

APPENDIX A
NOTICE OF PREPARATION AND COMMENT LETTERS

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Notice of Preparation of a Program Environmental Impact Report for the Six Basins Strategic Plan

Date: September 12, 2018
To: Reviewing Agencies and Interested Parties
From: Three Valleys Municipal Water District
1021 E. Miramar Avenue, Claremont, CA 91711
Attention: Ben Peralta, Jr., P.E., Project Manager
bperalta@tvmwd.com, (909) 621-5568 ext 109
Project Title: Program EIR for the Six Basins Strategic Plan
Project Applicant: Six Basins Watermaster
NOP Review Period: September 12 through October 12, 2018
Scoping Meeting: Wednesday September 26, 2018, following the regularly scheduled Board Meeting (approximately 2 PM)
TVMWD Board Room, 1021 E Miramar Ave, Claremont

This Notice of Preparation (NOP) is a request for responsible and trustee agencies, other interested agencies, organizations, and members of the general public to provide input on the draft Program Environmental Impact Report (PEIR) being prepared for the Six Basins Strategic Plan (Strategic Plan). The Strategic Plan is a regional program of conjunctive water management for the Six Basins, which is an adjudicated groundwater basin located south the San Gabriel Mountains in eastern Los Angeles and western San Bernardino counties.

The Three Valleys Municipal Water District (TVMWD), acting as the Lead Agency, has determined that a PEIR shall be prepared for the Strategic Plan. Pursuant to CEQA Section 21165, TVMWD is responsible for preparing the PEIR, which will address the potential impacts associated with the Strategic Plan. A project description for the Strategic Plan is attached to this NOP.

The PEIR will analyze the full set of environmental topics identified in the CEQA Environmental Checklist for significant environmental impacts. Therefore, no Initial Study has been prepared for the Strategic Plan.

This NOP solicits comments and questions from responsible agencies, trustee agencies, federal, State and local agencies, and the general public on the scope and content of the environmental document to be prepared to analyze the potential environmental impacts of the proposed project. Comments received in response to this Notice will be reviewed and considered in determining the scope of the PEIR. Pursuant to time limits as defined by CEQA, responses should be sent at the earliest possible date, but no later than October 5, 2018.

Send written comments to: Three Valleys Municipal Water District
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1. Introduction

The Six Basins are a group of adjacent groundwater subbasins, located along the front of the San Gabriel Mountains in eastern Los Angeles and western San Bernardino counties. Figure 1, *The Six Basins and the Water Purveyors in the Area*, shows the general location of the project area within the larger southern California region and the relationship between the groundwater subbasins and the San Gabriel Mountains.

The main source of groundwater replenishment to the Six Basins is surface-water runoff from precipitation that falls on the San Gabriel Mountains and recharges at spreading grounds located along the foot of the mountain range—predominantly at the San Antonio Spreading Grounds (SASG). The water-supply agencies that pump groundwater from the Six Basins also use imported surface water from the Metropolitan Water District of Southern California (MWDSC) for artificial recharge at the spreading grounds and for direct consumptive uses.

The pumping and storage rights for the Six Basins were adjudicated in 1998 through a stipulated judgment (Judgment) titled “Southern California Water Company vs. City of La Verne, et al.” in the Superior Court of California for the County of Los Angeles (Case No. KC029152). The Judgment prescribes a physical solution for the coordinated management of the Six Basins with the objective that the Parties to the Judgment can reliably pump their respective rights and maximize the beneficial use of groundwater. The Judgment also established the Six Basins Watermaster (Watermaster) to implement the physical solution. The Court maintains continuing jurisdiction over the Judgment.

The Watermaster is a committee of representatives of the individual Parties to the Judgment, which include:

- Three Valleys Municipal Water District – the main imported water wholesaler to the Six Basins agencies (TVMWD)
- Pomona Valley Protective Association – a California corporation that is responsible for conducting replenishment activities in the Six Basins at the direction of the Watermaster (PVPA)
- City of Claremont – a City that overlies the Six Basins and is served water by the Golden State Water Company; under an agreement between the two agencies regarding water rights
- City of La Verne – a municipal water purveyor in the Six Basins
- City of Pomona – a municipal water purveyor in the Six Basins
- City of Upland – a municipal water purveyor in the Six Basins
- Golden State Water Company – an investor-owned public utility that serves water in the Six Basins to the City of Claremont and portions of Los Angeles County.

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- San Antonio Water Company – a mutual water corporation that pumps groundwater from the Six Basins, and other basins, for use by its shareholders including the City of Upland
- Pomona College – an educational corporation in the Six Basins that has executed an agreement with Golden State Water Company with regard to its groundwater rights; under an agreement between the two agencies regarding water rights

The Judgment is the current groundwater management plan for the Six Basins. The main components of the Judgment include:

- a Safe Yield of 19,300 acre-feet per year (acre-ft/yr) of annual groundwater pumping the allocation of base annual production rights to the individual Watermaster Parties, expressed as a percentage of the Safe Yield
- an Operating Safe Yield (OSY) that is determined annually by the Watermaster, which is based on the Safe Yield and the current and expected recharge, pumping, and groundwater levels; and is allocated in proportion to the base annual production rights
- Carryover Rights, which allow up to 25 percent of a Party's unused annual OSY allocation to be carried over for use in the subsequent operating year
- the rules and methods for "replacing" groundwater pumped in excess of a Party's share of the OSY
- the rules and responsibilities for the continued replenishment of the Six Basins with native surface water from the San Gabriel Mountains
- monitoring and mitigation measures to protect against the threat of rising groundwater
- guidelines for entering into Storage and Recovery Agreements
- the governance structure and rules to conduct and fund Watermaster activities

Strategic Plan for the Six Basins

The Watermaster Parties had approximately 17 years of experience of managing the Six Basins pursuant to the Judgment and its physical solution. Some Parties raised questions and concerns about the current operating rules, regulations, agreements, and practices of the Watermaster, and expressed the desire for a better technical approach to the management of the Six Basins. As such, the Watermaster Parties collectively agreed that enhanced management of the Six Basins through a new integrated management program, beyond the execution of the Judgment, was necessary. This led to the development of the Strategic Plan.

Throughout the development of the Strategic Plan, the Parties expressed great interest in planning, constructing, and operating projects in a coordinated manner to optimize conjunctive water management activities in the Six Basins, and thereby increase the

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reliability of regional water supplies. The Watermaster Parties agreed to four goals for the Strategic Plan: (1) enhance water supplies, (2) enhance basin management, (3) protect and enhance water quality and (4) equitably finance the Strategic Plan implementation.

A draft Strategic Plan report was published in December 2015, and was a first of its kind effort for the Six Basins that included: a comprehensive characterization of the hydrogeology of the Six Basins; an integrated review and assessment of the water supply plans of the Parties to the Six Basins Judgment (e.g. the Baseline water management alternative in the absence of the Strategic Plan); documentation of the issues, needs and wants of the Parties as it relates to their water supplies in the Six Basins; the agreed upon goals of the Strategic Plan; and an evaluation of the physical and economic feasibility of a series of conceptual “project types” that are consistent with the goals of the Strategic Plan.

The project types that were evaluated in the draft Strategic Plan report included:

- pump and treat groundwater in the Pomona Basin
- increase stormwater recharge at the San Antonio and Thompson Creek Spreading Grounds
- increase supplemental water recharge in the Upper Claremont Heights Basin
- increase the use of the Temporary Surplus provision of the Judgment
- conjunctive water management

In the first half of 2016, the Watermaster identified specific projects that are consistent with the project types that were described in the draft Strategic Plan report and were of interest by the Parties for implementation. The Watermaster also concluded that the Strategic Plan is best described as a regional program of conjunctive water management that coordinates the use and management of all surface-water and groundwater resources available to the Parties to enhance yield, improve water quality, and improve water-supply reliability during dry periods. During subsequent workshops, the Watermaster refined the list of specific projects that could participate in a conjunctive water management program.

In November 2017, the Watermaster finalized the Strategic Plan report with an updated characterization of the Strategic Plan as a conjunctive water management program. The final Strategic Plan and supporting documentation can be found on the Watermaster’s website at www.6bwm.com.

2. Project Description

The Strategic Plan is a regional program of conjunctive water management for the Six Basins that will coordinate the use and management of all surface-water and groundwater resources available to the Parties to enhance yield, improve water quality, and improve regional water-supply reliability during dry periods. The operational concept is to maximize

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the use of surplus local and imported surface water when it is available in greater volumes during wet periods, so that groundwater will be more available and reliable during dry periods when surface-water supplies are reduced. A key feature of the program is to utilize the Pomona Basin, which has the greatest regulatable storage potential in the Six Basins, as a storage reservoir for a dry-year storage account.

The ability to implement the Strategic Plan under current operating rules and practices in the Six Basins is constrained by the following impediments:

- Not all storm water can be diverted and recharged by PVPA during very wet years, which is a permanently lost opportunity.
- The threat of high groundwater conditions can limit the amount of stormwater spread by PVPA in wet years, which limits the ability to “maximize” the use of local and imported surface-water resources during wet periods.
- The location, production capacity, and operation of wells are not coordinated or optimized among the Parties to increase production during dry periods or to prevent high groundwater conditions in wet periods.
- Poor groundwater quality in the Pomona Basin is a barrier to increasing production capacity to facilitate increased pumping during dry periods.
- High groundwater in the Pomona Basin limits its unused storage space that is necessary to store water during wet periods.
- Watermaster’s current Operation Plan lacks the necessary detail to enable the Parties to implement the Strategic Plan, such as plans and rules for: entering into Storage and Recovery Agreements which define the operating and accounting rules; reviewing and approving Special Projects; and declaring a Temporary Surplus.

To implement the Strategic Plan, the Watermaster and the Parties must develop and implement projects and policies that will remove these impediments, and thereby achieve the goals of this Strategic Plan.

Storage and Recovery in the Pomona Basin

Under this project, the Parties would store water or “put” water into storage during wet years, “hold” water until needed, and produce or “take” the stored water when imported water supplies are reduced due to drought or otherwise not available. In the draft Strategic Plan report (WEI, 2015), a single conjunctive water management project was described and evaluated, which included a 36,000 acre-foot dry-year storage account in the Pomona Basin. The project included the following features:

- Create a dry-year storage account large enough to offset the imported water demands of the three largest imported water users for four consecutive years. The imported water demand is about 9,000 acre-ft/yr for the City of La Verne, the City of Pomona,

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and the Golden State Water Company. Thus, a dry-year storage account of at least 36,000 acre-ft is required to withstand four consecutive dry years.

- 50,000 acre-ft of the groundwater currently in storage in the Pomona Basin is dedicated to the dry-year storage program to evacuate operational storage space because groundwater elevations in the Pomona Basin are relatively high.
- Construct pump-and-treat capacity of 9,000 acre-ft/yr in the Pomona Basin for dry year takes from storage that are in addition to the Baseline OSY.
- The “put” or recharge to the dry-year storage account is accomplished through in-lieu recharge. In-lieu recharge is the addition of water to the groundwater basin using other surplus surface water supplies “in-lieu” of producing groundwater within the OSY rights of the recharging parties. The put is accomplished by reducing groundwater production in the Pomona Basin by as much as 9,000 acre-ft/yr and increasing the use of other sources of water by the same amount. The other sources of water could include imported water or water made available through a Temporary Surplus.

This project was just one potential size and operational scheme for the dry-year storage account. To support the preparation of this Program EIR, the Watermaster will evaluate and refine the scale of the dry-year storage program and its operating scheme using the Watermaster’s groundwater model to assess the physical impacts of the project and the need for mitigation.

Strategic Plan Projects

In the final Strategic Plan report (WEI, 2017), the Watermaster identified several projects that the Parties, either individually or as a group of Parties, are interested in implementing and are consistent with the goals of the Strategic Plan (Strategic Plan Projects). Each of these projects could participate in and help implement the conjunctive water management program and provide a basis for the scale and operation of the dry-year storage account in the Pomona Basin.

The Strategic Plan Projects can be sub-divided into three main types of projects: Pump-and-Treat Groundwater; Stormwater and Supplemental Water Recharge; and, Temporary Surplus. The specific projects are listed in Table 1, *Proposed Projects to Optimize Conjunctive Water Management.*, and the general project locations are shown in Figure 2, *Projects to Optimize Conjunctive Water Management.*

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Table 1 Proposed Projects to Optimize Conjunctive Water Management

PID ¹	Project Description
<i>Pump and Treat</i>	
a	Increase Groundwater Production and Treatment Capacity at Reservoir 5 Treatment Facility
b	Increase Groundwater Production and Treatment Capacity at Lincoln/Mills Treatment Facility
c	Rehabilitate Del Monte 4 and Add Arsenic Treatment
d	Construct Durward 2 Well and a Wellhead Treatment Facility
e	Rehabilitate Old Baldy Well and Construct Wellhead Treatment Facility
<i>Recharge Improvements</i>	
f	Enhance Stormwater Recharge at the San Antonio Spreading Grounds
g	Enhance Supplemental-water Recharge at the SASG
h	Enhance Stormwater Recharge at the Thompson Creek Spreading Grounds
i	Supplemental-water recharge at the TCSG
j	Enhance Stormwater Recharge at the Pedley Spreading Grounds
k	Recharge Stormwater and Supplemental Water at the LA County Fairplex
n	Enhance Stormwater Recharge through MS-4 Compliance
o	Create a Conservation Pool Behind San Antonio Dam
<i>Temporary Surplus</i>	
l	Construct Interconnections between water supply agencies
m	Rehabilitate P-20 and a Wellhead Treatment Facility
p	Construct New Production Wells

Source: Wildermuth Environmental, Inc., Final Strategic Plan for the Six Basins, November 2017, Table 6-2

Notes

1. Project Identification Number.

The project types and the specific projects, as currently conceptualized by the Parties, are described below:

Pump and Treat Projects

As previously described, the Pomona Basin is an under-utilized water resource that could be better managed to achieve the goals of the Strategic Plan. An impediment to increasing groundwater production in the Pomona Basin is poor groundwater quality. Groundwater levels have increased and generally remained high in portions of the Pomona Basin as the Parties have shifted away from pumping to avoid the cost of treating groundwater for municipal use. This has reduced the yield of the Pomona Basin by increasing subsurface outflow to the Chino Basin and has increased the threat of rising groundwater and liquefaction potential. The pump and treat projects were conceptualized to remove these impediments and achieve the following:

- Increase the yield of Pomona Basin by reducing subsurface outflow to the Chino Basin.

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- Remove contaminants from groundwater and put the treated groundwater to beneficial use.
- Lower groundwater levels to reduce the threat of rising groundwater and liquefaction potential.

In addition, the pump and treat projects described below facilitate the implementation of a conjunctive water management program in the Six Basins by creating unused storage space in the Pomona Basin to facilitate the implementation of a storage and recovery program, and by increasing groundwater-production capacity to enable increased production during take years.

Increase Groundwater Production and Treatment Capacity at Reservoir 5 Treatment Facility.
Current Operations. The Reservoir 5 treatment facility is an air stripping facility owned by the City of Pomona and is located at the I-10 freeway and Towne St (see PIDa on Figure 2). Groundwater from the P-3, P-7, P-8B and P-32B wells is conveyed to the facility to remove dichloroethene (DCE), and blended with treated imported water to reduce chromium-6 (Cr-6), nitrate, and perchlorate concentrations. The P-3, P-7, P-8B and P-32B wells have a combined capacity of about 3,000 gpm, and if operated at maximum capacity, can produce a total of 3,625 acre-ft/yr. From 2010-2015, the City of Pomona produced about 1,500 from the P-3, P-7, P-8B and P-32B wells. The wells are not operated at their full capacity because well 3 and 7 are currently not equipped with pumps. The current capacity of the treatment facility is 2,000 gpm.

Project Description. The proposed project is to increase groundwater production and treatment capacity in the southeast portion of the Pomona Basin by increasing production from the P-3, P-7, P-8B and P-32B wells, and increasing the treatment capacity of the Reservoir 5 treatment facility. The project could decrease the volume of treated imported water needed for treatment through blending to zero. By operating the P-3, P-7, P-8B and P-32B wells at their maximum capacity, groundwater production will be increased by about 2,100 acre-ft/yr compared to the average production rate over the past five years of about 1,500 acre-ft/yr. If the project's production exceeds the water demands of the City of Pomona, the excess water can be supplied to other water-supply agencies. The project could include combinations of various treatment methods to produce potable water, depending on the ultimate project capacity and the desire to minimize the use of treated imported water for blending.

- Potential facility improvements are:
- Construct ion exchange (IX) or biological treatment facilities at the Reservoir 5 treatment facility to remove Cr-6, nitrate and perchlorate.
- Expand the existing air stripping facility or construct a granular activated carbon (GAC) facility to remove DCE.

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- Construct conveyance facilities to supply the product water to other agencies, if necessary.

The proposed operating scheme is:

Groundwater Production. Production at P-3, P-7, P-8B and P-32B wells is increased to produce up to 3,625 acre-ft/yr.

Groundwater Treatment. All groundwater production is treated at the Reservoir 5 treatment facility. A goal of this project is to not increase, and possibly reduce, the demand for imported water.

Distribution. The product water is used by the City of Pomona through its existing distribution system or is supplied to other water-supply agencies via interconnections and/or exchanges.

Water Rights. Operation of the project may result in production volumes that exceed the annual Operating Safe Yield (OSY) of the Four Basins. The exceedance of OSY rights can be addressed in the following ways:

- Replacement. The production that exceeds the OSY rights is replaced through wet-water recharge with imported water in the following year.
- Special Projects. The project is approved under the Special Projects provision of the Judgment so some or all of the production that exceeds the OSY rights would not require replacement. The volume and schedule for groundwater production under a designated Special Project would be defined by a Watermaster-approved plan.
- Storage and Recovery Agreement. The production that exceeds the OSY rights is debited from a Watermaster-approved storage account, which could include a dry-year storage account held by all of the Parties. For a dry-year storage account, the debit would occur only during “take” years as defined in a dry-year storage and recovery agreement.

Increase Groundwater Production and Treatment Capacity at Lincoln/Mills Treatment Facility

Current Operations. The Lincoln/Mills treatment facility is an air-stripping facility owned by the City of La Verne and is located at 6th and White St (see PID b on Figure 2). Groundwater pumped by the Lincoln and Mills Tract wells is conveyed to the facility to remove TCE and is blended with treated imported water via a static mixer to reduce nitrate and perchlorate concentrations. The Lincoln and Mills Tract wells have a combined capacity of about 2,000 gpm, and if operated at maximum capacity, can produce a total of 2,400 acre-ft/yr. From 2010-2015, the City of La Verne produced about 1,100 afy of from the Lincoln and Mills Tract wells. The wells are not currently operated at their full capacity because the

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capacity of the treatment facility is 1,200 gpm, and it is not economically feasible for the City of La Verne to buy replacement water if doing so would incur a Replacement obligation.

Project Description. The proposed project is to increase groundwater production and treatment capacity in the western portion of the Pomona Basin by increasing production from the Lincoln and Mills Tract wells and other wells and increasing the treatment capacity of the Lincoln and Mills treatment facility. The project could decrease the volume of treated imported water needed for treatment through blending to zero, depending on the project's design and capacity.

