
Item d	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?	--	**See Biological Resources, Item a above** **See AES-1 above for Compliance with the Tree Technical Manual**					
Items a, b, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Have a substantial adverse effect on any riparian habitat or other sensitive	BIO-1	**Mitigation Measure BIO-1: Protection of Sensitive Habitats and Jurisdictional Features.** The proposed project has been designed to avoid impacts to sensitive habitats, including jurisdictional wetlands and waters. However, indirect impacts to jurisdictional waters could occur as a result of the proposed project. The following general measures will be implemented during the construction and operation of the proposed project to minimize indirect impacts to sensitive habitats and jurisdictional features: • All construction equipment will use identified staging areas and access roads located in upland areas. When accessing work sites, travel and parking of vehicles and equipment will be limited to pavement, existing roads, and previously disturbed areas (except where overland travel is required). Construction workers will not	1, 2. City of Palo Alto or its contractor 2. Contractor 3, 4. City of Palo Alto	City of Palo Alto	1. Document that requirements are included in plans and specifications. Confirm measures are implemented. 2. Inspect construction sites to confirm plans and specifications implemented during construction. 3. Inspect construction sites to confirm plans and specifications	1. Design 2. Construction 3. Post-Construction, before operation.	1._____ 2._____ 3._____

	natural community identified in local or regional plans, policies, regulations, including 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? Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?		be allowed to enter sensitive areas that have been fenced or staked. • Ground disturbance and vegetation removal will not exceed the minimum amount necessary to complete work at the site. • The following BMPs shall be incorporated into the SWPPP as protective measures to address wind- or water-related erosion: o No discharge of pollutants from vehicle and equipment cleaning will be allowed into storm drains, wetlands, or water courses. o No vehicles may be refueled within 100 feet of wetlands, streams, or other waterways. Vehicles operating adjacent to wetlands and waterways must be inspected and maintained daily to prevent leaks. o Waste facilities will be maintained. Waste facilities include concrete wash-out facilities, portable toilets, and hydraulic fluid containers. Waste will be removed to a proper disposal site. • After construction is completed, a final cleanup will include removal of all stakes, temporary fencing, flagging, and other refuse generated by construction.			implemented after construction is completed.		
Items a, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or	BIO-2	**Mitigation Measure BIO-2: Protection of CRLF.** Construction activities associated with the creek crossing (Matadero Creek near Deer Creek Road) will be limited to the dry season (generally April 15 to October 15) to the extent feasible.	City of Palo Alto or its contractor	City of Palo Alto	1. Confirm requirement is included in plans and specifications. 2. Confirm construction occurs in compliance	1. Design 2. Construction	1._____ 2._____

	regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?					with plans and specifications.		
Items a, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Conflict with any local policies or ordinances protecting	BIO-3	**Mitigation Measure BIO-3: Employee Education Program (required for CRLF, BUOW, and CCR if preconstruction surveys determine they are present).** An employee education program will be conducted by a qualified biologist, consisting of a brief presentation to explain special-status species concerns to contractors, their employees, and any other personnel involved in the project. The program will include the following: a description of relevant special-status species and their habitat needs as they pertain to the project; a report of the occurrence of these species in the project vicinity, as applicable; an explanation of the status of these species and their protection under the MBTA, California Fish and Game Code, and other statutes; and, a list of measures being taken to reduce potential impacts to natural resources during project construction and implementation. A fact sheet conveying this information will be prepared for distribution to the above-mentioned people and anyone else	1. City of Palo Alto or its contractor 2. Contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications the need to conduct an employee-education program as described in Mitigation Measure BIO-3. 2. Upon completion of training, have Contractor employees sign a form stating they have attended	1. Design 2. Pre-construction	1._____ 2._____

	biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?		who may enter the project area. Upon completion of training, employees will sign a form stating that they attended the training and understand all of the conservation and protection measures. Construction crews will be informed during the education program meeting that, to the extent possible, travel within the marked project area will be restricted to established roadbeds.			training and understand conservation and protection measures.		
Items a, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?	BIO-4	**Mitigation Measure BIO-4: Monitoring During Construction.** A qualified biologist will be retained to monitor construction activities associated with the creek crossing (Matadero Creek near Deer Creek Road). The biologist will have expertise with CRLF biology and ecology. The biologist will have the authority to halt work if a special-status species is observed.	1. City of Palo Alto or its contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications the need for monitoring at Matadero Creek during construction. 2. Retain biologist to monitor creek crossing activities. 3. Confirm monitoring at creek crossing.	1. Design 2. Prior to/during construction 3. Construction	1._____ 2._____ 3._____

