From: ARCF_SEIS <ARCF_SEIS@usace.army.mil>
Sent: Thursday, February 22, 2024 2:31 PM
To: Sutton, Drew
Cc: publiccommentARCF16@water.ca.gov; ARCF_SEIS
Subject: [EXT] FW: American River Common Features (ARCF) 2016 Draft SEIS-SEIR - Public Comment
Attachments: ARPF Comments on ARCF Comprehensive SEIS-SEIR.docx.pdf

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From: Daniel Whitaker <dwhitaker@arpf.org>
Sent: Thursday, February 22, 2024 2:20 PM
To: ARCF_SEIS <ARCF_SEIS@usace.army.mil>
Cc: PublicCommentARCF16@water.ca.gov
Subject: [Non-DoD Source] American River Common Features (ARCF) 2016 Draft SEIS-SEIR - Public Comment

To whom it may concern,

I am emailing on behalf of the American River Parkway Foundation to formally submit a comment letter on the American River Common Features (ARCF) 2016 Draft SEIS-SEIR.

Please see attached for the letter in .pdf format.

Our comments are focused on the contracts that will take place within the American River Parkway. Thank you for considering our concerns regarding this matter.

Best regards,
Danny

Daniel Whitaker he/him/his/él
Natural Resources Manager
American River Parkway Foundation
5700 Arden Way | Carmichael, CA 95608
p. (916) 486-2773 **| c.** (520) 604-3093 **w.** www.arpf.org

AMERICAN RIVER parkway FOUNDATION

5700 Arden Way
Carmichael, CA
95608
www.arpf.org

American River Parkway Foundation
5700 Arden Way
Carmichael, CA 95608
20 February 2024

U.S. Army Corps of Engineers
Sacramento District

Dear Sir/Madam,

The American River Parkway Foundation (ARPF) is writing to express our concerns regarding the proposed erosion control projects outlined in the ARCF Comprehensive SEIS/SEIR. While we understand the necessity of these projects for mitigating erosion, it is imperative that we carefully consider their environmenta consequences and take steps to minimize their impact on the ecosystem.

As outlined in the California Environmental Quality Act (CEQA) guidelines, projects with the potential for significant environmental impact require the preparation of an Environmental Impact Report (EIR) to identify feasible mitigation measures and reasonable alternatives. It is essential that the U.S. Army Corps of Engineers (USACE) adheres to these guidelines and thoroughly evaluates the environmental effects of the proposed projects.

Several aspects of the proposed projects raise concerns regarding their potential environmental consequences. For example, the sourcing of soil from off-site commercial sources within 100 miles of the project site raises questions about the risk of introducing invasive plant species. It is crucial that measures are put in place to ensure that the soil used is free from invasive seeds to prevent further disruption to the local ecosystem. 1

Furthermore, the removal of trees from the construction footprint and disruption of existing habitats, such as wetlands, raises concerns about the long-term impact on local wildlife and biodiversity. While we appreciate efforts to protect existing trees and mitigate habitat disturbance, it is essential to have a transparent process for determining which trees will be preserved and how habitat disruption will be minimized. 2

Additionally, the proposed staging areas within the American River Parkway and disruption of recreational trails, such as the multi-use equestrian trail, highlight the need for comprehensive mitigation plans. It is essential that USACE explores alternatives to minimize recreational impacts and ensures that staging areas are restored to their initial conditions after project completion. 3

AMERICAN RIVER
park way
FOUNDATION

5700 Arden Way
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95608

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Moreover, the construction of berms and rerouting of bike trails in sensitive riparian areas requires careful consideration of habitat connectivity and recreational values. Alternative actions, such as Alternative 3a, which minimize environmental and recreational impacts, should be thoroughly explored, and considered as viable alternatives to the proposed action. 4

Furthermore, we encourage USACE to engage in meaningful consultation with Indigenous communities and stakeholders to ensure that their voices are heard, and their concerns are addressed in the decision-making process. 5

In conclusion, while erosion control projects are necessary, it is crucial that USACE prioritizes environmental conservation and minimizes the impact on local ecosystems and recreational activities. We urge USACE to expand upon mitigation plans and explore alternatives that reduce the environmental and recreational impacts of the proposed projects. 6

Thank you for considering our concerns regarding this matter. We look forward to seeing further efforts to address these issues and ensure the preservation of our natura environment.

Sincerely,

American River Parkway Foundation
(916) 486-2773
info@arpf.org

CENTER *for* BIOLOGICAL DIVERSITY

January 17, 2024

Via Email

Mr. Guy Romine
U.S. Army Corps of Engineers, Sacramento District
1325 J Street
Sacramento, California 95814
Guy.K.Romine@usace.army.mil

Mr. Josh Brown
Central Valley Flood Protection Board/California Dept of Water Resources
3310 El Camino Avenue, Suite 170
Sacramento, California 95281
Josh.Brown@water.ca.gov

Re: December 2023, Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report XIV; American River Common Features, 2016 Flood Risk Management Project, Sacramento, CA

Dear Mr. Romine and Mr. Brown:

We are working on public comments regarding the above Draft SEIS/SEIR. However, we are unable to find a number of documents that are essential to our evaluation of the Project. These documents are not available at the USACE Digital Library, nor could we find them through a Google or Worldcat search. We therefore respectfully request that the documents be made publicly available and a new 45-day comment period established. 1

The documents are as follows:

1. Ayres Associates. December 1997. American and Sacramento River, California Project-Geomorphic, Sediment Engineering, and Channel Stability Analyses. *See, e.g.,* American River Watershed, Common Features, General Reevaluation Report, Attachment E, Erosion Protection Report, p. 12.

2. Ayres Associates, "Erosion Susceptibility Analysis for Infrequent Flood Events", July 2004. *See, e.g.,* (1) American River Watershed, Common Features, General Reevaluation Report, Attachment B, Hydraulic Report, p. 47; (2) American River Watershed, Common Features, General Reevaluation Report, Attachment C, Geotechnical Report, p. 40; (3) American River Watershed, Common Features, General Reevaluation Report, Attachment E, Erosion Protection Report, pp. 13, 41. 2

3. Ayres Associates, "Channel Stability Analysis of the Lower American River, Folsom Dam to the Confluence, Sacramento, California", January 2010. *See, e.g.,* (1) American River Watershed, Common Features, General Reevaluation Report, Engineering Appendix, p. 39; (2) American River Watershed, Common Features, General Reevaluation Report, Attachment E, Erosion Protection Report, pp. 3, 13 and 68.

4. West Consultants, "Lower American River, Panel of Experts, Findings Report," Prepared for U.S. Army Corps of Engineers, December 2010. *See, e.g.,* (1) American River Watershed, Common Features, General Reevaluation Report, Attachment B, Hydraulic Report, p. 24; (2) American River Watershed, Common Features, General Reevaluation Report, Attachment C, Geotechnical Report, p. 47; (3) American River Watershed, Common Features, General Reevaluation Report, Attachment E, Erosion Protection Report, pp. 3, 14, 19, 22.

5. Fugro Consultants, Inc., "Lower American River, Stratigraphic and Geomorphic Mapping Report, American River Common Features, Sacramento County, California", Prepared for U.S. Army Corps of Engineers, June 2013. *See, e.g.,* (1) American River Watershed, Common Features, General Reevaluation Report, Attachment C, Geotechnical Report, p. 25; (2) American River Watershed, Common Features, General Reevaluation Report, Attachment E, Erosion Protection Report, p. 19.

6. Fugro Consultants, Inc., "Lower American River, Upstream Sediment Source, Reconnaissance Report, American River Common Features, Sacramento County, California", Prepared for U.S. Army Corps of Engineers, September 2012. *See, e.g.,* American River Watershed, Common Features, General Reevaluation Report, Attachment E, Erosion Protection Report, p. 20.

7. Geotechnical Office Report, Geotechnical Expert Elicitation Meeting Minutes, July 2009. *See, e.g.,* American River Watershed, Common Features, General Reevaluation Report, Attachment E, Erosion Protection Report, p. 59.

Both NEPA and CEQA require that documents such as these be made available for inspection during public comment. For example, NEPA states: "No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment." 40 C.F.R. § 1501.12; *see also League of Wilderness Defs./Blue Mts. Biodiversity Project v. Connaughton*, No. 3:12-cv-02271-HZ, 2014 U.S. Dist. LEXIS 170072, at *41-52 (D. Or. Dec. 9, 2014) ("Section 1502.21 plainly prohibits an agency from relying on information in the preparation of an EIS while refusing to make that information available to the public."). CEQA similarly requires that "[i]nformation relevant to the significant effects of a project, alternatives, and mitigation measures which substantially reduce the effects shall be made available as soon as possible by lead agencies, other public agencies, and interested persons and organizations." Pub. Res. Code § 21003.1(b).

Sincerely,

Justin Augustine
Center for Biological Diversity
916-597-6189
jaugustine@biologicaldiversity.org

cc:
Liz Bellas, Director, Sacramento County Regional Parks, BellasE@saccounty.net
Pete Ghelfi, Director of Planning, Sacramento Area Flood Control Agency, ghelfip@saccounty.gov
Gregg Ellis, ICF, Facilitator, BPWG/TRAC, gregg.ellis@icf.com
Patrick Kennedy, Chair of the Board, Sacramento Area Flood Control Agency, SupervisorKennedy@saccounty.gov
Susan Rosebrough, National Parks Service, Susan_Rosebrough@nps.gov
Wade Crowfoot, Director, California State Natural Resources Agency (via Tony Andersen, Deputy Secretary, Tony.Andersen@resources.ca.gov)
Stephen Green, President, Save The American River Association (SARA), info@sarariverwatch.org
Yana Garcia, Secretary for Environmental Protection, CalEPA, cepacomm@calepa.ca.gov
Abdulfetah Sigal, Environmental Protection Specialist, Tribal, Intergovernmental and Policy Division, sigal.abdulfetah@epa.gov
Robin Truitt, Environmental Protection Agency, Truitt.Robin@epa.gov
Army Corps of Engineers Comment Portal, ARCF_SEIS@usace.army.mil
Department of Water Resources Comment Portal, PublicCommentARCF16@water.ca.gov

From: Brown, Josh@DWR <Josh.Brown@water.ca.gov>
Sent: Tuesday, January 23, 2024 10:12 AM
To: Sutton, Drew
Subject: [EXT] FW: Documents re December 2023, Draft SEIS and SEIR XIV; American River Common Features, 2016 Flood Risk Management Project, Sacramento, CA

From: Justin Augustine <jaugustine@biologicaldiversity.org>
Sent: Monday, January 22, 2024 10:34 AM
To: Guy.K.Romine@usace.army.mil; Brown, Josh@DWR <Josh.Brown@water.ca.gov>
Subject: RE: Documents re December 2023, Draft SEIS and SEIR XIV; American River Common Features, 2016 Flood Risk Management Project, Sacramento, CA

Good morning,

After examining the documents we received this past Friday, we discovered that they reference three additional documents we do not have access to. We therefore respectfully ask that the following 3 documents be provided:

1

1. David Ford Consulting Engineers (Ford Engineers) (2018). "Lower American River Erosion Risk Assessment." Feb. 1.
2. HDR (2019). "Lower American River erosion conditional risk assessment: Subreach 1, 3, and 4".
3. Sacramento Area Flood Control Agency (SAFCA) (2017). "Erosion Risk Characterization Methodology for the Lower American River Study Area." Memorandum to Dan Tibbitts, SAFCA, from Michael Kynett, MBK Engineers; Ray Costa, Consultant; and David Ford, David Ford Consulting Engineers. October 18.

Thank you,

Justin Augustine

From: Justin Augustine
Sent: Friday, January 19, 2024 12:45 PM
To: Brown, Josh@DWR <Josh.Brown@water.ca.gov>
Cc: Romine, Guy K SPK <Guy.K.Romine@usace.army.mil>
Subject: RE: Documents and comment period re December 2023, Draft SEIS and SEIR XIV; American River Common Features, 2016 Flood Risk Management Project, Sacramento, CA

I just received the 8 documents I had asked about. Thank you, I appreciate it.

--Justin Augustine

From: Justin Augustine
Sent: Thursday, January 18, 2024 2:42 PM

To: Brown, Josh@DWR <Josh.Brown@water.ca.gov>
Cc: Romine, Guy K SPK <Guy.K.Romine@usace.army.mil>
Subject: RE: Documents and comment period re December 2023, Draft SEIS and SEIR XIV; American River Common Features, 2016 Flood Risk Management Project, Sacramento, CA

Thank you for the response. As we were doing additional comment work today, another document came up that we are also unable to find. It is listed as "HDR and Ford Engineers. 2019. Lower American River - Subreach 1, 3, and 4 tier classification Technical memo – Nov. 13, 2019." We would appreciate if that document could also be provided to us.

Thanks,

Justin Augustine

From: Brown, Josh@DWR <Josh.Brown@water.ca.gov>
Sent: Wednesday, January 17, 2024 8:44 AM
To: Justin Augustine <jaugustine@biologicaldiversity.org>
Cc: Romine, Guy K SPK <Guy.K.Romine@usace.army.mil>
Subject: RE: Documents and comment period re December 2023, Draft SEIS and SEIR XIV; American River Common Features, 2016 Flood Risk Management Project, Sacramento, CA

Good morning, Justin.

Your documents and comment period request letter was received. Let us work through the proper procedures to fulfill this request.

Thank you,
Josh

Josh Brown
Sr. Environmental Scientist (Supervisor)
Department of Water Resources
Division of Flood Management
Flood Projects Branch
Cell: (916) 539-2030

From: Justin Augustine <jaugustine@biologicaldiversity.org>
Sent: Wednesday, January 17, 2024 8:06 AM
To: Guy.K.Romine@usace.army.mil; Brown, Josh@DWR <Josh.Brown@water.ca.gov>
Cc: BellasE@saccounty.net; ghelfip@saccounty.gov; gregg.ellis@icf.com; SupervisorKennedy@saccounty.gov; Susan_Rosebrough@nps.gov; Andersen, Tony@CNRA <Tony.Andersen@resources.ca.gov>; info@sarariverwatch.org; Communications@EPA <CEPAComm@CALEPA.ca.gov>; sigal.abdulfetah@epa.gov; Truitt.Robin@epa.gov; ARCF_SEIS@usace.army.mil; DWR Public Comment ARCF 16 <PublicCommentARCF16@water.ca.gov>
Subject: Documents and comment period re December 2023, Draft SEIS and SEIR XIV; American River Common Features, 2016 Flood Risk Management Project, Sacramento, CA

Good morning,

Please see the attached letter asking for documents, and an extension of the comment period, regarding the December 2023, Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report XIV; American River Common Features, 2016 Flood Risk Management Project, Sacramento, CA.

Thank you,

Justin Augustine
Center for Biological Diversity
916-597-6189

CENTER *for* BIOLOGICAL DIVERSITY

February 23, 2024

U.S. Army Corps of Engineers, Sacramento District
1325 J Street
Sacramento, California 95814

Central Valley Flood Protection Board/California Dept of Water Resources
3310 El Camino Avenue, Suite 170
Sacramento, California 95821

Submitted via email: ARCF_SEIS@usace.army.mil and PublicCommentARCF16@water.ca.gov

Re: December 2023, Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report XIV; American River Common Features, 2016 Flood Risk Management Project, Sacramento, CA

We respectfully request that you not move forward with the plans described in Contracts 3B and 4B ("Project" or "Proposed Action"). This Project should instead be significantly revised in order to avoid the loss of riparian forest, and its associated values, along the Lower American River. Thousands of people use this particular forested area every year for fishing, wildlife-watching, hiking, swimming, canoeing, kayaking, paddle boarding, tubing, relaxing, and to escape the urban environment and summer heat.

The recreational and fishery values of the Project area are why it is protected under both the federal and state Wild and Scenic River Acts. As stated in the California Wild and Scenic River Act, protected rivers like the Lower American "shall be preserved in their free-flowing state, together with their immediate environments, for the benefit and enjoyment of the people of the state." We hope you will listen to the numerous concerns raised by the public, and work together with us to achieve a solution that meaningfully protects the River's riparian forest and its associated values. 1

Our comments below describe the harmful outcomes of the proposed Project. Overall, the Project fails to comply with the federal Wild and Scenic River Act, the California Wild and Scenic River Act, the California Environmental Quality Act, the National Environmental Policy Act, and other laws and policies as discussed below. In addition to the destruction of the River's shoreline and riparian forest, and the loss of many recreational activities and wildlife resources associated with them, the Project will also have detrimental impacts beyond the riparian area. For instance, the Project's construction, and construction routes, are located adjacent to a Title 1 elementary school, and will result in harmful noise and air quality impacts to sensitive populations.

A. The Forest of the Project Area

As shown in the below pictures (and those submitted by others), numerous trees, including heritage oaks, exist in the 3B and 4B areas. These large trees have evolved with flooding events over the past hundreds of years. They deserve protection from an ecological standpoint, a safety 2

#2 cont'd

perspective, and because of their value under the Wild and Scenic River Acts. The forest in the Project area serves as an important wildlife corridor between the forest segments near River Bend Park and Howe Avenue. These pictures, and an attached map,[1] depict beaches, swimming areas, hiking trails, and wildlife of the area.






[1] See Exhibit A

#2
cont'd





A video of the Project area can be viewed at https://www.youtube.com/watch?v=4bKBNZHrrYI.

#2 cont'd

In addition, the following pictures from previous projects to the west illustrate the destruction that would occur in the 3B and 4B areas:

B. The Project Violates the Federal Wild and Scenic River Act

3

The Lower American River area is the most heavily used recreation river in California, and its associated economic benefits are substantial as well–a 2006 study concluded that the Lower American River Parkway had a greater than $364 million annual economic impact. The River and its riparian forest are an incredible resource that provides recreational and educational opportunities for numerous people in the region. It is impossible to overstate just how important the River's forest is to so many people due to its location, its quality, its beauty, and what it supports. But it can only continue to provide that value if the forest is protected, which is why the River was designated under the Wild and Scenic River Act. As discussed below, because this Project would cause substantial damage to the River's condition and values, the Project violates the Act's core mandates and must therefore be revised.

1. The proposed rip-rapping violates the Wild and Scenic River Act's "free-flowing" requirement

4

The Wild and Scenic River Act states that designated rivers such as the lower American "shall be preserved in free-flowing condition, . . . and their immediate environments shall be protected for the benefit and enjoyment of present and future generations."[2] The Act defines "free-flowing" as "existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway."[3] As discussed in *Ctr. for Biological Diversity v. Delgado*: "The statute provides that the existence of minor modifications to a river's free flow

[2] 16 U.S.C. § 1271
[3] 16 U.S.C. § 1286(b)

should not prevent designation of the river, but also states that once a river is designated no further modifications should be constructed."[4] Because Contracts 3B and 4B propose to modify the River with extensive rip-rapping, the Project violates the Wild and Scenic River Act and must therefore be changed to comply with the Act.

5 Rip-rap is particularly problematic because it is now (as compared to when the Wild and Scenic River Act was passed) even more understood that not only is rip-rap harmful to a river and its riparian environment, rip-rap can be ineffective. For instance, as discussed in "Engineering with Nature," while "[r]iprap, or hard armoring, is the traditional response to controlling and minimizing erosion along shorelines or riverbanks, . . .[t]he very nature of having to repair [riprap] facilities counters the popular engineering belief that riprap is the best solution for mitigating stream bank erosion."[5]

6 Moreover, other options exist that can address both safety and environmental protection. "[W]e can manipulate streams and rivers without completely overriding nature's design, that indeed, it is possible to work hand in hand with nature to make living by the water not only viable, but much safer and secure in the long run."[6] "Finding methods of restricting riverbank erosion while allowing natural processes to function normally is just one important step in achieving equilibrium with our environment and investing smartly for our future."[7] This nature-based approach has been promoted at the highest levels—in 2022, the White House issued a press release advancing nature-based solutions.[8] It is therefore imperative that the lead agencies find alternative solutions that do not contradict the Wild and Scenic River Act.

