TEHAMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT



Tehama County Board of Supervisors Chambers 727 Oak Street, Red Bluff, CA 96080 https://tehamacounty.legistar.com/Calendar.aspx

AGENDA FOR MONDAY, MARCH 10, 2025

2/24 meeting moved to 3/10

Call to Order / Pledge of Allegiance / Introductions

10:00 AM

Chairperson: Matt Hansen Vice-Chairperson: Pati Nolen Directors: Robert Burroughs, Greg Jones, Tom Walker

Justin Jenson, Deputy Director of Public Works-Water Resources

Public Comment

This time is set aside for citizens to address this Board on any item of interest to the public that is within the subject matter jurisdiction of this Board provided the matter is not on the agenda or pending before this Board. Each agenda item will have an opportunity for public comment at the time the item is called. Persons wishing to provide public comment are asked to address the Board from the podium. The Chair reserves the right to limit each speaker to three (3) minutes. Disclosure of the speaker's identity is purely voluntary during the public comment period.

For audio and real-time commenting via phone:

(530) 212-8376, conference code 142001. Press 5* on your phone keypad to raise your hand to comment.

For live audio of the meeting:

Go to: https://tehamacounty.legistar.com/Calendar.aspx

- 1. Presentation Department of Water Resources Land and Water Use Northern Region Office
- 2. APPROVAL OF MINUTES Deputy Director Justin Jenson

25-0331

- a) Waive the reading and approve the minutes of the regular meeting held 1/28/2025
- 3. APPROVAL OF MINUTES Deputy Director Justin Jenson

<u>25-0330</u>

- a) Waive the reading and approve the minutes of the special meeting held 2/6/2025
- 4. APPROVAL OF MINUTES Deputy Director Justin Jenson

25-0329

- a) Waive the reading and approve the minutes of the regular meeting held 11/18/2024
- 5. East Side Flooding Issues

25-0360

Presentation

6. GSA Approved Groundwater Sustainability Plans - Review of

25-0358

Comments

Click here to enter Requested Action(s).

7. Resolution No. 2025-01

25-0357

Approve and sign Resolution No. 2025-01

Board Matters

Adjourn

The County of Tehama does not discriminate on the basis of disability in admission to, access to, or operation of its buildings, facilities, programs, services, or activities. Questions, complaints, or requests for additional information regarding the Americans with Disabilities Act (ADA) may be forwarded to the County's ADA Coordinator: Tom Provine, County of Tehama, 727 Oak St., Red Bluff, CA 96080, Phone: (530) 527-4655. Individuals with disabilities who need auxiliary aids and/or services or other accommodations for effective communication in the County's programs and services are invited to make their needs and preferences known to the affected department or the ADA Coordinator. For aids or services needed for effective communication during Tehama County Flood Control & Water Conservation District meetings, please contact the ADA Coordinator prior to the day of the meeting. This notice is available in accessible alternate formats from the affected department or the ADA Coordinator.



Agenda Request Form

File #: 25-0331 Agenda Date: 3/10/2025 Agenda #: 2.

APPROVAL OF MINUTES - Deputy Director Justin Jenson

Requested Action(s)

a) Waive the reading and approve the minutes of the regular meeting held 1/28/2025

Financial Impact:

None

Background Information:



January 28, 2025 Tehama County Board of Supervisors Convene as Board of Directors **Special Item Minutes**

Chairman Matt Hansen recessed as the Tehama County Board of Supervisors and convened as Flood Control and Water Conservation District at minute marker 55:09.

Present:

Director Robert Burroughs, Director Tom Walker, Director Pati Nolen,

Director Matt Hansen, Director Greg Jones

Absent:

11. Approval of minutes

25-0095

Chairman Matt Hansen requests to waive the reading and approve the minutes of the regular meeting held on 1/7/25.

