CALIFORNIA DEPARTNENT OF MILIDLIFE

State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE South Coast Region 3883 Ruffin Rd San Diego, CA 92107 www.wildlife.ca.gov

November 13, 2023

Land Use Manager

601 N. Ross Street Irvine, CA 92701

Orange County Public Works

Cindy.salazar@ocpw.ocgov.com

Cindy Salazar

Governor's Office of Planning & Research

Nov 14 2023

STATE CLEARING HOUSE

Santiago Creek Project (Project) Mitigated Negative Declaration (MND) SCH# 2023090344

Dear Cindy Salazar,

The California Department of Fish and Wildlife (CDFW) has reviewed the abovereferenced MND for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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

CDFW ROLE

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

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: Orange County (County)

Objective: The main objective of the Project is for the County, as local sponsor for the United States Army Corps of Engineers (ACOE), to reduce flood risk in the Santiago Creek floodplain. The Project consists of three major elements:

<u>Reservoir Slope Stabilization</u>: Large-scale stabilization will occur through installation of buttress fill, installation of retaining walls, and/or installation of armoring in Blue Diamond, Bond, and Smith Basins. Some areas will require riprap; in these areas, the

LUTER OF THE OF

GAVIN NEWSOM, Governor

CHARLTON H. BONHAM, Director

Cindy Salazar Orange County Public Works November 13, 2023 Page 2 of 11

riprap will be buried with approximately two feet of soil. Additionally, the Project involves grading a low-flow channel through the center of Smith Basin and redirecting the existing channel to this location. The low-flow channel will be an approximately one-foot depression by approximately 20 feet in width through the middle of Smith Basin. The reservoir slope stabilization portion of the Project also includes the restoration and grading of a historic maintenance access road.

<u>Channel modifications</u>: This portion of the Project will produce 64,000 feet of trapezoidal channel armored with buried riprap along the full downstream channel between the Santa Ana Freeway and the Santa Ana River. Riprap will then be covered with approximately one foot of excavated material from the channel bottom. A channel operation and maintenance program are intended to prevent large woody plants from re-establishing, as well as invasive vegetation. Channel modifications will also lead to an as-yet undetermined number of tree removals, which include California coast live oak (*Quercus agrifolia*).

<u>Floodwalls</u>: Several steel sheetpile floodwalls with a reinforced concrete cap are included in the Project design. The floodwalls will extend for approximately 2,600 feet between Bristol Avenue and Flower Street on both the north and south sides of the lower Santiago Creek channel, and for 900 feet on the north side of the lower Santiago Creek channel west of Bristol Avenue. A minimum of 15 feet downslope of any floodwall will be a vegetation-free zone, which applies to all vegetation except for grasses planted for the purpose of erosion control.

Location: The Project site is located within Santiago Creek, a tributary of the Santa Ana River in Orange County. The Project area consists of the lower reach of Santiago Creek extending from the Santa Ana Freeway to the creek's confluence with the Santa Ana River. This portion of Santiago Creek flows through the City of Santa Ana. The Project area also consists of the reach of Santiago Creek that flows through the Santiago Recharge Basins (Blue Diamond Basin, Bond Basin, and Smith Basin). Residential uses surround the Project area.

Biological Setting: The Santiago Creek watershed covers approximately 100.6 square miles in northern Orange County. The upper reaches of the creek are free flowing, while the lower reaches are urbanized and include parts of the cities of Tustin, Orange, and Santa Ana. Below the Villa Park Dam, the majority of the creek is channelized and flows only during large storm events. Outside of the basins, the portions of the creek within the Project area are soft-bottom cobble. The MND states that the development surrounding the Project area makes it part of a key wildlife movement corridor and/or dispersal habitat.

