



## NOTICE OF PREPARATION AND SCOPING MEETING FOR THE SANTIAGO CREEK DAM OUTLET TOWER AND SPILLWAY IMPROVEMENTS PROJECT ENVIRONMENTAL IMPACT REPORT

**DATE:** May 04, 2023

**TO:** Reviewing Agencies and Other Interested Parties

**FROM:** Irvine Ranch Water District, 15600 Sand Canyon Avenue, Irvine, California 92618

**PROJECT TITLE/SUBJECT:** Santiago Creek Dam Outlet Tower and Spillway Improvements Project — Notice of Preparation of an Environmental Impact Report (EIR) and Notice of Public Scoping Meeting

**PROJECT APPLICANT:** Irvine Ranch Water District

**NOTICE OF PREPARATION REVIEW PERIOD:** May 04, 2023 – June 05, 2023 (30 days)

**SCOPING MEETING:** May 16, 2023

The purpose of this Notice of Preparation (NOP) is to notify potential Responsible Agencies (Agencies) that the Lead Agency, the Irvine Ranch Water District (IRWD), will prepare an Environmental Impact Report (EIR) for the proposed Santiago Creek Dam Outlet Tower and Spillway Improvements Project (Project) and to solicit comments and suggestions regarding (1) the scope and content of the EIR and (2) the environmental issues and alternatives to be addressed in the EIR (California Environmental Quality Act [CEQA] Guidelines Section 15082). This NOP also provides notice to interested parties, organizations, and individuals of the preparation of the EIR and requests comments on the scope and contents of the environmental document. A more detailed Project Description is available in the Initial Study for review at [www.IRWD.com/irvinelakeproject](http://www.IRWD.com/irvinelakeproject).

### PROJECT LOCATION:

The Project is located at Santiago Creek Dam at the northwest end of Irvine Lake in unincorporated Orange County, California. Santiago Creek Dam impounds Irvine Lake. The Project is located south of State Route (SR) 261 and east of SR-241 and Santiago Canyon Road. Existing structures include the dam, outlet tower in Irvine Lake, spillway channel, flashboard storage shed, control house/outlet works, energy dissipater structure, Irvine Lake pipeline (ILP), and dam access road.

The Project site is located on the U.S. Geological Survey's Black Star Canyon 7.5-minute quadrangle. It is within the Santa Ana Watershed. The drainage area for the Project encompasses approximately 63.4 square miles. Irvine Lake (also called the Santiago Creek Reservoir) was originally constructed in 1933 to store water for the benefit of the surrounding communities.



Surrounding land uses primarily consist of undeveloped open space. Irvine Regional Park is located northwest of SR-241; Limestone Canyon Regional Park is located south of Santiago Canyon Road; and Oak Canyon

Park is located at the southeast end of Irvine Lake. The closed Santiago Canyon Landfill is located adjacent to the west of Irvine Lake. Residential development is located west of SR-241.

### **PROJECT BACKGROUND:**

IRWD and Serrano Water District (SWD), jointly referred to as the “Districts”, operate Irvine Lake and the Santiago Creek Dam that serves as a critical water supply reservoir for the Districts. IRWD uses water from Irvine Lake for two purposes: 1) as a source of water for non-drinking purposes, such as irrigation uses, and 2) as a source of water for the Baker Water Treatment Plant, which produces drinking water for an estimated 85,000 homes in Orange County. SWD uses water from Irvine Lake to provide treated drinking water to its customers in the City of Villa Park and some parts of the City of Orange.

Santiago Creek Dam is a compacted earthfill embankment completed in 1933 and certified by the State of California, Department of Water Resources, Division of Safety of Dams (DSOD), which identifies it as Dam No. 75-000. Santiago Creek Dam is in Orange County, California and impounds water for Irvine Lake on Santiago Creek, a tributary to the Santa Ana River.

The Districts have been working with the DSOD to evaluate different structural elements of the existing Santiago Creek Dam, including the evaluation of the existing outlet tower and an alternative analysis for seismic retrofits or replacement of the tower. DSOD requested the Districts perform a seismic evaluation of the outlet tower; evaluation of the results shows that the tower is nearing the end of its useful life and could be replaced and upgraded to today’s seismic and safety standards. In addition, DSOD also requested a spillway condition assessment be performed for the spillway at Santiago Creek Dam. The assessment found that the aging spillway is nearing the end of its useful life and the design, while acceptable at the time of construction, does not meet current design standards.

In light of the findings from the seismic evaluation for the existing outlet tower and comprehensive assessment of the existing spillway, the Districts have elected to develop designs for an inclined outlet structure that would be placed near the left abutment of the existing dam and to replace the existing spillway with a side-channel spillway on the left abutment. The spillway crest would also be raised by six feet to regain operational storage capacity that was lost over the years due to sedimentation. The existing outlet tower would be abandoned, and the new inclined outlet structure would connect to the existing outlet conduit within the reservoir.

The rehabilitation and replacement of the Santiago Creek Dam outlet works, and spillway facilities is necessary to address identified seismic safety concerns; to meet current DSOD regulatory requirements; to satisfy the Districts’ operational requirements; to extend the useful life of the facilities; and to improve reliability.

### **PROJECT DESCRIPTION:**

General elements of each portion of the Project are included below. A more detailed description of the proposed facilities is included in the Initial Study.

- Demolition of existing structures, including the existing outlet tower, portions of the existing spillway, portions of the upstream dam embankment concrete facing, storage building on the dam crest, portions of the outlet works, portions of the ILP, catwalk/stairs across Santiago Creek, and piezometers/monitoring wells.
- The existing outlet tower would be demolished, capped, and a new inclined outlet structure would be constructed on the left abutment. Each riser would be equipped with an intake fish screen.
- Inlet/Outlet works would be configured to incorporate the new structure, including new valves and fittings. Water would enter through the new inclined inlet/outlet structure, would enter an existing conduit under the dam. At the downstream toe of the dam, a new fitting would be installed to bifurcate the flow to the ILP or the emergency outlet pipeline. Water that enters the ILP would reach the Districts’ distribution systems. Water that enters the emergency outlet pipeline would be released at the end of the new spillway.

- The ILP would be increased from 36 inches to 54 inches to increase the capacity of the line to improve the hydraulic performance of the system.
- The existing spillway would be demolished and replaced with a new side-channel spillway at the left abutment.

Ancillary site improvements are also proposed for the Project, including the following:

- New access road and ramp to provide vehicle access to the new inclined/outlet structure. A new shotcrete tie-back retaining wall would be needed to cut the roadway into the existing slope without affecting the existing landfill facility above.
- New dam control building to house the valve system (approximately 52 feet by 18 feet with a height of 12 feet). The new building would be designed in accordance with IRWD's fire-hardening building criteria.
- Widening of the existing dam crest from 10 feet to 12 feet with a retaining wall on the downstream side of the crest. The retaining wall would be 1,300 feet in length and would have a height of 10 feet.
- Raising of the dam crest with an approximately 1.5-foot-tall parapet wall on the upstream side of the dam crest. This wall would raise the effective dam crest from an elevation of 795.9 to 797.9 feet for DSOD freeboard requirements during the Probably Maximum Flood event.
- New emergency access walkway (5 feet wide) and stair system along the left wall of the new spillway channel to reach the inlet/outlet structure and dam crest from the adjacent landfill during a spillway event. The walkway would connect to the new access road (described above).
- New prefabricated steel bridge structure for vehicles across the spillway.