7 The lead agencies for this Project have previously stated that the "proposed bank protection and launchable rock trench measures are the only two measures that will address the significant erosion problem on the American River," and "[o]ther measures were eliminated from consideration because the river velocities render them infeasible."[9] Not only are these statements eight years old, conclusory, and unsupported for the Project area, new studies regarding the Lower American River further demonstrate why the Project should be reconsidered and changed to protect the River and its associated riparian forest.[10] The new information and policies must be addressed because, for instance, it found that "when trees were accounted for in large-eddy simulations, a drastic effect on redistributing the high-velocity flow away from the banks and

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[4] No. C 01-4835 PJH, 2003 U.S. Dist. LEXIS 21885, *41-43 (N.D. Cal. June 19, 2003)
[5] Engineering With Nature: Alternative Techniques to Riprap Bank Stabilization, Federal Emergency Management Agency, January 2009
[6] Id.
[7] Id.
[8] https://www.whitehouse.gov/briefing-room/statements-releases/2022/11/08/fact-sheet-biden-%E2%81%A0harris-administration-announces-roadmap-for-nature-based-solutions-to-fight-climate-change-strengthen-communities-and-support-local-economies/; see also Executive Order 14072, https://www.govinfo.gov/content/pkg/DCPD-202200306/pdf/DCPD-202200306.pdf
[9] 2016 FEIS/FEIR, Appendix F
[10] Kevin Flora, Christian Santoni, and Ali Khosronejad. 2021. "Numerical Study on the Effect of Bank Vegetation on the Hydrodynamics of the American River Under Flood Conditions." *Journal of Hydraulic Engineering*. https://doi.org/10.1061/(ASCE)HY.1943-7900.0001912; Kevin Flora and Ali Khosronejad. 2023. "Uncertainty Quantification of Bank Vegetation Impacts on the Flood Flow Field in the American River California Using Large-Eddy Simulations." *Earth Surface Processes and Landforms*. https://doi.org/10.1002/esp.5745

increasing its magnitude near the center of the American River was observed."[11] Because trees significantly reduce velocity flow along banks, while increasing velocities in the center, trees should be protected, not destroyed, for flood protection. In addition, when trees are left in place, their roots hold the soil together, thereby improving resistance to erosion.

8 The SEIS/SEIR does not address the 2014 Water Resources Reform and Development Act (WRRDA) amendments which included provisions to prevent the destruction of vegetation on levees which had occurred under earlier outdated Corps guidelines and policies. Specifically, WRRDA Section 3013 requires the Secretary of the Army to, among other things, "carry out a comprehensive review of the guidelines [Corps of Engineers policy guidelines for management of vegetation on levees] in order to determine whether current Federal policy relating to levee vegetation is appropriate for all regions of the United States."[12] Section 3013(c) sets forth specific factors that the Secretary "shall consider" in carrying out the review including "the levee safety benefits that can be provided by woody vegetation; [] the preservation, protection, and enhancement of natural resources, including—[] the benefit of vegetation on levees in providing habitat for species of concern, including endangered, threatened, and candidate species . . ." Section 3013(f) requires that not later than 18 months after the date of enactment of WRRDA the Secretary shall "revise the guidelines based on the results of the review. . ." As most relevant here, section 3013(g)(1) mandates: "Until the date on which revisions to the guidelines are adopted in accordance with subsection (f), the Secretary shall not require the removal of existing vegetation as a condition or requirement for any approval or funding of a project, or any other action, *unless the specific vegetation has been demonstrated to present an unacceptable safety risk.*"[13] Here, especially in light of the new studies identified above, not only has it not been demonstrated that the trees to be removed in the Project area present an unacceptable risk, the new policies and information show that trees can be beneficial to addressing safety. This is yet another reason why it is imperative that the Project not be allowed to harm a Wild and Scenic River.

9 Importantly, we are unable to find in the Project documents any cohesive discussion of the data and information addressing why such destructive choices were made to address erosion in the Project area, especially since the area is a protected area within a Wild and Scenic River and contains numerous trees that provide natural erosion protection. Instead, much of the documentation shows the choices made are outdated and unsupported by site-specific data for the Project area. Moreover, the documents speak to the need to conduct further soil and geological analysis, such as more boring holes for analysis due to a "high degree of variability in the bed materials," "to assure continuity of various layers," and that "interpretations made of connecting the dots between borings could be erroneous." In addition, the area near the entrance

10 of SARA Park contains significant amounts of erosion-resistant clay hardpan, which the technical documents refer to as the "Pleistocene Fair Oaks Formation," and which the documents indicate do not present a serious erosion issue. And, as discussed above, trees can enhance

[11] Kevin Flora, Christian Santoni, and Ali Khosronejad. 2021. "Numerical Study on the Effect of Bank Vegetation on the Hydrodynamics of the American River Under Flood Conditions." *Journal of Hydraulic Engineering*. https://doi.org/10.1061/(ASCE)HY.1943-7900.0001912

[12] Public Law 113–121, 128 STAT. at 1284-87

[13] Public Law 113–121, 128 Stat. at 1287 (emphasis added)

erosion protection. This information, as well as the detailed submissions from Bill Avery,[14] Joshua Thomas,[15] Gerald Djuth, Bill Brattain,[16] and others show the necessity to explore nature-based alternatives that protect and enhance on-site trees instead of removing them to introduce massive amounts of rock.

2. The Project violates the Wild and Scenic River Act's mandate to "protect and enhance" river values

The Wild and Scenic River Act states that designated rivers such as the Lower American "possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values," and must be administered so as to "protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values."[17] 11

The Lower American River was determined to have outstandingly remarkable fishery and recreation values. As explained in the 1980 FEIS regarding the Lower American River's designation, the River and its adjoining riparian lands offer "one of the most unique stretches of public parkland in the country because of the close proximity of its natural and recreational features to the urban environment of Sacramento and adjoining communities."[18] The 1980 FEIS notes that the River "is lined with lush riparian growth that includes walnut, oak, cottonwood, and sycamore trees," and that this forest supports numerous birds and other wildlife despite the close proximity to a major urban area.[19] As discussed in *EDF, Inc. v. East Bay Mun. Util. Dist.*,: "The riparian vegetation acts as a buffer between the Lower American River and the surrounding urban development. This vegetation, together with the river itself, are the most prominent features of the Parkway, and contribute greatly to the recreational experiences there. Many species of wildlife use the riparian vegetation for sources of food, cover, nesting sites, roosting areas and migratory corridors. Riparian vegetation is recognized by ecologists as being among the most productive wildlife habitat in the state."[20]

The 3B/4B Project does not "protect and enhance" the Lower American River's fishery and recreational values, and the Project will "substantially interfere with public use and enjoyment of these values." For instance, the Project will not only destroy important riparian forest that many people enjoy for hiking, wildlife-watching, and shade, the Project will simultaneously eliminate fishing access, popular beaches, trails, small watercraft access, and swimming areas, such as

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[14] See Exhibit B
[15] See Exhibit C
[16] See Exhibit D
[17] 16 U.S.C. §§ 1271, 1281
[18] See Final Environmental Impact Statement, Proposed Designation of Five California Rivers in the National Wild and Scenic Rivers System, December 1980; see also Evaluation Report on the Eligibility of Five California Rivers for Inclusion in the National Wild & Scenic Rivers System; *EDF, Inc. v. East Bay Mun. Util. Dist.*, 1990 Cal. Super. LEXIS 7, *12 ("The American River Parkway is unique among urban rivers the United States. Running through the center of the Sacramento metropolitan area, the river and parkway provide a public recreational resource of great value and regional significance; it has no equivalent in California and few equivalents in this country.")
[19] *Id.*
[20] 1990 Cal. Super. LEXIS 7, *14-15

those depicted in the pictures and map identified above. This will be caused primarily by the construction of "approximately 1.8 miles of launchable rock toe, launchable trench, and bank protection" with respect to 3B North, "approximately 1.5 miles of launchable rock toe (Figure 3.5.2-13), launchable trench, bank protection, and tie backs" with respect to 3B South,[21] and tree removal associated with 4B.[22]

12 The SEIR/SEIS proposes changes to the 2016 proposal that will increase the harm to the River's values. As stated in the SEIR/SEIS, because the "2016 ARCF GRR Final EIS/EIR only analyzed launchable trench and bank protection (Figure 3.5.2-2) as erosion protection methods, [t]he [2023] design refinements include additional erosion protection methods (launchable rock toe protection and tie backs) throughout the American River Erosion Contract C3B North and South project sites as well as staging areas, haul routes, and additional areas within the construction footprint."[23] The 2016 FEIS/FEIR also appears to have intended to protect more vegetation. It states that bank protection targets "[s]mall vegetation and loose materials" for removal whereas "[i]n most cases, large vegetation would be permitted to remain at these sites."[24] The 2016 documents further note that "removal of waterside vegetation during construction . . . would primarily consist of shrubby vegetation and grasses, which do not significantly contribute to shade, [and] [t]he larger trees in the bank protection footprint, which are the primary contributors to shade, would be protected in place."[25] According to the 2016 documents, the Project would "not require . . . the disruption of shaded riparian habitat" when creating "launchable rock trench",[26] and "erosion measures on the American River are not considered structural fixes, as these measures do not impact the structure of the levee, therefore the vegetation in this portion of the project would not be addressed under the ARCF project [and] [b]ank erosion measures therefore will allow the vegetation to remain."[27] In the SEIR/SEIS, Figure 3.5.2-2 (Launchable Trench and Bank Protection Designs) appears to show riparian trees largely remaining where the described type of actions take place.

13 In 2023, however, launchable toes and tiebacks were added that, as shown in Figure 3.5.2-13, and as stated in the documents, "will result in substantial tree removal to construct levee improvements."[28] Despite this, the SEIS/SEIR asserts that "the new additional erosion protection methods for American River Erosion Contract 3B North and South are similar enough in method and location on the levee to the erosion protection methods described in [2016] that the visual impact from the design refinements would be similar to what was already analyzed in [2016]"[29] This assertion makes no sense in light of the significant harm that the new proposals include, and the assertions made in 2016 regarding very minimal tree loss. Unfortunately, the documents (both 2016 and 2023) nowhere state how many trees are likely to be lost due to the Project, but other documents (not available on the Project page, such as the December 12, 2023 presentation

[21] SEIS/SEIR at 3-26
[22] Very little information is offered regarding Contract 4B, especially regarding its potential impacts to large trees and heritage trees and other native vegetation.
[23] SEIS/SEIR at 3-26
[24] 2016 FEIS/FEIR at 35
[25] 2016 FEIS/FEIR at 104
[26] 2016 FEIS/FEIR, Appendix E at 65
[27] 2016 FEIS/FEIR at 139
[28] SEIS/SEIR at 4-192
[29] SEIS/SEIR at 3.1-24

13 cont'd

showing 522 trees to be removed in 3B South alone),[30] as well as the completed activities to the west, show that entire areas will be virtually clear-cut, or at least most trees lost, including many large trees and even heritage trees. This means that the Project documents fail to provide the information necessary for the public to meaningfully understand what will be lost—a few trees, many trees, one heritage oak, ten heritage oaks—we don't know because the Project documents don't explain. Likewise, nowhere does the SEIS/SEIR explain, or provide site-specific date to support, the erosion methods chosen in the Project area.

Further confusion is found in documents not included in the SEIS/SEIR or the Project webpage. A December 12, 2023 document states that 3B South "[a]voids most large trees," but also states that 522 trees will be removed in the 3B South section–no explanation is given as to how many of the 522 trees are considered large, nor is "large" defined. Moreover, the loss of just a single large tree, such as any of the giant oaks in the Project area, can itself be significant, yet thus far it is not possible to tell which trees of which sizes will be eliminated by the Project. 522 is a very significant number of trees, regardless of their size, especially in an ecologically- and recreationally-significant city environment, and this information contradicts the assurances given in the 2016 documents that very few trees would need to be removed or harmed.

14 Removing so many trees, and introducing so much rock, in the Project area will have devastating effects on the fishery value of the River. By eliminating canopy cover and shade, the water temperature of the area will be increased, harming the habitat of anadromous fish species. In addition, rip-rap reduces habitat complexity and diversity, and breaks up habitat connectivity in an area where such habitat is already limited.

15 The SEIS/SEIR acknowledges that the Project will substantially interfere with the River's recreational value: "The short-term significant unavoidable impacts related to recreational resources cannot be reduced to a less-than-significant level with implementation of mitigation measures listed in Section 3.14.6 of the ARCF GRR Final EIS/EIR. Disturbances associated with construction work and hauling are unavoidable effects of the work to be completed and consequentially the significant impact on recreation cannot be avoided."[31] In addition, the Project will also have severe long-term impacts on recreation. The loss of trees, and introduction of rock, will either permanently, or for a very long time (decades to centuries), harm the ability of people to walk, hike, wildlife-watch, fish, visit beaches or trails or swimming areas, or enjoy a shaded environment.

Because the Project fails to adhere to the Wild and Scenic River Act's "protect and enhance" mandate, it cannot go forward as currently proposed. Modifications must be made to ensure that the Project area remains meaningfully useable for recreation including fishing access, beach access, swimming, wading, hiking, wildlife-watching, and shade. For example, rather than eliminating over 600 trees in the Project area (as shown in the December 2023 document with respect to 3B North and 3B South), the vast majority of trees should be allowed to remain in the Project area to support the areas' recreational and fishery values.

[30] https://waterforum.org/wp-content/uploads/LARTF-Dec-2023-Slides.pdf
[31] SEIS/SEIR at 4-115

Furthermore, from a safety perspective, new information (e.g., the above-mentioned published studies) shows that the trees that would be eliminated by the Project are actually of great importance when determining how to address erosion.[32] The 2023 study notes that "in addition to the results obtained previously by Flora and Khosronejad (2021) showing that vegetation will redistribute the flow away from the banks and into the main flow of the channel, the importance of incorporating vegetation into the LES was shown in this new study by highlighting its
16 influence on the water surface profile. By modelling the free surface, one can easily see how including the vegetation in the numerical model increases the backwater in a river."[33] "This study has underscored the significance of integrating vegetation effects into high-fidelity numerical models, shedding light on the need to consider vegetation in advanced simulations. Building upon previous research (Flora et al., 2021b) conducted at the study site, which revealed the influence of bank vegetation on redistributing the flow and modifying bed shear stress, our study employed a multiphase LES to accurately model the water surface. The simulation demonstrated that the trees lining the riverbanks imparted substantial flow resistance and produced significant backwater in the river. These findings further emphasize the importance of accounting for vegetation in such advanced simulations."[34]

The new circumstances/information is relevant to environmental concerns, as well as the Proposed Action and its impacts, because this new information means that the destruction that the Project would cause is not necessary, and in fact may be counterproductive to the important mission of ensuring that Sacramento is protected from flooding.[35] Furthermore, this information means that alternatives previously found not to be feasible are in fact feasible, and would substantially reduce significant effects of the project.[36] For instance, the new information shows that keeping trees, rather than eliminating them, is not only feasible, it is helpful for the Project goals. Likewise, alternatives which are considerably different from those analyzed (e.g., protecting most trees) would substantially reduce one or more significant effects on the environment. These feasible alternatives should be explored and adopted to avoid violations of the Wild and Scenic River Act (as well as CEQA and NEPA as discussed below).

The SEIS/SEIR asserts that the "design of the erosion protection features, specifically the planting benches and soil-filled revetment, allows for the site to be revegetated and used for onsite mitigation for riparian habitat and salmonid habitat."[37] This is deeply flawed because mature riparian habitat with canopy cover will take many decades, and large heritage trees
17 centuries, to actually return, if they return at all. For the 3B and 4B areas to retain their fishery and recreation values, the vast majority of trees must be left in place. There is also no discussion as to long-term maintenance of these planted tree areas and whether they will be able to grow to a size to be remotely comparable to the trees removed, given that some trees will be planted on

[32] Kevin Flora, Christian Santoni, and Ali Khosronejad. 2021. "Numerical Study on the Effect of Bank Vegetation on the Hydrodynamics of the American River Under Flood Conditions." *Journal of Hydraulic Engineering*. https://doi.org/10.1061/(ASCE)HY.1943-7900.0001912
[33] Kevin Flora and Ali Khosronejad. 2023. "Uncertainty Quantification of Bank Vegetation Impacts on the Flood Flow Field in the American River California Using Large-Eddy Simulations." *Earth Surface Processes and Landforms*. https://doi.org/10.1002/esp.5745.
[34] Id.
[35] 40 C.F.R. § 1502.9
[36] 14 C.C.R. § 15162
[37] SEIS/SEIR at 3-38

top of rock benches. No information is provided to explain how a complex mature forest will be able to return after the area is denuded.

18 Also flawed is the assertion in the SEIS/SEIR that impacts to recreation are "Long-term Less than Significant with Mitigation Incorporated," or "Long-term No Impact." As discussed above, there are permanent and substantial short and long-term impacts–beaches lost, swimming areas lost, trails lost, shade lost, small watercraft access points lost, wildlife-watching lost, fishery habitat lost, fishing access lost–for up to centuries even if the forest comes back some day post-project. The SEIS/SEIR claims that "[i]n the long term, American River Erosion Contract 3B would result in less-than-significant impacts after construction activities are complete *and vegetation matures"* (emphasis added),[38] but the reality is that for a riparian forest to reach maturity can take centuries. The loss of mature forest therefore cannot be overstated, and the Wild and Scenic River Act does not allow such overwhelming interference with public use and enjoyment of the riparian forest of the Lower American River. Moreover, the rock being introduced is permanent, not temporary, and will therefore have long-term impacts as well.

19 The SEIS/SEIR also asserts that "the maturation of the riparian vegetation will return the visual quality of the project area to pre-construction conditions."[39] This assertion too is highly misleading, as again, it will take up to centuries for that outcome to actually occur, if it occurs at all—the impacted area contains mature riparian forest with canopy cover and many large, old trees that can require centuries to return. Examination of new plantings in the River Park area and elsewhere associated with other segments of the levee work shows that the plantings have largely been done in rows, like in an orchard, which is not at all like the natural riparian forest that currently provides amenities to wildlife and the public.

20 The Project documents also seem to imply that the Project's damage to riparian forest is allowable because otherwise the forest at issue will be destroyed by flooding. While certainly flooding impacts riparian vegetation, it does not eliminate it like the Project would. The riparian forests of the Lower American have grown and evolved with flooding events, and the many large, old trees in the Project area are proof that serious flooding will not likely eliminate these trees. Some of these trees may have existed prior to the existence of California as a political and cultural entity, and have survived and thrived through and despite the most damaging and infamous of California's recorded storms, such as those in the 1850s.

21 The Project also does not follow the Corps' guidance that for "flood damage reduction projects, the goal of landscape planting is to minimize and/or mitigate negative impacts to aesthetic, environmental, and ecological conditions, such that post project conditions are equal to, or better than, pre-project conditions."[40] Here, the post-project conditions will be dramatically worse than pre-project due to the extreme loss of riparian trees and vegetation, and introduction of rock. The Corps is also not doing what it said it would do in 2016: "if some sort of bank protection is

[38] SEIS/SEIR at 4-118
[39] SEIS/SEIR at 4-143
[40] Engineering and Design, Guidelines For Landscape Planting And Vegetation Management At Levees, Floodwalls, Embankment Dams, And Appurtenant Structures

21 cont'd

determined to be necessary, other options to reduce impacts, including bioengineering measures, will be analyzed."[41] Other options must still be analyzed.

Tellingly, the work recently performed downriver, to the west near Howe Avenue and the River Park neighborhood, shows what the future of the existing riparian forest will likely be if the Project goes forward under current design–a River without a nuanced shoreline and areas in which to swim/wade, hike, fish, see wildlife, or find enjoyment. The 3B and 4B area is one of the most important areas of the Lower American River, accessible and serving the municipal core, and must be allowed to remain that way under the Wild and Scenic River Act.

