



## TRIBAL INFORMATIONAL MEETING (IM) #3

**Date:** January 10, 2023

**Time:** 2:00 p.m. – 3:30 p.m.

**Meeting Location:** Virtual Zoom Meeting at: <https://esassoc.zoom.us/j/87240620473> CASP IM#2  
[Zoom Link](#)

Phone: +1 646-518-9805 or +1 470-250-9358

Meeting ID: 263 041 5587 Passcode: 785598

**Meeting Goal:** To provide information update regarding the status of the California Aqueduct Subsidence and Groundwater Monitoring Program.

### Past Meetings:

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July 15, 2020	Informational Meeting #1 – Picayune Rancheria of Chukchansi Indians, Santa Rosa Rancheria Tachi-Yokut Tribe, Tule River Indian Tribe
August 20, 2021	Information Meeting #2 - Postponed
January 12, 2022	Information Meeting #2 – Santa Rosa Rancheria Tachi-Yokut Tribe

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### CASP Tribal Engagement Website

<https://water.ca.gov/Programs/Engineering-And-Construction/Subsidence/TribalEngagement>

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#### Tribal Participants

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- **Picayune Rancheria of Chukchansi Indians**
  - Marcos Alcantar, Treasurer
- **Santa Rosa Rancheria Tachi-Yokut Tribe**
  - Samantha McCarthy, Cultural Specialist 2
  - Nichole Escalon, Cultural Specialist 1

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#### Department of Water Resources (DWR) Participants

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- **Mariko Falke, Executive Tribal Liaison**
  - **Jim Lopes, Deputy Program Manager**
  - **Monica Nolte, Cultural Lead**
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# California Aqueduct Subsidence Program (CASP)



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- **Marea McCann, Environmental Job Manager**
  - **Holly Nichols, Engineering Geologist, Geology Lead**
  - **Chad Carlson, Engineering Geologist**
  - **Candace Ehringer, Consultant Cultural Support**
  - **Kristina Lecina, Consultant Environmental Project Management Support**
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## NOTES

1. Welcome – Marea welcomed Tribal representatives. Representatives from Santa Rosa Rancheria Tachi-Yokut presented themselves, followed by DWR representatives.
2. Meeting Purpose – DWR clarified that this is an information meeting (IM); Mariko presented a list of Consultation Policies. Informational Meetings are intended to provide project background information to the Tribal representatives to take back to leadership to enable Tribes to make informed decisions on their interest in consultation (under AB52) and monitoring. DWR also highlighted the non-AB 52 policies.
3. Prior Engagement –
  - a. Embankment Raise – main project previously consulted on
    - i. July 15, 2020 – IM #1 - At that time, DWR thought they would have CEQA/NEPA by now. However, the schedule has changed due to new requirements.
    - ii. January 12, 2022 – IM #2 – DWR informed Santa Rosa Rancheria Tachi-Yokut Tribe that US Bureau of Reclamation (Reclamation) presented a new federal feasibility requirement. The original schedule for the Embankment Raise projects was suspended and



DWR needed to work with Reclamation to identify requirements and impact to the schedule.

- b. Milepost (MP) 208 Groundwater (GW) Monitoring Station – Pilot study of larger GW and Subsidence Monitoring Program.
    - i. Sept 22, 2022 - Consultation Meeting (CM) #1
  - c. Embankment Raise Project Description - San Joaquin Valley in Fresno and Kern Counties. APE 5,595 acres; 41-miles of embankment raises; Joint use facility (DWR-USBR)
4. What has happened Since? Newly identified requirements.
- a. DWR required to comply with the federal feasibility process called Extraordinary Maintenance Justification (XMJ). Relatively new process. NEPA Record of Decision (ROD) is required to complete the study. The process is intended to ensure that the selected alternative creates the



greatest net benefit to the public, users of the water, and those paying for the water.

