

# John Snyder

- In 1995, I heard NCSD claim the basin was overdrafted or short of groundwater.
- Sued by purveyors in 1997 and later NCSD, based on the theory:
  - That there was an “overdraft” or shortage.
  - That my parcel had a superior water right.
  - That I failed to investigate the purveyors, the overdraft and then start a lawsuit to curtail NCSD pumping to the limit of the basin.
  - That the statute of limitations had run out.
  - And therefore NCSD had the superior water pumping right and I did not.
  - And because of the shortage I had to reduce my pumping or pay for replacement water as NCSD increased connections.
- Spent 1995 to 2012 investigating NCSD’s actions and groundwater.
- Web site with (almost) all the documents: [www.NoNewWIPTax.com](http://www.NoNewWIPTax.com)

# Water

## Different views with an open Question and Answer

Thoughts by John Snyder

# A summary comparing some of views

## On the left

- NCSD comments

## On the right

- A different view of reality On the right.
- NCSD's numbers are not quite right.
- Spelling not guaranteed

# Need for water

## NCSD:

- Describes it as one common need for one common “area”.
- With an existing 2500 af shortage.
- Only considered options that could supply 6200 af as viable.

## Reality:

- Existing Needs and Future Needs are different.
- The reliability needed for current and future needs are different.
- We should look at separate solutions to lower the cost for existing users and guaranteeing water for future use.

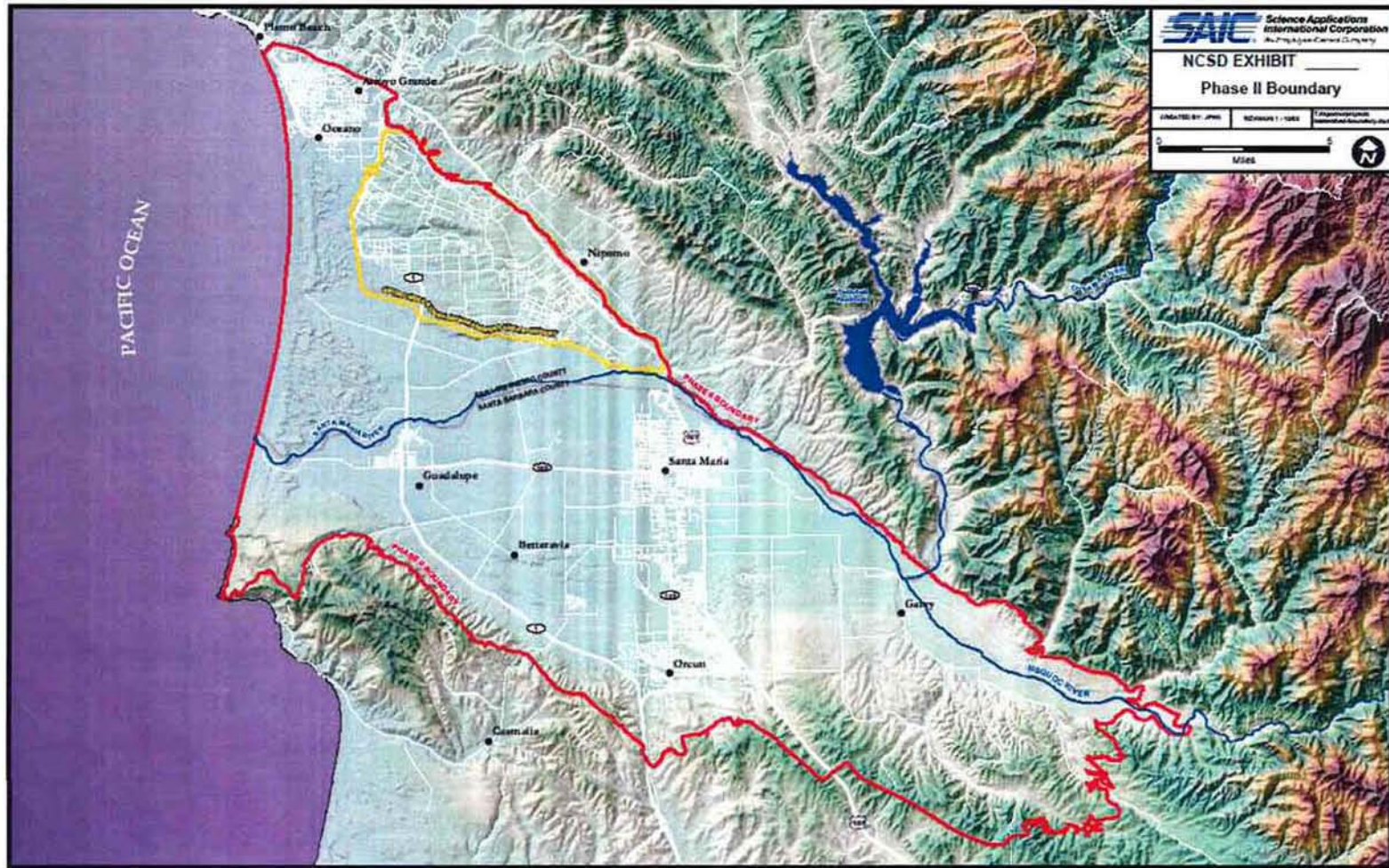
# Basin and Watershed

## NCSD

- We have the rain that falls on the Nipomo area and a small amount of water that moves underground from Santa Maria.
  - Ed Eby:
    - “Most of our water comes from rain fall or a little bit of it leaks under the mesa from the Santa Maria valley”
- 1/23/12

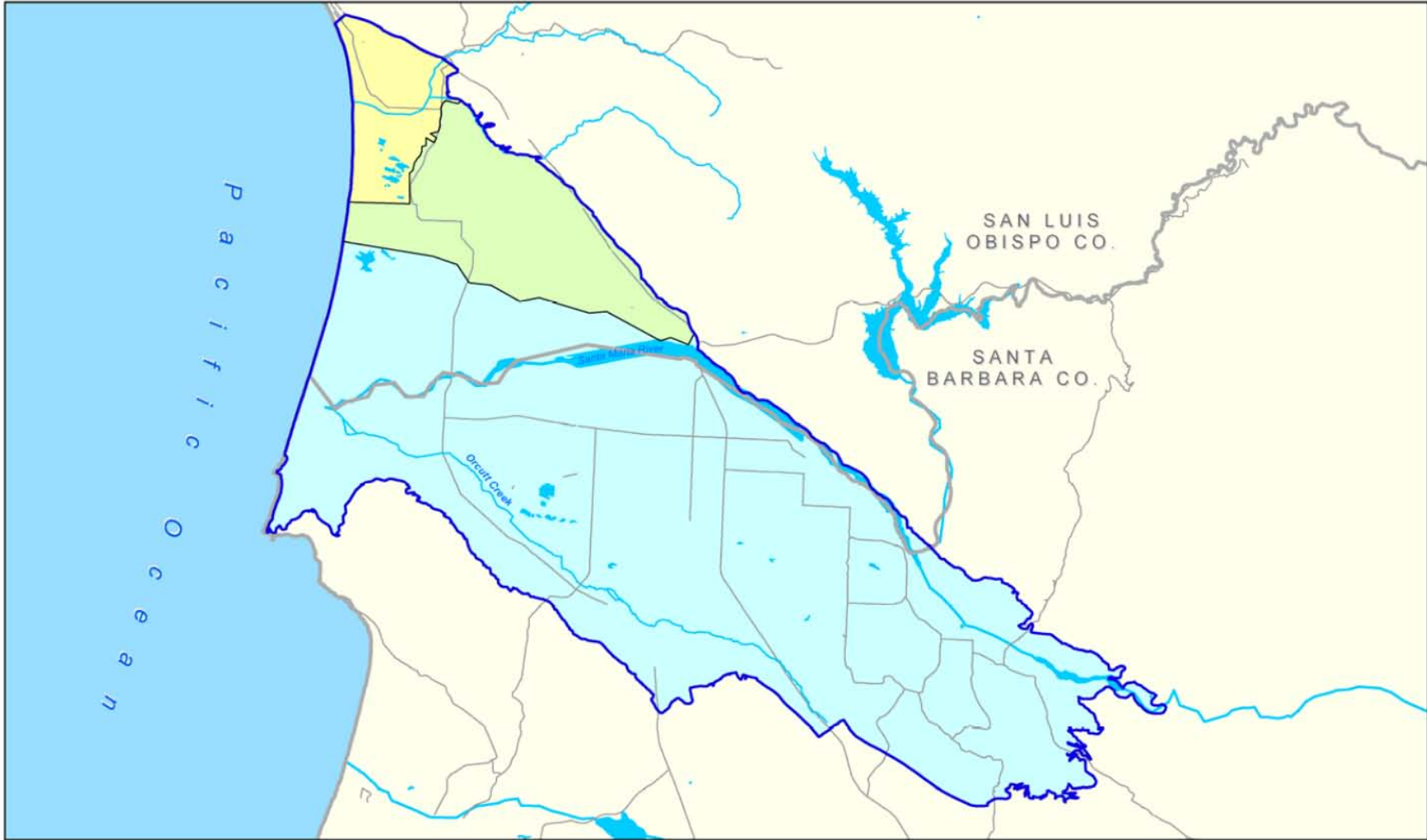
## Reality

- There is currently no limit on anyone pumping anywhere in the basin.
- Considerable water moves underground.



Copy of document found at [www.NoNewWipTax.com](http://www.NoNewWipTax.com)

NCSD 8/23/11  
 presentation  
 power point slide 6



**Legend**

- Santa Maria Groundwater Basin
- Northern Cities Management Area
- Nipomo Mesa Management Area
- Santa Maria Valley Management Area

Note: Management Area boundaries are approximate

Copy of document found at [www.NoNewWipTax.com](http://www.NoNewWipTax.com)

**Management Areas**  
Santa Maria Groundwater Basin

# Area of Use Vs Areas of Supply

Yellow=Area of rainfall that NCSWCD water use restrictions are to be based on.  
Black=NCSWCD area of use

Purple=water shed Arroyo Grande / Cuyama

Lopez

Twitchell

Brown=County Line

49,900 AF/Y to ocean  
10,000 AF/Y needed

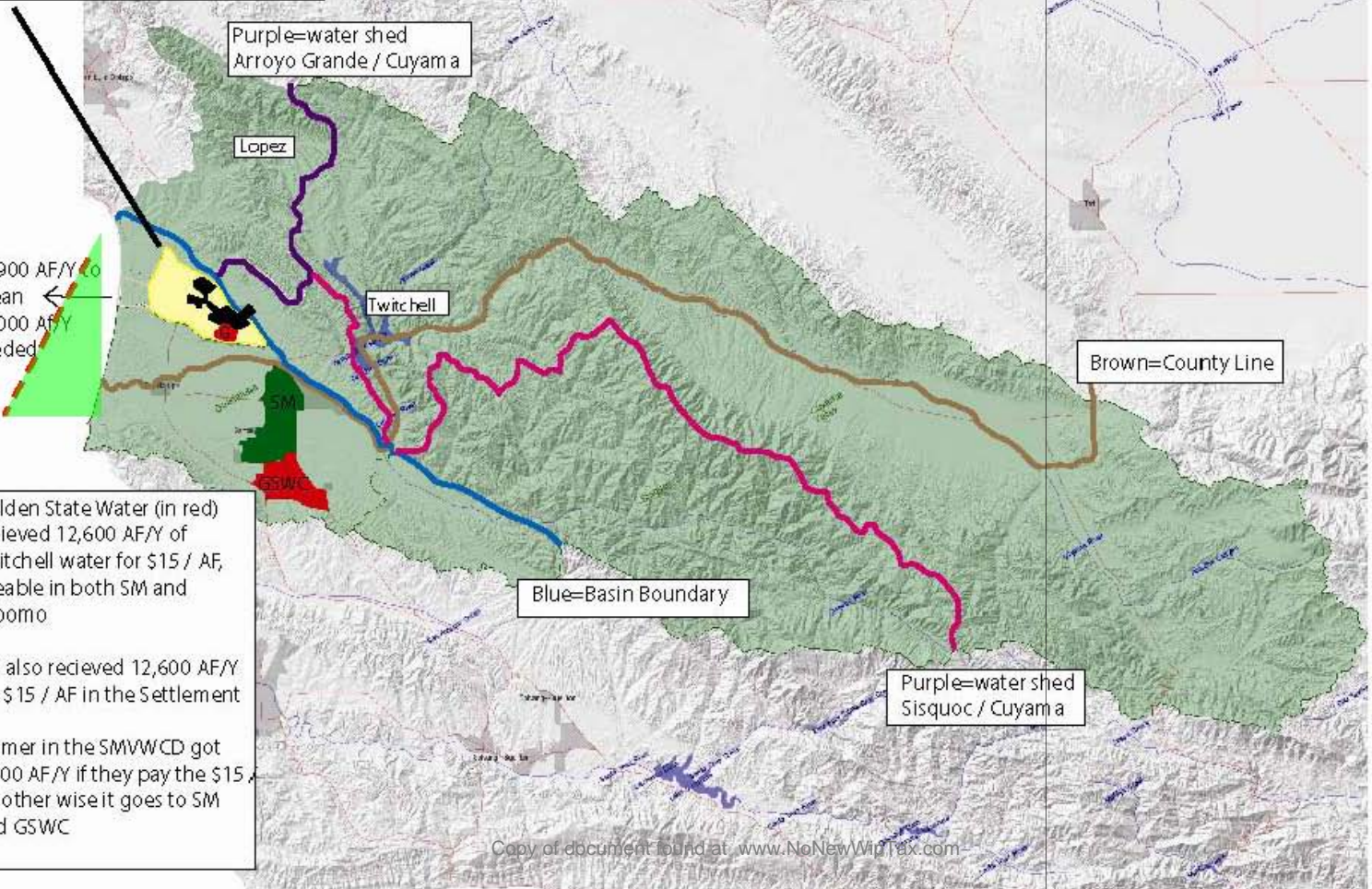
Golden State Water (in red) received 12,600 AF/Y of Twitchell water for \$15 / AF, useable in both SM and Nipomo

