



ORANGE COUNTY
CLERK-RECORDER
CEQA FILING COVER SHEET

30-05/14/2025-0351

202585000458

FILED

May 14, 2025

HUGH NGUYEN

CLERK - RECORDER

By: *Kalci DO*
Deputy clerk

Complete and attach this form to each CEQA Notice filed with the County Clerk-Recorder

TYPE OR PRINT CLEARLY

Project Title

SYPHON RESERVOIR IMPROVEMENT PROJECT

Check Document being Filed:

- ☒ Environmental Impact Report (EIR)
- ☐ Mitigated Negative Declaration (MND) or Negative Declaration (ND)
- ☐ Notice of Exemption (NOE)
- ☐ Other (Please fill in type):

**FILED IN THE OFFICE OF THE ORANGE
COUNTY CLERK-RECORDER ON** May 14, 2025
Posted for 30 **days**
DEPUTY KALCI DO

Filing fees are due at the time a Notice of Determination/Exemption is filed with our office. For more information on filing fees and No Effect Determinations, please refer to California Code of Regulations, Title 14, section 753.5.



Irvine Ranch Water District
Notice of Determination

To: ☒ Orange County Clerk Recorder ☒ Office of Planning and Research
County Administration South 1400 Tenth Street, Room 121
601 N Ross Street Sacramento, CA 95814
Santa Ana, CA 92701

From: Irvine Ranch Water District
Water Resources & Environmental
Compliance
15600 Sand Canyon Avenue
Irvine, CA 92618

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

PROJECT TITLE: Syphon Reservoir Improvement Project **STATE CLEARINGHOUSE NO.** 2019080009

PROJECT LOCATION - Specific: The project would be built within the IRWD service area at the site of the existing Syphon Reservoir, located in unincorporated Orange County, California, on the northeast side of Portola Parkway between Bee Canyon Access Road and State Route 133.

PROJECT LOCATION - City/County: City of Irvine / Orange County, CA

PROJECT DESCRIPTION: The project would increase the capacity of the existing recycled water reservoir from approximately 500 acre-feet (AF) to 5,000 AF. The project would replace the existing engineered dam with a new engineered dam, increasing the existing 59-foot dam height to 136 feet and increasing the elevation of the dam crest from the existing 388 feet above mean sea level (amsl) to 466 feet amsl. A new spillway would be included with the new dam to protect the reservoir from overtopping. As part of the new design, the engineered embankment dam would include a seepage control drainage system and a circulation system for the reservoir. The existing strainer and disinfection facilities would be demolished, reconstructed and expanded at the toe of the new dam to provide filtration and disinfection. Additional project features include new onsite access and maintenance roads; on-site and off-site wetland and riparian mitigation areas; and potential recreational facilities.

Environmental review of the potential impacts associated with the change in status of Crotch's bumble bee (*Bombus crotchii*; CBB) to candidate for listing under the California Endangered Species Act (CESA) has been completed, and Addendum No. 2 to the Syphon Reservoir Improvement Project's Final Environmental Impact Report (FEIR) has been prepared. At the time the FEIR was certified in 2021, CBB was not a candidate for listing under CESA. In 2022, after the FEIR was certified, CBB became a candidate for State listing under CESA. The FEIR determined that construction of the expanded reservoir would temporarily remove and permanently displace native and non-native upland habitat and disturbed land cover around the reservoir, including various types of coastal sage scrub (CSS), which may serve as suitable foraging and nesting habitat for CBB. The purpose of Addendum No. 2 is to describe and evaluate the potential environmental effects associated with the change in listing status of CBB pursuant to CEQA Guidelines Section 15164.

PUBLIC AGENCY APPROVING PROJECT: Irvine Ranch Water District

PROJECT APPLICANT: Irvine Ranch Water District **PHONE:** (949) 453-5300

FILED

MAY 14 2025

HUGH NGUYEN, CLERK-RECORDER

BY: VP DEPUTY

PROJECT APPROVAL: This is to advise that on July 26, 2021, the Irvine Ranch Water District's Board of Directors, at its meeting, acting as the Lead Agency, made the following determinations regarding the Syphon Reservoir Improvement project:

- (a) The project will not have a significant effect on the environment.
- (b) An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
- (c) Mitigation measures were made a condition of the approval of the project.
- (d) A mitigation reporting or monitoring plan was adopted for this project.
- (e) A Statement of Overriding Considerations was not adopted for this project.
- (f) Findings were made pursuant to the provisions of CEQA.

On May 12, 2025, the Irvine Ranch Water District's Board of Directors, at its meeting, approved Addendum No. 2 to the Syphon Reservoir Improvement Project FEIR. Therefore, the following determinations are made in connection with the Syphon Reservoir Improvement Project:

- (a) The project will not have a significant effect on the environment.
- (b) An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
- (c) Mitigation measures were made a condition of the approval of the project.
- (d) A mitigation reporting or monitoring plan was adopted for this project.
- (e) A statement of Overriding Considerations was not adopted for this project.
- (f) Findings were made pursuant to the provisions of CEQA.

Based upon the evidence submitted and as demonstrated by the analysis included in Addendum No. 2, the Board determined none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent Environmental Impact Report have occurred; specifically:

- (a) The change in listing status of CBB does not represent a substantial change in the Syphon Reservoir Improvement Project that would require major revisions to the FEIR because of new significant environmental effects or a substantial increase in the severity of previously identified significant environmental effects;
- (b) The change in listing status of CBB does not represent a substantial change with respect to the circumstances under which the Syphon Reservoir Improvement Project would be undertaken that would require major revisions to the FEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant environmental effects; and
- (c) The change in listing status of CBB does not represent new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the FEIR was certified as complete, that shows any of the following:
 - i. The Syphon Reservoir Improvement Project will have one or more significant effects not discussed in the FEIR;
 - ii. Significant environmental effects previously examined will be substantially more severe than shown in the FEIR;
 - iii. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects, but IRWD declines to adopt the mitigation measure or alternative; or
 - iv. Mitigation measures or alternatives which are considerably different from those analyzed in the FEIR would substantially reduce one or more significant effects on the environment, but IRWD declines to adopt the mitigation measure or alternative.

The Final EIR with comments and responses, Addendum No. 1, Addendum No. 2, and record of project approval are available to the General Public at 15600 Sand Canyon Avenue, Irvine, CA 92618.

FILED

MAY 14 2025

HUGH NGUYEN, CLERK-RECORDER

BY:  DEPUTY

STAFF CONTACT PERSON: Fiona Sanchez, Director of Water Resources **PHONE:** 949-453-5325



Authorized Signature

Director of Water Resources

Title

May 14, 2025

Date

FILED

MAY 14 2025

HUGH NGUYEN, CLERK-RECORDER

BY:



DEPUTY



ORANGE COUNTY
CLERK-RECORDER
CEQA FILING COVER SHEET

Recorded In Official Records, Orange County
Hugh Nguyen, Clerk-Recorder



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202185000581 8:34 am 07/27/21

135 11A Z02

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Complete and attach this form to each CEQA Notice filed with the County Clerk-Recorder

TYPE OR PRINT CLEARLY

Project Title

SYPHON RESERVOIR IMPROVEMENT PROJECT

Check Document being Filed:

- ☒ Environmental Impact Report (EIR)
- ☐ Mitigated Negative Declaration (MND) or Negative Declaration (ND)
- ☐ Notice of Exemption (NOE)
- ☐ Other (Please fill in type):

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JUL 27 2021

ORANGE COUNTY CLERK-RECORDER DEPARTMENT

BY: _____ DEPUTY

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JUL 27 2021

ORANGE COUNTY CLERK-RECORDER DEPARTMENT

BY: _____ DEPUTY

FILED IN THE OFFICE OF THE ORANGE
COUNTY CLERK-RECORDER ON July 27, 2021

Posted July 27, 2021 Removed _____

Returned to agency on _____

DEPUTY SANDRA VALENCIA LOPEZ

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MAY 14 2025

HUGH NGUYEN, CLERK-RECORDER

BY: _____ DEPUTY

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FILED

JUL 27 2021

ORANGE COUNTY CLERK-RECORDER DEPARTMENT

Notice of Determination

BY: _____ DEPUTY

Appendix D

TO:

☒ Office of Planning and Research
For U.S. Mail: _____ Street Address: _____
P.O. Box 3044 _____ 1400 Tenth Street
Sacramento, CA 95812-3044 _____ Sacramento, CA 95814

☒ County Clerk
County of: Orange _____
Address: 601 N. Ross St. _____
Santa Ana, CA 92701 _____

FROM:

Public Agency: Irvine Ranch Water District

Address: 15600 Sand Canyon Ave.

Irvine, CA 92618

Contact: Jo Ann Corey

Phone: (949) 453-5326

Lead Agency (if different from above): _____

Address: _____

Contact: _____

Phone: _____

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2019080009

Project Title: Syphon Reservoir Improvement Project

Project Location (include county): The proposed project would be built within the IRWD service area at the site of the existing Syphon Reservoir, located in unincorporated County of Orange, California, on the northeast side of Portola Parkway between Bee Canyon Access Road and State Route 133.

Project Description: The proposed project would increase the capacity of the existing recycled water reservoir from approximately 500 acre-feet (AF) to 5,000 AF. The proposed project would replace the existing engineered dam with a new engineered dam, increasing the existing 59-foot dam height to 136 feet and increasing the elevation of the dam crest from the existing 388 feet above mean sea level (amsl) to 466 feet amsl. A new spillway would be included with the new dam to protect the reservoir from overtopping. As part of the new design, the engineered embankment dam would include a seepage control drainage system and a circulation system for the reservoir. The existing strainer and disinfection facilities would be demolished, reconstructed and expanded at the toe of the new dam to provide filtration and disinfection. Additional project features include new onsite access and maintenance roads; wetland and riparian mitigation areas; and potential recreational facilities.

FILED

MAY 14 2025

HUGH NGUYEN, CLERK-RECORDER

BY: _____ DEPUTY

This is to advise that the Irvine Ranch Water District has approved the above described project on
(☒ Lead Agency or ☐ Responsible Agency)

July 26, 2021 and has made the following determinations regarding the above described projects.
(Date)

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

POSTED

JUL 27 2021

ORANGE COUNTY CLERK-RECORDER DEPARTMENT

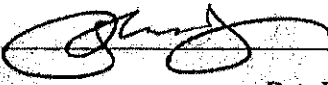
BY: _____ DEPUTY

36-27-27-05602

This is to certify that the final EIR with comments and responses and record of project approval, or the Negative Declaration, is available to the General Public at:

In Person: Irvine Ranch Water District, 15600 Sand Canyon Ave., Irvine, CA 92618

Electronically: <https://www.irwd.com/construction/syphon-reservoir-improvement-project>

Signature (Public Agency) 

Title: Environmental Compliance Analyst

Date: July 27, 2021

Date Received filing at OPR: _____

POSTED

JUL 27 2021

ORANGE COUNTY CLERK-RECORDER DEPARTMENT

BY: 

DEPUTY

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JUL 27 2021

ORANGE COUNTY CLERK-RECORDER DEPARTMENT

BY: 

DEPUTY

FILED

MAY 14 2025



State of California - Department of Fish and Wildlife
2021 ENVIRONMENTAL FILING FEE CASH RECEIPT
DFW 753.5a (REV. 01/01/21) Previously DFG 753.5a

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RECEIPT NUMBER: 30 — 07/27/2021 — 0562
STATE CLEARINGHOUSE NUMBER (If applicable) 2019080009

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY IRVINE RANCH WATER DISTRICT	LEAD AGENCY EMAIL	DATE 07/27/2021
COUNTY/STATE AGENCY OF FILING Orange	DOCUMENT NUMBER 202185000581	

PROJECT TITLE

SYPHON RESERVOIR IMPROVEMENT PROJECT

PROJECT APPLICANT NAME IRVINE RANCH WATER DISTRICT	PROJECT APPLICANT EMAIL	PHONE NUMBER (949) 453-5326
PROJECT APPLICANT ADDRESS 15600 SAND CANYON AVE	CITY IRVINE	STATE CA
		ZIP CODE 92618

PROJECT APPLICANT (Check appropriate box)

- ☐ Local Public Agency ☐ School District ☒ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

- | | | |
|---|------------|-------------|
| ☒ Environmental Impact Report (EIR) | \$3,445.25 | \$ 3,445.25 |
| ☐ Mitigated/Negative Declaration (MND)(ND) | \$2,480.25 | \$ 0.00 |
| ☐ Certified Regulatory Program (CRP) document - payment due directly to CDFW | \$1,171.25 | \$ 0.00 |

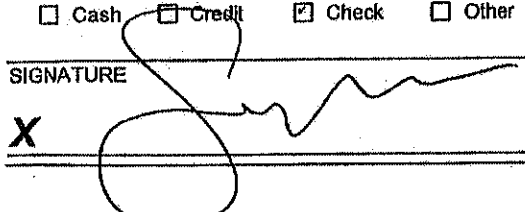
- ☐ Exempt from fee
- ☐ Notice of Exemption (attach)
- ☐ CDFW No Effect Determination (attach)
- ☐ Fee previously paid (attach previously issued cash receipt copy)

- | | | |
|---|----------|---------|
| ☐ Water Right Application or Petition Fee (State Water Resources Control Board only) | \$850.00 | \$ 0.00 |
| ☐ County documentary handling fee | | \$ |
| ☐ Other | | \$ |

PAYMENT METHOD:

- ☐ Cash ☐ Credit ☒ Check ☐ Other

TOTAL RECEIVED \$ 3,445.25

SIGNATURE 	AGENCY OF FILING PRINTED NAME AND TITLE DEPUTY CLERK, SANDRA VALENCIA LOPEZ
--	--

FILED

MAY 14 2025

HUGH NGUYEN, CLERK-RECORDER

BY:  DEPUTY

Orange County
Clerk-Recorder's Office
Hugh Nguyen

601 N. Ross Street
92701

County

Finalization: 20210000408290
7/27/21 8:34 am
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Item	Title	Count
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1	202	1
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EIR: Environmental Impact
Report

Document ID	Amount
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DOC# 202185000581	3445.25
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Time Recorded 8:34 am

Total	3445.25
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Payment Type	Amount
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Check tendered	3445.25
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187469

Amount Due	0.00
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RECEIPT NUMBER:

30 — 05/14/2025 — 0351

STATE CLEARINGHOUSE NUMBER (If applicable)

2019080009

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY IRVINE RANCH WATER DISTRICT	LEAD AGENCY EMAIL	DATE 05/14/2025
COUNTY/STATE AGENCY OF FILING Orange		DOCUMENT NUMBER 202585000458

PROJECT TITLE

SYPHON RESERVOIR IMPROVEMENT PROJECT

PROJECT APPLICANT NAME IRVINE RANCH WATER DISTRICT	PROJECT APPLICANT EMAIL	PHONE NUMBER (949) 453-5300
PROJECT APPLICANT ADDRESS 15600 SAND CANYON AVENUE	CITY IRVINE	STATE CA
	ZIP CODE 92618	

PROJECT APPLICANT (Check appropriate box)

☐ Local Public Agency ☐ School District ☒ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

☐ Environmental Impact Report (EIR)	\$4,123.50	\$ 0.00
☐ Mitigated/Negative Declaration (MND)(ND)	\$2,968.75	\$ 0.00
☐ Certified Regulatory Program (CRP) document - payment due directly to CDFW	\$1,401.75	\$ 0.00

☐ Exempt from fee

☐ Notice of Exemption (attach)

☐ CDFW No Effect Determination (attach)

☒ Fee previously paid (attach previously issued cash receipt copy)

☐ Water Right Application or Petition Fee (State Water Resources Control Board only)	\$850.00	\$ 0.00
☐ County documentary handling fee		\$
☐ Other		\$

PAYMENT METHOD:

☐ Cash ☐ Credit ☐ Check ☐ Other

TOTAL RECEIVED \$ 0.00

SIGNATURE X KALCI DO	AGENCY OF FILING PRINTED NAME AND TITLE KALCI DO, DEPUTY
--------------------------------	--

ADDENDUM NO. 2 TO THE SYPHON RESERVOIR IMPROVEMENT PROJECT FINAL ENVIRONMENTAL IMPACT REPORT

SCH #: 2019080009

Prepared for
Irvine Ranch Water District

May 2025



ADDENDUM NO. 2 TO THE SYPHON RESERVOIR IMPROVEMENT PROJECT FINAL ENVIRONMENTAL IMPACT REPORT

SCH #: 2019080009

Prepared for
Irvine Ranch Water District

May 2025

420 Exchange, Suite 260
Irvine, CA 92602
949.753.7001
esassoc.com



Bend	Pasadena	San Francisco
Irvine	Pensacola	San Jose
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Orlando	Sacramento	Tampa
Palm Beach County	San Diego	Thousand Oaks

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CHAPTER 1

Introduction

1.1 Overview

- 1. Title:** Syphon Reservoir Improvement Project Regulatory Update (Addendum No. 2)
- 2. Lead Agency Name and Address:** Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618
- 3. Contact Person and Phone Number:** Fiona Sanchez, Director of Water Resources, 949-453-5325
- 4. Location:** Northeast of Portola Parkway between Bee Canyon Access Road and State Route 133 (SR-133), Irvine, CA
- 5. Sponsor's Name and Address:** Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618
- 6. General Plan Designation(s):** Open Space Preserve
- 7. Zoning:** General Agriculture
- 8. Description:**

See Section 2.5, *Syphon Reservoir Improvement Project Regulatory Update* below.

9. Surrounding Land Uses and Setting:

The Syphon Reservoir Improvement Project is being implemented at the existing recycled water storage reservoir located within the Irvine Ranch Water District (IRWD) service area. The site is northeast of Portola Parkway between Bee Canyon Access Road and SR-133 in the County of Orange. The Crean Lutheran High School Athletic Complex and the Stonegate Elementary School are located adjacent to the southern boundary of the site. Additionally, there are nearby residential communities, including Stonegate Village, Stonegate East, Woodbury and Woodbury East.

10. Other public agencies whose approval is required:

The Syphon Reservoir Improvement Project requires approvals from the following agencies:

- See Table 1 in Section 2.6, *Proposed Approvals*, below.

1.2 Background and Purpose of the Addendum

IRWD prepared a Final Environmental Impact Report (FEIR) for the Syphon Reservoir Improvement Project (State Clearinghouse No. 2019080009), and a Notice of Determination (NOD) approving the project was filed in compliance with Sections 21108 and 21152 of the Public Resources Code on July 27, 2021. The Syphon Reservoir Improvement Project would increase the storage capacity of the Syphon Reservoir from 500 acre-feet to approximately 5,000 acre-feet to serve the community's seasonal and future recycled water needs. Increased use of recycled water will make more drinking water available and help withstand future water shortages.

The Syphon Reservoir Improvement Project FEIR evaluated the effects of construction and operation of the Syphon Reservoir Improvement Project and presented a comprehensive impact analysis. The Syphon Reservoir Improvement Project FEIR identified that expansion of the Syphon Reservoir would permanently displace or temporarily remove upland habitat, including various types of coastal sage scrub (CSS) and other vegetation around the existing reservoir. At the time the Syphon Reservoir Improvement Project FEIR was certified, Crotch's bumble bee (*Bombus crotchii*; CBB), which may utilize the upland habitat at the Syphon Reservoir Improvement Project site, was not a candidate for listing under the California Endangered Species Act (CESA).

In 2019, the California Fish and Game Commission advanced the CBB to "candidacy" status for listing under CESA. After a legal challenge was resolved, the candidacy was reinstated in 2022. As a result, the CBB is currently a candidate for State listing and is therefore subject to CESA provisions. The Syphon Reservoir Improvement Project site has suitable habitat with potential to support this species. This Addendum No. 2 is being prepared pursuant to CEQA Guidelines Section 15164 to assess potential impacts associated with the change in listing status of CBB. No other project modifications have been proposed.

