

From: [REDACTED]
To: [Ussana Tertenan](mailto:Ussana.Tertenan)
Subject: Fwd: Agenda for 10 June 2021, Item 7.B. Discussion and Consideration to Introduce the 2020 Urban Water Management Plan and the 2020 Water Shortage Contingency Plan
Date: Thursday, June 10, 2021 2:50:53 PM

Osanna, I will speak to this orally and will ask that it is part of the public record of the meeting. Thus, it is written and spoken public comment.

----- Forwarded message -----

From: Elizabeth Bettenhausen [REDACTED]
Date: Thu, Jun 10, 2021 at 10:09 AM
Subject: Agenda for 10 June 2021, Item 7.B. Discussion and Consideration to Introduce the 2020 Urban Water Management Plan and the 2020 Water Shortage Contingency Plan
To: Elizabeth Bettenhausen [REDACTED], Cindy Steidel [REDACTED], Donn Howell [REDACTED], Harry Farmer [REDACTED], Karen Dean [REDACTED], Tom Gray [REDACTED], tsgray@sbcglobal.net
Cc: John Weigold <jweigold@cambridcsd.org>, Ray Dienzo <rdienzo@cambridcsd.org>, Melissa Bland <mbland@cambridcsd.org>

Re: CCSD Agenda for 10 June 2021, Item 7. B. Discussion and Consideration to Introduce the 2020 Urban Water Management Plan and the 2020 Water Shortage Contingency Plan

CCSD Board of Directors:

The disclaimer on p. 7 is a crucial aspect of the 2020 Urban Water Management Plan Guidebook .

Disclaimer

This 2020 UWMP Guidebook was prepared by the California Department of Water Resources to aid urban water suppliers who must comply with the requirements of the California Water Code Section I, Part 2.55 and Part 2.6. **Urban water suppliers subject to the requirements are solely responsible for compliance with the requirements and may use this Guidebook if they choose.** DWR has voluntarily opted to provide this Guidebook to make complying with the California Water Code simpler for urban water suppliers, and to assist these suppliers in creating a useful planning document. For assistance interpreting the content of this document, please contact California Department of Water Resources Water Use Efficiency staff at UWMPhelp@water.ca.gov.

<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans/Final-2020-UWMP-Guidebook/UWMP-Guidebook-2020---Final-032921.pdf>

The Urban Water Management Plan makes no policy decisions about any of the issues considered therein. The State of California has no oversight of the enforcement of this plan.

I commented on the 2010 and 2015 CCSD Urban Water Management Plans, before they were approved by the CCSD Board. Almost all of the questions I raised in my comments over the years are germane to the proposed 2020 edition of the CCSD UWMP. Thus I repeat them here, verbatim.

According to my gmail files, I sent this email in 2012 to the CCSD General Manager and District Engineer, with copies to the Board, regarding the 2010 Urban Water Management Plan. I've tried unsuccessfully to find on the CCSD website when the CCSD Board actually adopted the 2010 Plan. Thus, the email might have been sent on 6 November 2011.

MEMO

DATE: 6 November 2012

TO: Jerry Gruber, General Manager of CCSD, and Bob Gresens, District Engineer

cc: CCSD Board of Directors and other interested parties

FROM: Elizabeth Bettenhausen

Re: 2010 Urban Water Management Plan

First, I raise concerns about the implementation of the 2005 CCSD UWMP.

