

CHAPTER 1.0

Introduction

1.1 Project Background

This Draft Environmental Impact Report (DEIR) examines the potential environmental impacts of a proposed citywide Aquifer Storage and Recovery (ASR) Program. The ASR Program is intended to maintain groundwater as a sustainable resource, improve the City of Roseville's (City) water supply reliability, and meet regional conjunctive use program goals. ASR is a process where treated surface water supply is injected by specially designed groundwater wells into the groundwater aquifer for storage and then later recovered for municipal use.

Over the past several decades, there has been increasing demand for water supplies in the City. At the same time, the City, and the surrounding region, has also been affected by:

- Extended drought and wet periods;
- Statewide push to dedicate surface water for environmental purposes;
- Declining groundwater levels statewide; and
- Ongoing and potential impacts to surface water quality and groundwater quality.

To address these challenges, and remain compliant with General Plan Policy, the City is proposing an ASR Program. Chapter 2.0 of this DEIR includes a complete project description.

1.2 Purpose and Intended Uses of this Draft Environmental Impact Report

The City has prepared this DEIR for the following purposes:

- To satisfy the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines, and the City's procedures for implementing CEQA. CEQA requires preparation of an EIR when a proposed project would potentially result in a significant environmental impact. Public agencies are required to consider the information presented in the EIR when determining whether or not to approve a project.
- To inform the general public, the local community, responsible and interested public agencies, and the City's decision-making bodies (e.g., the Public Utilities Commission, and City Council) regarding the potentially significant environmental effects that could result from implementation of the proposed project, as well as possible measures to mitigate the significant effects; and alternatives to the proposed project that would avoid or substantially minimize significant impacts while feasibly attaining the basic objectives of the project.
- To enable the City to consider environmental consequences when deciding whether to approve the project.

- To serve as a source document for responsible agencies (e.g. the Central Valley Regional Water Quality Control Board) to issue permits and approvals as required for implementation of the project.

In summary, this document is intended to provide information that enables decision-makers and the public, to intelligently consider the environmental consequences of the proposed action. It identifies significant or potentially significant environmental impacts and ways those impacts can be reduced to less-than-significant levels, either through implementation of mitigation measures or selection of a project alternative. In a practical sense, EIRs are a tool for the public and regulatory agency staff to review and evaluate baseline conditions and project impacts through a process of full disclosure. Additionally, this DEIR provides the primary source of environmental information for the lead agency to consider when exercising any permitting authority or approval power directly related to implementation of the proposed project.

1.3 Type of EIR

This DEIR has been prepared to meet the requirements of a project-level EIR, as defined by Section 15161 of the State CEQA Guidelines. The project-level EIR examines the environmental impacts of the proposed project and focuses on changes in the physical environment that would result from implementation of the project, including its planning, construction, and operation. The City's intention in preparing this project DEIR is that no further environmental review under CEQA would be required for subsequent activities consistent with the proposed project (see State CEQA Guidelines Sections 15162–15164 and 15183). This would provide for the streamlined approval of projects proposed within the scope of the proposed ASR Program and this DEIR, as described in Section 1.4 below.

1.4 Prior CEQA Approvals

Two CEQA documents have been prepared by the City as part of examining the potential for a City ASR Program: 1) the Diamond Creek Well Project Initial Study/Mitigated Negative Declaration (IS/MND) (February 2002); and, 2) The City of Roseville Aquifer Storage and Recovery Demonstration Test Phase 2 Initial Study/Negative Declaration (IS/ND) (June 2005).

1.4.1 Diamond Creek Well Project IS/MND

The Diamond Creek Well project IS/MND was adopted by the City Council on May 1, 2002. This document addressed construction and operation of the Diamond Creek well located on Northpark Drive in the Diamond Creek Subdivision in the North Roseville Specific Plan area. According to the Diamond Creek Well IS/MND, this well and pump station was constructed to provide backup to existing surface water supplies during critically dry periods. In addition, the CEQA document for the Diamond Creek Well project also covered use of the well to gather information to help determine if groundwater conditions in the vicinity may be suitable for future development of an ASR Program. The Diamond Creek Well IS/MND covered not only well construction and operation as a backup water supply, but also testing for both water injection and extraction. This testing, which later became known as the ASR pilot-scale cycle test (Phase I Pilot Study), was performed from May 5 to September 20, 2004 and included

monitoring injection and extraction volumes, water quality, and groundwater level changes to evaluate system performance for potential future ASR use.