<u>Habitat Types</u>: The existing habitats and land cover on site are the following: blue elderberry thickets (1.84 acres), brittle bush scrub (16.57 acres), California live oak woodland and forest (0.38 acre), California sagebrush – black sage scrub (35.90 acres), fountain grass swards (5.58 acres), Goodding's willow – red willow riparian woodland and forest (21.73 acres), laurel sumac scrub (6.10 acres), mulefat thickets (4.49 acres), upland mustards or star-thistle fields (2.00 acres), wild oats and annual brome grasslands (3.78 acres), eucalyptus – tree of heaven – black locust groves (8.29 acres), open water (175.77 acres), unvegetated channels and slopes (10.43 acres), and developed (36.73 acres).

<u>Sensitive Species</u>: Sensitive plant species known to occur on site, or with a moderate to high potential to occur, include Catalina mariposa lily (*Calochortus catalinae;* California Rare Plant Rank (CRPR) 4.2), intermediate mariposa lily (*Calochortus weedii* var. *Intermedius;* CRPR 1B.2), southern tarplant (*Centromadia parryi* ssp. *australis;* CRPR 1B.1), many-stemmed dudleya (*Dudleya multicaulis;* CRPR 1B.2), Southern California black walnut (*Juglans californica;* CRPR 4.2), and Coulter's Matilija poppy (*Romneya coulteri;* CRPR 4.2).

Sensitive wildlife species known to occur on site, or with a moderate to high potential to occur, include Crotch's bumblebee (*Bombus crotchii*, CESA candidate), Santa Ana

Cindy Salazar Orange County Public Works November 13, 2023 Page 3 of 11

speckled dace (*Rhinichthys osculus*; CDFW Species of Special Concern (SSC)); orange-throated whiptail (*Aspidoscelis hyperthyra*; CDFW Watch List (WL)), coastal whiptail (*Aspidoscelis tigris stejnegeri*; SSC), red-diamond rattlesnake (*Crotalus ruber*; SSC), coast horned lizard (*Phrynosoma blainvillii*; SSC), Cooper's hawk (*Accipiter cooperii*; WL), Southern California rufous crowned sparrow (*Aimophila ruficeps canescens*; WL), coastal cactus wren (*Campylorhynchus brunneicapillus*; SSC), yellowbreasted chat (*Icteria virens*; SSC), osprey (*Pandion haliaetus*; WL), coastal California gnatcatcher (*Polioptila californica*; Federal Endangered Species Act (ESA) listedthreatened; SSC), yellow warbler (*Setophaga petechia*; SSC), least Bell's vireo (*Vireo bellii pusillus*; ESA listed-endangered; CESA listed-endangered), and San Diego desert woodrat (*Neotoma lepida intermedia*; SSC).

Additional species have a moderate potential to use the site for foraging only, including golden eagle (*Aquila chrysaetos;* Fully Protected (FP)), burrowing owl (*Athene cunicularia*, SSC), Swainson's hawk (*Buteo swainsoni;* CESA listed-threatened), white-tailed kite (*Elanus leucurus;* FP), California horned lark (*Eremophila alpestris actia;* WL), American peregrine falcon (*Falco peregrinus anatum;* FP), bald eagle (CESA listed-endangered; FP), pallid bat (*Antrozous pallidus;* SSC), Mexican long-tongued bat (*Choeronycteris mexicana;* SSC), western mastiff bat (*Eumops perotis californicus,* SSC), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and big free-tailed bat (*Nyctinomops macrotis;* SSC).

Cindy Salazar Orange County Public Works November 13, 2023 Page 4 of 11

<u>Impacts and Mitigation</u>: A summary of proposed impacts and mitigation for vegetation can be found below:

Alternative. Plant Community Type	Total Acreage	Impact Type	Acres Impacted	Mitigation Ratio	Acres of Mitigation Onsite	Acres of Mitigation Offsite
Riparian and W	etland Veg	etation Types				
Goodding's Willow – Red		Permanent	1.29	5:1	0.00	6.45
Willow Riparian Woodland and Forest	21.73	Temporary	9.19	2:1	9.19	9.19
Mulefat	4.47	Permanent	0.17	5:1	0.00	0.85
Thickets		Temporary	1.43	2:1	2.72	1.43
Upland Vegetat	tion Types					
California	- 25.97	Permanent	1.53	3:1	0.00	4.59
Sagebrush – Black Sage Scrub		Temporary	7.18	2:1	7.18	7.18
Brittle Bush	10 57	Permanent	0.00	3:1	0.00	0.00
Scrub	16.57	Temporary	0.00	2:1	0.00	0.00
Fountain	5.58	Permanent	0.29	3:1	0.00	0.87
Grass Swards		Temporary	0.64	2:1	0.64	0.64
Laurel Sumac	6.10	Permanent	0.00	3:1	0.00	0.00
Scrub		Temporary	0.24	2:1	0.24	0.24
Upland	1.97	Permanent	0.00	3:1	0.00	0.00
Mustards or Star-Thistle		Temporary	0.00	2:1	0.00	0.00
Wild Oats and	3.78	Permanent	0.00	3:1	0.00	0.00
Annual Brome Grasslands		Temporary	0.19	2:1	0.19	0.19
Other Vegetatio	on Types		3	:	5	
Unvegetated	-	Temporary	0.16	NA ¹	0.00	0.00
Channels and Slopes	3.81	Permanent	0.00	NA ¹	0.00	0.00
Developed	33.98	Temporary	3.53	NA ¹	0.00	0.00
		Permanent	0.15	NA ¹	0.00	0.00
Total Vegetation Acres	133.86	Total Vegetation Acres Impacted	25.99	Total Mitigation Acres	20.16	31.63

Table 10: Summary of Proposed Offset and Vegetation Categories for the Proposed Action Alternative.

¹ No offsite mitigation is required for temporary impacts to non-riparian habitat.

In addition to the vegetation types listed above, the MND states that there will be a potential removal of up to 0.38 acre of California coast live oak woodland. No mitigation is proposed for this loss.

Relocation of the low-flow channel in Smith Basin will also impact an existing mitigation site for the Orange County Flood Control District (OC Flood). During surveys conducted in 2022 by the County and the Santa Ana Watershed Association, three least Bell's vireo territories were located within the low-flow channel grading project footprint in Smith Basin. One additional vireo territory was documented within the Smith Basin area, but outside the Project footprint.

COMMENTS AND RECOMMENDATIONS

CDFW appreciates the invitation to scope this Project with the County and the ACOE, through bi-monthly virtual meetings beginning in 2021, as well as at site visits in June 2021 and January 2023.

Cindy Salazar Orange County Public Works November 13, 2023 Page 5 of 11

CDFW offers the comments and recommendations below to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

COMMENT #1: Scope of Environmental Document

Issue: A MND is not the appropriate document for analysis of this Project, and a higher level of analysis is needed.

Specific impact: The MND does not provide sufficient disclosure or analysis of the Project's potential biological impacts to allow CDFW to determine their significance, nor to ascertain whether proposed mitigation will reduce impacts to biological resources to below significant. The Project is located in, and has potential to impact, sensitive habitats such as Santiago Creek, coastal sage scrub, many oak trees/oak woodland, and existing riparian mitigation.

Furthermore, the MND does not adequately demonstrate that potential impacts CESAlisted and/or fully protected species will be less than significant with mitigation. We are particularly concerned about the direct take of least Bell's vireo that could occur as a result of the relocation of the Smith Basin low-flow channel. CDFW has consistently communicated that such impacts would need to satisfy CESA's fully mitigated standard through acquisition of an Incidental Take Permit (ITP). Especially given that the habitat in question was restored/created for the purposes of satisfying mitigation obligations apart from this Project, the scope of analysis provided in the MND is insufficient.

The Project involves large-scale, extensive changes to the bank and bed of Santiago Creek, and the analysis provided does not demonstrate that impacts will be appropriately mitigated. For example, the ACOE proposes habitat restoration in areas that will be converted from a natural bank to riprap, covered by one to two feet of substrate, and excavated from the channel bottom. No analysis in the MND supports that this methodology would be successful in supporting native vegetation, and CDFW does not believe that such shallow substrate is enough to allow for appropriate rooting of plants on top of the riprap. Impacts due to excavating material from the bed of the creek are not adequately discussed.