The Project includes raising the spillway to 797.9 feet, which is 2 feet higher than the existing maximum water storage elevation with the flashboards installed. Raising the spillway would allow the lake to impound water up to the 797.9-foot elevation contour year-round, which would allow storage of approximately an additional 1,600 acre-feet of additional water.

**CONSTRUCTION ACTIVITIES:**

It is estimated that construction of the Project would take approximately three years to complete, assuming potential down time associated with weather delays and work restrictions in the wet season. The initial construction schedule anticipates that the spillway and inclined outlet structure improvements would be constructed over multiple dry seasons.

**NOTICE OF PREPARATION (NOP):**

IRWD has made a determination that a full-scope EIR, inclusive of all environmental topics except for Agriculture and Forest Resources, Hazards and Hazardous Materials, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire is required for the proposed Project. The NOP can also be accessed online at [www.IRWD.com/irvinelakeproject](http://www.IRWD.com/irvinelakeproject). Copies are available for review at Irvine Ranch Water District, 15600 Sand Canyon Avenue, Irvine, California 92618, and at the following locations:

- Irvine/Katie Wheeler Library, 13109 Old Myford Road, Irvine, CA 92602
- Library of the Canyons, 7531 East Santiago Canyon Road, Silverado, CA 92676

IRWD requests your careful review and consideration of this notice, and it invites any and all input and comments from interested Agencies, persons, and organizations regarding the preparation of the EIR. Pursuant to CEQA Section 21080.4, comments must be submitted in response to this notice no later than 30 days after receipt of the NOP during the scoping period, which begins on May 4, 2023, and ends at the close of business on June 5, 2023. All comments or other responses to this notice should be submitted in writing to:

Andy Uk  
Environmental Compliance Analyst  
Irvine Ranch Water District Water Resources & Policy Department  
15600 Sand Canyon Avenue  
Irvine, California 92618  
[uk@irwd.com](mailto:uk@irwd.com)  
949.453.5326

**NOTICE OF PUBLIC SCOPING MEETING:**

IRWD will conduct a public scoping meeting in conjunction with this NOP to present the Project, describe the EIR process, and receive public comments and suggestions regarding the scope and content of the EIR. The meeting will be held on May 16, 2023, at 5:00 PM, at the following location:

IRWD's Board Room  
15600 Sand Canyon Avenue  
Irvine, California 92618

**ALTERNATIVES TO THE PROPOSED PROJECT:**

CEQA Guidelines Section 15126.6(a) requires that, "an EIR describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project and evaluate the comparative merits of the alternatives."

IRWD will develop alternatives, which will include the CEQA-required No Project Alternative, that will be determined once the technical analyses are completed and there is an understanding of the Project's potentially significant impacts.

**PROBABLE ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT:**

IRWD has determined that all environmental topics, except for Agriculture and Forest Resources, Hazards and Hazardous Materials, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire, will be included and analyzed in the EIR for the proposed Santiago Creek Dam Outlet Tower and Spillway Improvements Project.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

**ANTICIPATED SCHEDULE**

A 45-day public review period will be provided with the Notice of Availability when the Draft EIR is complete, after which responses to comments received will be prepared. IRWD will then hold a public hearing and make a recommendation on certification of the EIR to the Board of Directors.

**CONCLUSION**

IRWD requests the public's careful review and consideration of this notice, and it invites any and all input and comments from public agencies and interested individuals regarding the preparation and scope of the Draft EIR.



## NATIVE AMERICAN HERITAGE COMMISSION

May 4, 2023

Andy Uk  
Irvine Ranch Water District  
15600 Sand Canyon Ave.  
Irvine, CA 92618

CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

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COMMISSIONER  
**[Vacant]**

COMMISSIONER  
**[Vacant]**

EXECUTIVE SECRETARY  
**Raymond C.  
Hitchcock**  
Miwok, Nisenan

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)

**Re: 2023050097, Santiago Creek Dam Outlet and Spillway Improvements Project, Orange County**

Dear Mr. Uk:

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

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

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

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



## AB 52

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

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
- 3. Mandatory Topics of Consultation if Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

**7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:

- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
- b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

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

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

**10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**

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

**11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
- b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
- c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf).

Some of SB 18's provisions include:

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

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

## NAHC Recommendations for Cultural Resources Assessments

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

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([https://ohp.parks.ca.gov/?page\\_id=30331](https://ohp.parks.ca.gov/?page_id=30331)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

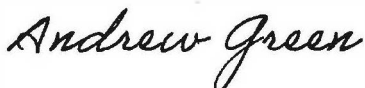


3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
  
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:

[Andrew.Green@nahc.ca.gov](mailto:Andrew.Green@nahc.ca.gov)

Sincerely,



Andrew Green  
Cultural Resources Analyst

cc: State Clearinghouse



May 24, 2023

Andy Uk  
Environmental Compliance Analyst  
Irvine Ranch Water District Water Resources & Policy Department  
15600 Sand Canyon Avenue  
Irvine, California 92618

**Subject: Notice of Preparation and Scoping Meeting for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project Environmental Impact Report**

Dear Andy Uk:

Staff is in receipt of the notice of preparation of an Environmental Impact Report (EIR) for the proposed Santiago Creek Dam Outlet Tower and Spillway Improvements Project generally located south of State Route (SR) 261 and east of SR-241 and Santiago Canyon Road. The project proposes to demolish existing structures and to construct a new inclined outlet structure. Ancillary site improvements include but are not limited to a new access road and ramp to the new structure, new dam control building, widening and raising of the dam crest, and new emergency access walkway and prefabricated steel bridge structures.

Staff has reviewed the project proposal and has no comments at this time.

Thank you for the opportunity to review and comment on the proposed project. Please add me to the interest list to receive project notifications, including the NOA for the EIR. If you have any questions, please contact me at [tilin@cityofirvine.org](mailto:tilin@cityofirvine.org) or 949-724-6361.

Sincerely,

A handwritten signature in black ink, appearing to be 'Tiffany Lin', written over a light blue horizontal line.

Tiffany Lin  
Associate Planner

ec: Marika Poynter, Manager of Planning Services



# ORANGE COUNTY FIRE AUTHORITY

P. O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Road, Irvine, CA 92602-0125

Brian Fennessy, Fire Chief

(714) 573-6000

[www.ocfa.org](http://www.ocfa.org)

June 2, 2023

Andy Uk Environmental Compliance Analyst  
IRWD Water Resources & Policy Department  
15600 Sand Canyon Avenue  
Irvine, CA 92618  
[uk@irwd.com](mailto:uk@irwd.com)  
949.453.5326

Subject: Notice of Preparation of EIR for Santiago Creek Dam and Spillway Improvement

Dear Andy Uk:

Thank you for the opportunity to review the subject document. The Orange County Fire Authority (OCFA) provides fire protection and emergency medical services response to 23 cities in Orange County and all unincorporated areas. The OCFA operates 78 fire stations throughout Orange County.

We have no comments at this time and look forward to reviewing the EIR.

Please contact me at 714-573-6253 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "RD" or "RJD", written over the word "Sincerely".