3. The Project violates the American River Parkway Plan

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The Project will also violate the American River Parkway Plan. For instance, the Plan requires agencies to "protect, enhance and expand the Parkway's native willow, cottonwood, and valley oak-dominated riparian and upland woodlands that provide important shaded riverine aquatic habitat (SRA), seasonal floodplain, and riparian habitats; and the native live oak and blue oak woodlands and grasslands that provide important terrestrial and upland habitats." The Project does not meet that requirement because it will destroy, rather than protect or enhance, the native willow, cottonwood, and valley oak-dominated riparian forest in the Project area. Likewise, the Project violates the Plan's requirements to (1) "ensure the protection of the Parkway's resources, its environmental quality and natural values," (2) "identify, enhance and protect areas where maintaining riparian vegetation will benefit the aquatic and terrestrial resources [and] current shaded riverine aquatic habitat," (3) "preserve, protect and/or restore riparian and in-channel habitat necessary for spawning and rearing of fish species, including native Chinook salmon (fall-run), steelhead, and Sacramento splittail, and recreational non-native striped bass and American shad," and (4) provide "passive, unstructured water-enhanced recreation activities which are appropriate in a natural environment, and which are not normally provided by other County recreational facilities."

The SEIS asserts that while "American River Contract 3B has some work within areas designated as conservation areas in the 2023 American River Parkway Resource Management Plan," "[b]ecause most conservation areas being impacted by the Proposed Action would become mitigation once work is complete, there would be a less than significant impact on these conservation areas."[42] This assertion is incorrect. The protected areas will be losing significant vegetation, including large mature trees that provide substantial shade for fish and wildlife and ensure that beaches and swimming areas and walking trails are what they are. Again, mitigation will not be meaningful for potentially centuries due to the loss of over 600 trees in the Project area.

Finally, it is important to recognize that the Parkway Plan's statement that "vegetation removal for flood control purposes, shall be designed to avoid or minimize adverse impacts on the Parkway" cannot be used to override the Wild and Scenic River Act's mandates. In other words, the Project is required to "avoid or minimize adverse impacts" in order to meet the standards of the Act. It is therefore imperative that the Project be redesigned to achieve that outcome.

[41] 2016 FEIS/FEIR, Appendix F
[42] SEIS/SEIR at 4-130

C. The Project Violates the California Wild and Scenic River Act

Contracts 3B and 4B are wholly within the California Wild and Scenic River Act system and must thus comply with this Act as well.[43] The Act provides that "[i]t is the policy of the State of California that certain rivers which possess extraordinary scenic, recreational, fishery or wildlife values, shall be preserved in their free-flowing state, together with their immediate environments, for the benefit and enjoyment of the people of the state[,]" and that "such use of these rivers is the highest and most beneficial use."[44] The modification of miles of river shoreline to angular rock bank "armoring" substantially harms the "scenic, recreational, fishery or wildlife values" of the Lower American River and is thus inconsistent with the CWSRA.[45] In addition, under section 5093.60 of the Act, the lower American River "shall be administered so as to protect and enhance the values for which it was included in the system . . . ."[46] Here, Contract 3B and 4B conflict with fish protection, and public use and enjoyment, for all the reasons discussed above—the Project will eliminate shade, as well as beaches and swimming areas, and will damage habitat and the ability to enjoy the area's wildlife and aesthetics. This direct and adverse harm to the River's values is substantial as it will occur in a popular, heavily recreated area. The Project must therefore be revised to protect the River's highest and most beneficial uses.

23

D. The SEIR Violates CEQA

CEQA requires that lead agencies "not approve projects as proposed if there are feasible alternatives or feasible mitigation measures which will avoid or substantially lessen the significant environmental effects of such projects."[47] CEQA and the CEQA Guidelines also require that an EIR's mitigation measures be fully enforceable through legally binding means.[48] As discussed below, the SEIS/SEIR fails to comply with CEQA because it lacks the information and analysis necessary to adequately avoid and mitigate the Project's harmful impacts, and no meaningful alternatives to the Project's destruction were considered or evaluated despite new information and new policies.

24

1. The SEIR Fails to Adequately Disclose, Analyze, and Mitigate the Project's Significant Adverse Recreational Impacts

The Project documents do not adequately disclose, and thus do not meaningfully analyze, many of the harmful impacts to recreational use of the Project area. The 2016 documents assert for instance that the "primary recreational feature within the American River Parkway (Parkway)

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[43] *See* Pub. Res. Code § 5093.54(e)
[44] Pub. Res. Code § 5093.50
[45] *See also* Opinion No. SO 76-7, Office of the Attorney General (1977)
[46] The importance of protecting the lower American River's values is further emphasized in section 5093.61 of the Act which states that "[a]ll departments and agencies of the state shall exercise their powers granted under any other provision of law in a manner that protects the free-flowing state of each component of the system and the extraordinary values for which each component was included in the system." Pub. Res. Code § 5093.6
[47] CEQA Guidelines §§ 15092(b), 15043, 15126.4(a)(1).
[48] Pub. Res. Code § 21081 ("A public agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures."; CEQA Guidelines § 15126.4(a)(2) ("Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments.")

24 cont'd

which could be affected by the project is the Jedediah Smith Recreation Trail,"[49] but in fact the primary impact will be the short and long-term recreational harm caused by loss of beaches, fishing access, swimming areas, hiking and walking trails, wildlife-watching, shade, and riparian trees. The 2023 documents likewise fail to meaningfully address recreational impacts as they too do not discuss what it means to recreation to lose fishing access, beaches, trails, swimming areas, wildlife-watching, canopy cover, large trees, and shade in the Project area—all of these activities will be either permanently lost or lost for many decades or even centuries due to the time it takes for a mature forest with large trees and canopy cover to grow back, if they grow back at all. What impacts will the community experience? Because the documents do not discuss this loss, nor the seriousness of it (despite numerous comments regarding the 2016 documents concerning these sorts of recreational features and concerns over their loss), the public was not properly informed as to what the Project's impacts actually are.

The proposed rip-rap and associated actions will forever change the character of the Project area and yet the Project documents imply that no significant long-term impacts exist because trees will eventually grow back someday. It is simply not true that "after all construction activities are completed and sites are re-opened to the public, long-term impacts would be less than significant."[50] The destruction to the riparian forest and installation of tons of rock armoring will in fact cause long-term impacts to recreation because for many decades, if not centuries or permanently, the public will not be able to meaningfully use the 3B area for fishing, swimming, beaches, hiking and walking, wildlife-watching, shade, or relaxation. These significant impacts to recreation are all the more problematic given that the area is meant to be protected under the Wild and Scenic River Acts for the River's "outstandingly remarkable" value for recreation.

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The SEIS/SEIR does note that "[o]ther recreational activities within the American River Parkway include walking, cycling, running, hiking, bird watching, wildlife viewing, and horse riding,"[51] but there is no information, discussion, or analysis provided as to what will happen to those activities due to the Project. Instead, the loss of these important activities is dismissed (without discussion) in the short term as "a direct significant impact that cannot be mitigated to a less-than-significant level," and ignored as to long-term impacts. The SEIS/SEIR asserts that "until vegetation reestablishes, wildlife and bird view would be impacted as habitat would be temporarily impacted,"[52] but even this is incorrect because what is meant by "temporarily" is not discussed, and the fact of the matter is that much of the wildlife cannot return to the area until mature forest reestablishes, which can take many decades to centuries.

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Moreover, the few passing references to these recreational resources are limited to impacts to vegetation, but permanent major impacts to the shoreline, including loss of access points to swim, fish, put in small watercraft, or just enjoy the view, are absent, despite their importance to the community and official recognition of these resources as described above. The lack of

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[49] The SEIS/SEIR acknowledges this as well: "The environmental setting described in Section 3.14.1 of the ARCF GRR FEIS/EIR covering land-based recreational resources is generally applicable to the land-based recreational resources found within the project sites. Generally, it describes the primary recreational resource that could be affected by the flood risk reduction work as bicycling."

[50] SEIS/SEIR at 2.2-23

[51] SEIS/SEIR at 2.2-2

[52] SEIS/SEIR at 2.2-21

26 cont'd analysis and consideration of each of these resources is distressing to the great many members of the public who cherish them.

As an example of this lack of analysis of the recreational features of the Project Area, note the "social trails," beaches, and other areas depicted on the map in Exhibit A to this letter. There are miles of trails that are routinely used by members of the public, yet these trails were not inventoried and were not discussed in the SEIS/SEIR.[53] If the Project is meant to avoid and mitigate for effects, how can the Project avoid and mitigate effects on recreational assets such as social walking trails, beaches, fishing spots, and the like if they were not inventoried, let alone analyzed?

27 The community is also concerned that in addition to the armoring of miles of shoreline, making recreation in those areas difficult or impossible, it may well be unsafe. Anecdotal reports indicate that very few people choose to recreate along shorelines that have been armored. Such shorelines are unwelcoming, uncomfortable, ugly, and unsafe. If the public abandons use of the shoreline for these or related reasons, the Project has effectively eliminated these sections from the public domain as a recreational resource. This needs to be discussed and avoided.

28 The substantial impacts to recreation are compounded by the fact that "many staging areas for American River Erosion Contract 3B North and South and American River Erosion Contract 4B are public parks or recreational areas," and "these staging areas could be needed over multiple years."[54] In other words, not only will recreation in a wild and scenic river area be substantially interfered with, local parks will be harmed in the process of that damage. This is all the more reason to avoid the harm to riparian forest on the Lower American River in the first place, and to instead adopt measures that do not require such destruction.

29 Recreation is also critically important to public health, yet this is nowhere addressed in the SEIS/SEIR.[55] Many people come to the 3B Project area for their physical and mental well-being, and that is especially so because of the close proximity of the area to urban Sacramento. Research has shown that "green exercise" may confer mental health benefits in addition to improving physical health. For instance, it was found that exercising with views of nature led to more consistent mental health improvements.[56] Similarly, natural park settings help decrease anger, anxiety, and depression; and increase restoration and tranquility.[57] Just the simple act of viewing nature has shown to provide physiological restoration, reduce stress and provide

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[53] Numerous community groups commented on the 2016 environmental documentation about these recreational resources and the need to protect them, so it is perplexing to see them ignored in the 2023 documentation. See, e.g., February 22, 2016 letter from Matthew Carr et al, ARCF GRR Final EIS/EIR 2016, Appendix F, PDF page 46. ("The Final EIS/EIR does not adequately characterize the many varied uses of the river and Parkway.") Ironically, the SEIS/SEIR mentions the bike path many times, but impacts to the bike path, while serious, are not nearly as substantial as the impacts to the other recreational amenities that will be impacted but were not analyzed. This point about undue focus on the bike path was also made in 2016.

[54] SEIS/SEIR at 2.2-22

[55] See, e.g., Urban River Parkways, An Essential Tool for Public Health (July 2014)

[56] Barton, J and Rogerson, M. 2017. The importance of greenspace for mental health. BJPsych International, 14 (4), pp. 79-81. DOI https://doi.org/10.1192/s2056474000002051

[57] Pretty J, Peacock J, Sellens M, Griffin M. 2005. The mental and physical health outcomes of green exercise. Int J Environ Health Res. 15(5):319-37. doi: 10.1080/09603120500155963. PMID: 16416750

29 cont'd

calming effects.[58] Maintaining a connection with nature is particularly valuable in reducing stress that accompanies urban living,[59] and scientific studies confirm that regular engagement with green spaces is linked with better mental health and well-being.[60] More greenery, access to nearby natural areas, and green exercise, positively correlate with less stress, less sadness, more satisfaction with life, and overall better mental health.[61] Morita et al. found that depression decreased and liveliness increased with forest immersion.[62] For people having high initial stress levels, exposure to forest settings produced lower measures of anxiety, depression, anger, confusion, and fatigue, and forest walking increased happiness more than walking in a gymnasium, with meditative walking in the forest being the most effective.[63] The U.S. Department of Health and Human Services states that the lack of green space is one of the most important causes of childhood obesity, and the need for green places to protect children's health is becoming more recognized and apparent.[64]

The loss of riparian forest in the Project area will detrimentally impact the health of the many people who use this particular area to relax, hike, run, walk, watch wildlife, swim, fish, and boat. This is especially so given how few areas nearby to Sacramento provide such opportunity for connection to nature, relaxation, and the many other ways that the area uniquely offers opportunities for physical activity and mental health sustenance. This is yet another important reason to protect the area's riparian forest. Again, the law requires, and the resource and community deserve, analysis of this and avoidance of these impacts.

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With respect to cumulative impacts to recreation, the SEIS/SEIR states that "the Proposed Action would result in a considerable contribution to the short-term significant cumulative impact on recreation," but fails to address the long-term significant impacts in any meaningful way. This is a serious oversight given how much of the Lower American River's vegetation is being harmed. Along the south bank of the river closest to the City of Sacramento, with all work in the GRR included, there are miles and miles of riverbank where the public cannot recreate, potentially for

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[58] Grinde B, Patil GG. 2009. Biophilia: does visual contact with nature impact on health and well-being? Int J Environ Res Public Health. 6(9):2332-43. doi: 10.3390/ijerph6092332; Dannenberg AL, Jackson RJ, Frumkin H, Schieber RA, Pratt M, Kochtitzky C, Tilson HH. 2003. The impact of community design and land-use choices on public health: a scientific research agenda. Am J Public Health. 93(9):1500-8. doi: 10.2105/ajph.93.9.1500.

[59] Vining, J. 2003. The Connection to Other Animals and Caring for Nature. Human Ecology Review, 10(2), 87–99. http://www.jstor.org/stable/24706957

[60] Maller, C., Townsend, M., St Leger, L., Henderson Wilson, C., Pryor, A., Prosser, L. and Moore, M. 2009. Healthy Parks, Healthy People: The Health Benefits of Contact with Nature in a Park Context

[61] World Health Organization. 2011. Investing in Mental Health; Kuo, M. 2011. Parks and Other Green Environments: 'Essential Components of a Healthy Human Habitat'. Australasian Parks and Leisure, 14(1); Barton, S. 2008. Human Benefits of Green Spaces

[62] Morita, E.; Fukuda, S.; Nagano, J.; Hamajima, N.; Yamamoto, H.; Iwai, Y.; Nakashima, T.; Ohira, H.; Shirakawa, T. 2007. Psychological effects of forest environments on healthy adults: Shinrin-yoku (forest-air bathing, walking) as a possible method of stress reduction. Public Health 121, 54–63

[63] Park, B.-J.; Furuya, K.; Kasetani, T.; Takayama, N.; Kagawa, T.; Miyazaki, Y. 2011. Relationship between psychological responses and physical environments in forest settings. Landsc. Urban Plan 102, 24–32; Shin, Y.-K.; Kim, D.J.; Jung-Choi, K.; Son, Y.; Koo, J.-W.; Min, J.-A.; Chae, J.-H. 2013. Differences of psychological effects between meditative and athletic walking in a forest and gymnasium. Scand. J. For. Res. 28, 64–72

[64] Mayors' Guide to Fighting Childhood Obesity. 2007. The United States Conference of Mayors; Preventing childhood obesity: the need to create healthy places. A Cities and Communities Health Report; Space oriented Children's Policy: Creating Child friendly Communities to Improve Children's Well-being

decades or permanently. The cumulative impacts of this many miles of a key recreational resource must be addressed.

2. The SEIR Fails to Adequately Disclose, Analyze, and Mitigate the Project's Significant Adverse Biological Impacts

31 The SEIS/SEIR fails to adequately describe the importance of the Project area's habitats in supporting vast biodiversity, including special-status animals and plants, in an otherwise urban landscape. Riparian habitat is unfortunately rare to begin with and not only supports disproportionately high levels of biodiversity, it is critical for wildlife connectivity. It is also important for many ecosystem services that communities rely on for safety and economic stability, including water quality protection, carbon sequestration, erosion control, and soil retention. Riparian ecosystems have long been recognized as biodiversity hotspots performing important ecological functions such as the shade and erosion control that riparian vegetation provides. Removal and degradation of riparian areas have been identified as major drivers of declines in California's freshwater and anadromous fish.

32 Importantly here, the riparian habitat at issue represents the primary corridor for wildlife movement, as outside the Project area, the land is largely developed and lacking cover. In other words, once the riparian forest at issue is lost, there is nothing else available nearby. The SEIS/SEIR effectively dismisses the Project area's importance for local biodiversity and connectivity, and thus fails to adequately describe and assess what the loss of this habitat means in this particular situation. Every single patch of riparian forest along the Lower American River is critical in light of the existing baseline, and thus cannot be mitigated with riparian forest decades to centuries in the future. This is especially so given that habitat has already been severely diminished to the west by other levee projects.

The fact that this area acts as a narrow, linear wildlife corridor was not discussed, and thus neither were alternatives or mitigation for that fact. To put a fine point on it, for wildlife to travel from the forest area near Howe Avenue to the forest area upstream of the Mayhew Drain, i.e., from downstream of the project area to upstream of the project area, it will have to traverse a stretch of miles that is, for many years, largely devoid of vegetation, which means no cover. Habitat loss and fragmentation like is happening with this Project (and others nearby) can lead to local extirpation, and the SEIS/SEIR likewise fails to address the importance of riparian habitat in the context of a changing climate –much like the humans that recreate in the shade of this forest, wildlife too relies on the canopy cover and shade to survive the heat.

33 The SEIR/SEIS states that "approximately 65 acres of riparian habitat would be removed" and that it will be mitigated "by planting new riparian habitat onsite or at USFWS approved mitigation sites."[65] What is left unclear is how much canopy cover and how many large trees will be lost, as that cannot be mitigated in light of the timetable for their reestablishment. It is critical that the public be told during the comment period what exactly will happen to medium and large-sized trees, especially the largest ones, because they are what matter most to the wildlife of the Project area. Instead, only vague and generic statements have been made about which large trees will remain in the Project area, and it is therefore difficult to know the extent of the damage to

[65] SEIS/SEIR at 4-186; in addition, "the loss of 80,825 linear feet of SRA habitat"

33 cont'd

the area's ecology. For example, the Project documents state a generic desire to "reduce impacts on vegetation and wildlife to the extent practicable," "reducing the impact footprint," "constructing bank protection rather than launchable rock trench whenever feasible," yet it appears that much of the shoreline will nonetheless be armored and over 600 trees removed despite their importance to wildlife. Many trees in the Project area have been here for over a century and provide habitat and cover for beavers, otters, deer, coyotes, and numerous bird species. As just a few examples, one large tree in the Project area can often be observed with 6-10 woodpeckers on it, owls and magpies are daily present in the large oaks, mergansers use the large trees for nesting, and otters are often observed near the shoreline.

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The Project documents state that "the affects to biological resources would be less than significant because the new habitat would be similar to those removed over the 50-year life of the project."[66] This is unhelpful because wildlife needs habitat now, not 50 years from now, and the general area is already severely depleted of riparian habitat such that every acre lost is significant in the short term and long term. Riparian habitats support disproportionately high levels of biodiversity and are important for wildlife connectivity and yet the SEIS/SEIR assumes that mitigation that, at best, will arrive many decades in the future is good enough. It is not. Moreover, it can take much more than 50 years for the mature riparian forest to return, if it returns at all. In addition, the significant amount of rock being placed in the Project area will result in long-term/permanent loss of habitat and will make it difficult for wildlife to access the shoreline/river. There is also no guarantee that the installed forest will regrow per the expectations of the SEIS/SEIR, let alone to match the values that a mature forest brings.

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The mitigation proposed is also presented in insufficient detail to meaningfully evaluate. For instance, mitigation measures VEG-1 and VEG-2, quoted and discussed below, as well as mitigation measure WATERS-1,[67] do not specify what specific measures will be taken, only that some measures will be taken, with a presentation of a list of possible mitigation measures. These unduly vague mitigation measures are inadequate as they prevent any meaningful evaluation of the Project and its impacts once the mitigation is implemented, whatever that mitigation might ultimately look like. The mitigation measures need to be presented in meaningful and sufficient detail at the time that the Project is considered to comply with CEQA. Approving the Project with only a vague, inchoate understanding of the mitigation is inappropriate. More detail is needed.

