*STAFF REPORT*

**To:** **Coastside County Water District Board of Directors**

**From:** **Mary Rogren, General Manager**

**Agenda:** **September 9, 2025**

**Report Date:** **September 5, 2025**

**Agenda/Title:** Approval of Professional Services Agreement with Balance Hydrologics, Inc. for Denniston/San Vicente Stream Gaging, Groundwater Monitoring, and Data Collection

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**Recommendation/Motion:**
**Authorize the General Manager to enter into a Professional Services Agreement with Balance Hydrologics, Inc. for Water Year 2026 stream gaging, groundwater monitoring, and data analysis for the Denniston Creek and San Vicente Creek watersheds for an estimated time-and-materials cost of $105,454.**

**Background:**
Quantifying the amount of water available for diversion from Denniston and San Vicente Creeks is vitally important to the District's efforts to secure its water rights on those streams. Balance Hydrologics (Balance) has provided stream gaging, monitoring, and analysis services to the District starting with Water Year 2011 (WY11 - October 1, 2010 to September 30, 2011). Balance's proposal dated August 19,2025 (Attachment A) covers WY26 continuation of gaging services for stations on Denniston and San Vicente Creeks, and groundwater monitoring. Services to be provided are similar to those provided for WY25.

Fiscal Impact:
Cost of $105,454 is included in the Capital Improvement Program for Denniston/San Vicente. (For comparison purposes, the Water Year 2025 agreement was $124,689 which included replacement of gaging equipment. No replacement of equipment is anticipated in Water Year 2026.)

Attachment A

Balance Hydrologics

800 Bancroft Way • Suite 101 • Berkeley, CA 94710 • (510) 704-1000
224 Walnut Avenue • Suite E • Santa Cruz, CA 95060 • (831) 457-9900
12020 Donner Pass Road • Unit B1 • Truckee, CA 96161 • (530) 550-9776
www.balancehydro.com • email: office@balancehydro.com

August 19, 2025

Mary Rogren, General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, California 94019-1995

**RE: Proposal to Gage Denniston Creek and San Vicente Creek and Monitor Inactive Wells and Hydrologic Conditions, Water Year 2026**

Dear Ms. Rogren:

It is our pleasure to provide you with this letter proposal containing our recommended scope to continue surface-water monitoring in Denniston and San Vicente Creeks, and groundwater monitoring in nearby unconsolidated aquifers. This proposal encompasses continuation of the water year[1] 2011 (WY2011) through WY2025 baseline stream gaging effort through the end of WY2026. Results will extend the flow record, which will help the Coastside County Water District (CCWD) evaluate (a) streamflow availability and (b) meet regulatory staff expectations. Extending the monitoring period for basic streamflow and geomorphic observations will facilitate CCWD's environmental and permitting process and will be beneficial for assessing diversion strategies that meet your expectations for yield and for site-appropriate watershed protection.

During WY2025, we (a) continued monitoring five stream gages, (b) concurrently monitored water levels (and quarterly measurements of salinities) in three wells and the three multi-level piezometers beneath Pillar Point Marsh, and (c) upgraded aging sensors at stations. Please see attached Figure 1 that shows past and current monitoring locations.

In WY2026, we propose to (a) continue monitoring five stream gages, and (b) concurrently monitor water levels in three wells, three piezometers, and in Pillar Point Marsh (See Work Scope, below).

[1] A "water year" (WY) is defined as the period from October 1st of the preceding year through September 30th of the named year. For example, water year 2026 (WY2026) starts October 1, 2025, and ends September 30, 2026.

To address the objectives of this work, we present a technical scope of work outlined under the following tasks:

1. *Water year 2026 stream gaging and monitoring, and provide online access to the provisional gage data*
2. *Draft and final water year 2026 data presentation technical memorandum*
3. *Golden Gate National Recreation Area (GGNRA) permit compliance reporting*
4. *Other studies not presently part of the scope of work which you may request and authorize.*
5. *Project administration*

The next section elaborates on this proposed approach.