By operating the Lincoln and Mills Tract wells at their maximum capacity, groundwater production will be increased by about 1,300 acre-ft/yr compared to the average production rate over the past five years of about 1,100 acre-ft/yr. Increased production from existing and/or new wells, conveyance pipelines, and expansion of the treatment facility would increase project's capacity. For example, the Old Baldy well could be rehabilitated and connected to the Lincoln and Mills treatment facility. If the project's production exceeds the water demands of the City of La Verne, the surplus water could be supplied to other water-supply agencies.

The project could include combinations of various treatment methods to produce potable water, depending on the project's capacity and the desire to minimize the use of treated imported water for blending.

Potential facility improvements include:

- Construct IX or biological treatment facilities at the Lincoln and Mills treatment facility to remove nitrate and perchlorate.
- Expand the existing air-stripping facility or construct a GAC facility to remove TCE.
- Construct conveyance facilities to connect other wells to the treatment facility, if necessary.
- Construct conveyance facilities to supply product water to other agencies, if necessary.

The proposed operating scheme is:

Groundwater Production. Production at the Lincoln and Mills Tract wells is increased to 2,400 acre-ft/yr.

Groundwater Treatment. All groundwater production is treated at the Lincoln and Mills treatment facility. A goal of this project is to not increase, and possibly reduce, the demand for imported water.

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Distribution. The product water is used by the City of La Verne through its existing distribution system or is supplied to other water-supply agencies via interconnections and/or exchanges.

Water Rights. Operation of the project may result in groundwater production that exceeds the annual OSY rights of the Four Basins. The exceedance of OSY rights can be addressed in the following ways:

- Replacement. The production that exceeds the OSY rights is replaced through wet-water recharge with imported water in the following year.
- Special Projects. The project is approved under the Special Projects provision of the Judgment and some or all of the production that exceeds the OSY rights would not require replacement. The volume and schedule for producing groundwater under a designated Special Project would be defined by a Watermaster-approved plan.
- Storage and Recovery Agreement. The production that exceeds the OSY rights is debited from a Watermaster-approved storage account, which could include a dry-year storage account held by all of the Parties. For a dry-year storage account, the debit would occur only during “take” years as defined in a dry-year storage and recovery agreement.

Rehabilitate Del Monte 4 and Add Arsenic Treatment

Current Operations. The Del Monte treatment facility is a GAC facility owned by GSWC and is located at College Avenue and 1st Street (see PID c on Figure 2). The Del Monte 4 well has a design capacity of 700 gpm, and if operated at maximum capacity, can produce a total of 850 afy. GSWC has not produced groundwater from the Del Monte 4 well since 2005 due to high arsenic concentrations. The well was drilled in 1991 and had a design flow rate of 700 GPM that supplied the Main Zone. Periodic sampling taken during its operation revealed arsenic levels that rose above the maximum contaminant level (MCL), thus requiring the well to be taken out of service. The latest sampling showed the levels ranged from 35-90 parts per billion (ppb). In its current configuration, Del Monte #4 pumps through an existing GAC treatment system, for VOCs (TCE) and 4-log inactivation, before entering the 1.5 MG Del Monte reservoir; consequently, the added friction loss of pumping through the proposed arsenic treatment system will require the replacement of the pump and motor to match the new operating point.

Project Description. The proposed project is to increase groundwater production and treatment capacity in the eastern portion of the Pomona Basin by rehabilitating the Del Monte 4 well and adding a wellhead treatment system to remove arsenic. By rehabilitating and operating the Del Monte 4 well at its maximum capacity, groundwater production

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capacity will be increased by about 850 afy. If the project's production exceeds the water demands of the GSWC, the excess water can be supplied to other water-supply agencies.

Potential facility improvements include:

- Construct an arsenic treatment system at the Del Monte 4 well.
- Construct conveyance facilities to supply product water to other agencies, if necessary.

The proposed operating scheme is:

Groundwater Production. Produce up to 850 acre-ft/yr at the Del Monte 4 well.

Groundwater Treatment. All groundwater production from Del Monte 4 is treated at a wellhead treatment system to reduce arsenic concentrations and is then conveyed to the Del Monte treatment facility to reduce TCE concentrations.

Distribution. The product water is used by GSWC through its existing distribution system or is supplied to other water-supply agencies via interconnections and/or exchanges.

Water Rights. Operation of the project may result in groundwater production that exceeds the annual OSY rights of the Four Basins. The exceedance of OSY rights can be addressed in the following ways:

- Replacement. The production that exceeds the OSY rights is replaced through wet-water recharge of imported water in the following year.
- Special Projects. The project is approved under the Special Projects provision of the Judgment so some or all of the production that exceeds the OSY rights would not require replacement. The volume and schedule for producing groundwater under a designated Special Project would be defined by a Watermaster-approved plan.
- Storage and Recovery Agreement. The production that exceeds the OSY rights is debited from a Watermaster-approved storage account, which could include a dry-year storage account held by all of the Parties. For a dry-year storage account, the debit would occur only during "take" years as defined in a dry-year storage and recovery agreement.

Construct Durward 2 Well and a Wellhead Treatment Facility

Current Operations. This project involves the construction of new facilities adjacent to the abandoned Durward well site. Historical groundwater-quality data from the Durward well indicates that high concentrations of nitrate, perchlorate, and TCE are present in the underlying groundwater.

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Project Description. The proposed project is to increase groundwater production and treatment capacity in the southwest portion of the Pomona Basin by constructing a new well, Durward 2, and constructing a wellhead treatment facility to reduce nitrate, perchlorate, and TCE concentrations (see PID d on Figure 2). By constructing the Durward 2 well and operating it at an estimated maximum capacity of 500 gpm, groundwater production will be increased by about 600 afy. If the project's production exceeds the water demands of GSWC, the surplus water can be supplied to other water-supply agencies. A goal of this project is to not increase, and possibly reduce, the demand for imported water.

Potential facility improvements include:

- Construct a new well adjacent to the Durward well site.
- Construct air stripping, GAC, IX and/or biological treatment facilities at the new well site to remove nitrate, perchlorate, and TCE.
- Construct conveyance facilities to supply the product water to its ultimate demand.

The proposed operating scheme is:

Groundwater Production. Produce up to 600 acre-ft/yr at the Durward 2 well.

Groundwater Treatment. All groundwater production is treated at the Durward 2 well site to reduce nitrate, perchlorate, and TCE concentrations.

Distribution. The product water is used by GSWC through its existing distribution system or is supplied to other water-supply agencies via interconnections and/or exchanges.

Water Rights. Operation of the project may result in groundwater production that exceeds the annual OSY rights of the Four Basins. The exceedance of OSY rights can be addressed in the following ways:

- Replacement. The production that exceeds the OSY rights is replaced through wet-water recharge with imported water in the following year.
- Special Projects. The project is approved under the Special Projects provision of the Judgment so some or all of the production that exceeds the OSY water rights would not require replacement. The volume and schedule for producing groundwater under a designated Special Project would be defined by a Watermaster-approved plan.
- Storage and Recovery Agreement. The production that exceeds the OSY rights is debited from a Watermaster-approved storage account, which could include a dry-year storage account held by all of the Parties. For a dry-year storage account, the debit would occur only during "take" years as defined in a dry-year storage and recovery agreement.

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Rehabilitate Old Baldy Well and Construct Wellhead Treatment Facility

Current Operations. The Old Baldy well is owned by the City of La Verne and is located in the northeast portion of the Ganesha Basin (see PID e on Figure 2). The Old Baldy well has a capacity of 650 gpm, and if operated at maximum capacity, can produce a total of 800 acre-ft/yr. The City has not produced groundwater from the Old Baldy well since 2002 due to high nitrate and perchlorate concentrations.

Project Description. The proposed project is to increase groundwater production and treatment capacity in the northeast portion of the Ganesha Basin by rehabilitating the Old Baldy well and constructing new treatment facilities to reduce nitrate and perchlorate concentrations in the produced groundwater. A goal of this project is to not increase, and possibly reduce, the demand for imported water.

By rehabilitating and operating the Old Baldy well at its maximum capacity, groundwater production will be increased by about 800 acre-ft/yr. If the project's production exceeds the water demands of the City of La Verne, the surplus water can be supplied to other water-supply agencies.

Potential facility improvements include:

- Construct IX or biological treatment facilities at the Old Baldy well site to remove nitrate and perchlorate.
- Construct conveyance facilities to supply product water to other agencies, if necessary.

The proposed operating scheme is:

Groundwater Production. Produce up to 800 acre-ft/yr at the Old Baldy well.

Groundwater Treatment. All groundwater production is treated at the Old Baldy well site to reduce nitrate and perchlorate concentrations.

Distribution. The product water is used by the City of La Verne through its existing distribution system or is supplied to other water-supply agencies via interconnections and/or exchanges.

Water Rights. Although pumping by La Verne is not constrained by water rights in the Ganesha Basin, the project could cause drawdown at other wells in the Live Oak, Ganesha and Pomona Basins. Drawdown would be identified in project development or CEQA and, if deemed excessive, mitigation may be required.

Stormwater and Supplemental Water Recharge

Impediments to enhancing the recharge of storm and supplemental water include: 1) incomplete understanding of the limiting factors for increasing storm-water recharge from

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the San Antonio Creek and Thompson Creek; 2) limited sources and availability of supplemental water; the potential for the occurrence of rising groundwater and liquefaction potential; and 3) the lack of a coordinated program to re-capture the enhanced recharge. The storm and supplemental water recharge projects were conceptualized to remove these impediments and achieve the following:

- Enhance the yield of the Six Basins by increasing the capacity to divert and recharge storm-water.
- Improve groundwater quality through the recharge of high-quality storm water.
- Increase the volume of groundwater that can be sustainably pumped from the Six Basins via recharge of supplemental water.

In addition, the recharge projects described below facilitate the implementation of a conjunctive water management program in the Six Basins by maximizing the use of surplus local and imported surface water when they are available in greater volumes during wet periods, so that groundwater will be more available and reliable during dry periods when the surface-water supplies are reduced.

Enhance Stormwater Recharge at the San Antonio Spreading Grounds

Current Operations. Runoff from the San Antonio Creek watershed that exceeds what can be diverted and used by SAWCo and the City of Pomona at the 60/40 splitter is captured behind the San Antonio Dam. Except under the most critical conditions, water impounded behind the Dam is discharged in a controlled manner into the PVPA diversion works. The diversion works consist of six slide gates that divert water into the San Antonio Spreading Grounds (SASG), each with a capacity to divert up to 200 cfs. Two gates on the west side of the diversion works direct water to the Los Angeles County side of the SASG through a 72-inch diameter reinforced concrete pipeline. Four gates on the east side of the diversion works direct water to the San Bernardino County side of the SASG through two 72-inch diameter reinforced concrete pipelines. Flow meters are installed in each 72-inch pipeline to record the diversions to the SASG. Discharge from the Dam that exceeds the PVPA's diversion capacity by-passes the diversion works and enters the concrete-lined San Antonio Creek Channel. Water discharged to the concrete-lined San Antonio Creek Channel has one more opportunity to be diverted to the SASG via the Lower San Bernardino Turnout. The turnout is a drop-inlet structure that diverts water to the San Bernardino County side of the SASG. When the gate is fully open, this turnout can divert water at a maximum rate of approximately 300 cfs. The Lower San Bernardino Turnout is not metered by the PVPA.

Based on PVPA records, from 1961 to 2015 annual diversions to the SASG ranged from 0 to 33,370 acre-ft/yr. Based on historical discharge measurements made by the USACE, the Watermaster has estimated that the volume of storm water discharged from San Antonio Dam that was not diverted by the PVPA ranged from a low of 4 acre-ft/yr to a maximum of

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about 44,900 acre-ft/yr. However, based on anecdotal information from the USACE, the discharge measurements at the Dam are not accurate in low-flow conditions and may overestimate outflow from the Dam under such conditions.

Project Description. The proposed project is to enhance stormwater recharge at the SASG (see PID f on Figure 2). There are three limitations on total diversions to the SASG for recharge: the physical capacity of the diversion works, the recharge capacity of the spreading grounds, and the requirement in the Judgment to manage recharge to avoid high groundwater conditions. The recharge capacity at the SASG under its current configuration of unlined channels, berms, ponds, deep mining pits, and unimproved land is not precisely known. And, the amount of stormwater available for capture is not well understood, so the optimal facilities and operating schemes to accomplish recharge enhancement cannot yet be defined. The first step in the development of alternatives to enhance recharge is to implement a monitoring program to improve the characterization of the water available for diversion and the factors that limit recharge capacity.

In order to provide recharge capacity the project calls for the expansion of the spreading grounds by approximately 890 acres to a depth of approximately 16 feet.

Enhance Supplemental-water Recharge at the SASG

Current Operations. Stormwater recharge occurs at the SASG when the USACE releases runoff from behind the San Antonio Dam, and otherwise the SASG remains unused except for relatively minor recharge activities conducted by SAWCo, the City of Pomona and TVMWD. In 32 of the last 55 years, stormwater diversions to the SASG were less than 1,000 acre-ft/yr, and in 15 of those years, there were no stormwater diversions.

Imported Water. TVMWD is the only Watermaster Party that recharges supplemental imported water at the SASG. The source of the imported water is MWDSC's Rialto Feeder Pipeline that conveys water to the west side of the SASG through an 80 cfs pipeline constructed by TVMWD in 2011 (maximum of 5,000 acre-ft per month). Because the facilities to recharge supplemental water at the SASG are already in place, there is no proposed scope of work for planning facilities to increase imported water recharge. However, Task 1 of this project includes a line-item to perform an economic analysis for the purchase and recharge of imported water at the SASG as part of the conjunctive water management program engineering analysis.

Recycled Water. Currently, there are no facilities to deliver recycled water for recharge at the SASG.

Project Description. The proposed project is to recharge tertiary-treated recycled water at the SASG to increase the amount of groundwater that can be sustainably pumped from the

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Six Basins and to increase groundwater production in the UCHB to capture this recharge (see PID g on Figure 2).

The potential sources of the recycled water supply include: the Pomona Water Reclamation Plant (WRP), the IEUA's recycled water distribution system in the Chino Basin, a potential satellite water reclamation plant, and/or the MWDSC's proposed recycled water treatment project in Los Angeles County. Exchange agreements are also possible; for example, the recycled water from the Pomona WRP could be exchanged for like amounts of untreated imported water delivered through TVMWD to the SASG. In the draft Strategic Plan report, one project was evaluated that assumed recycled water was delivered from the Pomona WRP to the SASG at a rate of 3,500 acre-ft/yr with an accompanying groundwater extraction program of 3,500 acre-ft/yr.

Potential facility improvements include:

- New pipelines and booster pumping stations to convey recycled water from its source to the SASG.
- New wells to recover the recharge.

The Parties participating in this project could either produce groundwater in excess of their OSY rights in an amount equal to the annual supplemental water recharge or store the water for recovery in dry periods (pursuant to a Watermaster-approved Storage and Recovery agreement).

Enhance Stormwater Recharge at the Thompson Creek Spreading Grounds

Current Operations. Runoff generated from the Thompson Creek watershed enters the PVPA property through a diversion structure upstream of the Thompson Creek dam. The diversion structure and dam are operated by the Los Angeles County Flood Control District (LACFD) in cooperation with PVPA. At the diversion structure, stormwater can be diverted to the reservoir behind the dam and/or the PVPA's conveyance ditch that subsequently discharges to the Thompson Creek Spreading Grounds (TCSG) through a tunnel with a capacity of approximately 75 cfs. Water that accumulates behind the Thompson Creek Dam does not contribute to the recharge of the Six Basins because the dam is partly grouted to bedrock and the reservoir is not maintained for recharge.

The PVPA requests the LACFCD to divert as much stormwater as possible into the TCSG, but the diversion is constrained by the LACFCD operating rules that focus primarily on flood control operations.

Based on PVPA records, from 2000 to 2015 annual diversions to the TCSG ranged from 0 to 269 acre-ft/yr. Based on historical discharge measurements made by the LACFD, Watermaster has estimated that the volume of stormwater captured at or discharged from

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Thompson Creek Dam, and therefore not diverted by the PVPA, ranged from a low of 3 acre-ft/yr to a maximum of about 1,634 acre-ft/yr.

Project Description. The proposed project is to enhance stormwater recharge at the TCSG (see PID h on Figure 2). The ability to increase recharge is constrained by the diversion capacity of the conveyance facilities to the TCSG, the recharge capacity of the TCSG, and the requirement in the Judgment to manage recharge to avoid high groundwater conditions. Neither the recharge capacity, the amount of stormwater available for capture, nor the hydrogeology underlying the TCSG are well understood and so the optimal facilities and operating schemes to accomplish recharge enhancement cannot yet be defined. The first step in the development of alternatives to enhance recharge is to implement a monitoring program to improve the characterization water available for diversion and the of the factors that limit recharge capacity.

In order to provide recharge capacity the project calls for the expansion of the spreading grounds by approximately 143 acres to a depth of approximately 10 feet.

Supplemental-water recharge at the TCSG: Imported Water

Current Operations. The TCSG are currently used when the LACFCD allows the PVPA to divert stormwater into the recharge facilities instead of to behind the Thompson Creek Dam. In 10 of the last 16 years, stormwater diversions to the TCSG totaled less than 50 acre-ft/yr, and in eight of those years, there were no stormwater diversions. The TCSG are not used to recharge supplemental water, nor are there existing facilities to convey supplemental water to the TCSG.

Project Description. The proposed project is to recharge untreated imported water at the TCSG to increase the amount of groundwater that can be sustainably pumped from the Six Basins (see PID i on Figure 2). The source of the untreated imported water would be MWDSC's Rialto Feeder Pipeline. A new pipeline would need to be constructed from the Rialto Pipeline to the TCSG. To the extent possible, the water would be conveyed to the TCSG by pressure head in the Rialto Pipeline. A booster pump station may be necessary to convey the imported water to the TCSG, at least at times when pressure head is low in the Rialto Pipeline.

The Parties participating in this project could either produce groundwater in excess of their OSY rights in an amount equal to the annual supplemental water recharge or store the water for recovery in dry periods (pursuant to a Watermaster-approved Storage and Recovery agreement).

Enhance Stormwater Recharge at the Pedley Spreading Grounds

Current Operations. San Antonio Creek water diverted by the City of Pomona at the 60/40 splitter box that exceeds the treatment capacity of the Pedley Treatment Plant, or does not

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meet turbidity standards for treatment, is recharged at the SASG or at the Pedley Spreading Grounds (PSG). Currently, the PSG does not receive stormwater or dry-weather runoff from the surrounding urbanized areas for recharge.

Project Description. The proposed project is to enhance recharge at the PSG to include stormwater and dry-weather runoff from the surrounding urbanized areas (see PID j on Figure 2). The amount of stormwater and dry-weather runoff available for diversion into the PSG has not yet been characterized. Additionally, the recharge capacity at the PSG is not precisely known and so the facilities and operating schemes to accomplish recharge enhancement cannot yet be defined.

In order to provide recharge capacity the project calls for the expansion of the spreading grounds by approximately 6 acres to a depth of approximately 10 feet.

Recharge Stormwater and Supplemental Water at the LA County Fairplex

Current Operations. There are no storm or supplemental water recharge facilities at the site.

Project Description. The proposed project is to utilize a 20-acre area at the LA County Fairplex to construct facilities to recharge stormwater and dry-weather runoff, and supplemental water into the Pomona Basin (see PID k on Figure 2). The proposed project could also help the City of Pomona to comply with the MS4 permit as a regional stormwater diversion and recharge project. The Fairplex site has the area available to increase the size of the propose recharge facilities from 20 acres to 100 acres. Therefore, although the project as currently envisioned may only utilize a 20-acre area, the Program EIR will evaluate the larger area.

