Attachment A

Public Comments
DRAFT 2016-17 Water Conservation Report

Ms. Amina Flores-Becker Special Districts Administration County of Fresno 2220 Tulare Street, 6th Floor Fresno Ca 93721

January 6, 2016

Dear Ms. Flores-Becker:

I represent the CAC for CSA 47 (Quail Lake) and am writing you regarding the proposed water schedule for CSA 47 in 2016/17. The Director had asked for any comments related to the proposal to make CSA 47 on Conservation Stage 2 (2 days per week of outdoor irrigation). This was recommended by Staff in order to comply with Governor Brown's Emergency Order that rural districts were to meet a 25% reduction in overall water usage vs. 2013 or restrict water days to 2 days/week. In 2015/16, CSA 47 reached 22% reduction in water usage but did not meet the required 25% even when adjusted for new homes.

I appreciate the opportunity to comment on the proposed conservation plan. Furthermore, Quail Lake is an ecologically conscious area and wish to comply with the requirements of Governor Browns order. With that I make the following recommendations:

- * I recommend the base period remain as previous stated, namely 2013. Hence the 25% reduction in 2016would be compared to 2013/14 and not the most recent year (for which the community already conserved at a 22% rate).
- * The discussion documentation cited the large amount of potable water used to fill the lake during a portion of the 2015 year which will not be allowed to continue until the emergency order is lifted. I would ask that you recognize this water usage as part of the overall usage by the community and attribute that savings to the upcoming year. If this savings were counted, along with the 22% savings, it would seem the overall conservation would be in excess of 25% resulting in a normal conservation condition.

Regardless of the above calculation, I ask consideration to two exceptions that, on their own, will provide incentives for residents to invest in proven water savings devices:

* **Drip Irrigation.** Provide a time of day exception to those who have installed drip irrigation or micro sprayers. These systems are known for their efficiency by providing smaller amounts of better targeted watering. These devices provide water savings but must water over a longer amount of time. As example, a typical drip line delivers 1 gallon/hour of water as compared to a regular pop-up sprinkler at 120-240 gallons/hour (2-4 gallons/minute). Using EvapoTranspiration equations to determine the optimal water times, drip irrigation may take upwards to 1 hour at a slow drip vs. 10 minutes of a pop-up sprinkler. Using these figures, the drip, even with its longer duration would save upwards to 40%-75%. With restrictive hours, a typical 7 station system which might have run 70 minutes with a pop-up sprinter now takes 7 hours with drip. Applying restrictions on water times could lead to drip

simply running out of time vs. pop-up sprinklers providing homeowners with a dis-incentive to invest in a proven water saving technology. Alternatively, allowing for an exception would provide an incentive for investment and allow the system to work properly.)

- * Smart ET (EvapoTranspiration) controller. Provide an exception to the limit on days per week for those who have installed a needs based ET or equivalent system. As background, these systems work on the calculation of EvapoTranspiration and can save 30%-60% of watering needs by calculating weather conditions(evaporation) and plant types (transpiration) to optimize water conservation and plant health. These are unusually smart system that receive micro-climate information (either through the internet or via a local weather station) and can develop sophisticated algorithms for watering proven to save water. In addition to the EvapoTranspiration element, these systems also consider the slope of the land and the type of soil. Depending on many factors, the water pattern will include periods of water and soak-in times. Typically a 5-10 minute of watering will be paired with a 30-60 minute soak-in period, then repeated.
- * These sophisticated ET systems are available at local Home Improvement Stores and landscaping e-tailers for \$300-800 and will optimize water conservation. Similar to the drip system, these typically water over a longer time period and are indifferent to water day restrictions. While one can limit the days of watering, the system will simply make up that missed day and will do so on a less efficient basis. The lost efficiency relates to the algorithm which will become "dumb" and water constantly in order to make up the lost ET, while also losing the 30%-60% efficiency

A counterargument to the exceptions listed above is it will be difficult to enforce the 2 day per week watering system unless enforcement knows which property owners have such systems. Enforcement will be already be difficult due to lack of resources compounded by the inability of enforcement to see any watering in a drip system. However, this concern can be alleviated by having those with such system provide the County with an affidavit stating they have such systems under penalty of perjury. That said, the point of granting exceptions is to encourage investments in water saving technology in the light of the lack any monetary incentives.

