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San Luis Obispo Board of Supervisors (805) 781-5450
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San Luis Obispo, California 93408

RE: Public comments for Water Master Plan (WMP)

Dear Supervisor Paul Teixeira and Board members:

I was present at the WRAC when the 1998 Water Master Plan was done.

During the 2010-12 Water Master Plan Process Mike Winn, a director from NCSD was the chair of the WRAC and also chair of the WMP subcommittees.

There was an unjustified change in the Water planning areas that prevents easy comparison of water supply and demand in the Nipomo area between the two reports.

The 2012 WMP "Supply" is about half the 1998 supply number with out any explanation of the change. How can that be?

In the 1998 WMP, WPA-6 of the Nipomo area had an existing 6,090 AF/Y surplus and a projected surplus or small deficiency at build out of 6,470 to (1,440) AF/Y.
(1998 WMP, WPA-6 p10 table 17 and p11 table 18, Lower right)

The numbers have changed by a factor of two for the 2012 WMP Report and there is no explanation of the change in supply and demand numbers in the new report.

The 2012 WMP reports on Appendix B page 31 a supply of:
"Area Yield. The safe yield of the DWR's Nipomo Mesa Hydrologic Subarea, reported as dependable yield, was estimated **between 4,800 AFY and 6,000 AFY** prior to the formal establishment of the Nipomo Mesa Management Area (DWR, 2002). The first Annual Report for the Nipomo Mesa Management Area does not list safe yield, but estimates total **recharge at 7,300 AFY**, being the sum of 5,700 AFY deep percolation of precipitation and 1,600 AFY subsurface inflow (NMMA Technical Group, 2009).

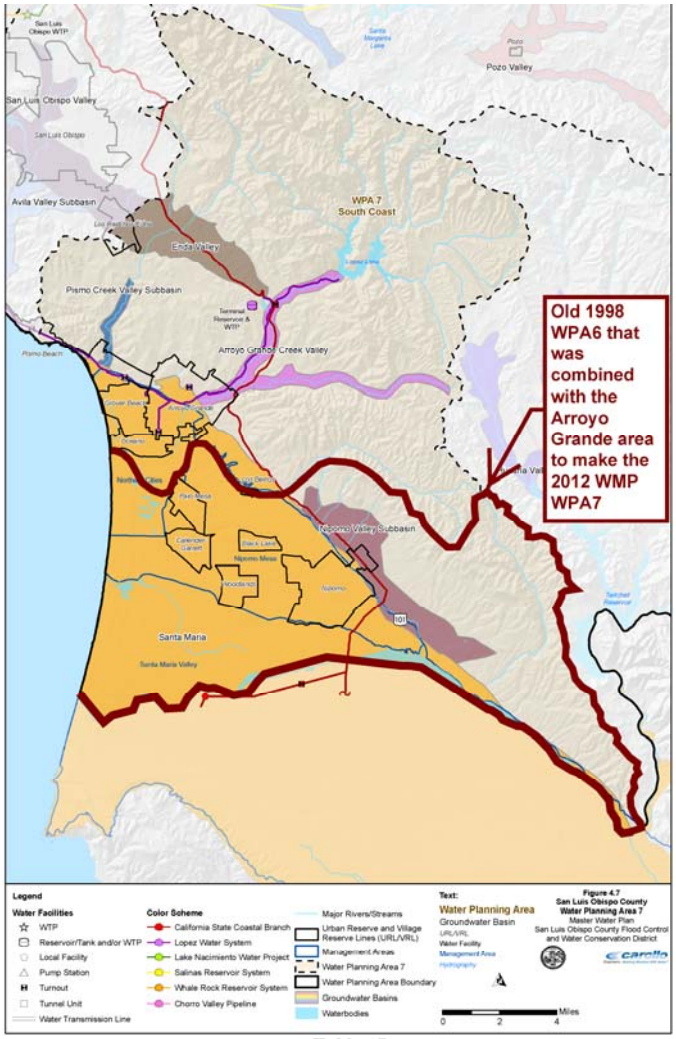


Table 17
Existing (ac-ft/yr)

Demand	Grndwater Supply	NonGrndwater Supply	Total Supplies	Balance (Deficiency)
35,210	41,300	0	41,300	6,090

a. Balance (Deficiency) figure has been rounded to the nearest 10's.