1.3 Regulatory Background

Per CEQA Guidelines Section 15162, a subsequent EIR must be prepared if:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

- Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Section 15164(a) of the CEQA Guidelines provides that an addendum to a previously certified EIR is permissible if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. As described in detail below, the change in the listing status of the CBB would not result in any of the conditions listed in CEQA Guidelines Section 15162 requiring preparation of a Subsequent EIR. As a result, this Addendum No. 2 to the Syphon Reservoir Improvement Project FEIR has been prepared.

This Addendum No. 2 to the Syphon Reservoir Improvement Project FEIR relies on the significance criteria established in the CEQA Guidelines and the resource analysis methodology, described in the FEIR, to assess the potential impacts related to the change in the listing status of the CBB. Each resource section presents a summary and a determination as to whether the change in the listing status would result in new significant impacts, or a substantial increase in the severity of previously identified significant impacts. Any changes to mitigation measures resulting from preparation of this Addendum are presented in ~~strikeout~~ or underline text.

In compliance with CEQA Guidelines Section 15150, this Addendum No. 2 to the Syphon Reservoir Improvement Project FEIR has incorporated by reference the Draft EIR (DEIR) and FEIR for the Syphon Reservoir Improvement Project, certified by IRWD in 2021, which include all technical studies, analyses, and technical reports that were prepared as part of the DEIR and FEIR.

CHAPTER 2

Description

2.1 Syphon Reservoir Improvement Project Description

The Syphon Reservoir Improvement Project would allow IRWD to increase the storage capacity of the existing recycled water Syphon Reservoir to help IRWD become more self-sufficient by reducing its dependence on costly and less reliable imported water during summer months and supporting the increased use of recycled water for public landscaping, agricultural, business and industrial uses in IRWD's service area. Increased use of recycled water for these non-drinking water purposes would make more water available to the region to meet other treated or untreated demands, better withstand future water shortages, and improve water supply reliability and resiliency in southern California.

The Syphon Reservoir Improvement Project would replace the existing engineered dam with a new engineered dam, increasing the existing 59-foot dam height to 136 feet and increasing the elevation of the dam crest from the existing 388 feet above mean sea level to approximately 466 feet above mean sea level. A spillway would be included with the new dam to protect the reservoir from overtopping. The existing dam includes a spillway that has never been used during its 65-year history, including during IRWD's ownership and operation of Syphon Reservoir. The new engineered dam would result in an increase in the reservoir's maximum water surface elevation from the existing 376 feet above mean sea level to approximately 456 feet above mean sea level and increase the reservoir's approximate capacity from the existing 500 acre-feet to about 5,000 acre-feet. As part of the new design, the engineered embankment dam would include a seepage control drainage system and a circulation/aeration system for the reservoir. The existing strainer and disinfection facilities would be demolished, reconstructed and expanded at the toe of the new dam to provide filtration, chlorination and de-chlorination. Additional project features include new on-site access and maintenance roads; wetland and riparian mitigation areas; and potential recreational facilities.

Similar to existing operations, all recycled water flowing into and out of the Syphon Reservoir for storage would be controlled directly by IRWD. The delivery of recycled water to and from Syphon Reservoir would be accomplished by the addition of pumps within the off-site Eastwood Recycled Water Pump Station. The Eastwood pump station structure has been constructed to enhance IRWD's recycled water delivery systems. The pump station can accommodate the Syphon Reservoir Improvement Project with the installation of additional pump equipment. Installation of the equipment would be coordinated as a separate "equipping project" in parallel to the construction of the Syphon Reservoir Improvement Project. Existing off-site conveyance facilities would be used to deliver tertiary-treated recycled water from the Michelson Water Recycling Plant to the Eastwood Recycled Water Pump Station, and then to Syphon Reservoir via an existing 36-inch recycled water pipeline. The existing Highline Canal would be abandoned in place and no longer used to deliver water from Rattlesnake Reservoir to Syphon Reservoir. Under normal operating conditions, all flow out of Syphon Reservoir would be conveyed back to the Eastwood Recycled Water Pump Station through the same 36-inch recycled water pipeline, for

connection to IRWD's recycled water distribution system (see **Figure 1**). **Figure 2** shows the proposed conceptual layout of the Syphon Reservoir Improvements Project. These project description details have not changed since the certification of the FEIR.

2.2 Syphon Reservoir Improvement Project Objectives

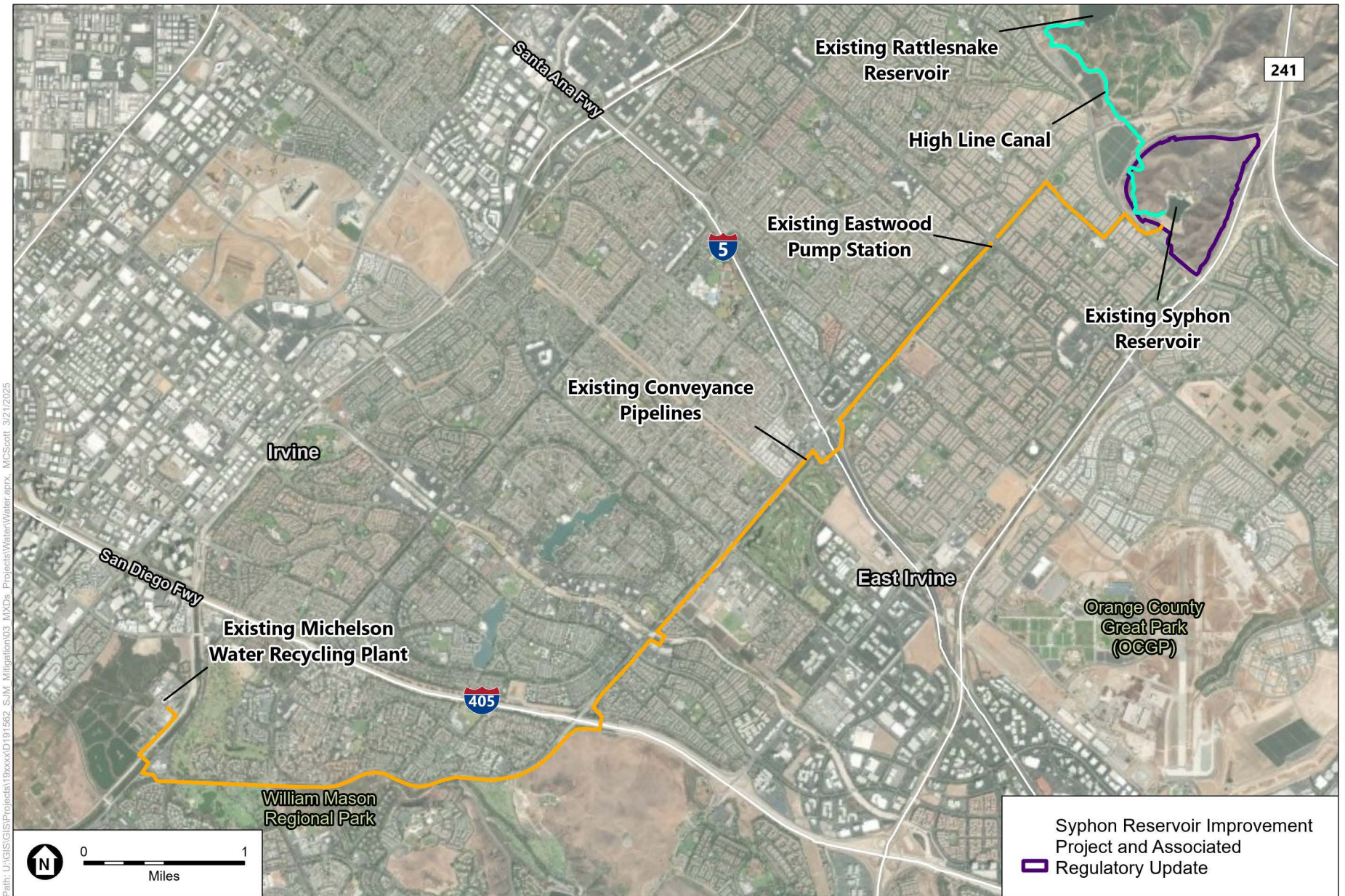
As included in the FEIR, the primary objective of the Syphon Reservoir Improvement Project is to allow for an increase in IRWD's seasonal recycled water storage capacity. In implementing the Syphon Reservoir Improvement Project, IRWD would:

- Improve local water supply reliability by reducing the need to purchase costly imported water from the Metropolitan Water District of Southern California (MWD) by storing additional recycled water during low demand periods for use when needed during high demand periods;
- Ensure the new engineered dam and reservoir meet or exceed the current safety and design requirements established by the California Department of Water Resources, Division of Safety of Dams (DSOD), which is the governing state agency associated with this project;
- Reduce diversions of sewage to Orange County Sanitation District;
- Maximize the use of recycled water produced by IRWD for the benefit of IRWD customers; and
- Reduce recycled water discharges to the ocean.

2.3 Syphon Reservoir Improvement Project Public Participation and Project Approval

On August 2, 2019, IRWD published the Notice of Preparation (NOP) of an EIR for a 45-day review period. On August 21, 2019, in accordance with CEQA Guidelines Section 15082, IRWD held a public scoping meeting to describe the proposed Syphon Reservoir Improvement Project, identify the environmental topics that would be addressed, and describe the CEQA process for preparation of the EIR. To notify the public of the Scoping Meeting, IRWD published the legal notification in the *Orange County Register* in five languages, mailed a notification to area residents, and posted information about the meeting on IRWD's website.

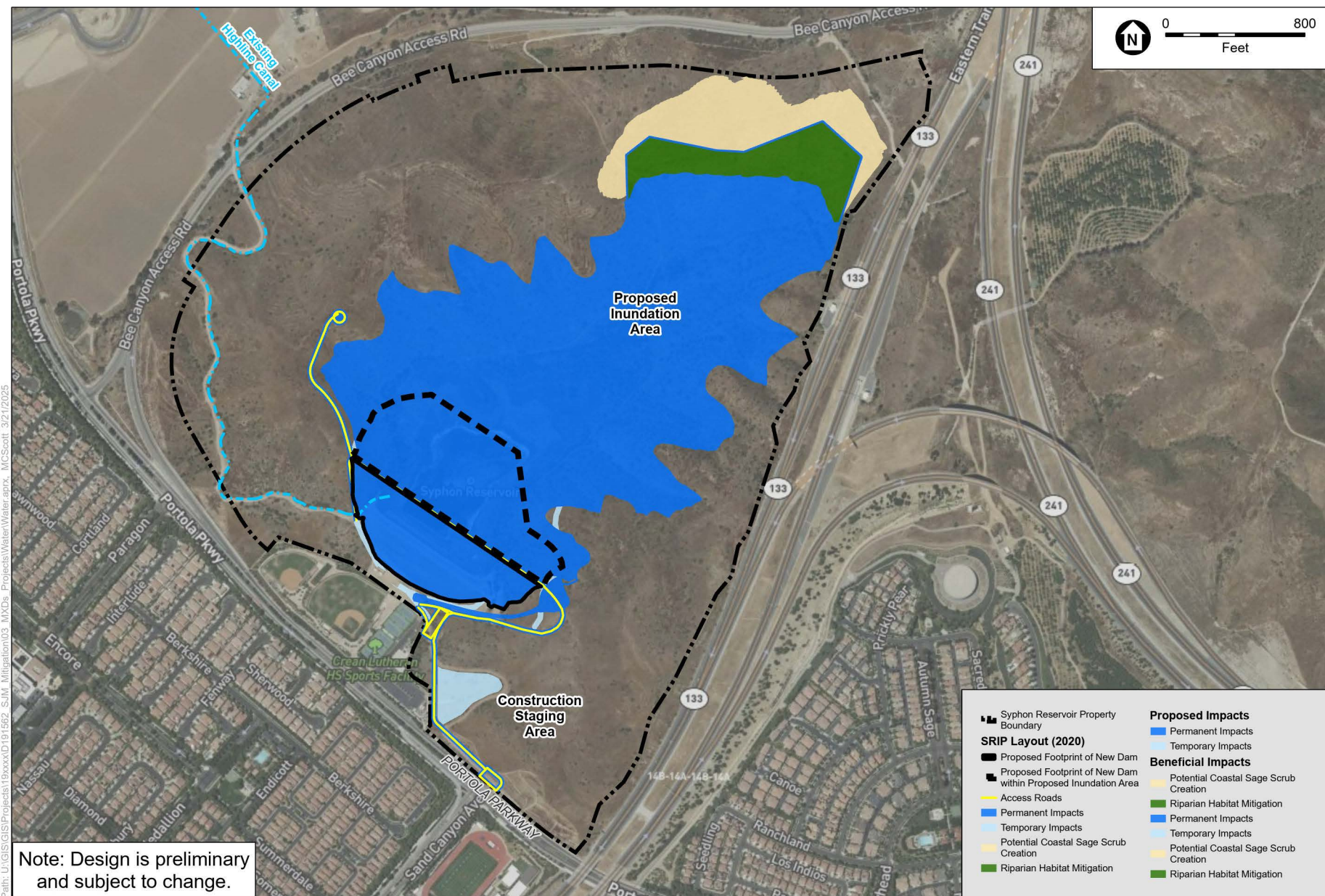
Once the Draft EIR (DEIR) was complete, a Notice of Completion was submitted to the Office of Planning and Research as required by CEQA Guidelines Section 15085, along with copies of the DEIR for distribution to public agencies via the State Clearinghouse (CEQA Guidelines Section 15087(f)). At the same time, a Notice of Availability of the DEIR was posted with the Orange County Clerk (CEQA Guidelines Section 15087(d)). The Notice of Availability also was published in the *Orange County Register* (per CEQA Guidelines Section 15087(d)). The Notice of Availability and DEIR were available at the following IRWD project website address: <http://www.syphonreservoir.com>. Printed copies of the DEIR were available for public review at the Heritage Park Library and the IRWD office as permitted if/when the restrictions due to facility closures and the need for social distancing required in response to the COVID-19 pandemic in effect at the time were lifted by the appropriate governmental agencies.



SOURCE: ESA, 2025; Mapbox, 2025

Syphon Reservoir Improvement Project Regulatory Update

Figure 1
Syphon Reservoir Improvement Project Overview



SOURCE: ESRI, 2020; ESA, 2025.

Syphon Reservoir Improvement Project Regulatory Update

Figure 2
Syphon Reservoir Improvement Project Site Activities

The DEIR was circulated for a 60-day public review period from March 19, 2021 to May 18, 2021. During this public review period, IRWD held one virtual public meeting via Zoom and telephonically, in accordance with State directives in effect at the time regarding public meetings held during the COVID-19 pandemic, to receive public comments on the environmental analysis in the DEIR.

During the public review period, public outreach and notification efforts were conducted to raise awareness about the availability and contents of the DEIR and to encourage public participation. Outreach efforts included the following:

- Information was included in an IRWD newsletter that was mailed or emailed to all 128,334 IRWD customer households;
- A Syphon Reservoir Improvement Project overview video, offered in English, Korean, and Chinese, was posted to YouTube and targeted to IRWD customers and surrounding residents (the videos received more than 41,000 views in a four-week timeframe);
- Individual postcard mailers were sent to more than 2,000 households;
- More than 100 email notifications were sent to elected officials and stakeholder organizations, including the offer for a briefing;
- Briefings with stakeholders;
- Coordination with the City of Irvine to notice the public meeting and comment period; and
- Social media and website notifications.

IRWD certified and approved the Final EIR and a NOD for the project was filed with the County Clerk in Orange County and State Clearinghouse on July 27, 2021. The Final EIR can be accessed at www.syphonreservoir.com.

2.4 Syphon Reservoir Improvement Project Off-site Mitigation (Addendum No. 1)

The Syphon Reservoir Improvement Project FEIR determined that construction of the expanded reservoir would result in impacts to woody riparian and freshwater marsh habitats and stipulated that both on-site riparian/wetland habitat creation and off-site habitat mitigation would be provided to assure that no net loss of such habitats would occur and also to provide appropriate compensation for temporary loss of habitat value. IRWD prepared Addendum No. 1 to the Syphon Reservoir Improvement Project FEIR after extensive consultation with the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) led to the selection of a 33.4-acre IRWD property in the San Joaquin Marsh to be utilized for the off-site riparian and wetland habitat mitigation component. Addendum No. 1 evaluated the potential effects associated with the proposed Syphon Reservoir Improvement Project Off-site Mitigation and verified that no new significant environmental effects or a substantial increase in the severity of previously identified significant effects would occur.

2.5 Syphon Reservoir Improvement Project Regulatory Update (Addendum No. 2)

The Syphon Reservoir Improvement Project FEIR identified that expansion of the Syphon Reservoir would permanently displace or temporarily remove upland habitat, including CSS, around the existing reservoir. At the time the Syphon Reservoir Improvement Project FEIR was certified, CBB, which may utilize the CSS and upland habitat at the Syphon Reservoir Improvement Project site, was not a candidate for listing under CESA. In 2022, after the Syphon Reservoir Improvement Project FEIR was certified, CBB became a candidate for State listing under CESA. This Addendum is being prepared to supplement the original Syphon Reservoir Improvement Project FEIR pursuant to CEQA Guidelines Section 15164 to assess potential impacts associated with the change in status of CBB to candidate for State listing.

2.6 Proposed Approvals

Table 1 presents a preliminary list of the agencies and entities in addition to IRWD that would use this Addendum No. 2 in their consideration of specific permits and other discretionary approvals.

TABLE 1
REGULATORY PERMITS AND AUTHORIZATIONS

Agency	Type of Approval	Needed for
CDFW	Incidental Take Permit under Section 2081 of the California Fish and Game Code	Impacts to CBB

CHAPTER 3

Evaluation of Environmental Impacts

3.1 Aesthetics

Issues (and Supporting Information Sources):	Yes	No
I. AESTHETICS — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Have a substantial adverse effect on a scenic vista?	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☒
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would require the use of construction equipment for a temporary period of 41 months and would not affect the scale or quality of locally designated scenic vistas/viewscales, including Loma Ridge, Santa Ana Mountains, and the San Joaquin Hills. The Syphon Reservoir Improvement Project FEIR concluded that scenic vistas and viewscales in the project vicinity would not be substantially degraded during construction activities, and impacts would be less than significant. Once the Syphon Reservoir Improvement Project is built, the FEIR stated that a retaining wall would be installed that would introduce permanent features into a native landscape that is identified by the City of Irvine as a “major view,” resulting in implementation of Mitigation Measure AES-1, which would require design of the aboveground project structures to have color palettes that blend in with the surrounding character of the project site, reducing the impact to a less than significant level. Additionally, the Syphon Reservoir Improvement Project FEIR identified that the enlarged dam would extend higher than the natural ridgelines and could constitute a permanent impact to the viewscape of prominent ridgelines of Loma Ridge and the Santa Ana Mountains. The Syphon Reservoir Improvement Project FEIR included

revegetation of the dam face as a project design feature, allowing for the enlarged dam to blend into the surrounding hillsides, which reduced the impact to a less than significant level.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no changes to the visual landscape that could impact scenic vistas, and no additional mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project was not located in the vicinity of a state designated or eligible scenic highway, and therefore no impacts would occur.

The changed listing status of CBB does not require modifications to project design or implementation methods. No changes to the visual landscape would occur that could impact scenic resources within a scenic highway, and no mitigation would be required. Therefore, the changed listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The Syphon Reservoir Improvement Project FEIR identified that the project site and surrounding area have moderate to high visual quality but are not considered highly visually sensitive when affected viewers and viewer exposure conditions are taken into account. The low contrasting visual elements of construction (i.e., equipment) would be temporary and would not permanently affect the existing visual character and quality of the surrounding area. To ensure that all permanent aboveground project structures would not impact the visual character or quality of the project site or surrounding area, the Syphon Reservoir Improvement Project FEIR required Mitigation Measure AES-1 to design the aboveground project structures to have color palettes that blend in with the surrounding character of the project site, resulting in a less than significant impact with implementation of mitigation.