1. Surveys of water **use** in Cambria were planned.[\[1\]](#) Have any of the surveys been done?

1.1. If so, where is this published for public access?

1.1.1. Were any staff trained relating to landscaping conservation of water?

1.1.2. Were any surveys done regarding evapotranspiration?

1.1.2.1. If so, where is this published for public access?

1.1.3. Did the CCSD do surveys targeting and promoting audits to high water use customers?

1.1.3.1. If so, where is this published for public access?

1.1.3.2. How was “high water use” defined?

2.1. Has the comprehensive annual water audit been done each year?[\[2\]](#)

2.1.1. If so, where is this published for public access?

2.1.2. Has the District adopted “5% or less of unaccounted water as a long-term performance goal”?

3.1 What is the history of CCSD led and/or required retrofits from 2005 to 2011?

4.1 The 2005 CCSD Urban Water Management Plan includes this statement in Chap. 3, Sect. 2: “In planning for a future water supply, the District’s Board expressed a desire to provide a quality of life increase to allow about 18 ccf per bi-monthly period (0.25 acre-feet per year) for a typical residential user. Therefore, sizing for the future desalination facility will assume a higher residential demand of approximately 0.25 acre-feet per residential connection.” See also The Executive Summary of the *Final Program Level Environmental Report* for the Water Master Plan and the July 2003 Minutes of the CCSD Board meeting.[\[3\]](#)

4.1.1. Will the CCSD Board of Directors take official action at its November 2011 meeting to retract the planned 50% increase in typical residential water use, before acting on the 2010 Urban Water Management Plan for the CCSD in its Dec. 2011 meeting?

5.1. Chap. 8, Sect. 12 refers to the Water Conservation Coordinator.

5.1.1. Will the 2010 Urban Water Management Plan be the only policy statement concerning water conservation and demand management for the CCSD?

5.1.2. Will the 2010 UWMP be consistent with the Water Master Plan? If not, which takes precedence as policy?

5.1.3. Who now on staff is in charge of creating and executing programs consistent with the water demand management policy adopted by the Board of Directors?

Second, I request that the 2010 CCSD Urban Water Management Plan include data showing the average water use in Cambria for the years 2009 and 2010 for each of the following categories. The “Customer/Consumption Profile” showing the average bi-monthly water use for all customers, the number of customers, and the percentage of all customers (developed by the CCSD for the Utilities Rate Workshop, Sept. 12, 2002) could be used for each category. The percentage of total water used should also be given for each category.

1. Single family residences (not used as vacation rentals)
2. Multi-family residences--with notation of how many units per meter
3. Vacation rentals
4. Motels, hotels
5. Bed and breakfast establishments
6. Restaurants
7. Commercial businesses not under 3-6 above
8. Churches
9. Schools
10. Non-profit establishments, e.g., library, food pantry
11. CCSD buildings and other CCSD sites with water meters

Third, when will the CCSD reevaluate the EDU structure as a measuring tool for water use and allocation?

1. Is an EDU 6 units or 9 units bimonthly?
2. Why is EDU allocation grandfathered to property, rather than allocated according to the category of the current user?
3. To whose advantage is the continuing use of the EDU structure?
4. Use of gallons as the measuring tool would be much more straightforward.

Thank you very much for your attention to these questions and concerns. I assume answers and other responses to them will be part of the final version of CCSD's 2010 Urban Water Management Plan. However, I would also appreciate a written response at your earliest convenience.

[1] Chap. 8, Sect. 3: “*Planned Measures* – Future documenting of the number of surveys completed and associated estimate of water savings will conform to reporting criteria developed by the CUWCC. Further staff training through the attendance of CUWCC sponsored seminars will also be pursued with more emphasis being placed on potential savings related to landscaping practices. Future surveys will also track whether newer evapotranspiration (ET) based irrigation controllers are in place. The District will also expand upon the existing survey practice by targeting and promoting audits to high water use customers.”

[2]Chap. 8, Sect.5: “A comprehensive annual water audit complying with AWWA audit worksheets will be completed following installation of the new billing meters to further document and attempt to identify potential savings. The audit should also be preceded by checking calibration on the existing production meters, estimating water used for fire training and fighting, as well as estimating losses that may occur throughout the year from accidental leaks such as a fire hydrant being hit by a car. The District should also adopt 5 % or less of unaccounted water as a long-term performance goal.”

[3] “Based on the CCSD Board of Directors’ earlier July 24, 2003 motion, and the historical occupancy rate for Cambria averaging 1.66 persons per residence, approximately 602 AF in supplemental water will be needed for 4,650 residences assuming a 50 percent quality of life increase over existing consumption” (2.2).