Projected (ac-ft/yr)

Demand	Grndwater Supply	NonGrndwater Supply	Total Supplies	Balance (Deficiency)
34,830-42,740	41,300	0	41,300	6,470-(1,440)

a. Balance (Deficiency) figure has been rounded to the nearest 10's.

The 2012 WMP report supply is listed in appendix B page 32:

> "Area Yield. The Santa Maria Valley, most of which is in Santa Barbara County, provided 124,000 AFY of average annual production to wells over a perennial yield study period without sea water intrusion or a decline in groundwater levels and storage (Luhdorff & Scalmanini, 2000). The 2008 Annual Report for the Management Area estimated 125,100 acre-feet of groundwater production in the basin for 2008, with no indications of severe water shortage (Luhdorff & Scalmanini, 2009). Safe Yield in the San Luis Obispo County portion of the **Santa Maria Valley, reported as dependable yield**, was estimated **between 11,100 AFY and 13,000 AFY** prior to the formal establishment of the Santa Maria Valley Management Area (DWR, 2002)."

So if you add 6,000 AFY for the Mesa and 13,000 AFY for the Santa Maria Valley plus 2000-4000 for the Nipomo Valley you only get 21,000 to 23,000 AFY of supply,

Which is about half the 1998 WMP supply number of 41,300 AFY.
With No explanation of the change how can that be?

The WMP uses Supply and Demand numbers are taken from different reports using incompatible methods.

For example, In the WPA 7 in the Santa Maria valley the demand in the appendix D page 4:

TABLE 1
EXISTING AND PROJECTED FUTURE WATER DEMAND FOR ALL WATER PLANNING AREAS[a]

WPA	WPA Name/ Category	Existing Demand (AFY)	Projected Demand (AFY)		
7	**South Coast**				
	Urban	410	458	-	482
	Agricultural	19,920	16,610	-	23,830
	Rural	1,480	1,990	-	2,160
Demand Category	NCMA[b]	11,326	13,142		13,854
	NMMA[b]	12,600	17,984		17,984
	SMVMA[b]	25,540	25,540		25,540
	Total	**71,276**	**75,724**	**-**	**83,850**
	Environmental	32,960	32,960		

The supply is listed in appendix B page 32:

> "Area Yield. The Santa Maria Valley, most of which is in Santa Barbara County, provided 124,000 AFY of average annual production to wells over a perennial yield study period without sea water intrusion or a decline in groundwater levels and storage (Luhdorff & Scalmanini, 2000). The 2008 Annual Report for the Management Area estimated 125,100 acre-feet of groundwater production in the basin for 2008, with no indications of severe water shortage (Luhdorff & Scalmanini, 2009). Safe Yield in the San Luis Obispo County portion of the Santa Maria Valley, reported as dependable yield, was estimated between **11,100 AFY and 13,000 AFY** prior to the formal establishment of the Santa Maria Valley Management Area (DWR, 2002)."

How can, in the Santa Maria valley demand be listed at 25,540 AFY which is double the reported "supply" of 11,100 to 13,000 AFY in the same report with out any explanation., And at the same time quote a report that states: "no indications of severe water shortage".

The WMP is unclear in that it uses Supply in two ways.

One way is "The supply" and then talks about a "safe yield" as an amount that can be supplied in the future.

The second way is Page 4-150, Table 4.39 "supply" to indicate the amount of water that will be taken from a groundwater basin even if it can't "supply" it in terms of the "safe yield"

That makes the WMP report lack credibility due to the confusion it creates.

The WMP is unclear, confusing and misrepresents the status of Ag supplied water by using the word "uncertain" on pages 4-150 to 4-153.