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[66] SEIS/SEIR at 5-25

[67] Mitigation Measure "WATERS-1" is inappropriately devoid of detail, and states in its entirety:
In compliance with the CWA, the Project Partners will compensate for fill of State and Federally protected waters to ensure no net loss of functions and values. Water quality certification pursuant to Section 401 of the CWA will be obtained from the Central Valley RWQCB before starting project activities subject to Section 401. Any measures determined necessary during the permitting processes will be implemented, such that there is no net loss of functions and values of jurisdictional waters.
Mitigation may be accomplished through habitat replacement, enhancement of degraded habitat, off-site mitigation at an established mitigation bank, contribution of in-lieu fees, or other methods acceptable to the regulatory agencies, ensuring there is no net loss of waters of the United States. If compensation is provided through permittee-responsible mitigation with additional NEPA and CEQA documentation, a mitigation plan will be developed to detail appropriate compensation measures determined through consultation with USACE and Central Valley RWQCB. These measures will include methods for implementation, success criteria, monitoring and reporting protocols. SEIS/SEIR, Appendix B, at 4.1-41.

Furthermore, the cumulative impacts of this Project with others must be more carefully addressed. While this Project alone will have devastating impacts to fish and wildlife habitat, it is on top of already significant loss of habitat to the west. Again, any loss of riparian habitat is significant in light of its extreme rarity, and here there are multiple projects eliminating or degrading it along the Lower American River.

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3. The SEIR Fails to Adequately Disclose, Analyze, and Mitigate the Project's Significant Visual Impacts

The Project area is renowned for being an area of beauty and respite from the urban world - the SEIS/SEIR notes that it is a "highly-valued, natural riparian woodland setting with a feeling of serenity amid a developed urban area."[68] Parkway users come from near and far to experience the tranquility and see a natural environment that is uncommon elsewhere, especially in a city. These users experience the natural shoreline of the river while recreating along the shore (e.g., swimming, walking, wading, and fishing) and from the water (e.g., kayaking and swimming). The Proposed Action would fundamentally and permanently change the shoreline of the Project area, including miles of "shoreline armoring" also known as "rip-rap." This sort of hard-armoring and related types of shoreline armoring run afoul of the public desire to keep the river "natural" as well as the state and federal Wild and Scenic River Acts' policies against such hard-armoring. Given this, it is quite surprising that in the SEIR/SEIS there is (1) zero discussion of how and how much of the shoreline will be changed by the Proposed Action in terms of visual impacts, nor is there (2) any discussion of how these changes might be avoided, reduced, or mitigated, nor is there (3) any discussion about the cumulative impacts of shoreline armoring so many miles of the Project Area. This is especially surprising since many community groups expressed grave concern over this type of impact in their comments to the 2016 EIR/EIS eight years ago, and the Corps' responses at that time were that the issue would be addressed by the SEIS/SEIR. It was not.

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The SEIR/SEIS' failure to acknowledge the significant visual impacts that the Proposed Action will have on the shoreline/banks of the river is especially concerning in light of the fact that these impacts are both significant and permanent. The public and decisionmakers are unable to meaningfully assess these impacts due to the failure of the SEIS/SEIR to discuss these significant, permanent changes to the natural character of the "Crown Jewel of Sacramento." The public should not be left out of the discussion of such significant, permanent changes to the shoreline of one of the "Crown Jewels" of our state.

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Second, the SEIS/SEIR contains insufficient detail to accurately assess the visual impact of the Project on the riparian forest. The SEIS/SEIR states that "[i]mpacts on scenic views along the American River would be less than significant over time once vegetation establishes, making impacts to scenic views from construction along the American River short-term significant and unavoidable."[69] The SEIS/SEIR similarly asserts that "[l]oss of vegetation along the American River, due to removal and construction of levee improvements, will result in significant and unavoidable short-term effects on visual resources of the mature vegetation, but a minor long-term impact on visual resources because of trees left onsite and the addition of onsite mitigation

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[68] SEIS/SEIR, Appendix B, at 3.1-1
[69] SEIS/SEIR, Appendix B, at 3.1-16

plantings."[70] These conclusions are not accurate with respect to the 3B/4B Project area because they: (1) do not discuss the significant visual effects that will be caused by armoring and other changes to the river's banks, and (2) inaccurately minimize the visual impact of removing over 600 trees, some of which are heritage oaks hundreds of years old and others which will take the better part of a human lifetime or more to mature.

40 The SEIS/SEIR also relies too heavily on two vaguely described mitigation measures, VEG-1 and VEG-2, to conclude that the Proposed Action will have a "less than significant" visual impact.[71] The SEIS/SEIR fails to describe the mitigation measures in sufficient detail and it is impossible, for example, to assess how many of the centuries-old heritage oaks will be removed despite implementation of these mitigation measures. As another, it is also impossible to assess how much of the mitigation will be on-site. The SEIS/SEIR fails to describe the extent to which this area will be changed permanently due to mitigation being off-site. The community is entitled to know the extent of on-site mitigation and how it will be done more than is presented in the SEIS/SEIR. There is a very strong preference in the community for on-site mitigation due to the importance of this area for recreation and fish. In addition, mitigation measures miles downriver are not "on-site" mitigation, yet the SEIS/SEIR seems to suggest that it is.

41 Related, in the work done recently in the River Park neighborhood, mitigation measures VEG-1 and VEG-2 were purportedly implemented, but it appears that nearly all mature trees were removed from that section. Thus, the public is concerned as to how, exactly, these mitigation measures will be implemented in this Project area over time as claimed in the SEIS/SEIR.

42 Moreover, the SEIS/SEIR contains no meaningful information from which to assess what the post-Project area will look like with respect to "trees left onsite," but based on other documents (e.g., the December powerpoint presentation), few trees will be left onsite. Therefore, the long-term impact on visual resources will likely be severe and significant, and will occur for many decades (to centuries, for the oldest trees) due to the time it takes for mature vegetation to return, if it can return at all after such destruction.

43 Finally, "mitigation" with an even-aged planted forest such as that existing near the Guy West Bridge at Sacramento State that the Corps points to as a restoration success is insufficient mitigation for the removal of a mature riparian forest featuring many heritage trees hundreds of years old, a key visual resource in an urban area. The description of the mitigation is insufficient to determine whether the mitigation will in any way be adequate to offset the significant impacts of the Project on such a treasured resource. Information presented by the Corps in other fora

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[70] SEIS/SEIR at 4-140

[71] "Project designs will be refined to reduce impacts on vegetation and wildlife to the extent practicable. Refinements implemented to reduce the loss of riparian habitat will include reducing the impact footprint, constructing bank protection rather than launchable rock trench whenever feasible, and designing planting benches. Where practicable, trees will be retained in locations where the bank protection and planting benches is constructed. Trees will be protected in place along the natural channel during rock placement. Additional plantings will be installed on the newly constructed benches to provide habitat for fish and avian species. The planting benches will be used where practicable to minimize impacts on fish and wildlife species. Where practical, soil filled revetment would be used to allow plantings and erosion protection features like launchable trench would be buried to allow plantings. The on-site habitat will be created in accordance with the ARCF GRR Habitat Mitigation, Monitoring, and Adaptive Management Plan, which includes conceptual mitigation proposals, performance standards, and adaptive management tasks." SEIS/SEIR, Appendix B, at 4.1-33-34.

indicate that an even-aged forest will replace the diverse forest that currently exists, and yet that too is nowhere discussed or acknowledged.

4. The SEIR Fails to Adequately Disclose, Analyze, and Mitigate the Project's Significant Adverse Air Quality and Health Impacts

The Project will bring heavy-duty truck trips and diesel construction equipment into a residential neighborhood and near an elementary school, raising substantial health risks. The SEIS/SEIR
44 acknowledges that "[c]onstruction haul traffic would occur on surface roads around the schools,"[72] with an average of 138 heavy equipment truck trips *per workday* in the 3B/4B contract area and a total of *24,750* total trips.[73] The SEIR/SEIS nonetheless asserts that air pollution impacts under Impact 3.5-c would be "short-term and major effects that are less than significant with mitigation incorporated." This assessment that the impact would be insignificant is incorrect.

The SEIS/SEIR appears to reach this conclusion by misunderstanding the Thresholds of Significance Table in the Sacramento Municipal Air Quality Management District (SMAQMD) Guide to Air Quality Assessment in Sacramento County (CEQA Guide). The SEIS/SEIR states: "As shown in Table 3.5-11 construction-generated exhaust emissions of PM2.5, which includes DPM, would not exceed SMAQMD's mass daily threshold of 82 lbs/day."

First, in what way does Table 3.5-11 show that the project has remained under the daily threshold of 82 lbs/day? There is no basis for separating out exhaust-related PM2.5 and considering that the limit applies solely to that.

Table 3.5-11. PM2.5 Emissions by Construction Year

Construction Year	Unmitigated total PM2.5 generated – exhaust and dust (lbs/day)	Unmitigated PM2.5 – exhaust only (lbs/day)	Mitigated total PM2.5 generated – exhaust and dust (lbs/day)	Mitigated PM2.5 – exhaust only (lbs/day)
2024	71.62	20.62	104.58	9.95
2025	233.6	17.13	210.10	9.11
2026	169.49	11.98	159.76	7.35
2027	10.17	5.86	7.20	3.07

Notes: The HarborCraft calculator used to calculate barge emissions does not break out $PM_{2.5}$ by dust and exhaust emissions, therefore, the barge exhaust emissions are not captured in the "exhaust only" columns.
For the Lower American River Contract 3A, exhaust only emissions are unknown, therefore, the total PM emissions are used.

Even more seriously, the SEIS/SEIR appears to have misunderstood the 82 lbs/day threshold. This standard would be the appropriate standard to consider for Impact 3.5-a,b related to consistency with regional plans. SMAQMD explains that it set that standard because the region exceeds the state particulate matter (PM10 and PM2.5) ambient air quality standards. This
45 standard relates to the extent to which an individual project might "contribute to the cumulative non-attainment problem."[74] However, the CEQA Guide makes it clear that the thresholds are not the full picture. It advises that "other factors, especially those related to the location of the

[72] SEIS/SEIR, Appendix B, at 3.8-5
[73] SEIS/SEIR, Appendix B, at 2.1-4
[74] CEQA Guide, 2-8

project and potential impacts on nearby populations (e.g., schools, day care centers, residences, and hospitals) also should be examined."[75]

46 The CEQA Guide also notes that significance thresholds for Toxic Air Contaminants are a separate category, to which it dedicates a separate chapter. It explains that it has not established thresholds of significance for TACs from *mobile* sources, which is the category that would include trucks and construction equipment. Instead, it advises "that lead agencies address this issue on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and its proximity to off-site receptors," listing at least seven factors that should be disclosed and considered.

Although PM2.5 does contain diesel particulate matter (PM) as stated in the SEIS/SEIR, diesel particulate matter is also a toxic air contaminant (TAC).[76] In other words, while it is harmful to breathe dust generally, it's particularly bad and deserving of separate thresholds when that dust contains toxins. Diesel particulate matter is a particularly dangerous form of particulate matter, as the SMAQMD's CEQA Guide explains, "particulate matter in diesel exhaust (diesel PM) dominates other air toxics in California's air, and the estimated risk from breathing it is greater than the risk from all other airborne [Toxic Air Contaminants] TACs combined."[77] SMAQMD also discusses naturally occurring asbestos (NOA) as a TAC. This is not addressed in the SEIS/SEIR despite the possibility that the rock to be imported would contain asbestos.

47 The SEIS/SEIR acknowledges that "there are four public schools within ½-mile of the American River Erosion Contract 3B North and South, and American River Erosion Contract 4B: Rio Americano High School, Sierra Oaks K-8 School, Isador Cohen Elementary School, and O.W. Erlewine Elementary School." However, no mention is made that O.W. Erlewine is a title 1 school[78] meaning that noise, dust, engine exhaust, and other pollutants will impact children that are already disadvantaged. Moreover, O.W. Erlewine is adjacent to Larchmont Park which will become a staging area, which causes parents in the area great concern due to the health impacts it will cause. Likewise, the many children that play at Larchmont Park will be harmed as well. Because the Project documents fail to specifically address the Project's harm to children, they violate CEQA.

48 While the SEIS/SEIR does discuss various air-pollution related mitigation measures, the documents fail to provide any detail as to protecting against long- and short-term health consequences for children, especially young children and those with pre-existing conditions such as asthma. The share of people in Project 3B's census tract who have been told they have asthma is in the 65th percentile, according to the CJEST. This lack of detail renders the SEIS/SEIR flawed, as the public and decisionmakers cannot duly assess the Project impacts.

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[75] CEQA Guide, 2-7

[76] For California/CEQA, diesel exhaust particulate matter (Diesel PM) is an identified carcinogen, with a cancer potency value from the state Office of Environmental Health Hazard Assessment (OEHHA). In the age group 2 to 16 years old, children are three times more sensitive to a carcinogen like diesel exhaust than adults (and between third trimester and 2 years old, they are 10 times more sensitive).

[77] CEQA Guide, 5-2

[78] See Exhibit E

49 Furthermore, Mitigation Measure AIR-3 of the SEIR requires using on-road haul trucks to be equipped with 2010 or newer engines. Trucks are already required to be 2010 or newer. These mitigation measures should be modified to require the trucks to be electric, as that is feasible.

50 As another example of failed analysis and mitigation, the SEIR/SEIS states that "health risks associated with exposure to diesel exhaust typically is associated with chronic exposure, in which a 30 or 70-year exposure period is often assumed. However, while cancer can result from exposure periods of less than 30 or 70 years, exposure periods of 2 to 3 years are not anticipated to result in increased health risk, as health risks associated with exposure to diesel exhaust are typically seen in exposure periods that are chronic (OEHHA 2015)." This analysis fails to consider other commonly-cited health impacts of diesel particulate matter, including asthma and cardiovascular disease. It also fails to note that children are more sensitive because their respiratory systems are still developing. Nowhere is information provided as to why children should be expected to endure these impacts. OEHHA's risk guidance recommends assessing cancer risks for construction projects lasting longer than two months. A construction health risk assessment (HRA) for the Project should therefore have been prepared, but has not been provided.

5. The SEIR Fails to Adequately Disclose, Analyze, and Mitigate the Project's Significant Adverse Environmental Justice Impacts

51 The SEIS/SEIR fails to adequately disclose, analyze, and mitigate the Project's effects on disadvantaged communities, i.e., the environmental justice ramifications of the Project. The SEIS/SEIR notes that "American River Erosion Contract 3B North and South, and American River Erosion Contract 4B is not located within a disadvantaged community. However, segments of the associated haul routes traverse and border disadvantaged communities."[79] While technically the work area for the Project may not be within a disadvantaged community, as defined, the SEIS/SEIR fails to mention, let alone discuss, the use of the river by members of nearby disadvantaged communities for recreation and fishing. The river is a rare instance of a free recreational resource for the entire region, which is especially meaningful to underserved, disadvantaged, and economically-challenged members of the Sacramento region. Anecdotally, it is heavily used by these members of our community, though there is regrettably no data in the SEIS/SEIR that explores these uses. It is likely that the Project will significantly impact these communities by reducing opportunities for fishing and land- and water-based recreation, as well as avoiding the summer heat, and may well cause other significant environmental justice impacts, yet the SEIS/SEIR does not analyze these critical uses, resources, and effects.

6. The SEIR Fails to Adequately Disclose, Analyze, and Mitigate the Project's Significant Adverse Climate Impacts

52 The Project documents do not analyze the impacts of the loss of riparian forest, especially the larger trees, on climate change. The forest in the Project area acts to sequester and store carbon, and the loss of that sequestration and storage of carbon must therefore be addressed in order to adequately analyze the Project's climate impacts. This is especially so with regard to the

[79] SEIS/SEIR at Appendix B, 2.5-22

cumulative effects of the loss of this Project's riparian forest in addition to the loss of trees to the west.

53 As discussed in Moomaw et al. 2019: "Proforestation serves the greatest public good by maximizing co-benefits such as nature-based biological carbon sequestration and unparalleled ecosystem services such as biodiversity enhancement, water and air quality, flood and erosion control, public health benefits, low impact recreation, and scenic beauty."[80] Similarly, as stated in Law et al. 2020: "To keep climate and temperatures within a safe range, it is necessary to simultaneously reduce emissions of greenhouse gases from all sources, including fossil fuels and bioenergy, and accelerate storage of atmospheric carbon in forests, soils and other plant-based systems."[81] Here, the Project documents speak to the GHG impacts from construction but ignore the impacts from loss of the forest's carbon sequestration.[82] This must occur, and is yet another reason the lead agencies need to disclose which trees, especially large trees, will be lost due to the Project.

7. The SEIR Fails to Consider Reasonable Alternatives

54 CEQA mandates that agencies consider a range of alternatives, yet here, the only choice considered for the 3B/4B area was the Project or no action. This is particularly troubling given that the 2023 SEIS/SEIR introduces elements to the Project that are worse than in 2016 and yet provides no information or analysis as to why no other alternatives are feasible. There is no discussion of what site-specific data the Project is relying on, no discussion of why nature-based solutions are infeasible, no discussion of recent policies or studies regarding nature-based solutions, no discussion of why new or better modelling was not done, no discussion of the recent 2021 and 2023 American River studies regarding trees and velocity. The Project instead seeks to introduce an outdated rip-rap solution without any real consideration or analysis of the many alternatives that exist. This is inadequate under CEQA but is especially wrong in light of the Project area being a Wild and Scenic River where rip-rap is not allowed and where only actions that protect and enhance the River's values can occur.

55 As discussed above in the Wild and Scenic Rivers sections, new policies and new information, as well as the Wild and Scenic River Acts, require that alternatives be addressed and adopted to avoid harm to the recreational and fishery values of the River. The SEIS/SEIR, however, contains no such alternatives. Moreover, the analysis from 2016 is now eight years old, and documents that post-date it do not support the destructive measures chosen in the 2023 SEIS/SEIR. This shortcoming is especially problematic given that in 2016 the lead agencies committed to examining measures that would be less destructive and yet instead chose more destructive ones.

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[80] Moomaw WR, Masino SA and Faison EK. 2019. Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good. Front. For. Glob. Change 2:27. doi: 10.3389/ffgc.2019.00027

[81] Law et al. 2020.

[82] *Ctr. for Biological Diversity v. United States Forest Serv.*, No. CV 22-114-M-DWM, 2023 U.S. Dist. LEXIS 144726, at *26 (D. Mont. Aug. 17, 2023) ("merely discussing carbon impacts and concluding that they will be minor does not equate to a hard look")

Nature-based approaches are now widely accepted and available, and new studies show that trees significantly reduce velocity flow along banks, while increasing velocities in the center. The 2023 study explains that "in addition to the results obtained previously by Flora and Khosronejad (2021) showing that vegetation will redistribute the flow away from the banks and into the main flow of the channel, the importance of incorporating vegetation into the LES was shown in this new study by highlighting its influence on the water surface profile."[83]

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It is the lead agencies' obligation to present a detailed and well-supported discussion as to why no alternative is feasible, and nothing like that is present in the SEIS/SEIR. Here, nature-based alternatives can allow greater protection of resources and new information shows that keeping trees, rather than eliminating them can be helpful for achieving Project goals.[84] Alternatives must be explored and adopted to avoid violations of CEQA and the Wild and Scenic River Acts.

8. The SEIR is Too Vague

Throughout the above, a core issue is the lack of information regarding what exactly will happen in the Project area. For example, the Project documents simultaneously speak to destruction of riparian habitat while also claiming to be eliminating few large trees. And while the Project documents contain no specific numbers regarding tree loss (especially with respect to large tree loss), the December 2023 presentation document suggests that over 600 trees will be lost, but yet again, even this document provides no specifics regarding large tree loss or where exactly that loss will occur.

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CEQA requires that an EIR include "relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public,"[85] so as to "make a decision which intelligently takes account of environmental consequences."[86] Here, the lack of information regarding impacts to the riparian forest, especially large trees, renders the SEIS/SEIR too vague to be valid.