In 2016 I made these comments for the public record at the meeting of the CCSD Board of Directors on 12/15/2016:

QUESTIONS about RESOLUTION NO. 44-2016

1. Which of the production and demand assumptions made in the UWMP are binding policy and procedures implicit in and integral to the “Water Conservation Programs” mentioned in the Resolution 44-2016—binding by virtue of the Board of Directors approving the 2015 UWMP?
2. If certain production and demand assumptions made in the UWMP are not so binding, which ones are binding and which ones are not?

PURPOSE of UWMP [all following directly quoted from the UWMP]

- meeting regulatory and grant funding requirements
- useful compilation and summary of the CCSD’s water planning efforts.
- P. 270 of Agenda, Resolution 44-2016...
The General Manager is hereby authorized and directed to implement the Water Conservation Programs as set forth in the 2015 Urban Water Management Plan, which includes recommendations to the District regarding necessary procedures, rules, and regulations to carry out effective and equitable water conservation and water recycling programs.

ASSUMPTIONS

Production

1. Table 6-1 (see above Section 6.2) provides a further breakdown on the volumes pumped by each source for the years 2011 through 2015. Table 6-9 provides projected groundwater pumping in five year increments from 2020 through 2040. To err on the conservative side, and in conjunction with the DSS modeling conducted and the aforementioned figure demand forecasting, it is assumed that the CCSD may complete licensing of its existing SWRCB permits based on the historical maximum pumped from each of its aquifers under these permits. This amounts to 1,017 acre-feet per year (rounded from 1,016.74), based upon 217.92 AFY from the CCSD’s Santa Rosa Creek aquifer wells (from 2008 production); and, 798.82 AFY from the CCSD’s San Simeon Creek aquifer wells (based on calendar year 2000 production). Therefore, 1,017 acre-feet is used in the Table 6-9 projections as the total right in each of the 5-year projections. 6.2 p. 38.

The supply totals include the groundwater and recycled water amounts shown in Tables 7-1a, 7-1b, and 7-1c, and conservatively assumes an estimated 80 percent of the water supplied by the CCSD would result in the amount of treated wastewater effluent being discharged into the percolation basins. This 80 percent value is based on an estimate of indoor water use that came from the earlier 1998 USGS study. 7.3 p. 61

2. It is assumed that in normal years, the SWF would be operated primarily during the late dry season to most efficiently control the hydraulic gradient between the percolation ponds and the up-gradient potable wells. This assumption used 8 hours per day operation for 12 weeks, or approximately 35 acre-feet annual production with a net amount of 21 acre-feet

entering the CCSD potable wells. In a more severe, multiple-year drought condition, the facility was assumed to have a maximum output of 1.8 acre-feet per day based on a 24-hour per day operation. For an average dry season duration of 184 days, this would result in 325 acre-feet being produced and re-injected with a net of 195 acre-feet entering the CCSD San Simeon Creek production wells. This output range is summarized within Table 6-7, which follows in this Section. 6.2 p. 40

Demand

1. 1% per year growth rate

For purposes of developing population estimates, it was assumed that adequate progress would be made on a supplemental source of water to allow the moratorium to be lifted during 2017. The County Board of Supervisors will ultimately determine whether a growth rate could be allowed for Cambria. For purposes of this 2015 UWMP, a 1% per year growth rate per year was assumed until reaching the buildout maximum of 4,650 existing and future residential connections. p. 18

The analyses described in Appendix G are summarized in Figure 4-1, which shows the projected water demands at a buildout of 4,650 existing and future (CCSD wait list) residential housing units. The supporting analysis for this plot assumed a 1% annual growth rate until reaching buildout. 4.4 p. 25

2. Conservation

The increase in potable and raw demand between year 2015 actual demand and projected 2020 demand is due to the conservative assumption that drought-year-reduced 2015 demand will rebound to pre-drought 2013 water use levels. 4.4 p. 24)