Robert J Distaso PE  
Fire Safety Engineer  
Planning and Development  
[robertdistaso@ocfa.org](mailto:robertdistaso@ocfa.org)  
[www.ocfa.org](http://www.ocfa.org)

**From:** [Joyce Perry](#)  
**To:** [Andy Uk](#)  
**Subject:** [EXTERNAL] Tribal Response- NOP for Santiago Creek Dam Outlet Tower and Spillway Improvements Project EIR  
**Date:** Friday, June 2, 2023 12:09:04 PM

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**Caution: This email originated from outside IRWD. Do not click links or open attachments unless you know the sender and were expecting the email.**

Good Afternoon,

I am responding on behalf of the Juaneno Band of Mission Indians, Acjachemen Nation-Belardes to your NOP of an EIR for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project.

This project is located within our territory, and a sensitive area to our tribe. We wish to consult on this project as it moves forward. We ask to review the Tribal Cultural Resources section of the draft EIR when it is available.

Additionally we wish to reconfirm our recommendation made to Kellie Welch if IRWD on 9/22/22, for native monitoring by representatives of the Juaneno Band of Mission Indians during ground disturbance in the vicinity of Santiago Canyon Road and Haul Road with nearby resources P-30-001012, P-30-100460, and P-30-001294.

Thank you and we look forward to hearing from you.

Joyce Stanfield Perry  
Hú'u'ni 'ómaqati yáamaqati- Teach peace



Payomkawichum Kaamalam - President  
[kaamalam.com](http://kaamalam.com)

Juaneno Band of Mission Indians, Acjachemen Nation  
Cultural Resources Director



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

June 5, 2023

Andy Uk, Environmental Compliance Analyst  
Irvine Ranch Water District, Water Resources and Policy Department  
15600 Sand Canyon Avenue  
Irvine, California 92618  
Phone: (949) 453-5326  
E-mail: [uk@irwd.com](mailto:uk@irwd.com)

Subject: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project [SCAG NO. IGR10882]

Dear Andy Uk:

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project (“proposed project”) to the Southern California Association of Governments (SCAG) for review and comment. SCAG is responsible for providing informational resources to regionally significant plans, projects, and programs per the California Environmental Quality Act (CEQA) to facilitate the consistency of these projects with SCAG’s adopted regional plans, to be determined by the lead agencies.<sup>1</sup>

Pursuant to Senate Bill (SB) 375, SCAG is the designated Regional Transportation Planning Agency under state law and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS). SCAG’s feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and align with RTP/SCS policies. Finally, SCAG is the authorized regional agency for Intergovernmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project in Orange County. The proposed project includes the rehabilitation and replacement of Santiago Creek Dam outlet works and spillway facilities, increasing storage by approximately 1,600-acre feet of water.

**When available, please email environmental documentation to [IGR@scag.ca.gov](mailto:IGR@scag.ca.gov) providing, at a minimum, the full public comment period for review.**

If you have any questions regarding the attached comments, please contact the IGR Program, attn.: Annaleigh Ekman, Senior Regional Planner, at (213) 630-1427 or [IGR@scag.ca.gov](mailto:IGR@scag.ca.gov). Thank you.

Sincerely,

Frank Wen, Ph.D.  
Manager, Planning Strategy Department

<sup>1</sup> Lead agencies such as local jurisdictions have the sole discretion in determining a local project’s consistency with the 2020 RTP/SCS (Connect SoCal) for the purpose of determining consistency for CEQA.



**COMMENTS ON THE NOTICE OF PREPARATION OF A  
DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE  
SANTIAGO CREEK DAM OUTLET TOWER AND SPILLWAY IMPROVEMENTS PROJECT [SCAG NO. IGR10882]**

**CONSISTENCY WITH CONNECT SOCIAL**

SCAG provides informational resources to facilitate the consistency of the proposed project with the adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or Connect SoCal). For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project’s consistency with Connect SoCal.

**CONNECT SOCIAL GOALS**

The SCAG Regional Council fully adopted [Connect SoCal](#) in September 2020. Connect SoCal, also known as the 2020 – 2045 RTP/SCS, builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in Connect SoCal may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project. Among the relevant goals of Connect SoCal are the following:

<b>SCAG CONNECT SOCIAL GOALS</b>	
Goal #1:	<i>Encourage regional economic prosperity and global competitiveness</i>
Goal #2:	<i>Improve mobility, accessibility, reliability and travel safety for people and goods</i>
Goal #3:	<i>Enhance the preservation, security, and resilience of the regional transportation system</i>
Goal #4:	<i>Increase person and goods movement and travel choices within the transportation system</i>
Goal #5:	<i>Reduce greenhouse gas emissions and improve air quality</i>
Goal #6:	<i>Support healthy and equitable communities</i>
Goal #7:	<i>Adapt to a changing climate and support an integrated regional development pattern and transportation network</i>
Goal #8:	<i>Leverage new transportation technologies and data-driven solutions that result in more efficient travel</i>
Goal #9:	<i>Encourage development of diverse housing types in areas that are supported by multiple transportation options</i>
Goal #10:	<i>Promote conservation of natural and agricultural lands and restoration of habitats</i>

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

SCAG CONNECT SOCIAL GOALS	
Goal	Analysis
Goal #1: <i>Encourage regional economic prosperity and global competitiveness</i>	<i>Consistent: Statement as to why;                      Not-Consistent: Statement as to why;                      Or                      Not Applicable: Statement as to why;                      DEIR page number reference</i>
Goal #2: <i>Improve mobility, accessibility, reliability and travel safety for people and goods</i>	<i>Consistent: Statement as to why;                      Not-Consistent: Statement as to why;                      Or                      Not Applicable: Statement as to why;                      DEIR page number reference</i>
etc.	etc.

**Connect SoCal Strategies**

To achieve the goals of Connect SoCal, a wide range of land use and transportation strategies are included in the accompanying twenty (20) technical reports. Of particular note are multiple strategies included in Chapter 3 of Connect SoCal intended to support implementation of the regional Sustainable Communities Strategy (SCS) framed within the context of focusing growth near destinations and mobility options; promoting diverse housing choices; leveraging technology innovations; supporting implementation of sustainability policies; and promoting a Green Region. To view Connect SoCal and the accompanying technical reports, please visit the [Connect SoCal webpage](#). Connect SoCal builds upon the progress from previous RTP/SCS cycles and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that helps the SCAG region strive towards a more sustainable region, while meeting statutory requirements pertinent to RTP/SCSs. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

SCAG staff would like to call your attention to the [Water Action Resolution](#) unanimously adopted by SCAG’s Regional Council on October 6, 2022 that formally affirmed the drought and water shortage emergency in Southern California and called on local and regional partners to join together to adopt an “all of the above” approach to addressing the region’s water challenges and catalyzing opportunities. The Resolution calls on SCAG to take action and support partners to reduce water use; improve water conservation, reuse, and efficiency; enhance water systems’ health and resilience; pursue and potentially implement new water supply and storage opportunities; and support investments in water infrastructure and conservation practices that support the region’s economic and population growth and fosters planning for the region’s housing needs.