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E. The SEIS Violates NEPA

Congress enacted NEPA to "promote efforts which will prevent or eliminate damage to the environment and biosphere and … to enrich the understanding of the ecological systems and natural resources important to the Nation."[87] To this end, NEPA and its implementing regulations set forth "action-forcing" procedures designed to (1) ensure agencies take a "hard look" at the environmental effects of an action, and (2) foster meaningful public participation.[88] Through NEPA, the agency must take a "hard look" at the project's "site-specific" impacts, and must describe alternatives to the proposed project. A "hard look" requires consideration of all

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[83] Kevin Flora and Ali Khosronejad. 2023. "Uncertainty Quantification of Bank Vegetation Impacts on the Flood Flow Field in the American River California Using Large-Eddy Simulations." *Earth Surface Processes and Landforms*. https://doi.org/10.1002/esp.5745.
[84] 14 C.C.R. § 15162
[85] 14 C.C.R. § 15147
[86] 14 C.C.R. § 15151
[87] 42 U.S.C. § 4321
[88] *See Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349–50 (1989)

foreseeable direct, indirect, and cumulative impacts, and "should involve a discussion of adverse impacts that does not improperly minimize negative side effects."[89]

Here, for the reasons discussed above with respect to CEQA, the Corps failed to meet NEPA's standards as well. There was not a hard-look at the Project's impacts, and no alternatives were considered despite the fact that the alternatives analysis is the "heart" of NEPA. It is imperative that the Project not move forward and instead be re-designed to avoid its significant harmful impacts.

F. The 2023 SEIS/SEIR Fails To Uphold The Promises Made In The 2016 Responses to Comments

In 2016, numerous members of the community and community groups wrote the Corps with regard to the 2016 ARCF GRR EIS/EIR.[90] The signatories to this comment letter and members of the organizations that signed the 2016 comment letter are disappointed that many of the issues raised in the 2016 letter are being raised again eight years later, in 2024. Some of the issues raised in the 2016 letter that we are perplexed for the need to raise yet again include: 60

1. That "our overarching concern is that there is not enough detail in the Final EIS/EIR to understand which Lower American River and Parkway resources will be affected by the project."
2. "We also strongly question [] whether the Final EIS/EIR accurately characterizes the impacts to vegetation and recreation as 'less than significant.'"
3. "We are concerned that the project provides the community with no alternatives [to the work]."
4. "The Final EIS/EIR is … unable to point out with any detail which sections of forest will be removed, and which will be allowed to remain standing. Nonetheless, the Final EIS/EIR determines that the impacts to vegetation in the parkway will be "less than significant" after mitigation. We question this determination in light of this lack of detail."
5. "It is not possible to evaluate the effectiveness of th[e] mitigation without knowing what sections of forest will be cut and what sections will be replaced on the same site versus being replaced on a distant site."
6. "The Final EIS/EIR does not adequately characterize the many varied uses of the river and the Parkway. Thus it cannot and does not catalog and assess the harms to such uses that will be the result of the proposed project. For instance, the impacts to recreation seem focused on the parkway' paved bikeway. While a key asset, there are others equally worthy of close consideration, such as swimming, shoreline recreation, fishing, walking, and bird-watching. The Final EIS/EIR pays inadequate attention to the value our community puts on the river for all of these activities."
7. "The final EIS/EIR does not seem to survey the recreational uses the river's banks are put to, and hence, it seems to inadequately judge the significance of the project and fails to set forth alternatives to it." "These recreational resources should be cataloged in detail[.]"

[89] *Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 963 (9th Cir. 2002)
[90] See, e.g., 2016 FEIS/FEIR, Appendix F, at PDF pp. 45-52

8. "The Final EIS/EIR gives the community only the barest of information to understand which treatments are proposed to occur along particular stretches of the river. This level of detail is insufficient."

Because each of these comments can be re-cast to apply to the current SEIS/SEIR, we repeat the comments in this letter. Finally, in other comment responses in 2016, the lead agencies promised to work around the preexisting vegetation and "minimize impacts to vegetation in the Parkway to the maximum extent possible during construction."[91] An examination of the work done in the previous phase of the project, between Howe Avenue and Paradise Beach, shows few trees that were saved and "worked around." Downriver of the Fair Oaks bridge, it appears that not a single tree within the construction footprint was preserved; 100% of the trees were removed. As noted above, the community is greatly concerned by the lack of detail in the description of the Project (3B/4B) and fears that despite the assurances in responses to formal comments, the area in the Project under consideration will be designed and constructed in a similar matter, leaving few if any trees within the Project footprint. Given what happened in the vicinity of Paradise Beach, the public does not trust that the habitat and other values in this important stretch of this Wild and Scenic River will be protected. 61

Sincerely,

Justin Augustine, Center for Biological Diversity
Jaime Becker
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Clint Duke
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cc:
Liz Bellas, Director, Sacramento County Regional Parks, BellasE@saccounty.net;
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[91] See, e.g., 2016 FEIS/FEIR, Appendix F, at Comment/Response EE-173

CNPS-1

CALIFORNIA NATIVE PLANT SOCIETY
Sacramento Valley Chapter

January 10, 2024

Mr. Guy Romine
Attn: Environmental Analysis Section (CESPK-PDR-A)
U.S. Army Corps of Engineers, Sacramento District
1325 J Street
Sacramento, California 95814

Mr. Josh Brown
Central Valley Flood Protection Board/California Department of Water Resources
3310 El Camino Avenue, Suite 170
Sacramento, CA 95281

Subject: Public Comment Period for the Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report for the 2016 American River Common Features, Flood Risk Management Project

Dear Mr. Romine and Mr. Brown,

Currently the Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR) has a public comment period beginning on December 22, 2023 and closing on February 5, 2024.

The Sacramento Valley Chapter of the California Native Plant Society will be commenting on this project. Our initial review of the environmental documents has revealed the significant complexity and scope of the proposed changes to the original project, and has made it clear that additional time will be needed to adequately review and comment on this document.

This document has taken U.S. Army Corps of Engineers and the Central Valley Flood Protection Board nearly a year to prepare. The public and Responsible Agencies (including the Sacramento County Regional Parks Department) and Trustee Agencies should be granted a sufficient review period to understand the significant environmental effects of this proposed project.

Additional time is needed to review the environmental documents based on the significant complexity and length of the environmental documents. In addition, the environmental document (SEIS/SEIR Section 2.3) identifies numerous significant areas of controversy with respect to the proposed project.

- o Habitat mitigation in the American River Parkway as proposed for the American River Mitigation Site (aka Urrutia Property);
- o Construction-related impacts to biological resources, especially endangered species and their habitats;

o Extensive removal of vegetation and tree removal, especially the extent of heritage tree removal;
o Effects to cultural resources and resources significant to Indigenous People; and
o Effects to recreational areas and facilities.

The type, number and significance of these controversial issues clearly support the need for an extension of the public review period to allow adequate review and comment. 1

We respectfully request a 45-day extension of the public review period to allow the public and pertinent agencies adequate review time for the environmental documents.

Sincerely,
Dan Meier
Dan Meier
American River Parkway Representative
Sacramento Valley Chapter
California Native Plant Society

cc:
Liz Bellas, Sacramento County Regional Parks

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Subject: Comments on the Draft American River Common Features, 2016 Flood Risk Management Project, Sacramento, California Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report

1 The Bird Club represents 460 members who are birders, conservationists, natural resource managers, and researchers from the Central Valley and elsewhere in California. Many of our members are from the Sacramento region and birdwatch extensively along the American River. Our data, as incorporated into eBird, but underutilized in the SEIS/SEIR, could have contributed as a basis for recognizing and managing bird and habitat conservation values and priorities for this region.

2 We are deeply concerned about the habitat and bird population impacts of recently completed flood control work along the American River and what is proposed in these project contracts. We are also gravely concerned about the inadequate public involvement process employed by the project applicants and the many deficiencies in the environmental analysis incorporated into the project Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report (SEIS/SEIR)

The comments we provide here are incomplete, as a result of the inadequate process offered for public involvement and the deficient presentation of material in the SEIS/SEIR. The timing of the document's release, short duration provided for public comment (including a short, late-announced extension), and the difficult-to-navigate from of the SEIS/SEIR has significantly hampered us in commenting meaningfully. Therefore, we ask that the proponents take the following procedural actions:

- Further extend the public comment period by at least 30 days beyond the extension granted, to allow the public time to understand and comment meaningfully on a project of such substantial magnitude;
- Add additional public meetings, including in-person and on-the-ground meetings where experts can engage in dialog with the public regarding the project need and the potential to apply alternative proposed flood control designs to those identified in the document;
- Re-release the existing version of Appendix B with a Table for Contents that can be used in navigating the document; and
- Considering the many deficiencies in the environmental process and documents, fully consider our comments, and those of other concerned groups, and reissue a substantially revised supplemental draft EIR/EIS so that we can meaningfully comment on the project and on an environmental document that adequately addresses public concerns, adequately considers a full range of alternatives, fully discloses environmental impacts, and meets legal requirements.

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We have mostly focused our attention on the analysis of impacts to birds, their habitats, and to a lesser degree wildlife-related recreation. We endorse the concerns expressed by other entities regarding the environmental process, conflicts with adopted plans, legal compliance, and impacts on other resource values, including other wildlife (especially the western pond turtle), vegetation communities, rare plants, general dispersed recreation, and visual quality impacts.

As emphasized in our comments, we are concerned that the conversion of Urrutia Pond would result in a significant impact to a variety of waterbirds that currently use the pond for feeding and especially for night-roosting. Despite these issues being clearly communicated during the scoping process, the SEIS/SEIR does not acknowledge the impacts, nor their significance, that would result to this habitat and its constituent species from the conversion of this site to a seasonally flooded riparian area. Avoidance or mitigation for this significant impact is required.

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While we support protection of the citizens of Sacramento from flood risks, the project proponents have not demonstrated that they have proposed a project that achieves this objective while also avoiding, minimizing, or successfully mitigating substantial impacts to environmental resource values and resource-based recreation. We believe that more careful environmental designs, including some that have been installed in the past and that appear to be operating successfully, are feasible to apply in this project.

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In short, we encourage the project proponents to engage meaningfully with the public and natural resource management agencies to find flood control solutions that maximally protect natural resources and public uses.

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We thank you for your consideration of our comments. Please keep us informed regarding project status.

Patricia Bacchetti
President

Daniel Airola
Certified Wildlife Biologist
Conservation Chair

	General Comments
8	***Complexity and Overly Technical Presentation****.* The SEIS/SEIR is full of detail and jargon that appears to be intended to obscure what the project(s) consists of and what its impacts will be. This complexity requires an extensive public outreach effort to allow the public to understand what is likely to happen and time for public review and response. The structure of the document appears to be designed to discourage rather than encourage public review.
9	***Inadequate Public Involvement*****.** The responsible agencies' public involvement and outreach process is minimal and inadequate for a project with impacts of this magnitude. The timing of release of the document (3 days before Christmas) and the short review period afforded are convincing evidence of an intent by the proponents to actively hamper the public's ability to meaningfully comment on project, its impacts, and the findings. A substantial extension to the public comment period should be granted to meet the spirit and specific requirements of NEPA and CEQA.
10	***The Document is Extremely Difficult to Navigate*****.** The document is nearly impossible to navigate. It refers to Appendix B as the location of the detailed Biological Resources Analysis, but there are two Appendix Bs, one that is and impact analysis and another that is the Public Meeting Scoping Notice. Such confusion makes thorough public review extremely difficult. The lack of an indexed Table for Contents for Appendix B, which details the environmental analysis, makes it virtually impossible to navigate it to conduct a review. I have literally spent hours over several weeks just trying to find sections dealing with biological resources and am often unsuccessful. Thus, my comments are incomplete. The proponents need to reissue a document with an indexed Table of Contents so the public can conduct a meaningful review.
11	***Incomplete and Inadequate Environmental Analysis*****.** In many areas, many of which we have outlined in our specific comments below, potential impacts are not recognized or analyzed. The analysis of the ARMS is particularly deficient. The SEIS/SEIR acknowledges the inadequacy of its analysis in the note included with Tables (4.3-2 and 4.3-3) on p. 872 and 873: "*Current programmatic level designs for ARMS and SRMS cannot provide quantitative data for species impacts. Detailed impacts to habitat will be disclosed in the Final SEIS/SEIR*." Deferring impact analysis to the Final SEIS/SEIR does not allow the public to comment on the results of the analyses, the findings of significance, or the adequacy of any proposed mitigation measures and is contrary to the requirements of NEPA and CEQA. This acknowledges inadequate treatment of potential impacts necessitates a recirculation of the Draft SEIS/SEIR with the appropriate analyses and conclusions for public review and comment.
12	***Inadequate Consideration of Alternatives to Urrutia Pond Site as Mitigation****.* The SEIS/SEIR does not include alternatives to the Urrutia Pond for mitigation. There clearly are alternatives to the use of this site, as SAFCA had GEI prepare a report identifying multiple potential mitigation sites in the report "American River Common Feathers Mitigation Site Concept and Evaluation Report (GEI 2020). Given that multiple alternative locations were identified for use in mitigating project impacts, the project proponents should have included an analysis of mitigation alternatives in the SEIS/SEIR. The absence of alternatives prevents the public from determining if the selected alternative is the least environmentally damaging alternative that could have been selected. The lack of alternatives is thus a key deficiency that requires new analysis in a reissued SEIS/SEIR so that the public can evaluate and comment on the analysis of impacts at alternative sites.

13 ***Characterization of the Impacts of the Use of Urrutia Pond for Mitigation Use is Inadequate***. We highlight this component of the project because of its likely significant impacts on many waterbirds that use the Lower American River. These impacts were not recognized and (in places) incorrectly characterized in the SEIS/SEIR, despite the demonstrated fact that they were identified during project scoping (see D. Airola and C. Conard comments in Appendix D). The proposed project would eliminate one of the few open-water habitat areas along the river as mitigation for riparian birds and anadromous fish. Recent peer-reviewed published research has documented the extensive use of this pond by a large number and high diversity of waterbirds. Of particular concern, the pond serves as night roosting habitat for a high proportion of the population of diving duck (Common Goldeneye, Bufflehead, and Common Goldeneye) that use the Lower American River. Loss of this key open-water habitat would disrupt the daily movement of birds from roosting to foraging habitats, which is a significant impact under CEQA. The loss of open-water habitat could result in substantial declines in the populations of these night roosting species, as well as birds that make substantial use of the site during daylight hours. The SEIS/SEIR also does not recognize that potential value of the pond as a hunting area for the nesting pair of Bald Eagles onsite, and the potential for open-water habitat loss to cause abandonment of the nest site.

14 ***Incorporation of a Permanent Pond into the Urrutia Mitigation Plan*.** The SEIS/SEIR should address whether it is feasible to incorporate a deep permanent pond into the mitigation design. Could the existing pond serve as a rearing area for salmonids with enhancement of shoreline cover for high water periods? This would allow retention of an open water area for use by diving ducks, cormorants, and other waterbirds that depend on open water conditions.

15 *Inconsistency with the County's Natural Resource Management Plan Regarding Treatment of Urrutia Pond.* Retention of Urrutia Pond, as shown in the Parkway Plan (County of Sacramento 2008), was based in part on a robust planning process known as the American River Parkway Plan Integrated Area Plan Concept for the Reaches of Discovery Park, Woodlake, and Cal Expo (February 2006). This plan was prepared under the direction of the Joint Agency Project Management Team (PMT) and the American River Parkway Plan Update Citizens Advisory Committee (UCAC). This plan supported retention of the Urrutia Pond as a central feature for purposes of nature study, recreation, and cultural interpretation, and contained specific recommendations to improve human safety and to increase biodiversity of the pond and the surrounding land. The proposed mitigation use is clearly in conflict with this plan.

16 ***Lack of Bank Protection/Erosion Control Alternatives.*** The designs of the proposed erosion control measures, and thus the impacts of their application, are unclear. Designs of existing older protection on the north bank between Watt and Howe and downstream of Paradise beach on the south bank appear to be functioning adequately and provide considerable habitat value. Are these same designs going to be used in sections without protection in Contracts 3B North and South and 4B? Or will the design look like those applied last year between the H St. Bridge and Paradise Beach, and longer ago above Discovery Park, which appear to have considerably less value and are unlikely to develop as much value in the long-term. Is the existing protection going to be torn out and replaced with the new design?

The design of the previously installed erosion control features in the project area appears to have substantially less environmental impact than the proposed design (if it is the same as used at H St). If the existing design provides adequate protection, why is it not being used in Contracts 3B North and South and 4B? Why isn't the previous design being evaluated as an alternative in the SEIR/SEIS? Under CEQA, the lead agency is required to adopt the least environmentally damaging alternative that meets project objectives. It cannot use economic efficiency to justify selection of a less damaging design if the cost is feasible to incur. If the existing design meets flood control objectives, it must be analyzed in the Draft SEIS/SEIR and adopted. Because it is not there (or at least not clearly depicted), it

	appears that it must be added to the analysis and a subsequent Draft SEIS/SEIR and reissued for public review.
17	***Inadequacy of the Mitigation Plan to Replace Lost Habitats.*** Based on the designs depicted in the SEIS/SEIR, we are concerned as to whether lost valley oak habitat will be adequately replaced. It appears that the frequency of inundation by winter floodwaters will be greater than oaks can tolerate. We ask that a better depiction of flooding frequencies and elevations be presented and analyzed and the designs be modified if our concerns are valid.
18	***Destruction of the Double-crested Cormorant Roost is Not Recognized or Mitigated*** – A cormorant roost was first recognized in 2019 along the north bank of the American River several hundred yards upstream of the Oak Meadows Park access within Project Area 3B North Side (eBird.org). Many cormorants and several Great Egrets roost nightly in dead and dying black locust trees that lean out over the river (i.e., shaded aquatic habitat) from September through March. The overhanging character of the vegetation appears to be important by creating safe, accessible roosting sites. As documented in eBird, numbers of roosting birds have been increasing annually from an average of 23 birds in 2019-2020 to an average of 69 birds in 2023-2024, and a high count of 105 birds in November 2022. Based on observations of flight paths of birds at dusk toward the roost, it is likely that this roost serves most of the cormorants that use the middle section of the Lower American River during the daytime. Removal of the cormorant roost trees would disrupt a movement corridor used by the cormorants, and thus is a significant impact under CEQA. The needs of roosting cormorants may be met by the mitigation habitat created at the Urrutia Pond, but not until after a period or 3-5 decades, so this would not reduce impacts to a less-than-significant level. Efforts should be made to avoid treating this section of the river or preserve these trees (and their overhang of the water) during bank protection work. Other roosting sites should be explored along the American River, and opportunities to create additional roosting habitat (i.e., installation of poles with roosting arms) should be explored as mitigation for temporal or permanent loss of this important habitat.
19	***Lack of Recognition of Impacts and Proposed Mitigation to Vertical-Bank-Nesting Species***. The project would eliminate known occupied habitat for species that require or prefer vertical banks for nesting, including the Belted Kingfisher and Northern Rough-winged Swallow. The comprehensive nature of bank elimination would result in significant losses to the populations of these species. Mitigation, although challenging, could involve bank retention, creation of banks as a part of mitigation habitats, and experimental creation of artificial burrows for the swallow.
20	***Loss of Nesting Sites for Cavity-nesting Species is Not Acknowledged or Mitigated***. The removal of numerous large trees will eliminate nesting habitat for primary and secondary cavity nesting bird species, including Wood Duck; Common Merganser; Western Screech Owl; Ash-throated Flycatcher; Nuttall's, Downy, and Acorn Woodpeckers; Northern Flicker; Tree Swallow; White-breasted Nuthatch; Oak Titmouse; Bewick's Wren; House Wren; and Western Bluebird, as well as raccoons, western gray squirrels, and other species. Mitigation areas will not become suitable for excavation of nest cavities for 20-40 years. Therefore, mitigation areas should include provision of nest boxes for cavity-nesting waterfowl and songbirds to provide nesting habitat to offset losses of forest removal. Nest boxes are a proven technique to attract and increase cavity-nesting bird populations, if they are properly designed, installed, managed, and monitored (Airola and Stine 2022).
21	***Evaluate Use the American River Dr. Detention Basin for Riparian Mitigation***. The 12-ac detention basin between Watt and Estates Dr. currently provides minimal habitat value, but could be enhanced through deepening, creating more varied topography, and using urban runoff or pumping to maintain wet conditions. This habitat could replace some of the riparian mitigation habitat lost by protecting a

portion of the Urrutia Pond. Alternatively, this area could be converted to an open-water aquatic habitat to provide resting habitat for displaced night-roosting diving duck, although its size and configuration makes it less suitable for this purpose. Because the existing habitat value of this site is lower than that of Urrutia Pond, it should be considered as part of the least-damaging practicable alternative. We suspect that there are other opportunities such as this, that could be used for riparian mitigation without destroying key habitat for other species.