SM also received 12,600 AF/Y for \$15 / AF in the Settlement

Farmer in the SMWCD got 6,400 AF/Y if they pay the \$15 / AF other wise it goes to SM and GSWC

Blue=Basin Boundary

Purple=water shed Sisquoc / Cuyama





# Amount of water being pumped

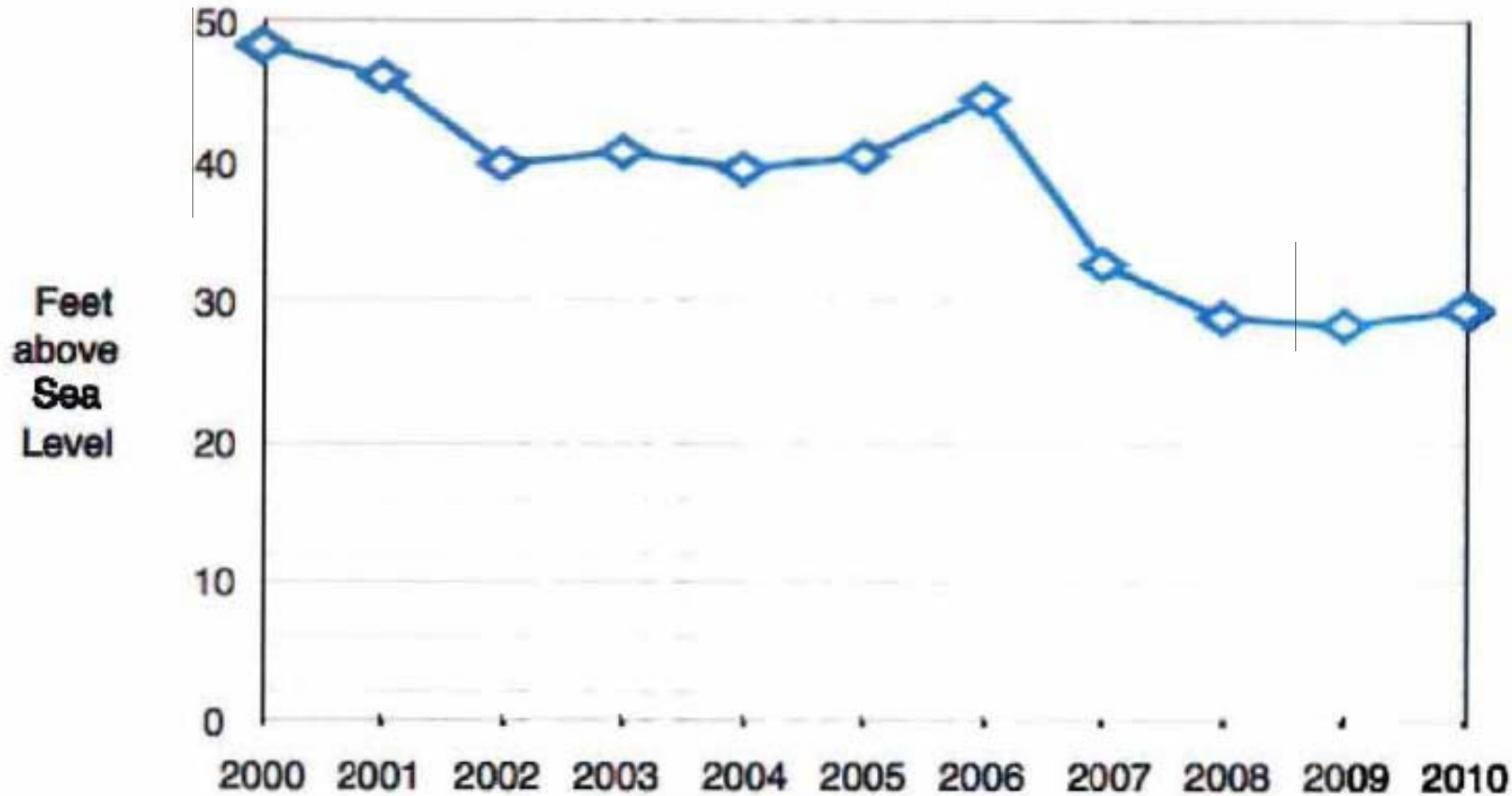
## NCSD

- Twice the water is being pumped than is being replenished.
- Water levels have been falling since 2000 because of growth.

## Reality

- Water levels are about the same at the start and end of the alleged shortage.
- Rainfall has been just below average.
- No indication of a 100,000 AF shortage or pumping twice the “supply”

# Average Water Levels in Key Wells



NCSD 8/23/11  
presentation  
power point slide 23

Key Well Index dropped 40% between 2000 and 2008

Original document found at [www.NoNewWells.com](http://www.NoNewWells.com)

We are pumping twice the **dependable yield**



**Dependable Yield**

NCSD 8/23/11 presentation  
power point slide 23

Year	Production AF (eyed)	NCSD yield AF	28 Year Shortage AF
1975	4500	6000	
1976	4750	6000	
1977	5000	6000	
1978	4750	6000	
1979	5100	6000	
1980	5300	6000	
1981	5500	6000	
1982	5800	6000	
1983	5750	6000	
1984	6200	6000	-200
1985	6400	6000	-400
1986	7100	6000	-1100
1987	7750	6000	-1750
1988	7900	6000	-1900
1989	8100	6000	-2100
1990	9200	6000	-3200
1991	8700	6000	-2700
1992	8700	6000	-2700
1993	8500	6000	-2500
1994	8700	6000	-2700
1995	8300	6000	-2300
1996	8900	6000	-2900
1997	9000	6000	-3000
1998	9300	6000	-3300
1999	10100	6000	-4100
2000	10500	6000	-4500
2001	10500	6000	-4500
2002	11200	6000	-5200
2003	11000	6000	-5000
2004	11000	6000	-5000
2005	11000	6000	-5000
2006	11500	6000	-5500
2007	12500	6000	-6500
2008	12500	6000	-6500
2009	12100	6000	-6100
2010	12100	6000	-6100
2011	12100	6000	-6100
		Total AF Shortage:	-102850

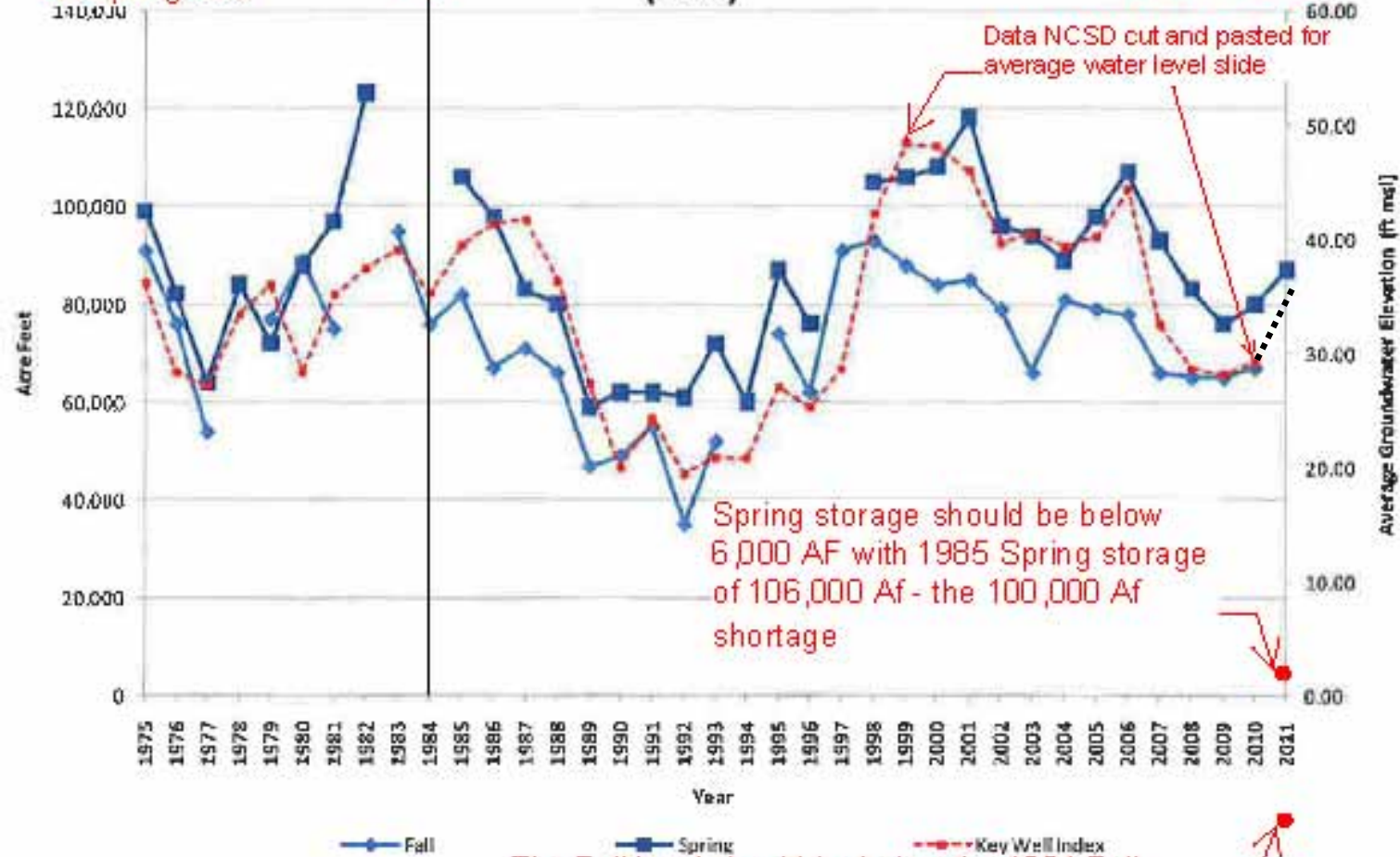
# Reality

***Add up the shortage for the 27 years and there should be about 100,000 AF less water underground:***

1984 First year of NCSD storage Fall storage at 76,000 AF, no spring data

## Spring and Fall Groundwater Index (GWI)

Notes: red added  
 NCSD average rainfall  
 16.5" for 1975-2011  
 15.8" for 1984-2011



The Fall level should be below the 1984 Fall storage of 76,000 AF - 100,000 AF = 24,000 AF

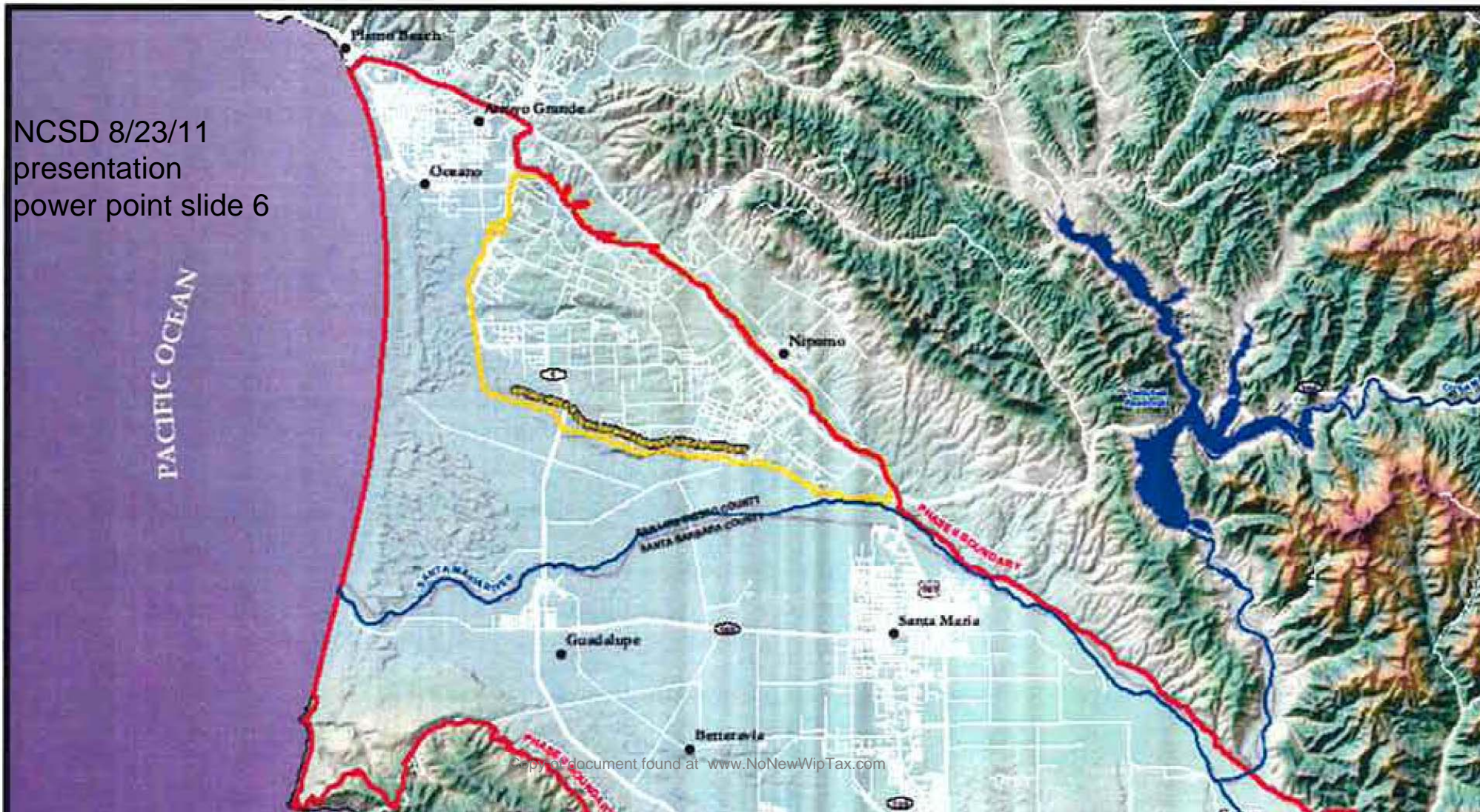
NCSD own "Expert" Brad Newton

Technical Memorandum  
 Spring 2011  
 "Groundwater in Storage"

with notes in red

Fall 2011 report from 12/15/11 added fall storage at 81,000 af

NCSD 8/23/11  
presentation  
power point slide 6



# SLO Water Master Plan 1998

## NCSD

- Don't look at that study?
- Reality
- Showed a 6000 af surplus for the south county.
- No explanation of the difference in any report.

