

Pursuant to Governor Newsom's Executive Order N-29-20, members of the Resources & Infrastructure Standing Committee and staff will participate in this meeting via a teleconference. Members of the public can submit written comments to the Board Secretary at boardcomment@cambriacsd.org.



RESOURCES & INFRASTRUCTURE COMMITTEE

REGULAR MEETING
Monday, April 19, 2021 - 2:00 PM

AGENDA

Please click the link below to join the webinar:

<https://zoom.us/j/95758017966?pwd=dDIQaHhHT1FJTTRBTE9CbERvdmpmZz09>

Passcode: 327747

Or iPhone one-tap:

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Webinar ID: 957 5801 7966

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Copies of the staff reports or other documentation relating to each item of business referred to on the agenda are on file in the Office of the Board Secretary, available for public inspection during District business hours. The agenda and agenda packets are also available on the CCSD website at www.cambriacsd.org. Please call 805-927-6223 if you need any assistance. If requested, the agenda and supporting documents shall be made available in alternative formats to persons with a disability. The Committee Chairperson will answer any questions regarding the agenda.

- A. CALL TO ORDER
- B. ESTABLISH QUORUM
- C. CHAIRMAN'S REPORT
- D. AD HOC COMMITTEE REPORTS

1. PUBLIC COMMENT

Members of the public may now address the Committee on any item of interest within the jurisdiction of the Committee but not on its agenda

today. Future agenda items can be suggested at this time. In compliance with the Brown Act, the Committee cannot discuss or act on items not on the agenda. Each speaker has up to three minutes.

2. CONSENT AGENDA

- A. Consideration to Approve the March 15, 2021 Regular Meeting Minutes

3. REGULAR BUSINESS

- A. Discuss and Consider the Updated CIP List
- B. Discuss and Consider Presenting Ad Hoc Report to the Board on the Strategic Objective to Identify Additional Resources for Water
- C. Discuss and Consider Presenting Ad Hoc Report to the Board on the Strategic Objective to Identify Public Water Conservation Measures and Best Practices

4. FUTURE AGENDA ITEMS

5. ADJOURN

RESOURCES & INFRASTRUCTURE COMMITTEE

REGULAR MEETING
Monday, March 15, 2021 - 2:00 PM

MINUTES

A. CALL TO ORDER

Chairperson Dean called the meeting to order at 2:00 p.m.

B. ESTABLISH QUORUM

A quorum was established.

Committee members present via Zoom: Karen Dean, David Pierson, James Webb, Brad Fowles, Steve Siebuhr, and Michael Thomas.

Staff present: John Weigold, Ossana Terterian, Pamela Duffield & Ray Dienzo.

C. CHAIRMAN'S REPORT

Karen Dean reported: The new members, Steve Siebuhr & Michael Thomas toured the Wastewater and other facilities.

1. **PUBLIC COMMENT** – There was no public comment

2. **CONSENT AGENDA: 2:02 pm**

A. Consideration to Approve the February 22, 2021 Regular Meeting Minutes

Committee member: James Webb motioned to approve the minutes.

Committee member: David Pierson seconded the motion.

The motion was approved 5-ayes (Pierson, Webb, Fowles, Siebuhr, Thomas), 0-Nays, 0-Abstain

3. **REGULAR BUSINESS**

A. Receive Reports from Ad Hoc Committees:

- Water storage: David Pierson was looking for parameters from the board for this subject. Discussed various water resources.
- Greywater: Jim Webb recommended viewing a video on Greywater installation by a local plumbing company, Potter Plumbing.

- B. Receive an Update from the Utilities Manager on the Progress of the SST Contract and Funding.
- Ray Dienzo stated that the Wastewater facility was high priority. They have value engineered the process to 5 projects. Getting ready to go out to bid.
- C. Receive an Update from the Utilities Manager on the UWMP Progress
- Ray Dienzo stated that we are getting near the report generating stage. Looks like 6 stages of drought levels. Coastal wants 25-year projection. Estimating May for preliminary report.

CIP list review was postponed.

4. FUTURE AGENDA ITEMS

- CIP List review
- CDP Process

Chairman Dean asked for any future agenda items.

5. ADJOURN

Motion by Brad Fowles to adjourn the meeting @ 2:42
Second by James Webb

Chairman Dean adjourned the meeting at 2:42 pm

Draft Report

Water Supply Ad Hoc Committee

R&I Standing Committee

Our committee was tasked as part of the CCSD Board's Strategic Planning process to find alternate sources of water for the community to allow growth. We were tasked to pursue opportunities regardless of the amount of water that might be needed or the amount the Water Reclamation Facility (WRF) will be able to produce during drought years. The revised Urban Water Master Plan, due in July, and a final approved Coastal Development Permit for the WRF should clarify the needed quantity. Our findings can then be used by the Board to decide on which, if any, opportunity needs to be pursued.