## *Work Scope*

*Task 1. Water year 2026 monitoring*

The water year 2026 monitoring effort will include (a) approximately monthly site visits to the five gaging locations, SVAD (San Vicente Creek above the diversion), SVAE (San Vicente Creek at Etheldore), SVCA (San Vicente Creek at California Street), DCAD (Denniston Creek above the CCWD diversion), and DCBC (Denniston Creek below Capistrano Way) to collect baseline data, (b) approximately quarterly visits to monitor groundwater levels (and salinities) at three wells, three piezometers, and in the Pillar Point Marsh, and (c) up to 3 - 4 additional visits during storms.

*Monthly Streamflow Measurements*

To the extent possible under dynamic field conditions, measurements conform with the standard of care for the California Division of Water Rights. Monthly visits allow us to calibrate streamflow measurement at stations by performing a flow (discharge) measurement and staff plate (gage height) readings over a wide range of streamflow levels. During quarterly visits we will also download data at San Vicente above diversion from the In-Situ LevelTroll 400® (installed during WY2025) and the Solinst Levelogger® and make channel observations (such as new high-water marks, bed conditions, and changes in the riffles and/or woodjams and logs which control flow at the various gages, all of which are crucial for calibrating the record of stage and flow), plus perform maintenance and calibration. During winter storms when flows are elevated, we will endeavor to make supplemental field visits to measure flow and make other observations (i.e., identify high-water marks, field-meter measurements, qualitative observations of water quality, when and where logjams form and dissipate, etc.). These visits are used to extend the stage-to-discharge rating curve(s) through the highest flows observed, and to adjust the rating curve (as needed) to account for changes in sedimentation, channel shape, vegetation growth, or debris accumulation. In the office, we will calculate the flow, enter the information into the station log, plot the data on a stage-to-discharge rating curve, add the downloaded data to the station spreadsheet, and reduce the data to daily mean flow values and otherwise meet the standards for continuous flow monitoring. We also check, maintain, and service the field equipment owned by CCWD.

We recommend continuation of the low-flow synoptic measurements at both the station in Denniston Canyon just downstream of the Canyon Field diversion (DCAAD) and the former DCBD (Denniston

Creek below the dam) location to characterize potential gains and losses between the reservoir and mouth of Denniston Creek at station DCAD (above Denniston Reservoir, at the water treatment plant bridge).

Presently, the preliminary station data are made available via our real-time system on the Balance Hydrologics website for the four real-time stations: SVAE, SVCA, DCAD and DCBC. This feature provides real-time information to both the CCWD staff and Balance staff. You have chosen to make the highlights of the information collected at DCBC available to the community at large, such that GGNRA and resource-agency staff as well as residents of the area can come to better understand the local streams. Finally, in addition to CCWD uses of the real-time data portal, having this information available remotely continues to improve the efficiency of winter storm monitoring, warns us of gage malfunctions, and allows us to continue to monitor in a more cost-effective manner.

*Storm Streamflow Measurements*

Due to the highly mobile sandy beds on both Denniston Creek and San Vicente Creek, gaging these creeks is particularly challenging relative to channels that have more stable bedrock, cobble-boulder, or even gravel beds. To meet this challenge, we will continue to regularly visit the sites, particularly during high-flow events. During WY2026 we will continue to refine the low end of the rating curves, but also refine the high end of the rating curves, getting better estimates of flow during storm or post-storm runoff, when diversions can most easily be accommodated with minimal environmental effects. As such, we will continue to make regular site visits are intervals of about a month throughout the year, in addition to a number of planned storm visits.