The changed listing status of the CBB does not require modifications to project design or implementation methods. No changes to the visual landscape would occur that could impact visual character or the quality of public views of the site and its surroundings; no additional mitigation would be required. Therefore, the changed listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR required nighttime lighting for the treatment facilities and new access road that could affect nighttime views. As a result, Mitigation Measure AES-2 was required for new permanent exterior lighting to be shielded or directed downward to minimize light cast on neighborhood residences directly adjacent to the project site. Additionally, the Syphon Reservoir Improvement Project FEIR specified that when reservoir levels are at their peak in the winter and spring months, the reservoir could create new sources of glare from an increased water surface area. However, this potential increase would be marginal, not in effect in the summer months when daytime hours are at their highest, and only noticeable to motorists travelling on SR-133 for brief periods of time (several seconds). As a result, impacts to nighttime and daytime glare would be less than significant.

The changed listing status of the CBB does not include modifications to project design or implementation methods. No new source of substantial light or glare would occur that would adversely affect views in the area, and no additional mitigation would be required. Therefore, the changed listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Aesthetics

The changed CESA listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects with respect to aesthetics. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162.).

3.2 Agriculture and Forestry Resources

Issues (and Supporting Information Sources):

	Yes	No
II. AGRICULTURE AND FORESTRY RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site was classified by the California Department of Conservation Farmland Map for Orange County as "Other Land," which includes low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry or aquatic facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. The Syphon Reservoir Improvement Project FEIR indicated there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the project vicinity; therefore, there would be no conversion of farmland, and no impact would occur.

The changed listing status of the CBB does not include modifications to project design or implementation methods. No impacts to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur, and no mitigation would be required. Therefore, the changed listing status of the CBB would not

result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site does not include land enrolled in a Williamson Act contract. However, the Syphon Reservoir Improvement Project site is zoned as General Agriculture by the County of Orange. Pursuant to Section 7-9-30.1 of the Orange County Zoning Code, the General Agricultural District is intended to “provide for agriculture, outdoor recreational uses, and those low intensity uses which have a predominantly open space character,” such as the Syphon Reservoir. The Syphon Reservoir Improvement Project FEIR identified that the site would not result in conflicts with the General Agriculture zoning designation because the Syphon Reservoir Improvement Project proposed similar uses; therefore, no impact would occur.

The changed listing status of the CBB does not include modifications to project design or implementation methods. No impacts to zoning for agricultural use or a Williamson Act contract would occur, and no mitigation would be required. Therefore, the changed listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site is currently zoned General Agriculture and the Syphon Reservoir Improvement Project would not affect lands that are zoned as forest land or timberland. Additionally, the Syphon Reservoir Improvement Project does not involve any changes to the current General Plan land use or zoning designations for forest land or timberland. Therefore, there would be no conversion of forest land, timberland, or cause rezoning of existing land uses. and no impact would occur.

The changed listing status of the CBB does not include modifications to project design or implementation methods. No impacts to zoning would occur for forest land or timberland, and no mitigation would be required. Therefore, the changed listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site and surrounding areas contain no forest land. Therefore, implementation of the Syphon Reservoir Improvement Project would result in no impacts related to the loss or conversion of forest land to non-forest use.

The changed listing status of the CBB does not include modifications to project design or implementation methods. No impacts related to the loss or conversion of forest land to non-forest use would occur, and no mitigation would be required. Therefore, the changed listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would not convert Farmland to non-agricultural use or forest land to non-forest use within the Project site and surrounding areas. Therefore, implementation of the Syphon Reservoir Improvement Project would result in no impacts related to the conversion of farmland to non-agricultural use or forest land to non-forest use.

The changed listing status of the CBB does not include modifications to project design or implementation methods. No farmland would be converted to non-agricultural use or forest land to non-forest use, and no mitigation would be required. Therefore, the changed listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Agricultural and Forestry Resources

The changed listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to agricultural and forestry resources. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162.).

3.3 Air Quality

Issues (and Supporting Information Sources):

III. AIR QUALITY —

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

	Yes	No
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

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

Forecast assumptions by the Southern California Association of Governments form the basis of the land use and transportation control portions of the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP). Projects that are consistent with the regional population, housing, and employment forecasts identified by the Southern California Association of Governments and which are generally consistent with land use designations in general plans from pertinent municipalities would not conflict with the AQMP growth projections. The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would result in an increase in short-term employment compared to existing conditions from construction. However, construction jobs would be temporary and as such would not conflict with the long-term employment projections upon which the AQMP is based. Operation of the Syphon Reservoir Improvement Project would neither result in a change in land use nor result in population, housing, or employment growth for the region.

The AQMP also includes control strategies applicable to short-term emissions from construction activities. The Syphon Reservoir Improvement Project FEIR determined that the Syphon Reservoir Improvement Project would be required to comply with the California Air Resources Board (CARB) Air Toxic Control Measure that limits heavy duty diesel motor vehicle idling to no more than five minutes at any given location with certain limited exceptions defined in the regulation for equipment in which idling is integral to the function of the equipment or activity (such as concrete trucks and concrete pouring). In addition, contractors would be required to comply with the CARB In-Use Off-Road Diesel Vehicle Regulation to use lower emitting equipment in accordance with the phased-in compliance schedule for equipment fleet operators. The Syphon Reservoir Improvement Project would also be required to comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403. Compliance with these requirements would be

consistent with and would not conflict with AQMP control strategies intended to reduce emissions from construction equipment and activities.

Nonetheless, as discussed in Impact 3.2-2 of the Syphon Reservoir Improvement Project FEIR, construction of the Syphon Reservoir Improvement Project was found to exceed the significance threshold for nitrogen oxides (NO_x). Therefore, impacts related to consistency with air quality plans during construction of the Syphon Reservoir Improvement Project were found to be potentially significant. Construction-related daily emissions would be reduced to below the SCAQMD threshold of significance for NO_x with the implementation of Mitigation Measure AIR-1. Thus, with implementation of Mitigation Measure AIR-1, the Syphon Reservoir Improvement Project would not conflict with the AQMP, and impacts were reduced to a less than significant level.

The changed listing status of the CBB does not involve generation of additional air pollutant emissions, and as a result, would not conflict with any applicable air quality plans. No additional mitigation would be required. As a result, the changed listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

b) Cumulatively considerable net increase of any criteria pollutant?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would generate air pollutant emissions from vehicle trips generated by construction workers, vendor trucks, and haul trucks traveling to and from the Syphon Reservoir Improvement Project site and the use of construction equipment. Operation of the Syphon Reservoir Improvement Project would not result in new or increased use of motor vehicles, aside from periodic maintenance vehicles. Air pollutant emissions were quantified using the California Emissions Estimator Model for off-road equipment and the On-Road Mobile Source Emissions Factors model for on-road vehicles. The maximum daily construction emissions for the Syphon Reservoir Improvement Project were estimated for each construction phase. Some individual construction phases could potentially overlap; therefore, the estimated maximum daily emissions include these potential overlaps by combining the relevant construction phase emissions. As indicated in the Syphon Reservoir Improvement Project FEIR, construction-related daily emissions were found to exceed the SCAQMD threshold of significance for NO_x. For all other criteria pollutants, emission levels would be below the applicable thresholds of significance. Because maximum regional emissions from construction would exceed the regional threshold of significance for NO_x, regional construction emissions impacts were found to be potentially significant. Construction-related daily emissions were reduced to below the SCAQMD threshold of significance for NO_x with the implementation of Mitigation Measure AIR-1. Thus, the Syphon Reservoir Improvement Project regional construction emissions impacts were mitigated to less than significant.

Annual construction emissions were compared to the General Conformity *de minimis* levels for the National Ambient Air Quality Standard non-attainment areas. In the unmitigated scenario, annual construction emissions of NO_x, were found to exceed the applicable General Conformity *de minimis* level of 10 tons per year. However, with implementation of Mitigation Measure AIR-1, annual construction emissions were found to be below applicable General Conformity *de minimis* levels and thus would not conflict with implementation

of the State Implementation Plan. Therefore, no further conformity analysis was required for any of the pollutants, and no significant adverse effect from the Syphon Reservoir Improvement Project would occur.

During Syphon Reservoir Improvement Project operations, no new permanent vehicle trips would occur because maintenance and recreational activities are anticipated to remain the same as the existing conditions. Operational regional criteria pollutant emissions were found to not exceed one pound per day for all criteria pollutants during operational activities, which would not exceed the SCAQMD thresholds of significance for any criteria pollutants. Therefore, regional operation-related emissions impacts were found to be less than significant. Annual operation-related emissions would be less than 0.2 ton per year, well below any of the applicable General Conformity *de minimis* thresholds. Therefore, no further conformity analysis was required for any of the pollutants because their emissions would be less than the conformity *de minimis* levels, and no significant adverse effect from Syphon Reservoir Improvement Project operations would occur.

The changed listing status of the CBB does not involve the generation of additional air pollutant emissions that would result in a net increase of any criteria pollutant. No additional mitigation would be required. As a result, the changed listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

c) Expose sensitive receptors to substantial pollutant concentrations?

The Syphon Reservoir Improvement Project FEIR identified that construction of the Syphon Reservoir Improvement Project would result in maximum localized construction emissions that would exceed the localized significance threshold for NO_x, and impacts to sensitive receptors would be potentially significant. All other criteria pollutants of local concern (carbon monoxide, particulate matter measuring 10 microns or less in diameter, and particulate matter measuring 2.5 microns or less in diameter) would not exceed the localized significance thresholds. Construction-related emissions would be reduced to below the SCAQMD localized significance threshold for NO_x with the implementation of Mitigation Measure AIR-1. Because the Syphon Reservoir Improvement Project FEIR maximum localized emissions from construction were found to be reduced to below the localized significance threshold, localized construction emissions impacts would be less than significant with the incorporation of Mitigation Measure AIR-1.

The Syphon Reservoir Improvement Project FEIR identified that construction of the Syphon Reservoir Improvement Project would result in a significant impact for lifetime cancer risk because the SCAQMD significance threshold for toxic air contaminant emissions of an incremental cancer risk greater than 10 in one million for any receptor would be exceeded. Implementation of Mitigation Measure AIR-1 would reduce diesel particulate matter emissions from Syphon Reservoir Improvement Project construction activities. The estimated incremental cancer risk for Syphon Reservoir Improvement Project construction activities with implementation of Mitigation Measure AIR-1 would be between 1.43 per million and 3.44 per million, depending on the level at which the mitigation is implemented, which would be well below the significance threshold of 10 in one million. Toxic air contaminant impacts would be less than significant with the incorporation of Mitigation Measure AIR-1. Both unmitigated and mitigated non-carcinogenic health risk impacts of the Syphon Reservoir Improvement Project would be below the

significance threshold of a chronic Hazard Index of 1.0 for the maximum impacted receptor. Therefore, the Syphon Reservoir Improvement Project FEIR found this impact to be less than significant.

The Syphon Reservoir Improvement Project FEIR identified that operation of the Syphon Reservoir Improvement Project would result in maximum daily localized emissions of less than one pound per day and therefore would not exceed localized significance thresholds. Because maximum localized operational emissions would not exceed the SCAQMD localized thresholds of significance for any pollutant, operational emissions impacts to sensitive receptors would be less than significant.

The changed listing status of the CBB does not involve generation of air pollutant emissions that would result in a net increase of any criteria pollutant. As such, the changed listing status of the CBB would not expose sensitive receptors to a substantial pollutant concentration. No additional mitigation would be required. As a result, the changed listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

d) Other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project may emit other emissions such as odors during construction. The Syphon Reservoir Improvement Project would comply with the applicable provisions of SCAQMD Rule 1113, which limits the amount of odor-causing volatile organic compound emissions in architectural coatings and solvents. In addition, the Syphon Reservoir Improvement Project would comply with the applicable provisions of the CARB Air Toxics Control Measure regarding idling limitations for diesel trucks. Furthermore, construction emissions for the Syphon Reservoir Improvement Project would not exceed the SCAQMD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., carbon monoxide and sulfur dioxide). Therefore, Syphon Reservoir Improvement Project construction activities were found to result in less than significant impacts with respect to other emissions, including those leading to odors.

Operation of the Syphon Reservoir Improvement Project would not include land uses associated with odor complaints, which, according to the SCAQMD *CEQA Air Quality Handbook*, typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Furthermore, operational emissions would not exceed the SCAQMD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., carbon monoxide and sulfur dioxide). Therefore, operation of the Syphon Reservoir Improvement Project would result in less than significant impacts with respect to other emissions, including those leading to odors.

The changed listing status of the CBB does not involve generation of air pollutant emissions. As such, the changed listing status of the CBB would not emit other emissions, including those leading to odors, that would adversely affect a substantial number of people and would have no impact. No additional mitigation would be required. As a result, the changed listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Air Quality

The changed listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to air quality. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162.).

References

SCAQMD. 2020c. Air Quality Analysis Handbook. Available at
www.aqmd.gov/home/rulescompliance/ceqa/air-quality-analysis-handbook.

3.4 Biological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Yes</i>	<i>No Impact</i>
IV. BIOLOGICAL RESOURCES — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

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

Special-Status Plants

The Syphon Reservoir Improvement Project FEIR noted that four special-status plant species - Catalina mariposa lily (California Rare Plant Rank [CRPR] 4.2, Central Subregion of the Orange County Central & Coastal Subregions Natural Community Conservation Plan/Habitat Conservation Plan [NCCP/HCP] Covered), intermediate mariposa lily (CRPR 1B.2), multi-stemmed dudleya (CRPR 1B.2), and San Diego viguiera (CRPR 4.3) - were observed during focused surveys of the project site in 2018 and 2019. The Syphon Reservoir Improvement Project was found to avoid removal or damage to any specimens of intermediate mariposa lily, multi-stemmed dudleya, and San Diego viguiera. Therefore, the Syphon Reservoir Improvement Project would not impact these special-status plant species, and no mitigation was required. The Syphon Reservoir Improvement Project was also found to avoid more than 90 percent of the Catalina mariposa lily specimens on-site and would remove approximately 24 of the total 309 Catalina mariposa lily individuals during construction. This loss was determined not to threaten the existence of the on-site population and would not be significant. Moreover, Catalina mariposa lily is a covered species under the NCCP/HCP provided that the Syphon Reservoir Improvement Project complies with the NCCP/HCP provisions; thus, impacts to this species are considered conserved because the

NCCP/HCP Reserve provides for the regional conservation for this and other covered species. Therefore, impacts to Catalina mariposa lily were found to be less than significant.

The changed CBB CESA listing status would not require modifications to project design or implementation methods. As such, no new impacts to special-status plant species would occur, and no mitigation would be required. As a result, the changed listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Special-Status Wildlife

Special-status wildlife species observed, or considered to have a moderate or high potential to occur within the proposed project site, include the following NCCP/HCP Covered Species: coastal California gnatcatcher (*Poliophtila californica californica*), orange-throated whiptail (*Aspidoscelis hyperythra*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), red-shouldered hawk (*Buteo lineatus*), northern harrier (*Circus hudsonius*), American peregrine falcon (*Falco peregrinus anatum*), sharp-shinned hawk (*Accipiter striatus*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), San Diego desert woodrat (*Neotoma lepida intermedia*), and coyote (*Canis latrans*). One species that is Conditionally Covered under the NCCP/HCP, prairie falcon (*Falco mexicanus*), was also observed. Several other species that are not “covered species” under the NCCP/HCP were also identified, including grasshopper sparrow (*Ammodramus savannarum*), Vaux’s swift (*Chaetura vauxi*), and the California fully protected white-tailed kite (*Elanus leucurus*). It should be noted that the two falcons and Vaux’s swift may fly over the site but have virtually no potential to nest on-site. Likewise, white-tailed kite has only been observed foraging or flying over but is not known to nest in the study area.

The coastal California gnatcatcher, orange-throated whiptail, southern California rufous-crowned sparrow, red-shouldered hawk, northern harrier, prairie falcon¹, American peregrine falcon, sharp-shinned hawk, coastal whiptail, San Diego desert woodrat, and coyote, as covered species under the NCCP/HCP, are considered to be conserved within the NCCP/HCP region provided that the project complies with the NCCP/HCP provisions. As a future infrastructure improvement that was originally recognized by the NCCP/HCP and for which IRWD has a credit allotment that can be “spent” or exchanged for the displacement of areas within the NCCP Reserve, the Syphon Reservoir Improvement Project is considered a permitted use within the Reserve System. Potential impacts to Covered Species within the Reserve are considered adequately covered under the NCCP/HCP provided that the proposed project complies with the NCCP/HCP provisions.

The Syphon Reservoir Improvement Project FEIR found that the Syphon Reservoir Improvement Project would permanently remove a total of up to approximately 28.5 acres of CSS communities and would temporarily impact an additional 0.85 acre upon which special-status species rely for habitat. Implementation of Mitigation Measures BIO-1 requires IRWD to utilize some of its allotted Incidental Take Credits for CSS impacts (as a participating landowner) in accordance with NCCP/HCP stipulations. Mitigation Measure BIO-1 also requires additional on- and/or off-site creation, restoration, and/or enhancement of areas containing natural communities suitable for special-status species and also

¹ Prairie falcon is a conditionally covered under the NCCP/HCP. Planned activities are authorized if the habitat is more than one-half mile from an active or historically active nesting site, and this species is currently not known to nest within Orange County, and have not occurred within the county for over a decade (CDFW 2020, Catino-Davenport 2019).

mandates off-site land acquisition, preservation, creation, restoration, and/or enhancement of natural communities suitable for special-status species, as identified at the time the Syphon Reservoir Improvement Project FEIR was certified. Finally, Mitigation Measure BIO-1 requires that areas subject to temporary impacts be returned to pre-project conditions (i.e., pre-project elevation contours and revegetated with native upland scrub species) and stipulates planning and monitoring to achieve that objective. Thus, Mitigation Measure BIO-1 addresses all potential impacts involving loss or displacement of habitat for special-status wildlife species. Therefore, Mitigation Measure BIO-1, along with Mitigation Measures BIO-2 and BIO-3, which are designed to avoid or minimize potential direct impacts to special-status wildlife species, would reduce impacts to a less than significant level.

Least Bell's Vireo

The least Bell's vireo (*Vireo bellii pusillus*) is listed as a federal and state Endangered species but is a Conditionally Covered species under the NCCP/HCP. This species is found in riparian habitat, and 17 least Bell's vireo individuals and/or territories were observed on the Syphon Reservoir Improvement Project site in 2019. The Wildlife Agencies (i.e., USFWS and CDFW) indicated that the NCCP/HCP conditional coverage would apply for the Syphon Reservoir Improvement Project's impacts to least Bell's vireo (subject to implementation of adequate mitigation). The Syphon Reservoir Improvement Project would displace approximately 6.41 acres of woody riparian communities but would also create woody riparian habitat that would provide replacement nesting habitat for the least Bell's vireo. The new riparian habitat areas would be maintained with supplemental irrigation and would not depend on whether the reservoir is full or nearly full to be sustained. Woody riparian habitat around the reservoir perimeter, once established, would provide both foraging and nesting opportunities that would benefit least Bell's vireo and other species. Nevertheless, there would be a temporary habitat loss until construction is completed and riparian habitat that the species can use again can be re-established. This temporary loss was found to be potentially significant in terms of the temporary reduction to the amount of habitat available in the local region. Implementation of Mitigation Measure BIO-1 requires on and/or off-site creation, restoration, and/or enhancement of areas containing natural communities suitable for special-status wildlife species and also mandates off-site land acquisition, preservation, creation, restoration, and/or enhancement of natural communities suitable for special-status wildlife species. Therefore, Mitigation Measure BIO-1, along with Mitigation Measures BIO-2 and BIO-3, which are designed to avoid or minimize potential direct impacts to special-status wildlife species, would reduce impacts to a less than significant level.