Finally, future upstream projects are cumulatively considerable and should be addressed in the analysis for this Project.

Why impact would occur: Given the temporary and permanent impacts proposed in Santiago Creek and the associated Basins and impacts to CESA-listed and/or fully protected species, the Project will result in significant impacts even with mitigation, and a MND is not the appropriate environmental document for the Project (CEQA Guidelines § 15064).

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Recommendation #1

To minimize significant impacts: CDFW strongly recommends a complete draft Environmental Impact Report (EIR) be circulated for public review and comment. The additional information and analyses identified in this letter should be included in the draft EIR. This should include a Project alternative that discusses more natural means of flood control, such as "bioengineered" slope protection practices.

COMMENT #2: Responsible Agency Authority

Cindy Salazar Orange County Public Works November 13, 2023 Page 6 of 11

Issue: The MND does not address the County's permitting obligations under the Fish and Game Code (FGC).

Specific impact: While CDFW acknowledges that the ACOE has assumed the Lead Agency role for the Project for the purpose of compliance with the National Environmental Policy Act, the County has assumed the Lead Agency role, as the non-federal sponsor for the Project, for the purpose of compliance with CEQA. As such, the County is subject to FGC requirements. It should not be assumed that federal ESA requirements and federal wetland permitting requirements alone would be sufficient, for purposes of CEQA, to support issuance of state permits that need to be obtained for the Project.

Why impact would occur: FGC section 2081 subdivision (b) allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain an ITP. A CESA permit may only be obtained if the impacts of the authorized take of the species covered by the ITP are minimized, fully mitigated, and adequate funding has been ensured to implement the mitigation measures. In addition, CDFW may only issue a CESA permit if the CDFW determines that issuance of the permit does not jeopardize the continued existence of the species. CDFW will make this determination based on the best scientific information available and include consideration of the species' capability to survive and reproduce, including the species known population trends and known threats to the species. Issuance of an ITP by CDFW is subject to CEQA; therefore, the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. Please visit CDFW's California Endangered Species Act (CESA) Permits webpage for more information (CDFW 2023a).

FGC section 1602 requires notification to CDFW before: 1) substantially diverting or obstructing the natural flow of a river, stream, or lake; 2) substantially changing the bed, channel, or bank of a river, stream, or lake; 3) substantially using any material from the bed, channel, or bank of a river, stream, or lake; and/or 4) depositing or disposing of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into a river, stream, or lake. The Project is subject to FGC Section 1602 for the following activities: the Project will substantially obstruct natural flows in Santiago Creek; the Project will substantially divert natural flows of Santiago Creek; and, the Project will substantially change the bed, channel, or bank of Santiago Creek. In a LSAA, CDFW specifies reasonable measures necessary to protect fish and wildlife resources that may be substantially adversely affected by the activities. The issuance of an LSAA by CDFW is subject to CEQA; thus, the DEIR should disclose and analyze all impacts to fish and wildlife resources that may result from these activities.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Recommendation #2:

To minimize significant impacts: Consistent with prior scoping efforts, CDFW strongly recommends that the environmental document include a discussion of the County's permitting obligations per the FGC. This should include a mitigation measure or measures that require application for take authorization under CESA as well as notification for a LSAA per FGC 1600 *et seq*. An adequate amount of environmental analysis and data should be included in the recirculated environmental document to support CDFW's consideration of the state permits under CEQA.

COMMENT #3: Existing Mitigation Sites

Cindy Salazar Orange County Public Works November 13, 2023 Page 7 of 11

Issue: The Project will impact existing biological mitigation sites.