Items a, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?	BIO-5	**Mitigation Measure BIO-5: General Measures to Reduce Impacts to Wildlife Species.** The following shall be relevant to the following species: California red-legged frog, burrowing owl, and the California Clapper Rail. • All excavations left open overnight will either be covered to prevent wildlife from becoming entrapped or will include escape ramps. In addition, excavations must be inspected for wildlife at the start of each workday and prior to back filling. The USFWS and/or CDFW will be contacted prior to removing or relocating any special-status wildlife within the excavation. • Food items may attract wildlife into construction areas, which would expose them to construction-related hazards. The construction areas will be maintained in a clean condition. All trash (e.g., food scraps, cans, bottles, containers, wrappers, cigarette butts, and other discarded items) will be placed in closed containers and properly disposed of. If an animal is found at a work site and is believed to be a protected species, work must be halted until the animal leaves of its own accord or the USFWS and/or CDFW is consulted to relocate the species. Care shall be taken not to harm the species. No wildlife or plant species will be handled and/or removed from the site by anyone except approved biologists.	City of Palo Alto's contractor	City of Palo Alto	1. Confirm requirement is included in plans and specifications the conditions in BIO-5. 2. If special-status wildlife found in excavations, halt work and resume after it leaves or consult with USFWS and/or CDFW prior to removing or relocating species. 3. Confirm compliance with plans and specifications.	1. Design 2. Construction 3. Construction	1._____ 2._____ 3._____
Items a, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status	BIO-6	**Mitigation Measure BIO-6: Burrowing Owl Pre-Construction Surveys.** Pre-construction BUOW surveys will be conducted in suitable habitat for BUOW (i.e., in pastureland habitat between Deer Creek Road and Hillview Avenue and in the vicinity of the RWQCP) in accordance with the recommendations and guidelines provided in the Staff Report on	City of Palo Alto or its contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications the conditions in BIO-6.	1. Design 2. Pre-construction 3. Construction 4. Pre-construction/ Construction	1._____

	species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		Burrowing Owl Mitigation (Department of Fish and Game, March 2012). If no BUOW or BUOW sign is observed no further action will be required. If BUOW or BUOW sign is observed then no disturbance will occur within 160 feet of occupied burrows during the non-breeding season (September 1 through January 31) or within 250 feet during the breeding season (February 1 through August 31). A qualified biologist will be present in these locations to monitor construction and ensure the BUOW is not disturbed.			2. Confirm pre-construction Burrowing Owl surveys are conducted to determine presence / absence. If no BUOW / BUOW sign is observed, no further action is required. 3. If signs of Burrowing Owls are observed, ensure no disturbance within the identified buffer and have a biologist present to monitor construction 4. Document contractor has complied with plans and specifications.		2._____ 3._____ 4._____
Items a, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status	BIO-7	**Mitigation Measure BIO-7: Buffer for California Clapper Rail or Survey.** Construction activities within 500 feet of the marshland habitat surrounding the RWQCP will be conducted outside the breeding season for CCR (i.e., September 1 through January 31). If this is not feasible, a qualified biologist will conduct protocol-level surveys for CCR in	City of Palo Alto or its contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications the conditions that if construction	1. Design 2. Pre-construction 3. Pre-construction 4. Construction	1._____

	species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?		accordance with the California Clapper Rail Draft Survey Protocol (USFWS 2000). A qualified biologist is an individual who has experience conducting protocol-level surveys for CCR. Prior to commencement of the surveys, the biologist will prepare a brief letter report describing the survey design and submit it to the USFWS and the CDFW for review and approval. Upon the completion of the surveys, results will be submitted to the USFWS and CDFW for a final decision on the possibility of doing work during the breeding season for CCR.			occurs within 500 feet of the marshland habitat during CCR's breeding season, retain qualified biologist to conduct survey. 2. Have biologist prepare a brief letter report describing survey and submit to USFWS and CDFW (if survey needed). 3. Confirm biologist conducts protocol-level surveys and submits results to USFWS and CDFW. 4. Confirm implementation of final decision from USFWS and CDFW.		2._____ 3._____ 4._____
Items a, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive,	BIO-8	**Mitigation Measure BIO-8: Measure to Protect Nesting Birds.** If equipment staging, site preparation, grading, excavation, or other project-related construction activities are scheduled to occur during the avian nesting season (generally February 1 to September 1), a focused survey for active nests will be	City of Palo Alto or its contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications. 2. Confirm any necessary	1. Design 2. Pre-construction 3. Pre-construction 4. Construction 5. Pre-construction/ Construction	1._____ 2._____