Three potential sources of water are considered for recharge at the Fairplex:

- Stormwater and Dry-Weather Runoff. Divert stormwater and dry-weather runoff from the LA County Fairplex and the Thompson Creek channel into new recharge basins at the Fairplex.
- Recycled Water. Pump recycled water from the Pomona WRP to the new recharge basins at the Fairplex. Recycled water would be recharged throughout the year except when stormwater recharge operations would conflict with it.
- Imported Water. Untreated imported water from the Rialto Feeder can be discharged to Thompson Creek and diverted to the new recharge basins at the Fairplex. Imported water can be recharged throughout the year except when stormwater recharge operations would conflict with it.

The potential facility improvements include:

- Construct new recharge basins at the Fairplex.

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- Construct necessary facilities to divert and convey stormwater and dry weather runoff and imported water to the new recharge basins.
- Construct necessary conveyance facilities to deliver recycled water to the new recharge basins.
- Construct and install monitoring facilities necessary to comply with the Department of Drinking Water Title 22 regulations.

Temporary Surplus Projects

Historically, high groundwater problems have occurred in the Six Basins because during wet periods, high volumes of stormwater recharge within the SASG cause groundwater levels to rapidly increase in the UCHB. The mound of high groundwater migrates to the south and can cause or contribute to high groundwater conditions in the southern portion of the UCHB, the LCHB, and the northern portion of the Pomona Basin. High groundwater conditions are undesirable because they increase the threat of rising groundwater and liquefaction potential, and they reduce the yield of the Six Basins by increasing subsurface outflow to the Chino Basin and by limiting the volume of stormwater recharge that can occur during wet periods.

The potential for high groundwater can be mitigated by managing groundwater production. The Temporary Surplus provision in the Judgment can be employed to increase groundwater production during wet periods to minimize the potential for high groundwater conditions, provided that the production to recover the Temporary Surplus is located in areas that will mitigate the potential for high groundwater (i.e. UCHB and LCHB). The physical impediments to implementing a Temporary Surplus in a manner that minimizes the potential for high groundwater conditions include: the lack of local water demands to utilize the Temporary Surplus when it needs to be extracted, the lack of facilities to convey the Temporary Surplus to areas of demand, and potentially insufficient pumping capacity. The Temporary Surplus projects described below were conceptualized to remove these impediments.

In addition, the Temporary Surplus projects facilitate the implementation of a conjunctive water management program in the Six Basins by increasing the use of surplus stormwater during wet periods, which can enable in-lieu recharge of the Pomona Basin so that groundwater is more available during dry periods.

Construct Interconnections

Current Operations. N/A.

Project Description. The proposed project is to increase the flexibility in conveying water to water-supply agencies in the region to facilitate the use of Six Basins groundwater during a Temporary Surplus.

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Potential facility improvements include:

- Interconnections of wells and/or distribution systems to the regional treated-water pipelines (e.g. Benson Avenue feeder; Miramar system).
- Interconnection of the WFA Agua de Lejos and TVMWD Miramar water treatment plants.
- Other interconnections necessary to ensure all Parties have the ability to:
 - convey and receive water from all other Parties
 - export water to the Chino Basin
 - export water through the PWR pipeline

Rehabilitate P-20 and a Wellhead Treatment Facility

Current Operations. The P-20 well is owned by the City of Pomona and is the only well located in the Lower Claremont Heights Basin (see PID m on Figure 2). The P-20 well has a capacity of 800 gpm, and if operated at maximum capacity, can produce a total of 80 af per month. The City has not produced groundwater from the P-20 well since 2000 due to high nitrate concentrations.

Project Description. The proposed project is to increase groundwater production and treatment capacity in the Lower Claremont Heights Basin by rehabilitating the P-20 well and constructing new treatment facilities to reduce nitrate concentrations in the produced water.

Rehabilitating and operating the P-20 well increases the groundwater production capacity in the Lower Claremont Heights Basin to better ensure that the Temporary Surplus can be produced when invoked. If the project's production exceeds the water demands of the City of Pomona, the excess water can be supplied to other water-supply agencies through interconnections or by exchange.

Potential facility improvements include:

- Construct IX or biological treatment facilities at the P-20 well site to remove nitrate.
- Construct conveyance facilities to supply product water to other water-supply agencies, if necessary.

The proposed operation scheme is described below:

Groundwater Production. Produce 960 acre-ft/yr.

Groundwater Treatment. All groundwater production is treated at the P-20 well site to reduce nitrate concentrations.

Distribution. The product water is used by the City of Pomona through its existing distribution system or is supplied to other water-supply agencies via interconnections and/or exchanges.

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Water Rights. Operation of the project may result in production that exceeds the annual OSY rights of the Four Basins. The exceedance of OSY rights can be addressed in the following ways:

- Replacement. The production that exceeds the OSY rights is replaced through wet-water recharge in the following year.
- Temporary Surplus. In wet years, groundwater produced under a Temporary Surplus would not be subject to replacement.

Construct New Production Wells

Current Operations. N/A.

Project Description. The proposed project is to create surplus production capacity in the UCHB to maximize Temporary Surplus takes by constructing new production wells. However, given that Watermaster has yet to develop and test a plan to implement a Temporary Surplus utilizing existing well capacity, and the agencies do not yet have the interconnections to pump and deliver the Temporary Surplus to places of demand, there is no proposed scope of work for this project herein. This project should be revisited after the Watermaster has approved a plan to invoke a Temporary Surplus and it is demonstrated that additional capacity is needed.

For the purposes of environmental analysis it has been assumed that construction of new production wells would disturb up to 0.50 acre per well site.

Watermaster Actions to Implement the Strategic Plan

Develop Updated Operating Plans for Storage and Recovery Agreements, Special Projects and Temporary Surplus

To enable the Parties to effectively plan and implement projects, the Watermaster must have clear operational plans and rules for: entering into Storage and Recovery Agreements which define the operating and accounting rules; reviewing and approving Special Projects; and declaring a Temporary Surplus. These rules and regulations must be developed and implemented based on sound technical evaluations. Prior to developing the updated operating plans and rules, Watermaster will use its groundwater model to:

- Estimate the physical storage space available for new Storage and Recovery Agreements and evaluate the current storage and recovery operations. This information will be used to develop a draft and final operating plan for storage recovery agreements, and to update existing storage and recovery agreements, if appropriate and agreeable to those holding the existing agreements.
- Determine the amount of water potentially available for production through the Special Projects provision of the Judgment (*i.e.* free of replacement obligation) and to develop a policy for reviewing and approving applications for Special Projects.

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- The modeling results from above will be used to develop an operating scheme to invoke a Temporary Surplus.

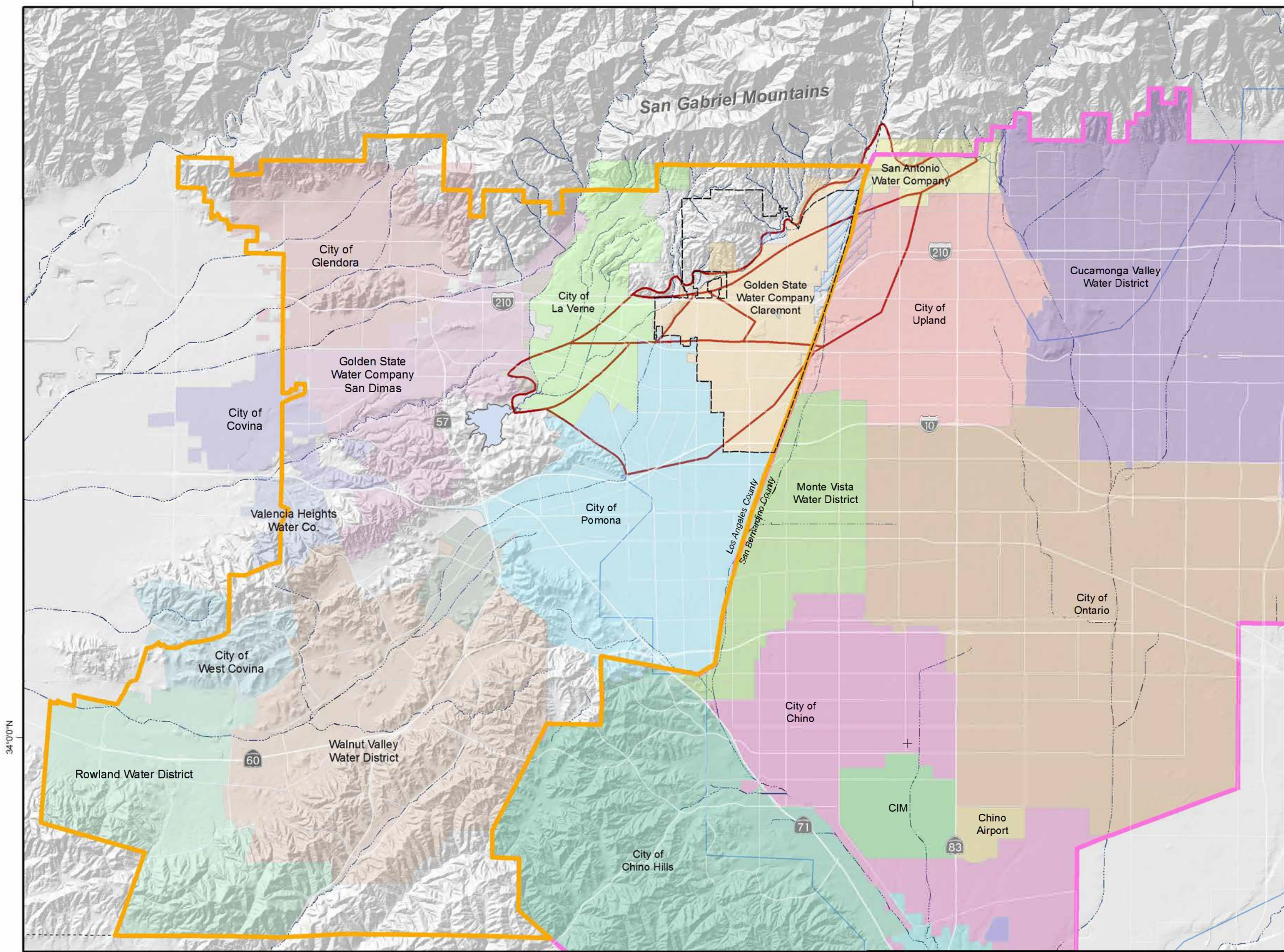
Review and Approve Projects under Watermaster Jurisdiction

As projects are developed, the projects may require review and approval by the Watermaster. This could include performance of Substantial Injury analyses; review and approval of new storage and recovery agreements; and review and approval of applications for Special Projects. Watermaster will include funds in its annual Operating Budget to perform such reviews and approvals to ensure that the projects are consistent with the Strategic Plan, the Watermaster Operating Plan, and the Judgment.

Implement Data Collection and Monitoring Programs

The objectives of the Watermaster's cooperative data collection and monitoring programs are to support the implementation of the Judgment, improve the understanding of the Six Basins hydrogeology, and support the implementation of the Strategic Plan projects. Data from the monitoring program will be evaluated annually in the fall by Watermaster staff. Based on the evaluation, Watermaster staff will recommend modifications to the monitoring program, if any, which may include new monitoring facilities and/or techniques to achieve the objectives of the program and to maximize monitoring efficiencies. The recommendations will include cost estimates to support Watermaster's budgeting process for the subsequent calendar year. A description of the monitoring program, and any changes made to it, will be included in the Annual Report of the Six Basins Watermaster, which is typically published in March of each year. All data collected will be made available to the Parties, or interested stakeholders, upon request, to support the development and implementation of Strategic Plan projects or other capital improvements.

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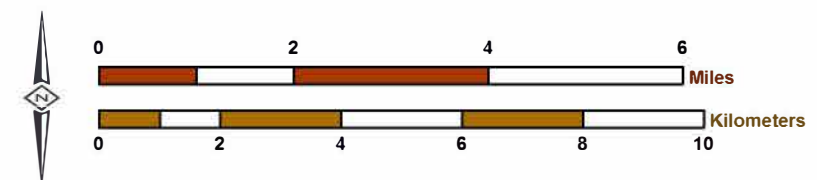


- Service Areas of Water Purveyors in the Six Basins Area
- City of Claremont
- Three Valleys Municipal Water District Boundary
- Inland Empire Utilities Agency Boundary
- Spreading Grounds

- Six Basins Adjudicated Boundaries
- 1 - Canyon
 - 2 - Upper Claremont Heights
 - 3 - Lower Claremont Heights
 - 4 - Live Oak
 - 5 - Ganesha
 - 6 - Pomona



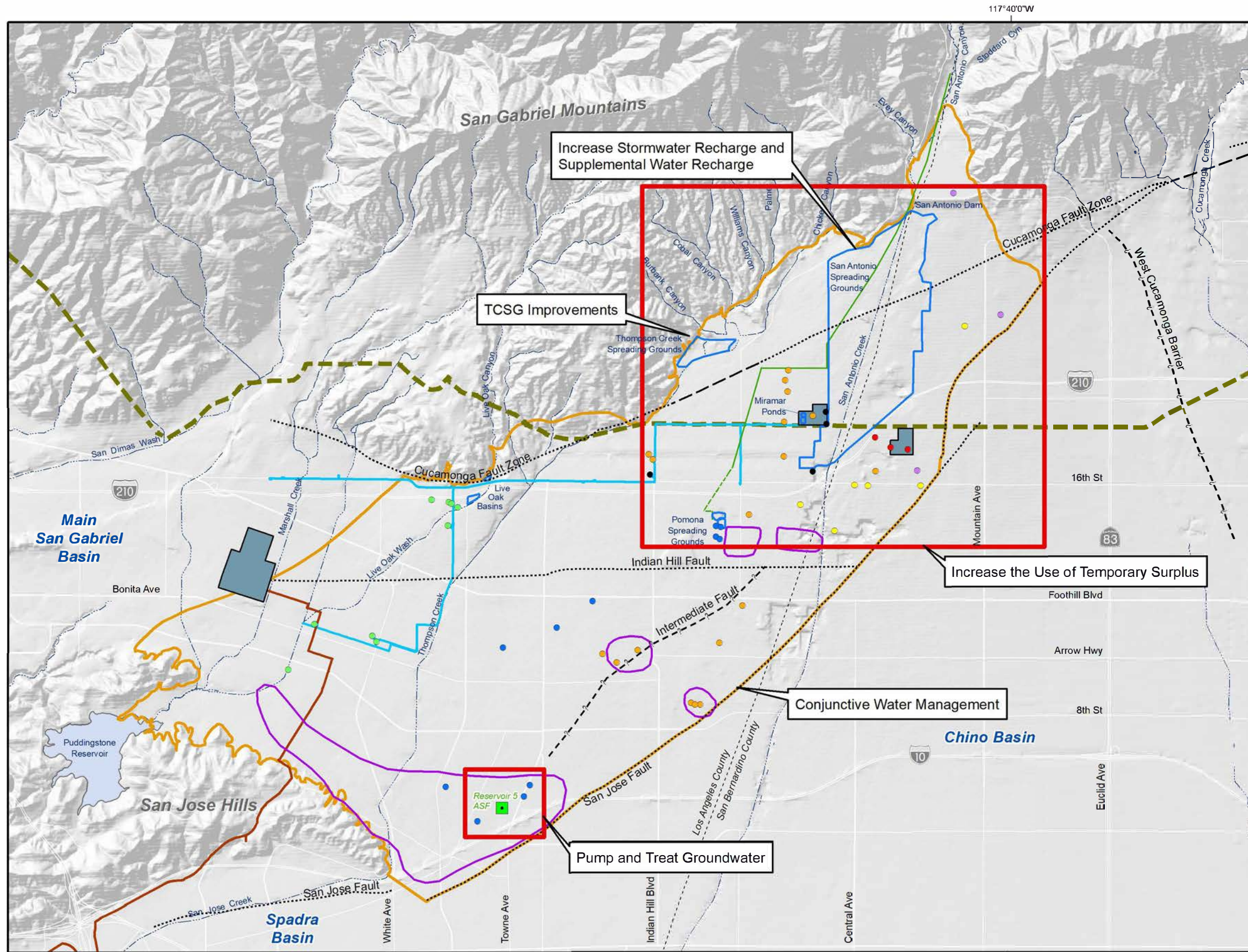
Prepared by:
WEI
 WILDERMUTH ENVIRONMENTAL, INC.



Three Valleys MWD
 Six Basins Program EIR
 Notice of Preparation

The Six Basins and the Water Purveyors in the Area

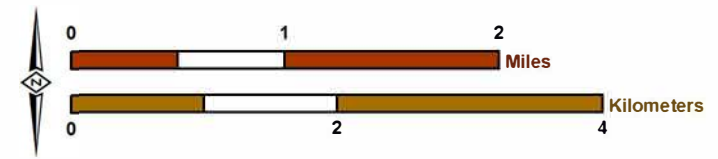
Figure 1



- Existing Facilities**
- Water Treatment Facility
 - Cañon Pipeline
 - Miramar Pipeline
 - PWR Joint Feeder
 - Foothill Feeder-Rialto Pipeline
- Production Wells**
- Golden State Water Company
 - City of La Verne
 - City of Pomona
 - San Antonio Water Company
 - Three Valleys Municipal Water District
 - City of Upland
 - West End Consolidated Water Company
- Other Features**
- Imported Water Treatment Plant
 - Six Basins Hydrologic Boundary
 - Historical Area of High Groundwater (Mendelhall, 1908; Bean, 1982; CDM, 2006)
 - Spreading Grounds
- Faults**
- Location Certain
 - Location Concealed
 - Location Approximate
 - Location Uncertain



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 WILDERMUTH ENVIRONMENTAL, INC.



Three Valleys MWD
 Six Basins Program EIR Notice of Preparation

Strategic Plan Conceptual Projects
 Location Map

Figure 2

NATIVE AMERICAN HERITAGE COMMISSION

Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



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SEP 24 2018

THREE VALLEYS MWD

September 19, 2018

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

RE: SCH# 2018091020 Strategic Plan for the Sixth Basins Project, Los Angeles and San Bernardino Counties

Dear Mr. Peralta:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
 - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
 - a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
 - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
 - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Frank.Lienert@nahc.ca.gov.

Sincerely,

for Nancy Sampels

Frank Lienert
Associate Governmental Program Analyst

cc: State Clearinghouse



Department of Public Works

- Flood Control
- Operations
- Solid Waste Management
- Surveyor
- Transportation

Kevin Blakeslee, P.E.
Director

Transmitted Via Email

October 3, 2018

Three Valleys Municipal Water District
Attn: Ben Peralta, Jr., Project Manager
1021 E. Miramar Avenue
Claremont, CA. 91711

File: 10(ENV)-4.01

RE: CEQA – NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE 6 BASINS STRATEGIC PLAN FOR THE THREE VALLEYS MUNICIPAL WATER DISTRICT

Dear Mr. Peralta:

Thank you for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. **We received this request on September 13, 2018** and pursuant to our review, the following comments are provided:

GENERAL COMMENTS

1. We are aware there may be storm drains in and around the site that may be affected by the proposed Project. When planning for or altering existing or future storm drains, be advised that portions of the Project are subject to the City of Montclair MPD, dated February 2002 available through the City of Montclair and Comprehensive Storm Drain Plan No. 1, dated July 1966 available through the S.B County Department of Public Works, Flood Control Planning Section. Any revision to the drainage should be reviewed and approved by the jurisdictional agency in which the revision occurs.