Yellow Warbler and Yellow-Breasted Chat

Several yellow warbler (*Setophaga petechia*) and yellow-breasted chat (*Icteria virens*), which utilize woody riparian habitat similar to the least Bell's vireo, were observed on-site in 2019. Although the Syphon Reservoir Improvement Project FEIR found that there would ultimately be no net loss of riparian habitat for the yellow warbler and yellow-breasted chat with the creation of riparian habitat areas on the Syphon Reservoir Improvement Project site, the temporal loss of habitat for yellow warbler and yellow-breasted chat were found to potentially be considered significant because it would reduce the amount of available habitat for these species in the local region until an equivalent habitat area is reestablished. Implementation of Mitigation Measure BIO 1, which includes on-site riparian habitat creation at the Syphon Reservoir site and also the riparian habitat to be established via the Syphon Reservoir Improvement Project Off-Site Mitigation, along with Mitigation Measures BIO-2 and BIO-3, would reduce impacts to a less than significant level.

Avian Species

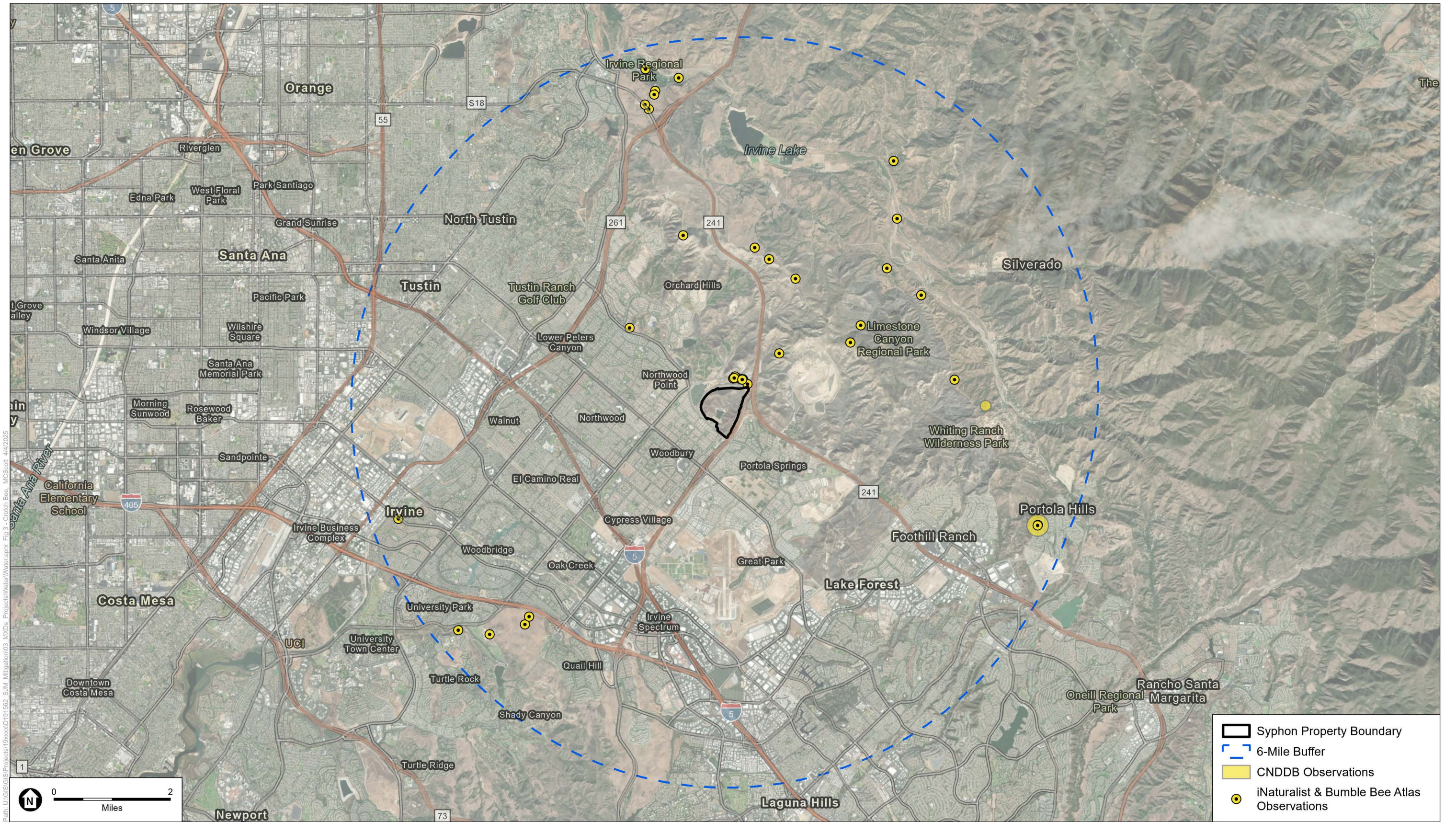
The Syphon Reservoir Improvement Project FEIR found that direct impacts to avian species during the non-breeding season would not be potentially significant because these species are mobile and would be expected to fly away from the construction area, if present. However, if construction and maintenance work cannot be scheduled outside of nesting season, impacts to nesting special-status bird species would be potentially significant. Implementation of Mitigation Measure BIO-3 was found to reduce impacts to a less than significant level.

Crotch's Bumble Bee

In June 2019, the California Fish and Game Commission accepted a petition to list CBB as a candidate for listing as endangered under CESA. Agricultural interests challenged CDFW's ability to list the species, claiming that CESA's definition of a "species" does not cover insects. Due to this ongoing litigation, CBB was not analyzed in the Syphon Reservoir Improvement Project FEIR because it was not a State protected species at the time. In November 2020, the Sacramento Superior Court ruled that insects are not eligible for listing under CESA (*Almond Alliance of California v. California Fish and Game Commission*); however, in May 2022, the California Court of Appeal reversed the prior ruling, deciding that invertebrates are eligible for CESA listing. CDFW then reinstated candidate status for listing under CESA on September 30, 2022.

CBB is one of 26 bumble bee species found in California. CBB generally nests and forages in grassland and scrub habitats. According to CDFW's California Native Diversity Database (CNDDDB), iNaturalist, and the Xerces Society's Bumble Bee Atlas, over 70 CBB observations have been documented within 10 miles of the Syphon Reservoir Improvement Project site (CDFW 2025, iNaturalist 2025, Bumble bee Atlas 2025). **Figure 3** depicts CBB observations within a six-mile maximum flight radius from the Syphon Reservoir Improvement Project site. More than seven CBB observations were documented at the Irvine Ranch Conservancy Native Seed Farm, approximately 0.15 mile north of the Syphon Reservoir Improvement Project site, between 2023 and 2024. CBBs were not documented or analyzed at the time of biological surveys for the Syphon Reservoir Improvement Project because the candidacy status was being legally challenged (2018–2019). However, given the proximity of recent CBB observations as well as the presence of suitable CSS habitat and preferred nectar sources such as deerweed (*Acmispon glaber*), California brittlebush (*Encelia californica*), black sage (*Salvia mellifera*), and white sage (*Salvia apiana*), CBB has a high potential to occur within the Syphon Reservoir Improvement Project site.

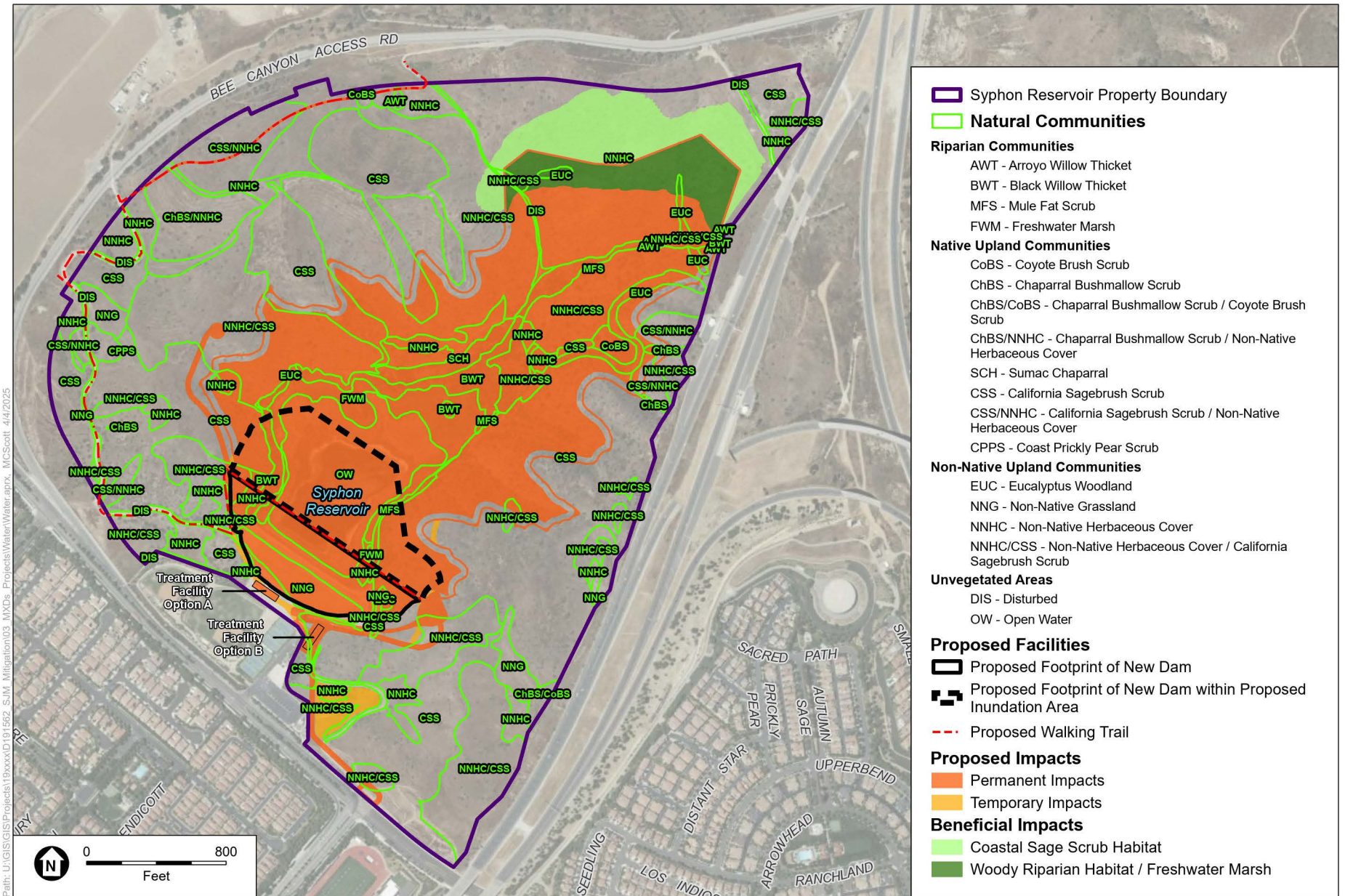
CNDDDB, iNaturalist, and Bumble Bee Atlas observation records indicate that CBB occurs in adjacent habitats. Suitable CBB foraging and nesting habitats within the Syphon Reservoir Improvement Project site are present in the 92.70 acres of native and non-native upland vegetation communities and disturbed land cover (**Figure 4**) identified for temporary adverse impacts, permanent adverse impacts, and permanent beneficial impacts as well as in adjacent surrounding lands.



SOURCE: ESA, 2025

Syphon Reservoir Improvement Project Regulatory Update

Figure 3
Crotch's Bumble Bee Observations



SOURCE: ESRI, 2025

Syphon Reservoir Improvement Project Regulatory Update

Figure 4
Impacts to Natural Communities

The change in status of CBB does not include modifications to any project design or implementation method. Direct effects to CBB may occur during initial site preparation; heavy equipment operation; grading; excavation; trenching and backfilling; installation and/or removal of structures and equipment; vehicle and foot traffic; access road construction, repair and resurfacing; handling of stockpiles and stored materials; soil compaction; vegetation clearing and maintenance (grading, mowing, and grubbing); revegetation requiring disking and excavation; inundation of the lake during operation and maintenance, and creation of the woody riparian mitigation area.

Direct impacts to CBB during construction may occur because the proposed staging area, access roads, new dam footprint, inundation area, and creation of woody riparian mitigation area overlap with areas where CBB have the potential to forage and/or nest. Impacts could occur during pre-construction and construction from crushing nests in burrows in work areas and along access roads around the proposed dam and reservoir and vehicle/equipment strikes. Impacts could also occur during Syphon Reservoir Improvement Project operation from inundating and drowning nests in burrows and collisions with vehicles during operations and maintenance.

Indirect impacts to CBB include the temporal loss of suitable foraging and nesting habitat as a result of Syphon Reservoir Improvement Project implementation and operation, increased habitat fragmentation, edge effects, and the Syphon Reservoir Improvement Project's incremental contribution to cumulative impacts such as noise and vibrations from ground disturbance, the introduction or spread of invasive non-native species, and loss of foraging habitat.

Direct and indirect impacts to CBB would be potentially significant under CEQA. However, implementation of Mitigation Measure BIO-1 included in the Syphon Reservoir Improvement Project FEIR would offset the permanent and temporary impacts to sensitive natural communities suitable for CBB foraging and nesting by conserving off-site habitat and restoration of suitable on-site upland habitat. As part of the original mitigation requirement, IRWD is responsible for establishing CSS habitat, which would be appropriate for CBB, on-site as a permanent beneficial impact in the northeast corner of the Project site (**Figure 5**) in addition to off-site at the Irvine Lake North property (Assessor's Parcel Numbers 105-361-07 and 105-361-09), which has been acquired by IRWD for the purpose of restoration and long-term preservation (**Figure 6**). All mitigation areas associated with the Syphon Reservoir Improvement Project are shown on **Figure 7**.

The Irvine Lake North property currently supports a variety of CSS and chaparral communities which contain abundant floral resources suitable for CBB, including CSS - mixed sage scrub, chamise - sage scrub, black sage scrub, and mixed sage scrub - grassland communities, as shown in **Figure 6**. **Table 2** provides a list of the floral resources observed within the Irvine Lake North property during the site visit conducted on April 2, 2025 and depicts the corresponding bloom period in relation to the colony active period for CBB (April to August).

TABLE 2
IRVINE LAKE NORTH FLORAL RESOURCE INVENTORY

Family Name	Latin Name	Common Name	Habit ^a	Duration ^b	Flower Color ^c	Bloom Period ^d											
						Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Anacardiaceae	<i>Rhus ovata</i>	sugar bush	S/T	P	W-P,R												
Apiaceae	<i>Sanicula arguta</i>	sharp-toothed sanicle	H	P	Y												
Asteraceae	<i>Baccharis pilularis</i> ssp. <i>consanguinea</i>	coyote brush	S	P	W												
Asteraceae	<i>Corethrogyne filaginifolia</i>	common sandaster	H	P	W - P - Pu												
Asteraceae	<i>Cynara cardunculus</i> var. <i>flavescens</i>	cardoon	H	P	B/Pu												
Asteraceae	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	golden yarrow	S	P	Y												
Asteraceae	<i>Gutierrezia californica</i>	California matchweed	SS	P	Y												
Asteraceae	<i>Hazardia squarrosa</i> var. <i>grindelioides</i>	saw-toothed goldenbush	S	P	Y												
Asteraceae	<i>Heterotheca grandiflora</i>	telegraph weed	H	A/P	Y												
Asteraceae	<i>Isocoma menziesii</i> var. <i>vernonioides</i>	coastal goldenbush	S	P	Y												
Asteraceae	<i>Lactuca serriola</i>	prickly lettuce	H	A	W												
Asteraceae	<i>Malacothrix saxatilis</i> var. <i>tenuifolia</i>	short-leaved cliff aster	H/SS	P	W												
Asteraceae	<i>Pseudognaphalium californicum</i>	Ladies' tobacco	H	A/P	W												
Asteraceae	<i>Pseudognaphalium microcephalum</i>	Wright's cudweed	H	P	W/Op												
Asteraceae	<i>Senecio vulgaris</i>	common groundsel	H	A	W – Y												
Asteraceae	<i>Silybum marianum</i>	milk thistle	H	A/P	P – Pu												
Asteraceae	<i>Sonchus asper</i> ssp. <i>asper</i>	sow thistle	H	A	W												
Boraginaceae	<i>Amsinckia menziesii</i>	common fiddleneck	H	A	OY												
Brassicaceae	<i>Hirschfeldia incana</i>	short-pod mustard	H	A/P	Y												
Convolvulaceae	<i>Calystegia macrostegia</i> ssp. <i>arida</i>	Southern California morning glory	V	P	W – P												
Cucurbitaceae	<i>Marah macrocarpa</i>	chilicothe	V	P	W												
Euphorbiaceae	<i>Euphorbia albomarginata</i>	rattlesnake sandmat	H	P	W												
Fabaceae	<i>Acmispon glaber</i> var. <i>glaber</i>	deerweed	SS	P	Y												
Fabaceae	<i>Lathyrus vestitus</i> var. <i>vestitus</i>	hillside pea	H	P	L – Pu												
Fabaceae	<i>Medicago polymorpha</i>	California burclover	H	A	Y												
Fabaceae	<i>Parkinsonia aculeata</i>	Mexican palo verde	T	P	Y												
Geraniaceae	<i>Erodium cicutarium</i>	redstem filaree	H	A	P – Pu												
Hydrophyllaceae	<i>Phacelia ramosissima</i>	branching phacelia	H	P	W/B/L												
Hydrophyllaceae	<i>Phacelia parryi</i>	Parry's phacelia	H	A	Pu												
Iridaceae	<i>Sisyrinchium bellum</i>	blue-eyed grass	H	P	B/Pu/V/W												
Lamiaceae	<i>Salvia apiana</i>	White sage	S	P	W												

Family Name	Latin Name	Common Name	Habit ^a	Duration ^b	Flower Color ^c	Bloom Period ^d											
						Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Lamiaceae	<i>Salvia mellifera</i>	black sage	S	P	W/B/L												
Liliaceae	<i>Calochortus catalinae</i>	Catalina mariposa lily	H	P	W – Pu												
Malvaceae	<i>Malacothamnus fasciculatus</i> var. <i>laxiflorus</i>	splendid bushmallow	S	P	P												
Myrtaceae	<i>Eucalyptus camaldulensis</i>	red gum	T	P	W												
Nyctaginaceae	<i>Mirabilis laevis</i> var. <i>crassifolia</i>	wishbone bush	S	P	P – Pu/R												
Onagraceae	<i>Clarkia botatae</i>	punch bowl godetia	H	A	L – P												
Orobanchaceae	<i>Castilleja exserta</i> ssp. <i>exserta</i>	purple owls' clover	H	A	W, Y, P - Pu												
Orobanchaceae	<i>Castilleja foliolosa</i>	woolly paintbrush	H/SS	P	O-R												
Papaveraceae	<i>Eschscholzia californica</i>	California poppy	H	A/P	O or Y												
Phrymaceae	<i>Diplacus auranticus</i>	orange bush monkeyflower	S	P	Y-O												
Plantaginaceae	<i>Plantago erecta</i>	California plantain	H	A	Op												
Plantaginaceae	<i>Antirrhinum coulterianum</i>	Coulter's snapdragon	H	A	W												
Polygonaceae	<i>Eriogonum fasciculatum</i> var. <i>foliosum</i>	California buckwheat	S	P	W												
Rosaceae	<i>Adenostoma fasciculatum</i> var. <i>fasciculatum</i>	chamise	S	P	W												
Rosaceae	<i>Heteromeles arbutifolia</i>	toyon	T	P	W												
Rubiaceae	<i>Galium angustifolium</i> ssp. <i>angustifolium</i>	narrow-leaved bedstraw	H	P	R – Y												
Rubiaceae	<i>Galium aparine</i>	goose grass	H	A	W												
Solanaceae	<i>Solanum umbelliferum</i> var. <i>umbelliferum</i>	blue witch nightshade	SS	P	L – B/Pu												
Viburnaceae	<i>Sambucus mexicana</i>	blue elderberry	T	P	W-B												

SOURCE: Blooming species observed on Irvine Lake North property as noted during the April 2, 2025 site visit. Floral information is noted as identified within the Jepson Flora Project (eds.) 2025. *Jepson eFlora*, <https://ucjeps.berkeley.edu/eflora/> [accessed on April 18, 2025].