Specific Comments

Page	Section	Comment
3-70	3.5.5	22 The proposed modifications at the American River Mitigation Site (ARMS) are intended to address mitigation needs for impacts occurring outside of the American River Parkway. Use of Parkway lands for outside mitigation violates the County's American River Parkway Plan. The impacts associated with river construction are only temporary, while the loss of open water pond habitat is permanent. Also, impacts of providing fill and recontouring land will produce air quality impacts similar to those of excavating elsewhere. 23
3-72	3.5.5.1	24 The deferral of studies that may affect "project level analysis and planning" demonstrates that the impacts of the project are not fully known. A supplemental draft SEIS/SEIR with studies that allow complete impact assessment and full public involvement is needed to ensure that impacts are properly analyzed and mitigated.
		25 The application of a blanket 600-ft construction buffer to the Bald Eagle nest is inappropriate, given the known variation of individual eagle pairs to disturbance (e.g., Airola 2007) and the rarity of nesting Bald Eagles (only one pair) on the Lower American River. Given the isolated nature of this site and low level of current human disturbance there, these birds may be more sensitive to human disturbance than is typical of the species. The buffer should be established on a site-specific basis prior to construction through observation of eagle responses to construction equipment operated experimentally at various distances from the nest.
3-95	3.7.3	26 Please explain why use of this site would result in a reduction in impacts to air quality, traffic, and noise as a result of a reduced need for fill. The characterization of benefits as a justification to select the Urrutia Pond area as a mitigation site, as described in 3.5.3, is misleading or incorrect. Filling the Urrutia site will require excavation elsewhere and transport of fill material, and so is no more beneficial than excavating a riparian mitigation site elsewhere in the Lower American River floodplain. 27 Rejection of the proposed alternative to retain a portion of the Urrurtia pond based on the need for the site for elderberry mitigation is inappropriate, as there are many alternative sites between Highway 160 and Paradise Beach that could be used to mitigate for the purported impact of elderberry removal on the valley elderberry long-horn beetle. Selecting one of these other available sites would not

	3-95	3.7.3	result in significant impacts to waterbirds of the Lower American River. Similarly, if impacts to salmonids could be mitigated elsewhere, such as by excavating side channels in the floodplain that were raised by deposition of historic hydraulic mining deposition, so that impacts to waterbirds could be avoided or reduced, this must be evaluated in the Draft SEIS/SEIR. To suggest that only this site can mitigate for these impacts is undemonstrated and unsupportable, particularly in light of the study funded by the proponents that identifies a number of other potential alternative mitigation sites (GEI 2020). The description shows that the County's proposed option to retain a 30-ac pond would result in less need for fill, and thus less impact to air quality, noise, and transportation, as well as less impact to existing waterbird use of the site (Airola et al. 2023). CEQA requires that the lead agencies select the least damaging environmental alternative that meets project objectives unless there are overriding considerations. Those have not been identified. The depiction of alternative sites to meet mitigation needs in this SEIS/SEIR and in GEI's (2020) mitigation alternatives evaluation demonstrates that mitigation could be achieved without destroying the entire Urrutia Pond and causing the resulting impacts to CEQA. Again, the selection of the least damaging practicable alternative is required under CEQA The presence of the Bald Eagle nest was known by the County and the proponents well prior to the release of the SEIR/SEIS. We contend that a sizable pond area remnant can be designed to include the central portion of the existing pond, thereby extending the buffer around the nest, while allowing mitigation construction to occur on the east and west sides (via two separate entrances to the American River and possibly a connection around the north side of the remnant pond). While this design would increase the amount of construction and fill required (to separate the pond from mitigation areas) it would better protect the eagles from construction disturbance. More importantly, it would retain an open water pond area that is highly attractive to the eagles' avian prey and would retain suitable open water habitat in which eagles could hunt for fish and the remaining waterbirds. Absent any other evidence, it is reasonable to conclude that the presence of this open water foraging habitat was a key inducement for the eagle pair to locate there in 2022, and that elimination of the pond could result in abandonment of the nest territory.
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31	3-98	3.7.2	The first paragraph correctly describes the substantial environmental benefits of pond retention of the County's proposed alternative. Again, this narrative demonstrates that alternatives are available to meet project mitigation needs.
32			The characterization of mitigation shortfalls described here needs further documentation and correct depiction of a feasible alternative. The deficiency for VELB mitigation would be only one acre. It seems

3-98	3.7.2	illogical that retention of approximately one-third of the existing pond would reduce salmon mitigation by a roughly equal amount, while it would reduce cuckoo habitat to only one-third of what would have been produced under the proposed project (29 acres). Arden Pond has been demonstrated to have high value to waterbirds, similar to Urrutia Pond (Airola et al. 2023). The use of this site, and the impacts of previously proposed mitigation clearly were inadequately analyzed in previous environmental documents, especially in light of new information (Airola et al. 2023), which verifies concerns previously expressed during scoping regarding mitigation use of this site. An additional supplemental SEIS/SEIR would be required to fully address the waterbird impacts that were inadequately addressed previously. We oppose use of both the Urrutia Pond and Arden Pond for mitigation purposes but recognize that there are more options to retain some habitat value at the larger Urrutia Pond. Because Arden Pond is smaller, its use (such as under previous mitigation proposals) would leave a remnant too small to serve the key waterbird roosting needs that it currently serves (Airola et al. 2023). Due to impacts to wildlife and recreation, Arden Pond should not be considered for mitigation need. There is ample area of high terrace habitat, created artificially by hydraulic mining debris deposition, that currently has low habitat value. Excavation of channels and ponds in this area or elsewhere could provide the mitigation needs of the project while enhancing habitat for waterbird species, rather than degrading it. This characterization of effects ignores that the loss of waterbird habitat at Urrutia or Arden Ponds would be a significant impact under CEQA and thus would require its own mitigation (i.e., creating an open water body in some other location). Selecting a mitigation site with lower habitat value, such as near Cal Expo would avoid these impacts and mitigation need. The impacts to waterbirds resulting from selection of the Urrutia site were highly predictable based on similar concerns expressed regarding Arden Pond and scoping comments. The decision to proceed to select Urrutia Pond as a mitigation site, and the potential threats that this poses not just to wildlife but to the project schedule, is thus largely attributable to poor planning and unwillingness to incorporate public concerns. It is not too late to correct this error by fulling analyzing the impacts of using the available alternative mitigation sites and shifting the mitigation program to another site with fewer impacts.
3-99	Figure 3.7.2-1	This figure depicts only one potential configuration of the pond that would avoid construction near the eagles' nest. The linear nature of

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34	3-99	Figure 3.7.2-1	this pond reduces its potential for use by night-roosting waterfowl, which is a key resource for the Lower American River (Airola et al. 2023). An alternate, more circular configuration (with a generally rounded shape, as shown in Figure 3.7.1-1) could be developed to the north of the Bald Eagle nest, which would avoid the need for construction access near the Bald Eagle nest and would retain as much waterbird use as possible.
35	3-107	3.10	The range of alternatives considered is wholly inadequate. All alternatives considered would result in significant impacts to waterbird populations that travel daily between the river and Urrutia Ponds for night roosting. Disrupting this movement corridor is a significant impact under CEQA. The alternatives analysis does not explain why the less damaging alternative of constructing mitigation habitats in the degraded floodplain area near Cal Expo or other identified mitigation sites along the Lower American River (GEI 2020), entirely or in part, were not considered, much less selected. Some of these alternatives are highly likely to be environmentally superior. Absent any documentation, it appears that the alternative were not considered because they may have been considered more expensive to construct. Under CEQS, expense is not an adequate basis for ignoring an environmentally superior alternative unless it is determined to be physically or economically infeasible.
36	4-115	Table 4.2.2-1	***Impact Number 2.2-c.*** The characterization of impacts is illogical and incorrect. Birdwatching, hiking, and nature appreciation are major uses of Contract 3B and 4A and 4B that serve a large population of adjacent residents and others from throughout the region. As noted, the proposed project will cause substantial long-term disruption in the use. Specifically, this impact will last for years after completion of project construction due to permanent habitat loss, wildlife population loss, and creation of areas with lower visual quality and reduced solitude character. None of the proposed mitigation measures reduces these impacts to less-than-significant. The impacts can be reduced, although not to a less-than-significant level by adopting modified designs that retain existing large trees and other vegetation wherever feasible and allowing riparian vegetation to grow on affected reaches.
37	4-115	Table 4.2.2.2	***Impact 2.2a, 2.2-b, 2.2-c Erosion Contracts***. The definition of short-term and medium-term are not clearly stated, so we cannot properly evaluate claims of impact magnitude or significance. The characterization of short- to-medium-term impacts as moderate to major and less-than-significant is illogical and incorrect.
38			The characterization that erosion control projects will have “no impacts with mitigation incorporated” Is utterly incorrect, given the loss of many 50- to 200-year-old trees and the intent to manage erosion control areas to preclude establishment of woody vegetation. These impacts are clearly significant, regardless of what offsite

39	4-115	Table 4.2.2.2	mitigation is implemented. Therefore, the effects should be minimized by implementing feasible designs that retain as many existing trees and as much other natural vegetation as possible and by allowing establishment of woody vegetation on protected areas. The omission of any discussion of long-term impacts renders the document incomplete, thereby contributing to the need for document revision and recirculation as a SEIS/SEIR.
40			***Impact 2.2-c*. ARMS.** The County's American River Parkway Plan specifies intentions to acquire the Urrutia Pond in part to increase recreation opportunity. The foreclosure of this opportunity to acquire and incorporate an open water pond area is a conflict with the adopted plan and thus a significant impact under CEQA that must be mitigated. The best mitigation would be to retain a portion of the existing pond as described in the Alternative provided by the County or by one that places the pond area north of the eagle's nest with mitigation connections to the river east and west of the nest.
41	4-119	4.3.1.2.2	***American River Mitigation Site.*** The statement that birds will simply be "scared away" is not supportable. Bird populations and use levels are largely determined by the amount of suitable habitat present in an area. Basic wildlife science supports the conclusion that at least some if not most of the birds that are displaced from construction areas will be displaced to habitats that are already supporting individuals at levels at or near their carrying capacity. Therefore, population reductions will likely result from the permanent removal of open water habitat by construction. The gradual increase in channel and riparian habitat will ultimately benefit those bird species that depend on these habitats. The change in habitat from a large open waterbody to narrow channels and seasonally flooded riparian habitat will not support many of the species that prefer using open water areas for foraging and resting, including wintering diving ducks, geese, gulls, and cormorants. Of special concern is the effects of loss of night-roosting habitat on the populations of diving ducks, including the Bufflehead, Common Goldeneye, and Common Merganser. A substantial proportion of the populations of these species along the Lower American River use the Urrutia Pond (and at Arden Pond) for night rooting (Airola et al. 2023). Loss or reduction of this habitat has a strong likelihood to reduce populations of these species as they are forced to seek out less suitable roosting habitat
42	4-184	4.5.1.1	***American River Mitigation Site*.** The high level of use of this site by waterbirds should be acknowledged.
43	4-186	4.4.1.1.2	The Urrutia Pond should be recognized as a sensitive natural habitat because of its subsurface connection to the American River and Steelhead Creek, its surface connection during high-water events, rarity as a habitat type locally, and especially because of its regional

4-186	4.4.1.1.2	importance to waterbird populations along the Lower American River (Airola et al. 2023).
4-188	Table 4.4.1-2	***Impact 4.1a.*** The elimination of Urrutia Pond would interfere with the daily movements of numerous waterbirds from daily foraging areas on the river to the pond for night-roosting, including Bufflehead, Common Goldeneye, and Common Merganser. This permanent disruption is a significant impact, as defined under CEQA Appendix G. As such it must be mitigated to a less-than-significant level. The mitigation should include moving all mitigation to other sites (as identified by GEI (2020), implementing pond protection as defined in Alternative 4a or the alternative configuration we have proposed elsewhere in this comment letter, along with creation of additional ponded habitat to fully offset pond habitat losses. ***Impact 4.1b.*** The proposed action, by removing Urrutia Pond has potential to cause substantially reduced winter night roosting and daily foraging habitat for waterbirds that use the Lower American River. Therefore, this impact is significant and requires mitigation to a less-than-significant level. ***Impact 4.1-d.*** Because of its subsurface connection to navigable streams, and surface connection during high-flow events, the Urrutia Pond should quality as a water of the U.S. and its loss as a significant impact that should be mitigated. ***Impact 4.1-e.*** Elimination of Urrutia Pond conflicts with the adopted American River Natural Resources Management Plan and thus is a significant impact.
4-194	4.2.1.2.2	***American River Mitigation Site.*** The significant impact of the loss of pond habitat should be acknowledged here.
4-215		***Purple Martin.*** This account demonstrates a lack of basic knowledge of the preparers. Purple Martins has been extensively studied since the 1990s with over 30 articles and a book publised (e.g., Airola and Grantham 2003, Airola and Williams 2008, Airola 2020, Airola and Kopp 2021, 2023). The Sacramento Purple Martin population is the last remnant of the species' once widespread population in the Central Valley, now nesting in only 5 elevated freeway and overpass sites in Sacramento (Airola 2020, Airola and Kopp 2021, 2023). The species has not been documented to have nested in trees in the Central Valley for at least 40 years. In this case the SEIS/SEIR has overstated the potential impacts of the project. There should be no effects of the project on Purple Martins and no mitigation should be required.
4-216		***Other Breeding and Migratory Birds.*** Recent published research provides a more detailed understanding of the role of Urrutia and Arden Ponds as resting habitat for diving ducks, including not only the Canvasback but also the Bufflehead, Common Goldeneye, and Common Merganser, as well as their importance as foraging habitat to Wood Ducks, Mallards, Double-crested Cormorants, American Coots, and other waterbirds (Airola et al. 2023). This research demonstrates that high proportions of the populations of these species that use the

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4-216		American River in winter also use the ponds either for night roosting or daytime foraging. The birds choose these open water areas presumably because they allow birds to forage, conserve energy, and avoid predation. Narrow flooded open water areas and flooded riparian habitat will not serve these needs for these species because they rely on open areas to detect predators. Thus, the proposed mitigation could reasonably be expected to lead to a substantial decline in populations of these species along much of the Lower American River. Such a loss would be significant under CEQA, and no mitigation has been proposed to mitigate this impact.
5-24	5.1.15	***Cumulative Impacts, Vegetation and Wildlife.*** The cumulative effects analysis is the SEIS/SEIR is superficial and misleading. The proposed projects do not just "have potential" to contribute to the loss and degradation of sensitive and other habitats, they will clearly do so. 50 The impacts of this and other projects are not quantified, and thus are not evaluated for their effects in the SEIS/SEIR or available for public review and comment. These impacts should be quantified to the maximum extent possible. In particular, what proportion of the bank area along the American River will be denuded by project actions in various reaches by proposed and past flood protection actions and how will that affect dependent wildlife species, vegetation, and human uses? 51 The document also does not address the indirect cumulative effect of all projects shifting public use to the remaining lands that retain wildland character in the American River Parkway. Increase use of remnant areas with wilder character will lead to increased creation of unauthorize foot trails, erosion, vegetation damage, and wildlife disturbance. 52 As noted elsewhere in this comment letter, the adopted mitigation measures are incomplete and ineffective in meeting a standard of causing the least amount of environmental impact. The acknowledgement that mitigation measures would not be able to reduce effects to a less-than-significant level requires that the project proponents explore design modifications and additional mitigation measures that would further reduce impacts, including retention of large trees along riverbanks within contract reaches. Given that the temporal impacts associated with vegetation removal will not be offset for a period of 50 years, it is incumbent on the project proponents to minimize vegetation removal within project reaches to the maximum extent possible. Cumulative impacts of the project are either significant or they are not. It is improper to characterize the impacts as significant for 50 years and then declared them no longer significant. No amount of

53	5-24	5.1.15	"overshoot" in ultimate conditions changes the fact that habitat values will be reduced substantially, and thus significantly, over a 50-year period. The cumulative impacts analysis does not consider the effects of climate change and resulting changes in hydrology and reservoir operations on habitats along the Lower American River. Will these changes result in additional impacts to existing riparian vegetation? Will they make proposed mitigation less effective? This impact needs to be incorporated into the cumulative effects analysis.
54	4.2-11		The project clearly is inconsistent with the following General Plan policies: CO-58, CO-59: violated by the destruction of Urrutia Pond CO-88: Violated by removal of the cormorant roosting site within Area 3B North has not been recognized as an impact and for which no mitigation has been proposed. CO-89: The project clearly will not protect, enhance, or maintain riparian habitat. CO-105: The minimal and inadequate public involvement process is a violation of this policy. CO105a: This policy is violated by altering natural topography and vegetation along waterways. CO-111, 121, 122: Violated by extensive vegetation removal and channel bank reshaping. CO-123. Violated by planting of unnatural elderberry orchards that remove much of the herbaceous vegetation in mitigation areas.
55	4.3-1	4.3.1	4.3.1. The omission of the extensive information available in eBird and the Sacramento Breeding Bird Atlas (Pandolfino et al. 2021) from the list of resources consulted for the impact analysis renders any evaluation to be inadequate.
56	4.3-3	Table 4.3-1	The descriptions in this table illustrate a lack of basic biological information affecting the soundness of the impact analysis. Some corrections: ***American Badger*.** Very unlikely to occur anywhere within or near American River sites due to limited amount of grassland, but VELB mitigation will cause a significant impact if any occur, due to loss of potentially suitable herbaceous habitat. ***Peregrine Falcon.*** Peregrines nest on the UC Davis Medical Center building (Pandolfino et al. 2021) and likely use the Parkway year-round. They are common in winter along the Parkway and may be affected by reduction in avian prey, including diving ducks and other waterbirds, that are likely to occur due to the loss of Urrutia Pond. ***Bank Swallow.*** The last nesting site of Bank Swallows near River Bend Park was destroyed during the nesting season by flood control efforts in the 1980s (D. Airola pers. obs.). The species now occurs only infrequently, if at all, during migration. ***Purple Martin.*** Has not nested in trees since the 1970s (Airola 2020). Would not breed in any project areas.

	4.3-3	Table 4.3-1	***Western Burrowing Owl.*** No longer nests along the American River due to development of herbaceous open space lands, removal of hay production and grazing following park establishment, and possibly due to planting use of herbaceous habitat for elderberry mitigation and its invasion by star thistle. ***Yellow-breasted Chat***. Recent migratory occurrences exist. The project area is not outside the species range. The elimination of low terrace habitat has reduced habitat quality. The creation of riparian habitat at Urrutia Pond might attract this species. ***Yellow Warbler.*** The characterization does not make sense (describing habitat as what occurs at the Parkway areas and then saying that suitable habitat doesn't exist). Yellow Warblers are sensitive to cowbird parasitism and so are absent from most areas where suitable habitat otherwise exists in the project area and throughout the Central Valley.
57	4-186	4.5.1.1.1	***Non-native Invasive Species.*** This section should note that major infestations of non-native and undesirable star thistle occur in previous mitigation areas developed for bank protection work by the Corps and SAFCA, which has reduced habitat value.
58	4-186	4.5.1.1.2	Calm-water areas, including Urrutia pond, Arden Pond, and backwater areas are especially diverse, regionally uncommon, and of special concern to local agencies, including Sacramento County Parks, and to non-profit conservation organizations. Thus, they qualify as sensitive natural habitats.
59	4-187	4.5.1.2.2	The idea that animals disturbed by loss of habitat resulting from construction of the proposed action can simply "move away from construction activities to unaffected areas" is contrary to the findings of more than a century of wildlife science, which shows that habitat loss generally results in reduction in populations. Evaluation of the degree to which displacement and elimination of habitat would affect current wildlife populations is needed, in particular because of evidence of substantial use of Urrutia Pond by night-roosting waterbirds (Airola et al. 2023) and roosting by substantial numbers of cormorants in trees slated for removal in Area 3B North
60	4-188	4.5.1.2.2	Maintenance plans for mitigation areas should be made available for review by County Parks and citizen groups, given the proponent's failure at adequately maintaining and protecting existing mitigation areas from weed invasions and fire.
61	Table 4.4.1-2	4.1-a	Removal of Urrutia pond and the trees supporting the cormorant roost in Area 3B North would eliminate movements of waterbirds from foraging to roosting areas, which has the potential to reduce regional populations. The mitigation measures do not address these impacts, and they are therefore significant under CEQA
	Table 4.4.1-2	4.1-b	The proposed project will eliminate the largest pond area along the entire Lower American River and thus has the potential to cause the local populations of several waterbird species to be greatly reduced.