# Surface Water Supply

Ground water is by far the largest source of water supply in WPA 6. Non-ground water supplies consist of some reclaimed water being used for irrigation purposes. Surface water yield is assumed to be 0 AF for the purposes of this study.

## DEFICIENCIES

Urban demands may be understated. Agricultural demand is using an “average” level of water use. Nipomo will see considerable growth within the planning horizon. Competition for ground water is increasing. New DWR study indicates problems on the Mesa. Several mutual companies and development potential make management a challenge.

**Table 17**  
**Existing (ac-ft/yr)**

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

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



# As soon as possible

## NCSD

- We need to build now, as soon as possible to prevent seawater intrusion.

## Reality

- For existing use we could wait, the pipe line is designed, approved and will take 2 years to build.
- If we wait it could easily be built in time at the first sign of seawater intrusion.
- “As soon as possible” has no legal effect.

# Santa Maria water as a reliable supply

## Very short History:

- In 1995 NCSD and others argued the SM part of the basin was overdrafted.
- In 2003 NCSD went to court and argued the SM part of the basin was overdrafted.
- NCSD argued that the Nipomo Mesa was separate and overdrafted.
- NCSD lost both arguments and the court found no current overdraft.

# Major Water Supply Events In The Santa Maria Basin

**1905**  
City of Santa Maria incorporates; begins pumping groundwater from basin to serve residents & businesses

**1907**  
SCWC begins pumping groundwater from basin to serve residents & businesses

**1930's**  
Recognition that Basin in overdraft and that native safe yield insufficient to meet long term needs

**1931**  
  
J. B. Lippincott

**1930** → **1945**  
Worts finds overdraft for each year during this period

**1951**  
  
Worts, USGS

**1954**  
Construction of dam and reservoir authorized by Congress "Twitchell Project"

**1958**  
Twitchell Project completed

**1962**  
Twitchell Reservoir begins regulating water


**1966**  
  
Miller & Evanson, USGS

**1968**  
Lopez Project begins regulating water

**1976**  
  
Toups Corp.

**1977**  
  
USGS

**1977**  
  
Ahiroth, SBCWA

**1991**  
  
Army, Ahiroth, Cosby, SBCWA

**1992**  
  
Ahiroth, SBCWA

**1994**  
  
Naftaly, SBCWA

**2000**  
  
Luhdorff & Scaramini Engineers

**2000**  
  
SBCWA

**2002**  
  
Hopkins

**2003**  
  
SBCWA & Boyle Engineering

**1997**  
Santa Maria and SCWC begin taking delivery of State Project Water

# Santa Maria water as a reliable supply 1

## NCSD:

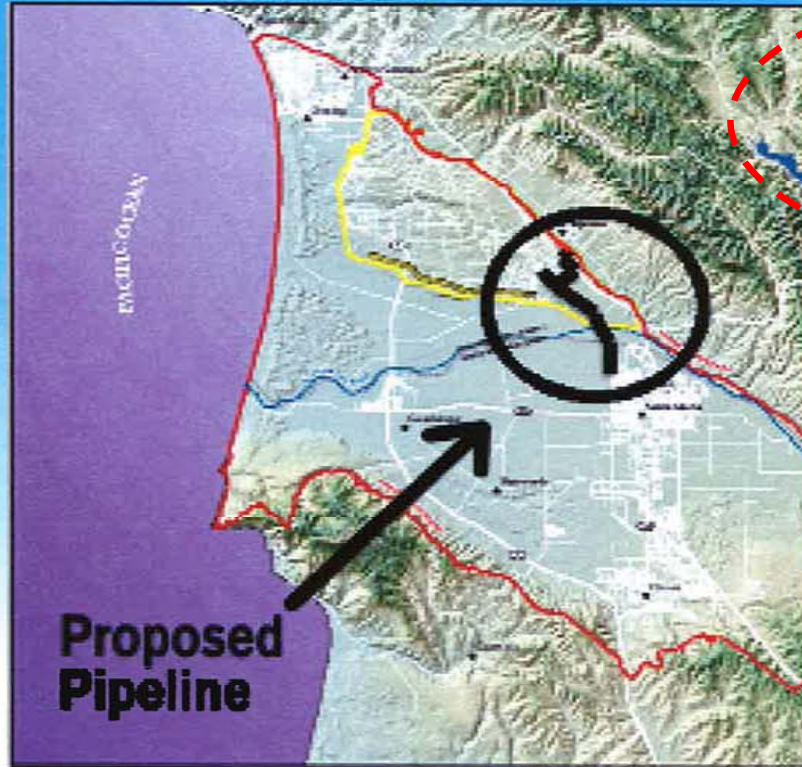
- Then Mike Winn states:
  - But board President Mike Winn said desalination would provide a steady supply, while water from Santa Maria is dependent upon State Water Project supplies and other issues. SMT 9/12/08
- Now Mike Winn states:
  - “There is lots of water that goes into the ocean with out any benefit to anybody on the other side of Santa Maria out in that area.” 1/23/12

## Reality

- In the 1990’s it was reported to be over drafted by 20,000-30,000 AF
- In 2003 NCSD, GSWC and Santa Maria went to court and argued that it was overdrafted and lost that argument.
- The experts were found to be “not credible”.
- Scalmanini “the only expert that did not find overdraft” did not study if there was a surplus.
- No study has been done on surplus.

# Santa Maria Pipeline

## Most Cost-Effective Near-Term Solution



This is NEW water to NIPOMO

Currently, Santa Maria's water includes 90%+ State water

This water source is **never** less than 50% State water

Any groundwater in the mix will come from wells south of Santa Maria, and wouldn't flow to Nipomo without the pipeline – it would flow directly out to the ocean

# Santa Maria water as a reliable supply 2

## NCSD:

- “Currently Santa Maria water includes 90%+ State water NCSD 11/09/11 presentation power point slide 31

## Reality

- CCWA ~11,000 AF
  - According to the 2009 DWR reliability study, the long term reliability of SWP water to Santa Barbara County project participants is 63% of the Table A amount in 2009 and reduces to 61% of the Table A amount in 2029. Following the DWR estimation protocol, the long term average of available water was calculated every five years starting in 2010 and ending in 2035.
- SM water supply is at about 16,000 Af now, and will be around 22,000 Af in five years with this project, long term projections result in 50% state water.

# Santa Maria State Water Not 90%+

year	Groundwater in Af, <small>SM UWMP page 4-10</small>	State Water in Af, <small>CCWA UWMP page 24</small>	%
2006	543	13268	96%
2007	2550	13128	84%
2008	6626	11711	64%
2009	6610	7792	54%
2010	3044	7779	72%

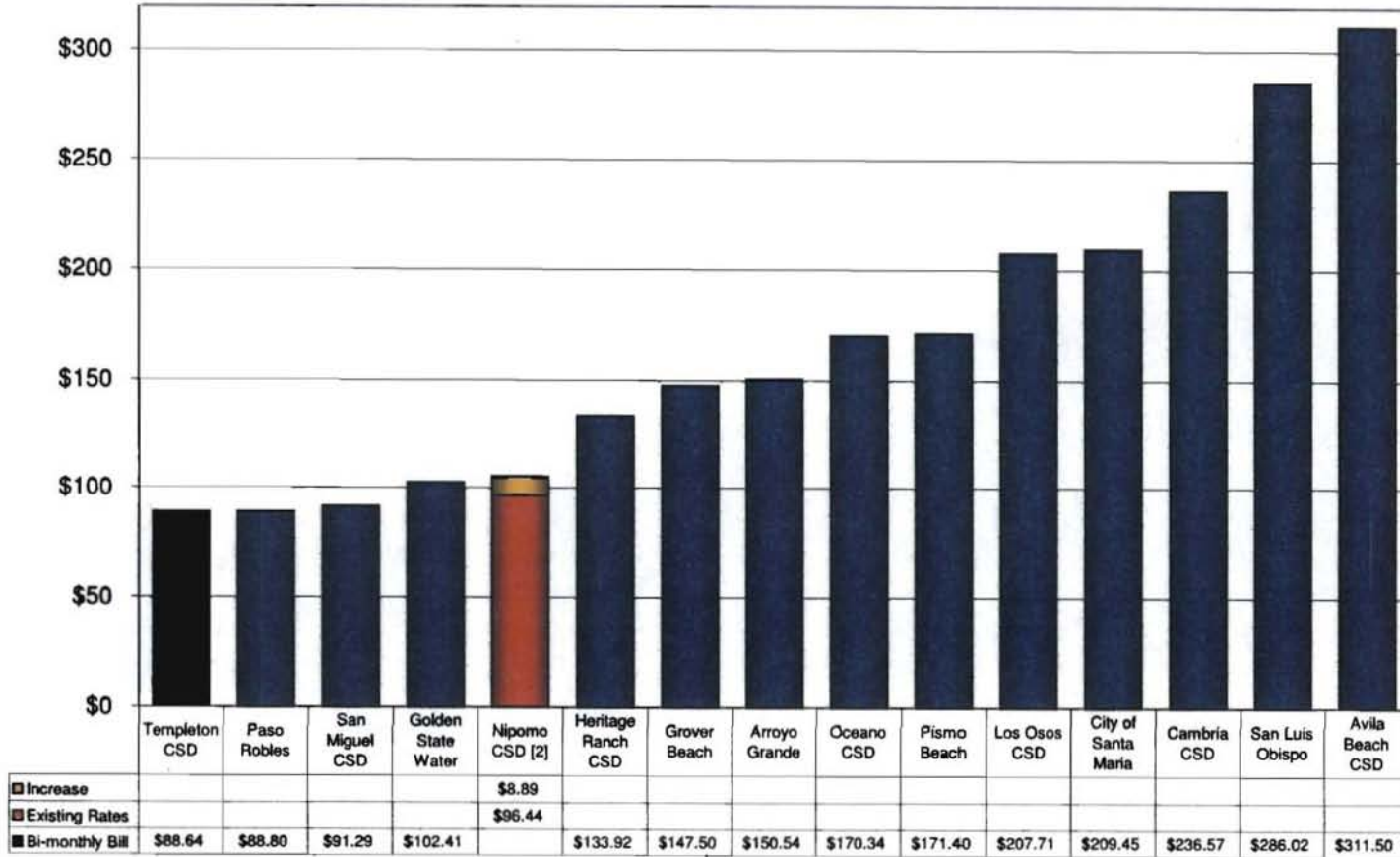
Table 3-4 Long Term Average Delivery Projections

Long Term Average Projections, Acre-Feet per Year						
Participant	2010	2015	2020	2025	2030	2035
Buellton	402	398	394	390	386	382
Carpinteria	1,389	1,376	1,362	1,348	1,335	1,321
Golden State Water Co	347	344	341	337	334	330
Goleta	4,705	4,659	4,612	4,566	4,520	4,473
Guadalupe	382	378	375	371	367	363
La Cumbre	695	688	681	674	667	661
Montecito	2,084	2,064	2,043	2,023	2,002	1,982
Morehart	139	138	136	135	133	132
Raytheon	35	34	34	34	33	33
Santa Barbara	2,084	2,064	2,043	2,023	2,002	1,982
Santa Maria	11,254	11,143	11,032	10,922	10,811	10,700
Santa Ynez ID1	1,389	1,376	1,362	1,348	1,335	1,321
Vandenberg	3,821	3,783	3,746	3,708	3,670	3,633
SLOFCWCD	3,074	3,037	3,000	2,963	2,926	2,889



**Chart ES-1  
Selected Local Water Agencies**

**Comparison of Single-family Residential Bi-monthly Water Bills<sup>[1]</sup>  
at 40 Ccf Bi-monthly**



[1] For rates in effect July 2011.  
[2] Total bi-monthly bill is \$105.33.

# Cost of Water

## NCSD

- “The average increase in a NCSD customer’s monthly bill was previously estimated at about \$12, but LeBrun said that number likely will be closer to \$8.” SMT 12/18/2011

## Reality

- NCSD has not shown how it comes up with \$8.
- Looks more like \$32 to \$48.