Table 4.38 South Coast WPA 7 Demand and Supply

	Golden State Water Co. (Edna Valley)	Northern Cities Management Area						Nipomo Mesa Management Area							Santa Maria Valley Management Area
		Pismo Beach [1]	Arroyo Grande [1]	Grover Beach [1]	Oceano CSD[1]	Agriculture	Rural	Golden State Water Company[16]	Nipomo CSD[16]	Rural Water Company[16]	Woodlands Mutual Water Company[16]	Conoco Phillips[16]	Agriculture[16]	Rural[16]	Agriculture /Rural
Demand															
Existing Demand (AFY)	410	1,944[2]	2,956[2]	1,787[2]	855[2]	2,056[2][3]	38	1,060[17]	2,698[23]	720[17]	850[17]	1,200[17]	2,800[17]	1,950[17]	25,540/37
Forecast Demand (AFY)	434-482	2,679-2,977[19]	3,735-4,150[19]	1,892-2,500[19]	1,277-1,419[19]	2,742	38	1,750-1,944[19]	2,984	Not Available	1,440-1,600[19]	1,260-1,400[19]	2,800-4,300	1,950	25,540/110
Supply															
State Water Project (AFY)[4]	0	1,240[5]	0	0	495[6]	0	0	0	0	0	0	0	0	0	0
Lopez Lake Reservoir (AFY)	0	896	2,290	800	303	0	0	0	0	0	0	0	0	0	0
Edna Valley Sub-basin (AFY)[7]	410	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pismo Creek Valley Sub-basin (AFY)[8]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arroyo Grande Plain Hydrologic Sub-area (part of Santa Maria Valley Groundwater Basin (AFY)[9]	0	700	1,202	1,198+225[14]	900	5,300[9]	36	0	0	0	0	0	0	0	0
Agricultural Land Conversion Credit (AFY)[10]	0	0	112	209	0	0	0	0	0	0	0	0	0	0	0
Transfers (AFY)[11]	0	0	100	0	-100	0	0	0	0	0	0	0	0	0	0
Pismo Formation outside the NCMA (AFY)	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0
Nipomo supplemental water project (AFY)[12]	0	0	0	0	0	0	0	208	2,167	208	417	0	0	0	0
Nipomo Mesa Hydrologic Sub-area (part of Santa Maria Valley Groundwater Basin) (AFY)[13]	0	0	0	0	0	0	0	852	457	462	405	1,400	4,300	1,950	0
Other Groundwater Supply Sources (AFY)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,540/37
Recycled Water (AFY)	87[19]	0	0	0	0	0	0	0	60-74	49-50	24-28	0	0	0	0
SWRCB Water Diversions (AFY)	0	0	0	0	0	[15]	[15]	0	0	0	0	0	[15]	[15]	[15]
Total Supply (AFY)	**482**	**2,836**	**3,794**	**2,432**	**1,598**	**Uncertain**	**Uncertain**	**1,060**	**2,698**	**720**	**850**	**1,400**	**Uncertain**	**Uncertain**	**Uncertain**

Page 4-152, Table 4.38 Footnote 15. "Diversions do not distinguish type of use. Potentially 1,243 AFY could be diverted for use to either agriculture or rural residential in WPA 7."

The Ag water "Total supply" is more certain then any other supplies listed because it is generally an overlying use that has the highest priority. The report uses "unknown" diversions as an excuse for "Uncertainty". If any water is supplied by a Diversion permit from surface water the Groundwater will be less by that diversion. The total "supply" will then be exactly the same as the demand.

There is clearly more uncertainty in other numbers such as state project water or as a result of the statement on page 4-141-143 that purveyors water "As party to the Santa Maria Groundwater Basin litigation, extraction rights may be affected at a future date."

The WMP misuses the word "basin" in several places:

For example page 4-20 table 4.2 uses the term "Safe Basin Yield" when it's clear that the three management areas are not basins and as such do not have "Safe Basin Yield's" The yield numbers are based on subsurface flow at the time they were determined, which is based on accumulated pumping up to that time and water levels at that time, and can not be considered a fixed number or a reliable numbers for the future.