**DEMOGRAPHICS AND GROWTH FORECASTS**

A key, formative step in projecting future population, households, and employment through 2045 for Connect SoCal was the generation of a forecast of regional and county level growth in collaboration with expert demographers and economists on Southern California. From there, jurisdictional level forecasts were ground-truthed by subregions and local agencies, which helped SCAG identify opportunities and barriers to future development. This forecast helps the region understand, in a very general sense, where we are expected to grow, and allows SCAG to focus attention on areas that are experiencing change and may have increased transportation needs. After a year-long engagement effort with all 197 jurisdictions one-on-one, 82 percent of SCAG’s 197 jurisdictions provided feedback on the forecast of future growth for Connect SoCal. SCAG also sought feedback on potential sustainable growth strategies from a broad range of stakeholder groups – including local jurisdictions, county transportation commissions, other partner agencies, industry groups, community-based organizations, and the general public. Connect SoCal utilizes a bottom-up approach in that total projected growth for each jurisdiction reflects feedback received from jurisdiction staff, including city managers, community development/planning directors, and local staff. Growth at the neighborhood

level (i.e., transportation analysis zone (TAZ) reflects entitled projects and adheres to current general and specific plan maximum densities as conveyed by jurisdictions (except in cases where entitled projects and development agreements exceed these capacities as calculated by SCAG). Neighborhood level growth projections also feature strategies that help to reduce greenhouse gas emissions (GHG) from automobiles and light trucks to achieve Southern California’s GHG reduction target, approved by the California Air Resources Board (CARB) in accordance with state planning law. Connect SoCal’s Forecasted Development Pattern is utilized for long range modeling purposes and does not supersede actions taken by elected bodies on future development, including entitlements and development agreements. SCAG does not have the authority to implement the plan -- neither through decisions about what type of development is built where, nor what transportation projects are ultimately built, as Connect SoCal is adopted at the jurisdictional level. Achieving a sustained regional outcome depends upon informed and intentional local action. To access jurisdictional level growth estimates and forecasts for years 2016 and 2045, please refer to the [Connect SoCal Demographics and Growth Forecast Technical Report](#). The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts				Adopted County of Orange Forecasts			
	Year 2020	Year 2030	Year 2035	Year 2045	Year 2020	Year 2030	Year 2035	Year 2045
Population	19,517,731	20,821,171	21,443,006	22,503,899	3,268,084	3,440,882	3,499,318	3,534,620
Households	6,333,458	6,902,821	7,170,110	7,633,451	1,065,426	1,103,569	1,124,628	1,154,274
Employment	8,695,427	9,303,627	9,566,384	10,048,822	1,773,571	1,886,065	1,927,505	1,980,433

**MITIGATION MEASURES**

SCAG staff recommends that you review the [Final Program Environmental Impact Report](#) (Final PEIR) for Connect SoCal for guidance, as appropriate. SCAG’s Regional Council certified the PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on May 7, 2020 and also adopted a PEIR Addendum and amended the MMRP on September 3, 2020 (please see the [PEIR webpage](#) and scroll to the bottom of the page for the PEIR Addendum). The PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.



County Administration South  
601 North Ross Street  
Santa Ana, CA 92701

P.O. Box 4048  
Santa Ana, CA 92702

{714} 667-8800

info@ocpw.ocgov.com

OCPublicWorks.com



Administrative  
Services



OC Development  
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OC Facilities Design  
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Management



OC Facilities  
Maintenance  
& CUF



OC Fleet Services



OC Construction



OC Environmental  
Resources



OC Operations &  
Maintenance



OC Infrastructure  
Programs



OC Survey



June 5, 2023

Andy Uk  
Environmental Compliance Analyst  
Irvine Ranch Water District Water Resources & Policy Department  
15600 Sand Canyon Avenue  
Irvine, CA 92618

**Subject: Notice of Preparation and Initial Study for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project Environmental Impact Report**

Dear Andy Uk,

Thank you for the opportunity to comment on the Initial Study (IS) for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project Environmental Impact Report (EIR). The County offers the following comments for your consideration.

**OC Infrastructure/Traffic Engineering**

1. Please provide a timeline for the proposed project (start year, end year, major points, etc.).
2. Page 13, Exhibit 3, of the IS, the project's proposed work and construction seems to extend outside Irvine Ranch Water District (IRWD) property line and into Unincorporated County of Orange jurisdiction. Confirm that has this been approved and permitted.
3. Page 23 of the IS, the project will potentially have a significant impact on inadequate emergency access. Will the proposed project be presented to the Orange County Fire Authority (OCFA) for approval?
4. Will Santiago Canyon Road be the primary road for construction workers and management to access the project? If so, please provide a traffic impact analysis/study to OC Traffic Engineering for review.
5. In the traffic impact analysis/study, please account for any changes in Level Of Service and Vehicle Miles Traveled within County roadway segments and intersections. Orange County's roadways are adjacent to the project site and should be considered.
6. County of Orange has a Capital Improvement Project (CIP) on Santiago Canyon Road planned construction for Fiscal Year 2025-2026. Will the project conflict with County of Orange's CIP? Please contact Sonica Kohli (714- 647-3910,

[Sonica.Kohli@ocpw.ocgov.com](mailto:Sonica.Kohli@ocpw.ocgov.com)) for more information regarding the County CIP project.

## **OC Flood Programs/Floodplain Management**

1. Page 3-12, Section IX. Hydrology and Water Quality, Impact Analysis, Item C-i to C-iii is to analyze if the proposed project will alter the existing drainage pattern in a manner which would: i) result in substantial erosion or siltation on- or off-site; 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 substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site; 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.

The response provided in the IS has categorized the impact as “Potentially Significant.” However, the explanation provided in this section discusses potential impacts related to groundwater supplies and groundwater recharge. The IS does not adequately address the potential impacts to the existing drainage pattern, potential for erosion, or impacts to existing or planned stormwater drainage systems. Further details shall also be provided if the change of the outlet tower will alter the existing maximum discharge from Irvine Lake, and if there would be any impacts downstream.

2. The project should provide a detailed hydrology and hydraulic analysis for Orange County Public Works (OCPW) to review as this project would have impact to downstream facilities, especially Villa Park Dam, which is an OCPW maintained and operated facility.

## **OC Development Services/Planning**

1. Provide a more in-depth project description. Include construction activities (i.e., construction staging and lay-down areas, phasing/construction schedule, on-site and off-site improvements), site improvement (i.e., site plan of area being improved, landscaping plans, signage, walls/fences, vehicular access, parking), and infrastructure characteristics (storm water, access easements, utilities, etc.)
2. Page 3-16, Section XV. Public Services, additional analysis should be included to confirm fire, police, and emergency services can maintain acceptable service ratios, response times, or other performance objectives during the construction phase.

## **OC Parks**

### Access Road:

1. Exhibit 3, Site Plan, indicates an access road from Irvine Regional “(Not for Construction).” Clarify whether this access road will be used in conjunction with the project, clarify where access to the project will be taken, and ensure all access points are shown on Exhibit 3.
2. Provide more information on whether access is needed through Irvine Regional Park as that will have an impact on recreation users at the park.
3. Page 1-4, Section 1.4 says “Ancillary site improvements are also proposed for the Project, including a new access road and ramp to provide vehicle access to the new inclined/outlet structure...” Clarify if this new access road is proposed to be on IRWD property or County property. A “proposed” or “new”



access road is not marked on the Site Plan. Relatedly, proposed improvements should be marked on the Site Plan/Exhibit.