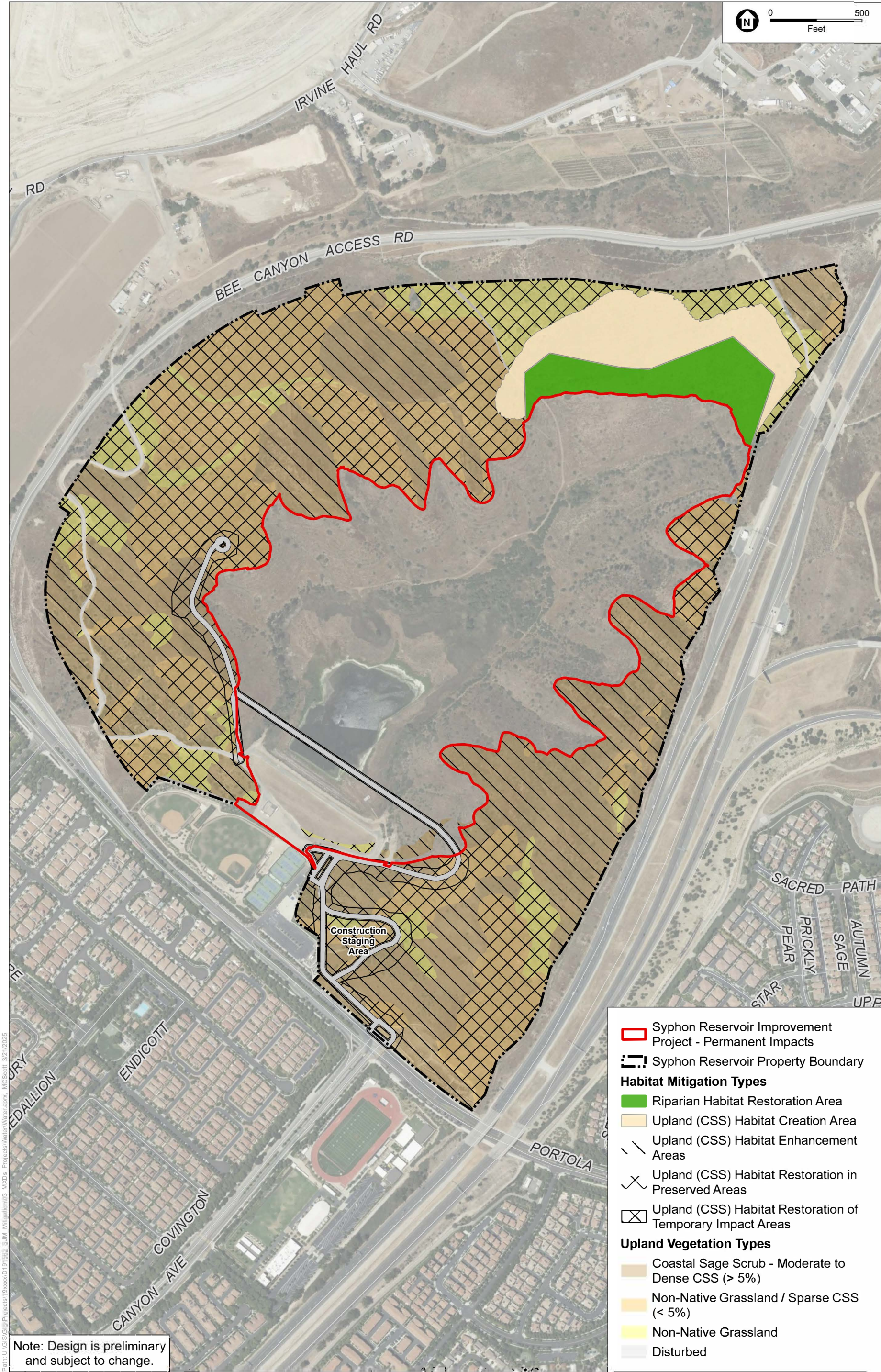
NOTES: Common names, habits, flower colors and bloom period as noted within the Jepson eFlora

a. Habit: Tree (T), Shrub (S), Subshrub (SS), Vine (V), Herbaceous (H)

b. Duration: Annual (A), Perennial (P)

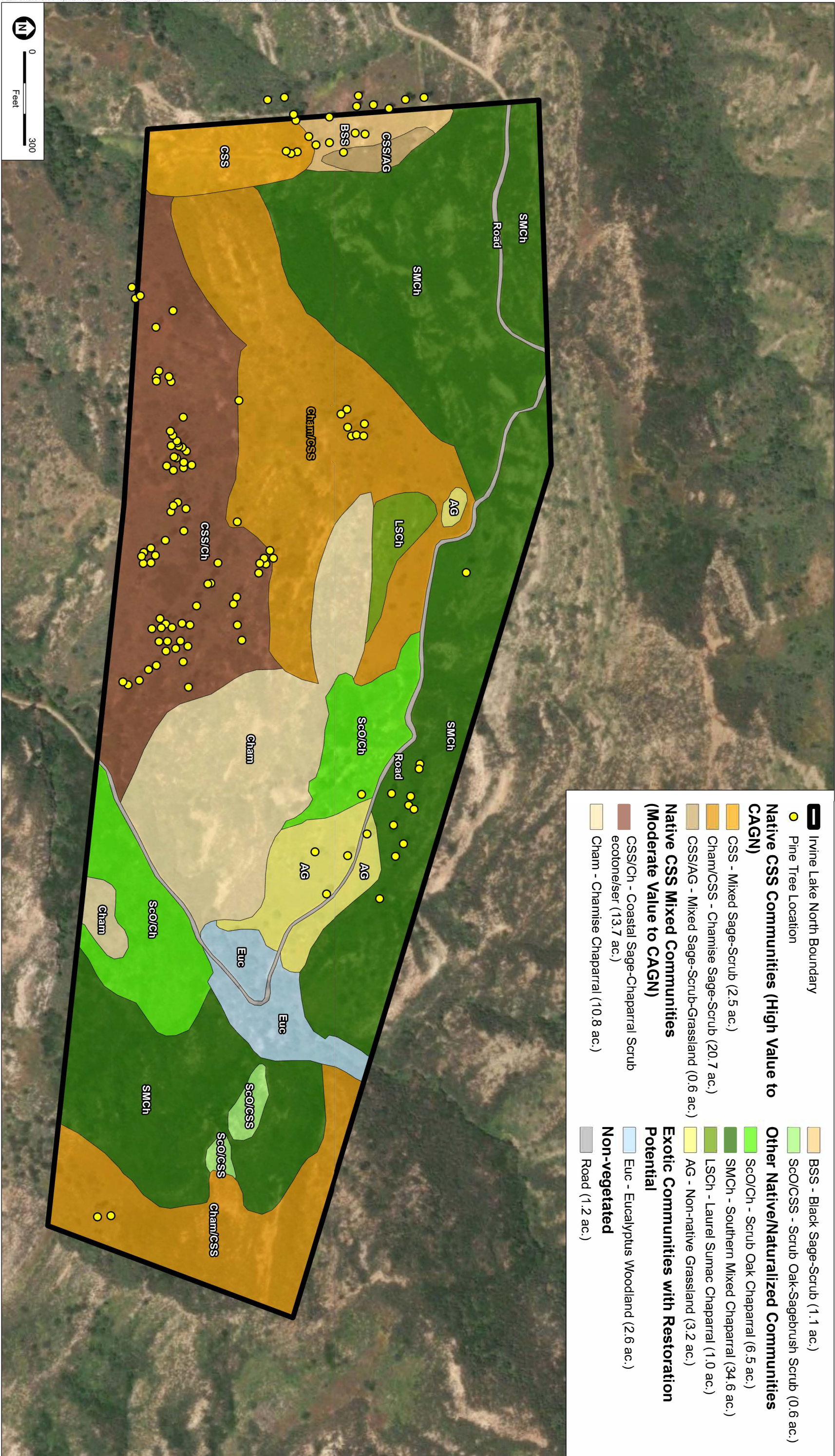
c. Flower Color: White (W), Red (R), Yellow (Yellow), Violet (V), Lavender (L), Pink (P), Purple (Pu), Blue (B), Orange (O), Opaque (Op), - represents a range between the two colors.

d. Bloom Period: Suitable bloom period for floral resources identified as February through November.



SOURCE: ESRI, 2020; ESA, 2024.

Syphon Reservoir Improvement Project Regulatory Update

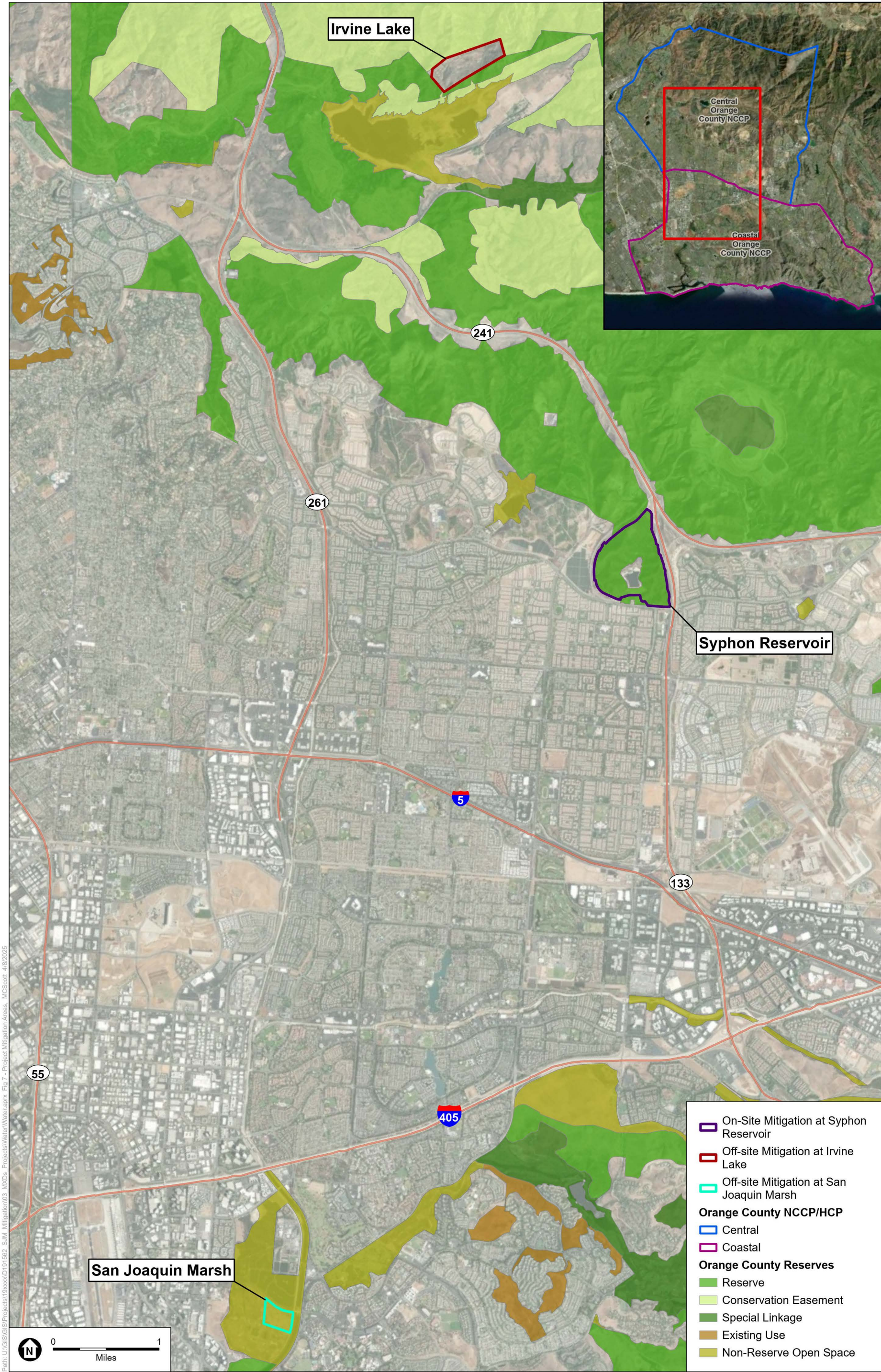


SOURCE: ESA, 2025; OC LAFCO, 2018

Syphon Reservoir Improvement Project Regulatory Update

Figure 6
Irvine Lake (North) Property - Plant Communities





Syphon Reservoir Improvement Project Regulatory Update

Figure 7
Syphon Reservoir Improvement Project Mitigation Areas

As shown in Table 2, the Irvine Lake North property would provide ample suitable floral resources for CBB throughout the year and represents a floral diversity of at least 50 species across 26 plant families. Table 2 depicts a wide assortment of blooming plant species during the colony active period, which represents the most active foraging period for CBB. Table 2 also depicts floral resources that bloom year round. Approximately 73.5 acres of upland habitat would be preserved and managed at IRWD's Irvine Lake North property as part of fulfilling Mitigation Measure BIO-2, which would directly support CBB. To ensure continued management in perpetuity, IRWD would enter into a Conservation Easement for the Irvine Lake North off-site property and establish an endowment to ensure ongoing funding. IRWD would also prepare a Long-Term Management Plan to satisfy commitments associated with protection of CBB. By preserving this land in perpetuity, the Irvine Lake North property would support CBB year-round, including during critical life stages such as the colony active period through preservation of suitable habitat and suitable floral resources. Through implementation of their Long-Term Management Plan for the Irvine Lake North Property, IRWD would also confirm the ongoing presence of CBB on the Irvine Lake North property through wildlife surveys for CBB and other special-status species such as bald eagle and coastal California gnatcatcher, which are also present on the site. The Long-Term Management Plan for the Irvine Lake North Property would also include various management obligations, including biological monitoring, invasive species control, site maintenance, and adaptive management requirements, which would preserve the site in perpetuity and provide permanent long-term preservation of CBB habitat.

Mitigation Measure BIO-2 included in the Syphon Reservoir Improvement Project FEIR would also reduce the potential for impacts to CBB through the demarcation of limits of disturbance and restrictions on the number of vehicle/equipment transportation routes and staging areas during construction. Additionally, Mitigation Measure BIO-5 from the Syphon Reservoir Improvement Project FEIR would require posting of educational signage and monitoring requirements. With implementation of Mitigation Measures BIO-1, BIO-2, and BIO-5 from the Syphon Reservoir Improvement Project FEIR, potential impacts to the CBB would be reduced to a less than significant level, similar to the conclusions of the Syphon Reservoir Improvement Project FEIR for other special-status wildlife species that rely on affected habitat. No additional mitigation would be required to address impacts to CBB.

The changed listing status of the CBB requires that IRWD apply for an Incidental Take Permit from CDFW pursuant to Section 2081 of the California Fish and Game Code². In compliance with the CESA, the Incidental Take Permit will include practicable take avoidance measures to minimize impacts to CBB and to support the successful conservation of CBB habitat both on-site and off-site. Issuance of the Incidental Take Permit will result in compliance with CESA.

The change in the listing status of the CBB would not in itself be a new significant impact or constitute a change in the project setting that could result in a new significant impact or a substantially more severe significant impact to special-status wildlife species. The Syphon Reservoir Improvements Project FEIR determined impacts to special-status wildlife species would be potentially significant and required implementation of Mitigation Measures BIO-1 through BIO-5. The mitigation measures included in the current Mitigation Monitoring and Reporting Program adopted by IRWD as part of the certified FEIR to

² CDFW is currently reviewing CBB's candidacy and will provide findings for a final decision sometime in 2025. Should CBB not become a candidate species with threatened species protections under CEQA, an Incidental Take Permit will not be required for the Syphon Reservoir Improvement Project.

establish both on-site and off-site compensatory mitigation would also be appropriate and sufficient to reduce impacts to CBB to less than significant levels. No additional mitigation or compensation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Mitigation Measures from the 2021 Syphon Reservoir Improvement Project FEIR

The following mitigation measures are required to be implemented under this Addendum No. 2.

BIO-1: IRWD has been engaged in close coordination with the Wildlife Agencies (i.e., USFWS and CDFW) since 2018 to develop a multi-faceted mitigation strategy to address impacts to California gnatcatcher, as well as to address the additional mitigation the agencies mandate to compensate for displacement of habitat and land previously set aside for mitigation and subject to the restrictions and requirements imposed under the Mitigation Grant Deed, of which USFWS is a third party beneficiary. To date, IRWD has researched numerous off-site lands with high value habitat and biological resources, and initiated negotiations with landowners for possible acquisition. IRWD shall implement one, or a combination, of the following measures to mitigate permanent impacts to special-status wildlife species:

- a. Use of Incidental Take Credits for participating landowners (within the Reserve, or outside of the Reserve) to offset permanent impacts to coastal sage scrub (e.g., California sagebrush scrub, California sagebrush scrub/non-native herbaceous cover, coyote brush scrub, chaparral bushmallow scrub, chaparral bushmallow scrub/non-native herbaceous cover, and non-native herbaceous cover/California sagebrush scrub) at a 1:1 impact-to-mitigation ratio.
- b. On- and/or off-site creation, restoration, and/or enhancement containing natural communities suitable for special-status species or comparable, as determined acceptable by the USFWS and CDFW.
- c. Off-site land acquisition, preservation, creation, restoration, and/or enhancement containing natural communities suitable for special-status species or comparable, as determined acceptable by the USFWS and CDFW.
- d. Areas where temporary impacts occur would be returned to pre-project conditions (i.e., pre-project elevation contours and revegetated with native upland scrub species) within one-year after construction is completed, and will be monitored for three years, or until a qualified biologist determines that the project site has returned to pre-project conditions. A revegetation plan would be prepared to re-seed/re-plant the area with local species, and would include performance standards, success criteria, maintenance, and future monitoring.

BIO-2: In accordance with the NCCP/HCP, certain construction-related mitigation measures are required to minimize impacts to the coastal California gnatcatcher and other coastal sage scrub species. The removal of coastal sage scrub communities will be conducted in compliance with the NCCP/HCP's Construction Related Minimization Measures:

- a. To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers will occur during the breeding season (February 15 through July 15).
- b. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub, a survey will be conducted to

locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans.

- c. A monitoring biologist, acceptable to USFWS/CDFW, will be on-site during any clearing of coastal sage scrub. IRWD will advise USFWS/CDFW at least seven calendar days (and preferably fourteen calendar days) prior to the clearing of any habitat occupied by Identified Species³ to allow USFWS/CDFW to work with the monitoring biologist in connection with bird flushing/capture activities. The monitoring biologist will flush Identified Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they will be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It will be the responsibility of the monitoring biologist to assure that Identified bird species will not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis.
- d. Following the completion of initial grading/earth moving activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel will be marked with temporary fencing and other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials will be permitted within such marked areas.
- e. In areas bordering the NCCP Reserve System or Special Linkage/Special Management areas containing significant coastal sage scrub identified in the NCCP/HCP for protection, vehicle/equipment transportation routes and staging areas will be restricted to a minimum number during construction consistent with project construction requirements. Waste dirt or rubble will not be deposited on adjacent coastal sage scrub identified in the NCCP/HCP for protection. Pre-construction meetings involving the monitoring biologist, construction supervisors, and equipment operators will be conducted and documented to ensure maximum practicable adherence to these measures.
- f. Coastal sage scrub identified in the NCCP/HCP for protection and located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist.