The WMP misstates the status of the court and the ongoing ligation.

For example the WMP on page 4-26 states:

"The Santa Maria Valley Groundwater Basin has been adjudicated. In 2005, the Superior Court of California entered a Judgment for a basin-wide groundwater litigation case that defined three basin management areas."

The court did not enter any Judgments in 2005, In 2005 many parties entered a settlement and others litigated, in 2008 the Superior Court of California entered a Judgment that is stayed pending the current appealed at the appellate court. The court had never "define three basin management areas" and only some parties have agreed to use three basin management areas.

For example the WMP on page Appendix B page 29 misstates the Judgment:

"According to the California Superior Court Judgment after Trial (2008) the Northern Cities have a right to produce 7,300 acre-feet from the basin."

The Appendix omits the words "*from the Northern Cities **Area** of the*"

The Northern Cities admitted in their appeal Purveyor Respondents brief, that the 7,300 AF number included 1200 AF of state water and 5200 AF of Lopez water, which only leaves 900 AF that is "from the basin".

Purveyor Respondents brief page 111, The Judgment states:

"4. (a) The Northern Cities have a prior and paramount right to produce 7,300 acre-feet of water per year *from the Northern Cities **Area** of the Basin*;"

Purveyor Respondents brief page 15,

"The lower court found that the Northern Cities have a superior right to 7,300 AFY of surface and groundwater in the Northern Cities Area – based on "the combination of **the Lopez Reservoir, State Water Project imports**, percolation ponds, and return flows""

Purveyor Respondents brief page 115,

"…. the court's award of **small** amounts of water to the Northern Cities based on: return flows from the use of the Northern Cities' contractual purchases of Lopez Reservoir water (400 AFY); the amount by which releases of Lopez water into Arroyo Grande Creek augment Basin groundwater (300 AFY); return flows from the use of SWP water imported by the Northern Cities (100 AFY); and augmentation of Basin groundwater by the Northern Cities' construction and operation of percolation ponds that prevent rainwater from wasting to the Pacific Ocean (100 AFY)."

The WMP does not cover Legal rights which is one of the most important issues effecting the "supply".

> In the Santa Maria groundwater basin the "supply" for any part of the groundwater basin depends on who has the legal right to pump. The Report fails to consider the effect of overlying priority to pump groundwater both in San Luis Obispo and Santa Barbara. It also does not consider purveyor's lower priority appropriative rights to pump groundwater. With out that the available supply for part of a basin cannot be figured. Also there is no "Safe Basin Yields" for parts of a basin such as the NCMA, NMMA or TMA stipulated management areas.

The WMP uses a uniform method to figure Ag water demand for all area's except in the Santa Maria ground water basin. The data was deleted to prevent comparison of the "county method" and the Management area methods. This was a waste of county funds to calculate the numbers and then not allow them to remain in the report so they could be compared to the NCMA, NMMA and TMA TG estimates of Ag use.

The WMP does not consider the biggest change in water use in the last 10 years, Strawberries.

> For the Santa Maria Valley alone Strawberries have gone from 3,516 to 10,010 for the period of 1998 to 2010, the Applied water is estimated at 1.28 AF per Acre. Conversion of Rotation Vegetables that use 2.06 AF per acre to Strawberries reduces applied water buy .8 AF per acre. (Scalmanini 2010 TMA annual report). So, for example it would only take a conversion of 3,000 Acres to reduce applied water by 2400 AF.
>
> There is no analysis of changes in water use due to conversion to strawberries on the Nipomo Mesa.

The WMP fails to note that the 2008 Santa Barbara County report does not show any surplus water is available to supply the Nipomo Water Intertie project. The report on page 76 it states:

> "In order to resolve the conflicting conclusions of historic studies and reports, the SBCWA hired Hopkins Groundwater Consultants Inc. to perform an independent evaluation of the methodologies and conclusions of SBCWA's work. Hopkins concluded that the overdraft is indeed somewhere between 2,000 and 3,000 AF per year and that the SBCWA methodologies, including use of the SBCWA Santa Maria Valley water budget model (SMVWBM) to assess basin conditions, are both effective and comprehensive. This assessment also confirms that the importation of State Water has taken considerable pressure off of the groundwater resources in this basin."