RESULT: APPROVED MOVER: Pati Nolen

SECONDER: Tom Walker

AYES: Burroughs, Walker, Nolen, Hansen, Jones

ABSENT:

Tehama County Flood Control and Water Conservation 12. **District - Deputy Director Justin Jenson**

24-2320

Chairmen Hansen states that there will be one director appointment and one board confirmation to fill the vacancy for District 1 representative, with the said term expiring 1/8/29. Deputy Director Justin Jenson clarifies the process stating that we take these one at a time for the purpose of each individual being able to appoint their member. Jenson states that the applications sent are to help appoint whomever the Directors wish to serve on the commission to represent their district.

a) Groundwater Commission – Chairman Hansen states that they are looking for an appointment from District 1. Interested persons are Bart Fleharty, Liz Merry, Jenny Alexander and Daniel King. Director Burroughs states he remembers the conversation about bringing new blood in and changing things up, his recommendation is Liz Merry. Groundwater Commissioner for District 1 representative Liz Merry, appointed by Director Rob Burroughs.

RESULT: APPROVED

MOVER: Rob Burroughs SECONDER: Pati Nolen

AYES: Jones, Burroughs, Walker, Nolen, Hansen

ABSENT:

b) Groundwater Commission – Chairman Hansen states to fill the vacancy for district 2 with said term expiring 1/8/29. Interested persons Adam Englehardt, Jenny Alexander, Liz Merry which cannot be on here any longer, and Daniel King. Director Walker moves to appoint Adam Englehardt.

RESULT: APPROVED

MOVER: Rob Burroughs SECONDER: Pati Nolen

AYES: Jones, Burroughs, Walker, Nolen, Hansen

ABSENT:

c) Groundwater Commission – Chairmen Hansen states to fill the vacancy for District 5 with said term expiring 1/8/29. Interested persons Jenny Alexander, Dave Lester, and Daniel King. Director Jones moves to appoint Dave Lester.

RESULT: APPROVED MOVER: Greg Jones

SECONDER: Pati Nolen

AYES: Jones, Burroughs, Walker, Nolen, Hansen

ABSENT:

Chairman Matt Hansen asks Deputy Director Jenson when the next the next Tehama County Flood Control meeting is going to be held. Jenson states that our next regular meeting is on a holiday, so it will be the Monday following which is February 24th at 10am. Hansen says due to the long span in meetings we have come up with quite a laundry list of questions, you may have seen that the Farm Bureau submitted among some other questions submitted in regards to what is going on. Hansen thinks that the lag in meetings has caused some concern and asks to have the questions looked over and brought to the next Flood Control meeting.

Adjourn as the Flood Control Water Conservation District to reconvene as the Tehama County Board of Supervisors.

APPROVED	
Flood Control and Water	Chairperson Conservation District Board of Directors
by	
	Deputy

7

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Agenda Request Form

File #: 25-0330 Agenda Date: 3/10/2025 Agenda #: 3.

APPROVAL OF MINUTES - Deputy Director Justin Jenson

Requested Action(s)

a) Waive the reading and approve the minutes of the special meeting held 2/6/2025

Financial Impact:

None

Background Information:

SPECIAL MEETING



Tehama County Thursday, February 6, 2025 1:30 PM Flood Control and Water Conservation District Meeting Minutes

Tehama County Board of Supervisors
Chambers
727 Oak Street, Red Bluff, CA 96080
https://tehamacounty.legistar.com/Cal
endar.aspx

1:30pm

Chairperson: Matt Hansen Vice Chairperson: Pati Nolen Directors: Tom Walker, Robert Burroughs, Greg Jones

Jim Simon, Executive Director; Justin Jenson, Deputy Director of Public Works-Water Resources

Director Hansen presided. Present in the chambers were Deputy Director Justin Jenson, Administrative Assistant Lena Sequeira, County Counsel Daniel Klaisner, and Transportation Planner Aide Cole Houghtby, and Tom Provine.

CLOSED SESSION

Public Comment

Caller of the public expressed concern not to appeal the case. Let us know that people could not get into the phones.

Liz Merry called in saying the wrong code was being used for the call in. Expressed that she does not want the case appealed.

County Counsel Daniel let the callers know we need to switch over to the correct line.

1:40 P.M. RECESS

1:45 P.M. RECONVENE

Matt Hansen stated the correct call in number and conference code is: 530-212-8376 Conference Code: 142001. We will now open back up to public comment.

SPECIAL MEETING

Caller ending in 3304 stated that citizens do not want this appealed.

Caller ending in 4848, Martha does not want the item appealed. Stated it is harmful in many ways.

1. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (Paragraph (1) of subdivision (d) of 54956.9) (Garst v. Tehama County Flood Control and Water Conservation District, Tehama County Superior Court Case No. 23CI-000079)

1:47 P.M. RECESS

3:47 P.M. RECONVENE

REPORTABLE ACTIONS FROM CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION (Paragraph (1) of subdivision (d) of 54956.9) (Garst v. Tehama County Flood Control and Water Conservation District, Tehama County Superior Court Case No. 23CI-000079)

Report Out: Board of Directors for the Flood Control and Water Conservation District which is the groundwater sustainability agency for the county of Tehama will not withdraw its support for the appeal.

Board Matters

No board matters

Public Comment

Adjourn

3:49 P.M. There being no further business before the Board, the meeting was adjourned.

SPECIAL MEETING

APPROVED	
Chairperson	
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Flood Control and W Board of Directors	/ater Conservation District
by	Donutu



Agenda Request Form

File #: 25-0329 Agenda Date: 3/10/2025 Agenda #: 4.

APPROVAL OF MINUTES - Deputy Director Justin Jenson

Requested Action(s)

a) Waive the reading and approve the minutes of the regular meeting held 11/18/2024

Financial Impact:

None

Background Information:



Tehama County Monday, November 18, 2024 10:00 AM Flood Control and Water Conservation District Meeting Minutes

Tehama County Board of Supervisors
Chambers
727 Oak Street, Red Bluff, CA 96080
https://tehamacounty.legistar.com/Cal
endar.aspx
Board Chambers

1. Call to Order / Pledge of Allegiance / Introductions

Chairman Leach called the meeting to order at 10:05 and went into recess due to technical difficulties.

The meeting reconvened at 10:25 AM.

Present

Director Bill Moule, Vice Chair Matt Hansen, and Chairperson John

Leach

ABSENT

Director Candy Carlson, and Director Pati Nolen

2. Public Comment

A caller commented on the formatting and numbering issue on the agenda.

A caller stated they are surprised these items are being discussed when the full Board is not present and thinks this meeting should be rescheduled.

Michael Ward discussed the demand management working group recommendations to be presented to the Corning Subbasin Advisory Board in December.

Deputy Director Jenson stated he does not have significant items for the December Board of Directors meeting and recommended cancelling the meeting. The Board gave consensus to cancel the December meeting.

3. MOU for California Olive Ranch Access to Surface Water Project 24-2068

Deputy Director Jenson stated the MOU was developed by the consultant to get California Olive Ranch access to surface water. Deputy Director Jenson stated this does not include construction activities, which will be brought forward as a separate agenda item.

Deputy Director Jenson clarified this item was part of the grant application and specifically funded by the SGMA implementation grant.

Michael Ward congratulated the county and staff on getting this item in front of the Board. Mr.

Ward stated item should be coming to the Commission first as previously requested.

Director Hansen stated it is exciting work is moving forward and the public will be happy to see progress being made.

RESULT: APPROVE
MOVER: Bill Moule
SECONDER: Matt Hansen

AYES: Director Moule, Vice Chair Hansen, and Chairperson Leach

ABSENT: Director Carlson, and Director Nolen

4. Well Registration Mailer

24-2071

Deputy Director Jenson presented the Well Registration Program FAQ sheet, noting staff is requesting feedback on the information presented before it is distributed.

The Board and staff discussed clarifying language to be included in the FAQ sheet as no final decisions have been made for long-term funding.

Deputy Director Jenson stated staff is working with the Assessor and Tax Collector to develop a better database and moving away from utilizing databases from other agencies.

Director Hansen proposed including language that non-compliance may disqualify from future well mitigation assistance and programs.

5. Corning Subbasin Open House 11/20/2024 at 6pm

24-2069

Deputy Director Jenson announced the Corning Subbasin open house scheduled for November 20, 2024 at 6:00 PM. The open house will give landowners an opportunity to discuss the community domestic well monitoring program.

Deputy Director Jenson provided an overview of the Antelope Subbasin open house, noting outreach events continue to have low participation.

6 Board Matters

Director Hansen requested standing agenda items for flood control updates, well mitigation, and demand management.

7. Adjourn

APPROVED
Chairperson Flood Control and Water Conservation District Board of Directors
by Deputy



Agenda Request Form

File #: 25-0360 **Agenda Date:** 3/10/2025 **Agenda #:** 5.