	Table 4.4.1-2	4.1-b	No adopted mitigation addresses this impact. Therefore, it is significant.
62	Table 4.4.1-2	4.1-3	The American River Parkway Plan identifies Urrutia Pond as an important and sensitive natural community. Its elimination is a substantial adverse effect that is not mitigated, and therefore is significant.
63	Table 4.4.1-2	4.1-d	Although artificially constructed, Urrutia Pond is fed by subsurface and surface flows, and thereby is federally protected. Its filling is a violation of the Clean Water Act, and no actions are proposed to mitigate the effects in-kind.
64	Table 4.4.1-2	4.1-e	Removal of Urrutia Pond violates Sacramento County Park's American River Parkway Plan
65	Table 4.4.1-3	4.1-c	The removal of 50-150 year-old cottonwoods and valley oaks cannot be considered a temporary impact, regardless of how much new mitigation is planted. This is a significant impact that requires maximum effort to design the project to avoid mature tree removal. This comment applies to all affected areas supporting mature trees. No mitigation is proposed here to protect the Bald Eagle nesting tree
66	4.1-16		***Riverine/Open Water.*** The Osprey is not common in project areas. The species has been recently studied in the region (Airola and Pandolfino 2021; Airola and Estep 2022, 2023), and am not aware of any nests on the Lower American River. The species is increasing, however, and so could become more common and could nest in the future, thereby requiring protection at nest sites. The unique side-channel and off-channel pond habitats, which are used differently than riverine habitats, should be acknowledged here.
67	4.1-17		***Non-native Invasive Species.*** The document should note that a major undesirable invasive species is star thistle, which has invaded numerous past mitigation sites, creating fuel loads that has resulted in repeated fires and loss of planted mitigation stock, such as at River Bend Park.
68	4.1-25	4.1.3	***Scoping Comments.*** Contrary to the assertion here, the proposed mitigation would not comply with the American River Parkway Natural Resources Plan. It also will eliminate nearly all open water in at the Urrutia Pond, and so will not "include…utilizing the open water or a portion thereof for fishing and non-motorized boating." Since the amount of open water area retained is so small and narrow, it will provide a significantly reduced area of off-channel foraging habitat and will not provide suitable roosting habitat for most of the night-roosting species that use this area now.

69	4.3-14	***Yellow-billed Cuckoo.*** The description of this species' status in the project areas is correct. Given this, the document should explain and justify why the mitigation was focused on this species instead of the many riparian species that are known to occur and that will be heavily impacted by removal of riparian vegetation and especially large oaks and cottonwoods. For example, if a guild of riparian birds had been used in the assessment, the impacts of nest site loss to cavity-nesting birds would have been identified as a significant impact and mitigated through a temporary nest box program.
70 71 72	4.1-28	***Movement Effects.*** The statement that "the proposed action would not interfere substantially with the movement of native or migratory wildlife" is clearly erroneous. As documented by Airola et al. (2023), large populations of several diving duck species, including the Common Goldeneye, Bufflehead, and Common Merganser, move each evening to Urrutia Pond to roost overnight and then return to the American River to forage in each morning. Also, the Contract 3B North site currently supports a nighttime winter roost for an average of >60 Double-crested Cormorants in nonnative black locust trees that overhang the river. It appears that these trees would be removed, thereby destroying an existing daily movement pattern. The used night roosting sites are largely unique within the Lower American River, with the exception of Arden Pond's use by diving ducks. The proposed mitigation will not provide suitable habitat for these purposes. As a result, contrary to the statement "nor would it reduce a population…", the potential exists for a substantial decline in the populations of these species along the American River. To anticipate the proponents' response, winter conditions are believed to be limiting, at least to the diving ducks (see Birds of the World references in Airola et al. 2013), and so it cannot be assumed that they will just relocate somewhere else without effects on numbers. ***O&M Activities.*** The proposed actions, which are described to include maintenance of "all project sites" to prevent the establishment of woody vegetation, will result in a permanent impact to many wildlife species, as well as wildlife user groups (birders, hikers), and aesthetics. The proponents should allow stabilizing woody vegetation to grow on bank protection sites. ***Bald Eagle.*** The construction buffer distance should be set by a biologist based on testing of the response of birds to equipment and human activity as recommended by Airola (2007). The needed buffer may be greater or lesser than the 660 ft guideline arbitrarily identified as a nationwide standard. It is quite possible that due the recent establishment of this nest and the very low level of baseline human activity, the buffer distance may need to be great than 660 ft to avoid disturbance and potential abandonment.
73	4.1-29	The statement regarding effects of mitigation on migratory birds is inaccurate and overly simplistic. The mitigation areas will, over a long period of time, improve habitat for certain migratory birds, but will eliminate habitat for others. The elimination of migratory birds that use open water habitat is a significant impact and should be mitigated, which is readily feasible. The conclusion on this page regarding effects on animal movements is inaccurate for reasons previously stated.

4.1-30	Similarly, the conclusion at the top of this page regarding effects on wildlife habitat and populations is inaccurate and misleading. ***MM BIRD-1.*** Purple Martins will not occur at project sites. No mitigation needed.
4.1-31	***Nest Protection.*** Except for a few species with low densities, such as the Yellow-billed Magpie and raptors, it is wasteful and serves no lasting purpose to spend large amounts of money to protect nesting birds from construction, whose populations will subsequently decline anyway due to habitat loss. The proponents should work with agencies to get take migratory bird take permits in exchange for putting the funding that otherwise would be used for avoidance toward some long-lasting conservation measures such as land acquisition or habitat improvement. ***Bald Eagle.*** See comments elsewhere regarding customized disturbance buffer determination. **Purple Martin**. It is completely unnecessary to conduct any surveys for Purple Martins in any construction areas because over 20 years of research and monitoring (Airola 2020) has shown that only a few sites in elevated freeways or road overpasses have supported colonies since the 1970s (Airola and Grantham 2003, Airola 2020, Airola and Kopp 2023).
4.1-32	The statement that only “some waterside trees” will be removed from project areas contradicts previous statements that all woody vegetation will be removed and that sites will be maintained to prevent its establishment. It also contradicts the subsequent paragraph which notes “Riparian woodland and riparian scrub would be removed from the erosion protection footprint”. This inconsistency is so fundamental that it prevents us from understanding the project impacts and providing meaningful comment on the SEIR/SEIS, thereby requiring reissuance of a corrected SEIS/SEIR. We, and CEQA requirements, favor use of erosion protection designs that protect as much existing riparian habitat as possible.
4.1-32	***Nest Boxes***. A measure should be added to the mitigation plans for erection and ongoing management of 2 waterfowl nest boxes and 5 songbird nest boxes per acre for several decades to offset the multi-decade loss of nesting habitat for riparian cavity-nesting birds that will occur until mitigation plantings achieve a mature condition. Boxes should be erected and managed according to approved designs and management guidelines by individuals with experience doing so. ***Overall Impact Conclusion.*** The project will cause significant long-term impacts to species that depend on open water as night roosting habitat.
4.1-33	The commitments to protection and reestablishing vegetation are so vague that they cannot be relied upon as a basis for evaluating impacts. Although short-term effects have been characterized as significant and unavoidable, the proponents should nonetheless commit to a maximum effort to minimize the impacts through the described methods and even other approaches to bank protection and erosion control, if feasible
4.3-14	***Yellow-billed Cuckoo.*** Other than the one unconfirmed sighting on a single day, as acknowledged, this species does not occur on the Lower American River. It is thereby inappropriate to base mitigation on the needs of this

	4.3-14	species, rather than other riparian species and waterbirds, which depend on habitat in the project area and will be impacted by the project.
81	4.3-15	***Other Breeding and Migratory Birds.*** This is a very incomplete representation of the diverse and abundant breeding, migratory, and wintering avian community within project areas. Published peer-reviewed studies document breeding by Yellow-billed Magpies in project areas 3B near Oak Meadows Park and in 4a near Larchmont Park and (Airola et al. 2021, Airola 2023). This species has declined by an estimated 85% due to West Nile virus so protecting large trees on riverbanks should be a priority, especially where magpies are nesting there.
82	4-3.39	***Bald Eagle.*** The DSEIS/SEIR does not address the impacts of aquatic habitat loss on the nesting pairs of Bald Eagles at the Urrutia property. Bald eagles feed both on fish and waterbirds. While the specific basis for selection of the site cannot be known specifically, the presence of the nest adjacent to a pond that supports large numbers of waterbirds and calm waters where fish may be more easily seen and captured is consistent with an explanation that the site was selected because of the presence of the pond. As someone who has conducted research and management on Bald Eagle over 40 years (e.g., Airola 2007), I (D. Airola) believe that elimination of the pond and its replacement with riparian habitat that will obstruct hunting access during those limited periods when it is flooded has potential to displace the eagle pair. Acquisition of the property by public agencies, and its development for mitigation has a high likelihood of resulting in increased legal and illegal human activity and disturbance unless commitments are made to vigorous preventative measures. Such disturbance has a high potential to displace this eagle pair because they are not acclimated to human disturbances (see Airola 2007). Such displacement would be a significant impact. The project proponents should identify mitigation measures to prevent legal and illegal human occupation in areas that would disturb nesting eagles. The determination of bald eagle disturbance buffers should be based on the specific current site condition and tolerances of the nesting pair, as I have recommended (Airola 2007) rather than applying blanket buffer guidelines that are likely inadequate under conditions when background disturbance levels are low, as in this case.
83	4-3.39	***Burrowing Owl.*** The Burrowing Owl is almost certainly not a breeding or wintering resident in any of the American River project areas. Magpie Creek has the possibility of supporting owls. It is not evident that proper surveys were conducted for this species to characterize potential project impacts in suitable habitat around Magpie Creek. Surveys and impact evaluation should be conducted by a professional with experience in dealing with this issue. Chris Conard with Sacramento Regional County Sanitation District is the expert on Burrowing Owl in Sacramento County and should be consulted.

	4-3.39	The adopted mitigation measures do not address the potential impacts of removing grassland habitat, removing burrows, and displacing owls from their burrows. Continual enactment of mitigation measures as outlined in this document has contributed to the near elimination of the species from Sacramento County (Pandolfino et al. 2021, C. Conard, pers. comm.). If Burrowing Owls are found to occur in project areas, measures should be taken to avoid disturbing their burrows. The effects of habitat disturbance and long-term changes need to be properly evaluated. If the project results in impact to occupied or recently occupied habitat, appropriate mitigation measures should be adopted, including purchase of local mitigation credits for Burrowing Owl (which may not be available), establishment of a relocated population (which has been done successfully in San Diego County), and/or acquisition, protection, and enhancement of existing occupied Burrowing Owl habitat that otherwise would likely become unsuitable over time.
84	4-3.41	***Least Bell's Vireo.*** It is certain that Least Bell's Vireo does not nest currently within project areas, as there have been no records despite widespread birder activity. To my knowledge there are no records of any migrant Bell's Vireos anywhere in Sacramento County, nor would they be expected because there are no nesting populations to the north of the County. There should be no significant impacts and no mitigation is required. There is a small possibility that the species could colonize project areas in the future. At that point potential conflicts might occur with long-term management programs.
85	4.3-43	***Yellow-billed Cuckoo*.** With the exception of one sighting, there is no evidence that cuckoos use the Lower American River corridor during migration, despite thousands of bird checklists being recorded in eBird during the migration period. The impact of habitat loss to migrating cuckoos is clearly not a significant impact that requires mitigation.
86	4.3-43	***White-tailed Kite.*** The expense incurred in surveying for and protecting kite nests from short-term disturbance could be better spent on managing habitat for the species to provide long-term benefits. The main impact of the project to White-tailed Kites is the misguided effort to plant elderberry orchards in a large amount of the remaining available space where herbaceous habitat occurs along the American River, and the resulting invasion of disturbed area by star thistle. This impact should be mitigated by enacting management to reduce star thistle in remaining herbaceous habitat areas through prescribed grazing, burning, mowing, and/or seeding.
87	4.3-43	***Other Breeding and Migratory Birds****.* This depiction of impacts is incorrect and misleading. As documented in a peer-reviewed study (Airola et al. 2023), a wide variety of waterbirds use the Urrutia Pond during winter, not just diving birds. To suggest that birds do not use the pond during other seasons is completely unsupported. Although bird use during other seasons has not been well documented due to restricted access, it should be the responsibility of the lead agencies to conduct such studies, not us commenters. The impacts described for other species are limited to the direct effects of disturbance during construction, as if there is an unlimited supply of habitat
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4.3-43	that individuals can move to and survive. This, of course is an idea contrary to more than a century of wildlife biological science. The created mitigation area will not function as a mature riparian woodland for decades, during which time populations of dependent species will decline. Therefore, the proponents should adopt project design measures that minimize these temporal losses, including protecting all existing habitat to the maximum extent possible. This also will reduce the mitigation need and reduce the impacts of the Urrutia mitigation project itself, which is ~~a~~ significant impact requiring its own mitigation. The proponents should also adopt measures to encourage colonization of the mitigation area by cavity-nesting birds, by supporting a nest box program at the mitigation site for a period of not less than 20 years, or until the vegetation matures sufficiently to allow primary cavity nesting birds (i.e., excavators) to colonize the site. Because the impacts to riparian birds, and thus cavity nesting birds, are significant, and the mitigation is highly feasible and effective (Airola and Stine 2023), its implementation is required.

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Appendix D

Comment 5-1	It should be made clear that, while it is difficult in general to comment on project environmental documents, the Corps appears to have gone out of its way to make public comment as difficult as possible. To some degree, it is refreshing that the Corps acknowledgment that it doesn't care to do anything to facilitate public involvement beyond the absolute minimum required by law. It remains to be seen whether, with the obvious impediments that the Corps has erected, it will be determined that it indeed met that minimal standard. Regardless, its approach violates a public agency's basic responsibilities to involve and be responsive to the public.
Comment 5-2	Who has determined what surveys are required? The request was for surveys to be conducted prior to the release of the SEIS/SEIR so that the results could be incorporated into the impact analysis. It appears that the proponents chose not to do the surveys because they wanted to avoid addressing the important issue of waterbird use of the Urrutia pond, of which they had been made aware. As a result, the analysis of impacts is incomplete and inadequate. Conducting bird surveys prior to disturbance makes no sense other than to avoid nesting birds. Why would they be done, unless they influence the subsequent design. Wintering waterbirds fly, so there is no purpose in conducting pre-disturbance surveys for them. Please explain what you are proposing to do and why.

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February 23, 2024

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Subject: Comments on the draft American River Common Feature, 2016 Flood Risk Management Project (project) Sacramento, California Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report (SEIS/SEIR)

The Environmental Council of Sacramento (ECOS), a consortium of local and regional environmental and community-based organizations, is providing the following comments on the Draft SEIS/SEIR prepared for the subject project.

1 In summary, ECOS believes the Draft SEIS/SEIR document is significantly flawed, and the scoping process used in its development is inadequate. We request that both agencies reopen the scoping process to ensure full public participation and the development and analysis of viable, protective project alternatives. The document fails to clearly articulate the reasons for the project,

2 and the need for, and the extent of, vegetation removal necessary to accomplish the project's objectives. Regarding this latter point, additional analysis and alternatives need to be considered and evaluated to ensure maximum protection of the American River Parkway is afforded while also accomplishing the project's bank and levee protection objectives.

3 An ineffective public participation process has been used while developing the Draft SEIS/SEIR document. The public participation process has failed to explain the need for and necessary components of the project. The comments being submitted by the County of Sacramento, other community groups, and members of the public demonstrate in part the public involvement process deficiencies. These deficiencies need to be corrected both through an expanded, in person, public participation process, and an expanded analysis and study to establish the most

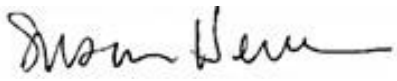
effective techniques that preserve the American River Parkway and attendant vegetation and improve riverbank and levee integrity.

ECOS understands and supports the importance of regional flood protection. Recent actions to improve the Folsom Dam complex and the banks and levees at other portions of the lower American River are designed to afford Sacramento communities a higher degree of flood protection. ECOS fully supports these goals. We also support the protection of both the American
4 River's banks and levees in the project areas. We understand that the river channel and flows in these areas can pose a significant risk to the existing banks and levees. This increased risk could result in flooding and potential damage to the American River Parkway and the adjacent community when maximum reservoir releases caused by extreme storm water events are required. While this project is intended to mitigate these impacts, ECOS also believes the project can be designed and constructed to minimize the impacts to the adjacent environmental resources and the American River Parkway. The Parkway is a regional jewel, a wildlife corridor, and is enjoyed by over eight million visitors every year. This project should go forward only after all efforts to ensure the Parkway's protection have been analyzed, and appropriate project improvements are incorporated into the project design and implementation.

ECOS strongly recommends that going forward, the Corps and the Board initiate a series of public meetings/workshops that include public tours of both earlier completed bank/levee work and the proposed sites so that understanding of the need for the specific outcomes can be
5 understood by community members. It is important to keep in mind that community residents live and visit the Parkway. They have a vision of the Parkway's beauty and what it affords for wildlife and native plants. The project as currently formulated will change the vision for twenty to thirty years – for some the rest of their lives.

ECOS stands ready to work with the County, other community groups and the project proponents to help in any way we can to expand community engagement, improve the project alternatives and accomplish a positive outcome for this project.

Ted N. Rauh
ECOS Water Committee Chair



Susan Herre
President, ECOS Board of Directors

Cc: Sacramento Area Flood Control Agency, Water Forum, Regional Water Authority

From: ARCF_SEIS <ARCF_SEIS@usace.army.mil>
Sent: Thursday, February 22, 2024 2:39 PM
To: Sutton, Drew
Cc: publiccommentARCF16@water.ca.gov; ARCF_SEIS; Romine, Guy K CIV USARMY CESPK (USA); Martin, Nathaniel J CIV USARMY CESPK (USA); Duey, Keleigh L CIV USARMY CESPK (USA); Saucier. Melanie
Subject: [EXT] FW: [Non-DoD Source] Comments on Draft American River Common Features, 2016 Flood Risk Management Project, Sacramento, California Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report XIV
Attachments: SARA-Comments-on-Draft-AR-Common-Features-2016-Flood-Risk-Management-Project-Sacramento-California-SEIS-SEIR.pdf

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From: Save the American River Association <info@sarariverwatch.org>
Sent: Thursday, February 22, 2024 2:24 PM
To: ARCF_SEIS <ARCF_SEIS@usace.army.mil>; PublicCommentARCF16@water.ca.gov
Subject: [Non-DoD Source] Comments on Draft American River Common Features, 2016 Flood Risk Management Project, Sacramento, California Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report XIV

Please see the attached comments re: Draft American River Common Features, 2016 Flood Risk Management Project, Sacramento, California - Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report XIV from Save the American River Association.

Sincerely,

Sara Stephens
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February 22, 2024 *Via E-mail*

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Subject: Comments on Draft American River Common Features, 2016 Flood Risk Management Project, Sacramento, California
Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report XIV

Mr. Romine and Mr. Brown:

I. Introduction

These are the comments of the Save the American River Association (SARA) on the Draft American River Common Features, 2016 Flood Risk Management Project, Sacramento, California, Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report XIV (DSEIS/SEIR).

The Save the American River Association (SARA) was founded in 1961 to protect the Lower American River and establish the American River Parkway. We have persisted since that time as lead advocate for the preservation and conservation of the Lower American River and Parkway. As such, we are greatly concerned with the work which is proposed for Contracts 3B and 4B, which evidently would result in the loss of very many trees.

