

Central Services
Joan Araujo, DirectorEngineering Services
Christopher Cooper, DirectorRoads & Transportation
Christopher Kurgan, DirectorWater & Sanitation
Joseph Pope, DirectorWatershed Protection
Glenn Shephard, Director

September 2, 2022

Subject: Robles Diversion Phase 2 Design Planning Project - Request for Qualifications (RFQ)

Prospective Design Consultants:

Ventura County Public Works Agency – Watershed Protection (VCPWA-WP), working in partnership with the Casitas Municipal Water District (Casitas)¹ and other Robles Working Group (RWG²) stakeholders, seeks a qualified lead consultant³ to undertake three inter-related design planning tasks as part of the Matilija Dam Ecosystem Restoration Project (MDERP - see <https://matilijadam.org/>). These tasks will advance potential Phase 2 improvements at the Ventura River's Robles Diversion and Fish Passage Facility (Robles Facility), along with associated improvements for Meiners Oaks flood protection.

The Robles Facility is a key component of the MDERP, essential to providing for the effective transport of elevated sediments generated by the removal of Matilija Dam while maintaining or improving Robles' water diversion and fish passage functions. Enhanced flood protection for the community of Meiners Oaks is also a key MDERP component, though decisions concerning the best alternative there are intertwined with and dependent upon the Phase 2 design path for Robles.

The principal design planning tasks set forth in this RFQ include the following:

Task A: Advance the alternatives recommended for Phase 2 refinement in the *Robles Diversion Phase 1 Independent Technical Review Final Report* (NHC 2022 – see Attachment 2, References) from initial review and initiation of additional technical studies to a consensus-based preferred alternative (or alternatives if that proves

¹ Casitas operates the Bureau of Reclamation's Robles Diversion Facility, and both owns and operates the Robles Fish Passage Facility.

² The Robles Working Group (RWG) currently includes representatives from VCPWA-WP, Casitas, CDFW, SCC, Bureau of Reclamation, NOAA Fisheries, California Trout, Surfrider Foundation, Cultivating Conservation, AECOM, NHC, Stantec, and Resources Legacy Fund.

³ Design Consultant qualifications will include demonstrated and successful design experience and expertise in hydrology, hydraulics and sediment transport analyses using multi-dimensional modeling as well as physical modeling; in fish passage design and implementation; and in water diversion systems and associated flood protection measures. California professional licenses will also be required for all engineers, licensed geologists, and other professional positions.



necessary) for advancement to Task B;

Task B: Complete conceptual (10%) design plans, feasibility studies, and preliminary (30%) design plans for the proposed Robles Facility improvements based on the preferred alternative(s) advanced under Task A above; and

Task C: Complete conforming design updates – including new alternatives assessments, feasibility studies and preliminary design plans – for improved flood protection for the adjacent community of Meiners Oaks based on the alternative(s) advanced for the Robles Facility under Task A above.

Tasks A-C and associated sub-tasks are described in more detail in Attachment 1, Summary of Key Tasks.

There are four intertwined goals of the Phase 2 design planning efforts for the Robles Facility. They include: (1) improving sediment transport through and/or around the Robles Facility; (2) improving Robles Facility water supply reliability whenever hydrologic and permit conditions allow; (3) enhancing Robles Facility volitional fish passage across a wide range of flow conditions; and (4) reducing flood risks at the Robles Facility and at/for the community of Meiners Oaks. The work program set forth in Tasks A-C above will also require extensive coordination with key agencies and their experts, with stakeholders, both individually (when appropriate) and through consultations and workshops with the Robles Working Group.

If your firm is interested in this exciting project, please submit your Statement of Qualifications (SOQ) and proposed Project Team (including sub-contractors) to Anne Duval at Anne.Duval@ventura.org by 4:00pm Pacific on **October 7, 2022**. Your SOQ should describe your proposed approach to the project over a **maximum of 10 pages**, including potential refinements to the Tasks and Sub-Tasks set forth in Attachment 1. Your SOQ should also include CV's for key members of your Project Team (no page limit), and at least three references who can be contacted about your relevant prior work. Additional reports, designs or other documents prepared by members of your Project Team that demonstrate their experience and qualifications in areas pertinent to the project may also be linked to the SOQ.