East Side Flooding Issues

Requested Action(s)

Presentation

Financial Impact:

Background Information:



Agenda Request Form

File #: 25-0358 **Agenda Date:** 3/10/2025 **Agenda #:** 6.

GSA Approved Groundwater Sustainability Plans - Review of Comments

Requested Action(s)

Click here to enter Requested Action(s).

Financial Impact:

Click here to enter Financial Impact.

Background Information:

The Department of Water Resources issued incomplete determinations on October 26, 2023. The GSA resubmitted the GSP to the Department on April 22, 2024, DWR has approved those resubmittals with conditions.

- Sustainable management criteria for the chronic lowering of groundwater levels (RB,LM,Ant,C)
 - How will dry wells be tracked? Process for public to report dry well. Provide public records of reported dry wells in annual and periodic evals
 - Provide the criteria used to select tessellation polygons for its selection of undesirable results.353 The GSA should also provide an explanation for how each tessellation polygon is representative of beneficial uses and users in the area, specifically how many wells are located within each tessellation hexagon.
 - Provide criteria and process of how focus area was chosen to establish min thresholds. Should consider the potential effects on beneficial uses and users.
 Explanation of why some reported dry wells are not included in focus areas.
- 2. Establish date for when demand management program will be implemented. Provide info that ensures GSA implements are feasible and will not create undesirable results. Report effectiveness and progress of management program in annual and periodic report (RB ONLY)
- 3. Hydrogeologic Conceptual Model (RB,LM,ANT)
 - Identify 2 aquifers, identify how interconnected they are, and how managing them separate improves sustainability
 - Steps to fill data before next eval (with a focus on the lack of understanding of the Lower Aquifer, including its formation thicknesses, defining hydraulic properties, and interconnectivity with the Upper Aquifer)
- 4. Update water budget. Specific consideration of the effect of RB Arch on flows to RB Subbasin to bowman subbasin (RB ONLY)
- Sustainable management criteria for degraded water quality (RB,LM,Ant,C)
 - Revise to include undesirable results
 - Revise description so that ground water conditions are considered in the assessment of subbasin
 - Coordinate with all water entities to develop process for monitoring if management and extraction is causing degraded water quality in subbasin

- 6. Sustainable management criteria for land subsidence (RB,LM,Ant)
 - Evaluate InSAR data
 - Impacts to beneficial use of groundwater. Quantify min threshold that represent an undesirable result
 - Set an annual rate and cumulative total amount of subsidence that will lead to undesirable results
- 7. Sustainably manage depletions of interconnected surface water (RB,LM,Ant)
 - Estimate the quantity and timing of depletions of interconnected surface water systems
- 8. Related to the monitoring networks (RB,LM,Ant)
 - Monitor subbasin to quantify water budget
 - Expand the degraded water quality monitoring network's spatial extent for the lower principal aquifer
 - Update the land subsidence monitoring network

Bowman ONLY

- 1. Explain the inconsistency between the depicted west-east groundwater flow direction based on groundwater elevation contours and the north-south flow direction based on the water budgets. Explain why significant subsurface flow
- 2. Revise the sustainable management criteria for groundwater levels
 - Refine the description of undesirable results to describe the significant and unreasonable conditions GSA is mamanging the subbasin to avoid
 - Department staff recommend the minimum thresholds be revised to be consistent with the GSP Regulations. Specifically quantify the number of wells (ALL)
 - Demonstrate that the minimum thresholds for groundwater levels will not interfere with other sustainability indicators causing undesirable results.
- 3. Revise the definition of undesirable results of groundwater quality
- 4. Identify critical infrastructure. Expand the land subsidence monitoring
- 5. Utilizing the interconnected surface water guidance issued by the Department to evaluate the rate, timing, and volume of depletions of interconnected surface water caused by groundwater extractions. Establish sustainable management criteria and management

Corning ONLY

1. Address the following:

- Provide updates in annual reports and future periodic evaluations of overdraft estimates, actual benefits from all projects, and groundwater conditions in the Subbasin
- Develop triggers for when the different components of the phased approach of the demand management program will be implemented
- 2. Set an annual rate and cumulative total amount of subsidence that will lead to undesirable results. Establish min thresholds and undesirable results definitions for land subsidence that consider impacts to beneficial uses and users of groundwater, land uses, and property interests