Portions of the Project's sub-basins (Basin Nos 1, 2, & 6) lie within large areas of San Bernardino County Flood Control District (District) easement, fee owned property and facilities from Foothill Boulevard to the San Antonio Dam. Any encroachments on the District's right-of-way or facilities, including but not limited to access, utility crossings, staging areas, will require a permit from the SBCFCD prior to start of construction. Also, SBCFCD facilities built by the Army Corps of Engineers (ACOE) will require the SBCFCD to obtain approval (408-Permit) from the ACOE. If these permits are required, their necessity and any impacts associated with the construction should be addressed in the DEIR prior to adoption and certification. If you have any questions, please contact Michael Fam at 909-387-8120.

2. Please keep the District informed of any changes to the project description/project scope due to the stormwater recharge component. For more information, please contact Diana Torres at 909-387-1862.

BOARD OF SUPERVISORS

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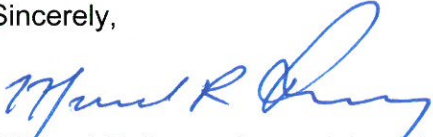
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Gary McBride
Chief Executive Officer

We respectfully request to be included on the circulation list for all project notices, public reviews, or public hearings. In closing, I would like to thank you again for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. Should you have any questions or need additional clarification, please contact the individuals who provided the specific comment, as listed above.

Sincerely,



Michael R. Perry, Supervising Planner
Environmental Management Division

MRP:PE:nm

Email: bperalta@tvmwd.com



October 5, 2018

Mr. Ben Peralta, Jr., P.E., Project Manager
Three Valleys Municipal Water District
1021 East Miramar Avenue
Claremont, California 91711
Phone: (909) 621-5568 x109
E-mail: bperalta@tvmwd.com

SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS
900 Wilshire Blvd., Ste. 1700
Los Angeles, CA 90017
T: (213) 236-1800
www.scag.ca.gov

RE: SCAG Comments on the Notice of Preparation of a Draft Program Environmental Impact Report for the Six Basins Strategic Plan [SCAG NO. IGR9745]

Dear Mr. Peralta,

Thank you for submitting the Notice of Preparation of a Draft Program Environmental Impact Report for the Six Basins Strategic Plan ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS) pursuant to Senate Bill (SB) 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.¹ SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS) goals and align with RTP/SCS policies.

SCAG staff has reviewed the Notice of Preparation of a Draft Program Environmental Impact Report for the Six Basins Strategic Plan. The proposed project includes a regional program of conjunctive water management for the Six Basins that will coordinate the use and management of all surface-water and groundwater resources.

When available, please send environmental documentation to SCAG's Los Angeles office in Los Angeles (900 Wilshire Boulevard, Ste. 1700, Los Angeles, California 90017) or by email to au@scag.ca.gov providing, at a minimum, the full public comment period for review.

If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Anita Au, Associate Regional Planner, at (213) 236-1874 or au@scag.ca.gov. Thank you.

Sincerely,

Ping Chang
Acting Manager, Compliance and Performance Monitoring

¹ Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2016 RTP/SCS for the purpose of determining consistency for CEQA. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a determination of consistency with the 2016 RTP/SCS for CEQA.

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**COMMENTS ON THE NOTICE OF PREPARATION OF A
DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE
SIX BASINS STRATEGIC PLAN [SCAG NO. IGR9745]**

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the RTP/SCS.

2016 RTP/SCS GOALS

The SCAG Regional Council adopted the 2016 RTP/SCS in April 2016. The 2016 RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health (see <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>). The goals included in the 2016 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2016 RTP/SCS are the following:

SCAG 2016 RTP/SCS GOALS	
RTP/SCS G1:	<i>Align the plan investments and policies with improving regional economic development and competitiveness</i>
RTP/SCS G2:	<i>Maximize mobility and accessibility for all people and goods in the region</i>
RTP/SCS G3:	<i>Ensure travel safety and reliability for all people and goods in the region</i>
RTP/SCS G4:	<i>Preserve and ensure a sustainable regional transportation system</i>
RTP/SCS G5:	<i>Maximize the productivity of our transportation system</i>
RTP/SCS G6:	<i>Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking)</i>
RTP/SCS G7:	<i>Actively encourage and create incentives for energy efficiency, where possible</i>
RTP/SCS G8:	<i>Encourage land use and growth patterns that facilitate transit and active transportation</i>
RTP/SCS G9:	<i>Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies*</i>

*SCAG does not yet have an agreed-upon security performance measure.

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG 2016 RTP/SCS GOALS	
Goal	Analysis
RTP/SCS G1: <i>Align the plan investments and policies with improving regional economic development and competitiveness</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
RTP/SCS G2: <i>Maximize mobility and accessibility for all people and goods in the region</i>	<i>Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference</i>
etc.	etc.

2016 RTP/SCS STRATEGIES

To achieve the goals of the 2016 RTP/SCS, a wide range of land use and transportation strategies are included in the 2016 RTP/SCS. Technical appendances of the 2016 RTP/SCS provide additional supporting information in detail. To view the 2016 RTP/SCS, please visit: <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>. The 2016 RTP/SCS builds upon the progress from the 2012 RTP/SCS and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that the SCAG region strives toward a more sustainable region, while the region meets and exceeds in meeting all of applicable statutory requirements pertinent to the 2016 RTP/SCS. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

DEMOGRAPHICS AND GROWTH FORECASTS

Local input plays an important role in developing a reasonable growth forecast for the 2016 RTP/SCS. SCAG used a bottom-up local review and input process and engaged local jurisdictions in establishing the base geographic and socioeconomic projections including population, household and employment. At the time of this letter, the most recently adopted SCAG jurisdictional-level growth forecasts that were developed in accordance with the bottom-up local review and input process consist of the 2020, 2035, and 2040 population, households and employment forecasts. To view them, please visit <http://www.scag.ca.gov/Documents/2016GrowthForecastByJurisdiction.pdf>. The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts			Adopted City of Claremont Forecasts		
	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040
Population	19,663,000	22,091,000	22,138,800	36,300	38,200	39,400
Households	6,458,000	7,325,000	7,412,300	12,200	12,800	13,200
Employment	8,414,000	9,441,000	9,871,500	18,500	19,300	19,700

	Adopted City of La Verne Forecasts			Adopted City of Pomona Forecasts		
	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040
Population	32,200	32,600	32,900	160,800	181,700	190,400
Households	11,600	11,800	12,100	43,400	48,800	51,100
Employment	13,200	13,900	14,300	60,500	64,700	67,200

	Adopted City of Upland Forecasts		
	Year 2020	Year 2035	Year 2040
Population	76,200	81,600	81,700
Households	27,200	28,800	28,900
Employment	35,900	42,300	43,500

MITIGATION MEASURES

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for the 2016 RTP/SCS for guidance, as appropriate. SCAG's Regional Council certified the Final PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on April 7, 2016 (please see: <http://scagrtpscs.net/Pages/FINAL2016PEIR.aspx>). The Final PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

RECEIVED

OCT 01 2018

THREE VALLEYS MWD

SENT VIA USPS AND E-MAIL:

bperalta@tvmwd.com

Ben Peralta, Jr., P.E., Project Manager
Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711

September 26, 2018

Notice of Preparation of a Draft Program Environmental Impact Report for the Six Basins Strategic Plan

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the draft Program Environmental Impact Report (PEIR). Please send SCAQMD a copy of the draft PEIR upon its completion. Note that copies of the draft PEIR that are submitted to the State Clearinghouse are not forwarded to SCAQMD. Please forward a copy of the draft PEIR directly to SCAQMD at the address shown in the letterhead. **In addition, please send with the draft PEIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files¹. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, SCAQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD staff recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analyses. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website at: [http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-\(1993\)](http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)). The SCAQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

On March 3, 2017, the SCAQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP), which was later approved by the California Air Resources Board on March 23, 2017. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional

¹ Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment. The 2016 AQMP is available on SCAQMD's website at: <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

SCAQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and the SCAQMD to reduce community exposure to source-specific and cumulative air pollution impacts, the SCAQMD adopted the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning in 2005. This Guidance Document provides suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. SCAQMD staff recommends that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions. This Guidance Document is available on SCAQMD's website at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>. Additional guidance on siting incompatible land uses (such as placing homes near freeways or other polluting sources) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>. Guidance² on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

The SCAQMD has also developed both regional and localized significance thresholds. SCAQMD staff requests that the Lead Agency compare the emission results to the recommended regional significance thresholds found here: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>. In addition to analyzing regional air quality impacts, SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the Proposed Project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in the draft PEIR. The degree of specificity will correspond to the degree of specificity involved in the underlying activity which is described in the draft PEIR (CEQA Guidelines Section 15146). When quantifying air quality emissions, emissions from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and

² In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's *Air Quality and Land Use Handbook: A Community Health Perspective*. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: <https://www.arb.ca.gov/ch/landuse.htm>.

entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, for phased projects where there will be an overlap between construction and operation, the air quality impacts from the overlap should be combined and compared to SCAQMD's regional air quality CEQA operational thresholds to determine significance.

In the event that the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the Proposed Project, including:

- Chapter 11 "Mitigating the Impact of a Project" of the SCAQMD *CEQA Air Quality Handbook*.
- SCAQMD's CEQA web pages available here: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies>
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- SCAG's MMRP for the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy available here: http://scagtrpccs.net/Documents/2016/peir/final/2016fP_EIR_ExhibitB_MMRP.pdf
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

Alternatives

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a "no project" alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the PEIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Permits

In the event that the Proposed Project requires a permit from SCAQMD, SCAQMD should be identified as a responsible agency for the Proposed Project. For more information on permits, please visit SCAQMD webpage at: <http://www.aqmd.gov/home/permits>. Questions on permits can be directed to SCAQMD's Engineering and Permitting staff at (909) 396-3385.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (<http://www.aqmd.gov>).

The SCAQMD staff is available to work with the Lead Agency to ensure that project air quality and health risk impacts are accurately evaluated and mitigated where feasible. Please contact Alina Mullins, Assistant Air Quality Specialist, at amullins@aqmd.gov or (909) 396-2402, should you have any questions.

Sincerely,

Daniel Garcia

Daniel Garcia
Program Supervisor
Planning, Rule Development & Area Sources

DG/AM
LAC180914-04
Control Number



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Habitat Conservation Planning Branch
P.O. Box 944209
Sacramento, CA 94244-2090
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



October 11, 2018

Mr. Ben Peralta Jr.
Project Manager
Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711

Dear Mr. Peralta,

THE SIX BASINS STRATEGIC PLAN (PROJECT)
NOTICE OF PREPARATION FOR PROGRAM ENVIRONMENTAL IMPACT REPORT

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation for a Program Environmental Impact Report (PEIR) for the Six Basins Strategic Plan from the Three Valleys Municipal Water District for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Project as proposed may result in “take” as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: Program Environmental Impact Report for the Six Basins Strategic Plan

Objective: The objective of the Project is to develop a program of conjunctive water management for the Six Basins that will coordinate the use and management of groundwater and surface water resources available to nine entities involved in the Southern California Water Company vs. Cinti of La Verne, et al. judgement. Primary Project activities include groundwater recharge and groundwater production.

Location: Project is south of the San Gabriel Mountains located in portions of Los Angeles and San Bernardino counties.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the Three Valleys Municipal Water District in adequately identifying and/or mitigating the Project’s significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

COMMENT 1: Groundwater impact on groundwater dependent ecosystems

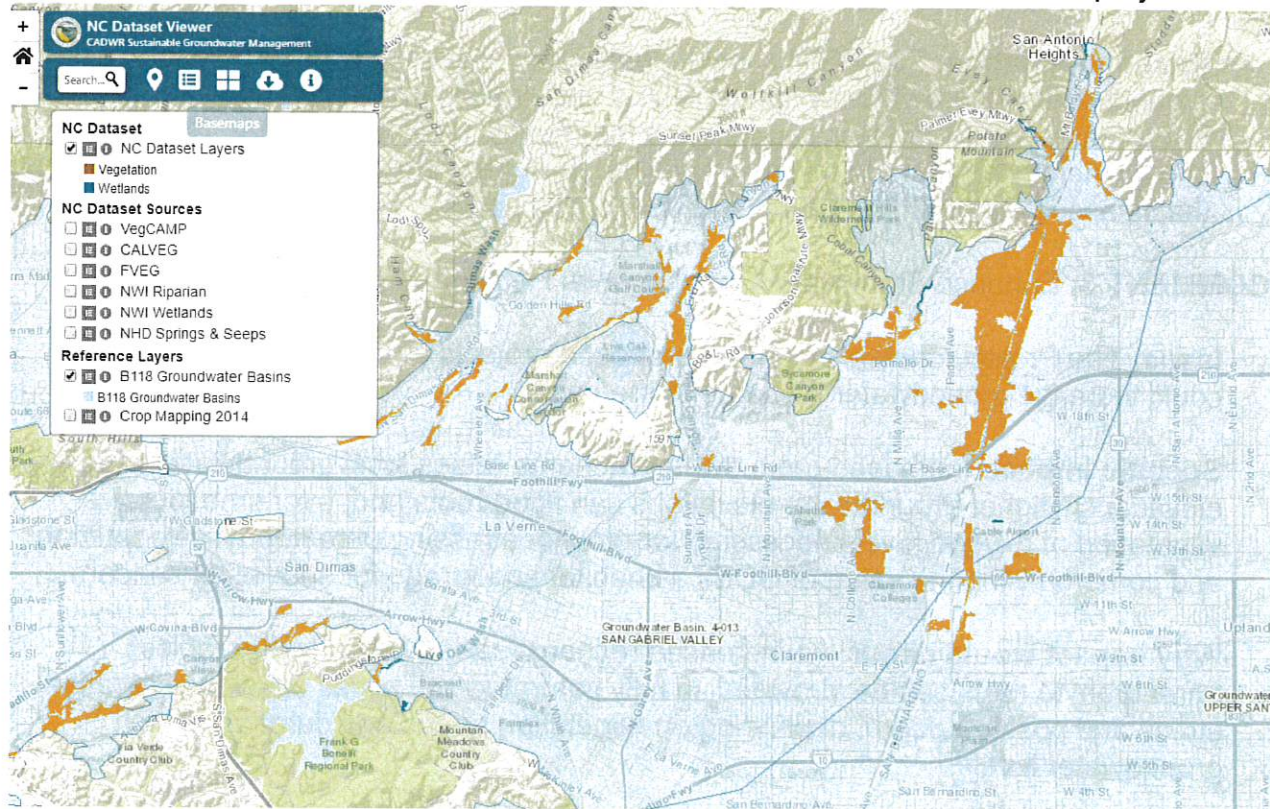
The CDFW has a vested interest in the sustainable management of groundwater, as many sensitive ecosystems and public trust resources are dependent on groundwater. Though the San Gabriel Valley Groundwater Basin is likely to be exempt from Sustainable Groundwater Management Act (SGMA) requirements due to its majority-adjudicated status, the Department of Water Resources (DWR) documented declining groundwater levels and potential for adverse impacts to streams and habitat in San Gabriel Valley Groundwater Basin attributable to groundwater pumping in the 2018 Draft Basin Prioritization (DWR 2018). Absent SGMA requirements for environmental considerations and protections, it is incumbent upon the Six Basins Watermaster to consider and manage for impacts to public trust resources, including groundwater dependent ecosystems (GDEs) in the Project.

The DWR’s [Natural Communities Commonly Associated with Groundwater Dataset](#) identifies many potential GDEs in the Project’s geographic scope (DWR 2018) (Figure 1). The potential GDEs identified in orange in Figure 1 likely comprise phreatophytic vegetation, which rely on water supply from the groundwater table. This vegetation is a critical contributor to habitat and forage for a wide range of species and can be sensitive to depth to groundwater threshold impacts (Naumburg et al. 2005, Froend

and Sommer 2010). This sensitivity to groundwater level thresholds means that localized pumping and recharge actions altering groundwater levels – such as those proposed in the Project can impact phreatophyte vegetation health. Both decreasing (drying out) or increasing (drowning) groundwater elevation has the potential to stress phreatophytes depending on the plant species and the groundwater elevation and duration (e.g., short term wetness/dryness versus prolonged wetness/dryness). Accordingly, proposed groundwater management actions in the Project’s geographic scope should be managed with consideration to impacts to potential GDEs.

Recommendations: The PEIR should verify the GDE existence and identify vegetated communities (e.g., species compositions) and associated rooting depths/optimal groundwater table elevations. This will allow Project proponents to: 1) determine which proposed project actions are most likely to impact GDEs based on basin hydrology, 2) deploy representative groundwater monitoring stations within GDEs to track groundwater levels and vegetation responses over time, 3) establish thresholds/triggers for adaptive management to respond to stressed vegetation as needed. There is potential that the proposed projects could benefit GDEs; if habitat benefits are expected based on PEIR development, monitoring should still be utilized to confirm outcomes.

Figure 1: Potential groundwater dependent ecosystems within the Six Basins project area.



COMMENTS ON SECTION #2: PROJECT DESIGN

COMMENT 2: Increase Groundwater Production and Treatment Capacity [Pump + Treat]

Issue: The Project identifies five (5) proposed projects (Table 1, a-e, page 6) that could increase groundwater extractions from the basin.

Specific impact: The increased groundwater production projects proposed in the Strategic Plan can lower local groundwater table elevations and stress phreatophytic vegetation, particularly during dry years, compromising the value of GDEs as habitat and forage for species of concern.

Why impact would occur: During dry water years when surface water deliveries are low, conjunctive use programs are designed to rely more heavily on groundwater extraction. The Project proposes implementation actions that will build capacity for greater groundwater extraction during these dry times when vegetation may already be stressed due to inadequate rainfall. Increased groundwater extraction during these times lowers groundwater tables, potentially cutting phreatophytes off from a water supply causing vegetation stress and possibly death, depending on vegetation needs and duration of low groundwater levels.

Recommendation: The PEIR should identify and assess how the increased groundwater withdrawal may impact GDEs and provide options on how the Watermaster might monitor and manage for impacts to GDEs. Further, the PEIR should identify any listed species as defined in Public Resources Code Section 15380 that is associated with the GDEs and evaluate impacts to those species.

COMMENT 3: Enhance Stormwater/Supplemental Recharge

Issue: The Project identifies eight (8) proposed projects (Table 1, f-o, page 6) that could increase groundwater recharge to the basin.

Specific impact: Increased groundwater recharge raises local groundwater table elevations. Higher groundwater elevations can flood roots and, over time, deprive vegetation of oxygen levels necessary for growth, stressing phreatophytic vegetation and compromising the value of GDEs as habitat and forage for species of concern.

Why impact would occur: As increased recharge raises groundwater tables, phreatophyte roots can be 'drowned' in fully saturated soil zones causing vegetation stress and possibly death, depending on vegetation needs and duration of high groundwater levels.

Recommendation: The PEIR should address how this increased groundwater recharge may impact GDEs and provide options on how the Watermaster might monitor and manage for impacts to GDEs.