- b. Embankment Raise Project is now one major alternative to be considered and analyzed within the XMJ report.
  - c. Anticipate CEQA/NEPA NOI/NOP to be filed in 2025.
  - d. A timeline was presented:
    - i. Currently (2023) - kicking off XMJ Study
    - ii. 2024 - AB 52 Consultation
    - iii. 2025 - NEPA/CEQA
    - iv. 2027 - ROD
    - v. 2028 - Appropriations to fund federal portion of improvements
    - vi. 2029 - Construction
  - e. DWR would welcome and appreciate Tribal input and comment to the process.
5. Interim Actions – These are necessary to continue to move water in a safe manner until a solution is implemented.
- a. Raising of concrete liners to the top of existing embankments (no embankment raises) at known choke points. This is a temporary solution only, until a final solution is implemented.
    - i. DWR clarified that they will be consulting with Tribes on concrete liner raises.
  - b. Non-structural Actions to slow or eliminate subsidence.



- i. Reviewing data, along with a subsidence forecast model to better predict timing and impact of subsidence. Trying to gain a better understanding of the science behind the dropping ground levels.
- ii. DWR will work with local farmers and water users to limit subsidence.
- iii. Subsidence and GW Monitoring Program – The installation of wells, extensometers and continuous GPS monitoring stations along the aqueduct. Continuation of work at MP 208 (Pilot Study).
  1. Goal – to fill in data gaps along aqueduct.
    - a. Measure ground surface elevations at higher frequency. Current program is based on manual measurements of ground levels at survey monuments.
    - b. Measure groundwater elevations at various levels in the aquifer (multi-completion wells).
    - c. Measure ground water chemistry of aquifers.
    - d. Measure aquifer compaction.
    - e. Data will be shared in public sphere via SGMA Data Viewer.
  2. Approach – Evaluate and compile available data (satellite; survey; extensometers; GW monitoring wells; continuous



GPS). DWR will compare historic locations of data collection with new proposed sites to reduce duplications.

### 3. Status

- a. Based on mapping of ground elevation over time (1960s vs 2002), Fresno County has experienced more subsidence than Kings and Kern Counties.
- b. MP 208 – Results of pilot study were shown: 3 to 3.5 feet of subsidence since construction. Plan to install continuous GPS station in 2023 for daily GW levels. Installing Extensometer in 2023 to measure changes in the compression of soils. Also working with USGS to measure aquifer compaction in different zones.
- c. Next wells to install are at MPs 167, 161, and 128

4. Next Steps – Consult with Tribal governments and adjust locations if needed. Consultation request letters are to be distributed in the next month.

5. Santa Rosa Rancheria Tachi-Yokut Tribe clarified that the Tribe would like to monitor but would need to do it under a sub-consultant due to concerns about sovereignty. Mariko suggested she would be happy to revisit DWR's PEA process with the Tribe, but in the meantime DWR will proceed with monitoring as a sub under ESA.

### 6. Monitoring Station Installation

- a. Most ground disturbance will be within a few feet of the drilling hole itself, but a lot of equipment is required resulting in soil disturbance at the ground surface. The depths to natural "in-place" soils varies, and is typically 10-20 feet below the surface. Examples were shown. These included a photo of



equipment at MP 208 and a photo of various drill bit sizes.

- b. Drilling mud will be contained using either shallow holes ('mud' pits) or mud pans.
- c. Surface and Infrastructure Completions –
  - i. Photos of completed well heads, a protective structure for extensometer and a continuous GPS station w/ fencing were shown to demonstrate the ground surface and

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infrastructure anticipated for each GW monitoring site at completion.

- ii. Limited site activity is anticipated once installed.
- iii. DWR clarified that the shallow well is separate from the multi-completion wells for monitoring GW.

## 6. Key Takeaways –

- a. The Subsidence and GW Monitoring Program will occur over several years. DWR is pleased that Santa Rosa Rancheria Tachi Yokut Tribe has confirmed an interest to monitor during this meeting.
- b. DWR will reach out officially for consultation for the GW monitoring program in the next month or two and in late 2024 for the embankment raise projects.

## 7. Questions / Additional Information

- a. No additional questions from Tribes.
- b. Additional questions can be sent via email to Anecita or others in project team.
- c. A copy of the presentation and minutes will be sent out via email and will also be posted on the Tribal Engagement website.
- d. Representatives from the Santa Rosa Rancheria Tachi-Yokut Tribe noted their appreciation for this meeting and the future updates.

## 8. Meeting adjourned