	or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?		conducted by a qualified biologists within 15 days prior to the beginning of project-related activities. Surveys will be conducted in all suitable habitat located at project work sites, and in staging or storage areas. Surveys will be conducted at the appropriate times of day (e.g., dawn or dusk), and during the appropriate nesting times and will concentrate on areas of suitable habitat. If a lapse in project-related activities of 15 days or longer occurs, another focused survey will be conducted. If no active nests are found, then no further mitigation is required. If an active nest is found within the surveyed areas, an appropriate exclusion buffer will be established by a qualified biologist and the exclusion buffer will be maintained until the young have fledged or will no longer be impacted by the project. A qualified biologist will be present to monitor construction activities in the vicinity of the nest and ensure the nesting species is not disturbed. If a species appears disturbed by construction activities (as determined by a qualified biologist) work will be halted and the USFWS and/or CDFW will be consulted. Project activities will not resume without approval from the USFWS and/or CDFW.			surveys are conducted. 3. If active nests are found during the survey, verify installation of buffer and completion of monitoring. 4. Verify coordination with USFWS and/or CDFW if needed. 5. Document contractor has complied with plans and specifications.		3._____ 4._____ 5._____
Items a, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California	BIO-9	**Mitigation Measure BIO-9: Bat Preconstruction Surveys.** Preconstruction day and night-roost surveys will be conducted to avoid impacts to bats. The survey will be conducted by a qualified bat biologist following the protocol in the Bats and Bridges Technical Bulletin (Erickson et al. 2003) to determine if bats are using the bridges as a roost site. If a roost is observed, the CDFW and/or USFWS will be consulted and additional mitigation measures will be implemented. Example measures include working during the daytime if night roosts are present, no clearing or grubbing	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications. 2. For bridge crossings, confirm pre-construction bat roost surveys are conducted.	1. Design 2. Pre-construction 3. Construction 4. Construction 5. Pre-construction/ Construction	1._____ 2._____

	Department of Fish and Game or U.S. Fish and Wildlife Service? Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?		adjacent to the roost, no work within 100 feet of the roost, no lighting near the roost where it could shine on the roost structure.			3. If a roost is observed document consultation with CDFW and/or USFWS. 4. Verify implementation of any measures specified by CDFW and USFWS. 5. Document contractor has complied with plans and specifications.		3._____ 4._____ 5._____
Items a, d	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Conflict with any local policies or ordinances protecting biological resources,	BIO-10	**Mitigation Measure BIO-10: Bats Breeding Season Surveys.** Construction activities near Adobe Creek crossing near Middlefield Road, the Barron Creek crossing near Cowper Street, and the Matadero Creek crossing near Cowper Street will be scheduled to avoid the bat breeding season (April through August) to the extent feasible. If work in these locations is required in the breeding season, a survey for bats will be conducted. The survey will be conducted by a qualified bat biologist following the protocol in the Bats and Bridges Technical Bulletin (Erickson et al. 2003) to determine if bats are using the bridges as a roost site. If a roost is observed, the CDFW and/or USFWS will be consulted and additional mitigation measures will be implemented. Example measures include excluding bats from directly affected work areas or replacing the roost location.	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications. 2. If construction occurs during the bat breeding season, confirm pre-construction survey are conducted. 3. If a roost is observed, document consultation with CDFW and/or USFWS. 4. If needed, document implementation of the measures	1. Design 2. Pre-construction 3. Pre-construction 4. Construction 5. Pre-construction/ Construction	1._____ 2._____ 3._____ 4._____

	such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?					specified by CDFW and USFWS. 5. Document contractor has complied with plans and specifications.		5._____
CULTURAL RESOURCES								
Item a	Have the potential to directly or indirectly destroy a local cultural resource that is recognized by City Council resolution?	--	**Protection of Cultural Resources.** Should any previously undiscovered historic or prehistoric archaeological deposits be discovered during construction, work shall stop within 50 feet of the discovery, until such time that the discovery can be evaluated by a qualified archaeologist and appropriate mitigative action taken as determined necessary in consultation with the lead Federal agency for NHPA Section 106 compliance, in accordance with 36 CFR Part 800.13, and the City. Measures might include preserving in situ the archaeological resource or an archaeological monitoring or data recovery program. Prehistoric archaeological site indicators include chipped chert and obsidian tools, and tool manufacturing waste flakes, grinding implements such as mortars and pestles, and darkened soil that contains dietary debris such as bone fragments and shellfish remains. Historic site indicators include, but are not limited to, ceramics, glass, wood, bone, and metal remains. Section 7050.5(b) of the California Health and Safety code will be implemented in the event that human remains, or possible human remains, are located during Project-related construction excavation. Section 7050.5(b) states: In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications. 2. Document contractor has complied with plans and specifications. 3. If archeological deposits are discovered during construction, document that appropriate action is taken. 4. If human remains, or possible remains are located, confirm implementation of California Health and Safety code section 7050.5(b).	1. Design 2. Construction 3. Construction 4. Construction	1._____ 2._____ 3._____ 4._____