*Measuring Shallow Groundwater and Surface-Groundwater Interaction*

Each of the monitoring wells (Inactive wells 4, 7 and 9) are currently equipped with an In-Situ LevelTroll 400® (installed during WY2025) that records water level and temperature every hour. We propose to continue to monitor these wells. In addition, we are proposing to continue to monitor the three-piezometer nest (three co-located piezometers screened at staggered depths) located at the north flank of West Avenue at Pillar Point Marsh. The three piezometers, initially constructed in 1989, are each instrumented with an In-Situ LevelTroll 400® (installed during WY2025). These data can be used in the future to assess the lower boundary condition for the shallow aquifer system adjacent to San Vicente and Denniston Creeks, an anticipated contentious issue with both the Coastal Commission and the Division of Water Rights.

This task provides time for us to measure depth-to-water and specific conductance in the three monitoring wells and three Pillar Point Marsh piezometers and download data during four quarterly site visits. In the office, we will enter the information into the station log, add the downloaded data to the station spreadsheet, and calibrate and plot the hourly data. We will develop graphics that compare the water levels in each of the wells and the rate at which the water table is recharged during storms in the winter or falls during the late summer months.

**Deliverables:** Provisional real-time data describing current conditions at four stream gages (SVAE, SVCA, DCAD, and DCBC).

*Task 2. Draft and final water year 2026 reporting*

Following the agreed upon reporting format implemented in WY2024, we have included budget to support preparation of a brief technical memorandum that will present the flow forms, figures tables, and will summarize precipitation, flow metrics for the water year, and a summary of important maintenance events or changes to the gaging program that occurred during the year (if any). Data interpretation will not be included, but should the need arise to interpret collected data to answer questions related to CCWD operations, we can assist with those under separate authorization. The written memo will include a summary form for each station tabulating the daily mean discharge data and identifying station descriptors, plots of the data, and water-surface elevation time series data for the monitoring wells, piezometers and Pillar Point Marsh water level gage. We will submit the draft report to you and then prepare a final report responding to your comments.

**Deliverables:** Draft technical memorandum in pdf and Microsoft Word formats, presenting the finalized water level records at 3 wells, 3 piezometers, and the Pillar Point Marsh, and flow records at 5 stream gages for WY2026. Final report in pdf format.

*Task 3. Permit compliance reporting*

Since 2016, GGNRA has managed much of San Vicente and Denniston Creek watersheds. CCWD is now required to submit data reports as part of the scientific sampling permit which GGNRA has issued to you. The data reports are submitted for one gage on San Vicente Creek (SVAD) and one gage on Denniston Creek (DCAD), both of which are within or adjacent to GGNRA jurisdiction. We will prepare the annual data forms for submittal by CCWD.

**Deliverable:** Draft cover letter for the permit compliance submittal with forms and table attachments.

*Task 4. Tasks to be authorized during the year, if any.*

It is possible that other work may be needed during the course of the water year. This work may include as-needed assistance with regulatory work, purchasing additional equipment on behalf of CCWD, etc. Should CCWD-owned equipment in the field be damaged or vandalized, Balance would purchase replacement equipment under this task after written authorization from CCWD. This task would be intended to cover unanticipated issues with equipment not covered by stated equipment costs in Table 2. You may wish to request additional site or storm visits following a future earthquake swarm or watershed-disturbing rainfall, wildfire or windstorms. If and as you ask for additional services, we will track these as tasks 4a, 4b, etc., so that you have clarity on what these additional assignments may cost, which may also aid in cost recovery.

*Task 5. Project administration*

This task provides time to help schedule and administer the project in a way that best helps you and us regularly track schedule and budget. We aspire to re-invigorate our check-in process to share our observations and listen to your observations and questions. We will target hosting these calls on a 6-month recurring schedule.

***Anticipated Costs***

Our estimates of staff assignments and level of effort for each task are shown in Table 1. The estimated total costs to complete this work are shown at the bottom of Table 2. Costs are lower than last year/WY2025 due to the purchase and installation of new equipment in WY2025. In addition, Table 2 covers expenses not allocated to individual tasks, such as mileage. The rental fees include modem line fees and travel and equipment fees. As you may recall, we released our new real-time system over the course of Water Year 2023. We hope that the new, more secure, mobile-friendly, reliable, and more user-friendly interface serves your monitoring and management goals. The new real-time interface allows for more customization; please reach out if you think we may be able to improve your experience. As part of this service, we are charging $90 per month for a single station, which comes to $360/month for 4 sites and includes a discount for hosting multiple sites. In addition, we pass through modem connection costs at approximately $50/month.