Specific impact: The bottom of Smith Basin is an existing mitigation site for OC Flood, for impacts associated with the Regional Maintenance Plan for Groundwater Recharge Facilities (LSAA 1600-2012-0013-R5). This mitigation site consists of 31.80 acres of native vegetation and 8.6 acres of open water and contain at least three least Bell's vireo territories (OC Flood 2012). The current ratios proposed to offset impacts to the existing OC Flood mitigation, particularly in the absence of take authorization through an ITP, does not provide enough biological uplift to reduce Project impacts to below significant, nor meet CESA's fully mitigated standard.

Further complicating the issue, it is unclear from our ongoing discussions with ACOE, analysis of OC Flood's annual reports, nor from the MND, whether certain areas within the Project area are included in OC Flood's mitigation site(s). Without additional discussion in a recirculated environmental document, CDFW cannot ascertain how much additional mitigation would be necessary to offset Project impacts to biological resources.

Why impact would occur: The extent of the existing OC Flood mitigation is unclear, and mitigation for Project impacts to existing mitigation is not discussed or analyzed appropriately in the MND. Impacts to existing mitigation sites are generally mitigated as a much higher ratio due to conservation value, compensation for previous projects, and long-term protection expectations. This is especially true of mitigation containing a CESA- and ESA-listed species (e.g., least Bell's vireo).

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Recommendation #3

To minimize significant impacts: In the recirculated environmental document, the County should discuss direct, indirect, and cumulative impacts to existing biological mitigation sites in the Santiago Basins. This should include an analysis of the extent of the existing mitigation in Smith Basin with concurrence from OC Flood. The environmental document should include a mitigation measure or measures which offset these impacts at a ratio of at least five times the standard ratio (or equivalent biological uplift) for the vegetation type. Measures should also include potential mitigation sites, the creation of a Mitigation, Monitoring, and Reporting Plan, a Long-Term Management Plan, a description of land protection instruments (i.e., a conservation easement or deed restriction), and in-perpetuity funding.

COMMENT #4: Mitigation for Coast Live Oak and California Sycamore

Issue: The Project is likely to impact coast live oak woodland, mature coast live oak trees, and mature California sycamore trees. A mitigation plan is not in place for these impacts.

Specific impact: The MND states that coast live oak trees will be protected when possible. However, the current Project Design does not include enough space for trees, and especially not for their root systems in the shallow substrate. Surveys for individual oak trees have not yet been conducted, and no specific mitigation plan for loss of oak woodland has been proposed. Additionally, the project contains 0.38 acres of oak woodland natural community.

Why impact would occur: Mature native trees provide important nesting and foraging habitat, as well as shade for wildlife. It is highly recommended that mature native trees be avoided whenever possible, and the Project as currently designed does not appear to allow for avoidance. Newly planted trees would not fill the same ecological role as mature trees for several years or more, thus higher replanting ratios need to be

Cindy Salazar Orange County Public Works November 13, 2023 Page 8 of 11

established. Additionally, newly planted or relocated trees may struggle to become established in the absence of support such as watering.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Recommendation #4:

To minimize significant impacts: Project impacts to native trees and the associated oak woodland habitat should be appropriately offset. Coast live oak woodland habitat should be replaced at a minimum 2:1 ratio. The environmental document should describe the size (diameter at breast height (DBH)) of impacted trees. CDFW recommends the following mitigation ratios for coast live oak trees:

- 1. trees less than 5 inches DBH shall be replaced at 3:1;
- 2. trees between 5 and 12 inches DBH shall be replaced at 5:1;
- 3. trees between 12 and 36 inches DBH shall be replaced at 10:1; and
- 4. trees greater than 36 inches DBH shall be replaced at 20:1.

Additionally, the recirculated environmental document should include a 10-year management and monitoring plan for relocated or newly planted coast live oak trees to ensure success of the restoration effort. If detailed plans for compensatory mitigation and monitoring cannot be included, a mitigation measure should be added to the environmental document which states that CDFW and the United States Fish and Wildlife Service will have the opportunity to review and approve the plans prior to their implementation.