After much consideration, we came up with two basic truths to guide us. First, the two streams that provide our water now will not be providing any new water in the future. Indeed, climate change may cause there to be less water available. Second is that many studies have already been done in this area and although we had some new ideas, we certainly used the previous studies to guide us.

The Army Corps of Engineers (ACE) report, *Cambria Water Supply Alternatives*, of November 2013 was a comprehensive report that had 28 concepts narrowed down to 8 viable alternatives. Some of those had us linking to resources to our south. We consulted with both Supervisor Gibson and Tom Luster of the Coastal Commission on those alternatives. Both told us that tapping any resources outside of the immediate Cambria area was a non-starter. The cost and environmental impact would preclude any of those opportunities. The ACE report did have two options that we thought were viable and those are discussed below.

We are proposing five different opportunities for the Board's consideration. All will cost millions of dollars and require environmental and engineering studies before being pursued. We are not endorsing any of these options but offering them to the Board for their consideration. We do agree that the new wastewater treatment plant (WWTP) will be required within the next 10-15 years. With the time to get the engineering done and the permit approvals for such a project, we recommend initial studies on a new WWTP begin soon. Once the WRF is permitted the Board should have a clear picture of the need for additional water supplies. We recommend the Board then take swift action to decide on an option and begin the needed studies and engineering.

- Option #1 The California Division of Drinking Water is working on a framework of regulations for the direct reuse of highly treated wastewater as drinking water. This new source of water will be highly regulated but offers a clear path for Cambria to use the water produced by the Water Reclamation Facility to be used directly as drinking water without being reinjected into the aquifer. There likely will be modifications needed to the existing plant, but this may be the most viable source of drinking water for the community. The hydrology of the aquifer will obviously need to be considered before undertaking this approach.
- Option #2 Construct a new state-of-the-art Wastewater Treatment Plant that will allow reuse of the plant output as drinking water. This technology is nearing reality and should be available within ten years which is probably the time needed to get the plant sited, permitted, and constructed. A cooperative effort with San Simeon and Hearst Castle (State

Parks) should be pursued. This plan has the backing of Supervisor Gibson. The current Cambria plant was built in the 1970s and though it has been upgraded it is not state of the art. The San Simeon plant needs to be moved due to sea level rise which may also be true of the Cambria plant in the future. The new plant will minimize the reliance on the streams as most of the community's need will come from the plant. This option needs to be pursued regardless of San Simeon's cooperation.

- Option #3 There are ranchers and farmers upstream of our wells that own water rights for their operations. The District should pursue buying these rights so that more of the streams' water can be used for the community. These include rights held by Mr. Warren and Mr. Pedotti on San Simeon Creek and numerous landowners on Santa Rosa Creek. We have not contacted any of these landowners and know of none that are looking to sell at this time. The key risk to this option is that since it does not bring any additional water into the system, in a drought this water may not be available. This extra water rights would not necessarily need to be permitted as this water would be available downstream to our well field.
- Option #4 The 3rd best option from the ACE report is for a Desalination Plant. This option has been pursued by the CCSD before but remains one of the most viable alternatives. It would reduce dependence on the streams which would allow them to replenish and would reduce the environmental impacts on the streams. We encourage the Board to work with San Simeon to reconsider building a plant that would serve both communities with a stable and reliable water supply.
- Option #5 Another alternative considered by the ACE report is off-stream storage of water. Our concept would be to work with Mr. Warren on his reservoir to store up to 700 AF of water. This water could be used to provide Mr. Warren with his 187 AF each year for his crops or with the addition of a surface water treatment plant be used for potable water for the community. There are numerous challenges associated with this plan including filling the reservoir which would take several years. There are other possible off-stream opportunities including one off Perry Creek that would provide a possible 50 AF of storage. However, all the other opportunities would be more expensive due to their remoteness to the main well fields.

The ACE report delineated eight Tier 2 concepts. One has been implemented with the Water Reclaim Facility. Two others are discussed above. Three involve sources outside of our reach based on discussions with Gibson and Luster. The Hard Rock Storage and San Simeon Recycle were rated 6 and 8 by the AEC report and not considered viable by us.

During our review of the ACE alternatives, we were reminded of the original plan to dispose of the brine from the Water Reclamation Facility. The original concept was for subterranean disposal by recharging of the plant generated waste stream in the seawater wedge via deep injection brine injection wells. We recommend that this be pursued by the CCSD as a better method of disposal of this waste than the current plan to truck the waste to an approved outfall. This will require new permitting and approvals, but the effort would be highly beneficial. (\$1.6M in 2013)

Draft Report
Water Conservation Ad Hoc Committee
R&I Standing Committee

The R&I Ad Hoc Committee on Water Conservation was assigned the Strategic Planning Objective of identifying public water conservation measures and best practices and to bring recommendations to the Board for sharing with the public. Actively conserving water as much as possible is very important to preserve our limited supply of water, especially with the increasing effects of climate change as well as our more and more frequently recurring drought conditions.