WIP Water, in AF	2000	3000
NCSD %	66.68%	66.68%
NCSD AF/Y of water	1333.6	2000.4
Water cost \$/AF (2011 cost, Lebrun 8/23/11)	\$1,450	\$1,450
NCSD payment to Santa Maria	\$1,933,720	\$2,900,580
Savings		
NCSD electric cost	\$525,000	\$525,000
NCSD water use (2010)	2370	2370
Free Rural Water share	166.6	249.9
Cost savings will be 1334 + 166 / 2370 af of that amount	\$332,323	\$498,484
NCSD new money needed	\$1,601,397	\$2,402,096
2010 connections	4148	4148
Average amount per connection per year	\$386	\$579
Average amount per connection bimonthly	\$64	\$97
Average amount per connection monthly	\$32	\$48

WIP Water, in AF	2000	3000
GSWC %	8.33%	8.33%
GSWC AF/Y of water	166.6	249.9
Water cost (less pumping and maintenance)	\$1,450	\$1,450
GSWC payment to Santa Maria	\$241,570	\$362,355
GSWC electric cost (assume same per af as NCSD)	\$222	\$222
GSWC 166 af of water pumping saved (assume water is taken)	166.6	166.6
Cost savings will be	\$36,905	\$332
GSWC new money needed	\$204,665	\$362,023
GSWC customers	13200	13200
Average amount per connection per year	\$16	\$27
Average amount per connection bimonthly	\$3	\$5
Average amount per connection monthly	\$1	\$2

WIP Water, in AF	2000	3000
RWC %	8.33%	8.33%
RWC paid for AF	166.6	249.9
Water cost (less pumping and maintenance)	\$1,450	\$1,450
RWC payment to Santa Maria	\$241,570	\$362,355
2010 connections	921	921
Average amount per connection per year	\$262	\$393
Average amount per connection bimonthly	\$44	\$66
Average amount per connection monthly	\$22	\$33

# Pre-agreed to pay any amount NMMA TG controls

- NCSD is claiming it will bring in 2000 af/y but the pipe allows 3000 af/y now and 6200 af/y later.
- The NMMA TG controls the actual amount required to be piped in. It can change it to the maximum at any time. If Ed Eby's claim that we are over-pumping by 6000 afy is true, then as soon as the project is approved we should expect the NMMA TG will increase the requirement to the full 3000 afy if not more.
- The NMMA TG has had no public hearing, No public input, No Brown act, No conflict of interest obligations. RWC has pre-agreed and has no representation on the NMMA TG. In any case RWC does not represent the actual RWC customers.
- **Mike Lebrun**, "It will be the basin management committee, **there's no limitation of the amount of supplemental water we might actually have to bring in**, in order to protect and maintain the basin health. In the stipulation there is a 2500 Af number then it's a more or less as the basin management committee defines or requires and that will be based on monitoring, actual water levels, **It is important for us to understand that.**" 7/27/2005 E-3) Supplemental Water Policy Discussion

# Pipe has a capacity of 3000/6200 Af

- At one point the cost of the pipe for 3000 Af was \$24 million, and the next 3200 Af expansion was an additional \$18 million.
- Once the pipe is built, the county requirement of supplemental water will be released.
- It is not clear what the costs now are for the next 3200 Af.

# Cost of Water includes profit

- Santa Maria is planning to make a profit.
- “Fiscal Considerations: Based on fiscal projections, the sale of supplemental water to the NCSD will be revenue neutral in the worst case scenario and generate revenue under most scenarios. This follows the City's longstanding judicial use of fiscal assets.”  
1/5/10 SM council Report



# Costs of Pipe

	NCSD #’s		Pipe costs Max not Expected	Good estimate
Max 1 BU, pay up front	<b>\$1,090</b>		This could be lower if construction bids are lower	<b>\$1,090</b>
1 BU cost	<b>\$1,340</b>			\$1,232
Maximum Bond Costs in \$	\$250		This could be lower if bond costs turn out lower	\$142
Maximum Bond cost in %	22.9%		This could be lower if bond costs turn out lower	13.0%
Financed amount	\$1,340			\$1,232
Term	<b>30</b>	years		<b>30</b>
1 Bu, payment per year (max)	<b>\$240</b>	per year	Result this could be lower if construction and bond costs are lower	\$108
Total Interest and Principle payments	\$7,200			\$3,254
Maximum Interest rate	17.8%	per year	This could be lower if bond interest turn out lower	8.0%

# Santa Maria water reliability

## NCSD

- Reliable supply because
  - NCSD will have the same “rights” as Santa Maria customers.

## Reality

- “the MOU allows for a potential adjustment to the rate for water in 2036” 8/21/08

# Santa Maria water as a reliable supply

## NCSD

- Desal is the only Long term solution.

## Reality

- The WIP may only be a Short term solution.
- We might be able to just go to the long term solution.

# Mike Winn 10/16/07 at county:

“But the ocean for us represents the only long term sustainable drought proof water supply that we can get. State water allocations are iffy. You know the smelt decision have reduced the deliveries. We don’t know if those are going to be sustainable in the future. The others, where you take water and you sort of move it around, you have a finite amount within your basin and when its utilized to it’s full maximum it’s over.”



# Nature of the Santa Maria - NCSD deal

## NCSD

- SM has plenty of water.

## Reality

- Short term reliability good.
- Long term reliability bad.
- Cost high.
- Flow constant.

# Settlement requires

- **7/27/2005 Ed Eby:** "I take exception to something that was said today about the, stipulation requires the purveyors to bring in supplemental water, **The stipulation does not require us to do anything.** The stipulation says we, the NCSD contemplates bring in water and therefore the purveyors will buy that water from NCSD. There is nothing in the stipulation or any court order that says we are required to buy supplemental water we are contemplating it, **we are doing that on our own volition,** we are not doing that on court order. **There is no court order or decision that says we have to get supplemental water.** We are contemplating it because it is in the best interest of our customers "

[Audio](#)

# Existing problem or Future development

## NCSD

- Pipe is to solve an existing problem.
- No water for new development.

## Reality

- No limit for water being used for future development.
  - If not what's the undeveloped assessment for?



# Why Experts say

## NCSD

- All experts say there is a shortage.
- Experts recommend the WIP.

## Reality

- NMMA TG experts are required to support the WIP project and recommend it.
- NMMA TG experts have made no estimate of the amount of water that can be pumped or who can pump it.

# Why NMMA TG Experts say?

## Stipulation, page 22

The Stipulating Parties agree to support (and, conversely, not to oppose in any way or to encourage or assist any other Person or party in opposing or challenging) the implementation of the MOU, which includes environmental and regulatory permits and approvals, the approval of a wholesale water supply agreement between Santa Maria and NCSD, and the alignment and construction of a pipeline and related infrastructure necessary to deliver the Nipomo Supplemental Water from Santa Maria to the NMMA ("Nipomo Supplemental Water Project").

# Experts and Numbers

Purveyors experts at trial:

- Santa Maria basin with no developed or imported water can supply: 136,743 AF/Y

Phase 3 Exhibit A125

- Ed Eby “the supply is 6000 af/y”

Reality

TABLE 28\*  
RELATIVE RANGE OF ERROR OF ESTIMATE OF HYDROLOGIC QUANTITIES

Components	Range of Percent Error
Gaged Streamflow	5-10
Ungaged Streamflow	10-200
Gaged : Imported Water	5-10
Exported Water	5-10
Wastewater or Drainage	5-10
Precipitation Volume, annual	5-30
Consumptive Use: Municipal	10-25
Industrial	5-20
Irrigation	5-25
Native Vegetation	10-70
Phreatophtyes	10-30
Subsurface Inflow or Outflow	10-100
Change of Storage (Specific Yield - Water Level)	5-40
Pumpage	20-100
Artificial Recharge	2-50
Deep Percolation of Precipitation	Unknown

\*From: Peters, 1981.

# Talking about experts and history: SCAC presentation 11/22/10 Seitz:

“The DWR found there was there was no overdraft and would not be until 2020 at this time in 2004 purveyors were handing out will serve letters.

At that time everyone thought the basin could continue to support growth County planning staff, a Professional staff, drafted a staff report saying all the parameters in the DWR report, which was a scientific study of the basin, indicated the basin was in overdraft, yet the DWR report concluded there was no overdraft county Papadopoulos report, independent of the district, San Francisco hydrologic firm, concluded that the basin was in in [overdraft] what we talk of when we saw those maps there, this is some what before and during the groundwater adjudication, that found that the Nipomo sub-area was in overdraft, that was the conclusion that was reached in that report **These are Experts, These are not people**, at that point and time I was district legal council, when the Papadopoulos report came out. That's when the Board switched direction on it's philosophy towards the groundwater basin, they now had two reports, independent reports, that indicated this basin was in trouble.

When you go back to the General plan that supports development on the mesa, that conclusion said that water was spilling to the North and spilling to the south and there for no overdraft.”

# NMMA TG “There is a lack of understanding” in the 2010 NMMA TG Report

- Page ES-3, "13. There is a **lack of understanding** of the contribution of Los Berros and Nipomo Creeks to the NMMA water supplies (see Section 3.1.5 Streamflow).
- Page ES-3, "14. There is a **lack of understanding** about confined and unconfined aquifer conditions in the NMMA, except near the coast and locally adjacent areas where the Deep Aquifer is known to be confined (see Section 2.3.2 Groundwater Flow Regime).
- Page ES-3, "15. There is a **lack of understanding** of the flow path of rainfall, applied water, and treated wastewater to specific aquifers underlying the NMMA (see Section 3.1.10 Wastewater Discharge and Reuse)."
- Page ES-5, "To better estimate agricultural groundwater production **where data is incomplete**, it is recommended that the TG work with a subset of farmers to measure groundwater production."
- Page 3, "One of the **sources of uncertainty is the subsurface quantity of groundwater** that crosses the NMMA boundaries."
- Page 21, "There **exists missing data** from both groundwater elevations and rainfall records. **Estimations are made to fill in these data gaps** with the understanding that the accuracy of these estimates is reduced."
- Page 21, "Derivatives from these **data therefore contain inaccuracies.**"
- Page 21, "Additionally, **precision issues arise** when interpretations are made from data, in that individuals make decisions during the process of interpreting data that are subjective and **therefore not documentable**"
- Page 21, "**Estimations are made for parameters that are not measurable** or very difficult to measure."
- Page 21, "The methodologies used to make **estimates represent a simplified numerical representation** of the environment and are **based on assumptions** defining these simplifications."
- Page 21, "**Quantifying the uncertainty in data or data derivatives is a rigorous and ongoing process.**"
- Page 35, "The change in groundwater storage from the hydrologic inventory reflects the difference between inflow and outflow for a period of time. Typically, this change in storage is compared to a change in storage computed from groundwater contours, cross-checking the results of each. Storage changes from groundwater contours are typically calculated by measuring change in groundwater elevation and multiplying that change by a storage factor. **The TG's current understanding of confining conditions within the NMMA precludes calculating change in groundwater storage from groundwater contours at this time for the management area.**"

- **The Technical work by SAIC is not reliable:**
- **NCSD reported a decline in storage of 27,000 Acre Feet from April to October last year, (Adobe Press 1/25/08)** (from 93,000 acre-feet to 66,000 acre-feet). SAIC Groundwater in Storage as of December 2008 SAIC
- 
- SAIC, the same experts that made that estimate, have assumed that the consumption of water is about 10,000 AF per year.
- And that SAIC assumes that Nipomo has to rely on only the rainfall on the mesa because it has assumed that sub-surface inflow will equal sub-surface outflow (that the water flowing under ground does not add or subtract water.)
- **SAIC can't be right. For the 6 months out of a full year, Say we used 7,000 Acre Feet out of the 10,000 Acre Feet per year. Where did the other 20,000 Acre Feet go?**
- **A second major inconsistency is that Buel has been quoted as saying "So we have a 32-year record of water level measurements. This is literally the first time we've calculated water storage in the fall." (Adobe Press 1/25/08)**
- This is not true look at the 1993 report by Lawrance, Fisk & McFarland (LFM)
- It reports fall water levels and water in storage on page 6.