ENVIRONMENTAL DATA

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

<u>http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf</u>. The completed form can be mailed electronically to CNDDB at the following email address: <u>CNDDB@wildlife.ca.gov</u>. The types of information reported to CNDDB can be found at the following link: <u>http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp</u>.

FILING FEES

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

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist to assist Orange County in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Brigid Moran at Brigid.Moran@wildlife.ca.gov.

Cindy Salazar Orange County Public Works November 13, 2023 Page 9 of 11

Sincerely,

DocuSigned by:

David Mayer David A. Mayer Environmental Program Manager South Coast Region

ec: Jennifer Turner, CDFW, <u>Jennifer.Turner@wildlife.ca.gov</u> Jennifer Ludovissy, CDFW, <u>Jennifer.Ludovissy@wildlife.ca.gov</u> State Clearinghouse, Sacramento, <u>State.Clearinghouse@opr.ca.gov</u> Jonathan Snyder – <u>Jonathan_d_Snyder@fws.gov</u>

REFERENCES

- California Environmental Quality Act (CEQA). California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.
- California Office of Planning and Research. 2009 or current version. CEQA: California Environmental Quality Act. Statutes and Guidelines, § 21081.6 and CEQA Guidelines, § 15097, §15126.4(2).
- Orange County Water District. 2012. Orange County Water District Groundwater Recharge Facilities Maintenance Plan. Prepared by Dick Zembal.

Cindy Salazar Orange County Public Works November 13, 2023 Page 10 of 11

ATTACHMENT A: Draft Mitigation Monitoring and Reporting Program (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

Biological Resources (BIO)							
Recommendation (REC) Description	Implementation Schedule	Responsible Party					
REC 1: Scope of Environmental Document: CDFW strongly recommends a complete draft Environmental Impact Report (EIR) be circulated for public review and comment. The additional information and analyses identified in this letter should be included in the draft EIR. This should include a Project alternative that discusses more natural means of flood control, such as "bioengineered" slope protection practices.	Prior to Project activities	Orange County					
REC 2: Permitting: Consistent with prior scoping efforts, CDFW strongly recommends that the environmental document include a discussion of the County's permitting obligations per the FGC. This should include a mitigation measure or measures that require application for take authorization under CESA as well as notification for a LSAA per FGC 1600 <i>et seq</i> . An adequate amount of environmental analysis and data should be included in the recirculated environmental document to support CDFW's consideration of the state permits under CEQA.	Prior to Project activities	Orange County					
REC 3: Existing Mitigation Sites: In the recirculated environmental document, the County should discuss direct, indirect, and cumulative impacts to existing biological mitigation sites in the Santiago Basins. This should include an analysis of the extent of the existing mitigation in Smith Basin with concurrence from OC Flood. The environmental document should include a mitigation measure or measures which offset these impacts at a ratio of at least five times the standard ratio (or equivalent biological uplift) for the vegetation type. Measures should also include potential mitigation sites, the creation of a Mitigation, Monitoring, and Reporting Plan, a Long-Term Management Plan, a description of land protection instruments (i.e., a conservation easement or deed restriction), and in-perpetuity funding.	Prior to and after Project activities	Orange County					
 REC 4: Mitigation for Coast Live Oak and California Sycamore: Project impacts to native trees and the associated oak woodland habitat should be appropriately offset. Coast live oak woodland habitat should be replaced at a minimum 2:1 ratio. The environmental document should describe the size (diameter at breast height (DBH)) of impacted trees. CDFW recommends the following mitigation ratios for coast live oak trees: 1. trees less than 5 inches DBH shall be replaced at 3:1; 2. trees between 5 and 12 inches DBH shall be replaced at 5:1; 3. trees between 12 and 36 inches DBH shall be replaced at 10:1; and, 4. trees greater than 36 inches DBH shall be replaced at 20:1. 	During and after Project activities	Orange County					

Cindy Salazar Orange County Public Works November 13, 2023 Page 11 of 11

|--|