1.4.2 City of Roseville Aquifer Storage and Recover Demonstration Test Phase 2 IS/ND

Following the Phase 1 Pilot Study which determined that the local aquifer has the capacity to accept, store, and release water for recovery consistent with ASR technology, the City and the Central Valley RWQCB (CVRWQCB) wanted to further assess ASR feasibility during a longer demonstration test. A longer test would yield more operational and water quality information for use in future planning of a city-wide ASR Program. Consequently, the City of Roseville Aquifer Storage and Recovery Demonstration Test Phase 2 (Phase 2 Test) IS/ND was prepared in collaboration with the RWQCB and adopted by City Council on August 3, 2005. This CEQA document examined potential impacts of prolonged testing involving six months of injection, four months of storage, and 10 months of extraction. The ASR Demonstration Test Phase 2 IS/ND concluded that no significant impacts would result from implementation of the Phase 2 Test. As a result, the Phase 2 Test was carried out beginning in winter 2005 following the pattern of injection and extraction cycles described above.

1.5 Scope of the EIR

The scope of this EIR was determined by consulting with interested parties and CEQA responsible and trustee agencies as follows:

- In 2008, meetings with the RWQCB were initiated and continued until shortly before release of the Draft EIR. These meetings were used to assist with defining the project, water quality thresholds of significance, related permit requirements and the scope of CEQA analysis. The goal was to ensure this DEIR would provide the water quality analysis required by the RWQCB to issue a Waste Discharge Permit (or a waiver thereof) for the project.
- A Notice of Preparation (NOP)/Initial Study (IS) was circulated for a 30-day comment period beginning on June 30, 2009. The NOP/Initial Study is included as Appendix A of this EIR.
- Two public scoping meetings were held on July 15, and July 29, 2009. Comments received during the scoping meetings and following the issuance of the NOP helped to determine the final scope of the DEIR. All comments received during the EIR scoping process are included in Appendix B of this DEIR.

Under the CEQA statutes and the State CEQA Guidelines, a lead agency may limit the discussion of environmental effects in an EIR when they are not considered potentially significant as long as a brief statement is included indicating the reasons why. Such a statement may be contained in an attached copy of the Initial Study (Public Resources Code Section 21002.1[e]; State CEQA Guidelines Sections 15128 and 15143). The Initial Study (Appendix A) contains these statements and “focuses” out the following issue areas where no significant or potentially significant impacts are identified:

- Aesthetics
- Agricultural Resources
- Air Quality and Global Climate Change
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

As a result of the above scoping process which included review of existing information, analysis of less than significant effects as presented in the NOP/IS, meetings with RWQCB staff and review of NOP, and scoping meeting comments, it was determined that the issues of Hydrology and Water Quality (DEIR Chapter 4.2) and Noise (DEIR Chapter 4.3) should be fully evaluated in the DEIR. Impacts for all other issue areas were determined to be less than significant per the Initial Study analysis. All Initial Study mitigation measures have been incorporated into the Project Description, Section 2.2.6 as Environmental Commitments.

Consistent with CEQA Guidelines §15123, an EIR must identify areas of controversy known to the Lead Agency, including issues raised by the public and regulatory agencies. Generally, public comments have included concerns about the use of groundwater, primarily regarding potential health effects and water quality in general. These and other comments are summarized in Table 1-1.