COMMENT 4: Sensitive Vegetation Community Impacts – Alluvial Fan Sage Scrub

Specific impact: The proposed Project is situated in habitat referred to as Riversidian Alluvial Fan Sage Scrub (Alluvial Scrub). This habitat is comprised of several S1-ranked Sensitive Vegetation Communities (Sensitive Vegetation Communities are defined as Alliances or Associations with a ranking of S1-S3 by CDFW). CEQA Guidelines section 15125(c) require the Lead Agency to include information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis placed on resources that are rare or unique to the region into the PEIR. CDFW considers Sensitive Vegetation Communities as threatened habitats having both regional and local significance.

Please note, in 2007, the State Legislature required CDFW to develop and maintain a vegetation mapping standard for the state (Fish and G. Code, § 1940). This standard complies with the National Vegetation Classification System, which utilizes alliance and association based classification of unique vegetation stands. CDFW utilizes vegetation descriptions found in the Manual of California Vegetation (MCV; Sawyer et al., 2008), found online at <http://vegetation.cnps.org/>.

Why impact would occur: The Project proposes to grade and/or excavate approximately 890 acres of Alluvial Scrub and convert this habitat into 16-foot-deep spreading basins.

Evidence impact would be significant: CDFW considers Alluvial Scrub, an S1-ranked Sensitive Natural Community, extremely rare with very little acreage remaining. An S1 ranking indicates there are less than six occurrences of this community in existence in California. The Alluvial Scrub and surrounding fish and wildlife resources are also a part of Los Angeles County's designated San Dimas Canyon/San Antonio Wash Significant Ecological Area (SEA).

Alluvial Scrub is a general term for a unique and declining natural community that occurs mainly on alluvial fans and floodplains in Southern California. This community was once fairly common in the region, but it is now restricted to scattered fragments due to urbanization, channelization of streams, and alterations in the natural hydrology. The altered hydrology no longer supports appropriate growing conditions for Alluvial Scrub along streams and rivers (Safford and Quinn, 1998).

Alluvial Scrub is known to occur in a wide range of successional stages, often described as pioneer (i.e. early), intermediate, or mature, which contributes to diverse ecosystem values (Smith, 1980). Naturally occurring Alluvial Scrub is also known to support a diverse array of plant species, including evergreen shrubs common to chaparral habitats, drought-deciduous shrubs, and subshrubs found in coastal sage scrub habitats. These habitats support a wide blend of different plant species that support a structural complexity unrivaled amongst other shrub-dominated communities in Southern California (Kirkpatrick and Hutchinson, 1977). This structural complexity (low growing shrubs, taller shrubs, small scattered trees, annual wildflowers, etc.)

provides important habitat for an array of insect, reptile, avian and small mammal species, some of which are locally rare and uncommon themselves.

The San Antonio/Mount Baldy Alluvial Fan, which contains the last remaining Alluvial Scrub in the area, has been entirely developed, except for the approximately 900 acres of Alluvial Scrub that is proposed to be impacted as part of the Project.

Mitigation Actions for Consideration:

Mitigation Measure #1: Plant communities, alliances, and associations with a statewide ranking of S1, S2, and S3 should be considered sensitive and declining in the PEIR. In order to determine the rarity ranking of vegetation communities potentially affected by the Project, the MCV alliance/association community names should be included in the PEIR for CDFW to track Sensitive Natural Communities using the National Vegetation Classification System.

Mitigation Measure #2: CDFW is concerned that mitigation for any impacts to Alluvial Scrub may be insufficient given that the Project will impact the last 900 acres of Alluvial Scrub habitat left in the San Antonio/Mount Baldy Alluvial Fan. CDFW recommends fully avoiding impacts to this extremely rare habitat. Alternatives that avoid the need to impact Alluvial Scrub and any S1-S3 vegetation communities should be considered. The PEIR should include the number of acres currently protected in the local area and conduct a cumulative effects analysis as described under CEQA Guidelines section 15130.

COMMENT 5: Impacts to Rare, Threatened, and/or Endangered Species

Specific Impact: Based on a search from the California Natural Diversity Database (CNDDDB) and the Los Angeles County Significant Ecological Area description for the San Dimas and San Antonio Wash areas, the Project has the potential to directly or indirectly impact several rare, threatened, and/or endangered species, including but not limited to: San Bernardino Merriam's kangaroo rat (*Dipodomys merriani ssp. Parvus*), foothill yellow-legged frog (*Rana boylei*), San Diego desert woodrat (*Neotoma lepida intermedia*), arroyo toad (*Anaxyrus californicus*), slender-horned spineflower (*Dodecahema leptoceras*), southwestern willow flycatcher (*Empidonax traillii*), least Bell's vireo (*Vireo bellii pusillus*), coastal California gnatcatcher (*Poliophtila californica*), southern western pond turtle (*Emys marmorata pallida*), Santa Ana sucker (*Catostomus santaanae*), Plummer's mariposa lily (*Calochortus plummerae*), slender mariposa lily (*Calochortus clavatus var. gracilis*), two-striped garter snake (*Thamnophis hammondi*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), hoary bat (*Lasiurus cinereus*), burrowing owl (*Athene cunicularia*), yellow warbler (*Setophaga petechia*), Braunton's milk vetch (*Astragalus brauntonii*), lemon lily (*Hemerocallis lilioasphodelus*), thread-leaved brodiaea (*Brodiaea filifolia*), San Gabriel bedstraw (*Galium grande*), Nevin's Barberry (*Berberis nevini*), San Gabriel River dudleya (*Dudleya cymosa ssp. crebrifolia*), San Gabriel Mountains dudleya (*Dudleya densiflora*), and thread-leaved brodiaea (*Brodiaea filifolia*).

Why impact would occur: The Project proposes to impact habitat in San Antonio Wash behind San Antonio Dam (unknown acreage), San Antonio Wash Alluvial Scrub (permanent impacts to 890 acres), Thompson Creek Spreading Grounds (permanent impacts to 143 acres), and Los Angeles County Fairplex (permanent impacts up to 100 acres) due to the construction of additional recharge basins (Fairplex Recharge Basins). Dry weather flow from Thompson Creek is proposed to be diverted to the Fairplex Recharge Basins. Additional impacts include proposed exportation of groundwater to the Chino Basin, undisclosed impacts to the Upper Claremont Heights Basin, and possibly other areas not clearly defined in the NOP that have the potential to support rare, threatened, and endangered species. The alteration and/or diversion of surface flows in streams/creeks/drainages may cause impacts, both upstream and downstream, to fish and wildlife dependent on this flow. The Project would result in direct and indirect impacts through grading, habitat conversion, noise, lighting, habitat fragmentation, dewatering via pumping groundwater, surface water diversion, and alteration of hydrograph during proposed surface water diversion events.

Evidence impact would be significant: Project implementation would result in a substantial adverse effect, either directly via removal of habitat or through habitat modifications caused by alteration of streamflow regimes, on rare vegetation communities and species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by CDFW or United States Fish and Wildlife Service (USFWS). It is unclear how Project impacts would be reduced to less than significant without appropriate avoidance, minimization, or mitigation measures.

Recommended Language for PEIR Inclusion:

1. CDFW considers adverse impacts to a species protected by the California Endangered Species Act (CESA), for the purposes of CEQA, to be significant without mitigation. Pursuant to CESA, take of any endangered, threatened, or candidate species that results from the Project is prohibited, except as authorized by state law (Fish & G. Code, §§ 2080, 2085). Consequently, if the Project, Project construction, or any Project-related activity during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an incidental take permit (ITP) or a consistency determination in certain circumstances, among other options (Fish and G. Code §§ 2080.1, 2081, subds. (b),(c)). Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

2. To enable CDFW to adequately review and comment on the proposed Project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the PEIR.
 - a. The document should contain a complete discussion of the purpose and need for, and description of, the proposed Project, including all expansion areas, new facilities, expanding facilities, affected stream areas, staging areas and access routes to the construction and staging areas.
 - b. A range of feasible alternatives should be included to ensure that alternatives to the proposed Project are fully considered and evaluated; the alternatives should avoid or otherwise minimize impacts to sensitive biological resources. Specific alternative locations should be evaluated in areas with lower resource sensitivity where appropriate.
3. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the PEIR.
 - a. A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage should also be included. The latter subject should address: project-related changes on drainage patterns on and downstream of the project site; the volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site. The discussions should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary, and the potential resulting impacts on the habitat, if any, supported by the groundwater. Mitigation measures proposed to alleviate such impacts should be included.
 - b. Discussions regarding indirect project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with the National Community Conservation Planning [NCCP] Act). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the PEIR.
 - c. The zoning of areas for development projects or other uses that are nearby or adjacent to natural areas may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the PEIR.

COMMENT 6: Range of Alternatives.

CEQA states, "For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (Cal. Code Regs., tit. 14, § 15126.6 (f)(2)(A)). The Project, as described, impacts several rare vegetation communities, effectively extirpating these vegetation community from the local area. The proposed Project has the high potential to impact listed species, potentially eliminating habitat for these species from the local area.

Mitigation Actions for Consideration:

Mitigation Measure #1: CDFW recommends that the PEIR include the evaluation of direct and indirect recharge alternatives to avoid impacts to sensitive biological resources including modification of aquifers or construction of new aquifers to enhance or create groundwater reserves, injection wells, percolation tanks, water conservation, and utilizing existing spreading grounds. Alternatives should be available to meet the purpose and need for the Project that would reduce, avoid, or mitigate impacts to biological resources.

Mitigation Measure #2: A range of alternatives should be analyzed to ensure that alternatives to the proposed Project are fully considered and evaluated. A range of alternatives which avoid or otherwise minimize impacts to sensitive biological resources including wetlands/riparian habitats, alluvial scrub, coastal sage scrub, should be included. Specific alternative locations should also be evaluated in areas with lower resource sensitivity where appropriate.

Mitigation Measure #3: The PEIR should include mitigation measures for adverse Project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, on-sites habitat restoration or enhancement should be discussed in detail. If on-sites mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-sites mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Mitigation measures for project impacts to sensitive plants, animals, and habitats should emphasize evaluation and selection of alternatives, which avoid or otherwise minimize project impacts. Compensation for unavoidable impacts through acquisition and protection of high quality, in-kind habitat elsewhere should be addressed with off-site mitigation locations clearly identified.

Mitigation Measure #4: The PEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities from Project-related impacts. CDFW considers these communities as threatened habitats having both regional and local significance.

Mitigation Measure #5: CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or

endangered species. CDFW studies have shown that these efforts are experimental in nature and largely unsuccessful. The PEIR should avoid relocation, salvage, or transplantation as a method for mitigation.

Mitigation Measure #6: For proposed preservation and/or restoration, the PEIR should include measures to perpetually protect the targeted habitat values from direct and indirect negative impacts. The objective should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

COMMENT 7 (Page #: 6, Table 1): CDFW recommends that the PEIR fully describe the conservation pool behind San Antonio Dam including acreage of impacts, the volume or capacity of the conservation pool, and how the Project goals are met through the construction of the conservation pool.

COMMENT 8 (Page #: 14-15): The Project estimates that based on historical discharge measurements made by the US. Army Corps of Engineers, the Watermaster has estimated that the volume of storm water discharged from San Antonio dam that was not diverted by the Pomona Valley Protective Association (PVPA) ranged from a low of 4 acre-ft/year to a maximum of about 44,900 acre-ft/year. CDFW is concerned that the additional flow diversions into San Antonio Creek, Thompson Creek, and other surface water flow alterations/diversions are not clear in the NOP and may have adverse impacts to least Bell's vireo and other sensitive fish and wildlife resources within San Antonio Creek and Thompson Creek and the streams they are tributary to. CDFW recommends that the PEIR evaluate the environmental flows necessary to protect existing stream dependent fish and wildlife resources and evaluate how any proposed flow alterations or diversions affect existing biological resources. Any proposed alteration of flow to San Antonio Creek should include downstream impacts to Chino Creek, Chino Creek Wetlands, Prado Dam Reservoir and Spillway, and the Santa Ana River.

COMMENT 9 (Page #: 15-16): The Project identifies the potential sources of the recycled water supply to enhance supplemental-water recharge at the San Antonio Spreading Grounds (SASG) that included the Pomona Water Reclamation Plant (WRP) that discharges into San Jose Creek, the Inland Empire Utilities Agency's recycled water distribution system in the Chino Basin within Chino Creek, Cucamonga and Deer Creek, Day Creek, Etiwanda Channel, San Sevaine Channel, West Fontana Channel, Decler Channel, a potential satellite water reclamation plant, and/or the Metropolitan Water District of Southern California's proposed recycled water treatment Project in Los Angeles County. The NOP does not provide details of the volume of water that may be diverted from the various recycled water discharge points. The volume of water that is currently being discharged from the recycled water discharge points will be diverted away from streams and into the SASG and these streams will lose these surface water inputs. Reduced surface water discharges from recycled water discharge points may result in adverse impacts to streams such as converting habitat to drier, non-riparian vegetation

communities, increased evapotranspiration, loss of hydric soils, loss or type conversion of other habitat that sustain sensitive species, the reduction or elimination of seasonally ponded waters, impacts to species dependent on seasonally ponded water to complete their lifecycle, reduction of open water habitat, and loss of marsh or wetland habitat. These effects would impact transitional riparian vegetation's access to surface flows and facilitate the continual narrowing of the riparian corridor as it adjusts to a smaller wetted perimeter. Additionally, several riparian tree species depend on surface flows during the spring flow recession curve to successfully regenerate from seed. CDFW recommends that the PEIR evaluate what environmental flows are necessary in the streams to be protective of existing process and resources.

COMMENT 10 (Page #: 17-18): The Project is proposing to divert untreated import water into the proposed Recharge Basins at the Los Angeles County Fairplex and into the existing Thompson Creek Spreading Grounds for groundwater recharge. CDFW recommends that the PEIR evaluate the potential for exposure to quagga mussels from Colorado River water, and quagga related measures or treatment to prevent the spread of quagga mussels within the San Gabriel River watershed pursuant to Fish and Game Code Section 2301.

General Biological Comments

1. **Biological Baseline Assessment.** To provide a complete assessment of the flora and fauna within and adjacent to the Project area, with particular emphasis upon identifying endangered, threatened, sensitive, regionally and locally unique species, and sensitive habitats, the PEIR should include the following information:
 - a. Per CEQA Guidelines, section 15125(c), information on the regional setting that is critical to an assessment of environmental impacts should place special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125(c));
 - b. A thorough, recent floristic-based assessment of special status plants and natural communities, following CDFW's recent updated Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, 2018). Botanical surveys should be floristic in nature (every plant taxon that occurs on a site should be identified to the taxonomic level necessary to determine rarity and listing status). Botanical surveys should be conducted in the field at the time of year when target plant taxa are both evident and identifiable (usually during flowering or fruiting), and multiple visits to a site must be made (e.g. in early, mid, and late-season) to accurately survey the floristic diversity of the site and detect the presence of all special status plant taxa that are evident and identifiable. Nearby reference populations should be visited whenever possible to determine if known special status plant populations are evident and identifiable in the years that botanical surveys take place, and to obtain a visual image of the target species, associated habitat, and associated natural community. Reference populations are particularly important in drought years to ensure that the timing of surveys is appropriate and to help substantiate negative findings in

adverse conditions caused by drought. Reports for surveys should be included in the PEIR, along with a discussion of how the year's weather conditions may have affected the comprehensiveness of the botanical surveys, and the potential for false negative surveys. Dates, durations, and locations of all botanical surveys should be reported in the PEIR. The size, condition, and phenological development of any special status plant reference populations that were visited should also be described. The floristic-based assessment of special status plants should occur over several years or growing season to substantiate findings. CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities are available at the following website:

<http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>). CDFW recommends that floristic, alliance- and/or association-based mapping and vegetation impact assessments be conducted at the Project sites and neighboring vicinity. The Manual of California Vegetation, second edition, should also be used to inform this mapping and assessment (Sawyer, et al. 2008). Adjoining habitat areas should be included in this assessment where sites activities could lead to direct or indirect impacts off-sites. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

- c. Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the Project site and within the neighboring vicinity. *The Manual of California Vegetation*, second edition, should be used to inform this mapping and assessment to fully allow CDFW to comment on Project impact significance to vegetative communities (Sawyer, et al. 2008). Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions;
- d. A current inventory of the biological resources associated with each habitat type on sites and within the areas of potential effect. CDFW's California Natural Diversity Data Base² in Sacramento should be contacted at: www.wildlife.ca.gov/biogeodata/ to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code. A nine-quadrangle search is generally used to inform a list of potential fish and wildlife resources that may be present in the Project area.
- e. An inventory of rare, threatened and endangered, and other sensitive species on sites and within the areas of potential effect. Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, § 15380). This should include sensitive fish, wildlife, reptile, amphibian, and plant species. Seasonal variations in use of the Project areas should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day

² The California Natural Diversity Database is not an exhaustive and comprehensive inventory of all rare species and natural communities found statewide. It is a positive sighting database, thus, lack of occurrence does not mean that rare species or communities are not present.

when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the USFWS; and,

- f. A recent, wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame, or in phases.
2. Biological Direct, Indirect, and Cumulative Impacts. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the PEIR:
- a. A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage. The latter subject should address Project-related changes on drainage patterns and downstream of the Project site; the volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site. The discussion should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary and the potential resulting impacts on the habitat, if any, supported by the groundwater. Mitigation measures proposed to alleviate such impacts should be included;
 - b. A discussion regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a NCCP). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the PEIR;
 - c. A discussion on how the Project may affect plant species in dryland systems, which may be dependent on occasional high water flows and flooding, and subsequent ecological succession to maintain appropriate habitat conditions near channel terraces and floodplains. Reduced flooding events due to recharging activities could impact these species, if present. Natural occasional high water flows and flooding events have already been curtailed by flood control and diversions activities. Collecting and storing water during "wet years" may reduce the occurrence of natural high water flows and flooding events even more. The PEIR should evaluate whether any rare plant species in the project area are dependent on occasional high water flows and flooding, and subsequent ecological succession to maintain appropriate habitat conditions. The PEIR should address how the proposed Project may impact any rare plant species dependent on high water flows and flooding events and subsequent ecological succession and develop mitigation measures to reduce such impacts.

- d. The impacts of zoning of areas for development Projects or other uses nearby or adjacent to natural areas, which may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the PEIR; and,
 - e. A cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future Projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.
3. Wetland and Riparian Habitats. CDFW has a responsibility to conserve and protect wetland and riparian habitats. It is the policy of CDFW to strongly discourage development in wetlands or conversion of wetlands to uplands. We oppose any development or conversion that would result in a reduction of wetland acreage or wetland habitat values, unless, at a minimum, Project mitigation assures there will be "no net loss" of either wetland habitat values or acreage. Development and conversion include, but are not limited to, conversion to subsurface drains, placement of fill or building of structures within wetlands, and channelization or removal of materials from streambeds. All wetlands and watercourses, whether intermittent or perennial, should be retained and afforded substantial setbacks assuring the preservation of riparian and aquatic values, and maintain the value to on-sites and off-sites wildlife populations. Mitigation measures to compensate for impacts to mature riparian corridors must be included in the PEIR and must compensate for the loss of function and value of a wildlife corridor.
- a. The Project areas may supports aquatic, riparian, and wetland habitats; therefore, a delineation of the stream and their associated riparian habitats should be included in the PEIR. The delineation should be conducted pursuant to the USFWS Wetlands Definition and Classification System adopted by CDFW. Please note that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers.
4. Lake or Streambed Alteration Agreement. CDFW also has regulatory authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use material from a streambed. For any such activities, the Project applicant (or "entity") must provide written notification to CDFW pursuant to Fish and Game Code Section 1600 et seq. Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration (LSA) Agreement with the applicant is required prior to conducting the proposed activities. CDFW's issuance of a LSA Agreement for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. CDFW as a Responsible Agency under CEQA may consider the local jurisdiction's (lead agency) Negative Declaration or Environmental Impact Report for the Project. To minimize additional requirements by CDFW pursuant to section 1600 et seq. and/or under CEQA, the document should fully

identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA Agreement.