The DSS Modeling effort conservatively assumed customer demand would rebound to pre-drought levels at its starting point. From here, the Cambria Demand Projection without Plumbing Code plot line shows demands with no conservation occurring, including ones that are currently mandated by the existing plumbing code. The Cambria Demand Projection with Plumbing Code plot line shows the future demands with the benefit of the existing plumbing code's more water efficient requirements taken into consideration. p. 26

The demand totals conservatively assumed the current drought-reduced production will increase to pre-drought levels, while also using the DSS Model's projection with minimal conservation efforts (i.e., no pro-active conservation program by the CCSD and relying only upon water efficiency improvements from plumbing code updates). 7.3 p. 61

The demand totals assume there would be no reduction in customer demands during a single dry year condition. Table 7-2 p. 62

Demand is based on Table 4-3 values and conservatively assumes NO reduction in a single-dry year. During the third year of a multiple year drought, it was assumed that there would be a 15% reduction in groundwater supply production due to conservation efforts. 7.3. p. 62

3. Planned Implementation to Achieve Water Use Targets

The following table presents a list and description of CCSD's current and planned conservation measures. These measures were used in the DSS Model described in Appendix G, and summarized in Section 4.4. 9.4 pp. 71 – 74 [Several explicit and implicit assumptions are presented in this long table.]

On 3 July 2017 I sent an email to several Cambrians concerning the UWMP. I print it here, because it expresses exactly my sentiments about the proposed 2020 CCSD Urban Water Management Plan:

The UWMP is one of those documents developed to give the appearance of government oversight.

The Guidebook for creating such a Plan says, however, on p. 1-3,

ALL URBAN WATER SUPPLIERS

The sections below are summaries of CWC [California Water Code] sections applicable to UWMPs. DWR [Department of Water Resources] provides guidance on addressing CWC UWMP requirements, but water suppliers are solely responsible for ensuring that all CWC requirements and applicable laws have been met.

http://www.water.ca.gov/urbanwatermanagement/docs/2015/UWMP_Guidebook_Mar_2016_FINAL.pdf

So, CCSD is required to plan, but no one in Sacramento or regions holds them to account on the quality of their planning in regard to factual and policy adequacy.

It's becoming clearer and clearer to me that the control and distribution of natural resources is very vulnerable to the bureaucratic numbers game. I'm reading Yuval Noah Harari's *Homo Deus: A Brief History of Tomorrow*. It's brief to the tune of 440 pages. He talks about the ideology of data, the explosion of information:

This relentless flow of data sparks new inventions and disruptions that nobody plans, controls or comprehends. No one understands how the global economy functions or where global politics is heading. But no one needs to understand. All you need to do is answer your emails faster--and allow the system to read them (p.385).

"You want to know who you really are?" asks Dataism. "Then forget about mountains and museums. Have you had your DNA sequenced? No?! What are you waiting for? Go and do it today. And convince your grandparents, parents and siblings to have their DNA sequenced too--their data is very valuable for you. And have you heard about these wearable biometric devices that measure your blood pressure and heart rate twenty-four hours a day? Good--so buy one of those, put it on and connect it to your smartphone. And while you are shopping, buy a mobile camera and microphone, record everything you do, and put it online. And allow Google and Facebook to read all your emails, monitor all your chats and messages, and keep a record of all your Likes and clicks. If you do all that, then the great algorithms of the Internet-of-All-Things will tell you whom to marry, which career to pursue and whether to start a war."

But where do these great algorithms come from? (pp. 392-3)

I think Dataism was the impetus for CCSD's Water Master Plan, including the so-called SWF. Believing in the reality of water and soil more than abstract numbers, we asked questions about the mathematical models for the EIRs, about the algorithms used, the presuppositions brought to the documents. What answers did we get? ZIP.

Thus, my final comments today, 10 June 2021:

I raised identical or similar questions at the meeting of the CCSD Board's Standing Committee on Resources and Infrastructure when they considered the 2020 CCSD UWMP. They were not taken seriously enough to merit consideration, so far as I can tell.