BIO-5: IRWD shall implement the following measure to mitigate indirect impacts to special-status wildlife species:

- a. Educational signage shall be posted at the entrances of the proposed walking trail to inform the public about the sensitive biological resources in the area and local wildlife in the area (e.g., rattlesnakes, coyotes). Signage would also be posted periodically along the proposed trail to remind public to keep on the trail and out of sensitive habitat areas.
- a. The proposed trail shall only be open during daylight hours (e.g., dawn to dusk).
- b. A Resource Management Plan (RMP) shall be prepared to outline long-term maintenance and management responsibilities for the preservation of the biological resources on-site (e.g., invasive species management, monitoring access issues, off-trail use, erosion, trash). The RMP should also provide guidance to ensure that all operations and maintenance activities performed on-site must also comply with all applicable requirements of the NCCP/HCP and the

³ NCCP/HCP Identified Species that occur, or have potential to occur, on-site include the following: coastal California gnatcatcher, coastal cactus wren, orange-throated whiptail, coastal western whiptail, red-diamond rattlesnake, coast horned lizard, northern harrier, sharp-shinned hawk, prairie falcon, American peregrine falcon, red-shouldered hawk, southern California rufous-crowned sparrow, San Diego desert woodrat, gray fox, and coyote.

preservation of the biological resources on-site. The RMP would also outline monitoring requirements for species populations for federal and state-listed species (i.e., least Bell's vireo and coastal California gnatcatcher).

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

The Syphon Reservoir Improvement Project FEIR found that the Syphon Reservoir Improvement Project would permanently impact up to 61.68 acres of sensitive natural communities, including 0.09 acre of arroyo willow thicket, 4.07 acres of black willow thicket, 0.77 acre of coyote brush scrub, 0.19 acre of chaparral bushmallow scrub, 0.06 acre of chaparral bushmallow scrub/non-native herbaceous cover, up to 27.34 acres of CSS, 0.98 acre of CSS/non-native herbaceous cover, and 28.18 acres of non-native herbaceous cover/CSS. The Syphon Reservoir Improvement Project would also temporarily impact an additional 0.85 acre of CSS. Impacts to sensitive natural communities that would result from the Syphon Reservoir Improvement Project were found to be potentially significant. Implementation of Mitigation Measure BIO-6 was required to reduce impacts to a less than significant level.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. The impacts to the CSS were previously analyzed under the Syphon Reservoir Improvement Project FEIR, and the change in the listing status of the CBB would result in no new impacts to sensitive natural communities. No additional mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The Syphon Reservoir Improvement Project FEIR found that there were no waters of the United States on the Syphon Reservoir Improvement Project site because Syphon Reservoir is an intrastate isolated water with no apparent interstate or foreign commerce connection. Thus, jurisdictional features identified are only subject to the jurisdiction of the State (i.e., wetlands and non-wetland waters of the State, and CDFW lakes, streams, and associated vegetation). Impacts related to CDFW jurisdiction are addressed in item b) above. The Syphon Reservoir Improvement Project was found to permanently impact 18.28 acres of wetlands and waters of the State (4.33 acres of wetlands, 13.95 acres of non-wetland waters of the State). The Syphon Reservoir Improvement Project would also create 5.88 acres of freshwater marsh wetland habitat and enlarge the reservoir, which would expand the open water resources on-site. Thus, the Syphon Reservoir Improvement Project would result in a beneficial impact, which would increase the amount of potential Regional Water Quality Control Board jurisdictional wetlands and water of the State, and impacts would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. No impacts to waters of the United States would occur, and no mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new

significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project would impact 121.43 acres of natural communities during construction on-site. Of this total, 2.70 acres would be temporarily impacted, 95.84 acres would be permanently impacted, and 22.91 acres would be permanently impacted but would be replaced by the creation of riparian/upland areas on-site resulting in an equivalent or beneficial impact. These impacts could disrupt local movement and displace wildlife within the Syphon Reservoir Improvement Project's footprint, particularly within the on-site riparian habitats. The Syphon Reservoir Improvement Project would avoid 144.31 acres of surrounding natural communities; thus, displaced wildlife utilizing upland habitats could disperse to other upland areas on-site, and the impacted areas would not inhibit local or regional movement of wildlife within these avoided areas of the site, although wildlife that is more sensitive to human disturbances and noise may be deterred by the nearby construction activities. Once completed, the enlarged reservoir would provide greater water storage capacity and an expanded open water area for migrating birds. The Syphon Reservoir Improvement Project would create at least 6.58 acres of on-site riparian woodland and approximately 5.88 acres of additional on-site woody riparian and/or freshwater marsh habitat that would be maintained to consistently provide habitat year-round, which would be a benefit to migratory species. In addition, approximately 10.47 acres of CSS habitat would be created in an area northeast of the reservoir that currently exhibits predominantly low-value ruderal grassland. Therefore, with the creation of the on-site riparian and upland habitat, impacts to local movement are not expected to be significant. Thus, impacts to regional and local wildlife movement are considered less than significant, and no mitigation was required.

The change in the listing status of the CBB does not include modifications to project design or implementation methods, and as a result, would not result in impacts to regional and local wildlife movement. No mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR analyzed the Syphon Reservoir Improvement Project's potential to be in conflict with relevant general planning documents of the County of Orange. The County's General Plan's Land Use Element Policy 9, Enhancement of Environment, ensures that all land use activities seek to enhance the physical environment, including the air, water, sound levels, landscape, and plant and animal life, and recognizes the need to improve both the manmade and natural environments. Plant and animal life that may be disrupted by the Syphon Reservoir Improvement Project would be offset through the creation of riparian and upland habitat areas and proposed mitigation, so while these created habitat and mitigation areas may not enhance the physical environment, they would ensure the preservation of biologically equivalent plant and wildlife resources. Thus, the Syphon Reservoir Improvement Project was found to not conflict with this policy. The County's General Plan's Resources Element Policy 1, Wildlife and Vegetation, requires the identification and preservation of the significant wildlife and vegetation habitats of Orange County. Impacts to special-status wildlife species

and sensitive natural communities were analyzed, and mitigation was proposed for impacts that were determined to be potentially significant. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, and BIO-6 were found to reduce impacts to a less than significant level.

The change in the listing status of the CBB does not include modifications to project design or implementation methods, and as a result, would not conflict with the local policies and ordinances previously analyzed under the Syphon Reservoir Improvement Project FEIR. No additional mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Syphon Reservoir Improvement Project FEIR found that the Syphon Reservoir Improvement Project is a permitted use within the NCCP/HCP Reserve System. Compliance with specific conditions required for NCCP/HCP conditionally covered species (i.e., least Bell's vireo) are discussed in item a) above. However, the removal of CSS communities would be considered potentially significant. Implementation of Mitigation Measures BIO-1 and BIO-2 were determined to reduce impacts to a less than significant level. When maintenance of the riparian and upland habitat areas involves vegetation removal (e.g., weeding) and cannot be scheduled outside of nesting season, such work could impact nesting special-status bird species, which could also be potentially significant. Implementation of Mitigation Measure BIO-3 was found to reduce impacts to a less than significant level, and thus impacts related to the Central & Coastal Subregion NCCP/HCP were determined to be less than significant with mitigation incorporated.

The change in the listing status of the CBB does not include modifications to project design or implementation methods, and as a result, would result in no conflicts with the provisions of the NCCP/HCP. No additional mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Biological Resources

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to biological resources. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162.).

References

- Bumble Bee Atlas. 2025. *Verified Observations of Bombus crotchii from Orange County, California, USA*, observed before March 12, 2025
- CDFW. 2025. *California Natural Diversity Database. Electronic database*. Sacramento, California. Accessed on March 12, 2025: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>.
- County of Orange. 2015. *Land Use Element*. General Plan. Chapter III, Land Use Element. October 2015. <https://www.ocgov.com/civicax/filebank/blobdload.aspx?blobid=55705>.
- iNaturalist. 2025. *Research Grade Observations of Bombus crotchii from Irvine, California, USA*, observed before March 12, 2025. Exported from <https://www.inaturalist.org> on March 12, 2025.
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3.5 Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	Yes	No
V. CULTURAL RESOURCES — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?**

The Syphon Reservoir Improvement Project FEIR identified a total of nine resources within the Syphon Reservoir Improvement Project site, including four prehistoric archaeological sites, an isolated prehistoric mano, a historic-period archaeological site consisting of an artifact scatter and foundation remnants, and three historic period built architectural resources. The Syphon Reservoir Improvement Project FEIR determined that with implementation of Mitigation Measure CR-1, which provides procedures for avoidance of two unevaluated resources, impacts would be less than significant. Four other resources were presumed likely to be impacted by the Syphon Reservoir Improvement Project; however, since none of these resources qualify for listing in the National Register of Historic Places or California Register of Historical Resources, none are historical resources as defined in CEQA Guidelines Section 15064.5, and impacts to the resources were determined to not be significant. Additionally, an analysis of indirect impacts to adjacent historical resources was conducted. It was determined that the Syphon Reservoir Improvement Project would not result in an indirect impact to historical resources and that impacts would be less than significant to known resources. The Syphon Reservoir Improvement Project FEIR also indicated that the presence of both historic-period and prehistoric archaeological sites within and in the vicinity of the Syphon Reservoir Improvement Project site indicates that the area is sensitive for archaeological resources. The Syphon Reservoir Improvement Project FEIR included Mitigation Measures CR-1 through CR-4, which require procedures for avoidance of two unevaluated resources at the Syphon Reservoir Improvement Project site, construction worker sensitivity training, cultural resources monitoring, and treatment of unanticipated discoveries, which would ensure that impacts associated with the Syphon Reservoir Improvement Project are reduced to a less than significant level.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. No adverse change in the significance of a historical resource would occur, and no additional mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

As previously mentioned in item a) above, the Syphon Reservoir Improvement Project FEIR identified a total of nine resources within the Syphon Reservoir Improvement Project site, including four prehistoric archaeological sites, an isolated prehistoric mano, a historic-period archaeological site consisting of an artifact scatter and foundation remnants, and three historic period built architectural resources. The Syphon Reservoir Improvement Project FEIR determined that with implementation of Mitigation Measure CR-1, which provides procedures for avoidance of two unevaluated resources, impacts to these known resources would be less than significant. The Syphon Reservoir Improvement Project FEIR also included Mitigation Measures CR-2 through CR-4, which require construction worker sensitivity training, cultural resources monitoring, and treatment of unanticipated discoveries, which would ensure that impacts to previously unknown archaeological resources, would be reduced to a less than significant level.

The change in the listing status of the CBB does not include modifications to project design or implementation methods or the potential to uncover buried prehistoric archaeological resources. No additional mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

The Syphon Reservoir Improvement Project FEIR determined that the potential to disturb human remains is low and that state laws dictate appropriate treatment of any unearthed human remains. As a result, the Syphon Reservoir Improvement Project FEIR concluded a less than significant impact to human remains.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. As a result, there would be no potential to disturb human remains. No new mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Cultural Resources

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to cultural resources. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162.).

While preparing the 2021 Syphon Reservoir Improvement Project FEIR, IRWD engaged in a consultation process with the Gabrieleno Band of Mission Indians - Kizh Nation and other tribal entities pursuant to Public Resources Code Section 21080.3.1. No parties objected to the adequacy of the consultation process or the adequacy of adopted mitigation measures prior to the close of the public hearing in July 2021.

3.6 Energy

<i>Issues (and Supporting Information Sources):</i>	Yes	No
VI. ENERGY — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would result in energy demand from the use of construction equipment for a temporary period of time for approximately 41 months. As discussed in the Syphon Reservoir Improvement Project FEIR, energy demand from the use of transportation fuels from construction activities would be generated by the operation of vehicles and equipment used for various construction activities, such as excavation and grading. Electricity would be consumed to power the construction trailers and exterior uses such as lights, conveyance of water for dust control, and any electrically-powered construction equipment. Construction-related energy and transportation fuel demand from construction equipment would vary depending on factors such as the type and number of equipment and the duration that each equipment is powered on and used. Construction equipment and trucks would be required to comply with applicable provisions of regulations to improve fuel efficiency. Therefore, construction of the Syphon Reservoir Improvement Project was found to not result in the wasteful, inefficient, or unnecessary consumption of transportation fuel resources, and impacts would be less than significant.

The Syphon Reservoir Improvement Project FEIR determined that the operational activities associated with the Syphon Reservoir Improvement Project would not increase the average daily traffic volumes along the major thoroughfares within the project vicinity. During operation of the Syphon Reservoir Improvement Project, electricity would be consumed for the operation of the Treatment Facility, which includes electricity for building lighting and electric-powered pumps and other equipment. Given the minimal energy consumption of the Syphon Reservoir Improvement Project, anticipated energy savings related to a reduction in imported water, and design with energy efficient lighting and equipment, operation of the Syphon Reservoir Improvement Project would not result in a substantial increase in energy consumption and would not result in the wasteful, inefficient, or unnecessary consumption of electricity resources; impacts were found to be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. Consumption of energy resources would not change, and no mitigation would

be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The Syphon Reservoir Improvement Project FEIR determined that the Syphon Reservoir Improvement Project would be designed in a manner consistent with relevant energy efficiency plans, such as Integrated Energy Policy Report and the California Building Standards Code, designed to encourage development that results in the efficient use of water resources. The Syphon Reservoir Improvement Project would increase the capacity of the Syphon Reservoir, thereby providing a local, consistent supply of recycled water for the IRWD service area. This would reduce the energy consumption needed to provide water to IRWD's recycled water customers. Replacing imported water with recycled water stored under the Syphon Reservoir Improvement Project would reduce the electricity used for water supply and conveyance by approximately 3,699,000 kilowatt-hours annually. The Syphon Reservoir Improvement Project FEIR discussed the CARB 2017 Climate Change Scoping Plan, which provided the State strategy for reducing greenhouse gas (GHG) emissions at the time of the Syphon Reservoir Improvement Project FEIR and includes various energy efficiency strategies to achieve the GHG reduction goals, including recognition of the nexus between water and energy consumption. The water-energy nexus provides opportunities for reducing energy demand and reducing GHG emissions. The 2017 Climate Change Scoping Plan, states that "recycled water has the potential to reduce GHGs if it replaces, and not merely serves as an alternative to, an existing, higher-carbon water supply." Given the water-energy nexus, this means recycled water has the potential to reduce energy consumption if it replaces more energy-intensive water supplies. Thus, the Syphon Reservoir Improvement Project was found to be consistent with the 2017 Climate Change Scoping Plan's strategy to reduce water-related energy consumption. As a result, the Syphon Reservoir Improvement Project would not conflict with or obstruct a State or local plan for energy efficiency, and impacts would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. No additional consumption of energy resources would be required that could conflict with any plans for renewable energy or energy efficiency; no mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Energy

The change in the listing status of the CBB would not result new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to energy. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162.).

References

CARB. 2017. *California's 2017 Climate Change Scoping Plan: The strategy for achieving California's 2030 greenhouse gas target*, November. Available at www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

3.7 Geology and Soils

<i>Issues (and Supporting Information Sources):</i>	Yes	No
VII. GEOLOGY AND SOILS — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:		
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☒
ii) Strong seismic ground shaking?	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☒
iv) Landslides?	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

- a.i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?**
- a.ii) **Strong seismic ground shaking?**
- a.iii) **Seismic related ground failure including liquefaction?**
- a.iv) **Landslides?**

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would not be located on an active earthquake fault but would be located within a seismically active region. The Syphon Reservoir Improvement Project FEIR concluded that the Syphon Reservoir Improvement Project could be subject to seismic shaking and seismic-induced ground failures, such as liquefaction, and landslides. However, the Syphon Reservoir Improvement Project FEIR further explained that the DSOD would require a final geotechnical investigation to be prepared that would identify

geotechnical issues, including seismic-related issues, and provide recommendations to address geotechnical issues, if any. The preparation of a geotechnical investigation and implementation of geotechnical recommendations would ensure impacts would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. As a result, there would be no change in activities that could increase the severity of impacts related to fault rupture, seismic ground shaking, liquefaction, or landslides, and no mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site includes slopes that could be susceptible to erosion. Some of the local geologic units are rated as generally having very poor slope stability characteristics and are described as landslide-prone (and consequently also erosion-prone) units. Several existing potential landslide areas are present. However, the Syphon Reservoir Improvement Project FEIR further explained that a final geotechnical report would be prepared that would identify geotechnical issues, including geologic units susceptible to erosion, and would provide recommendations to address such geotechnical issues. The preparation of a geotechnical investigation and implementation of geotechnical recommendations would ensure impacts would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. As a result, there would be no change in activities that could result in substantial soil erosion or loss of topsoil, and no mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site includes geologic units and slopes that could be susceptible to landslides. In addition, the construction of the dam could be susceptible to subsidence due to settlement of the dam materials. However, the Syphon Reservoir Improvement Project FEIR further explained that a final geotechnical investigation would be prepared that would identify geotechnical issues, including landslides and settlement, and provide recommendations to address such geotechnical issues. The preparation of a geotechnical investigation and implementation of geotechnical recommendations would ensure impacts would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. As a result, there would be no increase in severity of impacts relative to unstable geologic units or soil compared with the conclusions in the Syphon Reservoir Improvement Project FEIR, and no mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

d) Be located on expansive soil creating substantial direct or indirect risks to life or property?

The Syphon Reservoir Improvement Project FEIR identified that the only expansive soils identified for the Syphon Reservoir Improvement Project would be lake bottom materials. However, these materials would not be used for construction of the dam and would remain at the bottom of the lake, and impacts would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. As a result, there would be no increase in the severity of impacts related to expansive soil, and no mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would not use septic tanks or other on-site wastewater disposal systems. Therefore, there would be no impact related to the adequacy of soils to support such systems.

The change in the listing status of the CBB would not involve use of septic tanks or other on-site wastewater disposal systems. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site includes geologic units that may contain paleontological resources. The Syphon Reservoir Improvement Project FEIR required implementation of Mitigation Measures GEO-1 through GEO-4 to ensure that impacts to paleontological resources are reduced to less than significant levels.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. As a result, there would be no potential to destroy a unique paleontological resource or geologic feature, and no additional mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Geology and Soils

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to geology and soils. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162.).

3.8 Greenhouse Gas Emissions

<i>Issues (and Supporting Information Sources):</i>	<i>Yes</i>	<i>No</i>
VIII. GREENHOUSE GAS EMISSIONS — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would generate GHG emissions from vehicle trips generated by construction workers, vendor trucks, and haul trucks traveling to and from the Syphon Reservoir Improvement Project site and the use of construction equipment. Operation of the Syphon Reservoir Improvement Project was found to not result in new or increased use of motor vehicles, aside from periodic maintenance vehicles. The Syphon Reservoir Improvement Project was found to result in the additional electricity demand to power equipment, which would result in electricity-related GHG emissions. The objectives of the Syphon Reservoir Improvement Project include reducing the need to purchase supplemental imported untreated water from the MWD by storing recycled water that is already produced. Conveying imported untreated water from the State Water Project (SWP) and the Colorado River to Orange County requires energy for pumping. Replacing imported water with locally generated recycled water reduces the overall energy associated with imported water because there would be less energy needed for conveyance. This reduction in energy would result in district-wide energy savings. The Syphon Reservoir Improvement Project FEIR determined that the Syphon Reservoir Improvement Project’s annual GHG emissions would not exceed the threshold of significance. Therefore, impacts with respect to the generation of GHGs were found to be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no activities that would result in additional GHG emissions, and no mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR determined that the Syphon Reservoir Improvement Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of

reducing the emissions of GHGs. The objectives of the Syphon Reservoir Improvement Project include reducing the need to purchase supplemental imported untreated water from MWD by storing recycled water that is already produced. Conveying imported untreated water from the SWP and the Colorado River to Orange County requires a tremendous amount of energy for pumping. Replacing imported water with locally generated recycled water reduces the overall energy associated with imported water because there would be less energy needed for conveyance. By providing IRWD customers with recycled water stored under the Syphon Reservoir Improvement Project, electricity used for water supply and conveyance from imported water would be offset by recycled water, thus reducing district-wide GHG emissions. The CARB 2017 Climate Change Scoping Plan, the State's plan to reduce GHG emissions at the time of the Syphon Reservoir Improvement Project FEIR, recognizes the nexus between water and energy consumption. The water-energy nexus provides opportunities for reducing energy demand and reducing emissions of GHGs. The 2017 Climate Change Scoping Plan states that "recycled water has the potential to reduce GHGs if it replaces, and not merely serves as an alternative to, an existing, higher-carbon water supply." Thus, the Syphon Reservoir Improvement Project would be consistent with and would not conflict with the Scoping Plan's strategy to reduce water-related GHG emissions. The Syphon Reservoir Improvement Project would also not result in employment growth in excess of regional projections by the Southern California Association of Governments. Therefore, the Syphon Reservoir Improvement Project was found to not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no activities that would result in conflicts with GHG emissions plans, and no mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Greenhouse Gas Emissions

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to GHG emissions. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162.).