3. Address the following

- Estimate the quantity and timing of depletions of interconnected surface water systems
- Revise sustainable management criteria with the removal of the exemption for undesirable results in unanticipated future droughts and unanticipated climatic conditions
- Consider utilizing the interconnected surface water guidance to establish quantifiable minimum thresholds, measurable objectives, and management actions
- Fill data gaps, collect additional monitoring data, and implement the current strategy to manage depletions of interconnected surface water and define segments of interconnectivity and timing
- collaborat with local, state, and federal regulatory agencies as well as interested parties to better understand the full suite of beneficial uses and users that may be impacted by pumping induced surface water depletion within the GSAs' jurisdictional area
- 4. Fill data gaps in the groundwater level monitoring network such as well construction information and spatial gaps near Thomes Creek



Agenda Request Form

File #: 25-0357 Agenda Date: 3/10/2025 Agenda #: 7.

Resolution No. 2025-01

Requested Action(s)

Approve and sign Resolution No. 2025-01

Financial Impact:

Receive up to \$615,000 for the installation and maintenance of streamgages. May have small ongoing costs for future maintenance, totals unknown.

Background Information:

Applied for and received grant funding through CalSi to reinstate streamgages. This will allow us to monitor stream elevations and designate flood conditions in the future.

Resolution No. 2025-01

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TEHAMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT AUTHORIZING THE FUNDING REQUEST, ACCEPTANCE, AND EXECUTION FOR STREAM GAGE REACTIVATION PROJECT.

WHEREAS, the Board of Directors of the Tehama County Flood Control And Water Conservation District (the "Board") proposes to implement the Tehama County Flood Control And Water Conservation District Stream Gage Reactivation Project (the "Stream Gage Reactivation Project"); and

WHEREAS, the Stream Gage Reactivation Project is being implemented to support and improve the stream gage network within the County of Tehama, State of California and is intended to: (1) provide publicly available data on natural surface waters; and (2) provide sound data that accurately informs water management decisions; and

WHERAS, the Board has the legal authority and is authorized to enter into a funding agreement with the State of California; and

WHEREAS, the Board intends to apply for funding from the California Department of Water Resources for the Stream Gage Reactivation Project.

NOW, THEREFORE, **BE IT RESOLVED** by the Board of the Tehama County Flood Control And Water Conservation District as follows:

- 1. That pursuant and subject to all of the terms and provisions of Budget Act of 2023, as amended (Stats. 2022, ch. 44, § 25), the Executive Director of the Tehama County Flood Control And Water Conservation District, or designee, is hereby authorized and directed to prepare and file a questionnaire for funding with the Department of Water Resources, and take such other actions as necessary or appropriate to obtain funding.
- 2. The Executive Director of the Tehama County Flood Control And Water Conservation District, or designee, is hereby authorized and directed to execute the funding agreement with the Department of Water Resources and any amendments thereto.
- The Executive Director of the Tehama County Flood Control And Water
 Conservation District, or designee, is hereby authorized to utilize electronic
 signatures to execute agreements with the Department of Water Resources and
 any amendments thereto.
- 4. The Executive Director of the Tehama County Flood Control And Water Conservation District, or designee, is hereby authorized and directed to submit any required documents, invoices, and reports required to obtain funding.

This resolution shall become operative upon adoption and remain in full force and effect until modified by a subsequent Resolution adopted by the Board.

The foregoing Resolution			
Director o	n	and adopted b	y the following vote:
AYES:			
NOES:			
ABSENT OR NOT VOTIN	IG:		
STATE OF CALIFORNIA)		
)		
COUNTY OF TEHAMA)		
	,		
I, SEAN HOUGHTBY, Co Tehama County Flood Co certify the above and fore adopted by said Board of	ntrol and Co going to be a	nservation District, St a full, true and correct	t copy of a resolution
Dated:			
	Cou	Clerk of the Boar	Y, County Clerk and ex-officion of of Directors of the Tehama, of Water Conservation District, State of California
		By:	
		Ī	Deputy

EXHIBIT A

SCOPE OF WORK

I. PURPOSE

This Agreement is between the California Department of Water Resources (DWR) and the Tehama County Flood Control and Water Conservation District (District) (collectively known as the "Parties"). The primary purpose of the Agreement is for DWR to provide financial funding to District to improve stream gage infrastructure and data availability as part of the Stream Gage Improvement Program (CalSIP). Through the CalSIP program, DWR is actively improving California's stream gage network by funding public agencies to upgrade existing gages, reactivate historical gages, or install new gages on natural waterways across the state.