Please do consider all the issues I have raised over the past decade about the CCSD Urban Water Management Plan, given to you in this email.

Thank you for your attention.

Elizabeth Bettenhausen
Cambria, CA
full-time resident of Cambria since 2002
CCSD ratepayer and property tax payer





Sunlight begins to touch the surf at Santa Rosa Creek Beach on 9 June 2021
just after sunrise over the Santa Lucia Range.

photo: Elizabeth Bettenhausen

From: [REDACTED]
To: [BoardComment](#)
Subject: June 10 meeting
Date: Thursday, June 10, 2021 2:07:29 PM

My upcoming comments, please include in the record. Thank you, Ossana.

June 10, 2021

Public Comment

Thank you for this opportunity to comment on public comment, Madam President. As the person chairing the meeting, you have restricted public comment from previous convention, which is within your prerogative. You allow the public to comment only at the beginning of discussion, before board members have discussed the item or staff members have given their reports. This has curtailed the public's ability to make relevant comments. As in the discussion of changing the name of the Emergency Water Supply Project/ Sustainable Water Facility, by allowing the public to comment only before the board discussion, the public were able to comment only on names that, in board discussion, were not under consideration, and not on the names that were. No public comments were heard on the name the board eventually adopted. The public is thus silenced on issues of public concern. Board and staff add information that is not included in the agenda packet. You often interrupt speakers and cut off the microphone, cutting speakers short. Mr. Hirsch informed you that allowing public comment only at the beginning of the item meets the minimum legal requirement for allowing the public to participate. However, I ask the other directors to discuss these changes and decide as a board if limiting public comment in this way, only to meet the minimum legal requirement, is how they want, as a board, to welcome public input.

Item 7B

Because the UWMP will be a critical document in Cambria planning for the next few years, it's important to get it right. If the board adopts this version, it's important to note that it is factually incorrect in several significant places.

Overall, it tends to minimize Cambria's water problem by overestimating supply and underestimating demand.

Using annual figures masks Cambria's water shortage during the dry season. Cambria has enough water for current residents and visitors during the rainy season. Cambria runs short of water at the end of the dry season. Continued pumping of well 9P7 during the dry season, when the well level is naturally low, could draw seawater into the aquifer at that time of year.

This draft UWMP assumes that the EWS/SWF/WRF will get a permit to operate by 2025 and, when operating, can provide 250 Acre Feet of water. Both of these are unlikely or impossible.

The district has not been able, in nearly a year, to provide any additions to the CDP application, which was submitted only 13 percent complete. The district shows no progress on even providing the county Planning Department with enough information to act on the application. After the district completes the application, the county has to evaluate it before

making any recommendation. If County Planning approves it, at some date unknown in the future, the permit then goes before the Board of Supervisors, where questions will be raised before it can be approved. It will then be appealed to the Coastal Commission. This cannot be accomplished by 2025.

The plant, as it now stands, can only be operated at questionable output and substantial expense. The district has no workable plan for disposing of the brine waste. Operating the plant full time will produce 20,000-50,000 gallons of brine waste per day. Trucking it will cost millions of dollars, and the two facilities that have permits to accept such waste for disposal have not yet agreed that they have the capacity to accept that volume of brine. The brine waste alone makes operating the plant unworkable.

If it could be operated, previous tests have not demonstrated that it can produce 250 Acre Feet over six months, as claimed. Its production is certainly less than that.

Table ES7 shows that Cambria will actually have more water supply, including the claimed 250 Acre Feet from the EWS/SWF/ WRF, in the fifth year of a drought than in the first year. This simply cannot be supported.

The draft UWMP projects that 884 new water connections at new residences will add 850 residents to Cambria. This is not credible. Surely, these 884 houses will house more than a single occupant each. By basing demand on this low number, this draft UWMP suggests that adding these new connections will demand less water than will be required.

Annualizing water savings from low-flow fixtures again masks the actual savings. During the rainy season, when Cambria's aquifers are full, water simply flows off into the ocean. Low flow fixtures affect demand only during the dry season, when the amount of water in the aquifer is limited. It's another way to underestimate demand.