As is customary for field-related jobs, our costs also include a $5,000 contingency allowance. The contingency allows for a smoother absorption of additional costs beyond our control (or yours) which inhibit the efficient completion of our work. Examples of situations that might require use of the contingency allowance are labor and materials associated with repair and/or replacement of hydrologic equipment or data damaged by high flows, earthquakes, or other “Acts of God,” changes requested by your staff or a landowner, a very wet year requiring additional visits, or shifts in regulatory requirements as well as lost samples due to lab or shipping company errors. Also, a breakdown of rental costs associated with this project is available upon request. We have also assumed that CCWD will continue to help obtain ready access to the gages and wells.

We have made every effort to minimize the impact of these changes by allocating staff hours in a prudent, technically sound, but cost-effective manner. The monitoring assignment has been spread to more junior staff to conserve costs, while also maintaining sufficient senior staff involvement to maintain oversight and quality. The spread amongst our staff allows work to be mobilized either from Berkeley or Santa Cruz as conditions dictate.

Although we have made out best effort to provide an accurate estimate to you, our work is done on a time-and-expense basis, so costs could be somewhat higher or lower than these estimates.

***Anticipated Schedule***

We anticipate drawing from this budget for data collection that takes place after WY2025 ends (Sept. 30, 2025). We will conclude monitoring on or about September 30, 2026. We will provide a completed draft report to the District in a timely manner. If needed earlier for regulatory purposes, we will attempt to adjust the timeline accordingly.

***Proposed Project Staff***

Scott Brown will serve as principal-in-charge, and act as senior reviewer. Eric Donaldson will serve as project manager. Emma Goodwin is the lead hydrologist, and she will be supported by field hydrologists Anders de Wit, Mark Woyshner (from Balance's Berkeley office), Jason Parke, and Chelsea Neill (Santa Cruz office), who have been servicing the stream gaging stations and wells and working with the data. Other staff may be called upon during winter storm flow monitoring. We have assigned more field staff to this project than usual so that storm assignments can be discharged either from Berkeley or Santa Cruz, since access to this part of San Mateo County can be problematic during winter weather.

***Closing***

Thank you for asking that we prepare this proposal, and we appreciate the opportunity to discuss potential updates to the monitoring program leading up to submittal of this proposal. We always aim to keep our work focused on the necessary questions, and it is helpful for us to revisit that with you annually.

We appreciate the opportunity to continue the streamflow gaging and groundwater monitoring through the next water year and look forward to supporting your water information needs through the ongoing and future work.

Please let us know if you have questions, or suggestions, or if your needs and schedule differ from our assumptions above.

Sincerely,

BALANCE HYDROLOGICS, INC.

Eric Donaldson, P.G.
Project Manager

Enclosures: Figure 1. Site map: Past and current gaging locations
Budget Tables 1 and 2 for WY2026