Attachment 2 includes a number of references that may be helpful in the development of your SOQ. The following additional information may also be of interest:

- A recent draft report by AECOM (July 2022) on the extended series of MDERP hydraulic and sediment modeling studies that are key to understanding the sediment transport and flood risk challenges that will drive the Phase 2 process.
- A detailed (up to 90%) design for a High Flow Sediment Bypass (HFSB) adjacent to the existing Robles Diversion was completed by TetraTech for the U.S. Army Corps of Engineers in February 2013. The RWG process was established in 2020 to facilitate a re-evaluation of alternatives to the HFSB due to increasing costs and anticipated operational complexity, raising concerns about future burdens on



Casitas and their ability to secure permits for the proposed improvements. The Robles Diversion Phase 1 Final Report (AECOM 2021) is the initial result of this re-evaluation, followed by the Phase 1 ITR Final Report.

- An intermediate (30-50%) design for a new levee at Meiners Oaks was developed by TetraTech for VCPWA-WP in November 2020 (see References). That design is currently on hold pending agreement on a preferred alternative for the proposed Robles improvements, which will likely require updated design plans and feasibility studies for Meiners Oaks flood protection.
- Section 2 of the Phase 1 ITR Final Report contains a detailed summary of recommendations for Phase 2. These recommendations should be carefully considered and integrated into your proposed approach
- Funding for Task A has been secured through a 2021 grant from the California State Coastal Conservancy (SCC), and funding for Task B-1 was recently awarded by the California Department of Fish and Wildlife (CDFW). Initial funding for Tasks C-1.1 and 1.2 will also be available as part of the CDFW grant award, however funding for Task B-2 and for the rest of Task C will be the subject of future grant requests.
- Separate from but related to this effort will be funding for technical assistance from the Bureau of Reclamation's Technical Service Center, which is currently being pursued as part of the FY23 Congressional appropriations process.⁴
- Please note that this RFQ covers Phase 2 in its entirety - i.e., Tasks A-C above apart from Bureau of Reclamation assistance - with a maximum fee (contractual) budget of **approximately \$2.8 million**. Because funding for Task B-2 and most of Task C has not yet been secured, the future contracted scope of work, schedule, budget and project deliverables will be adjusted to align with available funds, then augmented if/as additional funds are secured. (In Attachment 1, the work currently funded appears as **green text**, while the unfunded portions are in regular black text.)

A pre-submission webinar will be held for all prospective respondents on **September 13** from 1-2pm PDT (see Zoom meeting information on page 4). In addition, a site tour of the Robles Facility and adjacent Meiners Oaks area will take place on **September 14** from 9am to 12noon PDT. *Please contact Anne Duval (page 2) by 5:00pm on **September 8** to confirm your plans for attending one or both events.*

Finally, while much will depend on the SOQ's submitted in response to this RFQ, the process and schedule from that point forward will unfold approximately as follows:

- VCPWA-WP and its partners will evaluate and score all timely-received SOQs by **October 7, 2022**.
- All respondents will be notified regarding the outcome of these evaluations by **October 14**, and virtual interviews with the three most qualified candidates will be conducted during

⁴ Consultant responsibilities will include numerical and potentially physical modeling to advance both alternatives refinement and preliminary design development. Technical assistance from Reclamation will likely focus on physical modeling for preliminary design verification towards the end of Phase 2 and through technical reviews, targeted modeling support, and RWG involvement throughout.



the week of **October 17-21**.

- Post-interview notifications will occur by **October 24**, at which time a request for a Full Proposal - including proposed scope of work, schedule and fee estimate – will be sent to the highest-ranked candidate.
- The Full Proposal will be due by **December 2**, and contract negotiations will commence as soon as possible thereafter, with a **January 10, 2023** deadline for agreement.
- The proposed Phase 2 Design Planning Contract will be subject to approval by the County of Ventura Board of Supervisors on or about **March 7**, with work on the project slated to commence by **mid-March 2023**.