The impact of the climate emergency is unclear. The UWMP uses figures from Santa Barbara, showing an increase in precipitation by 2050 to 19.1 inches per year. The Fourth California Climate Change Assessment estimates precipitation in San Luis Obispo County at 17.6 inches per year. https://www.energy.ca.gov/sites/default/files/2019-11/Reg_Report-SUM-CCCA4-2018-006_CentralCoast_ADA.pdf

The required public hearing is apparently expected to serve as a rubber stamp for the draft plan, as the June 17 date provides no opportunity to revise the plan and complete the requirements prior to submitting it on the July 1 deadline. That obviates the reason for a public hearing, to solicit and take note of public comment, and revise the document appropriately. It's a sham.

This draft UWMP is written to allow Cambria to lift the building moratorium, but on the basis of water that is not actually there. Cambria could erroneously allow new water connections, without having adequate water to serve them.

I support Director Farmer's suggestion to invite Gus Yates of Todd Groundwater and Cindy Cleveland of Cleveland Biological to give reports to the board and the public as to their work for the district. While board members and staff expressed concern over the cost of having these contractors give public reports, with questions, Utilities Manager Ray Dienzo told the board at the January 17 meeting that he would include a provision for such a report in Mr. Yates' contract, over \$75,000, for groundwater modeling and monitoring on San Simeon Creek to satisfy the County Planning Department and the CA Coastal Commission request for the In Stream Flow Study on San Simeon Creek. So that should already be included. As for Dr. Cleveland, the district has paid her over \$100,000 since 2016. The public is entitled to an in-person report from her.

If these professionals require that they be appropriately compensated for their time, so be it. The board need not hesitate to pay them for their time and expertise. Let the public hear these reports and ask questions. Thank you.

Item 9E:

I thank Board members Farmer and Dean for their work on this issue and their report. I support their recommendations that these variously named new construction permits be brought before the board for discussion and full public airing.

As you know, none of these permits can legally be granted and the Coastal Commission will deny them. While the board may think that ignoring the Building Moratorium, the Growth Management Ordinance, previous Coastal Commission decisions and common sense relieves the district of responsibility, the Coastal Commission's patience with the district's stubborn intransigence is wearing thin. At the last meeting when the commission was required to deal with one of these permits in November 2020, the commission suggested one solution would be to put up a billboard in Cambria saying Don't believe these people. Now would be a good time for the board to decide to reverse its practice and start telling the truth.

There are no grandfathered projects. The Coastal Commission has settled this point in several decisions, including 2019 Hadian: "This exception from the moratorium for these pipeline projects was not due to any finding that they would not lead to harm to the existing water supply from adding more water demand to the system, rather it was considered a matter of equity and fairness to honor CCSD commitments made at the time (with the possibility of attendant legal risk if such commitments were not recognized), provided they were strictly limited in the manner described above. There were originally some 64 of these grandfathered pipeline projects, but there are no more such pipeline projects remaining today."

And in the Settimi decision: "There were originally a limited number of these "grandfathered" pipeline projects and there are no more such pipeline projects pending today. As a result, the cumulative effect of the moratorium and the certified LCP is that currently the LCP effectively prohibits approval of new water service in Cambria, taking into account the actual facts and reality on the ground, and does so in this case."

Forget Grandfathered. The Coastal Commission will not find differently because you send them more permits. They will only be more frustrated with you.

Stop approving new construction permits. But, if you feel you want to approve them, please discuss and approve them in public meetings. The Coastal Commission will be interested to view the video clips of your discussion and hear you defy their decisions when they hear future appeals.