II. BACKGROUND

Access to reliable, real-time information about the conditions and amount of water flowing into our rivers and streams is critical to better manage water resources for public safety, water supply and the conservation of freshwater species. To help better understand water resources statewide, DWR is seeking to fund public entities to improve stream gaging. Through CalSIP, public agencies can receive funding to upgrade, reactivate, or install new surface water gaging stations.

III. LOCATION OF SERVICES

The stream gage locations and descriptions are provided in the table below. (Location(s) to be verified & provided by agency (incl. coordinates). Delete this highlighted text after).

Gage Number	Description	Latitude	Longitude
1	COTTONWOOD C NR OLINDA		
	CA		

Exhibit A

Page 2 of 8

2	RED BANK C A RAWSON RD BR	
	NR RED BLUFF CA	
3	MILL C NR MINERAL CA	
4	REEDS CREEK AT WILDER ROAD	
	NEAR RED BLUFF	

IV. CONTRACT MANAGERS

The Contract Managers during the term of this agreement will be:

DEPARTM	ENT OF WATER RESOURCES	TEHAMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
<mark>Name:</mark>	TBD	Name:	Justin Jenson
<mark>Address:</mark>		Address:	1509 Schwab St.
			Red Bluff, CA 96080
<mark>Phone:</mark>		Phone:	530-690-0700
<mark>Email:</mark>		Email:	jjenson@tcpw.ca.gov
		Name:	Evan Davis
		Address:	500 First St.
			Woodland, CA 95695
		Phone:	530-661-0109
		Email:	edavis@lsce.com

The Contract Managers may be changed by written notice to the other party

V. RESPONSIBILITIES

Under this Agreement, District, will perform the activities described in this scope of work as summarized below in section A.

A. Summary

The scope of work for this contract organizes District responsibilities into the following work categories:

B. Administration – Invoices and Reporting

This task includes project administration, invoicing, and reporting.

Project administration includes administration of the Project including overseeing the budget and schedule, installation management and inspection, making payments to engineers and contractors after inspections and/or approval of work, and other activities related to the completion of the Project. Includes attending weekly/monthly meetings (as needed) with the DWR Contract Manager.

Invoicing includes preparing and submitting invoices and appropriate backup documentation to the DWR Contract Manager describing the work completed and listing the costs incurred during the billing cycle.

Reporting includes preparing and submitting to DWR progress reports monthly.

Deliverables: Invoices and supporting documents, Monthly Progress Reports, Project Completion Certification.

C. Reactivation Stream Gage:

1. Planning - Site Confirmation and Permitting

Verify the historic site location using available records, physical inspection, and site mapping. This involves reviewing historical data, consulting with local experts, and physically inspecting the site to ensure accuracy. Historical data review will include checking old records, maps, and photographs to determine the exact location. Physical inspection will involve visiting the site, taking GPS coordinates, and comparing them with historical data. This task is critical to ensure that the reactivation occurs at the correct location. Perform all biological, cultural, and other resource field investigations to support the application and development of needed regulatory permits. Identify the permits, studies, and reports needed for each site. Commence permitting and fieldwork as appropriate. Responsible for all fieldwork, permit applications, reports, and all elements to secure permits for installation and continued measurements and maintenance of the gage. Permits may include, but are not limited to 404, 401, potentially CVFPB for those in the floodway encroachment (for installation on bridges), and cultural resources (if extraordinary excavation is needed). Responsible for CEQA Requirements and compliance as applicable.

Deliverables: Verified Site Selection Report, Property Access agreements (as needed), Final CEQA/Permit Approval Documentation.

2. Installation - Equipment Installation

Obtain, install, and make operational new stream gage equipment, including sensors, data loggers, power supply, and telemetry systems. This includes selecting appropriate equipment, ensuring compatibility with existing infrastructure, and installing it according to manufacturer specifications and industry standards. The equipment installation process will involve setting up data loggers, sensors, and telemetry systems in secure and weatherproof housing.

Installation will ensure that all components are properly connected and configured for optimal performance.