TABLE 1-1. NOP COMMENT SUMMARY

Agency	Comments	Referenced in EIR
United Auburn Indian Community	In the event of discovery of historic cultural resources or human burials, the UAIC would like to be contacted immediately to provide input on the appropriate course of action.	Initial Study Checklist: Appendix A
Water Quality Control Board, Central Valley Region	Improved reliability implies no increase in City's water demand beyond that already allocated. If that's not the anticipated outcome, EIR needs to describe other appropriate impacts of required water treatment plant expansion and impacts to surface water discharge water quality.	2.0 Project Description 6.0 Alternatives
	Identify controls/mitigation strategy addressing potential overdraft of groundwater.	2.0 Project Description
	City is required to submit a Report of Waste Discharge at least 150 days prior to operating the ASR project.	2.0 Project Description
Department of Water Resources	City needs to complete an antidegradation analysis.	4.2 Water Quality
	Implementation should be coordinated to maintain consistency with regional efforts. EIR should document ASR as a method of maintaining groundwater as a sustainable resource, and improvement to the City's water supply reliability.	2.0 Project Description
Sacramento Groundwater Authority	Encourage the City of Roseville to participate in the Sacramento Regional Contamination Issues Committee, and in the State and Federal land surface subsidence monitoring efforts.	2.0 Project Description
Placer County Air Pollution Control District	Short-term construction impacts should be mitigated in compliance with PCAPCD rules and regulations.	Initial Study Checklist: Appendix A
Public Comments		Referenced in EIR
Why not use other storage systems (above ground) instead of aquifer?		6.0 Alternatives
Why not store water instead of releasing/overflow of Folsom on wet years?		6.0 Alternatives
When aquifer (well) water was supplied to Sun City as a test use, there were many negative consequences. Address these issues, i.e., skin itch and rash, and too much salt in water.		4.2 Water Quality
How often will aquifer water be tested before distribution?		2.0 Project Description
Major concern is the sodium content in well water.		4.2 Water Quality
Sun City families should not be considered a standard family in size or make-up in your studies regarding consumption.		Consumption standards are not an issue evaluated in the ASR EIR.
Address potential effect of ASR water with blood pressure medicine. If put on this water again, we need to be notified so I can notify my doctor and see about bottled water or a home purification system.		4.2 Water Quality
The first option should be above-ground storage. Underground storage should be absolutely the last option.		6.0 Alternatives

Public Comments	Referenced in EIR
Maximize use of ASR water for irrigation uses, etc. - other than household use.	6.0 Alternatives
Blend ASR water with surface water at a 1:4 ratio in storage/blending tanks.	2.0 Project Description 4.2 Water Quality
DEIR needs to clearly state all the potential uses of groundwater, how much used and when.	2.0 Project Description
Explain how/if the State Water Resources Control Board has oversight of this process.	2.0 Project Description
What exactly are the "Regional Conjunctive Use Program Goals" Where in California has ASR been used and for how long?	2.0 Project Description
Identify "any" health issues or risks associated with the various groundwater properties.	4.2 Water Quality
Discuss the issue of declining groundwater levels.	2.0 Project Description
What types of monitoring programs will be established?	2.0 Project Description 4.2 Water Quality
Discuss project cost, how it will be funded, and whether there is enough surface water to meet current demands.	2.0 Project Description
Explain how much surface water will be injected, how it will be measured and monitored, and whether the amount recovered will exceed the amount injected.	2.0 Project Description
Explain the process for water treatment prior to injection and extraction.	2.0 Project Description
Mitigation should be treatment of the extracted amount prior to delivery. If this is not feasible, explain why.	2.0 Project Description 6.0 Alternatives
Will the ASR program create the need for expansion of the Water Treatment Plant?	2.0 Project Description
Explain the "use or lose" component of the City's surface water supply.	2.0 Project Description
Address potential impacts to biologic resources.	Initial Study Checklist: Appendix A
Include exhibit showing the well discussion/location in the Del Webb Specific Plan EIR.	Appendix F
Identify sources of surface water supply contract limitations, etc. Implications of future annexations, using RHNA numbers.	2.0 Project Description 5.0 CEQA Considerations
Compare ASR water quality to the surface water.	4.2 Water Quality
Identify measures to neutralize or mitigate water quality contamination in the aquifer?	4.2 Water Quality
Identify surface water supply and demand data, including sources of surface water and demand at build-out.	2.0 Project Description
What are cumulative demand amounts for potential annexations being planned?	2.0 Project Description
Are new development "supply and demand" years based on "dry years"?	2.0 Project Description
Would there be policy changes associated with project? Flexible Long-term Water Supply Planning Policy?	2.0 Project Description
Include information about the pilot test, and concerns raised during the pilot test.	1.0 Introduction
Will public be notified of distribution of groundwater in the future?	2.0 Project Description