I hope that you will take these recommendations into account when crafting your new requirements.

Please call with any questions.

John Ypma

John Ypma Vice Chair - CAC CSA 47 559-217-7142

Flores Becker, Amina

From:

Jim Torosian <torosianfamily@yahoo.com>

Sent:

Wednesday, January 20, 2016 10:32 AM

To:

District5 (Office of Supervisor Debbie Poochigian); Weaver, Alan; Thompson, John R.

Cc:

Flores Becker, Amina; Bump, Christopher

Subject:

Proposed Stage 2 Water Conservation for CSA44-D In The 2016-2017 Water Year

Attachments:

Scan0085.pdf

Debbie Poochigian, Supervisor District 5, County of Fresno Alan Weaver, Director Public Works & Planning John Thompson, Special Districts Special Districts Staff

SEE ATTACHED "SUMMARY"

I will first go through the "Summary" letter that was received to point out the errors and misstatements made.

1. "County Service Area 44D (CSA 44D) provides water to 124 customers in the Monte Verdi Estates subdivision, located one mile south of the community of Friant."

<u>Currently</u>, (January 20, 2016), there are 121 homes that are "connected" with water and sewer service in CSA44-D, not 124 as stated.

The Monte Verdi Tract is located approximately 7 miles south of Friant, California, not 1 mile as stated.

Monte as in Monte Verdi, is spelled with an e at the end, not an i.

2. "CSA 44D experienced lower than normal use after November 2013 due to a fee increase that was approved at that time."

November is the time of the year that normally sees a reduction in use due to the property owners curtailing landscape watering. In reality, the fees for water to the individual properties were lowered approximately 50% due to the Proposition 218, while sewer fees were approximately doubled. The fees for water after November 2013 had little or no effect on consumption.

3. " During that critical period the user demand was 40% of well capacity and capacity exceeded demand by 357 gallons per minute. That difference is equivalent to approximately 714 new homes."

So simply stated, there was no negative number to provide when comparing production and consumption. I would also have to question why those who drafted this "Summary" would include a statement, "That difference is equivalent to approximately 714 new homes."

What does that have to do with anything involved with the subject at hand, changing the Water Conservation from Stage 4 to Stage 2. Furthermore, what documentation, facts, numbers, is Staff using

to make this statement?

The reason for listing some of these errors and misstatements in the Summary is, if Special Districts Staff can not produce a valid and factual Summary, including not spelling the name of this Tract correctly, then how do we know that the 2% that Special Districts indicates we have not met is a valid figure?

4. The comparison is being made between the Water Years of 2013 and 2015. I am assuming that the water years are based on a April 1 through March 31 calendar. In this assumption, the 2013 Water year would have been April 1, 2013 through March 31, 2014.

The 2015 Water year would be, April 1, 2015 through March 31, 2016. Therefore, we still have 3 months from January 1, 2016, to accumulate the necessary data.

Due to rainfall since October 2015, property owners for the most part have curtailed to completely stopped watering their landscapes.

5. "During the months of June through November of "calendar year" 2015, CSA44 D customers decreased total water usage by 23% compared to the same months in 2013."

Are we now comparing "calendar years" as opposed to "Water Years? Or are we comparing 5-6 months of the year 2015 as opposed to 5-6 months months of 2013.

6. "Staff expects the completion of a tertiary water treatment facility in December 2016; the facility is projected to decrease potable water usage by approximately 10%."

Again, this has nothing to do with the subject at hand, which is residential water use.

The most important variable in all of this, and one that County Staff has seemed to overlook is, in the 2013 "Water Year", there were 118 homes "connected". In the 2015 "Water Year", there were 121 homes "connected".