Information on consultant contracting with VCPWA-WP is contained in the Consultant's Guide to Ventura County Procedures available at:

<https://www.vcpublishworks.org/es/contracting/#1531868106725-2552f77d-0184>

If you have any questions, please contact me at (805) 654-2017 or kirk.norman@ventura.org.

Sincerely,

Kirk Norman, P.E.
MDERP Project Manager
Ventura County Public Works Agency – Watershed Protection

Cc: File (Ref: 81915)

RFQ Webinar – September 13, 2022 from 1-2pm Pacific

Join Zoom Meeting

<https://us02web.zoom.us/j/85845392168>

Meeting ID: 858 4539 2168

One tap mobile

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(Chicago)

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Dial by your location

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+1 929 205 6099 US (New York)

+1 301 715 8592 US (Washington DC)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)



ATTACHMENT 1: SUMMARY OF KEY TASKS¹

TASK A – Robles Diversion Phase 2 Improvements: Alternatives Refinement

A-1 Design Criteria: Organize the Project, collect updated information, and define the approach that will be used to develop design criteria and guide subsequent tasks.

- Conduct project meetings, confirm the alternatives to be advanced and any additional studies needed, and develop design criteria in consultation with all Robles Working Group (RWG) stakeholders.
- Manage and administer all subtasks under design contract Task A.

A-2 Alternatives Refinement: Undertake detailed modeling and technical assessment of the alternatives developed under Task A-1 to reach a preferred alternative (or alternatives) that will be carried forward into Tasks B and C.²

- Undertake general refinement and summary of the selected alternatives including updated cost estimates and pros/cons comparisons.
- Develop and utilize an operational model to assess impacts and provide quantitative measures for each alternative
- Undertake 2D hydraulic and sediment transport modeling for the recommended alternatives, and utilize findings to update the operational model to quantify impacts to objectives and long-term maintenance and other costs.
- Prepare a draft Alternatives Analysis Report with findings and recommendations for the preferred alternative (or alternatives) to be carried forward into Tasks B and C.
- Conduct RWG Stakeholder Workshop to build consensus around the draft Alternatives Analysis Report and the selected preferred alternative(s).
- Prepare a Final Alternatives Analysis Report with findings and recommendations for the preferred alternative(s) to be carried forward into Tasks B and C.

TASK B - Robles Diversion Phase 2 Improvements: Concept Design through Preliminary Design

B-1 Robles Feasibility Studies and 10% Concept Design: Undertake additional technical studies in coordination with Tasks A and C to advance the preferred alternative(s) selected to a 10% Concept Design level, then evaluate the feasibility of

¹ Green text indicates the currently-funded portions of the total Phase 2 project.

² Section 5.6 of the ITR Final Report provides suggestions for additional studies that may be needed to advance the recommended alternatives towards a single consensus-based preferred alternative; and it acknowledges that preliminary design plans for more than one alternative may be necessary to reach that consensus.

the project.

B-1.1 Design Contract Management

- Manage and administer all subtasks under design contract Task B.

B-1.2 Feasibility Study Parameters and Technical Studies

- Develop and complete Technical Memoranda summarizing the Feasibility Study parameters that will be used to evaluate the 10% Design Plans.
- Undertake additional technical studies in coordination with Tasks A and C to help foster consensus on a single preferred alternative utilizing operational, numerical (2D), and initial physical modeling).

B-1.3 Draft 10% Design

- Complete Draft 10% Design Plans and a Draft Design Summary Memorandum.

B-1.4 Draft Feasibility Study

- Complete the Draft Feasibility Study Report and incorporate as appendices or by reference all associated Technical Memoranda.

B-1.5 RWG Stakeholder Workshop

- Conduct RWG Stakeholder Workshop to review the Draft 10% Design Plans and Draft Feasibility Study Report and gain consensus.

B-1.6 Final 10% Design and Final Feasibility Study Report

- Complete the Final 10% Design Plans and Final Design Summary Memorandum as part of the Final Feasibility Study Report.