5. Restoration and Revegetation Plans. Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include, at a minimum: (a) the location of mitigation sites; (b) plant species to be used, container sizes, and seeding rates; (c) a schematic depicting the mitigation areas; (d) planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on sites; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation sites in perpetuity.
6. Nesting Birds and Raptors. In order to avoid impacts to nesting birds, the PEIR should require that clearing of vegetation, and when biologically warranted construction, occur outside of the peak avian breeding season which generally runs from February 1 through September 1 (as early as January for some raptors). If Project construction is necessary during the bird breeding season, a qualified biologist with experience in conducting bird breeding surveys should conduct weekly bird surveys for nesting birds, within three days prior to the work in the areas, and ensure no nesting birds in the Project areas would be impacted by the Project. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. The buffer should be a minimum width of 300 feet (500 feet for raptors), be delineated by temporary fencing, and remain in effect as long as construction is occurring or until the nest is no longer active. No Project construction shall occur within the fenced nest zone until the young have fledged, are no longer being fed by the parents, have left the nest, and will no longer be impacted by the Project. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors. Furthermore, nests of all native bird species are protected under both federal and state laws and regulations, including the Migratory Bird Treaty Act (MBTA; U.S.C. §§ 703 - 712) and California Fish and Game Code sections 3503 and 3503.5, respectively.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address:

Ben Peralta Jr., Project Manager
Three Valleys Municipal Water District
October 11, 2018
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CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the Three Valleys Municipal Water District in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ms. Karen Carpio, Senior Environmental Scientist at (916) 653-3864 or Karen.Carpio@wildlife.ca.gov.

Sincerely,



for

Richard Macedo
Branch Chief
Habitat Conservation Planning Branch

cc: Office of Planning and Research, State Clearinghouse, Sacramento
P.O. Box 3044
Sacramento, CA 94244-2460

ec: California Department of Fish and Wildlife

Ed Pert, Regional Manager
South Coast Region (Region 5)
Ed.Pert@wildlife.ca.gov

Kelly Schmoker, Senior Environmental Scientist
South Coast Region (Region 5)
Kelly.Schmoker@wildlife.ca.gov

Victoria Tang, Senior Environmental Scientist
South Coast Region (Region 5)
Victoria.Tang@wildlife.ca.gov

Mary Ngo, Senior Environmental Scientist
South Coast Region (Region 5)
Mary.Ngo@wildlife.ca.gov

Scott Cantrell, Branch Chief
Water Branch
Scott.Cantrell@wildlife.ca.gov

Robert Holmes, Environmental Program Manager
Water Branch
Robert.Holmes@wildlife.ca.gov

Briana Seapy, Senior Environmental Scientist
Water Branch
Briana.Seapy@wildlife.ca.gov

Isabel Baer, Environmental Program Manager
Habitat Conservation Planning Branch
Isabel.Baer@wildlife.ca.gov

Jeb Bjerke, Senior Environmental Scientist
Habitat Conservation Planning Branch
Jeb.Bjerke@wildlife.ca.gov

Cathie Vouchilas, Environmental Program Manager
Habitat Conservation Planning Branch
Cathie.Vouchilas@wildlife.ca.gov

Ryan Mathis, Senior Environmental Scientist (Supervisor)
Habitat Conservation Planning Branch
Ryan.Mathis@wildlife.ca.gov

Karen Carpio, Senior Environmental Scientist
Habitat Conservation Planning Branch
Karen.Carpio@wildlife.ca.gov

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THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

October 12, 2018

VIA EMAIL AND FED EX

Mr. Ben Peralta, Jr.
Project Manager
Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, California 91711
bperalta@tvmwd.com

Dear Mr. Peralta:

Notice of Preparation of a
Program Environmental Impact Report for the Six Basins Strategic Plan

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Notice of Preparation (NOP) of a Program Environmental Impact Report (PEIR) for the proposed Six Basins Strategic Plan. The Three Valleys Municipal Water District (TVMWD) is acting as the Lead Agency under the California Quality Environmental Act (CEQA). The project consists of identifying and improving water recharge of the Six Basins region through the development and implementation of a Strategic Plan. The Strategic Plan would plan, construct, and operate projects in a coordinated manner to optimize conjunctive water management activities, thereby increasing the reliability of regional water supplies. Project types identified in the Strategic Plan include groundwater treatment in the Pomona Basin, stormwater recharge at the San Antonio and Thompson Creek Spreading Grounds, increase water recharge in the Upper Claremont Heights Basin, increase Temporary Surplus provision described in the Plan's judgement, and conjunctive water management. This letter contains Metropolitan's response to the public notice as a potentially affected public agency.

Metropolitan reviewed the public notice and determined the proposed Strategic Plan covers an area that includes Metropolitan's La Verne Pipeline, Upper Feeder, Yorba Linda Feeder, Middle Feeder, Orange County Feeder, Rialto Pipeline, the F.E. Weymouth Water Treatment Plant, associated facilities, and easements. The enclosed map shows these facilities in relation to the proposed Project. It will be necessary for TVMWD to consider these facilities in the Strategic Plan.

The Project must not impact Metropolitan's ability to access, operate and maintain existing facilities. In addition, any proposed grading within Metropolitan's easement will require Metropolitan's review and written acceptance. Detailed prints of drawings of Metropolitan's

Mr. Ben Peralta, Jr.

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October 12, 2018

pipelines and rights-of-way may be obtained by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist in preparing plans that are compatible with Metropolitan's facilities, easements, and properties, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or easements of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

We request a copy of the Draft PEIR for review when available. We appreciate the opportunity to provide input to your planning process and we look forward to further coordination on this Project. If you have any questions, please contact Brenda S. Marines at (213) 217-7902.

Very truly yours,



Sean Carlson
Team Manager, Environmental Planning Section

BSM:bsm

SharePoint\Three Valleys Municipal Water District - Six Basins Strategic Plan_Comment Letter

Attachments:

- (1) Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of The Metropolitan Water District of Southern California
- (2) MWD Map

**Guidelines for
Improvements and Construction Projects Proposed
in the Area of
Metropolitan's Facilities and Rights-of-Way**



July 2018

Prepared By:
The Metropolitan Water District of Southern California
Substructures Team, Engineering Services
700 North Alameda Street
Los Angeles, California 90012

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Additional Copies: To obtain a copy of this document, please contact the Engineering Services Group, Substructures Team.

Disclaimer

Metropolitan assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavating and assumes all liability for damage to Metropolitan's facilities as a result of such excavation. Additionally, the user is cautioned to conduct surveys and other field investigations as deemed prudent, to assure that project plans are correct. The appropriate representative from Metropolitan must be contacted at least two working days, before any work activity in proximity to Metropolitan's facilities.

It generally takes 30 days to review project plans and provide written responses. Metropolitan reserves the right to modify requirements based on case-specific issues and regulatory developments.

PUBLICATION HISTORY:

Initial Release

July 2018

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1.0 GENERAL INFORMATION

Note: Underground Service Alert at 811 must be notified at least two working days before excavating in proximity to Metropolitan's facilities.

1.1 Introduction

These guidelines provide minimum design and construction requirements for any utilities, facilities, developments, and improvements, or any other projects or activities, proposed in or near Metropolitan Water District of Southern California (Metropolitan) facilities and rights-of-way. Additional conditions and stipulations may also be required depending on project and site specific conditions. Any adverse impacts to Metropolitan's conveyance system, as determined by Metropolitan, will need to be mitigated to its satisfaction.

All improvements and activities must be designed so as to allow for removal or relocation at builder or developer expense, as set forth in the paramount rights provisions of Section 20.0. Metropolitan shall not be responsible for repair or replacement of improvements, landscaping or vegetation in the event Metropolitan exercises its paramount rights powers.

1.2 Submittal and Review of Project Plans/Utilities and Maps

Metropolitan requires project plans/utilities be submitted for all proposed activities that may impact Metropolitan's facilities or rights-of-way. Project plans shall include copies of all pertinent utilities, sewer line, storm drain, street improvement, grading, site development, landscaping, irrigation and other plans, all tract and parcel maps, and all necessary state and federal environmental documentation. Metropolitan will review the project plans and provide written approval, as it pertains to Metropolitan's facilities and rights-of-way. Written approval from Metropolitan must be obtained, prior to the start of any activity or construction in the area of Metropolitan's facilities or rights-of-way. Once complete project plans and supporting documents are submitted to Metropolitan, it generally takes 30 days to review and to prepare a detailed written response. Complex engineering plans that have the potential for significant impacts on Metropolitan's facilities or rights-of-way may require a longer review time.

Project plans, maps, or any other information should be submitted to Metropolitan's Substructures Team at the following mailing address:

Attn: Substructures Team
The Metropolitan Water District of Southern California
700 North Alameda St.
Los Angeles, CA 90012

General Mailing Address: P.O. Box 54153
Los Angeles, CA 90054-0153

Email: EngineeringSubstructures@mwdh2o.com

For additional information, or to request prints of detailed drawings for Metropolitan's facilities and rights-of-way, please contact Metropolitan's Substructures Team at 213-217-7663 or EngineeringSubstructures@mwdh2o.com.

1.3 **Identification of Metropolitan's Facilities and Rights-of-Way**

Metropolitan's facilities and rights-of-way must be fully shown and identified as Metropolitan's, with official recording data, on the following:

- A. All applicable plans
- B. All applicable tract and parcel maps

Metropolitan's rights-of-ways and existing survey monuments must be tied dimensionally to the tract or parcel boundaries. Metropolitan's Records of Survey must be referenced on the tract and parcel maps with the appropriate Book and Page.

2.0 **General Requirements**

2.1 **Vehicular Access**

Metropolitan must have vehicular access along its rights-of-way at all times for routine inspection, patrolling, operations, and maintenance of its facilities and construction activities. All proposed improvements and activities must be designed so as to accommodate such vehicular access.

2.2 **Fences**

Fences installed across Metropolitan's rights-of-way must include a 16-foot-wide gate to accommodate vehicular access by Metropolitan. Additionally, gates may be required at other specified locations to prevent unauthorized entry into Metropolitan's rights-of-way.

All gates must accommodate a Metropolitan lock or Knox-Box with override switch to allow Metropolitan unrestricted access. There should be a minimum 20-foot setback for gates from the street at the driveway approach. The setback is necessary to allow Metropolitan vehicles to safely pull off the road prior to opening the gate.

2.3 **Driveways and Ramps**

Construction of 16-foot-wide commercial-type driveway approaches is required on both sides of all streets that cross Metropolitan's rights-of-way. Access ramps, if necessary, must be a minimum of 16 feet wide.

There should be a minimum 20-foot setback for gates from the street at the driveway approach. Grades of ramps and access roads must not exceed 10 percent; if the slope of an access ramp or road must exceed 10 percent due to topography, then the ramp or road must be paved.

2.4 **Walks, Bike Paths, and Trails**

All walkways, bike paths, and trails along Metropolitan's rights-of-way must be a minimum 12-foot wide and have a 50-foot or greater radius on all horizontal curves if also used as Metropolitan's access roads. Metropolitan's access routes, including all walks and drainage facilities crossing the access routes, must be constructed to American Association of State Highway and Transportation Officials (AASHTO) H-20 loading standards (see Figure 1). Additional requirements will be placed on equestrian trails to protect the water quality of Metropolitan's pipelines and facilities.

2.5 Clear Zones

A 20-foot-wide clear zone is required to be maintained around Metropolitan's manholes and other above-ground facilities to accommodate vehicular access and maintenance. The clear zone should slope away from Metropolitan's facilities on a grade not to exceed 2 percent.

2.6 Slopes

Cut or fill slopes proposed within Metropolitan's rights-of-way must not exceed 10 percent. The proposed grade must not worsen the existing condition. This restriction is required to facilitate Metropolitan use of construction and maintenance equipment and allow uninhibited access to above-ground and below-ground facilities.

2.7 Structures

Construction of structures of any type is not allowed within the limits of Metropolitan's rights-of-way to avoid interference with the operation and maintenance of Metropolitan's facilities and possible construction of future facilities.

Footings and roof eaves of any proposed buildings adjacent to Metropolitan's rights-of-way must meet the following criteria:

- A. Footings and roof eaves must not encroach onto Metropolitan's rights-of-way.
- B. Footings must not impose any additional loading on Metropolitan's facilities.
- C. Roof eaves must not overhang onto Metropolitan's rights-of-way.

Detailed plans of footings and roof eaves adjacent to Metropolitan's rights-of-way must be submitted for Metropolitan's review and written approval, as pertains to Metropolitan's facilities.

2.8 Protection of Metropolitan Facilities

Metropolitan facilities within its rights-of-way, including pipelines, structures, manholes, survey monuments, etc., must be protected from damage by the project proponent or property owner, at no expense to Metropolitan. The exact location, description and method of protection must be shown on the project plans.

2.9 Potholing of Metropolitan Pipelines

Metropolitan's pipelines must be potholed in advance, if the vertical clearance between a proposed utility and Metropolitan's pipeline is indicated to be 4 feet or less. A Metropolitan representative must be present during the potholing operation and will assist in locating the pipeline. Notice is required, a minimum of three working days, prior to any potholing activity.

2.10 Jacked Casings or Tunnels

A. General Requirements

Utility crossings installed by jacking, or in a jacked casing or tunnel under/over a Metropolitan pipeline, must have at least 3 feet of vertical clearance between the outside diameter of the pipelines and the jacked pipe, casing, or tunnel. The actual

cover over Metropolitan's pipeline shall be determined by potholing, under Metropolitan's supervision.

Utilities installed in a jacked casing or tunnel must have the annular space between the utility and the jacked casing or tunnel filled with grout. Provisions must be made for grouting any voids around the exterior of the jacked pipe, casing, or tunnel.

B. Jacking or Tunneling Procedures

Detailed jacking, tunneling, or directional boring procedures must be submitted to Metropolitan for review and approval. The procedures must cover all aspects of operation, including, but not limited to, dewatering, ground control, alignment control, and grouting pressure. The submittal must also include procedures to be used to control sloughing, running, or wet ground, if encountered. A minimum 10-foot clearance must be maintained between the face of the tunneling or receiving pits and outside edges of Metropolitan's facility.

C. Shoring

Detailed drawings of shoring for jacking or receiving pits must be submitted to Metropolitan for review and written-approval. (See Section 10 for shoring requirements).

D. Temporary Support

Temporary support of Metropolitan's pipelines may be required when a utility crosses under a Metropolitan pipeline and is installed by means of an open trench. Plans for temporary support must be reviewed and approved in writing by Metropolitan. (See Section 11, Supports of Metropolitan Facilities).

3.0 Landscaping

3.1 Plans

All landscape plans must show the location and limits of Metropolitan's right-of-way and the location and size of Metropolitan's pipeline and related facilities therein. All landscaping and vegetation shall be subject to removal without notice, as may be required by Metropolitan for ongoing maintenance, access, repair, and construction activities. Metropolitan will not be financially responsible for the removal of any landscaping and vegetation.

3.2 Drought-Tolerant Native and California Friendly Plants

Metropolitan recommends use of drought-tolerant native and California Friendly® plants (excluding sensitive plants) on proposed projects. For more information regarding California Friendly® plants refer to www.bewaterwise.com.

3.3 Trees

Trees are generally prohibited within Metropolitan's rights-of-way as they restrict Metropolitan's ability to operate, maintain and/or install new pipeline(s) located within these rights-of-way. Metropolitan will not be financially responsible for the removal and replacement of any existing trees should they interfere with access and any current or future Metropolitan project located within the right-of-way.

3.4 Other Vegetation

Shrubs, bushes, vines, and groundcover are generally allowed within Metropolitan's rights-of-way. Larger shrubs are not allowed on Metropolitan fee properties; however, they may be allowed within its easements if planted no closer than 15 feet from the outside edges of existing or future Metropolitan facilities. Only groundcover is allowed to be planted directly over Metropolitan pipeline, turf blocks or similar is recommended to accommodate our utility vehicle access. Metropolitan will not be financially responsible for the removal and replacement of the vegetation should it interfere with access and any current or future Metropolitan project.

3.5 Irrigation

Irrigation systems are acceptable within Metropolitan's rights-of-way, provided valves and controllers are located near the edges of the right-of-way and do not interfere with Metropolitan vehicular access. A shutoff valve should also be located along the edge of the right-of-way that will allow the shutdown of the system within the right-of-way should Metropolitan need to do any excavation. No pooling or saturation of water above Metropolitan's pipeline and right-of-way is allowed. Additional restrictions apply to non-potable water such as Recycled Water and are covered on Table 3 of Page 20.

3.6 Metropolitan Vehicular Access

Landscape plans must show Metropolitan vehicular access to Metropolitan's facilities and rights-of-way and must be maintained by the property owner or manager or homeowners association at all times. Walkways, bike paths, and trails within Metropolitan's rights-of-way may be used as Metropolitan access routes. (See Section 2.4, Walks, Bike Paths, and Trails).

4.0 General Utilities

Note: For non-potable piping like sewer, hazardous fluid, storm drain, disinfected tertiary recycled water and recycled water irrigation see Table 1 through Table 3.

4.1 Utility Structures

Permanent utility structures (e.g., manholes, power poles, pull boxes, electrical vaults, etc.) are not allowed within Metropolitan's rights-of-way. Metropolitan requests that all permanent utility structures within public streets be placed as far from its pipelines and facilities as practical, but not closer than 5 feet from the outside edges of Metropolitan facilities.

Note: Non-potable utility pipelines are an exception to the 5-foot minimum clearance. Non-potable utility pipelines should have 10 feet of separation.

4.2 Utility Crossings

Metropolitan requests a minimum of 1 foot of vertical clearance between Metropolitan's pipeline and any utility crossing the pipeline. Utility lines crossing Metropolitan's pipelines must be as perpendicular to the pipeline as possible. Cross-section drawings, showing proposed locations and elevations of utility lines and locations of Metropolitan's pipelines and limits of rights-of-way, must be submitted with utility plans, for all

crossings. Metropolitan's pipeline must be potholed under Metropolitan's supervision at the crossings (See Section 2.9).

4.3 Longitudinal Utilities

Installation of longitudinal utilities is generally not allowed along Metropolitan's rights-of-way. Within public streets, Metropolitan requests that all utilities parallel to Metropolitan's pipelines and appurtenant structures (facilities) be located as far from the facilities as possible, with a minimum clearance of 5 feet from the outside edges of the pipeline.

Note: Non-potable utility pipelines are an exception to the 5-foot minimum clearance. Non-potable utility pipelines should have 10 feet of separation (for more information See Table 1 on Page 18).

4.4 Underground Electrical Lines

Underground electrical conduits (110 volts or greater) which cross a Metropolitan's pipeline must have a minimum of 1 foot of vertical clearance between Metropolitan's pipeline and the electrical lines. Longitudinal electrical lines, including pull boxes and vaults, in public streets should have a minimum separation of 5 feet from the edge of a Metropolitan pipeline or structures.

4.5 Fiber Optic Lines

Fiber optic lines installed by directional boring require a minimum of 3 feet of vertical clearance when boring is over Metropolitan's pipelines and a minimum of 5 feet of vertical clearance when boring is under Metropolitan's pipelines. Longitudinal fiber optic lines, including pull boxes, in public streets should have a minimum separation of 5 feet from the edge of a Metropolitan pipelines or structures. Potholing must be performed, under Metropolitan's supervision, to verify the vertical clearances are maintained.

4.6 Overhead Electrical and Telephone Lines

Overhead electrical and telephone lines, where they cross Metropolitan's rights-of-way, must have a minimum 35 feet of clearance, as measured from the ground to the lowest point of the overhead line. Overhead electrical lines poles must be located at least 30 feet laterally from the edges of Metropolitan's facilities or outside Metropolitan's right-of-way, whichever is greater.

Longitudinal overhead electrical and or telephone lines in public streets should have a minimum separation of 10 feet from the edge of a Metropolitan pipelines or structures where possible.

4.7 Sewage Disposal Systems

Sewage disposal systems, including leach lines and septic tanks, must be a minimum of 100 feet from the outside limits of Metropolitan's rights-of-way or the edge of its facilities, whichever is greater. If soil conditions are poor, or other adverse site-specific conditions exist, a minimum distance of 150 feet is required. They must also comply with local and state health code requirements as they relate to sewage disposal systems in proximity to major drinking water supply pipelines.

4.8 Underground Tanks

Underground tanks containing hazardous materials must be a minimum of 100 feet from the outside limits of Metropolitan's rights-of-way or edge of its facilities, whichever is greater. In addition, groundwater flow should be considered with the placement of underground tanks down-gradient of Metropolitan's facilities.

5.0 Specific Utilities: Non-Potable Utility Pipelines

In addition to Metropolitan's general requirements, installation of non-potable utility pipelines (e.g., storm drains, sewers, and hazardous fluids pipelines) in Metropolitan's rights-of-way and public street rights-of-way must also conform to the State Water Resources Control Board's Division of Drinking Water (DDW) regulation (Waterworks Standards) and guidance for separation of water mains and non-potable pipelines and to applicable local county health code requirements. Written approval is required from DDW for the implementation of alternatives to the Waterworks Standards and, effective December 14, 2017, requests for alternatives to the Waterworks Standards must include information consistent with: DDW's [Waterworks Standards Main Separation Alternative Request Checklist](#).

In addition to the following general guidelines, further review of the proposed project must be evaluated by Metropolitan and requirements may vary based on site specific conditions.

- A. Sanitary Sewer and Hazardous Fluids (General Guideline See Table 1 on Page 18)
- B. Storm Drain and Recycled Water (General Guideline See Table 2 on Page 19)
- C. Irrigation with Recycled Water (General Guideline See Table 3 on Page 20)
- D. Metropolitan generally does not allow Irrigation with recycled water to be applied directly above its treated water pipelines
- E. Metropolitan requests copies of project correspondence with regulating agencies (e.g., Regional Water Quality Control Board, DDW); regarding the application of recycled water for all projects located on Metropolitan's rights-of-way

6.0 Cathodic Protection/Electrolysis Test Stations

6.1 Metropolitan Cathodic Protection

Metropolitan's existing cathodic protection facilities in the vicinity of any proposed work must be identified prior to any grading or excavation. The exact location, description, and type of protection must be shown on all project plans. Please contact Metropolitan for the location of its cathodic protection stations.

6.2 Review of Cathodic Protection Systems

Metropolitan must review any proposed installation of impressed-current cathodic protection systems on pipelines crossing or paralleling Metropolitan's pipelines to determine any potential conflicts with Metropolitan's existing cathodic protection system.

7.0 Drainage

7.1 Drainage Changes Affecting Metropolitan Rights-of-Way

Changes to existing drainage that could affect Metropolitan's rights-of-way require Metropolitan's approval. The project proponent must provide acceptable solutions to ensure Metropolitan's rights-of-way are not negatively affected by changes in the drainage conditions. Plans showing the changes, with a copy of a supporting hydrology report and hydraulic calculations, must be submitted to Metropolitan for review and approval. Long term maintenance of any proposed drainage facilities must be the responsibility of the project proponent, City, County, homeowner's association, etc., with a clear understanding of where this responsibility lies. If drainage must be discharged across Metropolitan's rights-of-way, it must be carried across by closed conduit or lined open channel and must be shown on the plans.

7.2 Metropolitan's Blowoff and Pumpwell Structures

Any changes to the existing local watercourse systems will need to be designed to accommodate Metropolitan's blowoff and pumpwell structures, which periodically convey discharged water from Metropolitan's blowoff and pumping well structures during pipeline dewatering. The project proponents' plans should include details of how these discharges are accommodated within the proposed development and must be submitted to Metropolitan for review and approval. Any blowoff discharge lines impacted must be modified accordingly at the expense of the project proponent.

8.0 Grading and Settlement

8.1 Changes in Cover over Metropolitan Pipelines

The existing cover over Metropolitan's pipelines must be maintained unless Metropolitan determines that proposed changes in grade and cover do not pose a hazard to the integrity of the pipeline or an impediment to its maintenance capability. Load and settlement or rebound due to change in cover over a Metropolitan pipeline or ground in the area of Metropolitan's rights-of-way will be factors considered by Metropolitan during project review.

In general, the minimum cover over a Metropolitan pipeline is 4 feet and the maximum cover varies per different pipeline. Any changes to the existing grade may require that Metropolitan's pipeline be potholed under Metropolitan's supervision to verify the existing cover.

8.2 Settlement

Any changes to the existing topography in the area of Metropolitan's pipeline or right-of-way that result in significant settlement or lateral displacement of Metropolitan's pipelines are not acceptable. Metropolitan may require submittal of a soils report showing the predicted settlement of the pipeline at 10-foot intervals for review. The data must be carried past the point of zero change in each direction and the actual size and varying depth of the fill must be considered when determining the settlement. Possible settlement due to soil collapse, rebound and lateral displacement must also be included.

In general, the typical maximum allowed deflection for Metropolitan's pipelines must not exceed a deflection of 1/4-inch for every 100 feet of pipe length. Metropolitan may require additional information per its Geotechnical Guidelines. Please contact Metropolitan's Substructures Team for a copy of the Geotechnical Guidelines.

9.0 Construction Equipment

9.1 Review of Proposed Equipment

Use of equipment across or adjacent to Metropolitan's facilities is subject to prior review and written approval by Metropolitan. Excavation, backfill, and other work in the vicinity of Metropolitan's facilities must be performed only by methods and with equipment approved by Metropolitan. A list of all equipment to be used must be submitted to Metropolitan a minimum of 30 days before the start of work.

- A. For equipment operating within paved public roadways, equipment that imposes loads not greater than that of an AASHTO H-20 vehicle (see Figure 1 on Page 21) may operate across or adjacent to Metropolitan's pipelines provided the equipment operates in non-vibratory mode and the road remains continuously paved.
- B. For equipment operating within unpaved public roadways, when the total cover over Metropolitan's pipeline is 10 feet or greater, equipment imposing loads no greater than those imposed by an AASHTO H-20 vehicle may operate over or adjacent to the pipeline provided the equipment is operated in non-vibratory mode. For crossings, vehicle path shall be maintained in a smooth condition, with no breaks in grade for 3 vehicle lengths on each side of the pipeline.

9.2 Equipment Restrictions

In general, no equipment may be used closer than 20 feet from all Metropolitan above-ground structures. The area around the structures should be flagged to prevent equipment encroaching into this zone.

9.3 Vibratory Compaction Equipment

Vibratory compaction equipment may not be used in vibratory mode within 20 feet of the edge of Metropolitan's pipelines.

9.4 Equipment Descriptions

The following information/specifications for each piece of equipment should be included on the list:

- A. A description of the equipment, including the type, manufacturer, model year, and model number. For example, wheel tractor-scraper, 1990 Caterpillar 627E.
- B. The empty and loaded total weight and the corresponding weight distribution. If equipment will be used empty only, it should be clearly stated.
- C. The wheel base (for each axle), tread width (for each axle), and tire footprint (width and length) or the track ground contact (width and length), and track gauge (center to center of track).

10.0 Excavations Close to Metropolitan Facilities

10.1 Shoring Design Submittal

Excavation that impacts Metropolitan's facilities requires that the contractor submit an engineered shoring design to Metropolitan for review and acceptance a minimum of 30 days before the scheduled start of excavation. Excavation may not begin until the shoring design is accepted in writing by Metropolitan.

Shoring design submittals must include all required trenches, pits, and tunnel or jacking operations and related calculations. Before starting the shoring design, the design engineer should consult with Metropolitan regarding Metropolitan's requirements, particularly as to any special procedures that may be required.

10.2 Shoring Design Requirements

Shoring design submittals must be stamped and signed by a California registered civil or structural engineer. The following requirements apply:

- A. The submitted shoring must provide appropriate support for soil adjacent to and under Metropolitan's facilities.
- B. Shoring submittals must include detailed procedures for the installation and removal of the shoring.
- C. Design calculations must follow the Title 8, Chapter 4, Article 6 of the California Code of Regulations (CCR) guidelines. Accepted methods of analysis must be used.
- D. Loads must be in accordance with the CCR guidelines or a soils report by a geotechnical consultant.
- E. All members must be secured to prevent sliding, falling, or kickouts.

Metropolitan's pipelines must be located by potholing under Metropolitan's supervision before the beginning construction. Use of driven piles within 20 feet of the centerline of Metropolitan's pipeline is not allowed. Piles installed in drilled holes must have a minimum 2-foot clearance between Metropolitan's pipeline and the edge of the drilled hole, and a minimum of 1-foot clearance between any part of the shoring and Metropolitan's pipeline.

11.0 Support of Metropolitan Facilities

11.1 Support Design Submittal

If temporary support of a Metropolitan facility is required, the contractor shall submit a support design plan to Metropolitan for review and approval a minimum of 30 days before the scheduled start of work. Work may not begin until the support design is approved in writing by Metropolitan. Before starting design, the design engineer should consult with Metropolitan regarding Metropolitan's requirements.

11.2 Support Design Requirements

Support design submittals must be prepared, stamped, and signed by a California registered civil or structural engineer. The following requirements apply:

- A. Support drawings must include detailed procedures for the installation and removal of the support system.
- B. Design calculations must follow accepted practices, and accepted methods of analysis must be used.
- C. Support designs must show uniform support of Metropolitan's facilities with minimal deflection.
- D. The total weight of the facility must be transferred to the support system before supporting soil is fully excavated.
- E. All members must be secured to prevent sliding, falling, or kickouts.

12.0 Backfill

12.1 Metropolitan Pipeline Not Supported

In areas where a portion of Metropolitan pipeline is not supported during construction, the backfill under and to an elevation of 6 inches above the top of the pipeline must be one-sack minimum cement sand slurry. To prevent adhesion of the slurry to Metropolitan's pipeline, a minimum 6-mil-thick layer of polyethylene sheeting or similar approved sheeting must be placed between the concrete support and the pipeline.

12.2 Metropolitan Pipeline Partially Exposed

In areas where a Metropolitan pipeline is partially exposed during construction, the backfill must be a minimum of 6 inches above the top of the pipeline with sand compacted to minimum 90 percent compaction.

12.3 Metropolitan Cut and Cover Conduit on Colorado River Aqueduct (CRA)

In areas where a Metropolitan cut and cover conduit is exposed, the following guidelines apply:

- A. No vehicle or equipment shall operate over or cross the conduit when the cover is less than 3 feet.
- B. Track-type dozer with a gross vehicle weight of 12,000 lbs or less may be used over the conduit when the cover is a minimum of 3 feet.
- C. Wheeled vehicles with a gross vehicle weight of 8,000 lbs or less may operate over the conduit when the cover is a minimum of 4 feet.
- D. Tracked dozer or wheeled vehicle should be used to push material over the conduit from the side.
- E. Tracked dozer or wheeled vehicle should gradually increase cover on one side of the conduit and then cross the conduit and increase cover on the other side of the conduit. The cover should be increased on one side of the conduit until a maximum of 2 feet of fill has been placed. The cover over the conduit is not allowed to be more than 2 feet higher on one side of the conduit than on the other side.
- F. The cover should be gradually increased over the conduit until the grade elevations have been restored.

13.0 Piles

13.1 Impacts on Metropolitan Pipelines

Pile support for structures could impose lateral, vertical and seismic loads on Metropolitan's pipelines. Since the installation of piles could also cause settlement of Metropolitan pipelines, a settlement and/or lateral deformation study may be required for pile installations within 50 feet of Metropolitan's pipelines. Metropolitan may require additional information per its Geo-technical Guidelines for pile installation. Please contact Metropolitan's Substructures Team for a copy of the Geotechnical Guidelines.

13.2 Permanent Cast-in-place Piles

Permanent cast-in-place piles must be constructed so that down drag forces of the pile do not act on Metropolitan's pipeline. The pile must be designed so that down drag forces are not developed from the ground surface to springline of Metropolitan's pipeline.

Permanent cast-in-place piles shall not be placed closer than 5 feet from the edge of Metropolitan's pipeline. Metropolitan may require additional information per its Geo-technical Guidelines for pile installation. Please contact Metropolitan's Substructures Team for a copy of the Geotechnical Guidelines.

14.0 Protective Slabs for Road Crossings Over Metropolitan Pipelines

Protective slabs must be permanent cast-in-place concrete protective slabs configured in accordance with Drawing SK-1 (See Figure 2 on Page 22).

The moments and shear for the protective slab may be derived from the American Association of State Highway and Transportation Officials (AASHTO). The following requirements apply:

- A. The concrete must be designed to meet the requirements of AASHTO
- B. Load and impact factors must be in accordance with AASHTO. Accepted methods of analysis must be used.
- C. The protective slab design must be stamped and signed by a California registered civil or structural engineer and submitted to Metropolitan with supporting calculations for review and approval.

Existing protective slabs that need to be lengthened can be lengthened without modification, provided the cover and other loading have not been increased.

15.0 Blasting

At least 90 days prior to the start of any drilling for rock excavation blasting, or any blasting in the vicinity of Metropolitan's facilities, a site-specific blasting plan must be submitted to Metropolitan for review and approval. The plan must consist of, but not be limited to, hole diameters, timing sequences, explosive weights, peak particle velocities (PPV) at Metropolitan pipelines/structures, and their distances to blast locations. The PPV must be estimated based on a site-specific power law equation. The power law equation provides the peak particle velocity versus the scaled distance and must be calibrated based on measured values at the site.

16.0 Metropolitan Plan Review Costs, Construction Costs and Billing

16.1 Plan Review Costs

Metropolitan plan reviews requiring 8 labor hours or less are generally performed at no cost to the project proponent. Metropolitan plan reviews requiring more than 8 labor hours must be paid by the project proponent, unless the project proponent has superior rights at the project area. The plan review will include a written response detailing Metropolitan's comments, requirements, and/or approval.

A deposit of funds in the amount of the estimated cost and a signed letter agreement will be required from the project proponent before Metropolitan begins or continues a detailed engineering plan review that exceeds 8 labor hours.

16.2 Cost of Modification of Facilities Performed by Metropolitan

Cost of modification work conducted by Metropolitan will be borne by the project proponent, when Metropolitan has paramount/prior rights at the subject location.

Metropolitan will transmit a cost estimate for the modification work to be performed (when it has paramount/prior rights) and will require that a deposit, in the amount of the estimate, be received before the work will be performed.

16.3 Final Billing

Final billing will be based on the actual costs incurred, including engineering plan review, inspection, materials, construction, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the total cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice for the additional amount will be forwarded for payment.

17.0 Street Vacations and Reservation of Easements for Metropolitan

A reservation of an easement is required when all or a portion of a public street where Metropolitan facilities are located is to be vacated. The easement must be equal to the street width being vacated or a minimum 40 feet. The reservation must identify Metropolitan as a "public entity" and not a "public utility," prior to recordation of the vacation or tract map. The reservation of an easement must be submitted to Metropolitan for review prior to final approval.

18.0 Metropolitan Land Use Guidelines

If you are interested in obtaining permission to use Metropolitan land (temporary or long term), a Land Use Form must be completed and submitted to Metropolitan for review and consideration. A nonrefundable processing fee is required to cover Metropolitan's costs for reviewing your request. Land Use Request Forms can be found at:

http://mwdh2o.com/PDF_Doing_Your_Business/4.7.1_Land_Use_Request_form_revised.pdf

The request should be emailed to RealEstateServices@mwdh2o.com, or contact the Real Property Development and Management (RPDM) Group at (213) 217-7750.

After the initial application form has been submitted, Metropolitan may require the following in order to process your request:

- A. A map indicating the location(s) where access is needed, and the location & size (height, width and depth) of any invasive subsurface activity (boreholes, trenches, etc.).
- B. The California Environmental Quality Act (CEQA) document(s) or studies that have been prepared for the project (e.g., initial study, notice of exemption, Environmental Impact Report (EIR), Mitigated Negative Declaration (MND), etc.).
- C. A copy of an ACORD insurance certification naming Metropolitan as an additional insured, or a current copy of a statement of self-insurance.
- D. Confirmation of the legal name of the person(s) or entity(ies) that are to be named as the permittee(s) in the entry permit.
- E. Confirmation of the purpose of the land use.
- F. The name of the person(s) with the authority to sign the documents and any specific signature title block requirements for that person or any other persons required to sign the document (i.e., legal counsel, Board Secretary/Clerk, etc.).
- G. A description of any vehicles that will have access to the property. The exact make or model information is not necessary; however, the general vehicle type, expected maximum dimensions (height, length, width), and a specific maximum weight must be provided.

Land use applications and proposed use of the property must be compatible with Metropolitan's present and/or future use of the property. Any preliminary review of your request by Metropolitan shall not be construed as a promise to grant any property rights for the use of Metropolitan's property.

19.0 Compliance with Environmental Laws and Regulations

As a public agency, Metropolitan is required to comply with all applicable environmental laws and regulations related to the activities it carries out or approves. Consequently, project plans, maps, and other information must be reviewed to determine Metropolitan's obligations pursuant to state and federal environmental laws and regulations, including, but not limited to:

- A. California Environmental Quality Act (CEQA) (Public Resources Code 21000-21177) and the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 1500-15387)
- B. Federal Endangered Species Act (ESA) of 1973, 16 U.S.C. §§ 1531, et seq.
- C. California Fish and Game Code Sections 2050-2069 (California ESA)
- D. California Fish and Game Code Section 1602
- E. California Fish and Game Code Sections 3511, 4700, 5050 and 5515 (California fully protected species)
- F. Federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. §§ 703-712
- G. Federal Clean Water Act (including but not limited to Sections 404 and 401) 33 U.S.C. §§ 1342, 1344)

- H. Porter Cologne Water Quality Control Act of 1969, California Water Code §§ 13000-14076.
- I. Title 22, California Code of Regulations, Chapter 16 (California Waterworks Standards), Section 64572 (Water Main Separation)

Metropolitan may require the project applicant to pay for any environmental review, compliance and/or mitigation costs incurred to satisfy such legal obligations.

20.0 Paramount Rights / Metropolitan's Rights within Existing Rights-of-Way

Facilities constructed within Metropolitan's rights-of-way shall be subject to the paramount right of Metropolitan to use its rights-of-way for the purpose for which they were acquired. If at any time Metropolitan or its assigns should, in the exercise of their rights, find it necessary to remove or relocate any facilities from its rights-of-way, such removal and replacement or relocation shall be at the expense of the owner of the facility.

