

**CENTRAL COAST LONG-TERM ENVIRONMENTAL ASSESSMENT  
NETWORK (CCLEAN) Steering Committee  
Meeting Minutes**

May 27th, 2026, 2:00 pm  
Via Teleconference Zoom Webinar

The meeting was called to order on May 27th, 2026, at approximately 2:03 pm by Jennie Munster. Roll call was taken of the voting committee members signed on to Zoom.

**Participants - Voting Members: Present:**

Jennie Munster, Laboratory Manager: City of Santa Cruz  
Patrick Treanor, District Engineer: CAWD  
Barbara Buikema, General Manager: CAWD  
Connie Machuca, Laboratory Manager: City of Watsonville  
Olivia Woolery, Laboratory Supervisor: Monterey One Water (M1W)

**Voting Members: Absent:**

Anne Hogan, Wastewater System Manager: City of Santa Cruz  
Dave Martin, Environmental Compliance Inspector: City of Santa Cruz  
Mohammed Serageldin, Laboratory Manager: CAWD  
Mike Crane, Water Quality Chemist: City of Watsonville  
Jeremy Long, Wastewater Division Manager: City of Scotts Valley  
Jose Guzman, Operations Manager: Monterey One Water  
Sarah Stevens, Environmental and Regulatory Compliance Supervisor: Monterey One Water  
Laura Dale, EH&S Manager: Vistra Corp (Moss Landing Power Plant)

A quorum was present.

**Participants - Non-Voting Members: Present**

Aroon Melwani, Senior Scientist, Central Coast Managing Principal Partner: Applied Marine Sciences (AMS)  
Sarah Bragg-Flavan, Water Resource Control Engineer: Central Coast Water Board

**Non-Voting Members: Absent**

Dane Hardin, Senior Marine Scientist, Principal: Applied Marine Sciences  
Mary Hamilton, Environmental Program Manager: Central Coast Water Board  
Cameron Kostigen Mumper, Associate Manager - Water Resources: Soquel Creek Water District

Virtual Public Attendees: None

**1. APPEARANCES / PUBLIC COMMENTS**

No public comments were made.

## 2. AGENDA CHANGES

No agenda changes were requested. The Committee noted that the discussion regarding Soquel Creek Water District membership would be tabled until a future meeting.

## 3. AGENDA ITEMS

### A. Introductions

**Discussion:**

Formal introductions were not conducted beyond roll call because the attendees were generally known to the group. Barbara Buikema attended as a guest participant and noted later in the meeting that she was listening in and had no specific item to raise.

**Decision:**

None.

**Action Item:**

None.

### B. Chair's Report, by Santa Cruz Representative

**Discussion:**

CASA nutrient modeling workshop: Jennie Munster reported on the recent CASA nutrient workshop hosted in Santa Cruz. Jennie was unable to attend in person due to illness, and Anne Hogan represented Santa Cruz using slides Jennie had prepared. Olivia Woolery reported that Monterey One Water's Director of Engineering, Matt Thompson, attended and found the workshop useful.

Jennie summarized the purpose of the workshop as CASA's effort to extend the Southern California Regional Ocean Monitoring System (ROMS) based nutrient modeling work to the remainder of the California coast, including the Central Coast. The model may be applied whether or not local agencies provide data, but the group discussed that local data could improve model accuracy and usefulness. The effort is expected to relate to future nutrient discussions, including potential nutrient management decisions and the 2030 Integrated Report. Nutrient-related constituents discussed included total inorganic nitrogen, silica, urea, phosphate, alkalinity, and TDS, among others.

Jennie contacted Martha Sutula, who agreed to attend the next CCLEAN meeting. Martha is expected to explain the modeling effort, the associated data request, and how local agencies may contribute data. The Committee discussed that agencies could either provide data individually or potentially ask AMS to compile CCLEAN-related data for the group. Jennie also noted that CCLEAN's long-term mission and dataset were not fully represented at the CASA meeting, and asked whether Aron Melwani could provide a short overview of CCLEAN's purpose and data record when Martha attends.

Soquel Creek Water District membership: Jennie reported that Santa Cruz is still reviewing options for how to address Soquel Creek Water District/Pure Water Soquel participation in CCLEAN. Options under consideration include treating Soquel Creek as part of the Santa Cruz discharge through a separate agreement or pursuing a distinct CCLEAN membership role. The item remains unresolved pending additional review by Santa Cruz and further discussion with member agencies.

**Decision:**

None. The Soquel Creek Water District membership issue remains tabled pending additional review.