Our research began with the CCSD Website and the links therein on Water Conservation and Water Use Efficiency. To find this information, go to Cambriacsd.org, click on Water, then Plans and Programs, and you will find links for Water Conservation guidelines as well as for the Water Efficiency Plan developed with Maddaus Water Management and adopted by the Board in 2013. We have included many of the recommendations from these reports, have expanded on some of those recommendations, as well as including information from our additional research.

Our recommendations for water conservation include the following.

Indoor water saving tips:

- Use low flow and water efficient fixtures. Bathroom faucet aerators can be easily replaced with ½gpm aerators, inexpensive and readily available at local hardware and home improvement stores. Also available are inline flow reducers that can be installed under the sink in the water supply line.
- Do not let the water run when brushing teeth or shaving.
- Install 1 ½gpm showerheads, they are currently available in many styles and finishes. Another option to reduce water flow in the shower is a flow restrictor that attaches between the shower arm and shower head, many of which have a shut off lever to stop the flow of water while shampooing or soaping up.
- Catch shower water in a bucket while waiting for hot water, use this water to flush toilet or water plants. Limit showers to 5 minutes. If more than one person will be showering, shower one after the other to avoid having to wait for hot water again.
- Replace toilets with a 1.28 gallon per flush or dual flush toilet. Check the toilet for leaks by putting food coloring in the water tank. If there is a leak, the food coloring will show up in the bowl without flushing.
- Replace kitchen faucet aerators with 1 ½gpm aerators or install inline flow restrictors in the water supply line under the sink.

- Hot water recirculating pumps can help reduce the water wasted while waiting for hot water. Many different types are available, and can be controlled with timers, remote controls, or a switch at the sink. They can be installed near the water heater, or under the sink versions for instant hot water are also available and would be a simpler retrofit requiring less plumbing.
- Never let the water run continuously if washing dishes by hand.
- Run only full loads in the dishwasher and washing machine and use the shortest cycle possible.

Outdoor water saving tips:

- Use a broom or a battery powered blower, not a hose, to clean driveways and walkways.
- Replace high water using lawns and plants with drought resistant groundcovers and shrubs.
- Add organic matter to the soil to increase water penetration and retention.
- Mulch around plants to keep the soil cool, retain moisture, and reduce weed growth.
- Use drip irrigation and adjust water schedule with changes in the weather, use timers.
- Water in the coolest part of the day, early morning or evening.
- Additional tips for water efficient landscaping can be found at <https://www.slowaterwiselandscaping.com>. Also consider more fire wise landscaping options, some good information and other links on this are available on www.ReadyforWildfire.org.
- Consider rainwater harvesting for landscape watering. Roof catchment systems can be as simple as collecting water by routing gutter downspouts into a barrel, daisy chaining several barrels together or using a water storage tank to hold the water for later use. This saved rainwater can also be used to wash vehicles. Approximately .62 gallons of water per square foot of rooftop per inch of rainfall can be collected, with a 2000 sq ft roof that could be about 1,343 gallons of water for every inch of rain.
- Greywater systems can help reduce the use of potable water for landscaping. However, greywater cannot be stored, nor can it be used for edible crops or where it can be in contact with people by spraying or by sprinkler systems.

A report by Committee member Jim Webb, with contributions from Committee member Brad Fowles, on research done on greywater systems and use follows. Jim talked to some local contractors regarding the use of greywater.

While greywater systems may be complex or simple, the bottom line is their design is dependent on site specific details. Living on a hill is a situation that might mean you need pumping to make your greywater system work. A flat lot might not need this and can use that old standby: gravity. More difficult the terrain, the more expensive the system will be.

Small lots use small systems, large lots more complex situations. Some properties may have no benefit at all from a greywater system if there is very little area to disperse the water. The rules are the same: non-potable water cannot be stored (the bacteria in it will multiply) and cannot be put on vegetable crops or dispersed in a manner that people will come in contact with it. A drip system will deliver water to a landscape bed but a sprinkler on a lawn won't work.

In a typical house, about a third of water use is with toilets. This water cannot be used for greywater. About half the water used goes to landscaping, and this is a place where greywater systems can show some savings. It is not unrealistic to assume 15% water savings implementing a greywater system.

Standardized parts are now available, and inexpensive systems in the right location can be done for under two thousand dollars. The issue that sometimes crops up is the cost of a permit. The cost of a permit is \$1,500. This has made some people opt to not go the permit route, but still put in a system. This obstacle could be adjusted by the county. Required care and maintenance of a greywater system should be considered when evaluating the benefits for your area.

Perhaps not unimportant, is the fact that greywater systems do not feed the CCSD Waste Water Treatment Plant. The water is absorbed by the user's yard. As such, water and wastewater bills could decrease with a greywater system.