21.0 Disclaimer and Information Accuracy

Metropolitan assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavating and assumes all liability for damage to Metropolitan's facilities as a result of such excavation. Additionally, the user is cautioned to conduct surveys and other field investigations as you may deem prudent, to assure that your project plans are correct. The relevant representative from Metropolitan must be called at least two working days, before any work activity in proximity to Metropolitan's facilities.

It generally takes 30 days to review project plans and provide written responses. Metropolitan reserves the right to modify requirements based on case-specific issues and regulatory developments.

Table 1: General Guidelines for Pipeline Separation between Metropolitan’s Pipeline¹ and Sanitary Sewer² or Hazardous Fluid Pipeline³

<p><u>Pipeline Crossings</u></p>	<p>Metropolitan requires that sanitary sewer and hazardous fluid pipelines that cross Metropolitan’s pipelines have special pipe construction (no joints) and secondary containment⁴. This is required for the full width of Metropolitan’s rights-of-way or within 10 feet tangent to the outer edges of Metropolitan’s pipeline within public streets. Additionally, sanitary sewer and hazardous fluid pipelines crossing Metropolitan’s pipelines must be perpendicular and maintain a minimum 1-foot vertical clearance between the top and the bottom of Metropolitan’s pipeline and the pipe casing.</p> <p>These requirements apply to all sanitary sewer crossings regardless if the sanitary sewer main is located below or above Metropolitan’s pipeline.</p>
<p><u>Parallel Pipeline</u></p>	<p>Metropolitan generally does not permit the installation of longitudinal pipelines along its rights-of-way. Within public streets, Metropolitan requires that all parallel sanitary sewer, hazardous fluid pipelines and/or non-potable utilities be located a minimum of 10 feet from the outside edges of Metropolitan’s pipelines. When 10-foot horizontal separation criteria cannot be met, longitudinal pipelines require special pipe construction (no joints) and secondary containment⁴.</p>
<p><u>Sewer Manhole</u></p>	<p>Sanitary sewer manholes are not allowed within Metropolitan’s rights-of-way. Within public streets, Metropolitan requests manholes parallel to its pipeline be located a minimum of 10 feet from the outside edges of its pipelines. When 10 foot horizontal separation criteria cannot be met, the structure must have secondary containment⁵.</p>

Notes:

¹ Separation distances are measured from the outer edges of each pipe.

² Sanitary sewer requirements apply to all recycled water treated to less than disinfected tertiary recycled water (disinfected secondary recycled water or less). Recycled water definitions are included in Title 22, California Code of Regulations, Chapter 3 (Water Recycling Criteria), Section 60301.

³ Hazardous fluids include e.g., oil, fuels, chemicals, industrial wastes, wastewater sludge, etc.

⁴ Secondary Containment for Pipeline - Secondary containment consists of a continuous pipeline sleeve (no joints). Examples acceptable to Metropolitan include welded steel pipe with grout in annular space and cathodic protection (unless coated with non-conductive material) and High Density Polyethylene (HDPE) pipe with fusion-welded joints.

⁵ Secondary Containment for Structures – Secondary containment consists of external HDPE liner or other approved method.

Table 2: General Guidelines for Pipeline Separation between Metropolitan’s Pipeline¹ and Storm Drain and/or Disinfected Tertiary Recycled Water²

<p><u>Pipeline Crossings</u></p>	<p>Metropolitan requires crossing pipelines to be special pipe construction (no joints) or have secondary containment³ within 10-feet tangent to the outer edges of Metropolitan’s pipeline. Additionally, pipelines crossing Metropolitan’s pipelines must be perpendicular and maintain a minimum 1-foot vertical clearance.</p>
<p><u>Parallel Pipeline</u></p>	<p>Metropolitan generally does not permit the installation of longitudinal pipelines along its rights-of-way. Within public streets, Metropolitan requests that all parallel pipelines be located a minimum of 10 feet from the outside edges of Metropolitan’s pipelines. When 10-foot horizontal separation criteria cannot be met, special pipe construction (no joints) or secondary containment³ are required.</p>
<p><u>Storm Drain Manhole</u></p>	<p>Permanent utility structures (e.g., manhole, catch basin, inlets) are not allowed within Metropolitan’s rights-of-way. Within public streets, Metropolitan requests all structures parallel to its pipeline be located a minimum of 10 feet from the outside edges of its pipelines. When 10 foot horizontal separation criteria cannot be met, the structure must have secondary containment⁴.</p>

Notes:

¹ Separation distances are measured from the outer edges of each pipe.

² Disinfected tertiary recycled water as defined in Title 22, California Code of Regulations, Chapter 3 (Water Recycling Criteria), Section 60301.

³ Secondary Containment for Pipeline - Secondary containment consists of a continuous pipeline sleeve (no joints). Examples acceptable to Metropolitan include welded steel pipe with grout in annular space and cathodic protection (unless coated with non-conductive material) and High Density Polyethylene (HDPE) pipe with fusion-welded joints.

⁴ Secondary Containment for Structures – Secondary containment consists of external HDPE liner or other approved method.

Table 3: General Guidelines for Pipeline Separation¹ between Metropolitan’s Pipeline and Recycled Water^{2,4} Irrigations

<p>Pressurized recycled irrigation mainlines</p>	<ul style="list-style-type: none"> • Crossings - must be perpendicular and maintain a minimum 1-foot vertical clearance. Crossing pressurized recycled irrigation mainlines must be special pipe construction (no joints) or have secondary containment³ within 10-feet tangent to the outer edges of Metropolitan’s pipeline. • Longitudinal - must maintain a minimum 10-foot horizontal separation and route along the perimeter of Metropolitan’s rights-of-way where possible.
<p>Intermittently Energized Recycled Water Irrigation System Components</p>	<ul style="list-style-type: none"> • Crossings - must be perpendicular and maintain a minimum 1-foot vertical clearance. Crossing irrigation laterals within 5-feet tangent to the outer edges of Metropolitan’s pipeline must be special pipe construction (no joints) or have secondary containment³. • Longitudinal – must maintain a minimum 5-foot horizontal separation between all intermittently energized recycled water irrigation system components (e.g. irrigation lateral lines, control valves, rotors) and the outer edges of Metropolitan’s pipeline. Longitudinal irrigation laterals within 5-feet tangent to the outer edges of Metropolitan’s pipeline must be special pipe construction (no joints) or have secondary containment³.
<p>Irrigation Structures</p>	<p>Irrigation structures such as meters, pumps, control valves, etc. must be located outside of Metropolitan’s rights-of-way.</p>
<p>Irrigation spray rotors near Metropolitan’s aboveground facilities</p>	<p>Irrigation spray rotors must be located a minimum of 20-foot from any Metropolitan above ground structures with the spray direction away from these structures. These rotors should be routinely maintained and adjusted as necessary to ensure no over-spray into 20-foot clear zones.</p>
<p>Irrigations near open canals and aqueducts</p>	<p>Irrigation with recycled water near open canals and aqueducts will require a setback distance to be determined based on site-specific conditions. Runoff of recycled water must be contained within an approved use area and not impact Metropolitan facilities. Appropriate setbacks must also be in place to prevent overspray of recycled water impacting Metropolitan’s facilities.</p>

Notes:

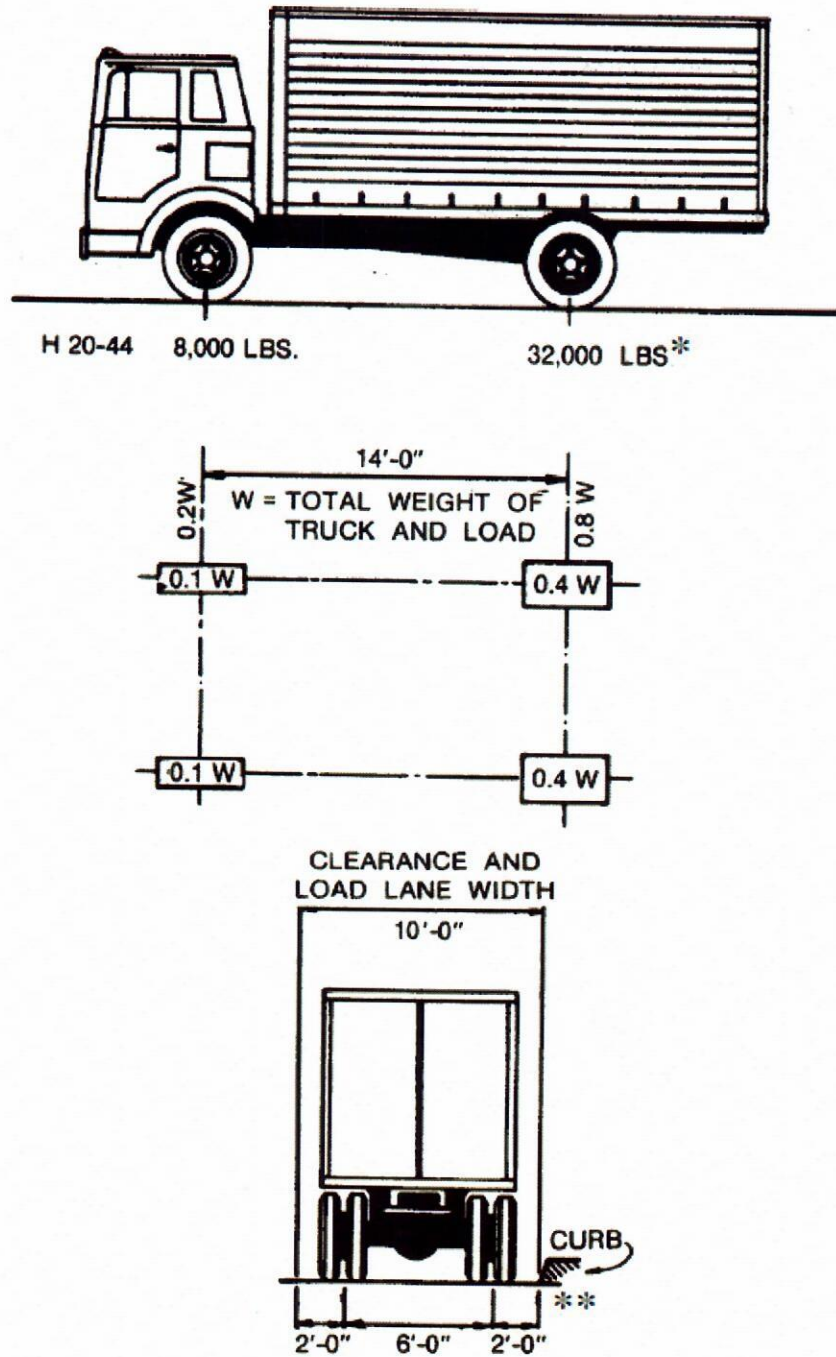
¹ Separation distances are measured from the outer edges of each pipe.

² Requirements for recycled water irrigation apply to all levels of treatment of recycled water for non-potable uses. Recycled water definitions are included in Title 22, California Code of Regulations, Chapter 3 (Water Recycling Criteria), Section 60301.

³ Secondary Containment for Pipeline - Secondary containment consists of a continuous pipeline sleeve (no joints). Examples acceptable to Metropolitan include welded steel pipe with grout in annular space and cathodic protection (unless coated with non-conductive material) and High Density Polyethylene (HDPE) pipe with fusion-welded joints.

⁴ Irrigation with recycled water shall not be applied directly above Metropolitan’s treated water pipelines.

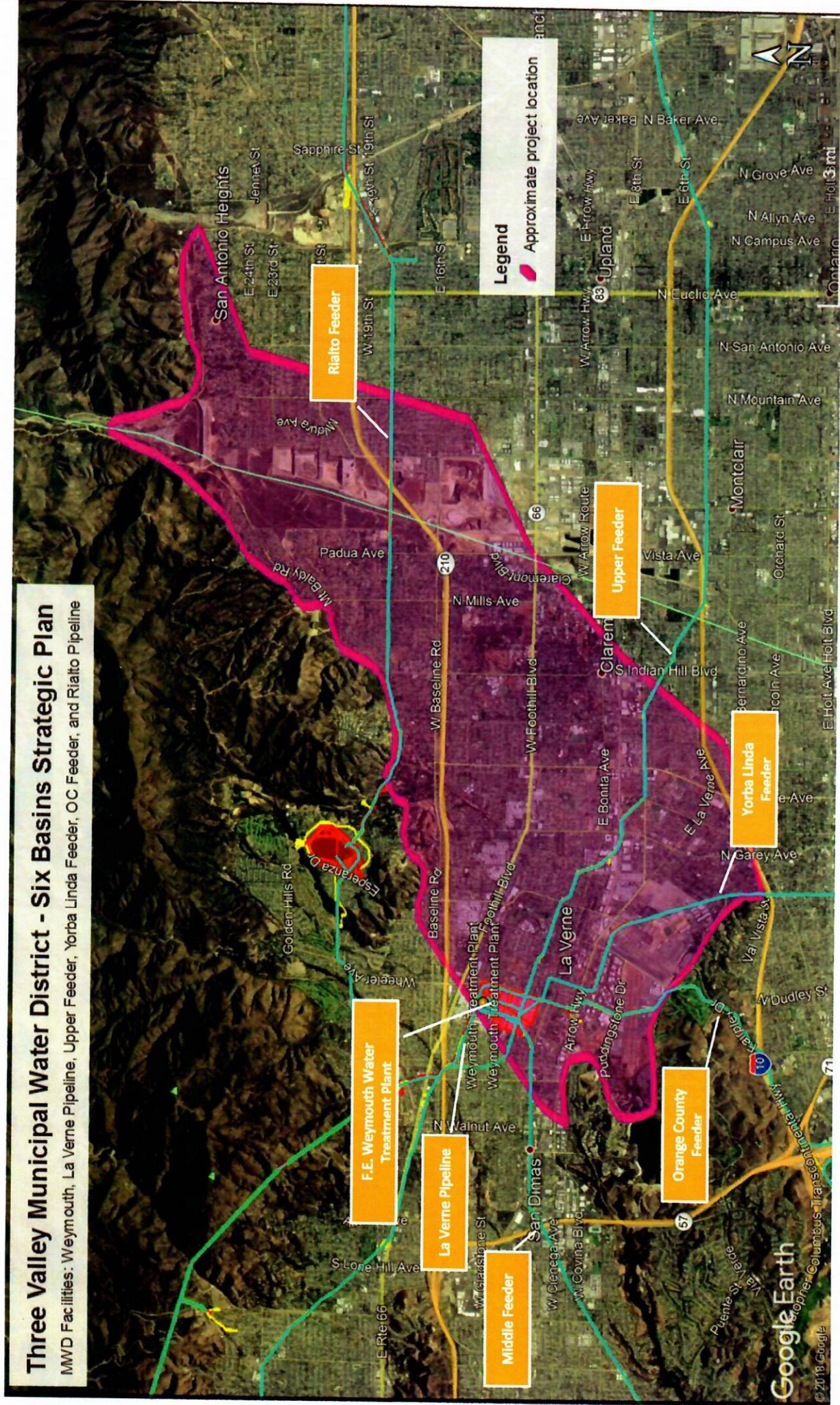
Figure 1: AASHTO H-20 Loading



Note: The H loadings consist of a two-axle truck or the corresponding lane loadings as illustrated above. The H loadings are designated "H" followed by a number indicating the gross weight in tons of the standard truck.

Three Valley Municipal Water District - Six Basins Strategic Plan

MWD Facilities: Weymouth, La Verne Pipeline, Upper Feeder, Yorba Linda Feeder, OC Feeder, and Rialto Pipeline



From: [Ben Peralta](#)
To: [Toan Duong](#)
Cc: [Long Thang](#); [Jose Suarez](#); [Julie Gilbert](#); [Nancy Ferguson](#); [Andy Malone](#); [Carolina Sanchez](#)
Subject: RE: Six Basins Strategic Plan NOP-Program EIR
Date: Tuesday, October 16, 2018 11:43:23 AM

Mr. Duong:

Thank you for providing comments.

Thank you,

Ben Peralta Jr., P.E.

Project Manager
Three Valleys Municipal Water District
1021 E. Miramar Avenue
Claremont, CA 91711
(909) 621-5568 Ext. 109

From: Toan Duong <TDUONG@dpw.lacounty.gov>
Sent: Tuesday, October 16, 2018 11:37 AM
To: Ben Peralta <bperalta@tvmwd.com>
Cc: Long Thang <LTHANG@dpw.lacounty.gov>; Jose Suarez <JSUAREZ@dpw.lacounty.gov>
Subject: Six Basins Strategic Plan NOP-Program EIR

To: Ben Peralta, Project Manager
Three Valleys Municipal Water District

Mr. Peralta,

Thank you for the opportunity to review the subject project. The Los Angeles County Department of Public works has the following comments for your consideration:

1. On page 16 of the NOP, the following request may need to be revised, *“The PVPA requests the LACFCD to divert as much stormwater as possible into the TCSG, but the diversion is constrained by the LACFCD operating rules that focus primarily on flood control operations.”*
 - The PVPA plays an active role in operating the inlet gates to their facility. Increased stormwater diversion into the spreading grounds is limited by the static design of the spreading ground’s inlet gates and appurtenances which do not allow the facility to efficiently divert dynamic storm induced runoff without continuous staffing by PVPA spreading ground field personnel.
 - The project statement in the NOP identifies two additional constraining factors: the recharge capacity of the TCSG, and the requirement in the Judgment to manage recharge to avoid high groundwater conditions.

- The recharge capacity (i.e. percolation rate) of the facility is a direct result of the spreading ground's design and maintenance standards which is managed by the PVPA and contributes to limiting the property's potential for groundwater recharge.
 - The Los Angeles County Flood Control District (LACFCD) provides flood protection with the dam. The PVPA has the authority and ability to operate their spreading grounds in accordance with the judgement as needed.
 - Please reconsider request, coordinate with LACFCD to determine safe operating procedures, and reflect on PEIR accordingly.
2. One of the proposed projects is to divert stormwater and dry-weather flows from Thompson Creek Channel into new recharge basins at the Los Angeles County Fairplex.
- An LACFCD permit and Corps 408 permit will be required to construct necessary facilities at Thompson Creek Channel to divert and convey flows.
 - The project proponent should review the current effective Flood Insurance Rate Maps (FIRMs) for the community/communities in which the project is located to ascertain potential flood hazards for the proposed project site and to determine what, if any, flood hazard impacts the proposed project would have on properties in the vicinity of the project site. Most communities in Los Angeles County, including unincorporated areas, are participants in the National Flood Insurance Program (NFIP), and have adopted building/development requirements to meet or exceed the NFIP's basic requirements regarding buildings and development in floodplains and floodways. The project proponent will thus need to comply with the floodplain management building/development requirements of the community/communities in which the proposed project is located. It is recommended the project proponent consult the community's/communities' building/development officials to ascertain its/their requirements and ensure that potential impacts arising from compliance with these requirements are addressed in the proposed project's California Environmental Quality Act document.

We request the opportunity to review future environmental documents when available. If you have any question regarding these comments, please contact Mr. Long Thang of Public Works' Stormwater Panning Division at (626) 458-5119 or lthang@dpw.lacounty.gov.

Sincerely,

Toan Duong
Civil Engineer
Los Angeles County Public Works
Office: (626) 458-4921