**Action Item:**

Jennie Munster to coordinate with Martha Sutula regarding the June meeting presentation, including timing and presentation title, and to send the information to CAWD for the next agenda/Zoom invitation. Jennie and Santa Cruz staff to continue reviewing options for Soquel Creek Water District participation. Aroon Melwani to be prepared to provide a brief overview of CCLEAN's mission and long-term dataset at the June meeting, if appropriate.

**C. Review of Prior Meeting Minutes, Report by CAWD**

**Discussion:**

Patrick Treanor summarized the April 22, 2026 meeting minutes. Topics reviewed included the CASA nutrient discussion, the continued Soquel Creek Water District membership discussion, the Phase 4 discussion and proposed scope/budget, the Water Board update regarding the 2030 Integrated Report nutrient/hypoxia solicitation, general announcements, and the financial report. Patrick noted that Aroon Melwani's slides had been attached to the prior meeting minutes and that he had worked to ensure the Soquel Creek discussion was accurately captured.

No corrections or revisions were requested.

**Decision:**

Olivia Woolery moved to approve the April 22, 2026 meeting minutes. Connie Machuca seconded the motion. The minutes were approved unanimously.

**Action Item:**

None.

**D. Lead Agency Remarks, Report by CAWD**

**Discussion:**

Patrick Treanor reported that CAWD is evaluating replacement of its Laboratory Information Management System (LIMS). The two primary systems under consideration are LabWorks and QBench. The Committee discussed software implementation challenges, upgrade processes, vendor support, customer references, and the general reality that most software systems involve tradeoffs.

Jennie Munster noted that Santa Cruz uses LabWorks and recommended asking vendors how they handle upgrades and upgrade-related errors.

Aroon Melwani noted that AMS does not use a traditional LIMS for CCLEAN analysis work; AMS uses raw data in Excel and conducts data management, statistical analysis, and visualization primarily in R.

**Decision:**

None.

**Action Item:**

CAWD to continue evaluating LIMS options. No CCLEAN action required.

**E. Discuss Addition of Soquel Creek Water District as Member of CCLEAN**

**Discussion:**

This item was tabled. Jennie Munster stated that Santa Cruz is continuing to review whether Soquel Creek Water District should be addressed through Santa Cruz's discharge arrangement or as a separate CCLEAN member. The Committee did not substantively revisit the issue during this meeting.

**Decision:**

Item tabled.

**Action Item:**

Re-agendize the Soquel Creek Water District membership discussion for a future meeting after Santa Cruz completes additional internal review.

**F. CCLEAN Membership MOA Revisions**

**Discussion:**

The Committee briefly discussed proposed revisions to the CCLEAN Membership MOA. Jennie Munster asked whether members had reviewed the revisions. Patrick Treanor stated that he is waiting for more clarity on Santa Cruz's position regarding Soquel Creek Water District voting membership before digging further into MOA revisions, because that issue may determine whether broader changes are necessary. Connie Machuca stated that she had reviewed the comments briefly and generally agreed with clarifying responsibilities, including responsibilities for participating members and the Program Director, so questions can be resolved by reference to the MOA.

Members generally agreed that the MOA revisions should remain on the agenda but that additional work should wait until the Soquel Creek membership issue is further resolved.

**Decision:**

No action taken. Item remains under review.

**Action Item:**

Keep the MOA revision item on future agendas. Member agencies to continue internal review as needed.

**G. Consider Approval of PY 26-27 Scope and Budget Proposal - Applied Marine Sciences**

**Discussion:**

Patrick Treanor introduced the Program Year 2026-2027 Scope and Budget Proposal as the official steering committee budget approval item for the next program year. If approved, CAWD will use the approved scope and budget to proceed with contracting with AMS.

Aroon Melwani clarified that the proposed scope and budget are tied to the updated monitoring plan that he recently circulated for comment. Sarah Bragg-Flavan noted that most proposed changes appear to be additions, while the limited removals from the ocean buoy monitoring program would need to be reviewed and justified. The group discussed that the minor removal of ocean-site TSS and FIB sampling is supported by the Phase 4 analysis and that, if the Water Board requires those parameters to be restored, contingency funds should be sufficient to cover the relatively small costs.

The Committee reviewed the proposed cost breakdown by agency and did not raise concerns. The proposal reflects the monitoring plan direction previously discussed, including additions and adjustments associated with Phase 4 implementation.

**Decision:**

Patrick Treanor moved approval of the Program Year 2026-2027 Scope and Budget Proposal. The Committee voted in favor and no opposition was stated. The Scope and Budget Proposal was approved unanimously.

**Action Item:**

CAWD to proceed with contract steps using the approved Program Year 2026-2027 Scope and Budget. Aroon Melwani/AMS to continue finalizing the monitoring plan for Water Board review.

**H. Program Director's Report, Report by Applied Marine Sciences**

**Discussion:**

Aroon Melwani provided a brief Program Director's Report.