Hours of Operation:

1. Clarify hours of operation for the project.

Impacts:

1. Page 3-16, Section XIV. Public Services and Section XV. Recreation impacts need to be evaluated in greater detail for potential impacts to the park areas in the vicinity of the Project. Potential impacts to the Recreation Lease Area need to be discussed and included in the evaluation as this is a known future project.
2. Evaluate whether the proposed spillway project will have an impact to future recreation at Irvine Lake as this recreation area is supposed to facilitate shoreline fishing.
3. Page 3-16 Section XV. Recreation states there will be no recreational impacts, but the lake will be drained (no fishing).
4. The draining of the lake and other disruptions caused by the project (noise, dust, construction traffic, etc.) may increase public demand and use of other competing recreational facilities as the public seeks alternate recreational facilities while Irvine Lake is impacted by the project. The following questions need to be addressed and evaluated in the Draft EIR: What alternate recreational facilities can the public use? Will these other facilities be able to support an increase in hikers, fishers, bikers, RVs, etc.? Will these recreational users come back to Irvine Lake when the project is completed? Will interruptions of recreational activities have an adverse physical effect on the environment?
5. Page 1-2, Section 1.2 states that, "The reservoir provides flood control, water supply, fisheries enhancement, and recreational opportunities for the surrounding area." The Project Boundary Map/Exhibit 2, which follows Page 1-2 (Page 10 of the PDF document), shows that the Project Boundary encompasses the County's Recreation Parcel (including our RV Storage Area), and portions of the James License Parcel which offers recreational opportunities.
6. Another consideration is whether impacts to the Orange County Modelers Association (OCMA) model airplane flyer hobby group has been considered. The Draft EIR needs to evaluate if access to the airfield will be impacted. It should also clarify that the group's recreational access will be preserved along Blue Diamond Road during the project as this group is another stakeholder in the area. Clarify whether OCMA has been consulted by IRWD and Serrano Water District regarding this project.
7. There are The Nature Conservancy/OC Parks Foundation conservation easement protections on the north, east and south side of the project area. Draft EIR needs to evaluate whether sound and dust related to the project construction through could impact surrounding habitat and Conservation Easement areas, as well as areas along the truck route. Project has the potential to impact nesting birds in proximity to the project.

8. Page 3-10 Section VIII. Hazard and Hazardous Material Section sub-heading “b)” since the lake is used for recreational fishing, the impact on fish/fishing this should be considered with the evaluation of the potential of hazardous materials impacting the reservoir.
9. Page 3-16 Section XIV. Public Services, although this will not result in the provision of new public services, the lake currently is used to provide public recreation (shoreline fishing) and since the project will require draining the reservoir for an extended period this will likely have an impact on public park/recreation services.
10. Page 3-20 Section XIX. Wildfire, although the site is not within a VHFHSV zone, if the reservoir is used for firefighting purposes (water drops), it could have an impact on recreational and habitat areas since the project requires draining the reservoir for an extended period of time.
11. Post-project impacts in the form of invasive weeds brought in or spread via trucks and movement of material that are not apparent for a year or even a few years after project initiation often occurs. This could be remediated by having the project include surveys and weed treatment obligations during and, for a time period, after the project to make sure project impacts post-project are accounted for. Following preventative measures for weed seed spread and requiring surveys, weed treatment, and communication for priority nonnative, invasive species should be included in conditioning for the project. As the project approaches, OC Parks will provide:
  - OC Parks’ Best Management Practice guidelines for sanitation practices to prevent invasive weed seed spread.
  - A current list of OC Parks’ target invasive species.
  - The OC Parks Integrated Pest Management (IPM) Plan and practices that must be followed for chemical control
  - Training in Calflora to map identified target weed populations and record treatment.
  - An OC Parks contact for communication.
12. Prior to project initiation, OC Parks requests to review detailed plans specific to remediation of temporary habitat impacts, including plant material palettes, installation and maintenance methods and timelines, and success criteria.
13. The Fremont Canyon Staging area is used by OC Parks to launch guided public hikes and is located along the dam road very close to the project area. The project will impact CE recreational values by detracting from user experience via sound, viewshed impacts and maybe dust; however this is a lightly used staging area (scheduled activities occurring about twice a week on average).
14. The Airfield Staging area and the Red Rock Wilderness area will be coming online for public access before or during the Irvine Lake Improvement process (on the south side of Irvine Lake). Analyze potential temporary impacts during construction related to recreational values specific to truck trips along access route and viewshed impacts.

#### Typographical and Exhibit Edits:

1. Page 1-1 Project Location: Info on surrounding land uses needs to be added; such info is included in the Air Quality Impact Analysis section in c).

2. Recreation Lease Area located at the southeastern side of the lake needs to be included as a surrounding land use in the Project Location section.
3. Page 1-2, 4th paragraph in Environmental Setting: “Surrounding land uses...SR-241” move up to after the first paragraph in the Environmental Setting section. Recreation Lease Area as an open space facility also needs to be included.
4. Page 1-2: The Project is within the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) area.
5. Special Linkage located southeast of the lake –Footnote needed to clarify “Special Linkage”.
6. Page 1-3 in Section 1.2 Environmental Setting, the words “fluctuating shoreline” is repeated.
7. Exhibit 2: Label Irvine Lake.
8. Exhibit 3: Label the Recreation Lease Area located at the southeastern side of the lake.
9. Page 1-4: Spell out “ILP” acronym prior to first use of acronym.
10. Page 1-5 in Section 1.5 Construction Activities, in addition to the number of years to complete, should identify the overall estimated frequency of truck trips.
11. Section 3.0 Discussion of Environmental Checklist Questions is missing the section on “Agriculture and Forest Resources” and has modified the numbering sequence (II, III, IV, etc.) for the remaining checklist topics in this section.

## **OC Waste & Recycling**

### Proximity to Landfill:

1. Proposed access and retaining wall via the landfill - The Santiago Canyon Closed Landfill is located immediately adjacent to the project boundaries. The project proposes a new access road and ramp to provide vehicle access to the new inclined/outlet structure. The project proponent also specifies that a new shot-crete tie-back retaining wall would be needed to cut the roadway into the existing slope without affecting the existing landfill facility above. The project also entails a new emergency access walkway connecting to the new access road which would reach the inclined inlet/outlet structure and dam crest from the adjacent landfill facility during a reservoir spill event.
  - The Draft EIR should provide more detail on this project element to determine how the proposed project can be implemented without affecting the landfill.
  - The details of the improvements that have potential to impact the landfill should be clearly marked on a map.
  - There could be a potential impact to public services maintaining the closed landfill (Section XV. Public Services) if the stability of the landfill or any of the slopes is compromised. The IS identifies no impact.

- The Draft EIR should provide information that the project would not interfere with Orange County Waste & Recycling's (OCWR) ability to comply with environmental regulations at the landfill.
  - Any access through the landfill property as part of construction of the project or to utilize the new access road via the landfill should be coordinated directly with OCWR. The Draft EIR should include additional detail regarding the access through the landfill, including specification of whether vehicle and/or pedestrian access are permanent or temporary access points.
2. Potential Impacts to the Integrity of the Santiago Canyon Closed Landfill Waste Prism and Cover – the Draft EIR should analyze any potential damage that will result to the waste prism and landfill cover as a result of excavation activities. Secondary impacts to the closed landfill associated with geotechnical stability, landslide, soil expansion and liquefaction potential, runoff and erosion should be analyzed. Mitigation measures should be required to protect the integrity of the closed landfill cover.
  3. Potential Impacts to Groundwater & Groundwater Monitoring System at the Santiago Canyon Closed Landfill – Per the IS, the proposed project has the potential to introduce sources of water pollutants that would have the potential to interfere with a water quality control plan or sustainable groundwater management plan. OCWR maintains a system of groundwater monitoring wells in and around the Santiago Canyon Closed Landfill. The Draft EIR should evaluate potential impacts to groundwater that could result in additional impacts to the landfill's groundwater monitoring system.
  4. Potential Impacts to Landfill Gas Monitoring System at the Santiago Canyon Closed Landfill – OCWR maintains a system of gas monitoring probes to monitor landfill gas and emissions at the Santiago Canyon Closed Landfill. Gas probes occur on and within the immediate vicinity of the landfill property. The Draft EIR should evaluate any potential impacts to interfere with the landfill's probes and gas monitoring system.