B-2 Robles 30% Preliminary Design: Advance the 10% Concept Design Plans completed under Task B-1 to the 30% Preliminary Design level suitable for physical model design testing and verification by the U.S. Bureau of Reclamation.³

B-2.1 Draft 30% Design

- Develop Draft 30% Design Plans including layouts, grading, profiles, typical cross-sections, civil details for designed features, and locations of proposed borrow areas
- Conduct sediment transport analyses.
- Complete a Draft Basis of Design Report with updated construction cost estimates and construction schedules based on the Draft 30% Design Plans.

B-2.2 RWG Stakeholder Workshop

³ Funding under Task B is not currently available for any portion of Task B-2 or associated subtasks.

- Conduct RWG Stakeholder Workshop to review the Draft 30% Design Plans and Draft Basis of Design Report and gain consensus.

B-2.3 Final 30% Design

- Complete the Final 30% Design Plans and Final Basis of Design Report.
- Ensure that all critical final design information is available to the Bureau of Reclamation's Denver Hydraulics Lab to undertake physical verification modeling of the proposed Robles and associated improvements.

TASK C - Meiners Oaks Flood Protection: Conforming Alternatives through 30% Design⁴

Task C-1 Meiners Oaks Technical Studies and Conforming 10% Concept Design: Undertake additional technical studies related to Meiners Oaks flood protection in coordination with Tasks A and B in order to fully inform those efforts as well as subsequent design development tasks; and complete conforming 10% Concept Design updates and feasibility studies for Meiners Oaks flood protection based on the preferred alternative(s) selected for Robles Facility improvements.

C-1.1 Design Contract Management

- Manage and administer all subtasks under design contract Task C.

C-1.2 Technical Studies to Inform Downstream Flood Risk Implications of Robles Design Alternatives

- Undertake initial technical studies in consultation with RWG stakeholders to assess the downstream flood risk implications of key Robles alternatives under Task A above, and to evaluate potential conforming alternatives for Meiners Oaks flood protection.⁵
- Review available data, identify gaps, and perform additional data collection and analyses through field investigations, geotechnical analysis and other appropriate methods.
- Undertake additional technical studies in coordination with Tasks A and B to help foster consensus on a single preferred alternative utilizing operational, numerical (2D) and initial physical modeling.

C-1.3 Alternatives Analysis and Draft 10% Design

- Develop feasible alternatives (in addition to a no action alternative) to address flood protection deficiencies identified in Subtask C-1.2.
- Prepare concept-level design plans for the most promising feasible alternative(s).
- Prepare preliminary quantities and cost estimates for the concept-level design.
- Complete Draft 10% Design and a Draft Design Summary Memorandum for the most promising alternative(s).

⁴ Funding under Task C is currently limited to the green text portions of subtask C-1.1 and C-1.2. No funding is currently available for subtasks C-1.3 through C-1.6, nor for any portion of Task C-2 (all in regular black text).

C-1.4 Draft Feasibility Study

- Undertake and complete a Draft Feasibility Study Report based on the Draft 10% Design and results of associated technical studies under Task C-1.2 and Task C-1.3.

C-1.5 RWG Stakeholder Workshop

- Conduct RWG Stakeholder Workshop to review the Draft 10% Design and Draft Feasibility Study Report and gain consensus.

C-1.6 Final 10% Design

- Complete Final 10% Design and Design Summary Memorandum as part of the Final Feasibility Study Report.

Task C-2 Meiners Oaks 30% Preliminary Design: Advance the 10% Concept Design completed under Task C-1 to the 30% Preliminary Design level suitable for physical model design testing and verification by the U.S. Bureau of Reclamation.

C-2.1 Draft 30% Design

- Develop the preferred alternative(s) identified in Task C-1 to the 30 percent design level.
- Prepare Draft 30% Design including quantities and cost estimates;
- Prepare a Draft 30% Basis of Design Report and incorporate as appendices or by reference the results of the analyses undertaken in Task C-1.

C-2.2 RWG Stakeholder Workshop

- Conduct RWG Stakeholder Workshop to review the Draft 30% Design Plans and Draft Basis of Design Report and gain consensus.

C-2.3 Final 30% Design

- Complete the Final 30% Design and Final Basis of Design Report.