YEAR	LFM report fall storage	SAIC Fall storage
1975	197,000 AF	91,000 AF
1985	200,000 AF	82,000 AF
1992	187,000 AF	35,000 AF

- 
- The January 6th Technical Memorandum by SAIC with it's method calculated a spring storage for the same years that is much lower.
- **How can the SAIC method of calculating water in storage result in ½ the amount that was in NCSD's past reports?**

# Existing or Future use

- NCSD
- Claims it for an “existing shortage”
- Not for growth
- Winn:
- SLO hearing:

## Reality

- No limit on use of water for future growth
- No limit on pumping more groundwater once pipe is built
- WIP removes county restriction on growth

# Pumping depressions

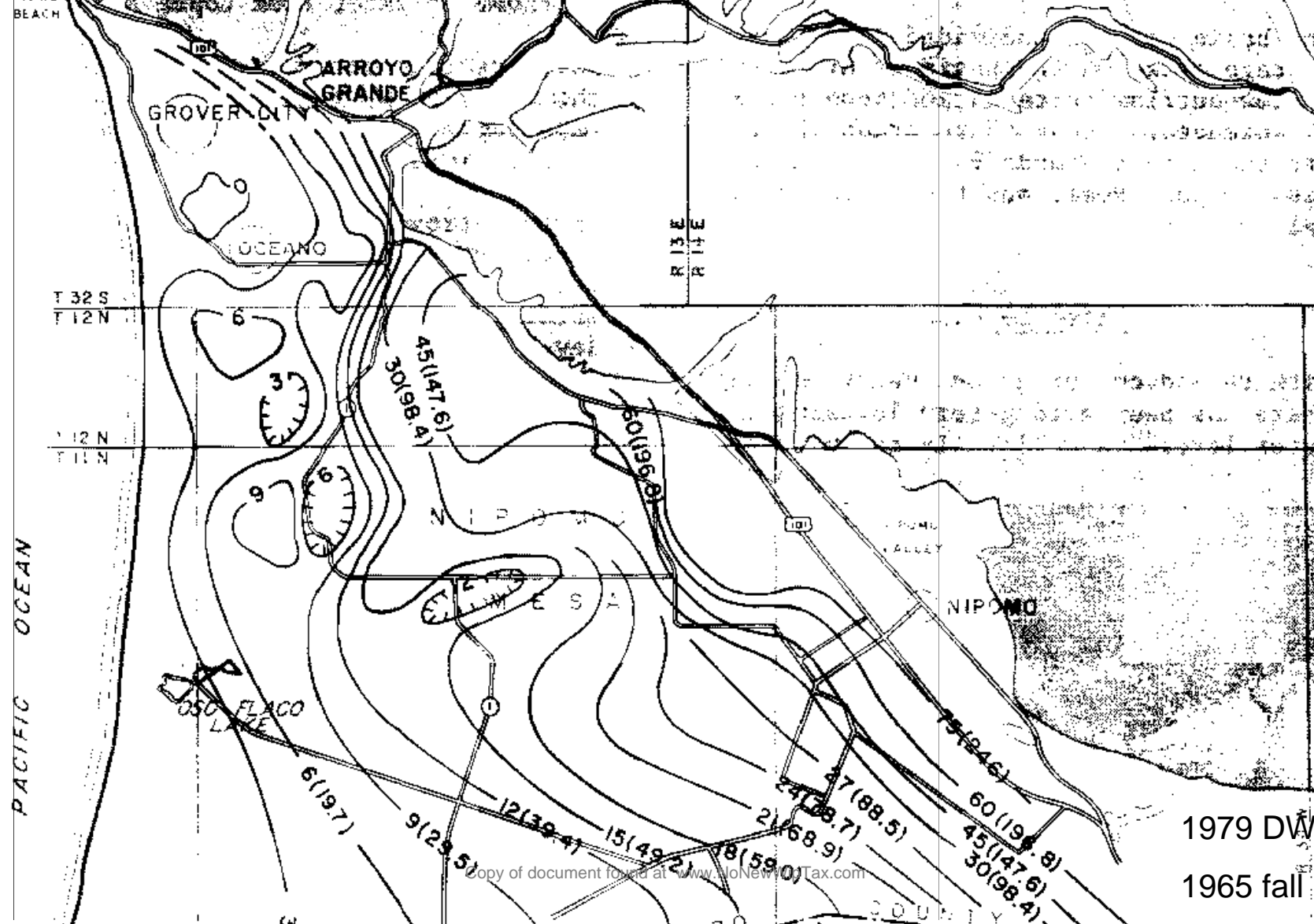
## NCSD

- Makes it sound like the 2000 to 2010 development has caused the pumping depressions.

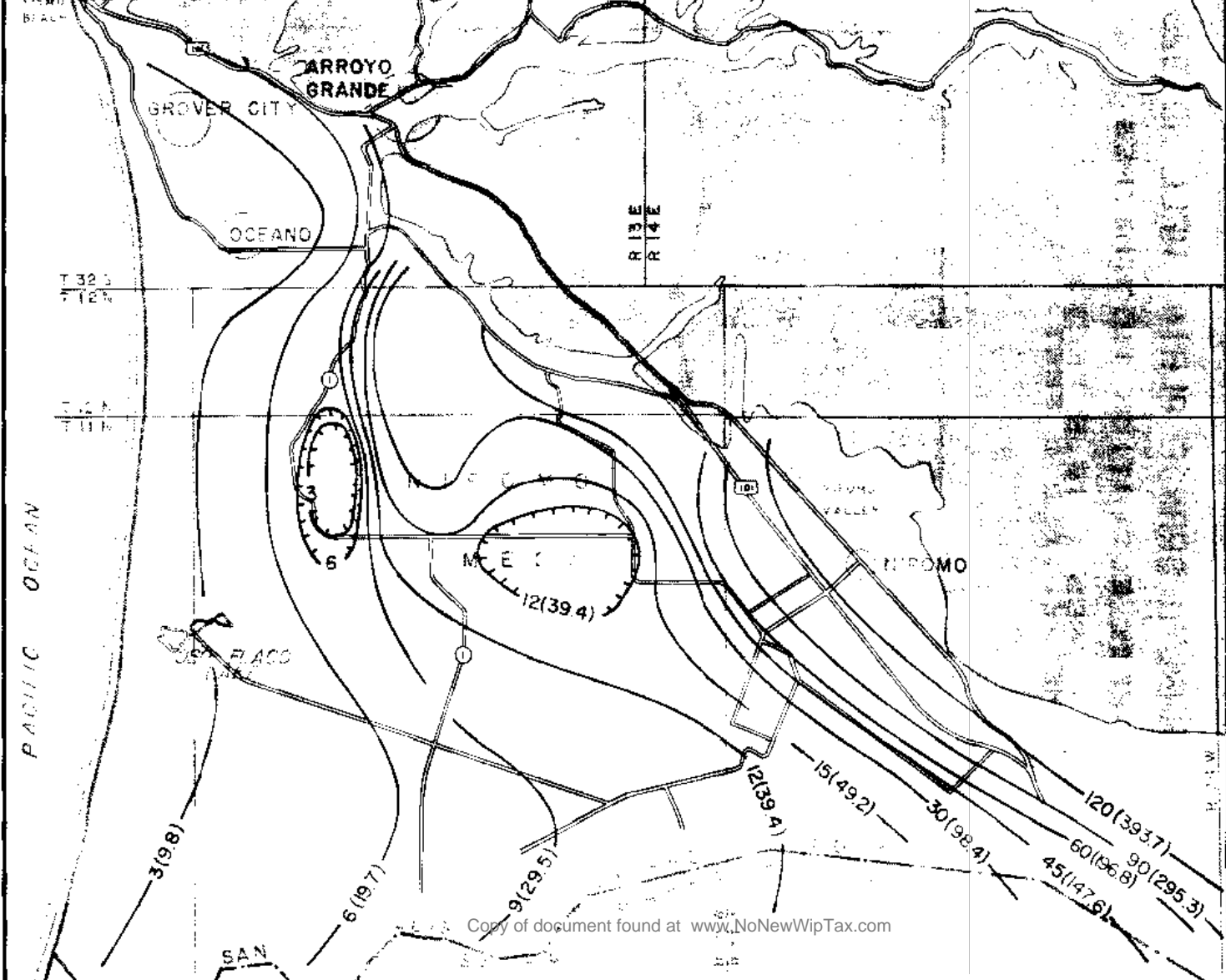
## Reality

- Pumping depressions have been around a long time.
- 1965 and 1975
- Depressions are good because they bring water North.
- Depressions can not be so big they cause water to move in from the ocean.
- No one has studied what the best sized depression is.





1979 DWR report  
1965 fall levels



Copy of document found at [www.NoNewWipTax.com](http://www.NoNewWipTax.com)

1979 DWR report  
 1975 fall levels

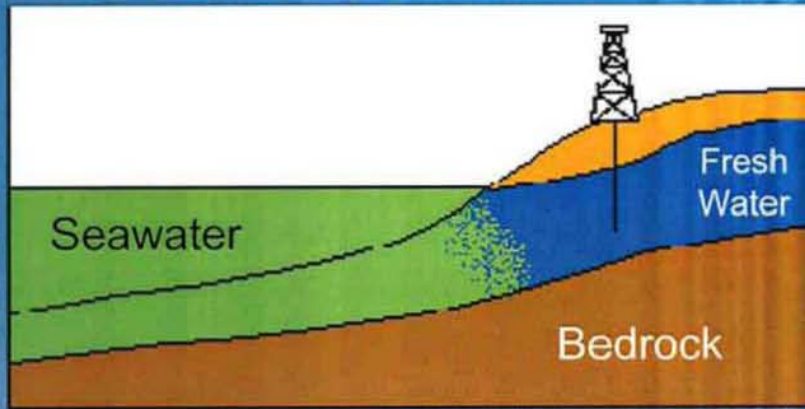
# Location of sea water

## NCSD

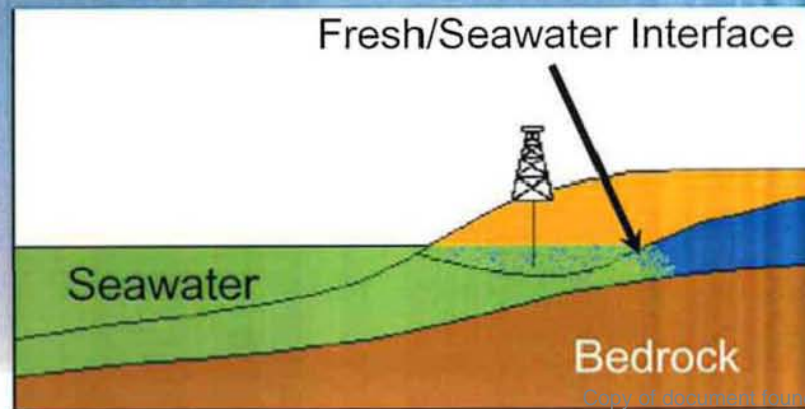
- Makes it sound like its right at the beach ready to come in.
- NCSD uses distorted pictures that makes it look around 20 times closer.
- NCSD fails to mention Nipomo is different than other areas on coast.

- Reality
- The location is at the shore around Pismo Beach and moves further off shore as it goes south.
- It has been described as being 19Km offshore.
- No actual investigation.
- 1979 DWR reports considerable water is offshore and may be used for 20 years.

# We share our aquifer with the Pacific Ocean



When fresh water table stays above sea level...  
Seawater stays offshore.



Too much pumping...  
Can cause the fresh water table to fall below sea level...  
Creating an invitation for seawater intrusion.