--

Christine Heinrichs

From: [REDACTED] n Dean
To: [Ossana Terterian](#); [John F. Weigold IV](#)
Subject: Fwd: Water Facility
Date: Saturday, June 5, 2021 11:41:28 AM

From: Dorin [REDACTED]
Date: June 5, 2021 at 11:16:50 AM PDT
To: Karen Dean [REDACTED]
Subject: Water Facility

RE: Cambria Urban Water Management Plan

Dear Director _Dean_____ :

I am writing to strongly encourage the Cambria Community Services District to withdraw its current application for a “regular” Coastal Development Permit for the Water Reclamation Facility (WRF). The permit application should be modified and resubmitted to clearly state that the facility will only be used to provide supplemental water in times of impending or existing drought conditions for existing customers only.

Intent to serve letters or water will serve letters are still being approved even though the District claimed Cambria was out of water in 2014. The CSD, San Luis Obispo County planning and the Board of Supervisors should deny all new construction while Cambria is in a moratorium. New home construction, extensive remodels, expanded events, and year over year increases in tourism threaten the delicate water supply existing residents rely on from San Simeon and Santa Rosa Creeks.

Both the high operating costs and significant environmental impacts of the WRF make it highly unlikely that it will ever be able to reliably produce the additional water necessary to support incremental water connections. Use of the WRF should be reserved to protect existing ratepayers in times of drought.

Thank you for your consideration and please include my comment for consideration in the 2020 Urban Water Management Plan. Yours truly,

your name

Melvin Dorin

From: [REDACTED] Crosby Swartz
To: [BoardComment](#); [REDACTED] [John F. Weigold IV](#); [Ray Dienzo](#)
Subject: Public Comment on Draft UWMP 6-10-21 Agenda Item No. 7.B.
Date: Monday, June 7, 2021 5:40:43 PM

We have reviewed the draft UWMP and we have the following comments and suggestions for Board consideration. We found several places where future water demands are underestimated and future water supplies are overestimated. The UWMP conclusion that CCSD has supply capabilities sufficient to meet expected demands through 2045 needs to be supported by accurate numbers.

- Future water demand estimates are too low because the population growth estimates are too low. The BRP Report states that 884 additional residential connections will be added to reach the 4650 residential connection goal. For an average household size of 2.03 (from UWMP Section 3.4.1), the population will increase by 1,795, not 868 (6,900 - 6,032) as stated in the UWMP.
- Future water demand estimates are too low because the plumbing fixture water savings are too high. During the 6 month wet season, the water saved by efficient plumbing fixtures is not retained for use during the dry season, and is lost down-gradient to the ocean. A more accurate estimate of usable water savings would be obtained by using 6 months of plumbing fixture water savings during the dry season instead of annual numbers.
- Future water supply estimates are too high because the WRF is assumed to supply 250 AFY of usable water. UWMP Section 6.2.5 states that 60 percent of the re-injected water would enter CCSD's San Simeon Creek aquifer potable water wells. Usable water supplied to CCSD customers by the WRF would be 150 AFY, not 250 AFY.
- Future water supply estimates are too high because the ability of the WRF to supply 250 AFY has never been analyzed or demonstrated. The amount of purified water supplied by the WRF is limited by the amount of non-potable water that can be safely pumped from percolation pond wells 9P4 and 9P7. Operating the facility at maximum capacity during the dry season would draw saltwater into the aquifer by lowering the water level in the percolation pond and aquifer to below sea level.
- Future water supply estimates are too high because the quoted normal year supply number of 725 AFY (Table 7-1) is an annual average. Cambria's water supply shortages occur during the 6 month dry season. Using the dry year supply number of 467 AFY instead of 725 AFY would provide a more accurate assessment of the ability of Cambria's water supply to meet anticipated demand during a 6 month dry season.
- The water supply and demand numbers in Tables 7-2, 7-3 and 7-4 should be adjusted to reflect realistic population growth, plumbing fixture water savings, usable WRF water output and base year water supply values.
- The Water Shortage Contingency Plan does not mention an important shortage indicator for determining Stages of Drought. The acre-feet of water remaining in the San Simeon Creek aquifer on any given date must be compared with the acre-feet of water needed to reach the end of the dry season. If the remaining stored water is less than what is needed, additional conservation measures and WRF operation is needed. For additional details, see written public comment for 5-20-21 Board Meeting.