Additionally, provide equipment, labor, and materials to install equipment on-site, perform initial flow measurement, and other applicable calibration and equipment testing to transmit data to CDEC online data portal. Following initial approvals, obtaining applicable permits, real property rights, and NESDIS(GOES) IDs, procure applicable equipment, tools, and incidentals to install gage infrastructure, power supply, and sensors, adding surveyed reference gages (outside staff and wire weight) and a minimum of two nearby survey benchmark monuments with established vertical datum (NAVD88). Track equipment purchased and installed for the site. Telemetry configuration and channels for the site shall be documented. Install gage equipment in conjunction with permits and real property rights and follow best practices.

Deliverables: Installed and operational stream gage equipment with documentation of the equipment installed.

Installation - Instrument and Telemetry Setup

Set up and calibrate instruments and telemetry systems, ensuring data transmission to [specify data portal e.g., CDEC]. This includes configuring data loggers, calibrating sensors, and testing telemetry systems to ensure reliable data transmission. This task will be completed within 90 days from project commencement at [Specify location]. Calibration of instruments will be done according to the manufacturer's specifications. Telemetry systems will be configured to transmit data in real-time to the specified data portal.

Deliverables: Calibration and setup report detailing the configuration and calibration of instruments and telemetry systems.

3. Operations and Maintenance – Flow Measurements

Conduct initial flow measurements and establish a rating curve. Perform ongoing measurements as required. This involves conducting flow measurements using standard methods, analyzing data to establish a rating curve, and scheduling regular measurements for ongoing data collection to refine and develop the stage-discharge rating curve. Initial measurements will be conducted as soon as

reasonably possible (order of weeks); ongoing measurements will be conducted as needed to capture flows at different depths throughout the water year, at extreme events as possible, and to confirm prior measurements. Flow measurements will be conducted using standard techniques such as the velocity-area method or the use of flow meters. Data collected will be analyzed to develop a rating curve, which will be used to convert water levels to flow rates. Regular measurements will ensure that the rating curve remains accurate over time.

Deliverables: Initial flow measurement data and ongoing data reports, including analysis and interpretation. Incorporate measurement data, field records, and curve calculations as part of annual report for data validation.

Operation and Maintenance

Operate and maintain the stream gage site to ensure continuous data collection and equipment functionality. This includes routine inspections, calibration checks, and necessary repairs to equipment. Implement protocols for data quality assurance and troubleshooting any issues that may arise with the equipment or data transmission systems. Regularly update and maintain the equipment to adhere to industry standards and manufacturer recommendations.

To provide quality control and quality assurance to the program, each gage will be required to submit annually, to DWR, for review and approval of the data, the rating curve adjustments, all field observations, and all operational information.

Deliverables: All station records for stage and flow measurements will be processed and submitted by December 31 of each year for the prior water year (October 1 through September 30). This process is considered the annual "certification" process that signifies the applicable prior-year data is valid and referenced to reflect all adjustments and corrections are correct. A final certification package needs to be provided as a hard copy and electronic copy and include the following elements:

- **A.** Site summary report.
- **B.** Field notes from all site visits and measurements.

- **C.** Flow measurement report summary to summarize when, how, and results of flow measurements.
- **D.** Certification (signature) by a qualified and experienced reviewer (someone who has completed a USGS, or similar, course; or professional licensed civil engineer).
- E. Flow measurement sheets.
- **F.** Rating table documentation, PDF or Excel spreadsheet.
- **G.** Rating table and discrete flow measurement plots.
- **H.** Primary computations.
- I. Mean daily gage height summary.
- J. Mean daily flow summary.
- **K.** Mean daily temperature summary.
- L. Mean daily gage height, water year plots.
- M. Mean daily gage flow, water year plots.
- **N.** Mean daily gage water temperature, water year plots.

VI. INVOICING AND PROGRESS REPORTS

Monthly Invoices and Progress Reports will be required. All invoices and progress reports are required to be completed on provided templates. Please review acceptable and eligible costs before starting work and submitting invoices.

VII. BUDGET AND TIMELINE

Contract #

Exhibit A

Page 8 of 8

All gages must be fully operational by October 1, 2026 and all expenditures invoiced for reimbursement by March 30, 2027. Final invoices must be submitted by April 15th, 2027.

DWR has established a total budget of \$615,000 for this project (Exhibit B).