We wish to thank the U.S. Army Corps of Engineers (Corps) and Central Valley Flood Protection Board/Department of Water Resources for extending the public comment deadline from February 5 to February 23. That extension greatly improved our ability to submit meaningful comments.

II. Contract 3B

a. Incomplete information presented and limited hydrologic modeling used to determine areas of risk and work

SARA had and has a representative on the Lower American River Task Force (LARTF) and its Bank Protection Working Group (BPWG), the latter of which was

responsible for the initial identification of the areas of work and initial project design in Contract 3B. As such, we are aware to some extent of the process and considerations involved. Unfortunately, this information was not made available to the broader public through the DSIES/SEIR or the two public meetings provided by the Corps. This has resulted in great consternation among residents in the areas of Contract 3B as well as a proliferation of misinformation. It would benefit all concerned if the final environmental documents added the hydrology and geomorphology which were involved in identifying the Contract 3B areas as being high risk. Also, a review of why specific designs for Contract 3B were chosen should be included.

On page 4-151 of the DSEIS/SEIR it states:

> "The effects of the Proposed Action on water surface elevations were evaluated using the Hydrologic Engineering Center's River Analysis System (HEC-RAS) computer software. HEC-RAS performs one-dimensional steady flow, one- and two-dimensional unsteady flow calculations, sediment transport/mobile bed calculations, and water temperature/water quality modeling."

A one-dimensional hydrologic model divides the river into a series of cross-sections, and assumes that all of the water in a given cross-section has the same velocity. A two-dimensional model takes the cross sections and divides them into columns of water, which can have different velocities from other columns of water in the same cross section. However, it still assumes that all of the water in a given column has the same velocity. A three-dimensional model divides the columns into cells which could each have different velocities from other cells in the same column or other columns (1).

The three-dimensional model should be closest to reality. The assumption in the one-dimensional model that all of the water in a given cross section has the same velocity is obviously not true, as the velocity varies both by lateral position and depth. In the two-dimensional models, the assumption that all of the water in a given column has the same velocity is more subtly false as friction from the bed, banks, berm, or levee side will slow the adjacent water, as will friction and turbulence from trees. The main justification for using a one- or two-dimensional model is that the amount of computations needed for the higher dimension models increases exponentially. 2

It is our understanding that when the BPWG assessed various areas of the Lower American River levee system to be of high risk of failure, it was based upon a two-dimensional hydrologic model. It is apparent from the above quote that the Corps has continued with one- and two-dimensional modeling in its work.

Recently, with the advances of available computing speed and power, three-dimensional modeling of river systems has become more common.

For example, recent research articles used a three- dimensional hydrologic model of a portion of the Lower American River downstream of the Contract 3B area. These articles arrived at the conclusion that the presence of trees along the banks of the river reduced the velocity and scour of the river near the banks and increased the velocity and scour in the middle of the river channel compared to the same model without trees (2, 3). These results lead to a couple of questions concerning the hydrologic modeling involved in the Contract 3B proposal.

First, were trees represented in the hydrologic models used by the Corps, and if so, how was this accomplished?

Second, would the Corps and/or its partners be willing to pause the project and rerun the assessment of risk of erosion using a three-dimensional hydrologic model with trees? If not, why not?

b. Incomplete information presented and limited hydrologic modeling used to determine project designs

As stated above, SARA had a representative on the LARTF and BPWG. Consequently, we are aware of some of the evolution of project designs of Contract 3B. However, this information was not made available to the public in the DSEIS/SEIR or either of the Corps' public meetings. We encourage the Corps and CVFPB to include this information in the final environmental documents. Similar questions arise to those cited above.

First, were trees represented in the hydrologic models used by the Corps for refining designs, and if so, how was this accomplished?

Second, would the Corps and/or its partners be willing to pause the project and rerun refinement of designs using a three-dimensional hydrologic model? If not, why not?

Finally, were designs considered which did not involve the placement of large amounts of rock (see for example reference 4), and why were those designs rejected?

c. Lack of information on impact on trees of Contract 3B

One of the great shortcomings of the DSEIS/SEIR is the lack of information of the impact on trees of Contract 3B. Summary information on tree losses was presented by Corps Project Manager Amanda Barlow at the LARTF meeting on 12-12-23. The information presented indicated that the 95% designs would involve the removal of 685 trees, the majority (522) in the Site 4-1 area. While we applaud the progress of the Corps and its partners in reducing the impacts as project designs evolved, we strongly feel that further progress in this regard is needed.

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Also, much more information needs to be presented in the documents. Ideally, this should include an arborist's report of all trees in the project area, including whether they are to be removed or not, their geographic location, species, and size. Also, a summary table showing species of trees, size range of trees, total numbers of trees to be left in place and total numbers of trees to be removed would be most useful. Finally, maps of the locations of trees to be left in place or removed would also be most useful. This sort of information seems to us to be required by the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA).

III. Contract 4B

The main question about contract 4B is: Why is it in the DSEIS/SEIR at all? The proposal is so incompletely described as to make it impossible to make more than generic comments. Two figures

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purported to portray the activities that would be undertaken, Figures 3.5.2-11 and 3.5.2-12 (text p. 3-42), are nowhere to be found. Even the Table of Contents skips from Figure 3.5.2-10 to Figure 3.5.2-13. Further, this proposal has NOT been presented at any LARTF or BPWG meeting that we are aware of. There is not even summary information on how many trees would be impacted. This

proposal should be removed from the final document and recirculated when there is adequate information for people to comment on it.

That being said, consider as a generic comments and questions on Contract 4B all of the comments and questions on Contract 3B above in sections IIa, IIb, and IIc. Please respond with specifics for Contract 4B.

IV. American River Mitigation Site (ARMS)

We are pleased that the Urrutia property appears to be on the way to being acquired by the Sacramento Area Flood Control Agency (DSEIS/SEIR p. 4-177). This marks a considerable addition to the Lower American River Parkway. However, the use of the site for the proposed American River Mitigation Site (ARMS) has some problems. As documented by Airola et al 2023 (5), there is considerable use of the pond in the middle of the site by wintering waterbirds. It is likely that loss of this pond, as proposed in the DSEIS/SEIR ARMS, would have a detrimental effect on said waterbirds. Accordingly, some modification of the proposal to retain at least part of the pond should be adopted.

An important concern that arises is a statement in the DSEIS/SEIR: "Table 3.5.5-1 presents the mitigation needs for all the ARCF Project contracts, not only the American River Contracts, to be met at the ARMS." We think it is inappropriate to be meeting mitigation needs from ARCF Projects outside of the Lower American River Parkway, if that results in detrimental effects on the Lower American River Parkway. We note in particular that the estimated off-site mitigation acreages from Contract 3B are considerably smaller than the acreages for the ARMS proposal in Table 3.5.5-1, with the exception of Valley Elderberry Longhorn Beetle (VELB), which is only slightly smaller. See table below. It is likely that the Contract 3B acreages are nearly all of the needed acreages since the only other site on the Lower American River is Contract 3A, which is a very small project located adjacent to the levee (one acre of flood reduction work [DSEIS/SEIR p. 4-143], including 0.6 acres of pond fill [DSEIS/SEIR p. 4-157] which is to be mitigated by purchase of credits at a U.S. Fish and Wildlife Service approved mitigation bank [DSEIS/SEIR p. 4-192]). 5

Comparison of off-site mitigation acreages for Contract 3B to ARMS proposals

Impact category	Contact 3B off-site mitigation acreages*				ARMS Proposed**	ARMS Alternative 4b***
	Site 3-1	Site 4-1	Site 4-2	Total		
Salmonid	16.78	15.17	0	31.95	66	47
Riparian/YBCU	5.78	7.94	0.58	14.30	72	29
VELB	2.76	19.32	0.81	22.89	23	22
Seasonal Wetland	?	?	?	?	6.6	?

* Data from presentation by Corps Project Manager Amanda Barlow to LARTF 12-12-2023. Salmonid data from 65% design, and Riparian/YBCU and VELB from 95% design.

** Data from DSEIS/SEIR p. 3-70 Table 3.5.5-1

*** Data from DSEIS/SEIR p. 3-98

ARMS alternative 4b would retain a part of the existing pond, which should be of value to the waterbirds. We point out that the ARMS Alternative 4b acreages would exceed by a considerable margin the required totals for off-site mitigation for salmonid and Riparian/YBCU. Only the VELB is

slightly smaller. It seems to us that the small additional amount (one acre) of VELB acreage could be accommodated by the other VELB sites on the Lower American River, such as Rio Americano or Rossmoor Bar.

It is our understanding that the Central Valley Bird Club comments on the DSEIS/SEIR make an additional recommendation wherin a rounder pond configuration north of the eagle's nest would be combined with two mitigation connections to the river, one east and one west of the nest. We think that such an alternative should be considered and would likely be preferable to the proposed action.

V. Miscellaneous comments

a. Aesthetics and Visual Resources: Long term impact significant

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On page ES-12, under the row Aesthetics and Visual Resources for American River Erosion Contract 3B North and South, Contract 4B, SRMS and ARMS, it is indicated that long term impacts under CEQA are "less than significant with Mitigation Incorporated" and under NEPA are "less than significant." The same assessments are also presented on p. 4-141 in Table 4.3.1-2, Impacts 3.1-a and 3.1-c. We disagree strongly with these assessments. Indeed, the assessments in the cited tables are inconsistent with the text of the DSEIS/SEIR. On p. 4-144, under American River Erosion Contract 4B, it states: "Even though there will be an attempt to save every native tree impacted at the American River Erosion Contract 4B site, the possible need to remove heritage oaks would create long term significant and unavoidable impacts."

Both Contracts 3B and 4B have the potential to remove large heritage trees that are more than 100 years old. While small trees may be planted near the site to replace these trees, they will not achieve the size of the large trees for decades or centuries. The aesthetics of large trees are quite different from those of small trees. Hence the long term effect is significant under both CEQA and NEPA. This should be acknowledged in tables and text in the final environmental document.

b. Table of Vegetation Impacts out of date

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On p. 4-195 of the DSEIS/SEIR, Table 4.4.1-4 sets forth the "Vegetation Impacts for ARCF GRR SEIS – Proposed Action." If the title is accurate, these are the vegetation impacts as identified in the General Reevaluation Report from 2016 (GRR). However, the proposed actions in the DSEIS/SEIR differ substantially from the proposed actions in the GRR. Hence, the table is misleading and inaccurate. It should be replaced with a table that reflects the impacts of the proposed actions in the DSEIS/SEIR.

c. Future maintenance of launchable rock

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Some of the designs of erosion protection involve launchable rock. Some questions arise: Which organization would be responsible for repair should a flood event occur which resulted in the launching of the rock? What exactly would this consist of? And, how would it be financed?

One additional point: it would be of interest to see if there is precedent for the launching of the rock and how it turned out. Pictures would be helpful.

d. Organization of pages inconsistent

Looking at the Table of Contents (pp. ii and iii), we find inconsistent and confusing numbering of pages. Whereas most chapters have the format chapter number-page number, beginning with page 1 (e.g. 1-1, 3-1, 5-1 etc.), two of the chapters deviate from this. Chapter 2 begins with page 2-8, proceeds to 2-9, then reverts to 2-1 followed by 2-3. The actual pages in the document are consistent with this page numbering. Very confusing. Also, Chapter 4 begins with page 4-108 instead of 4-1. Possibly some technology has baffled the authors of the DSEIS/SEIR. This should be remedied in the final environmental document.

e. Organization of appendices confusing

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In the .pdf documents made available to the public on the Corps' web site, Appendix B is found in the .pdf document labeled as "draft SIES-SEIR report." However, all other appendices are found in a .pdf document labeled as "draft SEIS-SEIR appendices." The appendices document is lacking in Appendix B. This has caused considerable confusion, as people have reported searching in vain in the appendices .pdf for Appendix B. Another problem this has created is that people looking in the main report .pdf have gone to the end of the .pdf document in search of Chapters 6 through 10, and found only the end of chapter 5. This is because Appendix B ends with Chapter 5. All in all, this arrangement has confused many people, and should be modified in the final environmental document.

VI. Concluding remarks

We greatly appreciate the enormous efforts that have gone into the identification of areas of risk of levee failure at 160,000 cubic feet per second of flow in the Lower American River, as well as the refinements to design that reduce the impacts on habitat and vegetation, especially trees. None-the-less, the remaining impacts are quite large: some 685 trees are likely to be removed in Contract 3B and an unknown number in Contract 4B. It seems to us that the advancing technology, in particular the deployment of three-dimensional hydrodynamic models capable of including trees, call for a pause and reevaluation of the risks and designs set forth in the DSEIS/SEIR. Also, it would be desirable to re-activate the BPWG and involve it in said reevaluation. Likewise, greater efforts should be made to reach out to the general public in the reevaluation. It would be a great shame to lose so many trees along our State and Federally protected Wild and Scenic Lower American River if such losses are not, in fact, justified.

Thank you for your attention to these considerations.

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References:

(1) Glock,K. et al. (2019) Comparison of Hydrodynamics Simulated by 1D, 2D and 3D Models Focusing on Bed Shear Stresses. Water 11, 226. https://doi.org/10.3390/w11020226

(2) Flora, K, Santoni, C & Khosronejad A (2021) Numerical Study on the Effect of Bank Vegetation on the Hydrodynamics of the American River under Flood Conditions. J. Hydraul. Eng. 147(9):

05021006.
https://ascelibrary.org/doi/10.1061/%28asce%29hy.1943-7900.001912

(3) Flora, K & Khosronejad A (2023) Uncertainty Quantification of Bank Vegetation Impacts on the Flood Flow Field in the American River, California, Using Large Eddy Simulations. Earth Surface Processes and Landforms.
https://doi.org/10.1002/esp.5745

(4) Federal Emergency Management Agency (date unknown) Engineering With Nature: Alternative Techniques to Riprap Bank Stabilization.
https://www.fema.gov/pdf/about/regions/regionx/engineering_with_nature_web.pdf

(5) Airola D.A., Geiger M. & Goodrich, S. (2023) The Importance of Off-Channel Ponds to Wintering Waterbirds along the American River in Sacramento, California: An Initial Assessment. Central Valley Birds 26 (3) 69

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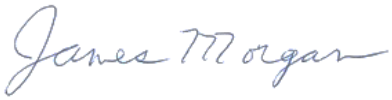

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February 23, 2023

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RE: Comments Regarding American River Common Features (ARCF) 2016 Draft Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR) – December 2023 Report and Appendices specific to Flood Risk Management Project Plans 3B, 4A and 4B

Dear Mr. Romine and Mr. Brown,

intro

I am writing on behalf of the Sierra Club, Sacramento Group regarding our serious concerns with the proposed American River Flood Risk Management Project. We have reviewed the draft supplemental EIS/EIR and many of the letters submitted from experts detailing a number of inadequacies in the documents and including recommendations for less impactful yet proven effective methods of ensuring adequate flood control and more effective mitigation measures. We are in support of the many calls to revise this project, aligned with the principles of "engineering with nature", with an approach that involves far less removal of existing vegetation and native trees, and with improved communication throughout the process of developing the final plan with the local community and governmental agencies.

1

The current EIS/EIR documents do not fully characterize the significant impacts, nor provide adequate mitigation measures or define feasible approaches that would mitigate impacts to less than significant. Under the California Environmental Quality Act (CEQA), even where impacts will remain "significant and unavoidable" after mitigation, CEQA requires that all feasible mitigation measures be incorporated (California Public Resources Code§ 21081; 14 CCR§ 15126.2(b).

2

In addition to creating an increase in carbon emissions over the two-year course of preparation and construction that is proposed, there is no mention or adequate plan to account for the loss of carbon sequestration that will occur when over 500 trees (including decades- and centuries-old native oaks),

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and vegetation are removed. In light of the fact that the Sacramento Area Council of Governments is currently developing a regional land use and transportation plan to comply with the statewide mandate to reduce VMT/GHG by 19 percent by 2035 an increase in carbon emissions without a revised plan to significantly reduce the number of trees and amount of vegetation lost is unacceptable. The proposed mitigation of the trees lost, at a ratio of 2 replacement trees per tree removed, cannot even come close to mitigating for the carbon sequestration value lost as replacement trees at that, or even at the higher ratios consistent with Sacramento City and County requirements, will not occur for many decades. The EIS/EIR documents lack adequate support for the USACE claim that the extent of tree and vegetation removal and the proposed streambank "erosion" control methods are needed for flood safety in this zone.

A December 2017 study, quoted below, illustrates the value of carbon sequestration provided by existing mature landscape. The 2017 Sacramento County Landscape Carbon Assessment, commissioned by the Sacramento Metropolitan Utility District, highlighted the value of native trees and vegetation in section 3.1, page 29 of their report. As the American River Parkway spans 23 miles and 4,800 acres of Sacramento County, the corridor comprises a good portion of the identified lands that sequester at least 8% of the carbon in the region.

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*"The results of the carbon inventory reflect that there is a substantial quantity of carbon sequestered by lands in Sacramento County. Based on LANDFIRE 2014, Sacramento County lands held roughly 36.3 million $MTCO_2e$ in aboveground biomass, belowground biomass, and soils. General agriculture, shrublands and urban areas make up a majority (approximately 80 percent) of landscape carbon in the 2014 inventory (**Figure 14**). Forests and grasslands consist of about 16 percent of the landscape carbon in the county with the rest of the LULCs accounting for approximately 3 to 4 percent of the inventory. These results are intuitive given that urban, agriculture and shrubland areas dominate the acreage of the county. Furthermore, although forests only make up approximately 3 percent (**Figure 15**) of county acreage, their high biomass and soil carbon sequestration rates cause them to account for 8 percent of the 2014 inventory (**Figure 14**)."*

Production team credits: Kathleen Ave (Client), WSP Project manager Tim Kidman (Technical Director) Chris Bruno (Technical Director), Subconsultants Patrick Huber (Lobata Group), Beth Kelly & Patty Cubanski (Burleson Consulting)

The USACE must include an inventory of the carbon sequestration value of the land they are intending to denude as well as a plan to mitigate for all carbon sequestration that is lost. They must also reevaluate the design choices and markedly reduce the many other "significant unavoidable" environmental impacts, develop more refined, less impactful alternative methods for project subcomponents, and conduct an adequate environmental analysis of the impacts of the revised project and its subcomponents; proceeding only where justifiable needs are identified. All native oaks must be protected and retained along the levee and staging areas must be placed where they will not impact native oak trees.

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We request that the USACE and the Central Valley Flood Protection Board reject the adoption of the current draft supplemental EIS/EIR and engage in developing a more comprehensive environmental document to address the numerous deficiencies in the current document, develop less destructive and more environmentally sound methods of providing erosion control only in areas where it is deemed absolutely necessary.

summary

summary

We support the multitude of comments submitted in support of a less impactful approach by other concerned environmental organizations and individuals with expertise in flood control and management of biological and natural resources. The letters we support include, but are not limited to, the following and we incorporate their comments into this letter by reference:

Save the American River Association
Dan Meier, Sacramento Valley Chapter, California Native Plant Society
Dan Airola, Central Valley Bird Club
William Avery, PhD, Professor Emeritus CSUS
Liz Bellas, Sacramento County Regional Parks
Michelle Stevens, Professor Emeritus CSUS, Bushy Lake Project Team
Brenda Gustin and Mark Berry, Preserve the American River
Justin Augustine, Senior Attorney for the Center for Biological Diversity
Josh Thomas, PhD Candidate, History Department, UC Davis
Butterfield – Riviera Neighborhood Association
Bill Brittain,P.E.
Ted Rauh, Environmental Council of Sacramento
Fred Kindel, retired USACE Wildlife Biologist, Chief, Environmental Planning Branch
Gerald Djuth, retired PE civil engineer

Additional individual submissions from American River Trees Steering Committee members - Peter Spaulding, Alicia Eastvoid, Matthew Carr, Beth Schwehr

Thank you for your consideration of our requests.

Sincerely,

Barbara Leary, Chair
Sierra Club Sacramento Group