References

CARB. 2017. *California's 2017 Climate Change Scoping Plan: The strategy for achieving California's 2030 greenhouse gas target*, November. Available at www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

3.9 Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	Yes	No
IX. HAZARDS AND HAZARDOUS MATERIALS — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

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

The Syphon Reservoir Improvement Project FEIR identified that construction equipment and materials may include fuels and chemicals commonly used in construction. These chemicals would be stored and used in accordance with all applicable laws and regulations. In addition, the construction contractor would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) for construction activities in compliance with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit requirements. The SWPPP would list the hazardous materials proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; outline protocols for responding immediately to spills; and describe best management practices for controlling site runoff. Finally, contractors would be required to prepare and implement Hazardous Materials Business Plans that would require that hazardous materials used for construction would be used properly and stored in appropriate containers with secondary containment to contain a potential release. During operation, sodium bisulfite would be used for water dechlorination, and sodium hypochlorite would be used for water treatment. As required by the State's Hazardous Materials Management Program, IRWD, as the operator of the proposed facility, would be required to prepare and submit a Hazardous

Materials Business Plan that would be required to include information on hazardous material handling and storage, including site layout, storage in appropriate containers with secondary containment to contain a potential release, and emergency response and notification procedures in the event of a spill or release. Compliance with laws, regulations, and manufacturers specifications would ensure impacts would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no change in activities that would utilize hazardous materials or create a significant hazard to the public or the environment, and no mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that transport of hazardous materials during construction and operation of the Syphon Reservoir Improvement Project could use haul routes that pass by schools. As described under items a) and b) above, construction and operation activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including in proximity to schools. The required compliance with the numerous laws and regulations that govern the transportation, use, handling, and disposal of hazardous materials during construction and operation of the Syphon Reservoir Improvement Project would ensure the potential risks to schools related to emitting and handling hazardous substances remain less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no new construction or operational activities that would involve transportation or handling of hazardous materials or substances near schools, and no mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List). Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR .

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

The Syphon Reservoir Improvement Project is located outside of the Airport Planning Areas for the operational airports in Orange County; therefore, there would be no impact. The change in the listing status of the CBB would not introduce new project components that would result in a safety hazard in proximity to an airport. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site is bounded by two evacuation routes: Portola Parkway to the west and SR-133 to the southeast. The Syphon Reservoir Improvement Project would modify the existing intersection and associated traffic lights to allow construction access through the intersection directly into the Syphon Reservoir Improvement Project site. The intersection modification would not involve closure of any roadways; however, temporary lane closures could be required, for example to allow for restriping of lanes or creating the curb cut and entrance to the proposed access road. However, to ensure that impacts related to the circulation system do not occur as a result of the Syphon Reservoir Improvement Project, IRWD would implement Mitigation Measure TRA-1, which would require the preparation and implementation of a Traffic Control Plan. The Traffic Control Plan would include, but would not be limited to, signage, striping, delineated detours, flagging operations, changeable message signs, delineators, arrow boards, and K-Rails during construction to guide motorists, bicyclists, and pedestrians safely through the proposed construction area and allow for adequate emergency access and circulation to the satisfaction of the City of Irvine. Therefore, with implementation of Mitigation Measure TRA-1, impacts to the circulation system during the initial intersection improvement phase of the Syphon Reservoir Improvement Project would be reduced to a less than significant level, and project construction would not impair or physically interfere with emergency response teams or an evacuation plan. Operation of the Syphon Reservoir Improvement Project would be substantially similar to current conditions respective to emergency response and evacuation. No operation-related activities would occur within surrounding rights-of-way or along evacuation routes.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no change in construction or operational activities that would impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, no additional mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project is located within a moderate fire hazard severity zone (FHSZ) and is adjacent to areas mapped as a Very High FHSZ. The Syphon Reservoir Improvement Project includes slopes surrounding the existing reservoir that are susceptible to prevailing winds. Brush and grassland habitats within the Syphon Reservoir Improvement Project site are highly flammable. The primary fire hazards from construction of the Syphon Reservoir Improvement Project would involve the use of vehicles and equipment. Heat or sparks from construction vehicles and equipment could ignite dry vegetation and cause a fire. Syphon Reservoir Improvement Project construction could increase the risk of exposure of people or structures to significant loss, injury, or death involving wildland fires, which would result in a potentially significant impact. However, all personnel on the Syphon Reservoir Improvement Project site would have to comply with Public Resources Code Sections 4427, 4428, 4431, and 4442, which include regulations relating to the handling of combustible fuels and equipment that can exacerbate fire risks. During construction, strict adherence to Public Resources Code regulations would ensure that contractors are responsible for all monitoring and safety measures ensuring that any risk to exacerbate wildfires would be reduced. Additionally, all construction must comply with fire protection and prevention requirements specified by the California Code of Regulations and California Division of Occupational Safety and Health. This includes various measures such as easy accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, and worker training for firefighter extinguisher use. Furthermore, implementation of Mitigation Measure WDF-1 would be required to ensure fire hazard reduction measures are implemented during Syphon Reservoir Improvement Project activities to further reduce the potential for wildfire impacts on project workers. As a result, the potential impact would be reduced to a less than significant level with mitigation.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no construction or operational activities that would expose people or structures to significant risk of loss, injury, or death involving wildland fires, and no additional mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Hazards and Hazardous Materials

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to hazards and hazardous materials. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

3.10 Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Yes</i>	<i>No Impact</i>
X. HYDROLOGY AND WATER QUALITY — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:		
i) result in substantial erosion or siltation on- or off-site;	☐	☒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☒
iv) impede or redirect flood flows?	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would include construction of access roads, clearing of vegetation, and other ground disturbing activities to expand the reservoir and construct the proposed dam. These construction-related activities would result in large stockpiles of soils and would require the use of hazardous materials (e.g., fuels, oil, lubricants for equipment), both of which could be mobilized and transported off-site, potentially degrading the water quality of nearby surface waters. However, the Syphon Reservoir Improvement Project would be required to obtain coverage under the NPDES Construction General Permit, which would require the preparation and implementation of a SWPPP. The SWPPP would describe best management practices such as settlement basins, silt fences, and straw wattles to prevent sediment and other pollutants from leaving the work site and entering waterways. With compliance with the Construction General Permit, impacts relative to water quality during construction would be less than significant.

For operation, the Syphon Reservoir Improvement Project would include a seepage control system to prevent erosion as required by the DSOD, an Emergency Action Plan as required by the DSOD to manage discharge from the reservoir in the event of an emergency, and various best management practices required by the Municipal Separate Storm Sewer System (MS4; i.e., regional stormwater permit) and Drainage Area Management Plan (DAMP) to manage outflow from the reservoir and prevent erosion of the dam, as required by both the DSOD and the Regional Water Quality Control Board. With compliance with the existing regulations, impacts relative to water quality during operations would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no new construction or operational activities that would violate any water quality standards or waste discharge requirements, and no mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would include temporarily draining the reservoir, resulting in a temporary decrease in groundwater infiltration during this time. Impacts associated with construction dewatering would be negligible because the Syphon Canyon Basin is a relatively small portion of the greater Orange County Coastal Plain Groundwater Basin, and dewatering during construction would not have a long-term effect with respect to groundwater levels or supplies. Therefore, impacts to groundwater supplies and recharge would be negligible, and the impact would be less than significant during construction. Once construction is complete, the Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would result in an increase in the new reservoir's storage capacity and would provide for enhanced recharge to groundwater resources, consistent with strategies for sustainable management of groundwater. Thus, relative to groundwater supplies and sustainable management of the basin, the Syphon Reservoir Improvement Project would result in a beneficial impact.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no new construction or operational activities that would decrease groundwater supplies or interfere with groundwater recharge, and no mitigation would be required. Therefore, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would not significantly alter the existing drainage pattern of the project site during construction. Due to the bowl-shaped topography of the site and the Syphon Reservoir Improvement Project's planned settlement basins and other required best management practices, drainage within the Syphon Reservoir

Improvement Project site area east of the existing and proposed dam would continue to flow into the reservoir basin, as it does now. In addition, the implementation of a SWPPP as discussed in item a) above would prevent erosion and siltation during construction. Finally, compliance with the requirements of the MS4 and DAMP requirements would include design measures to prevent erosion and siltation. Once constructed, the drainage pattern of the Syphon Reservoir Improvement Project would be substantially the same as existing conditions. With compliance with the existing regulations, impacts relative to erosion or siltation during operations would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no new construction or operational activities that would alter the existing drainage pattern of the site or area or result in erosion, and no mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

c.ii) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

As discussed in the Syphon Reservoir Improvement Project FEIR and under items a), b), and c.i) above, compliance with the NPDES Construction General Permit with its required implementation of a SWPPP along with compliance with the design requirements of the MS4 and DAMP would prevent stormwater runoff that could cause flooding for the Syphon Reservoir Improvement Project. With compliance with the existing regulations, impacts relative to increased surface runoff resulting in flooding on-site or off-site during operations would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no new construction or operational activities that would alter the existing drainage pattern or result in surface runoff leading to flooding, and no mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

c.iii) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As discussed in the Syphon Reservoir Improvement Project FEIR and under items a), b), and c.i) above, compliance with the design requirements of the MS4 and DAMP would prevent runoff that could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. With compliance with the existing regulations, impacts relative to stormwater drainage systems or additional sources of polluted runoff during operations would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no new construction or operational activities that would create

or contribute runoff water resulting in an exceedance of stormwater drainage system capacity or polluted runoff, and no mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

c.iv) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: impede or redirect flood flows?

As discussed in the Syphon Reservoir Improvement Project FEIR and under items b) and c.ii) above, the reservoir is bowl-shaped, and stormwater falling within the reservoir would be retained. Compliance with the design requirements of the MS4 and DAMP would manage surface water flow outside of the reservoir and would prevent runoff that could impede or redirect flood flows. With compliance with the existing regulations, impacts relative to flood flows would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no new construction or operational activities that would result in impeded or redirected flood flows, and no mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The Syphon Reservoir Improvement Project FEIR found that the Syphon Reservoir Improvement Project site is not located in an area subject to tsunamis, resulting in no impact. Impacts relative to the release of pollutants associated with flood hazards are analyzed in items c.ii) and c.iv) above, which concluded a less than significant impact. The new engineered dam and reservoir would meet or exceed the current safety and design requirements established by the DSOD. With compliance with existing regulations for the design and operation of the dam and adherence to the procedures in the Emergency Action Plan, the impacts relative to the release of pollutants during seiches and flooding due to breaches of the dam would be less than significant.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no new construction or operational activities that would risk the release of pollutants under flood, tsunami, or seiche conditions, and no mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Syphon Reservoir Improvement Project FEIR found that, once operational, the new Syphon Reservoir would function as a closed system and would not interact with surface waters, eliminating any impact to surface waters. Thus, the Syphon Reservoir Improvement Project would not conflict with the Water Quality Control Plan for the Santa Ana River Basin (also referred to as the Basin Plan) or a

sustainable groundwater management plan, including Orange County Water District's Basin 8-1 Alternative Plan. In addition, the proposed Syphon Reservoir Improvement Project would reduce the flow of sediment and other pollutants in waterways and would increase recharge to groundwater (as discussed under item b) above), which would be consistent with the goals of the Basin Plan, resulting in a beneficial impact.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. There would be no new construction or operational activities that would conflict with the Water Quality Control Plan or a sustainable groundwater management plan, and no mitigation would be required. As a result, the change in the listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Hydrology and Water Quality

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to hydrology and water quality. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

References

Orange County Water District. 2017. Basin 8-1 Alternative Final Report. Available at <https://www.ocwd.com/media/4918/basin-8-1-alternative-final-report-1.pdf>.

3.11 Land Use and Planning

<i>Issues (and Supporting Information Sources):</i>	Yes	No
XI. LAND USE AND PLANNING — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Physically divide an established community?	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

a) Physically divide an established community?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would not construct any physical structures that would impact mobility within the surrounding community or remove a means of access. Therefore, the Syphon Reservoir Improvement Project would result in no impact related to the physical division of an established community.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in any additional structures that could divide the surrounding community, and no mitigation would be required. Therefore, the conclusions in the Syphon Reservoir Improvement Project FEIR would not change. The change in the listing status of CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Syphon Reservoir Improvement Project FEIR identified that pursuant to California Government Code Section 53091, water supply facilities, such as those associated with the Syphon Reservoir Improvement Project, are exempt from building and zoning ordinances. The Syphon Reservoir is considered a water storage facility; thus, building and zoning ordinances of the County of Orange and City of Irvine, including the Orange County General Plan and the City of Irvine General Plan and its policies, do not apply to the Syphon Reservoir Improvement Project site. Additionally, the Syphon Reservoir Improvement Project does not propose development that would conflict with the Orange County General Plan, Orange County Zoning Code, the City of Irvine General Plan, or the City of Irvine Zoning Ordinance. Therefore, no impact would occur.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in any additional development that would conflict with any land use plan, policy or regulation, and no mitigation would be required. The change in

listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Land Use

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to land use. No further environmental review is required. (Public Resources Code § 21166; CEQA Guidelines § 15162).

3.12 Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	Yes	No
XII. MINERAL RESOURCES — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site is not a known mineral resource area and does not have a history of mineral extraction uses. Additionally, according to the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, no oil wells exist on the Syphon Reservoir Improvement Project site. Therefore, impacts would not occur to the loss of availability of a known mineral resource.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no additional activities that could affect loss of a known mineral resource, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site is not identified as a mineral resource zone, according to the County of Orange. Therefore, construction of the Syphon Reservoir Improvement Project FEIR would not result in the loss of a locally important mineral resource recovery site and no impacts would occur.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no additional activities that could affect loss of a locally important mineral resource, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Mineral Resources

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to mineral resources. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

References

CCDC. 2020b. Division of Oil, Gas, and Geothermal Resources Well Finder. Available at <https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx>.

3.13 Noise

<i>Issues (and Supporting Information Sources):</i>	Yes	No
XIII. NOISE — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒
b) Generate excessive groundborne vibration or groundborne noise levels?	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

- a) **Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would require the use of construction equipment for a temporary period of time. As discussed in the Syphon Reservoir Improvement Project FEIR, noise from construction activities would be generated by the operation of vehicles and equipment used for various construction activities, such as excavation and grading. Noise levels generated by construction equipment would vary depending on factors such as the type and number of equipment and the construction activities being performed. Noise levels at noise-sensitive receptor locations would also depend on the distance from the construction activities to the receptor location, as well as the presence of intervening terrain, vegetation, buildings, or other structures that would absorb or block the transmission of noise. The nearest noise-sensitive receptors are located approximately 55 feet from the Syphon Reservoir Improvement Project site (Crean Lutheran High School Athletic Complex), approximately 180 feet from the access road construction (residential uses), and approximately 700 feet from the dam, reservoir and treatment facilities (residential uses). The Syphon Reservoir Improvement Project FEIR determined that the Syphon Reservoir Improvement Project would comply with Irvine Municipal Code Section 6-8-205, which restricts construction to between the allowed hours of 7 a.m. to 7 p.m. Mondays through Fridays, and 9 a.m. to 6 p.m. on Saturdays. As such, construction activities would comply with the City's noise standards and would not result in significant impacts to nearby sensitive receptors. Impacts were found to be less than significant.

The Syphon Reservoir Improvement Project FEIR determined that the operational activities associated with the Syphon Reservoir Improvement Project would not increase the average daily traffic volumes along the major thoroughfares within the project vicinity. Additionally, the proposed inlet and outlet pipelines that would supply and drain the reservoir would be located underground and would not result in any operational noise. Furthermore, small pumps located on the site within the proposed treatment

facilities would be housed inside a masonry block wall building, which would block the transmission of noise and would not generate noise above ambient conditions at sensitive receptor property lines. Therefore, impacts from the operations of the Syphon Reservoir Improvement Project would be less than significant.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in activities that increase ambient noise levels and or produce a violation of noise standards established in the local general plan or noise ordinance, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

b) Generate excessive groundborne vibration or groundborne noise levels?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would require the use of construction equipment for a temporary period of 41 months. Construction activities have the potential to generate low levels of groundborne vibration and groundborne noise from the use of heavy equipment (i.e., backhoe, dozer, grader, loader, and haul trucks, etc.), which generate vibrations that propagate through the ground and diminish in intensity with distance from the source. No high-impact activities, such as pile driving or blasting, would be used during construction. The Syphon Reservoir Improvement Project FEIR determined that construction would not exceed the significance thresholds for groundborne vibration, which are the levels at which structural (i.e., building) damage or human annoyance in occupied buildings could occur because of the distance separating construction areas and receptor locations. Operation of the Syphon Reservoir Improvement Project would not result in new sources of groundborne vibration and groundborne noise compared to existing conditions. Thus, construction and operational groundborne vibration impacts were found to be less than significant.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in new activities that generate excessive groundborne vibration or noise levels, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The Syphon Reservoir Improvement Project FEIR determined that the project area is not located within the vicinity of a private airstrip. Furthermore, the nearest airport to the project area is the John Wayne Airport, located approximately 7.7 miles to the southwest of the project area. The Syphon Reservoir Improvement Project is not located within an airport land use plan or within two miles of a public airport or public use airport. Therefore, the FEIR determined no impact related to public or private airport/airstrip noise levels would occur.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in new activities that would expose people in the vicinity of an airport to excessive noise, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Noise

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to noise. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

3.14 Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Yes</i>	<i>No</i>
XIV. POPULATION AND HOUSING — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

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

The Syphon Reservoir Improvement Project FEIR identified that the implementation of the Syphon Reservoir Improvement Project would not have a direct growth inducement effect because the Syphon Reservoir Improvement Project does not propose development of new housing that would attract additional population to the area. Additionally, the Syphon Reservoir Improvement Project would not introduce substantial permanent employment that could indirectly induce population growth in the City of Irvine and in the region. Construction activities associated with the construction of the Syphon Reservoir Improvement Project would introduce short-term construction employment opportunities and would not require persons outside of the Orange County workforce. Therefore, the Syphon Reservoir Improvement Project would not directly induce substantial unplanned population growth, and no impact would occur.

The change in the listing status of the CBB would not result in development that would introduce new permanent employees or residents to the area, and no impact would occur. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that there are no existing residences within the project area, and the Syphon Reservoir Improvement Project would not displace existing housing. Therefore, the Syphon Reservoir Improvement Project would not displace people or housing, necessitating the construction of replacement housing elsewhere, and no impacts would occur.