			site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The County Coroner, upon recognizing the remains as being of Native American origin, is responsible for contacting the Native American Heritage Commission (NAHC) within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for protection from inadvertent destruction. To achieve this goal, the construction personnel on the Project would be instructed as to the potential for discovery of cultural or human remains, the need for proper and timely reporting of such finds, and the consequences of failure thereof.					
Item b	Cause a substantial adverse change in the significance of an archaeological	--	**See Cultural Resources Item a above**					

	resource pursuant to 15064.5?							
Item c	Have the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	--	**Protection of Paleontological Resources** If paleontological resources are discovered during earthmoving activities, the construction crew would immediately cease work near the find. In accordance with Society of Vertebrate Paleontology guidelines (Society of Vertebrate Paleontology 2010), a qualified paleontologist would assess the nature and importance of the find and recommend appropriate salvage, treatment, and future monitoring and mitigation.	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications. 2. If paleontological resources are discovered, document appropriate treatment.	1. Design 2. Construction	1._____ 2._____
Item d	Have the potential to disturb any human remains, including those interred outside of formal cemeteries?	--	**See Cultural Resources Item a above**					
Item e	Have the potential to adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory?	--	**See Cultural Resources Item a above**					
Item f	Have the potential to eliminate important examples of major periods of California history or prehistory?	--	**See Cultural Resources Item a above**					
Items a, b, d, e, f	Have the potential to directly or indirectly destroy a local cultural resource that	CR-1	**Mitigation Measure CR-1: Subsurface Testing.** A program of sub-surface testing shall be conducted to determine whether buried resources are present within the areas of high or high to moderate archaeological sensitivity that	City of Palo Alto and	City of Palo Alto	1. Document completion of sub-surface testing.	1. Design, upon selection of the construction methods. 2. Pre-construction	1._____ 2._____

	is recognized by City Council resolution? Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5? Have the potential to disturb any human remains, including those interred outside of formal cemeteries? Have the potential to adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory? Have the potential to eliminate important examples of major periods of California history or prehistory?		will be impacted by Project construction. Only those locations where design confirms that the proposed pipeline would be buried at archaeologically sensitive locations will require subsurface testing. A testing program will be developed to determine the best approach for each location, considering the physical constraints of the urban setting (e.g., structures, traffic). The testing program could consist of multiple core extractions at individual sites; the locations and depths of the bore holes would be determined on the basis of projected depths of excavation at the individual work areas. A qualified archaeologist would monitor the testing efforts, and inspect the cores for prehistoric archaeological site indicators (e.g., chipped chert and obsidian tools, and tool manufacturing waste flakes, grinding implements such as mortars and pestles, and darkened soil that contains dietary debris such as bone fragments and shellfish remains) and historic site indicators (e.g., ceramics, glass, wood, bone, and metal remains). If the findings of the subsurface testing are negative, then no further actions (e.g., further testing or archaeological monitoring) would be recommended as necessary for NHPA Section 106 compliance, although consultation with SHPO would still be needed to formally complete the Section 106 process. If the findings of the subsurface testing are positive (and avoidance of the archaeological site is not feasible or practicable through project redesign), then a qualified archaeologist will develop an archeological data recovery plan (ADRP) in consultation with the City, the lead Federal agency, the SHPO and other appropriate consulting parties, as applicable, in accordance with the requirements of 36 CFR Part 800. The	its contractors		2. If resources are present and avoidance is not feasible, document completion of ARDP. If findings are positive, confirm an ADRP is developed in consultation with relevant agencies which identify appropriate measures. 3. Confirm implementation of the measures identified in the ADRP.	3. Pre-construction/ Construction	3._____

			ADRP shall identify how the proposed data recovery program will used to evaluate and preserve the significant information the archaeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Implementation of the ADRP through the development and execution of an appropriate agreement document by the lead Federal agency, the SHPO, the City, and any other identified signatories, would satisfy the requirements of NHPA Section 106 as outlined at 36 CFR § 800.6. Whether the results of subsurface testing are negative or positive, if Federal funding for the Project is approved, full compliance with Section 106 of the NHPA as determined by the lead Federal agency will be required prior to Project construction.					
GEOLOGY, SOILS, and SEISMICITY								
Item a	Have the potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, groundshaking, liquefaction or landslides?	--	**Geologic Report for Potentially Affected Facilities.** During the design phase for the Project, the City shall require preparation of a Geologic Report by a geologist registered in the State of California for facilities that could be affected by seismic-related hazards or unstable soils (e.g., liquefaction and expansive soils). • The Geologic Report shall include an engineering analysis of liquefaction and the potential for expansive soils at the pump stations. This assessment shall include a liquefaction assessment study in accordance with the California Geological Survey Special Publication 117 Guidelines. If this report finds unstable soils would present potential risks associated with liquefaction,	City of Palo Alto and its contractors	City of Palo Alto	1. Document preparation of Geologic Report. 2. Document incorporation of recommendations in plans and specifications. .	1. Design 2. Design	1._____ 2._____