ATTACHMENT 2: REFERENCES

On file c/o Ventura County Public Works Agency – Watershed Protection. Please email Kirk Norman (Kirk.Norman@ventura.org) for VCPWA-WP share site credentials.

- Matilija Dam Removal 65% Design, Subtask 2.9: 2D Hydraulic and Sediment Transport Modeling in SRH-2D – Draft Final Technical Report, AECOM July 2022
- Robles Diversion Phase 1 Independent Technical Review Final Report – Northwest Hydraulic Consultants, April 2022
- Matilija Dam Removal 65% Design, Subtask 2.3: Hydraulic Studies to Determine 100-Year Surface Water - Technical Report, Stillwater Sciences/AECOM March 2022
- Matilija Dam Removal Draft 65% Design Report, AECOM March 2022
- Robles Diversion Final Phase 1 Report – AECOM, June 2021
- Review of Matilija Dam Technical Studies – ESA, June 2021
- Meiners Oaks Levee Project – Intermediate Design: Basis of Design and Alternatives Report – Tetra Tech, November 2020
- Water Supply Mitigation Alternatives Refinement Report (Draft), AECOM October 2020
- Robles Diversion Dam Modification, 90% Design Documentation Report – TetraTech February 2013 (prepared for USACE and VCPWA-WP)
- Matilija Dam Ecosystem Restoration Feasibility Study - Final Report, U.S. Army Corps of Engineers and VCPWA-WP, September 2004
- Matilija Dam Ecosystem Restoration Project - Final Environmental Impact Statement / Environmental Impact Report, U.S. Army Corps of Engineers and VCPWA-WP, September 2004

<https://matilijadam.org/> (see Documents > Current Project)

- Matilija Dam Removal 65% Design Subtask 2.2: Detailed Sediment Transport Modeling from Matilija Dam Downstream to Ventura River Delta TECHNICAL REPORT • FEBRUARY 2020
- Matilija Dam Removal 65% Design Subtask 2.3: Hydraulic Studies to Determine 100-year Water Surface Elevations TECHNICAL REPORT • FEBRUARY 2020

<https://matilijadam.org/> (see Documents > Federal Project)

- Robles Diversion Dam Modification 30% Design Documentation Report – USACE, July 2009
- Value Engineering Study Summary Report – Robles Diversion Project, Ventura River Basin, CA. June 2007. Project Sponsors: U.S. Army Corps of Engineers Los Angeles District, Ventura County Watershed Protection District.
- Hydrology, Hydraulics and Sediment Studies for the Meiners Oaks and Live Oak Acres Levees – Draft Report, Bureau of Reclamation, July 2007

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- Hydrology, Hydraulics and Sediment Studies for the Matilija Dam Ecosystem Restoration Project, Ventura, CA – Draft Report, Bureau of Reclamation, November 2006

<https://matilijadam.org/> (see Documents > General Reference)

- Geomorphic Setting of the Ventura River Watershed, and History of the Ventura River near the Robles Diversion, California, Cluer 2010

<https://matilijadam.org/> (see Documents > Archive)

- Robles Diversion Dam High Flow and Sediment Bypass Structure, Ventura, California - Physical Model Study BOR Hydraulic Laboratory Report HL-2008-7 September 2008
- Two-Dimensional Numerical Model Study of Sediment Movement at the Robles Diversion Dam on the Ventura River, California, Technical Report No. SRH-2008-7 U.S. Department of the Interior Bureau of Reclamation Technical Service Center Denver, Colorado April, 2008

<https://www.casitaswater.org/>

- Water Efficiency and Allocation Program (WEAP) – Casitas Municipal Water District, May 2021
- 2020 Urban Water Management Plan (UWMP – Final) – Casitas Municipal Water District, Adopted by the Board of Directors June 23, 2021
- Comprehensive Water Resources Plan (CWRP) - Casitas Municipal Water District, June 2020 DRAFT (copy on file c/o VCPWA-WP)
- Robles Diversion Fish Screen Prototype Evaluation Plan, Casitas Municipal Water District 2019
- Annual Robles Fish Passage Progress Reports – Casitas Municipal Water District, 2005-2018