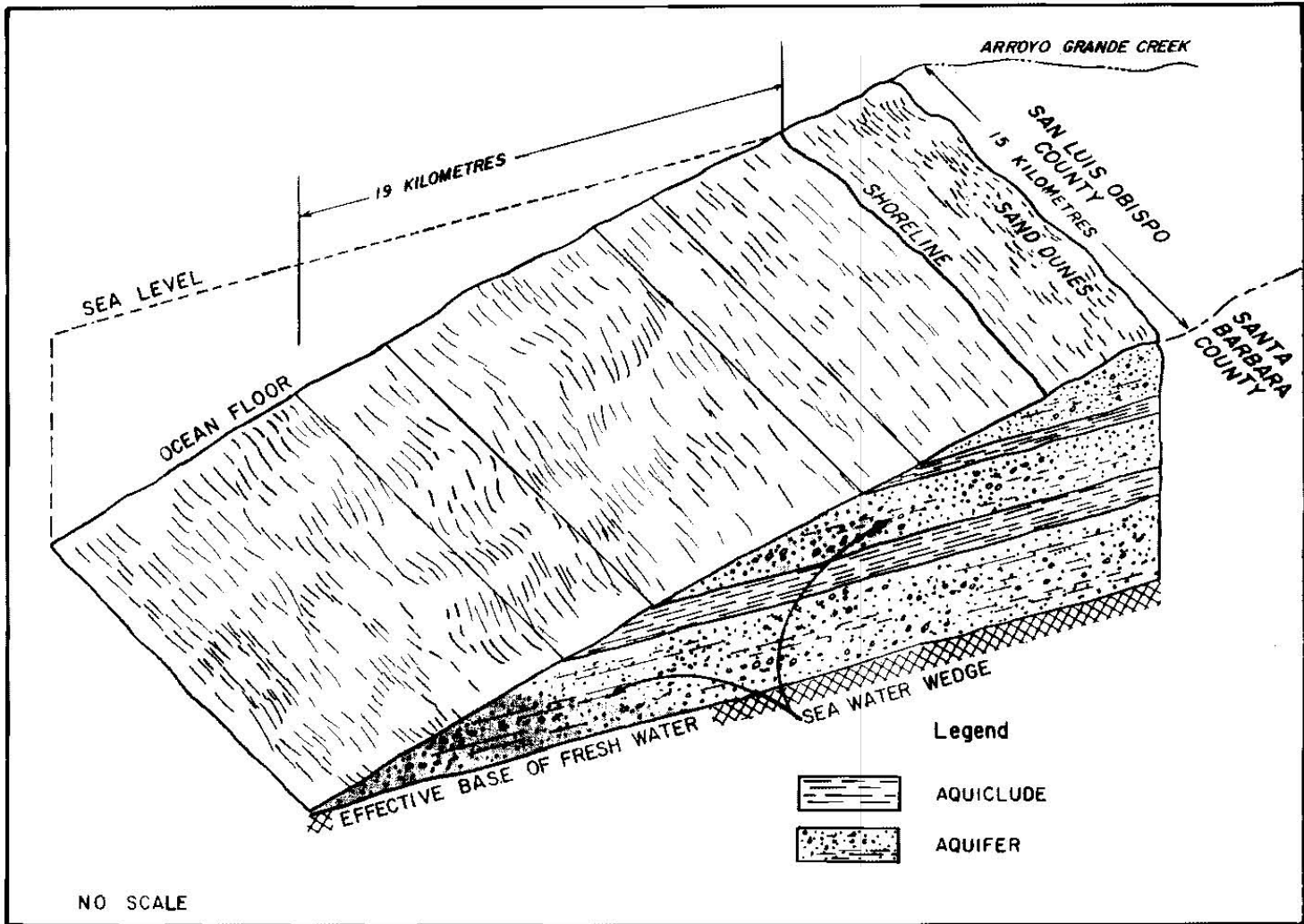
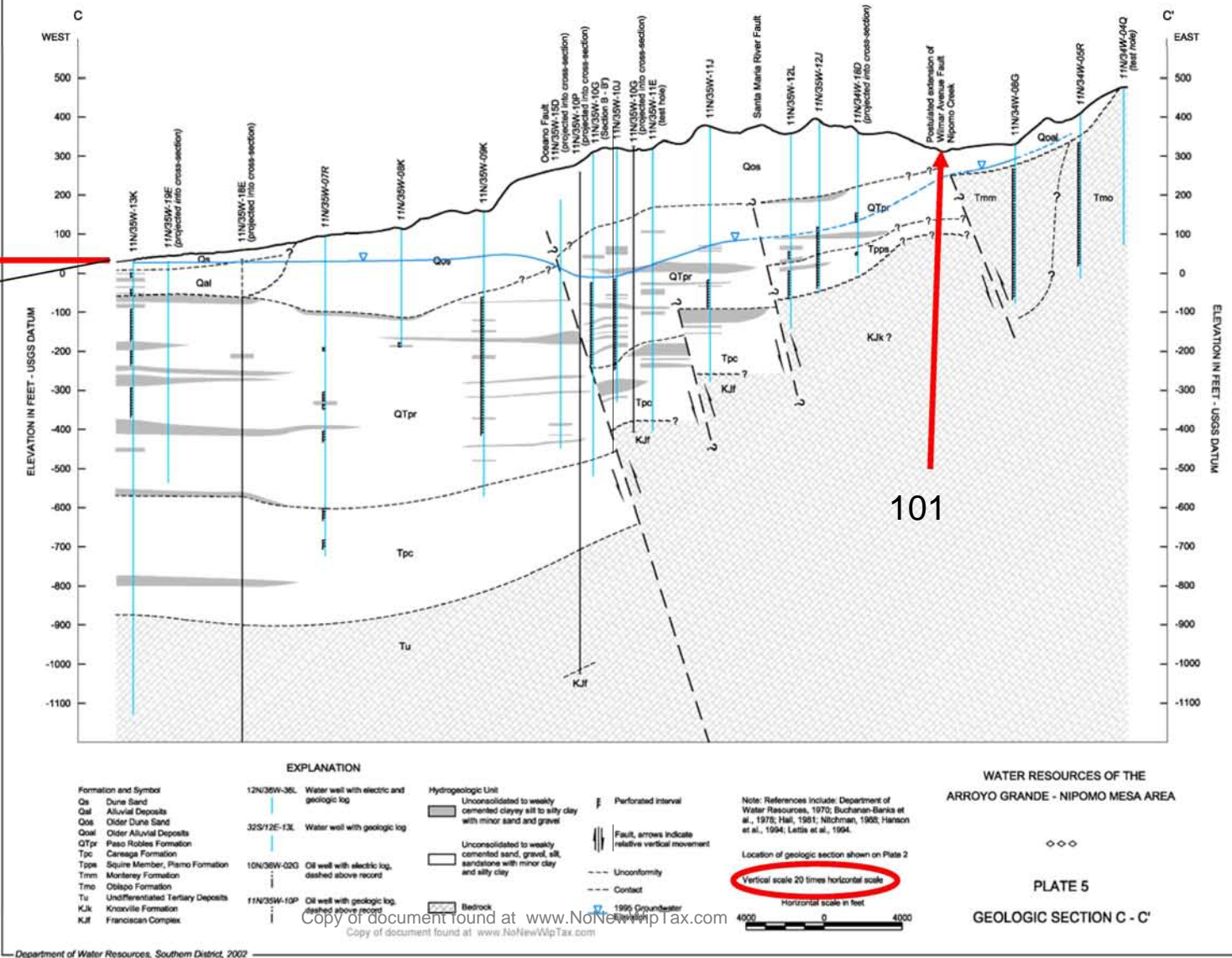


Figure 35 - CONCEPTUAL DRAWING OF THE OFFSHORE AQUIFERS

Formation out to  
 ~19 km offshore  
 ~ 15 km from shore  
 to 101



**EXPLANATION**

<p><b>Formation and Symbol</b></p> <p>Qs Dune Sand</p> <p>Qal Alluvial Deposits</p> <p>Qo6 Older Dune Sand</p> <p>Qoal Older Alluvial Deposits</p> <p>QTpr Paso Robles Formation</p> <p>Tpc Careaga Formation</p> <p>Tmm Squire Member, Plamo Formation</p> <p>Tmo Monterey Formation</p> <p>Tu Undifferentiated Tertiary Deposits</p> <p>Kjk Knoxville Formation</p> <p>KJf Franciscan Complex</p>	<p>12N36W-36L Water well with electric and geologic log</p> <p>32S12E-13L Water well with geologic log</p> <p>10N36W-02G Oil well with electric log, dashed above record</p> <p>11N35W-10P Oil well with geologic log, dashed above record</p>	<p><b>Hydrogeologic Unit</b></p> <p>Unconsolidated to weakly cemented clayey silt to silty clay with minor sand and gravel</p> <p>Unconsolidated to weakly cemented sand, gravel, silt, sandstone with minor clay and silty clay</p> <p>Bedrock</p>	<p>Perforated interval</p> <p>Fault, arrows indicate relative vertical movement</p> <p>Unconformity</p> <p>Contact</p> <p>1986 Groundwater</p>	<p>Note: References include: Department of Water Resources, 1970; Buchanan-Banks et al., 1970; Hall, 1981; Nitchman, 1985; Hanson et al., 1994; Lettice et al., 1994.</p> <p>Location of geologic section shown on Plate 2</p> <p>Vertical scale 20 times horizontal scale</p> <p>Horizontal scale in feet</p> <p>4000 0 4000</p>
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**WATER RESOURCES OF THE ARROYO GRANDE - NIPOMO MESA AREA**

○ ○ ○

**PLATE 5**

**GEOLOGIC SECTION C - C'**

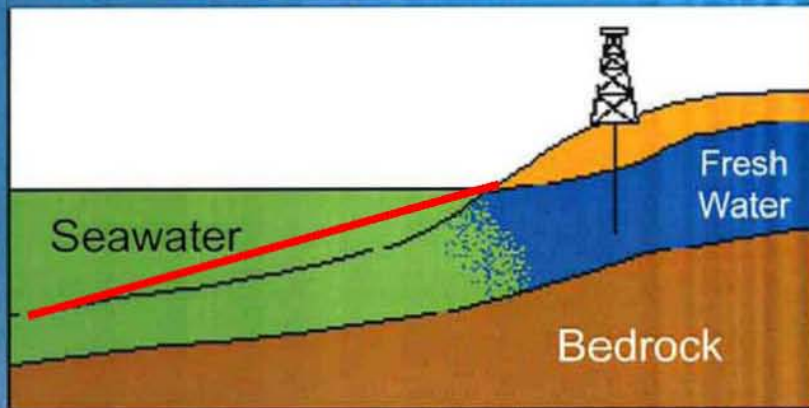
# Chart with out 20:1 distortion

Formation out to  
~19 km offshore

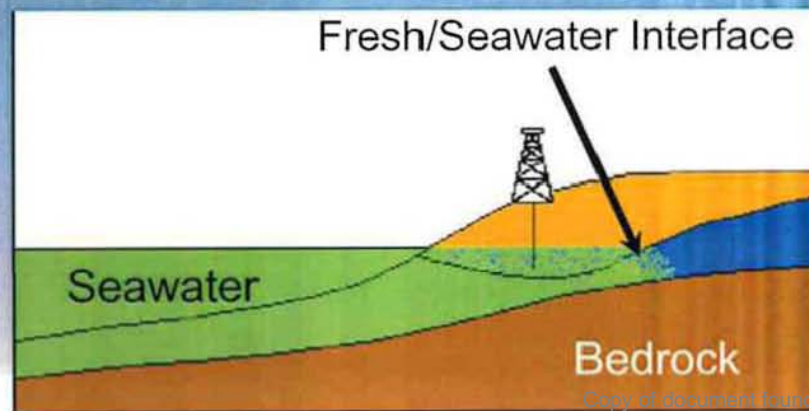
~ 15 km from shore  
to 101



# We share our aquifer with the Pacific Ocean



When fresh water table stays above sea level...  
Seawater stays offshore.



Too much pumping...  
Can cause the fresh water table to fall below sea level...  
Creating an invitation for seawater intrusion.



# Who controls growth

## NCSD

- The county does.
- NCSD must supply water.
- Reality
- New rules allow NCSD to have more sway at the county.
- NCSD can limit will-serves
- NCSD had a moratorium from 1987 to 1992
  - 6/10/87 NCSD urgency ordinance of NCSD prohibiting annexations to the district pending resolution of uncertainties related to future district water supplies, see [Ordinance No. 87-51](#)

# NMMA TG grant request

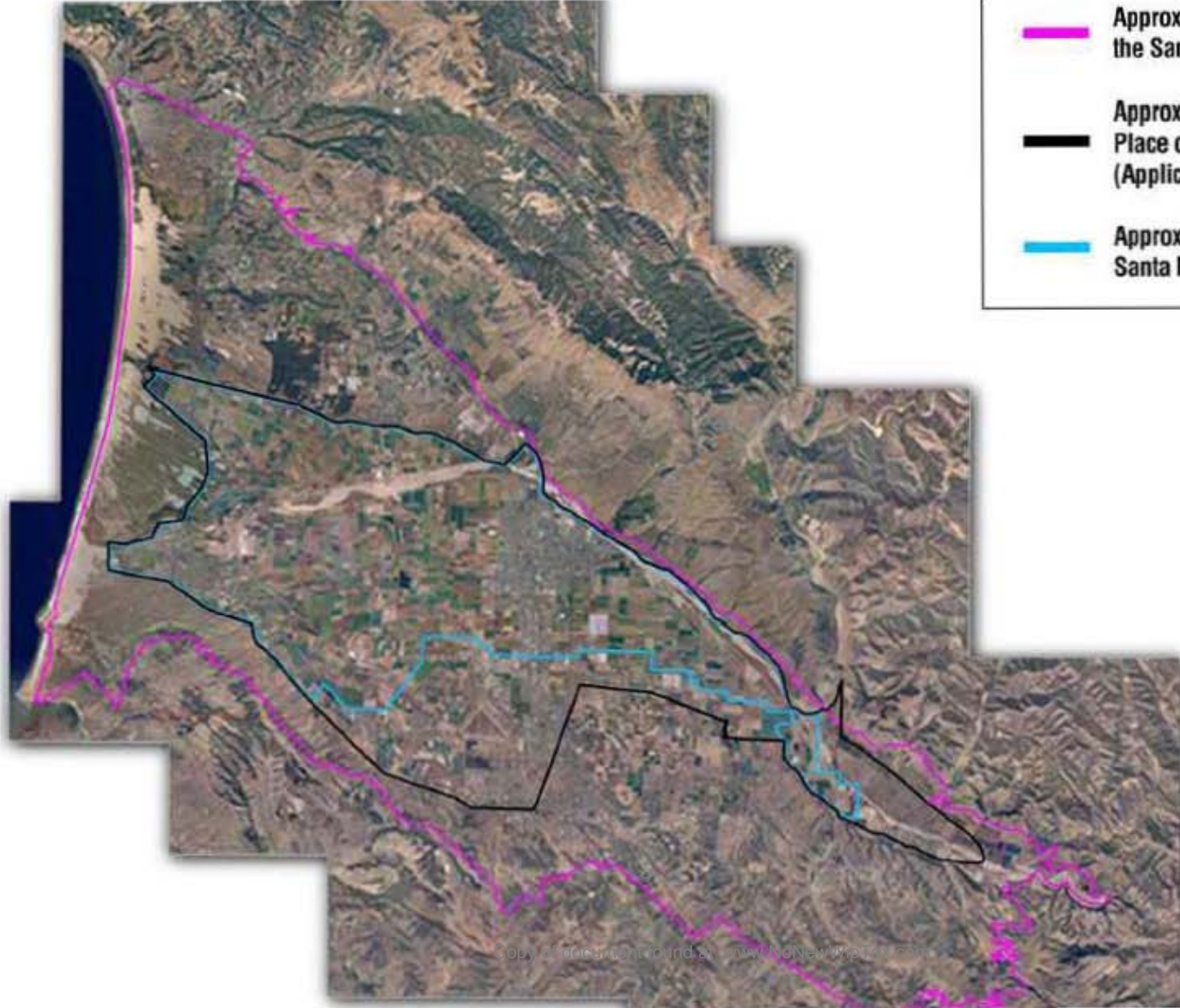
- 12/12/07 item E-3
- Get money for modeling and monitoring to understand what is going on underground better.
- Cost \$250,000

# Other solutions

Rainfall, use and pumping priority are  
unpredictable

# Is Santa Maria the one to buy from?

- Santa Maria, profit?
- GSWC, PUC controlled profit, can provide connection to state water pipe.
- Landowners, are paying \$15-30 per Af to keep are 6000 Af share of Twitchell. Many are planning to “transfer” that to Santa Maria.