The change in the listing status of the CBB would not result in development that would displace people or housing, and no impact would occur. Therefore, the change in listing status of the CBB would not result

in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Population and Housing

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to population and housing. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

3.15 Public Services

Issues (and Supporting Information Sources):

Yes

No

XV. PUBLIC SERVICES —

- a) Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts due to changed circumstances or new information for any of the following public services:
- i) Fire protection? ☐ Yes ☒ No
 - ii) Police protection? ☐ Yes ☒ No
 - iii) Schools? ☐ Yes ☒ No
 - iv) Parks? ☐ Yes ☒ No
 - v) Other public facilities? ☐ Yes ☒ No

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts due to changed circumstances or new information for any of the following public services:

- a.i) Fire Protection?**
- a.ii) Police Protection?**
- a.iii) Schools?**
- a.iv) Parks?**
- a.v) Other Public Facilities?**

The Syphon Reservoir Improvement Project was found to not introduce substantial permanent employment that would indirectly induce population growth in the City of Irvine and in the region. Construction activities associated with the Syphon Reservoir Improvement Project would introduce short-term construction employment opportunities and would not require persons outside of the Orange County workforce. Therefore, the Syphon Reservoir Improvement Project would not substantially increase the need for new fire department staff or new facilities; require the expansion of new police stations to serve the Syphon Reservoir Improvement Project site; exceed enrollment capacity of the Irvine Unified School District; require new or expanded school facilities; result in the construction of new public parks or require the alteration of existing public parks; or otherwise require construction of new public facilities.

The change in the listing status of the CBB does not include modifications to project design or implementation methods. The listing status would not lead to population growth and would not increase the demand for public services; no mitigation would be required. The change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Public Services

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to public services. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162.)

3.16 Recreation

Issues (and Supporting Information Sources):

	Yes	No
XVI. RECREATION — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

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

The Syphon Reservoir Improvement Project FEIR identified that the implementation of the Syphon Reservoir Improvement Project would not increase the use of existing neighborhood and regional parks or other recreational facilities. The Syphon Reservoir Improvement Project could include passive recreational facilities, such as a proposed walking trail installed east from the existing Highline Canal and would be located on ridges or other relatively gradual-sloped terrain. IRWD would moderate the use of a recreational trail at Syphon Reservoir by restricting entrance to daily or seasonal use. Therefore, impacts related to physical deterioration or nearby recreational facilities were found to be less than significant.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no changes to the use of existing neighborhood and regional parks or other recreational facilities, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the implementation of the Syphon Reservoir Improvement Project site would involve implementation of a passive trail in a manner that is compatible with the Syphon Reservoir Improvement Project site. Specifically, the Syphon Reservoir Improvement Project would include a proposed walking trail installed east from the existing Highline Canal and would be located on ridges or other relatively gradual-sloped terrain. The construction of the proposed trail would result in impacts to special-status species and sensitive natural communities that would be potentially significant. The Syphon Reservoir Improvement Project FEIR included Mitigation Measures BIO-1 through BIO-6 to ensure that impacts to special-status species and natural communities would be reduced to less than significant levels. Additionally, the construction of the walking trail along the Highline Canal would occur in close proximity to a historic-period archeological site. The Syphon Reservoir Improvement Project FEIR required implementation of Mitigation Measures CR-1 through CR-

4 to ensure that construction activities are monitored and assessed for unanticipated discoveries, and impacts to cultural resources were found to be reduced to a less than significant level with mitigation incorporated. Operation and maintenance of the Syphon Reservoir Improvement Project proposed recreational facilities was found to have a less than significant impact with mitigation related to expansion of recreational facilities.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no additional recreational facilities or expansion of existing facilities which might have an adverse physical effect on the environment, and no additional mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Recreation

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to recreation. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

3.17 Transportation

<i>Issues (and Supporting Information Sources):</i>	Yes	No
XVII. TRANSPORTATION — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒
d) Result in inadequate emergency access?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Syphon Reservoir Improvement Project FEIR identified temporary and permanent vehicular trips associated with implementation of the Syphon Reservoir Improvement Project that could impact a plan addressing the circulation system. Impacts during construction would involve temporary lane closures that could create delays and/or detours for bikers and pedestrians traveling nearby. With the implementation of Mitigation Measure TRA-1, which would require the preparation and implementation of a Traffic Control Plan, impacts would be reduced to a significant level. On any given day during construction of the Syphon Reservoir Improvement Project, between 10 and 46 workers would be required on-site. Peak construction trip generation would be up to 232 daily construction vehicle trips. During operation of the Syphon Reservoir Improvement Project FEIR, maintenance of the proposed wetland/riparian area would require operational vehicle trips during the first five years of 12 to 24 round trips for 30 to 40 days per year. The increased traffic volume that would result from operating the Syphon Reservoir Improvement Project was found to have a nominal impact on local circulation system performance, and impacts during operation were found to be less than significant.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no new activities that could increase roadway trips or conflict with the circulation system, and no additional mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The Syphon Reservoir Improvement Project FEIR determined that all phases of construction and operation would generate fewer than 250 daily weekday trips. Screening criteria in the City of Irvine's

adopted *CEQA VMT Impact Analysis Guidelines* exclude projects generating fewer than 250 weekday daily trips from further VMT impact analysis. Therefore, it was determined that construction of the Syphon Reservoir Improvement Project would meet the City of Irvine's daily trip screening threshold, and the Syphon Reservoir Improvement Project requires no further VMT impact analysis. Impacts were found to be less than significant.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no new activities that could increase roadway trips and conflict with CEQA Guidelines Section 15064.3(b), and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR included access improvements that modified the turn lane geometry and added a traffic signal at the intersection of Sand Canyon Avenue and Portola Parkway. The Syphon Reservoir Improvement Project FEIR analysis evaluated the proposed intersection improvements for consistency with the City of Irvine Transportation Design Procedures' (TDP) recommended design features for left-turn lane pocket lengths (TDP 1), driveway lengths (TDP 14), and vehicle stacking and gate-stacking at project sites and concluded that proposed lane and signal changes would be implemented in a manner that is consistent with City of Irvine traffic control regulations to ensure that intersection modifications do not create additional hazards impacts for vehicles traveling on the northbound, eastbound, or westbound roadways. Impacts were found to be less than significant.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no changes to traffic hazards due to roadway designs or features, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

d) Result in inadequate emergency access?

The Syphon Reservoir Improvement Project FEIR identified that while the Syphon Reservoir Improvement Project would not involve closure of any roadways, temporary lane closures could interfere with emergency access. To ensure that impacts related to emergency access would not occur as a result of the Syphon Reservoir Improvement Project, Mitigation Measure TRA-1 was required, which involves coordination with emergency responders, including fire departments, police departments, and ambulances that have jurisdiction in the Syphon Reservoir Improvement Project area. The mitigation measure also requires that IRWD notify emergency responders of any partial or full lane closures at least 30 days prior to impacts. With implementation of Mitigation Measure TRA-1, impacts were reduced to a less than significant level. Due to the relatively limited amount of vehicle trips associated with operation and maintenance of the Syphon Reservoir Improvement Project, such trips would not interfere with emergency access, and impacts would be less than significant.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no new activities that could interfere with emergency access, and no additional mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Transportation

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to transportation. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

3.18 Tribal Cultural Resources

Issues (and Supporting Information Sources):	Yes	No
XVIII. TRIBAL CULTURAL RESOURCES — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:		
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

While preparing the Syphon Reservoir Improvement Project FEIR, IRWD engaged in a consultation process with the Gabrieleno Band of Mission Indians - Kizh Nation and other tribal entities pursuant to Public Resources Code Section 21080.3.1. No parties objected to the adequacy of the consultation process or the adequacy of adopted mitigation measures prior to the close of the public hearing in July 2021. IRWD has complied with all applicable tribal consultation requirements (see Public Resources Code § 21080.3.1).

The change in the listing status of the CBB does not require modifications to project location, design, or implementation methods (including the extent of ground disturbance). As a result, IRWD did not conduct supplemental Native American outreach. The listing status would not result in new activities that could

impact tribal cultural resources, and no additional mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Tribal Cultural Resources

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to tribal resources. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

3.19 Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	Yes	No
XIX. UTILITIES AND SERVICE SYSTEMS — Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☒
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☒
e) Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would result in an expanded water storage facility (dam, pipelines, treatment and disinfection, etc.). The Syphon Reservoir Improvement Project FEIR found that no new water, wastewater, stormwater drainage, electric power, natural gas, or telecommunication facilities would be required other than those analyzed throughout the Syphon Reservoir Improvement Project FEIR. Therefore, the implementation of the Syphon Reservoir Improvement Project would not require the relocation of any of the existing infrastructure, and no impacts would occur.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in relocation or construction of new water, wastewater, stormwater drainage, electric power, natural gas or telecommunication facilities. No impact would occur, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would increase storage of recycled water, which would be beneficially used within IRWD's service area instead of potable water, reducing dependency on costly, imported water and maintaining operational efficiency at IRWD's water recycling plants. No new water supplies or entitlements would be required to serve the Syphon Reservoir Improvement Project itself. Therefore, no impacts would occur related to water supplies.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in a new need for water supplies or entitlements. No impact would occur, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

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

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would not generate wastewater associated with construction, such as temporary use of portable facilities. Once construction activities are completed, portable facilities would be removed, and the wastewater would be properly handled and disposed of in accordance with all applicable laws and regulations. Therefore, no impacts would occur related to wastewater treatment capacity.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in a new need for wastewater treatment. No impact would occur, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The Syphon Reservoir Improvement Project FEIR identified that implementation of the Syphon Reservoir Improvement Project will result in construction debris from demolition of the existing dam and construction and contouring of the new reservoir bottom. Construction-related debris would require disposal at regional landfills serving the Syphon Reservoir Improvement Project area. The Syphon Reservoir Improvement Project FEIR found three permitted Class III landfills in Orange County available to accept waste. The Frank R. Bowerman Landfill, located adjacent to the Syphon Reservoir Improvement Project site, would be the primary destination for construction-related solid waste and has remaining capacity through the year 2053. If the limit of 11,500 tons per day is reached at that landfill, waste would be diverted to either the Olinda Landfill or the Prima Deshecha Landfill, both located in Orange County. Thus, the Syphon Reservoir Improvement Project would be served by landfills with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and no impact would occur.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in new generation of solid waste. No impact would occur, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would result in nominal solid waste. Statewide policies regarding solid waste have become progressively more stringent, reflecting Assembly Bill 939, which required local governments to develop waste reduction and recycling policies. IRWD would be required to comply with all laws and regulations related to the disposal and recycling of waste and for disposal of any hazardous materials resulting from demolition of the dam and the strainer and disinfection facilities. Therefore, no impact would occur.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would not result in new generation of solid waste. No impact would occur, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Utilities and Service Systems

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to utilities and service systems. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

3.20 Wildfire

<i>Issues (and Supporting Information Sources):</i>	Yes	No
XX. WILDFIRE — If located in or near state responsibility areas or land classified as very high fire hazard severity zones, would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:		
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☒

Discussion

Would project modifications, changed circumstances, or new information substantially increase the severity of significant impacts identified in the previous CEQA document or result in new significant impacts that could:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The Evacuation Plan for the City of Irvine identifies Portola Parkway to the west and SR-133 to the southeast as evacuation routes. Construction of the Syphon Reservoir Improvement Project would involve intersection improvements at the Portola Parkway/Sand Canyon Avenue intersection and would not involve closure of any roadways; however, temporary lane closures could be required. The Syphon Reservoir Improvement Project FEIR required implementation of Mitigation Measure TRA-1 to require the preparation and implementation of a Traffic Control Plan. The Traffic Control Plan would include, but would not be limited to, signage, striping, delineated detours, flagging operations, changeable message signs, delineators, arrow boards, and K-Rails during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate emergency access and circulation to the satisfaction of the City of Irvine. Therefore, with implementation of Mitigation Measure TRA-1, impacts to a circulation system during construction would be less than significant with respect to emergency response teams or an evacuation plan. Once construction is complete, intersection improvements at Portola Parkway/Sand Canyon Avenue would provide access for operation and maintenance vehicles onto IRWD property. Thus, operation of the Syphon Reservoir Improvement Project would not result in impacts on emergency response plans or emergency evacuation plans.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no changes to implementation of local emergency response plans or emergency evacuation plans. No impact would occur, and no additional mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project site is within a Moderate Fire Hazard Severity Zone in a State Responsibility Area and includes slopes surrounding the existing reservoir that are susceptible to prevailing winds. In addition, brush and grasslands within the Syphon Reservoir Improvement Project site are highly flammable. During construction, equipment and on-site diesel fuel could pose a risk to wildfire with possible ignition sources such as internal combustion engines, gasoline-powered tools, and equipment that could provide a spark, fire, or flame. The Syphon Reservoir Improvement Project would be required to comply with Public Resources Code Sections 4427, 4428, 4431, and 4442, which include regulations relating to the handling of combustible fuels and equipment that can exacerbate fire risks. Additionally, construction activities for the Syphon Reservoir Improvement Project would comply with fire protection and prevention requirements specified by the California Code of Regulations and California Division of Occupational Safety and Health. During operation, the Syphon Reservoir Improvement Project would involve expansion of the existing reservoir water storage capacity, and increased water levels would effectively create more inundated area and fewer steep slopes susceptible to prevailing winds within the Syphon Reservoir Improvement Project area in winter and spring months when the reservoir is full. Operation-related activities would involve a limited number of maintenance trucks for inspections and material delivery, which would utilize established access roads and would have low potential of producing uncontrolled spread of wildfire. The Syphon Reservoir Improvement Project FEIR required implementation of Mitigation Measure WDF-1, which would ensure fire hazard reduction measures are implemented during Syphon Reservoir Improvement Project construction activities to further reduce the potential for wildfire impacts on project workers.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no changes to wildfire risks or exposure of occupants to pollutants or uncontrolled wildfire spread. No impact would occur, and no additional mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The Syphon Reservoir Improvement Project FEIR identified that the Syphon Reservoir Improvement Project would include the construction and operation of new access roads and pipelines to support the expanded dam and reservoir. The new infrastructure would not pose additional risk to exacerbate wildfires. All infrastructure installed as part of the Syphon Reservoir Improvement Project FEIR during operation and maintenance would be required to implement fire reduction measures, as outlined in Mitigation Measure WDF-1. Thus, impacts would be less than significant with mitigation.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no additional infrastructure that may

exacerbate fire risk. No impact would occur, and no additional mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact or a substantial increase in the severity of the previously identified significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The Syphon Reservoir Improvement Project FEIR identified that during construction, approximately 2.4 million cubic yards of material would be excavated from the Syphon Reservoir Improvement Project site. These materials include topsoil, lake bottom sediments, alluvium, colluvium, slopewash, and formational materials as well as the existing dam. Approximately 2.2 million cubic yards of compacted material would be reused on-site for construction of the new dam. Site alteration through the movement of substantial quantities of soil and earth materials has the potential to result in landslides as a result of runoff or drainage changes during construction. However, due to the bowl-shaped topography of the site and the planned sediment basins, erosion on-site would not extend beyond the boundaries of the site. The Syphon Reservoir Improvement Project site would be required to comply with the *NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002 as amended by Orders 2010-0014-DWQ, 2012-006-DWQ, and 2022-0057-DWQ) (Construction General Permit) and local stormwater ordinances. Once constructed, the Syphon Reservoir Improvement Project would be designed to withstand a variety of site conditions to maintain capacity for the purpose of water storage. Specifically, the Syphon Reservoir Improvement Project would incorporate slopes no steeper than 4H:1V (a ratio of 4 units of horizontal length to 1 unit of vertical height) to promote slope stability. The inclinations of the natural hillside slopes surrounding the reservoir are typically 4H:1V; thus, the inclination of cut slopes would be similar to that of the natural slopes. Therefore, the operation of the Syphon Reservoir Improvement Project was found to not involve on-site personnel that could be put at risk should landslides or flooding occur as a result of wildland fires. Thus, impacts on people or structures due to downslope or downstream flooding or landslides as a result of runoff were found to be less than significant.

The change in the listing status of the CBB does not require modifications to project design or implementation methods. The listing status would result in no changes that would expose people or structures to risks of downslope flooding or landslides. No impact would occur, and no mitigation would be required. Therefore, the change in listing status of the CBB would not result in a new significant impact and would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

Summary of Potential Effects on Wildfire

The change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects, with respect to wildfire. No further environmental review is required (Public Resources Code § 21166; CEQA Guidelines § 15162).

3.21 Mandatory Findings of Significance

Issues (and Supporting Information Sources):

XXI. MANDATORY FINDINGS OF SIGNIFICANCE —

	Yes	No
a) Does the Project Modification have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒
b) Does the Project Modification have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒
c) Does the Project Modification have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒

Discussion

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

The Syphon Reservoir Improvement Project FEIR concluded that the Syphon Reservoir Improvement Project would not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

As discussed throughout this Addendum No. 2, the change in the listing status of the CBB would not in itself be a new significant impact or constitute a change in the project setting that could result in a new significant impact or substantially more severe significant impact to special-status species. The Syphon Reservoir Improvements Project FEIR determined impacts to special-status wildlife species would be potentially significant and required implementation of Mitigation Measures BIO-1 through BIO-5. The mitigation measures included in the current Mitigation Monitoring and Reporting Program adopted by IRWD as part of the certified FEIR to establish both on-site and off-site compensatory mitigation would also be appropriate and sufficient to reduce impacts to CBB to less than significant levels. No additional mitigation or compensation would be required. Therefore, the change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects. As a result, the change in listing status of the CBB would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

b) Does the project have impacts that are individually limited, but cumulatively considerable?

The Syphon Reservoir Improvement Project FEIR identified the Syphon Reservoir Improvement Project's contribution to cumulative impacts for all resource topics and concluded that cumulative impacts would be less than significant, often with implementation of mitigation measures. The change in the listing status of the CBB does not require modifications to project design or implementation methods. As a result, as described throughout this Addendum No. 2, the change in listing status of the CBB would not result in new significant cumulative environmental effects, result in a substantial increase in the severity of previously identified cumulative significant effects, or result in a substantial increase in the severity of previously identified cumulatively considerable contributions to significant cumulative impacts.

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

The Syphon Reservoir Improvement Project FEIR concluded that the Syphon Reservoir Improvement Project would not result in impacts that could cause substantial adverse effects on human beings, either directly or indirectly. The change in the listing status of the CBB does not introduce modifications to project design or implementation methods. As described throughout this Addendum, the change in listing status of the CBB would not result in environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. Therefore, the change in the listing status of the CBB would not result in new significant environmental effects or result in a substantial increase in the severity of previously identified significant effects. As a result, the change in listing status of the CBB would not alter the conclusions of the Syphon Reservoir Improvement Project FEIR.

CHAPTER 4

Determination

As mentioned in Section 1.3, *Regulatory Background*, IRWD as Lead Agency, finds that no subsequent EIR is required to address the change in listing status of CBB because there would not be substantial changes to the project, changed circumstances, or new information that would require major revisions of the previous EIR due to involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant impacts. Furthermore, new information does not indicate that the change in listing status of CBB would have new significant effects not discussed in the certified FEIR; that significant effects previously examined will be substantially more severe than shown in the certified FEIR; that mitigation measures or alternatives previously found not to be feasible would in fact be feasible; or that mitigation measures or alternatives which are considerably different from those analyzed in the certified FEIR would substantially reduce one or more significant effects on the environment but IRWD declines to adopt the mitigation measures or alternatives. Section 15164(a) of the CEQA Guidelines provides that an addendum to a previously certified EIR is permissible if some changes or additions are necessary but none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred. As analyzed in this document, IRWD has determined the change in the listing status of the CBB would not result in any of the conditions listed in CEQA Guidelines Section 15162. As a result, this Addendum No. 2 to the Syphon Reservoir Improvement Project FEIR has been prepared and is the appropriate CEQA document.