The WMP does not consider the “lost” Monitoring wells.

Monitoring for Seawater is the most important factor in increasing the yields / supplies in WPA7 to allow them to be used to there fullest extent in compliance with the California constitution Article X Section 2.

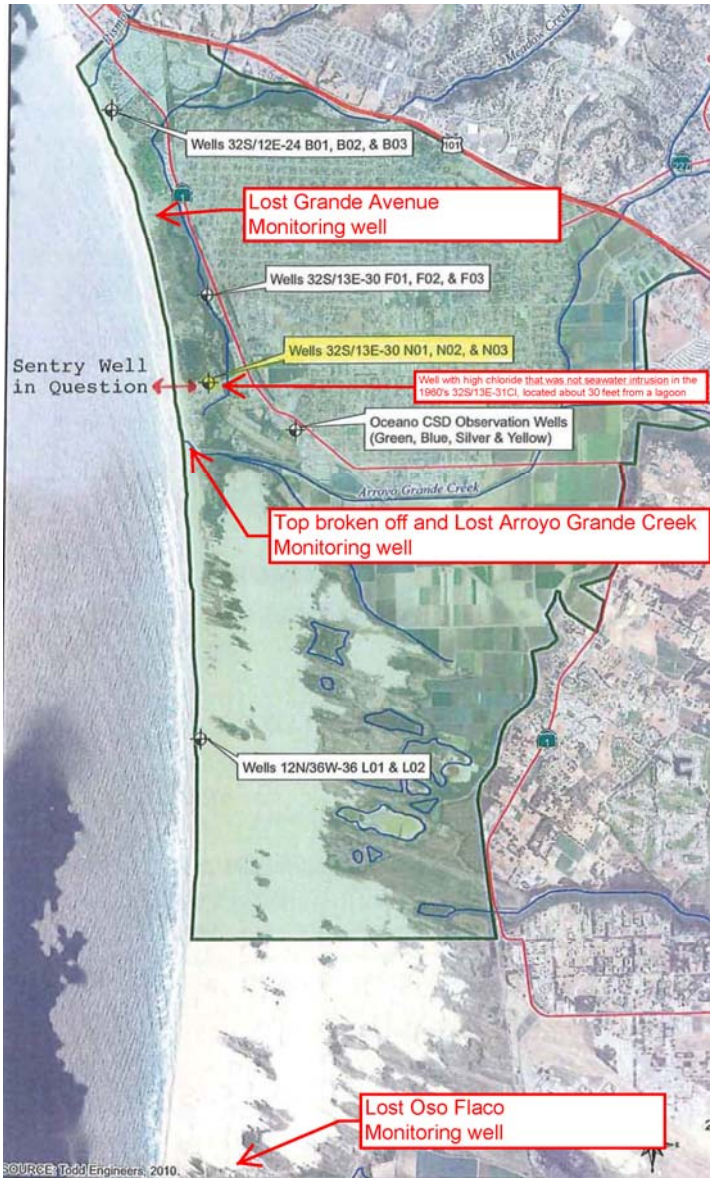
The WMP talks about seawater monitoring but does not mention the Lost/Missing monitoring wells or locating them.

The fact that the county pays some for monitoring well work that is not being made public cuts into the credibility and devalues the work being funded by the County.

Any future funding should be linked to a requirement that all records be made public with out being delayed or reworked by a confidential committee that has political objectives even it it’s called a “Technical Group”

In short we need public seawater monitoring and there is no explanation of how, from 1998 to 2012 the Nipomo area has gone from a reported 6,090 AF/Y surplus to a 6,000 AF/Y shortage while the Santa Maria Valley has gone from a 30,000 AF/Y shortage to a surplus that can support moving 6,000 AF/Y to Nipomo.

I request that the above comments and referenced attachments be added to the record.



Thank You

John Snyder

CC

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