- Approximate Boundary of the Santa Maria Groundwater Basin**
- Approximate Boundary of Place of Use for License 10419 (Application 11343)**
- Approximate Boundary of Santa Maria Water Conservation District**

# Area of Use Vs Areas of Supply

Yellow=Area of rainfall that NCSWCD water use restrictions are to be based on.  
Black=NCSWCD area of use

Purple=water shed Arroyo Grande / Cuyama

Lopez

Twitchell

Brown=County Line

49,900 AF/Y to ocean  
10,000 AF/Y needed

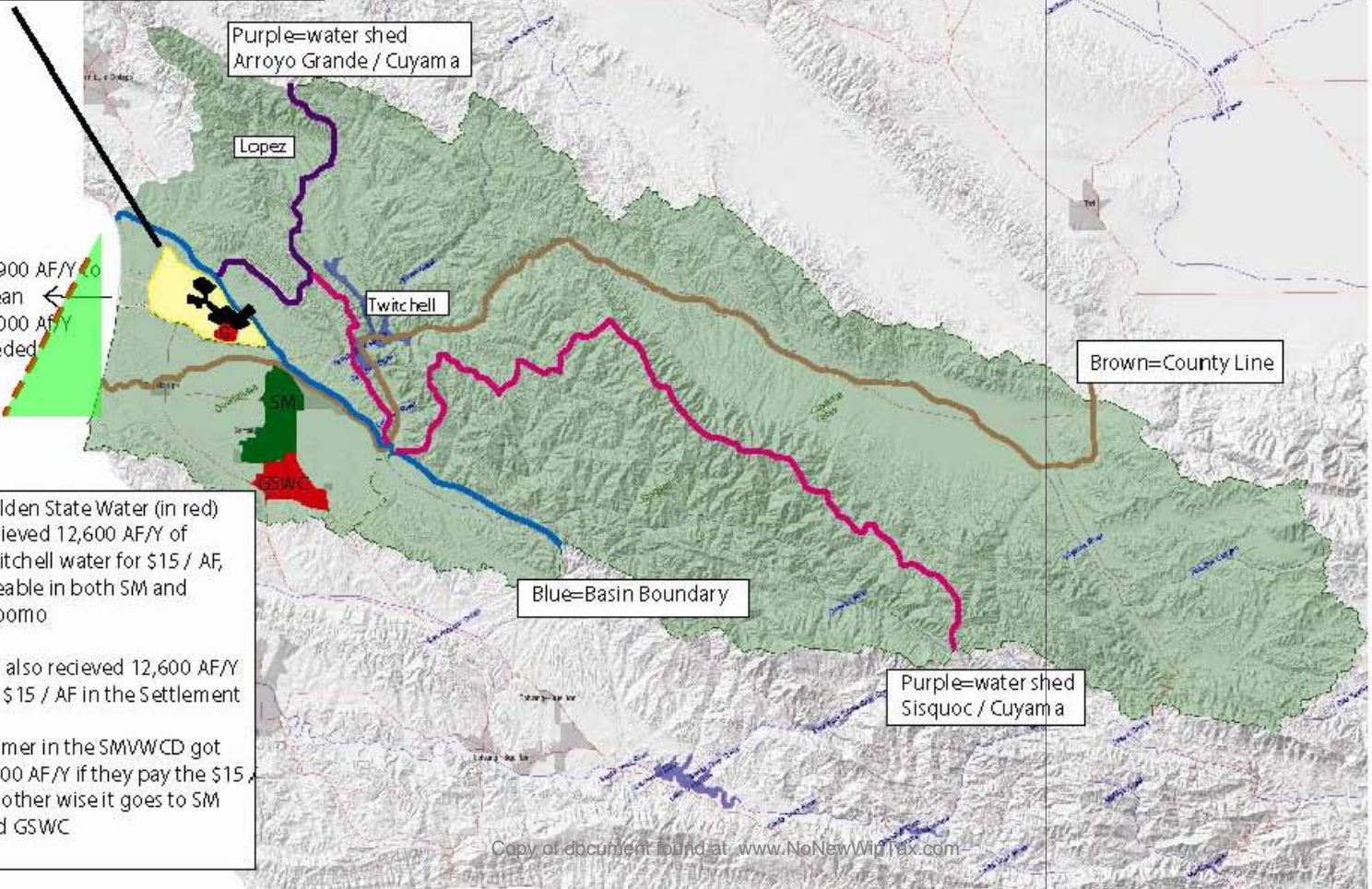
Golden State Water (in red) received 12,600 AF/Y of Twitchell water for \$15 / AF, useable in both SM and Nipomo

SM also received 12,600 AF/Y for \$15 / AF in the Settlement

Farmer in the SMWCD got 6,400 AF/Y if they pay the \$15 / AF otherwise it goes to SM and GSWC

Blue=Basin Boundary

Purple=water shed Sisquoc / Cuyama



10,000 or 50,000 going to ocean



# Conversion to strawberries

# NCSD RWC customer worksheets

## Rural Water Company Basis of Assessment

Group	Sub Group	Land Use Category	Description	Parcel Sizes Included (acres)	Basis of Assessment
1	A	Residential with 1 unit (RSF, RMF, RR, RS, RL)	All residential parcels with one unit	<= to 0.35	1.00 Equiv. BU
	B			>0.35 & <= 0.65	1.60 BU
	C			>0.65	2.00 BU
2	A	Residential with 2 units	Second Unit on a residential property	<=1.00	0.00 BU
	B			>1.00	0.30 BU for 2nd unit
3	A	Commercial (CS, OP, CR)	Commercial Services, Office Professional, Commercial Retail	<= to 0.35	1.0 BU
	B			>0.35 & <= 0.65	1.60 BU
	C			>0.65 & <= 2.00	3.00 BU
	D			>2.00	6.00 BU
4	A	Hotel	Hotel or Bed & Breakfast	All Parcel Sizes	0.40 BU/room
5	A	School	School	<= to 0.35	1.00 BU
	B			>0.35 & <= 0.65	1.60 BU
	C			>0.65 & <= 2.00	3.00 BU
	D			>2.00	3.00 BU plus 1.0 BU for every acre above 2.0 acres
6	A	Recreational	Parks, Fields, etc	All Parcel Sizes	1.00 BU per acre
7	A	Public Facilities w/ No Irrigation	Public Facilities with no irrigation (i.e. wells, tanks, lift stations)	All Parcel Sizes	0.00 BU
8	A	Public Facilities w/ Irrigation	Public Facilities with irrigation	All Parcel Sizes	1.00 BU/acre
9	A	Open Space w/ No Irrigation	Open Space w/ no irrigation (i.e. medians, parking lots, etc)	All Parcel Sizes	0.00 BU
10	A	Open Space w/ Irrigation	Open Space w/ existing irrigation	All Parcel Sizes	1.00 BU/acre
11	A	WWTP	Wastewater Treatment Plant		1.00 BU
12	A	Exempted Parcels	Parcels with their own water source	All Parcel Sizes	0.00 BU

# Property Owner Assessment Worksheet for Rural Water Company Customers (Approximate Current **ESTIMATE**)

**1**

## Total Assessment

(Example)

- a. Enter your Benefit Units \_\_\_\_\_ 1.0
- b. Multiply a. by \$1,348 \_\_\_\_\_  $1.0 \times \$1,348 = \$1,348$
- c. Multiply a. by \$1,090 \_\_\_\_\_  $1.0 \times \$1,090 = \$1,090$   
if prepayment is made



This is your Total Assessment

**2**

## Yearly Payment

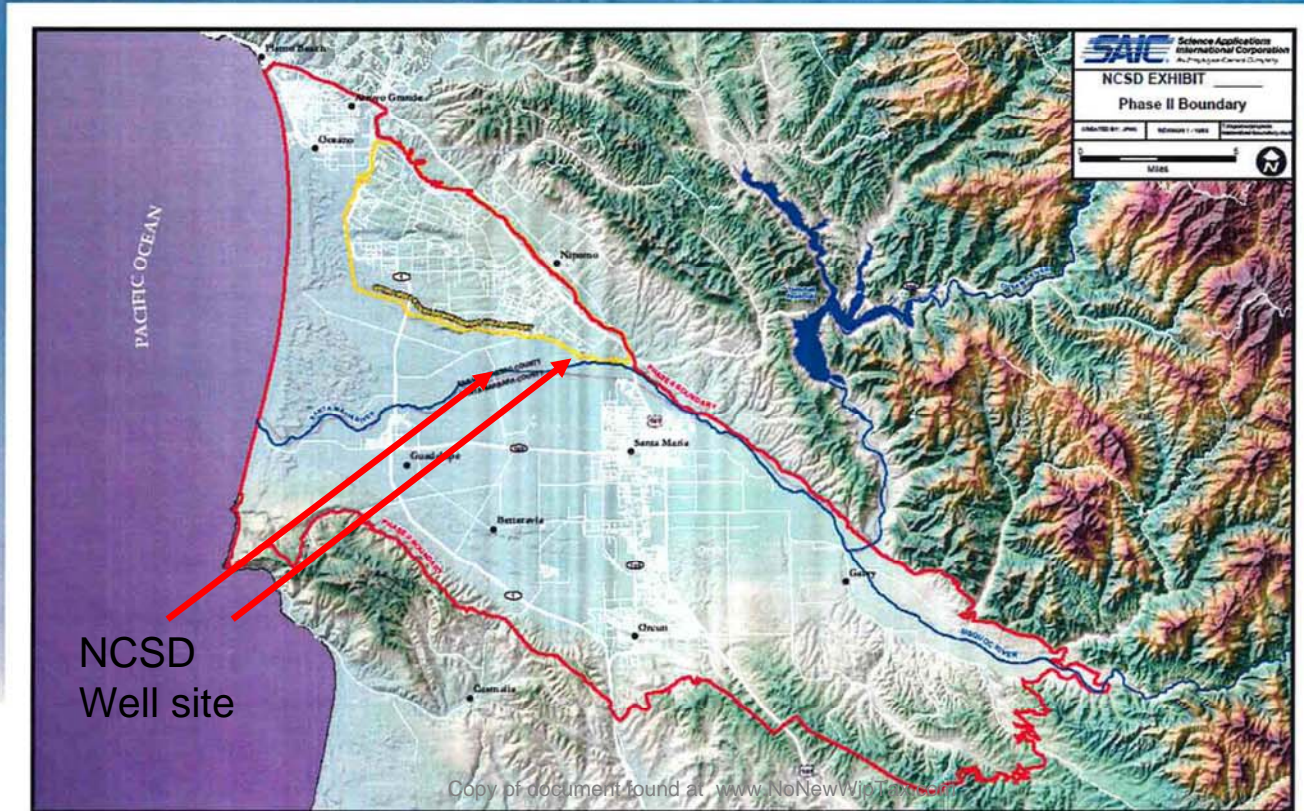
(Example)

- a. Enter your Benefit Units \_\_\_\_\_ 1.0
- b. Multiply a. by \$240 \_\_\_\_\_  $1.0 \times \$240 = \$240$

This is your estimated  
Yearly Payment on your  
Property Tax Bill

# NCSD has Well sites in the SM valley

## Santa Maria Groundwater Basin

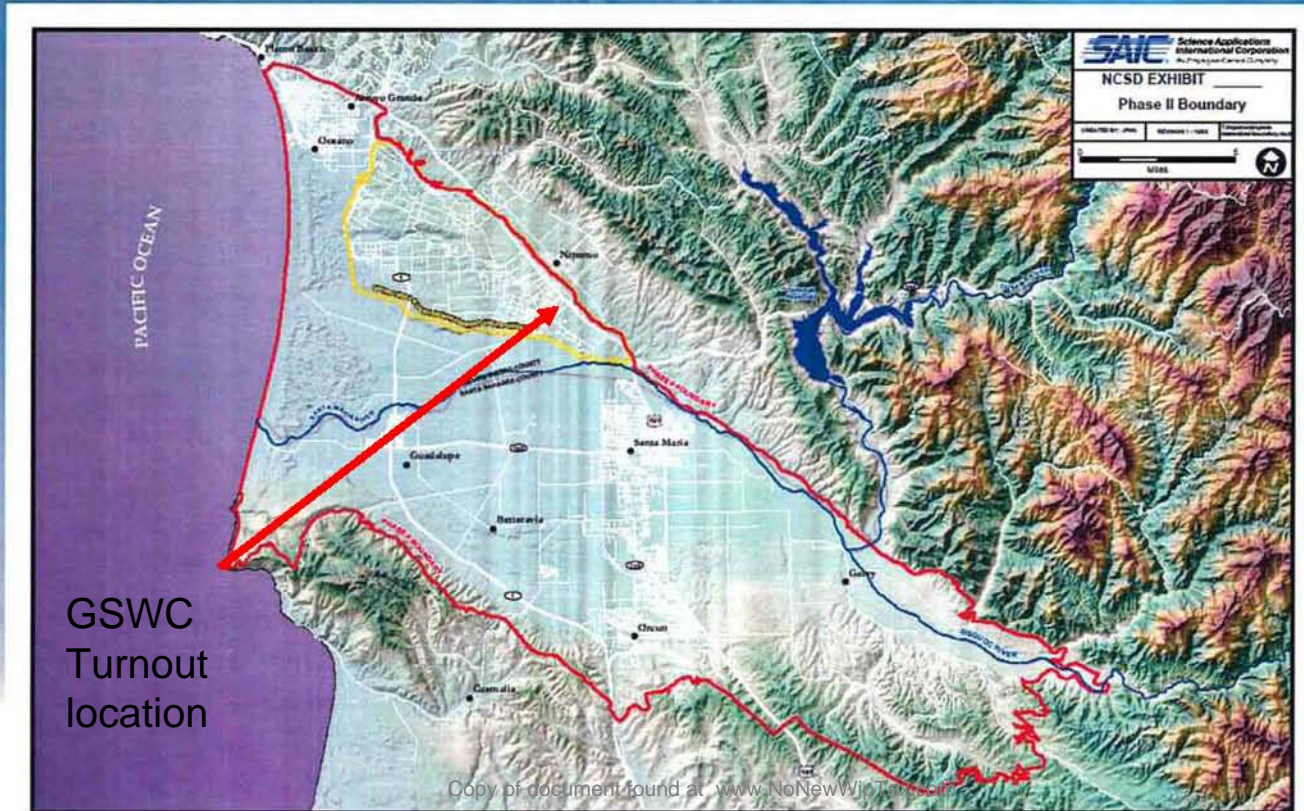


# “Unit” cost of desal lower?

- **NCSD documents show the WIP is not the lowest cost solution, for example:**
- NCSD’s [5/20/09 board packet Item B](#) last page, the chart shows:
- **“Unit Cost” of Intertie Project Supply is \$26,644 per AF**
- **“Unit Cost” of Desalinization Project is \$14,063 per AF**
- **NCSD based the connection fee on this study**