Annual report: AMS finalized the annual report after incorporating comments received. The final report has been posted to the AMS website and shared with Sarah Bragg-Flavan and Mary Hamilton.

Monitoring plan revisions: AMS has been revising the monitoring plan to reflect the scope approved by the Committee. Major revisions include re-emphasizing river POP monitoring, incorporating nutrient sampling at receiving water sites for Monterey One Water, Santa Cruz, and Watsonville, documenting removal of TSS and FIB sampling from the ocean buoy sites based on the Phase 4 analysis, increasing benthic monitoring frequency from a five-year cycle to a three-year cycle, and incorporating the State Water Board-recommended neonicotinoid method change to LC-MS/LCMS methods.

Neonicotinoid methods: Aroon stated that CCLEAN is expected to use the LC-MS methods going forward, consistent with State Water Board recommendations. AMS is still waiting for side-by-side comparison results from the recent wet-season sampling and expects those data within the next few months, before the next round of sampling. Those results may inform whether additional special study work is needed.

Aroon asked the Committee to provide comments on the draft monitoring plan before AMS finalizes it for submittal to the Regional Board.

**Decision:**

None.

**Action Item:**

Committee members to provide comments on the draft monitoring plan to AMS by the end of the following week. AMS to finalize the monitoring plan after receiving comments and submit it to the Regional Board.

**I. CCLEAN Topics or Questions for Water Board Staff**

**Discussion:**

Jennie Munster told Sarah Bragg-Flavan that Santa Cruz has additional data available for the headworks sampling calculations under evaluation, although Santa Cruz does not yet have a firm date for when the headworks work will begin. Jennie asked whether Sarah had discussed internally the possibility of analyzing which components are weighted most heavily in the calculations. Sarah stated that she had not yet done so. Jennie said she would check in with Sarah the following week.

**Decision:**

None.

**Action Item:**

Jennie Munster to follow up with Sarah Bragg-Flavan the following week regarding headworks sampling data and possible analysis of component weighting.

## J. Water Board's Report, Report by Central Coast Water Board

**Discussion:**

Sarah Bragg-Flavan reported that DMR functionality in CIWQS appears to be working again. Some dischargers have successfully uploaded DMRs, although the warning message remains on the login/front page. Sarah stated that there is still no State Water Board guidance on how agencies should handle previous months' DMRs affected by the outage. Agencies may upload current DMRs and may choose whether to begin uploading historical DMRs now or wait for State Board/CWIQS guidance on a potential solution for historical data. Sarah noted that she learned the system was working in the prior week, but the State Board is still rolling out fixes and guidance.

No other Water Board updates were provided.

**Decision:**

None.

**Action Item:**

Member agencies to monitor CIWQS/DMR guidance and determine whether to upload historical DMRs now or wait for additional State Board direction.

## K. General Announcements

**Discussion:**

No general announcements were made. Near the end of the meeting, the Committee further discussed the planned June presentation by Martha Sutula regarding the CASA nutrient modeling effort. Jennie Munster explained that Martha is expected to discuss the ROMS-based model, the Central Coast modeling effort, and the associated data request. Jennie noted that agencies may invite additional staff to attend the June meeting if the topic is relevant to them.

Jennie said she would send Patrick Treanor and Domine the information needed to include Martha in the Zoom invitation and agenda, including her email address, presentation title, and estimated time needed. The group discussed placing Martha's presentation near the beginning of the June meeting so she can present and then be excused before the regular CCLEAN agenda continues.

**Decision:**

None.

**Action Item:**

Jennie Munster to send Martha Suchula's contact information, presentation title, and requested presentation time to CAWD for the June agenda and Zoom invite. Member agencies may invite additional relevant staff to attend the June presentation.

## L. Financial Report, Report by CAWD

**Discussion:**

Patrick Treanor reviewed the current financial statements. Patrick reported that fourth-quarter payments are reflected and that AMS had an invoice of approximately \$47,000 during the prior month. Expenditures were reported as generally on track relative to the \$635,000 budget.

Patrick and Aroon discussed that a substantial portion of remaining costs relate to outstanding samples, subcontract laboratory costs, and analytical work. Aroon clarified that AMS bills monthly for labor, while analytical costs are included when labs invoice AMS after data are submitted.

No concerns were raised regarding the financial report.

**Decision:**

None.

**Action Item:**

None.

### 4. ADJOURNMENT / NEXT MEETING DATE

The next Regular CCLEAN Committee Meeting will be held on June 24th, 2026, via Zoom.

**ADJOURNMENT:** Patrick Treanor moved to adjourn the meeting. Jennie Munster seconded the motion. The motion passed without opposition. The meeting was adjourned at approximately 2:36 p.m.