			engineering recommendations for surface and subsurface drainage specifications and detailed design for fill placement and excavation shall be provided.					
Item b	Result in substantial soil erosion or the loss of topsoil	--	**See HYD-1 for Best Management Practices – Stormwater Quality**					
Item c	Result in substantial siltation.	--	**See HYD-1 for Best Management Practices – Stormwater Quality**					
Item d	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.	--	**See Geology and Soils Item a above.**					
Item e	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	--	**See Geology and Soils Item a above.**					
GREENHOUSE GAS EMISSIONS								
Item a	Have the potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	AIR-1	**See above for AIR-1 information.** **See Air Quality Item a above.**					

Item b	Have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	AIR-1	**See above for AIR-1 information.** **See Air Quality Item a above.**					
HAZARDS and HAZARDOUS MATERIALS								
Item a	Have the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	--	**See Biological Resources Item a for Health and Safety and Hazardous Materials Management and Spill Prevention Control Plans** **See HYD-1 for Discharge of Exceptional Wastewater**					
Item a	Have the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	--	**Storage, Handling, and Use of Hazardous Materials in Accordance with Applicable Laws.** The City shall ensure that all construction-related hazardous materials and hazardous wastes are stored, handled, and used in a manner consistent with applicable federal, state, and local laws, and the City of Palo Alto's Pollution Prevention plan sheet. In addition, construction-related hazardous materials and hazardous wastes shall be staged and stored away from stream channels and steep banks to keep these materials a safe distance from near-by residents and prevent them from entering surface waters in the event of an accidental release.	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirements are included in plans and specifications. 2. Confirm measures are implemented during construction.	1. Design 2. Construction	1._____ 2._____
Item a	Have the potential to create a significant hazard to the public or the environment through the routine transport, use, or	--	**Proper Disposal of Contaminated Soil and/or Groundwater.** If contaminated soil and/or groundwater is encountered or if suspected contamination is encountered during Project construction, work shall be halted in the area, and the type and extent of the contamination	City of Palo Alto and its	City of Palo Alto	1. Confirm requirements are included in plans and specifications.	1. Design 2. Construction	1._____ 2._____

	disposal of hazardous materials.		shall be identified. A contingency plan to dispose of any contaminated soil or groundwater would be developed through consultation with appropriate regulatory agencies and consistent with the requirements of the City of Palo Alto's Pollution Prevention plan sheet and RWQCP's permit requirements for discharge of exceptional wastewater to the sanitary sewer	contractors		2. Confirm measures are implemented during construction.		
Item b	Have the potential to 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?	--	**See Hazards and Hazardous Materials Item a above**					
Item c	Have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	--	**See Hazards and Hazardous Materials Item a above**					
Item e	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 create a significant hazard to the public or the environment?	--	**See Hazards and Hazardous Materials Item a above**					

Item h	Have the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	--	**Traffic Control Plan.** The City's Transportation Section would require the contractor to have a full traffic control plan prepared by a registered traffic engineer. The traffic control plan shall be in accordance with the City's Traffic Control Requirements and would show specific methods for maintaining traffic flows to minimize construction impacts on traffic and parking. There are several schools in the vicinity of the Project. These areas would be evaluated more closely to determine whether the traffic control plan is appropriate or if additional measures are needed specific to school areas. Examples of traffic control measures to be considered include: • Identify all roadway locations where special construction techniques (e.g., directional drilling) would be used to minimize impacts to traffic flow; • Develop circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone; • Schedule truck trips outside of peak morning and evening commute hours; • Prohibit construction on collector and arterial streets during morning commute period before 9 a.m. and in the afternoon commute period after 4 p.m.; • Use haul routes, minimizing truck traffic on local roadways to the extent possible; • Consider detours for bicycles and pedestrians in all areas potentially affected by Project construction. Pedestrian and bicycle detours should not be required unless deemed necessary for safety reasons;	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirements are included in plans and specifications. 2. Confirm measures are implemented during construction.	1. Design 2. Construction	1._____ 2._____

			• Use flagmen to maintain alternating one-way traffic while working on one-half of the street; • Use advance construction signs and other public notices to alert drivers of activity in the area; • Use "positive guidance" detour signing on alternate access streets to minimize inconvenience to the driving public; • Install traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones; • Develop and implement access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals and schools. The access plans would be developed with the facility owner or administrator. To minimize disruption of emergency vehicle access, ask affected jurisdictions to identify detours, which would then be posted by the contractor. Notify in advance the facility owner or operator of the timing, location, and duration of construction activities and the locations of lane closures; • Store construction materials only in designated areas; and • Coordinate with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary. • Establish methods for minimizing for construction effects on parking (e.g., identifying designated areas for construction worker parking at staging areas).					
NOISE								