# NCSD has Well sites in the SM valley

## Santa Maria Groundwater Basin



# State water pipe Use vs Capacity (sm,ccwa uwmps)

Year	2005	2006	2007	2008	2009	2010
Santa Barbara Capacity	42986	42986	42986	42986	42986	42986
Santa Barbara used Capacity	23344	23678	26112	18391	15452	17775
Santa Barbara Unused Capacity	19642	19308	16874	24595	27534	25211
Year	2005	2006	2007	2008	2009	2010
SM+GSWC+Guad Capacity	18975	18975	18975	18975	18975	18975
SM used Capacity	13268	13128	11711	7792	7779	10277
GSWC used Capacity	194	586	189	233	249	246
Guad used Capacity	404	476	437	348	39	0
SM+GSWC+Guad Unused Capacity	5109	4785	6638	10602	10908	8452



# Can't connect to State Water pipe?

## NCSD

- Lebrun “and a connection to that pipeline, while not an engineering problem, is not possible” 1//23/12 NCSD presentation

- Mike Winn: “”

## Reality more like

- NCSD board member Jim Harrison: “if we got water out of the pipeline in Nipomo it would cost \$48,000 per acre foot” 11//09/11 Oceano CSD meeting
- NCSD may not be able to connect but GSWC can.

Long term no, Short term yes

# Court order physical solution

- Anyone can make request for filing fee.
- Needs real threat of sea water intrusion and overpumping.
- Physical solution:
  - NCSD starts process to build de-sal
  - SLO provides unused state water at cost.
  - CCWA, SM, GSWC, Guad provide unused pipe capacity at cost
- Would not be able to rely on temporary state water for new will-serves.

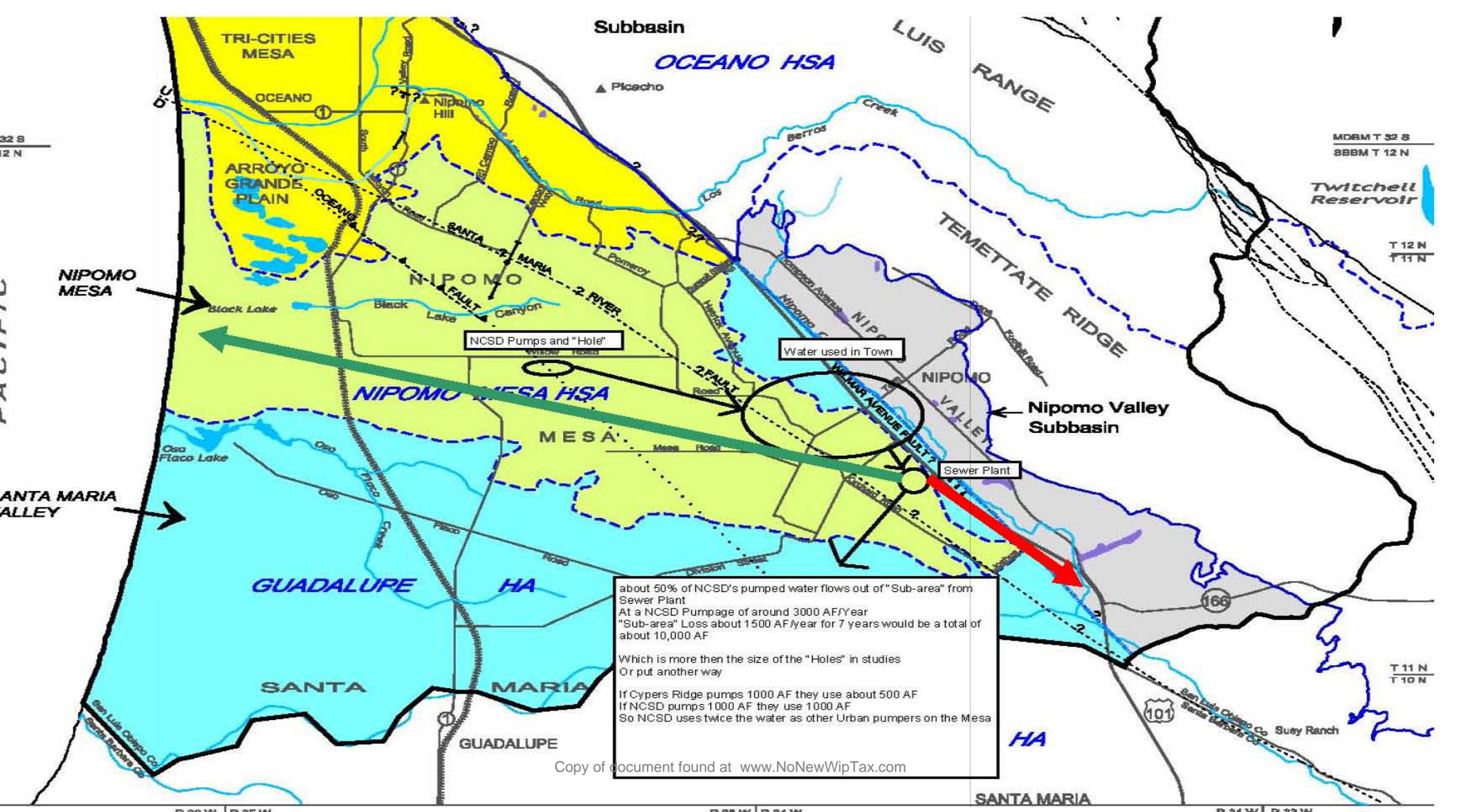
# NCSD sewer plant part of the problem

## NCSD

- ?

## Reality

- Return flows 50%.
- Return flows hi in salts.
- Water needs to go to the ocean.



Subbasin

OCEANO HSA

NCSD Pumps and "Hole"

Water used in Town

Sewer Plant

about 50% of NCSD's pumped water flows out of "Sub-area" from Sewer Plant  
 At a NCSD Pumpage of around 3000 AF/Year  
 "Sub-area" Loss about 1500 AF/year for 7 years would be a total of about 10,000 AF  
 Which is more then the size of the "Holes" in studies  
 Or put another way  
 If Cypers Ridge pumps 1000 AF they use about 500 AF  
 If NCSD pumps 1000 AF they use 1000 AF  
 So NCSD uses twice the water as other Urban pumps on the Mesa

Copy of document found at [www.NoNewWipTax.com](http://www.NoNewWipTax.com)

MDBM T 32 S  
 SBBM T 12 N

T 12 N  
 T 11 N

T 11 N  
 T 10 N

32 S  
 12 N

NIPOMO MESA  
 SANTA MARIA ALLEY

TRI-CITIES MESA

OCEANO

ARROYO GRANDE PLAIN

NIPOMO

NIPOMO MESA HSA

MESA

GUADALUPE HA

SANTA MARIA

GUADALUPE

SANTA MARIA

LUIS RANGE

TEMETTATE RIDGE

Nipomo Valley Subbasin

Twitchett Reservoir

166

101

Suey Ranch

San Luis Obispo Co  
 Santa Barbara Co

50

1

2

2

2

2

2

2

2

2

Black Lake

Black Lake

Casa Flaco Lake

San Luis Obispo Co  
 Santa Barbara Co

Suey Ranch

Picocho

Bertos Creek

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# NMMA TG contingency plan

- **NMMA PURVEYOR NMMA WELL MANAGEMENT PLAN1 Adopted January 21, 2010**
  - Voluntary evaluation and implementation of shifting pumping to reduce GW depressions and/or protect the seaward gradient. This includes the analysis and establishment of a potential network of purveyor system interties to facilitate the exchange of water;

# Water Law

“Question: What can be done to get Conoco Philips and ag users to contribute? Talk to our congress men? Well you can certainly talk to your congress man. But the problem is the law.

We have one of the most antiquated water laws in America, Texas and United States (California ) only have the law that water does not belong to all of us. It belongs to each individual underneath their property. When they pump it it's theirs and you can't tell them no. This is so antiquated it came out of the gold rush in California there was a test case done and it started back in the 1990 between Barstow and the water conservation district over Mojave and the question was: Look this law is so antiquated so out of date, surely this can't be our law. And they won the first case and they lost the second case on appeal and they went to the California supreme court.

The California Supreme court ruled very simply: the old law is definitely still in effect. That's it. They cannot be required to conserve, can prosecute if they waste”, Mike Winn

8/23/11

# 2-28-92 Engineer: Nipomo has plenty of water

By Angela Hastings  
Times Staff Writer

**NIPOMO** — Nipomo residents concerned about water availability in their developing community heard Wednesday that the Nipomo Mesa in fact has ideal groundwater conditions for development to occur.

The theory, presented by engineer Donald Asquith, disputes San Luis Obispo County's general stance that groundwater availability decreases as development increases. Asquith is one of the authors of the environmental impact report for the proposed South County Area Plan, which will serve as a guide for development in Nipomo for the next 20 years.

The features that make the Nipomo Mesa — the portion of Nipomo west of Highway 101 — a

good site for development include the sandy soil and depressions between the Mesa's sand dunes, which together cause the soil to soak up water like a sponge, Asquith said. Therefore, the water does not flow off to the ocean, but enters the ground water basin where it can be used again.

Nipomo's east side and the Santa Maria Valley, on the other hand, have more clay in their soils, so rainfall and recharge from residents flow on the ground surface to the ocean.

Another factor in favor of development on the Mesa is that with slightly less vegetation and crops, which consume a large amount of water, more water will be available to recharge the groundwater basin.

“On the Mesa now the only thing that takes water out of the

system is vegetation,” Asquith said. Even drought-tolerant vegetation uses large amounts of water; it simply uses it in the winter when it is available.

However, the development must be balanced with open space areas containing natural depressions where water can seep back into the ground, Asquith said.

Too much concrete and pavement also would cause water to drain in streams rather than soak into the ground. San Luis Obispo, Arroyo Grande and Morro Bay replace little water into groundwater systems in part for that reason, Asquith said.

Because of the Mesa's ability to recharge the groundwater basin, an abundance of water is available below the Mesa that

Continued on Page A-8



# Engineer likes Nipomo's water situation

**Continued from Page A-1**  
can be used to support a relatively dense population.

Asquith called into question some Nipomo residents' and county officials' concern that Nipomo may be in an overdraft situation, as a number of drying wells here seem to indicate. Overdraft means that the community withdraws more water than it puts back into the system, depleting the groundwater or nearby streams.

The water levels below the Mesa are higher than the water levels below Arroyo Grande and Santa Maria, which are part of

the same groundwater basin, so several hundred acre-feet of water per year flow downhill from the basin below the Mesa in southern and northern directions, according to a 1979 state Department of Water Resources report. Therefore, the Mesa is putting more water into the basin than it is withdrawing.

"Since you're giving away 82 percent of your water, you can't possibly be in overdraft," Asquith said. "You may be using substantially less than your share."

Although water levels below most of the Mesa are high, there

are some dry pockets, which account for the drying wells, according to Nipomo Community Services District Manager Ryder Ray.

Residents here often have voiced anger that the Mesa supplies so much water to Santa Maria without any compensation. Participation in the state water project would limit water loss to Santa Maria, because any acre-foot of state water that the Nipomo CSD purchases, uses and returns the groundwater system here can be pumped legally only by the CSD, Asquith said.

# Court Vs Settlement

## NCSD:

- There is a “final Judgment” in the court case.

## Reality

- The judgment is called the “final Judgment” but that is only for the superior court.
- It has to be reviewed by the appellate court. And possibly by the Supreme court.
- It is currently waiting for the appellate court to have a hearing.

# Court Vs Settlement

## NCSD

- claims the settlement is effectively a decision by the court.
  - Claims the settlement controls the water rights.
  - Ignores the main portion of the judgment.
- The courts have independent power and obligations from the settlement.
  - The court allowed NCSD and other signers to settle with the settlement.
  - If there is a conflict between the settlement and future court decisions the settlement must change.

# Court Vs Settlement

## NCSD

- Claims the court formed the NMMA TG to monitor the basin.

## Reality

- Only Settling parties agreed to form the NMMA TG its reports and decisions do not have any elevated status in the courts.
- “The actions or decisions of any Party, the Monitoring Parties, the TMA, or the Management Area Engineer shall have no heightened evidentiary weight in any proceedings before the Court.” settlement page 31

P00-1 Camp site 7 "Lost or Not Monitored" 32S12E24B1-3

P00-2 Grande Avenue "Lost" 32S12E24R 1-3

P00-3 Park Head Q 32S12E30F 1-3

P00-4 Pier Avenue Wells "Cloride" 32S13EN1-3

P00-5 Arroyo Grande Creek "Lost & Damaged 32S13E31F2-4"

12N36W36L1-2

11N36W12C1-3

OF-1 Oso Flaco "Lost" 11N36W13K2-6

G0-2, 11N36W35J2-6

G0-1, 11N36W2Q1