# Table 1. Anticipated Staff Hours by Task

## 226057 Coastside County Water District Hydrologic Monitoring, WY2026

| Task Number and Description | Sr. Principal | Principal | Senior Professional | Project Professional | Sr. Staff Professional | Staff Professional | Assistant Professional | GIS/CADD Senior Analyst | Sr. Proj Admin | Sr. Report Specialist | Hydrologic Tech | Labor Costs For Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Hourly Rate* | *$275* | *$255* | *$215* | *$200* | *$195* | *$175* | *$160* | *$160* | *$150* | *$125* | *$105* | |
| Task 1. Water Year 2026 monitoring | | 30 | 30 | | 164 | 164 | | | | | | $74,780.00 |
| Task 2. Draft and final water year 2026 reporting | | 4 | 10 | | 32 | 12 | | 4 | | 8 | | $13,150.00 |
| Task 3. Permit compliance reporting | | 1 | 3 | | | | | | | 1 | | $1,025.00 |
| Task 4. Tasks to be authorized during the year, if any | | | | | No work presently budgeted | | | | | | | |
| Task 5. Project administration | | 1 | 10 | | | 2 | | | 12 | | | $4,555.00 |
| **Subtotal Hours** | | 36 | 53 | | 196 | 178 | | 4 | 12 | 9 | | |
| ***Total Hours*** | **488** | | | | | | | | | | | |

*Notes:*

| | |
|---|---|
| **TOTAL LABOR** | **$93,510.00** |
| ***Expenses from Table 2*** | ***$6,944.00*** |
| ***Contingency from Table 2*** | ***$5,000.00*** |
| **GRAND TOTAL** | **$105,454.00** |

# Table 2. Estimated Costs

***226057 Coastside County Water District Hydrologic Monitoring, WY2026***

| **Professional Fees** | **Rate** | **Hours** | | **Allocation** |
|---|---|---|---|---|
| Sr. Principal | $275 | 0 | | $0.00 |
| Principal | $255 | 36 | | $9,180.00 |
| Senior Professional | $215 | 53 | | $11,395.00 |
| Project Professional | $200 | 0 | | $0.00 |
| Senior Staff Professional | $195 | 196 | | $38,220.00 |
| Staff Professional | $175 | 178 | | $31,150.00 |
| Assistant Professional | $160 | 0 | | $0.00 |
| Junior Professional | $145 | 0 | | $0.00 |
| GIS/CADD Senior Analyst | $160 | 4 | | $640.00 |
| GIS/CADD Analyst | $150 | 0 | | $0.00 |
| Senior Project Administrator | $150 | 12 | | $1,800.00 |
| Senior Report Specialist | $125 | 9 | | $1,125.00 |
| Report Specialist | $105 | 0 | | $0.00 |
| Hydrologic Technician | $105 | 0 | | $0.00 |
| | | | **Labor Subtotal** (Table 1) | $93,510.00 |

**Expenses**

**Direct Expenses**

| | | | | |
|---|---|---|---|---|
| Mileage | **1700** | miles @ | $0.72 | $1,224.00 |
| Mileage, 4-Wheel Drive* | | miles @ | $0.75 | $0.00 |
| Vehicle Rental | | | | $0.00 |
| Equipment Rental Fees (Sampling gear during site visits, e.g, flow meter, etc.) | | | | $800.00 |
| Cell modem fees | | $50/mo for 4 realtime sites | | $600.00 |
| Real-time data access | | 4 realtime sites @ $90/mo each | | $4,320.00 |

**Reimbursable Costs**

| | | | | |
|---|---|---|---|---|
| Other Travel, Subsistence | | trips @ | | $0.00 |
| Express Mail, Deliveries | | | | $0.00 |
| Maps and Aerial Photos | | | | $0.00 |
| Outside Copying, Blueprint | | | | $0.00 |
| Outside Consultants | | | | $0.00 |
| Analytical Laboratory Fees | | | | $0.00 |
| Materials and Supplies | | | | $0.00 |
| Permits, Licenses or Agency Inspection fees | ***client responsibility*** | | | $0.00 |
| Printing+ | | | | $0.00 |
| Other | | | | $0.00 |
| | | | **Expenses Subtotal** | $6,944.00 |
| | | | **ESTIMATED TOTAL** | **$100,454.00** |
| | | | **Contingency** | **$5,000.00** |
| *Notes* | | | **TOTAL w/ CONTINGENCY** | **$105,454.00** |

* 4WD rates apply only if required by site conditions. See Balance policy re 4WD.

+Plotting costs vary according to complexity of design

Project-related expenses will be billed at cost plus 10%; including work by outside consultants and analytical or testing laboratories.