Item a	Have the potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	--	**Compliance with Local Noise Ordinance** According to the City of Palo Alto's Noise Ordinance (Palo Alto Municipal Code Chapter 9.10), for residential and non-residential property, construction, alteration and repair activities which are authorized by a valid city building permit shall be prohibited on Sundays and holidays and shall be prohibited except between the hours of 8:00 a.m. and 6:00 p.m. Monday through Friday, and 9:00 a.m. and 6:00 p.m. on Saturday, provided that the construction, demolition or repair activities during those hours meet the following standards: • No individual piece of equipment shall produce a noise level exceeding 110 dBA at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet from the equipment as possible. • The noise level at any point outside of the property plane of the Project shall not exceed 110 dBA. • The holder of a valid construction permit for a construction project in a non-residential zone shall post a sign at all entrances to the construction site upon commencement of construction, for the purpose of informing all contractors and subcontractors, their employees, agents, materialmen and all other persons at the construction site, of the basic requirements of this measure. o The sign(s) shall be posted at least five feet above ground level, and shall be of a white background, with black lettering, which lettering shall be a minimum of one and one-half inches in height.	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirements are included in plans and specifications. 2. Confirm measures are implemented during construction.	1. Design 2. Construction	1._____ 2._____

			o The sign shall read as follows: CONSTRUCTION HOURS FOR RESIDENTIAL (OR NON-RESIDENTIAL) PROPERTY (Includes Any and All Deliveries) MONDAY - FRIDAY.....8:00 a.m. to 6:00 p.m. SATURDAY.....9:00 a.m. to 6:00 p.m. SUNDAY/HOLIDAYS.....Construction prohibited.					
Item a	Have the potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	--	**Pump Station Design/Noise** For the pump station at the Mayfield Soccer Fields, a detailed analysis of the buildings' sound isolation would be conducted by a qualified acoustical consultant during the engineering design phase of the project. A post-construction field sound measurement shall be conducted by an acoustical consultant to verify that the project operational noise standards are in compliance with relevant City noise standards.	City of Palo Alto and its contractors	City of Palo Alto	1. Document completion of acoustical analysis and incorporation of measures in design. 2. Verify that operational noise levels are in compliance with City noise standards.	1. Design 2. Post-Construction	1._____ 2._____
Item c	Have the potential to create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	--	**See Noise Item a above**					
Item d	Have the potential to create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above	--	**See Noise Item a above**					

	levels existing without the project?		
Item g	Have the potential to cause the average 24 hour noise level (Ldn) to increase by 5.0 decibels (dB) or more in an existing residential area, even if the Ldn would remain below 60 dB?	--	**See Noise Item a above**
Item h	Have the potential to cause the Ldn to increase by 3.0 dB or more in an existing residential area, thereby causing the Ldn in the area to exceed 60 dB?	--	**See Noise Item a above**
Item i	Have the potential to cause the Ldn to increase by 3.0 dB or more in an existing residential area, thereby causing the Ldn in the area to exceed 60 dB?	--	**See Noise Item a above**
Item j	Result in indoor noise levels for residential development to exceed an Ldn of 45 dB?	--	**See Noise Item a above**
Item k	Result in instantaneous noise levels of greater than 50 dB in bedrooms or 55 dB in other rooms in areas with an	--	**See Noise Item a above**

	exterior Ldn of 60 dB or greater?							
Item l	Generate construction noise exceeding the daytime background Leq at sensitive receptors by 10 dBA or more?	--	**See Noise Item a above**					
Items a, c, d, g, h, i, j, k, l	Have the potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Have the potential to create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Have the potential to create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? Have the potential to cause the average 24 hour noise level	NOI-2	**Mitigation Measure NOI-1: Noise Control Measures to Reduce Construction Noise.** The City shall incorporate into contract specifications all of the following measures: • Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction will be hydraulically or electrically powered whenever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust would be used. This muffler can lower noise levels from the exhaust by up to 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures will be used such as drilling rather than impact equipment whenever feasible. • Wherever possible, sonic or vibratory pile drivers will be used instead of impact pile drivers. If sonic or vibratory pile drivers are not feasible, acoustical enclosures will be provided as necessary to reduce noise levels. Engine and pneumatic exhaust controls on pile drivers will be required as necessary to ensure that exhaust noise from pile driver engines are minimized to the	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirement is included in plans and specifications. 2. Document contractor has complied with plans and specifications.	1. Design. 2. Construction	1._____ 2._____