Given the allotted number of gallons at 25,000 gallons per month per lot, and should there have been overages on the three additional "connections", that amount alone could be at or over 1,000,000 gallons.

The graph that was enclosed looks nice, but lacks substantiation. What are the numbers?

What was the starting point in the 2013 "Water Year."

When was the comparison made in the 2015 "Water Year" and what were those numbers?

What is the number in gallons the 25% reduction required by the State of California?

What is the number in gallons of the actual 23% reduction?

What is the 2% in number of gallons?

And most importantly, what effect did the 3 additional "connections" have on the overall consumption and or reduction in consumption? Of course, three additional "connections" would increase total consumption, but factored into the other 118 "connections", they could also produce an overall reduction when attempting to make any type of comparison between "Water years 2013 & 2015.

My thoughts are, that after factoring these variables, that we have decreased consumption more than the 25% requirement.

I would appreciate a reply to this e mail along with documentation (numbers) that support Special Districts recommendation that Stage 2 Water Conservation be implemented for CSA44D in the 2016-17 Water Year."

I would also ask that at this time, Stage 2 Conservation not be implemented and that further study be done to support the County's decision and position on this extremely important issue.

As the Summary requested, please add this correspondence to the record for consideration by the Fresno County Board of Supervisors.

I would appreciate notification of when the Board of Supervisors will be hearing and making a decision on this issue.

Jim Torosian County Service Area 44, Zone D.

Flores Becker, Amina

From:

Weeks, Jerod

Sent:

Monday, January 25, 2016 8:05 AM

To: Cc: Bump, Christopher Flores Becker, Amina

Subject:

FW: Comments on WWD 40 Annual Water Conservation Report

Jerod Weeks

Staff Analyst, Special Districts

Fresno County Department of Public Works and Planning

Resources Division

2220 Tulare Street, 6th Floor · Fresno, CA 93721

Ph: 559/600-4321 Fx: 559/600-4552 www.co.fresno.ca.us/specialdistricts

Please let us know how we are doing. <u>Customer Service Survey</u>

From: George Davis [mailto:gdavis@netptc.net]
Sent: Monday, January 25, 2016 7:50 AM

To: Special Districts Admin

Cc: Patricia Stearns; Jean Spencer; Weeks, Jerod

Subject: Comments on WWD 40 Annual Water Conservation Report

Dear Sirs,

I read the draft report on the Shaver Springs WWD 40 annual water conservation report and have a few comments.

- 1) The subdivision is not built out, there are 92 buildable lots.
- 2) The report needs to be clear that without purchasing water from the "private" Messer well the district would have had to truck water in to meet the demand last summer.
- 3) There needs to be data showing the well output throughout the season and what it is currently. The chart showing a constant 10 gallons per minute well output throughout the season is not correct. It is my understanding from talking to field staff that the output of the two district wells is still very low at this date.
- 4) The paragraph on critical usage month would lead one to believe that in the worst case there was always 26% more water available than what was used and would imply that the tank storage tanks were always full. This was not the case, the message board at the tract entrance showed many times when the tank levels were down to around 60% of capacity.
- 5) I would not recommend reducing the conservation level from stage 4 to stage 3.

Sincerely, Carol Davis, CAC To: Amina Flores, Principle staff analyst Fresno County Department of Public Works and Planning

Re: Comments regarding the 2016 -2017 Water Year Conservation Report.

Dear Amina:

- In follow up to a recent conversation with Chris Bump regarding the Annual Water Report, please accept the below narrative for your consideration which:
 - Reflects the CAC interpretation of said draft report that tentatively recommends moving Monte Verdi from Normal (Stage 1) to Stage 2 watering schedules.
 - Ongoing Conservation activities of the HOA, CAC, and Residents, in the name of water conservation, that have not been necessarily in place long enough to reflect their total impact. Additional dimensions of consideration not noted or reflected in the report. Many of the measures listed below took time to contract, install, repair, and otherwise implement that you may not be aware of.
 - 25 acres of green belt irrigation that has been turned off in the interests of achieving our 25% reduction goal
 - 4 homes and more to come this year, replacement of existing lawns with artificial turf, which occurred in late summer early fall 2015, in the interest of saving water.
 - 2 homes (one new and one remodeled) completely landscaped with drought tolerant vegetation and drip irrigation (no grass at all).
 - Refocused efforts with our gardening contractor to a higher level of maintenance of Monte Verdi irrigation systems replacing / upgrading leaking valves, broken lines and inefficient sprinklers resulting in meaningful reductions in wasted water.
 - Replanting with more drought tolerant species and utilizing drip irrigation where practical.
 - The 2.5 million dollar renovation / replacement of the existing undersized WWTP under active, continuous development in cooperation with the County Resources Division anticipated to be completed this year.
 - Ongoing participation with the County Resources Management division through an active CAC whose membership includes both the HOA president and treasurer as well as 3 concerned residents.
- Additional dimensions that merit discussion Include:
 - Monte Verdi is not a cookie cutter subdivision that could be easily compared to other subdivisions. Unique features by lot that impact water consumption includes the size of the lots 14,000 to over 29,000+ square feet, Custom homes from 3000 to over 8,000 square feet.

- Additionally, the size of families varies widely from 2 retirees to large, young extended families. Water consumption given these variables is practically impossible to predict or effectively managed from the sidewalk. In this regard, to more effectively identify opportunity for improvement at the individual address level, it would be extremely useful to gain monthly access to address specific water consumption figures to focus in with an educational program to be developed. We understand these figures are available from the County and request that they be forwarded monthly to the HOA board for review.
- A bit of confusion associated with the Ordinance code 14.01.090 Water Conservation Stage Two, which states (item B) this classification is appropriate when the director anticipates limits on the availability of water resources to serve an even extended need that would result in significant short fall of water. (paraphrased). If this is the primary criteria for stage two, that finding cannot be made as the current measurements of water consumption are only 40% of available well capacity during critical period measurements as stated on page 34 of the area 44D Summary. "This finding" element is also listed in the proposed resolution, page one, third "Whereas" and again in substance in the last "whereas" on page two.
- It would also be fair to recognize the inordinate time it has taken to complete the WWTP, which has endured multiple delays through several additional years that was not caused by Monte Verdi or the HOA. By the Counties own estimate, this renovation will reduce water consumption a minimum of 10% and most certainly should be included in consideration as all 125 owners have signed on to the financing of this project. Per County estimates, this project is anticipated to be on line this year.
- The CAC members do not understand the significance of the County's reference to "714 new homes," noted in the first paragraph of the County Service Area 44D Summary, page 34. Are the homes referenced comparable to Monte Verdi's lot sizes and residential square footage? What point was being made by this comment; that our wells have incremental capacity sufficient to support an additional 714 new homes at Monte Verdi, or that the 357 gallons per minute demonstrates a significant "cushion" in capacity alleviating any concern that the district would experience any shortfall of water supply to meet the needs of the water consumers, (14.01.100, B)?

• To conclude:

Monte Verdi has demonstrated a serious focus on water conservation throughout this initial year of emergency management by virtue of the measures listed above. Many of the measures taken were not patchwork efforts but rather substantial individual investment and effort that should result in achievement of the 25% reduction in usage. Timing is the only variable and understandable in the context of the complexities of the measures taken. Monti Verdi did not simply turn off a faucet, they have re-engineered several systems to achieve long term results. The graph on page 35 44D

- 1 suggests our consumption figures are likely to continue to decline through December and as such would reduce the adverse variance even more. To suggest 2% or less is enough to warrant a stage two recommendation seems punitive and a gross imbalance in light of the measures Monte Verdi has taken.
- In summary, we collectively believe, these activities will easily result in the 25% reduction in water usage assigned over the next "Water Year", April 1
 March 31 2017. Monte Verdi's efforts in time, planning and investment in water conservation has been substantial and should not be discounted in the decision making process associated with the Stage 2 recommendation to the board.

Respectfully submitted,

Monte Montemagni Chair, CAC

CC: Chris Bump, Staff Analyst