### **Habitat Protection:**

1. The Draft EIR should include a thorough, updated biological survey to determine the extent of biological resources on the site and the associated project impacts. In particular, items of concern should include the following:
  - *Sensitive Upland Vegetation Communities* – Areas in and around the Santiago Canyon Closed Landfill contain coastal sage scrub and other sensitive upland vegetation communities. The Draft EIR should include a thorough, updated biological survey to determine the extent of biological resources on the project site and the associated project impacts both on and off the Santiago Canyon Closed Landfill, particularly including any new infrastructure such as the new emergency access walkway and stair designed for access from the landfill property. The Draft EIR should also include the proposed mitigation measures for all project impacts to biological resources and detail compliance with the Orange County Central Coastal NCCP/HCP, as the project lies within NCCP/HCP areas. The Draft EIR should identify the permits that the project applicant will be required to obtain from both federal and state biological regulatory agencies.
  - *Sensitive Wildlife Species* – As suitable habitat for nesting and/or foraging by the California gnatcatcher is known to exist on the closed landfill and along its periphery, a protocol survey

for California gnatcatcher should be included as part of the Draft EIR biological resources analysis. The Draft EIR should provide mitigation measures for any impacts to nesting pairs of California gnatcatchers. The Draft EIR biological resources analysis should also identify any other federal- or state-endangered or threatened plant or animal species that may exist on the project site and quantify the impacts that will occur to these sensitive species from project development. Mitigation measures for these impacts should also be included. The Draft EIR should identify the permits that the project applicant will be required to obtain from both federal and state biological regulatory agencies.

## **OC Environmental Resources**

1. Projects that, as part of a common plan of development, disturb one or more acres are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity, Order 2009-0009-DWQ (and subsequent Order 2022-0057-DWQ) and implement a Storm Water Pollution Prevention Plan (SWPPP) and monitoring program consistent with permit requirements.
2. Specific mention should be made of whether or not the project qualifies as a *Priority Development Project* under the city's municipal stormwater permit (Santa Ana Regional Board Order R8-2009-0030), or instead is a *Non-Priority Project* which would require preparation of a *Non-Priority Water Quality Project Plan*.
3. New development projects that create 10,000 square feet or more of impervious surface require the development of a Water Quality Management Plan (WQMP). Specific mention should be made of applicable city WQMP requirements for projects to comply with their municipal stormwater permits.
4. Specific mention should be made of the Orange County Stormwater Program's Drainage Area Management Plan (DAMP). The DAMP is Orange County's principal policy and program guidance document for stormwater management and includes a 2017 Technical Guidance Document to be followed in preparing the project's WQMP.
5. Specific mention should be made of the potential water quality impacts from the proposed project and identification of the anticipated pollutants to be generated or mobilized by the project should be provided.
6. Note that OC Environmental Resources (OCER) currently owns and operates the following hydrologic equipment within the project construction area: a rain gauge, waterlevel gauge, and bubbler line that stretches to the lake, located on the bridge above the spillway. The eventual dam improvements contractor, IRWD, and OCER should coordinate a plan in advance to either retrieve or protect the monitoring equipment prior to or during construction.

## **OC Infrastructure Programs/Regulatory Permitting**

1. Section XIX. Wildfire Impact Analysis section applies to areas *in or near* very high fire hazard severity zones. According to the [Map of CAL FIRE's Fire Hazard Severity Zones in State Responsibility Areas](https://osfm.fire.ca.gov/media/6737/fhszs_map30.pdf) ([https://osfm.fire.ca.gov/media/6737/fhszs\\_map30.pdf](https://osfm.fire.ca.gov/media/6737/fhszs_map30.pdf)) and the [Fire Hazard Severity Zones \(FHSZ\)](#)



viewer (<https://egis.fire.ca.gov/FHSZ/>), Irvine Lake is a moderate fire hazard severity zone surrounded by very high fire hazard severity zones.

Section XIX. Wildfire lists that there are no impacts, citing the fact that the lake itself is a moderate fire hazard area. However, the adjacent properties are identified as high-risk areas. The evaluation method used may have neglected to consider the adjacent high-risk area, especially considering the recent rains and heavy vegetation growth, which contribute to the risk of wildfire in the area. It would be advisable to re-evaluate this impact and coordinate with the OCFA for their review.

2. The IS identifies that the project will raise the spillway by two feet, increasing the maximum storage capacity of the facility. OCPW is working with the U.S. Army Corps of Engineers (USACE) to address flood risk on the Santiago Creek.

Has the project proponent worked with OCPW and/or the USACE to investigate how the facility could better function to reduce flood risk downstream and if additional measures could be incorporated into the design to help alleviate flooding? Measures could include further raising the spillway and/or dam structure, strategic sediment removal from within the basin to maintain greater flood capacity, upgrading technology within this and other dam facilities and flow gages in the Santiago Creek to better manage extreme flows in a more integrated manner. If discussions between the project proponent and the USACE/OCPW Santiago Creek flood team have not already taken place, it is recommended that a working group be established to maximize the flood alleviation benefits of this project.

If you have any questions regarding these comments, please contact Cindy Salazar at (714) 667-8870. Please continue to keep the County of Orange on the distribution list for future notifications related to the Project.

Sincerely,



Cindy Salazar, Land Use Manager  
OC Public Works /OC Development Services  
601 North Ross Street  
Santa Ana, California 92701  
[Cindy.Salazar@ocpw.ocgov.com](mailto:Cindy.Salazar@ocpw.ocgov.com)

cc: Justin Kirk, Deputy Director, OC Development Services  
Nardy Khan, PE/PMP, Deputy Director, OC Infrastructure Programs  
Brian Kurnow, Interim Planning & Design Division Manager, OC Parks  
Aimee Halligan, Habitat Program Manager, OC Waste & Recycling  
Tracey Ingebrigtsen CPESC®, QSD/QSP, Countywide Compliance Program Manager,  
OC Environmental Resources  
Giatho Tran, P.E., C.F.M., Senior Civil Engineer, OC Flood Programs  
Alison Camara, Civil Engineer, OC Flood Programs  
Giles Matthews, Regulatory Permitting Manager, OC Infrastructure Programs  
Paul Lee, Civil Engineer, OC Infrastructure Programs  
Arturo Cervantes, Senior Planner, OC Development Services  
Yuritzzy Randle, Associate Planner, OC Development Services

San Joaquin Hills  
Transportation  
Corridor Agency  
Chair: Will O'Neill  
Newport Beach



Foothill/Eastern  
Transportation  
Corridor Agency  
Chair: John Taylor  
San Juan Capistrano

June 5, 2023

Via Email: [uk@irwd.com](mailto:uk@irwd.com)

Andy Uk  
Environmental Compliance Analyst  
Irvine Ranch Water District  
Water Resources and Policy Department  
15600 Sand Canyon Avenue  
Irvine, CA 92618

Re: Notice of Preparation for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project Environmental Impact Report

Dear Mr. Uk:

The Transportation Corridor Agencies (TCA) appreciate the opportunity to participate and provide comments on the Notice of Preparation for an Environmental Impact Report (EIR) for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project (Proposed Project). TCA understands that the Proposed Project includes the demolition, rehabilitation and replacement of the Santiago Creek Dam outlet works and spillway facilities in unincorporated Orange County. TCA thanks you for the opportunity to participate in your planning process.