	(Ldn) to increase by 5.0 decibels (dB) or more in an existing residential area, even if the Ldn would remain below 60 dB? Have the potential to cause the Ldn to increase by 3.0 dB or more in an existing residential area, thereby causing the Ldn in the area to exceed 60 dB? Have the potential to cause an increase of 3.0 dB or more in an existing residential area where the Ldn currently exceeds 60 dB? Result in indoor noise levels for residential development to exceed an Ldn of 45 dB? Result in instantaneous noise levels of greater than 50 dB in bedrooms or 55 dB in other rooms in areas with an exterior Ldn of 60 dB or greater?		extent feasible. Where feasible, pile holes will be pre-drilled to reduce potential noise and vibration impacts. • All equipment and trucks used for project construction shall use the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) and be maintained in good operating condition to minimize construction noise impacts. All internal combustion engine-drive equipment shall be fitted with intake and exhaust mufflers which are in good condition. • Unnecessary idling of internal combustion engines shall be prohibited. In practice, this would mean turning off equipment if it would not be used for five or more minutes. • Stationary noise-generating construction equipment, such as air compressors and generators, shall be located as far as possible from homes and businesses. • Staging areas shall be located as far as feasibly possible from sensitive receptors.					

	Generate construction noise exceeding the daytime background Leq at sensitive receptors by 10 dBA or more?							
Items a, c, d, g, h, i, j, k, l	Have the potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Have the potential to create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Have the potential to create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? Have the potential to cause the average 24 hour noise level (Ldn) to increase by	NOI-3	**Mitigation Measure NOI-2: Pre-Construction Notification.** Prior to construction, written notification to residents within 500 feet of the proposed facilities undergoing construction shall be provided, identifying the type, duration, and frequency of construction activities. Notification materials shall also identify a mechanism for residents to register complaints with the City if construction related noise impacts should occur.	City of Palo Alto	City of Palo Alto	1. Confirm written notifications are sent to residents within 500 feet of the construction area.	1. Pre-construction	1._____

	5.0 decibels (dB) or more in an existing residential area, even if the Ldn would remain below 60 dB? Have the potential to cause the Ldn to increase by 3.0 dB or more in an existing residential area, thereby causing the Ldn in the area to exceed 60 dB? Have the potential to cause an increase of 3.0 dB or more in an existing residential area where the Ldn currently exceeds 60 dB? Result in indoor noise levels for residential development to exceed an Ldn of 45 dB? Result in instantaneous noise levels of greater than 50 dB in bedrooms or 55 dB in other rooms in areas with an exterior Ldn of 60 dB or greater?							

	Generate construction noise exceeding the daytime background Leq at sensitive receptors by 10 dBA or more?							
Items a, c, d, g, h, i, j, k, l	Have the potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Have the potential to create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Have the potential to create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? Have the potential to cause the average 24 hour noise level (Ldn) to increase by 5.0 decibels (dB) or	NOI-3	**Mitigation Measure NOI-3: Design of the Pump Station to Reduce Noise.** To ensure the proposed pump station complies with the City's noise standards, structure openings, including air ventilation would employ acoustical rated louvers, silencers, or other noise-reduction devices, as appropriate, to reduce noise propagation to the outside of the building.	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirements are included in plans and specifications. 2. Confirm construction complies with design requirements.	1. Design 2. Construction	1._____ 2._____

	more in an existing residential area, even if the Ldn would remain below 60 dB? Have the potential to cause the Ldn to increase by 3.0 dB or more in an existing residential area, thereby causing the Ldn in the area to exceed 60 dB? Have the potential to cause an increase of 3.0 dB or more in an existing residential area where the Ldn currently exceeds 60 dB? Result in indoor noise levels for residential development to exceed an Ldn of 45 dB? Result in instantaneous noise levels of greater than 50 dB in bedrooms or 55 dB in other rooms in areas with an exterior Ldn of 60 dB or greater?							

	Generate construction noise exceeding the daytime background Leq at sensitive receptors by 10 dBA or more?							
TRANSPORTATION AND TRAFFIC								
Item a	Have the potential to exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	--	**See Hazards and Hazardous Materials Item h above for Traffic Control Plan**					
Item a	Have the potential to exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account	--	**Restoration of Roads to Pre-construction Condition.** Following construction, the City shall ensure that road surfaces, bicycle routes, and bus stop facilities that are damaged during construction are returned to their pre-construction condition or better.	City of Palo Alto and its contractors	City of Palo Alto	1. Confirm requirements are included in plans and specifications. 2. Confirm completion of road restoration.	1. Design 2. Post-construction	1._____ 2._____

	all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?							
Item 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?	--	**See Hazards and Hazardous Materials Item h above for Traffic Control Plan and Transportation and Traffic Item a**					
Items a, b	Have the potential to exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to	TRA-2	**Mitigation Measure TRA-1: CMP Facilities.** The City shall work with VTA to determine when peak hour traffic starts on Page Mill Road, a CMP facility. If peak hour traffic starts around 3 p.m. on this road, then the City shall prohibit construction on this roadway after 3 p.m.	City of Palo Alto and its contractors	City of Palo Alto	1. Document consultation with VTA. 2. Confirm appropriate requirement is included in plans and specifications. 3. Document contractor has complied with plans and specifications.	1. Design 2. Design 3. Construction	1._____ 2._____ 3._____

	intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? 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?							
Item d	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	--	**See Hazards and Hazardous Materials Item h above for Traffic Control Plan**					
Item e	Result in inadequate emergency access?	--	**See Hazards and Hazardous Materials Item h above for Traffic Control Plan**					
Item f	Have the potential to result in inadequate parking capacity that impacts traffic circulation and air quality?	--	**See Hazards and Hazardous Materials Item h above for Traffic Control Plan**					

Item f	Have the potential to result in inadequate parking capacity that impacts traffic circulation and air quality?	TRA-2	**Mitigation Measure TRA-2: Coordinate construction with Businesses.** To reduce the disruption of business from the temporary reduction of parking, the City shall coordinate with individual businesses on the timing of construction.	City of Palo Alto	City of Palo Alto	1. Document coordination with businesses.	1. Pre-construction	1._____
Item g	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., pedestrian, transit & bicycle facilities)?	--	**See Hazards and Hazardous Materials Item h above for Traffic Control Plan**					
Item n	Impede the development or function of planned pedestrian or bicycle facilities?	--	**See Hazards and Hazardous Materials Item h above for Traffic Control Plan**					
Item o	Impede the operation of a transit system as a result of congestion?	--	**See Hazards and Hazardous Materials Item h above for Traffic Control Plan**					

Appendix B – Public Meeting Sign-In Sheet

SIGN-IN

PALO ALTO RECYCLED WATER PROJECT
Public Meeting

Palo Alto, CA – May 19, 2015

NAME	AFFILIATION	ADDRESS	PHONE or EMAIL
Karin North, Watershed Protection Manager	City of Palo Alto RWQCP	2501 Embarcadero Way, Palo Alto, CA 94303	650.329.2104 Karin.North@cityofpaloalto.org
Phil Bobel, Assistant Public Works Director	City of Palo Alto RWQCP	2501 Embarcadero Way, Palo Alto, CA 94303	Phil.Bobel@cityofpaloalto.org
Jane Ratchye, Assistant Director of Utilities	City of Palo Alto Utilities	1007 Elwell Court, Palo Alto, CA 94303	Jane.Ratchye@cityofpaloalto.org
Karla Daily, Senior Resources Planner	City of Palo Alto Utilities	1007 Elwell Court, Palo Alto, CA 94303	Karla.Daily@cityofpaloalto.org
Walter Passmore, Urban Forest Manager	City of Palo Alto	250 Hamilton Avenue, Palo Alto 94301	Walter.Passmore@cityofpaloalto.org
Matt Krupp	City of Palo Alto RWQCP	2501 Embarcadero Way, Palo Alto, CA 94303	Matt.Krupp@cityofpaloalto.org
Julie Weiss	City of Palo Alto RWQCP	2501 Embarcadero Way, Palo Alto, CA 94303	Julie.Weiss@cityofpaloalto.org
Dave Richardson	RMC Water and Environment	2175 North California Blvd, Suite 315, Walnut Cree, CA 94596	drichardson@rmcwater.com
Sue Chau	RMC Water and Environment	101 Montgomery Street, Suite 1850, San Francisco, CA 94104	schau@rmcwater.com
Trish Mulvey	Public Citizen	--	--

City of Palo Alto

Public Meeting: Recycled Water EIR

Adobe South, Mitchell Park Community Center, 3700 Middlefield Rd

Thursday, May 21, 2015 6:00 PM-8:00 PM

Name	Association	Email Address	√*
1. Phil Bobel	City of Palo Alto	phil.bobel@cityofpaloalto	
2. JEFFREY H HOEL	~~Resident of Palo Alto~~	jeff_hoel@yahoo.com	
3. Kirsten Struve	City of Palo Alto	kirsten.struve@cityofpaloalto.org	
4. Catherine Martineau	Canopy	catherine@canopy.org	
5. DOUG KARLSON	RESIDENT - BARRON PARK	karlsons@sbcglobal.net	
6. SUSAN ROSENBERG	CANOPY	SUSANPA@SONIC.NET	
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17.			
18.			

*(Check box if you would like to be included on our Recycled Water email distribution list.)