Public Comments	Referenced in EIR
Please analyze and discuss water quality issues including cumulative impacts associated with: urban runoff, drainage and infiltration of stormwater, pesticides, traffic pollutants, reclaimed water, rail yards, golf courses, agriculture, including livestock.	4.2 Water Quality
Address atrazine, DBP, arsenic, nitrates, and groundwater contamination. Reference groundwater contamination concerns in the state.	4.2 Water Quality
How will evolving research impact the City's Risk Management and overall costs as more groundwater risks are discovered?	4.2 Water Quality
Consider a storage tank alternative.	6.0 Alternatives

1.6 Lead, Responsible and Trustee Agencies

As required by CEQA, this DEIR defines Lead, Responsible and Trustee Agencies. The City is the Lead Agency for the project because it holds principal responsibility for approving the project. A Responsible Agency refers to a public agency other than the Lead Agency that has discretionary approval over the project. Responsible agencies include: the RWQCB and the California Department of Public Health (DPH). A Trustee Agency is defined as a state agency that has jurisdiction by law over natural resources that are held in trust for the people of the state. The California Department of Fish and Game (CDFG), the California Department of Toxic Substances Control (DTSC), the California Public Utilities Commission (CPUC), the State Water Resources Control Board (SWRCB), the Placer County Air Pollution Control District, and the Placer County Environmental Health Division are Trustee Agencies with respect to this project.

1.7 Environmental Review Process

This EIR has been prepared to meet all of the substantive and procedural requirements of CEQA (California Public Resources Code Section 21000 et seq.). As the Lead Agency, the City has primary responsibility for conducting the environmental review and approving or denying the project.

During the preparation of the EIR, agencies, organizations, and persons who the City believed might have an interest in this project were contacted. Information, data, and observations from these contacts are included in the EIR. Agencies or interested persons who did not respond during the public review period for the NOP will have an opportunity during the 45-day public review period for the DEIR, as well as at public hearings on the project.

This DEIR and the Notice of Availability that the EIR is available for public review, has been distributed to agencies that have commented on the NOP, surrounding cities, and interested parties for a 45-day public review period. Copies of the DEIR are available for review at the following locations:

City of Roseville Permit Center
 311 Vernon Street
 Roseville, CA 95678
 Hours: Monday-Friday 8 a.m. to 5 p.m.

Roseville Main Library
225 Taylor Street
Roseville, CA 95678

Martha Riley Community Library
1501 Pleasant Grove Boulevard
Roseville CA 95747

City of Roseville Website: www.roseville.ca.us/gov/community_development/edpn.asp

Copies of all technical documents referenced in this DEIR are available at the City of Roseville Permit Center at the address referenced above.

Interested parties may provide comments on the DEIR in written form during the 45-day public comment period. Comments should be addressed to:

Terri Shirhall, Administrative Analyst
City of Roseville Environmental Utilities Department
2005 Hilltop Circle
Roseville, CA 95747
tshirhall@roseville.ca.us

Upon completion of the 45-day public review period, written responses to all significant comments raised with respect to the environment will be prepared and incorporated into the Final EIR (FEIR). Written responses to comments received from any State agencies will be made available to those agencies at least ten days prior to the public hearing during which the certification of the FEIR will be considered. These comments and their responses will be included in the FEIR for consideration by the City Council, as well as any other public decision-makers. The process will culminate with City Council hearings to consider certification of the FEIR and whether to approve the proposed project.

According to the Public Resources Code, Section 21081, the Lead Agency must make specific Findings of Fact (Findings) before approving the FEIR when the EIR identifies significant environmental impacts that may result from a project. The purpose of the Findings is to establish the connection between the contents of the FEIR and the action of the Lead Agency with regard to approval or rejections of the project. Prior to approval of a project, one of three findings must be made as follows:

- Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the FEIR.
- Such changes or alternations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives in the DEIR.

Additionally, according to PRC Section 21081.6 (a)(1), for projects in which significant impacts will be avoided by mitigation measures, the Lead Agency must prepare a mitigation monitoring program (MMP) to be adopted at the same time the Lead Agency decision-making body makes its Findings. The purpose of the MMP is to ensure compliance with required mitigation during implementation of the project. An MMP will be developed as part of the Final EIR.

There are instances in which significant impacts may not be mitigated to a less-than-significant level. When this occurs, impacts are considered significant and unavoidable. If a public agency approves a project that has significant and unavoidable impacts, the agency shall state in writing the specific reasons for approving the project based on the DEIR and any other information in the public record. This document is termed a “Statement of Overriding Considerations” and is used to explain the specific reasons why, in the minds of agency decision-makers, the benefits of a proposed project make its unavoidable significant environmental effects acceptable. That statement is prepared, if required, after the FEIR has been completed, yet before action to approve the project has been taken.

1.7.1 EIR Adequacy

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines and recent court decisions, which provide the standard of adequacy on which this document is based. The Guidelines state as follows:

“An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.”

1.8 Document Organization

This DEIR has been designed for easy use and reference. To help the reader locate information of particular interest, a brief summary of the contents of each section of the DEIR is provided. This report includes seven principal parts:

- **Introduction (Chapter 1)** - Provides a brief project background and description of the EIR, including its purpose, intended use, type, scope, and standards for adequacy; and identification of lead, responsible, and trustee agencies; a description of the environmental review process; and a summary of how the document is organized.

- **Project Description (Chapter 2)** - Includes a discussion of the project site(s); a statement of project objectives; a general description of the project's technical and environmental characteristics, including proposed ASR Program operational parameters; and required governmental approvals.
- **Summary of Impacts and Mitigation Measures (Chapter 3)** - Presents an overview of the results and conclusions of the environmental evaluation. This section identifies project impacts for the ASR Program and available mitigation measures for use by the City in reviewing the project and establishing conditions under which the project may be implemented. It also identifies the level of significance of project-related impacts both before and after the imposition of mitigation measures.
- **Environmental Setting, Impacts, and Mitigation Measures (Chapter 4)** - Includes analysis of baseline environmental conditions and impacts that would or could result from ASR Program implementation. It also identifies potentially feasible mitigation measures that, if adopted, would reduce the level of significance of environmental impacts. The results of field visits, data collection, and results of agency contacts are included in the analysis.
- **CEQA Considerations (Chapter 5)** - Includes a discussion of certain specific issues that CEQA requires: significant unavoidable adverse impacts, irreversible environmental changes, growth inducement, and cumulative impacts.
- **Alternatives Analysis (Chapter 6)** - Includes an assessment of alternative methods for accomplishing most of the basic objectives of the proposed project while substantially lessening at least one significant impact of the project. This assessment, required by CEQA, provides information for decision-makers to make a reasoned choice among potentially feasible alternatives based on the impacts of the project.
- **Appendices** - Contains technical analyses, reference items and reports providing support and documentation of the analyses in the EIR.

1.9 Documents Incorporated by Reference

In accordance with Section 15150 of the State CEQA Guidelines, this DEIR incorporates the following documents by reference:

- City of Roseville 2025 General Plan (as amended 2010);
- West Roseville Specific Plan, February 2004. SCH No.2002082057
- North Roseville Specific Plan, July 1997. SCH No.96112014
- Hewlett-Packard Master Plan Draft Environmental Impact Report, February 1996. SCH No.95112022
- Del Webb Specific Plan Environmental Impact Report, September 1993. SCH No.93042005
- City of Roseville Diamond Creek Well Project, Initial Study/Mitigated Negative Declaration. February 2002.

- City of Roseville Aquifer Storage and Recovery Demonstration Test Phase 2, Initial Study Negative Declaration. June 2005.
- Sierra Vista Specific Plan EIR, May 2010.SCH No.2008032115 (Updated General Plan to 2025)

These documents are referenced and certain elements are discussed and summarized in this DEIR. Copies of each of these documents, as well as all documents referenced in this DEIR, are available for review, weekdays, during normal business hours, at the City of Roseville Permit Center, 311 Vernon Street, Roseville, California 95678.

1.10 Mitigating Ordinances and Standards

In April 2008, the City adopted Findings of Fact under Resolution 08-172, confirming that the development policies and standards uniformly applied by the City on a City-wide basis will substantially mitigate environmental effects, unless substantial new information indicates significant effects would still occur. The following adopted policies apply to the proposed project and were considered in the CEQA evaluation of potential project effects.

- The City's Noise Ordinance (Municipal Code Section 9.24) exempts City operations and activities from noise ordinance regulation. The noise ordinance specifies noise-generating construction activities should be limited to Monday through Friday from 7 a.m. to 7 p.m. and Saturday/Sunday from 8 a.m. to 8 p.m. The ordinance (Section 9.24.160) does allow the City Manager (or the Manager's designee) to grant exceptions.
- The City's Tree Preservation Ordinance (Roseville Municipal Code, Chapter 19.66) establishes an in-lieu mitigation fee for projects that would affect native oak trees.
- The City's Construction Standards (Resolution 01-208) require the Contractor to stop construction if signs of an archeological site are discovered during construction of the project, halt all work, and notify the City Community Development Department. The City shall then notify a qualified archeologist, and additional mitigation may be required.
- The City's Grading Ordinance and Construction Standards require grading plans to include an erosion control plan to eliminate offsite flows of sediment and to reduce site erosion.
- The City's Design Standards (Resolution 02-37) and Construction Standards require preparation of an erosion and sediment control plan intended to protect water quality in streams and drainages, the storm drain system, and adjacent properties.
- The Roseville Municipal Code, via the Drainage Fees for the Dry Creek Watershed (Roseville Municipal Code, Chapter 4.49), provides funding for improvements sufficient to mitigate potential flooding impacts within and downstream of the Dry Creek Watershed.

- The City’s Flood Damage Prevention Ordinance (Roseville Municipal Code, Chapter 9.80) includes measures designed to prevent or regulate construction of flood barriers that may divert floodwater or increase flood hazards. This ordinance includes standard requirements for all new construction, including regulation of development with the potential to impede or redirect flood flows, and methods and provisions restricting uses that could result in damaging increases in erosion or flood height/velocities.
- The Roseville Municipal Code (RMC Title 13, Ch. 28) requires that any roadwork resulting in traffic lane closures be approved by the City’s Engineering Department, and that the Police and Fire Departments be noticed 48 hours in advance of any road closures.

1.11 Standard Terminology/Acronyms

This DEIR uses the following terminology, acronyms and abbreviations.

No impact	No change from existing conditions (no mitigation is needed).
Less-than-significant impact	No substantial adverse change in the physical environment (no mitigation is needed).
Potentially significant impact	An impact that might cause a substantial adverse change in the environment (mitigation is recommended because potentially significant impacts are treated as significant).
Significant impact	An impact that would cause a substantial adverse change in the physical environment (mitigation is recommended).
Significant and unavoidable impact	An impact that would cause a substantial adverse change in the physical environment and that cannot be avoided, even with the implementation of recommended mitigation.
Proposed project	Aquifer Storage and Recovery Program, as described above and throughout this DEIR.
Project site	Project site(s) identified as described in Chapter 3 and throughout this DEIR.
AF	acre-feet
AFY	acre-feet per year
ASR	Aquifer Storage and Recovery
BMP	best management practices
AB	Assembly Bill
ADWF	Average Dry Weather Flow
Cal/EPA	California Environmental Protection Agency
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CNEL	Community Noise Equivalent Level
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act

CVRWQCB	Central Valley Regional Water Quality Control Board
dB	decibel
dBA	A-weighted noise level in decibels
DBP	Disinfection By-Products
DPH	California Department of Public Health
DWR	Department of Water Resources
EIR	Environmental Impact Report
gpm	gallons per minute
MAF	million acre feet
M&I	municipal and industrial
MCLs	Maximum Contaminant Levels
mg	million gallon(s)
mgd	million gallons per day
mg/L	milligram per liter
msl	mean sea level
NOP	Notice of Preparation
ppb	parts per billion
ppm	parts per million
RO	reverse osmosis
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Council of Governments
SDWA	Safe Drinking Water Act
SGA	Sacramento Groundwater Authority
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
THM	trihalomethanes
TOC	Total Organic Carbon
µg/L	micro grams per liter