TCA looks forward to receiving all future notices, the draft EIR, along with any other forthcoming documentation for the Proposed Project and requests to be kept on IRWD's distribution list. If you have questions or require additional information, please do not hesitate to contact me at 949.754.3487 or via email ([vgomez@thetollroads.com](mailto:vgomez@thetollroads.com)).

Sincerely,

A handwritten signature in cursive script that reads "Virginia Gomez".

Virginia Gomez  
Environmental Analyst



STATE OF CALIFORNIA • NATURAL RESOURCES AGENCY Gavin Newsom, Governor  
DEPARTMENT OF FISH AND WILDLIFE Charlton H. Bonham, Director

South Coast Region  
3883 Ruffin Road | San Diego, CA 92123  
wildlife.ca.gov

June 5, 2023

Andy Uk  
Environmental Compliance Analyst  
Irvine Ranch Water District Water Resources & Policy Department  
15600 Sand Canyon Avenue  
Irvine, CA 92618  
[Uk@irwd.com](mailto:Uk@irwd.com)

**Subject: Santiago Creek Dam Outlet Tower and Spillway Improvements Project, Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR), SCH# 2023050097**

Dear Andy Uk:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from Irvine Ranch Water District (IRWD) for the Santiago Creek Dam Outlet Tower and Spillway Improvements Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

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

#### **CDFW Role**

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

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Irvine Ranch Water District Water Resources & Policy Department  
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related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). CDFW also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The Irvine Ranch Water District (IRWD) participates in the NCCP program through its role as a Participating Landowner under the County of Orange Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). To the extent implementation of the Project as proposed may result in "take" (see Fish & G. Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

## PROJECT DESCRIPTION SUMMARY

**Proponent:** Irvine Ranch Water District

**Objective:** IRWD and Serrano Water District (SWD) have been working to evaluate the different structural elements of the existing Santiago Creek Dam including the analysis for seismic retrofits or replacement of the outlet tower. After the evaluation, the Division of Safety of Dams (DSOD) requested that the tower and spillway need to be improved because the current design does not meet current construction standards. The improvements and replacement of the Santiago Creek Dam outlet tower and spillway facilities are necessary to address the seismic safety concerns and to meet current DSOD regulatory standards. The proposed Project involves demolishing existing structures, including the outlet tower, spillway, portions of the upstream dam embankment concrete facing, storage building on the dam crest, portions of the outlet works, portions of the Irvine Lake pipeline (ILP), catwalks/stairs across Santiago Creek, and piezometers/monitoring wells. The existing spillway will be replaced with a new side-channel spillway at the left abutment. The Project also includes raising the spillway 6 feet to 797.9 feet, which is 2 feet higher than current water storage elevation.

**Location:** The Project is located at the Santiago Creek Dam at the northwest end of Irvine Lake in Orange County, California. The Project site is south of State Route (SR) 261 and east of SR 241 and Santiago Road. The Project is also located in the Central and Coastal Subregion NCCP/HCP. The Santiago Dam is in "Non-Reserve Open Space." The surrounding land uses include NCCP/HCP Reserve which include Irvine Regional Park, Limestone Canyon Regional Park, and Oak Canyon Park.

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**Biological Setting:** As stated above, the Project site is located in “Non-Reserve Open Space within the NCCP/HCP plan area. The area surrounding the lake and dam is largely undeveloped and includes sensitive habitat. Per the Initial Study (IS), the habitat types that occur in the survey area include: sagebrush scrub, disturbed sagebrush scrub, sagebrush-coyote bush scrub, southern cactus scrub, disturbed southern cactus scrub, disturbed floodplain sage scrub, toyon-sumac chaparral, annual grassland, ruderal riparian herb, southern willow scrub, mulefat scrub, disturbed mulefat scrub, southern sycamore riparian woodland, southern sycamore-coast live oak riparian woodland, southern black willow forest, disturbed southern black willow forest, southern black willow forest/riparian herb, coast live oak woodland, and western sycamore and vegetated fluctuating shoreline. Other land cover includes cliff, open water, fluctuating shoreline, perennial stream, ornamental vegetation, and developed areas associated with the lake.

The Project site has the potential to support several sensitive wildlife species, including but not limited to coastal California gnatcatcher (*Poliioptila californica californica*; Federal Endangered Species Act listed-threatened (ESA), California Species of Special Concern (SSC), NCCP/HCP Covered Species)), least Bell's vireo (*Vireo bellii pusillus*; ESA listed endangered, California Endangered Species Act (CESA) listed endangered, NCCP/HCP Covered Species)), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*; SSC, NCCP/HCP Covered Species), bald eagle (*Haliaeetus leucocephalus*; California Fully Protected Species), western spadefoot (*Spea hammondi*; SSC, NCCP/HCP Covered Species), orange-throated whiptail (*Aspidoscelis hyperythra*; NCCP/HCP Covered Species), two-striped gartersnake (*Thamnophis hammondi*; SSC), western mastiff bat (*Eumops perotis californicus*; SSC), and pallid bat (*Antrozous pallidus*; SSC).

The Project site also has the potential to support a variety of sensitive plant species including but not limited to intermediate mariposa lily (*Calochortus weedii* var. *intermedius*; California Rare Plant Rank (CRPR) 1B.2, NCCP/HCP Covered Species)), Allen's pentachaeta (*Pentachaeta aurea* ssp. *Allenii*; CRPR 1B.1), chaparral nolina (*Nolina cismontana*; CRPR 1B.2), Braunton's milk-vetch (*Astragalus brauntonii*; ESA listed-endangered, CRPR 1B.1), white rabbit-tobacco (*Pseudognaphalium leucocephalum*; CRPE 2B.2), and many-stemmed dudleya (*Dudleya multicaulis*; CRPR 1B.2).

**Project Timeline:** The Project would take approximately three years to complete. The initial construction schedule anticipates that the spillway and inclined outlet structure improvements would be constructed over multiple dry seasons.

## COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist IRWD in identifying and/or mitigating Project impacts on biological resources to ensure regional

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conservation objectives in the County of Orange Central and Coastal Subregion NCCP/HCP are met and the Project is compliant with the NCCP/HCP.

### **Specific Comments**

- 1) Biological Direct, Indirect, and Cumulative Impacts. This Project includes the use of heavy machinery for the construction of the new dam facilities. An increased amount of noise and artificial light are associated with construction activities. Artificial light can change normal wildlife behavior, often altering their nesting and foraging behavior. Edge effects, such as light pollution, are known to result in extirpation of species from an area. Due to the proximity of the Project site to sensitive habitat types and to Santiago Creek, it is essential to understand how the open space and biological diversity within it may be impacted by Project activities. This area is part of an essential wildlife corridor and open space that supports biological diversity in the area. CDFW recommends providing a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. The following should be addressed in the DEIR:
  - a) A discussion regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with an NCCP (NCCP, Fish & G. Code, § 2800 et. seq.). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;
  - b) A discussion of potential adverse impacts from lighting, noise, temporary and permanent human activity, and exotic species and identification of any mitigation measures;
  - c) A discussion on Project-related changes on drainage patterns downstream of the Project site; the volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site. Mitigation measures proposed to alleviate such Project impacts should be included;
  - d) An analysis of impacts from land use designations and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR; and,
  - e) A cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated



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future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

- 2) Sensitive Bird Species. Based on the location of the Project, there is potential for special-status bird species. Project activities occurring during the breeding season of nesting birds could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment in habitat directly adjacent to the Project boundary. The Project could also lead to the loss of foraging habitat for sensitive bird species.
  - a) CDFW recommends that measures be taken, primarily, to avoid Project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the MBTA).
  - b) Project activities including (but not limited to) staging and disturbances to native and nonnative vegetation, structures, and substrates should occur outside of the avian breeding season which generally runs from February 15 through August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, CDFW recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300-feet of the disturbance area (within 500-feet for raptors). Project personnel, including all contractors working onsite, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.
- 3) Coastal California Gnatcatcher and Least Bell's Vireo. There is a strong possibility that these two species occur on or near the Project site. The DEIR should include a complete, recent habitat assessment for suitable coastal California gnatcatcher (*Polioptila californica californica*) and least Bell's vireo (*Vireo bellii pusillus*) habitat. If suitable habitat for the coastal California gnatcatcher and least Bell's vireo is present onsite or adjacent to the Project site, CDFW recommends protocol level surveys for gnatcatcher and vireo to determine presence or absence of this species. Mitigation for direct, indirect, and cumulative impacts to this species should be determined after the completion of these surveys.

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- 4) Biological Baseline Assessment. CDFW recommends providing a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project site, with emphasis upon identifying endangered, threatened, sensitive, regionally, and locally unique species, including any Covered Species under the NCCP/HCP, and sensitive habitats. The Project impact analysis should therefore address direct, indirect, and cumulative biological impacts, as well as provide specific mitigation or avoidance measures necessary to offset those impacts. The DEIR should include the following information:
- a) A complete floristic assessment within and adjacent to the Project area, with particular emphasis upon identifying endangered, threatened, sensitive, and locally unique species and sensitive habitats. This should include a thorough, recent, floristic-based assessment of special status plants and natural communities.
  - b) A complete, recent, assessment of the biological resources associated with each habitat type onsite and within adjacent areas that could also be affected by the Project. CDFW's California Natural Diversity Database (CNDDDB) should be reviewed to obtain current information on any previously reported sensitive species and habitat. CDFW recommends that CNDDDB Field Survey Forms be completed and submitted to CNDDDB to document survey results. Online forms can be obtained and submitted at <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>.
  - c) Vegetation mapping should follow criteria and definitions developed for the subregional NCCP/HCP. More specifically, areas of the property which may show invasion by non-native forbs (e.g., mustards, etc.) should nonetheless be identified as non-native grassland vegetation and any impacts mitigated accordingly. Such areas should not be categorized as 'Disturbed' or ruderal unless there is strong documentation that the property had been subject to an authorized use which caused a truly disturbed condition of the vegetation.
  - d) The DEIR should have a complete, recent, assessment of rare, threatened, and endangered, and other sensitive species onsite and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050 and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are necessary. Acceptable species-specific survey procedures should be developed in consultation with CDFW and USFWS; and,

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- e) A recent, wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years as long as there was not a prevailing drought during the time of the botanical survey. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame, or in phases.

## General Comments

- 1) County of Orange Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) CDFW issued Natural Community Conservation Plan Approval and Take authorization for the County of Orange Central and Coastal Subregion NCCP/HCP (Central and Coastal NCCP/HCP) per section 2800, et seq., of the California Fish and Game Code on July 17, 1996. The Central and Coastal NCCP/HCP establishes a multiple species conservation program to minimize and mitigate habitat loss and provides for the incidental take of covered species in association with activities covered under the permit.

Compliance with approved habitat plans, such as Central and Coastal (NCCP/HCP), is discussed in CEQA. Specifically, section 15125(d) of the CEQA Guidelines requires that the CEQA document discuss any inconsistencies between a proposed Project and applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. An assessment of the impacts to the Central and Coastal NCCP/HCP as a result of this Project is necessary to address CEQA requirements.

The proposed Project occurs within the area and is subject to the provisions and policies of the Central and Coastal NCCP/HCP. To be considered a covered activity, Permittees need to demonstrate that proposed actions are consistent with the Central and Coastal NCCP/HCP and its associated Implementing Agreement.

- 2) Lake and Streambed: Santiago Creek is located just east of the Project site. Santiago Creek is a blueline stream which enters Irvine Lake and continues downstream to the dam flowing north to west, ultimately reaching the Santa Ana River. This Project will impact the watersheds surrounding Santiago Dam and Irvine Lake. CDFW has regulatory authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of any river, stream, or lake or use material from a river, stream, or lake. For any such activities, the Project applicant (or "entity") must provide written notification to CDFW pursuant to section 1600 et seq. of the Fish and Game Code. Based on this notification and other information, CDFW

Andy Uk  
Irvine Ranch Water District Water Resources & Policy Department  
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determines whether a Lake and Streambed Alteration Agreement (LSAA) with the applicant is required prior to conducting the proposed activities. CDFW's issuance of an LSAA for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. To minimize additional requirements by CDFW pursuant to section 1600 et seq. and/or under CEQA, the DEIR should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSAA. CDFW recommends the Applicant submit a Lake and Streambed Alteration Notification to CDFW.

- 3) Mitigation and Avoidance of Project-Related Biological Impacts: The DEIR should include mitigation measures for adverse project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration or enhancement should be discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link:

<https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>

The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link:

[http://www.dfg.ca.gov/biogeodata/cnddb/plants\\_and\\_animals.asp](http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp).

## **FILING FEES**

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

Andy Uk  
Irvine Ranch Water District Water Resources & Policy Department  
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## CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist IRWD in identifying and mitigating Project impacts on biological resources and ensuring Project consistency with the requirement of County of Orange Central and Coastal Subregion NCCP/HCP.

Questions regarding this letter or further coordination regarding the implementation of the Central and Coastal NCCP/HCP should be directed to Emily Gray, Environmental Scientist, at [Emily.Gray@wildlife.ca.gov](mailto:Emily.Gray@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
D700B4520375406...

David Mayer  
Environmental Program Manager  
South Coast Region

ec:

Jonathan Snyder, U.S. Fish and Wildlife Service, [Jonathan.Snyder@fws.gov](mailto:Jonathan.Snyder@fws.gov)  
State Clearinghouse, Sacramento, [state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)  
Karen Drewe, CDFW, [Karen.Drewe@wildlife.ca.gov](mailto:Karen.Drewe@wildlife.ca.gov)  
Jennifer Turner, CDFW, [Jennifer.Turner@wildlife.ca.gov](mailto:Jennifer.Turner@wildlife.ca.gov)  
Jennifer Ludovissy, CDFW, [Jennifer.Ludovissy@wildlife.ca.gov](mailto:Jennifer.Ludovissy@wildlife.ca.gov)

## References

California Department of Fish and Wildlife. 2020. California Natural Diversity Database. Available from: <https://wildlife.ca.gov/Data/CNDDDB>.

California Department of Fish and Wildlife. 2020. Lake and Streambed Alteration Program. Available from: <https://wildlife.ca.gov/Conservation/LSA>

County of Orange Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan. 17 July 1996.

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Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC.