

Harold Snyder P.O. Box 926 Nipomo, CA 93444 (805) 929-2455 H

August 23, 2011

Nipomo Community Services District 148 Wilson Street P.O. Box 326 Nipomo, CA 93444

(805) 929-1133 Phone (805) 929-1932 Fax

Dear Michael LeBrun:

I am making a public record request for a copy of the power point presentation at the August 23, 2011 board meeting on the Water Intertie project, If the power point presentation will be posted to the NCSD Website I can get them there, if not please make a copy.

Thank You

John Market

Harold Snyder

Hand Delivered.

RECEIVED

AUS 2 + 2011

NIPOMO COMPUTE SURVICES MESTERS

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September 6, 2011

Mr. Harold Snyder P. O. Box 926 Nipomo, California 93444 kochcal@earthlink.net

Dear Mr. Snyder:

SUBJECT: AUGUST 23, 2011 PUBLIC DOCUMENT REQUEST # 1

The presentation given by the District the evening of August 23, 2011, is posted on the District's website (www:NCSD.CA.GOV) under the 'Water Shortage' sub directory.

Very truly yours,

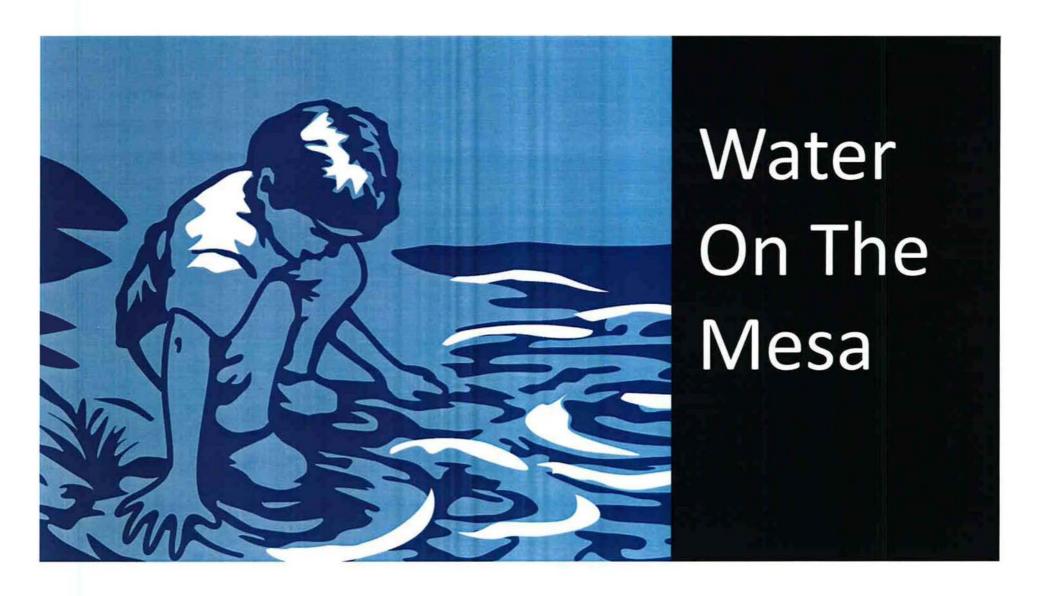
NIPOMO COMMUNITY SERVICES DISTRICT

Michael of JeBrun

Michael S. LeBrun General Manager

Enclosure(s):

110823 Snyder Request '1'



### **Community Forum**

August 23, 2011 / 6:30-8:30pm Nipomo High School, Olympic Hall

### Nipomo Community Services District Board President Jim Harrison

- Welcome and Introductions
- NCSD Public Meeting Call To Order
- Board Roll Call
- Pledge of Allegiance
- Meeting Overview

### **Meeting Overview & Process**

- Presentation A Series of Speakers
- Questions & Answers
- Public Comment Period
- NCSD Closing Remarks
- Adjourn by 8:30pm

### IF YOU HAVE A QUESTION...

- Turn it in on a 3x5 card...
- We will address it during the Q&A Period.

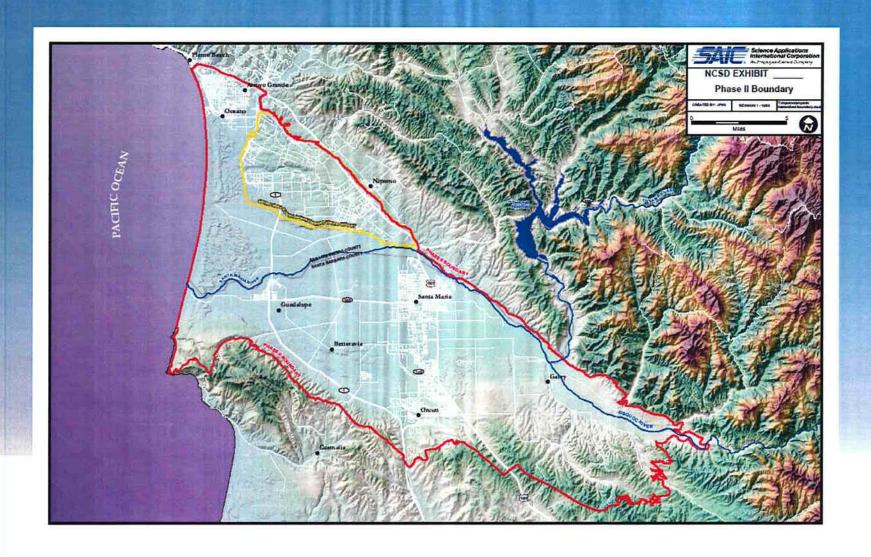
### Agenda

- Introduction Context
- Our Water Problem on the Mesa
- History How did we get here?
- Finding the Right Solution
- Where do we go from here?
- Questions & Answers
- Public Comment
- Closing Remarks

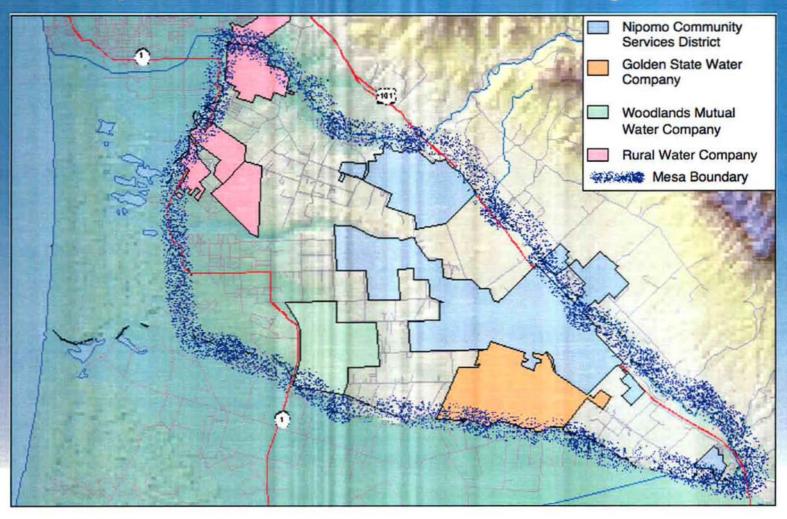
### Introduction - Context

Michael LeBrun
NCSD General Manager

### Santa Maria Groundwater Basin



### Nipomo Mesa Water Purveyors



## **Our Water Problem**

Ed Eby
NCSD Board Director

# The Nipomo Mesa has <u>only ONE</u> source of water...

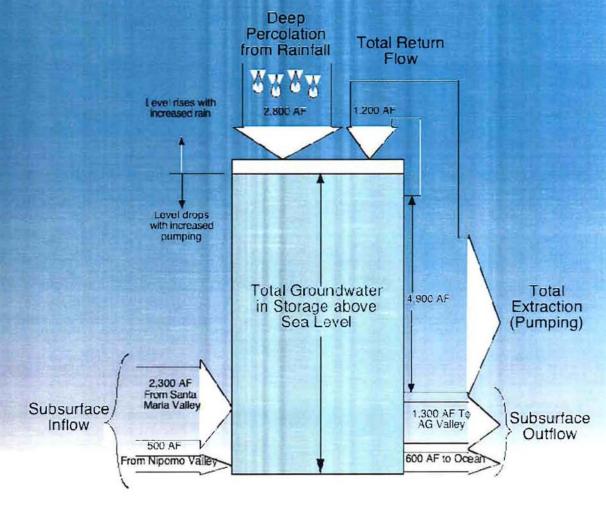
... it is groundwater pumped from beneath us.

## Most communities have multiple sources of fresh water

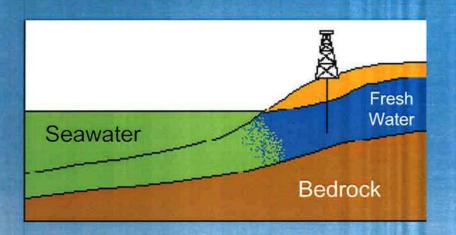
- Pismo, Arroyo Grande, Grover Beach, and Oceano have Lopez Lake, State Pipeline, and Groundwater
- Santa Maria has <u>State Pipeline</u>, <u>Twitchell Reservoir</u> and <u>Groundwater</u>
- San Luis Obispo has <u>Nacimiento Lake</u>, <u>Santa Margarita</u> <u>Lake</u>, <u>Whale Rock Reservoir</u>, <u>State Pipeline</u>, and <u>Groundwater</u>

Nipomo has only **Groundwater** as its single supply

### A Complex View of Our Water Supply

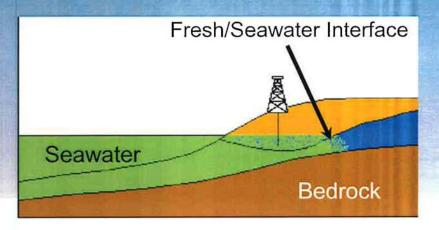


### We share our aquifer with the Pacific Ocean



When fresh water table stays above sea level...

Seawater stays offshore.

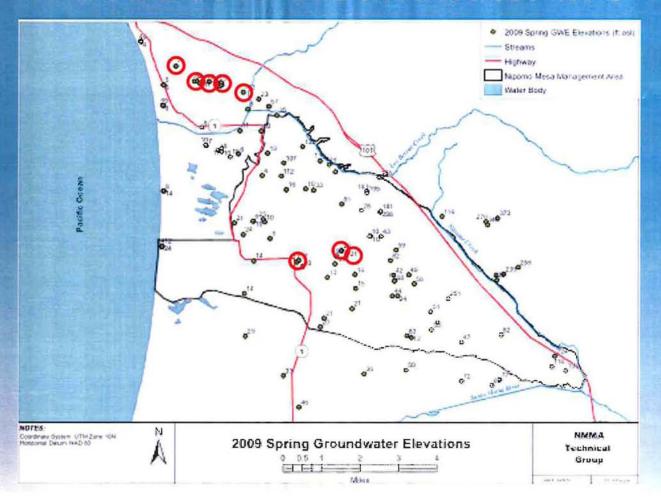


Too much pumping...

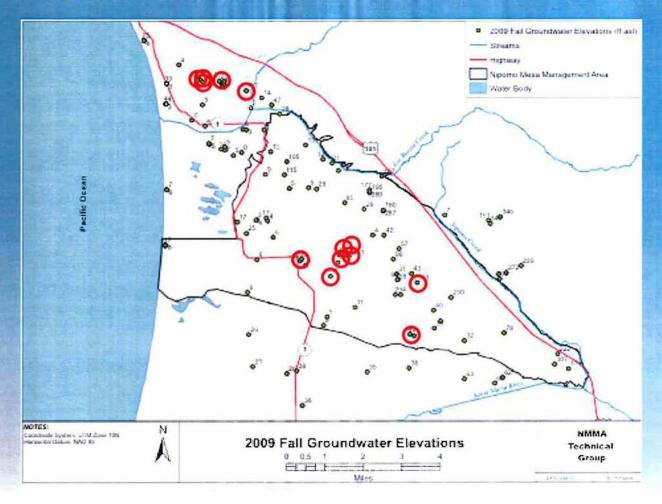
Can cause the fresh water table to fall below sea level...

Creating an invitation for seawater intrusion.

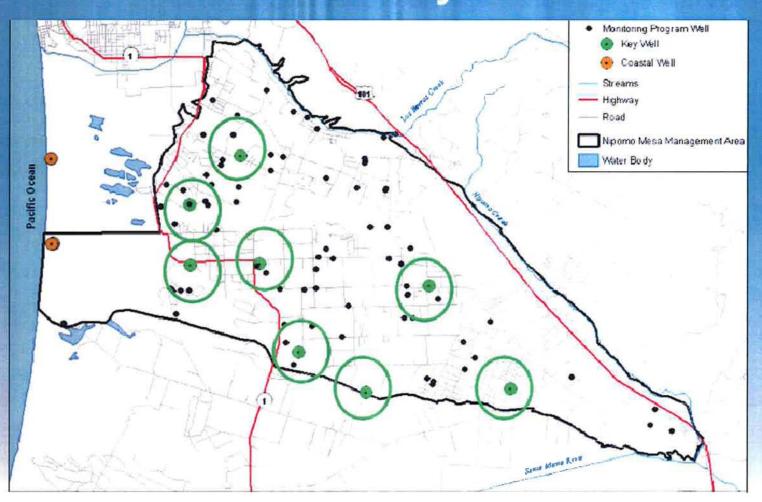
### **Below Sea Level Groundwater in 8 Wells**



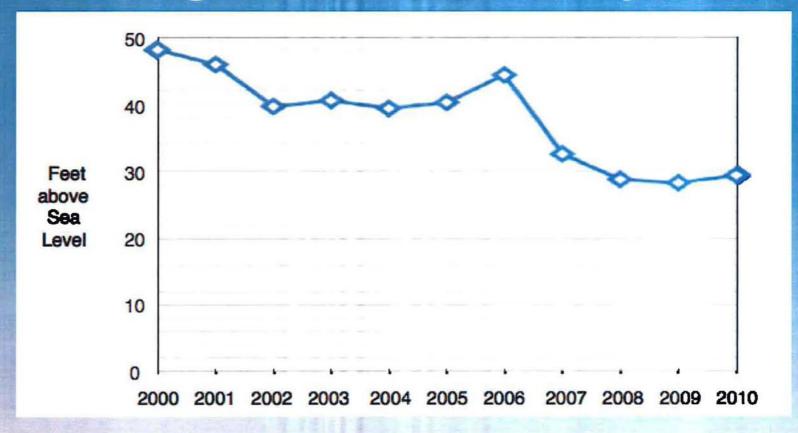
### Below Sea Level Groundwater in 13 Wells



### **Inland or Key Wells**



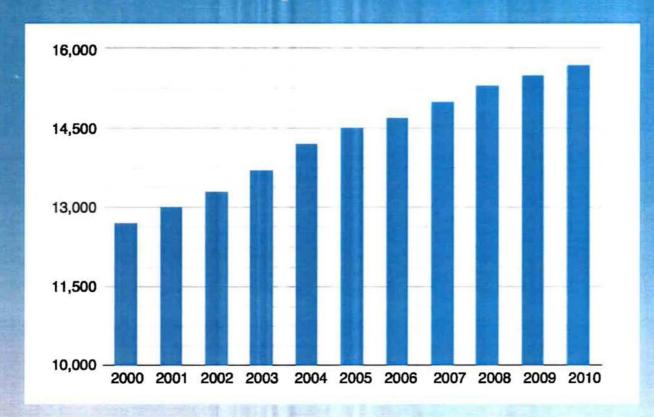
### Average Water Levels in Key Wells



Key Well Index dropped 40% between 2000 and 2008

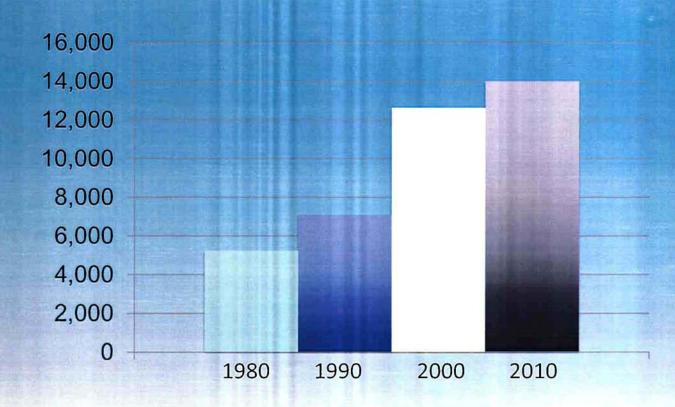
# Why are groundwater levels dropping?

### **NCSD Population Growth**



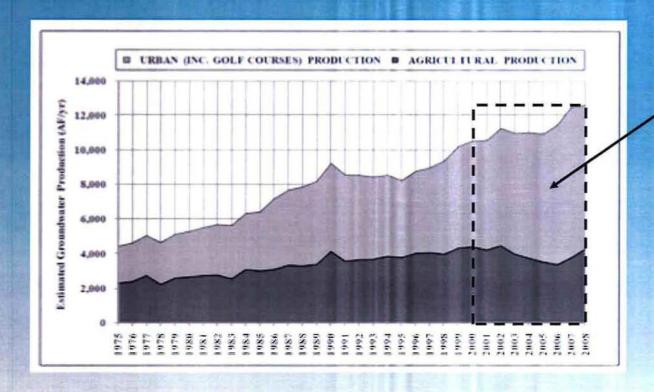
NCSD Population Grew 20% between 2000 and 2008





Nipomo Mesa Population Grew 11% between 2000 and 2010

### Nipomo Mesa Water Use Increase



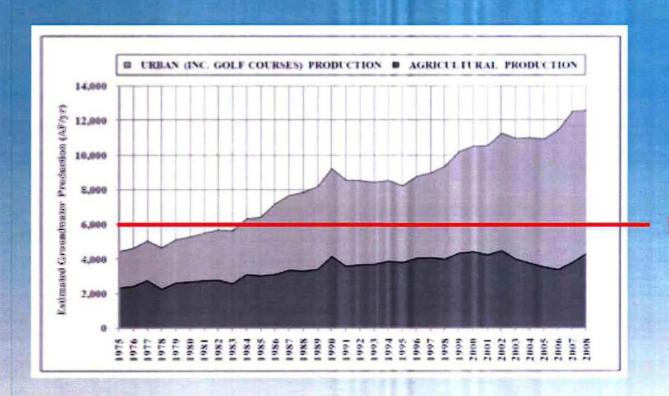
Urban water consumption increased 50% between 2000 and 2008

# Is the increase in groundwater consumption and lowering of groundwater levels a problem?

### Water experts use a term called "Dependable Yield"

- Average yearly amount of water than can safely be pumped without adverse effects
  - -Seawater intrusion
  - -Subsidence
  - -Permanently lowered groundwater levels
  - -Degraded water quality
- Dependable Yield for Nipomo Mesa no more than 6,000 acre-feet per year
- Since ~1984 we have been pumping more than the dependable yield

### We are pumping twice the dependable yield



Dependable Yield

Since we are next to the Pacific Ocean we are concerned that exceeding the dependable yield will invite seawater intrusion.

## When will seawater intrusion occur on the Nipomo Mesa?

An exact date is impossible to predict...

AND...

- ALL cases of seawater intrusion elsewhere started with:
  - Pumping aquifers beyond the dependable yield
  - Consistent dropping of water levels in wells
  - Well levels falling below sea level

## Why the concern now? Has seawater intrusion happened before?

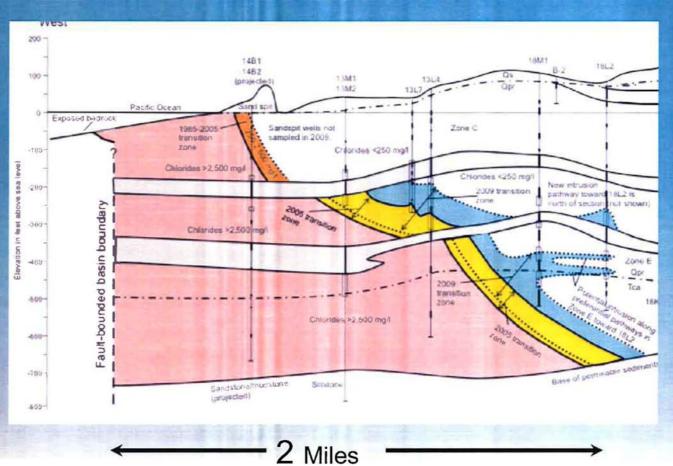
- Seawater intrusion has been experienced all along the West Coast.
- Serious seawater intrusion has been documented in Los Osos since before 1985.
- Oceano had its first recent episode of seawater intrusion in 2009.

### The threat of seawater intrusion is real.



## **Los Osos Seawater Intrusion** 18,500 mg/l Chloride Zone D isochlor (seawater) Estmated extent of 250 mg/ Zone Disochlar Estimated exteri of 250 mg/l Zone D isochlor in 2005 e-logs indicate seawater mixing at base of Zone D

### **Los Osos Seawater Intrusion**



### Oceano Seawater Intrusion



Pier Avenue Sentry Well 1/2 Mile Inland

- Oceano had a recent episode of seawater intrusion in 2009
- August and October 2009 measurements in sentry wells showed seawater intrusion
- Preceded by two years of well levels as much as 10 feet below sea level
- Reduced groundwater pumping by up to 90% and used alternate supplies
- Long term solution is to get access to more State Pipeline water and pump less groundwater

# The Nipomo Mesa has <u>only ONE</u> source of water...

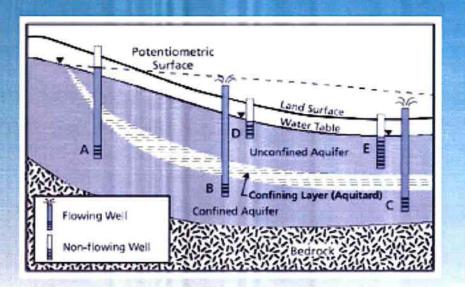
... it is groundwater pumped from beneath us.

# History How did we get in this predicament?

Mike Winn
NCSD Board Director

### Once the Mesa had plenty of water

- Unlimited growth (but few wanted to live here)
- New wells were often artesian



### **Planning Paradigms**

### Old (pre-2000) Model:

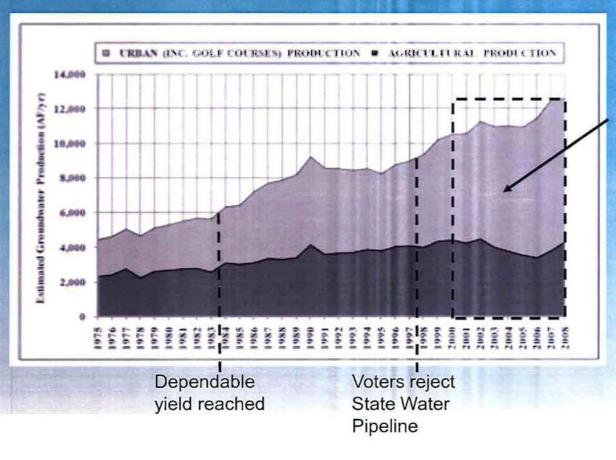
"The County does the planning: CSDs must provide whatever resources are required."

[CSDs, by State law, do not have planning powers.]

### New Model (as of ~2000):

"The County does the planning within the resources a CSD can provide (and must rely on the CSD's UWMP for resource facts)."

#### Nipomo Mesa Water Use



Urban water consumption increased 50% between 2000 and 2008

### **Summary: Water Studies of the Nipomo Mesa**

Published	Source	Area	Conclusions
1979	DWR	Nipomo Mesa Subarea	Evidence of overdraft
1990	DWR	Nipomo Mesa Subarea	Evidence of overdraft
June 1990	SLO County	Nipomo Mesa Subarea	~350 AF/yr overdraft
October 1993	Lawrence, Fisk & McFarland	Nipomo Mesa Subarea "within AG Groundwater Basin"	1,200 AF/yr overdraft
1993	WPA-6	Nipomo Mesa Subarea	Urban development has negligible effect on basin
April 1994	SB County Water Agency	SM River Valley	Usable volume = 10M AF Nipomo 1991 volume = 250K AF Total recharge in good rain year
June 1997	SM Valley Water Cons. Dist.	SM River Valley	Basin not in overdraft South and central Nipomo Mesa recover completely in wet years No seawater intrusion

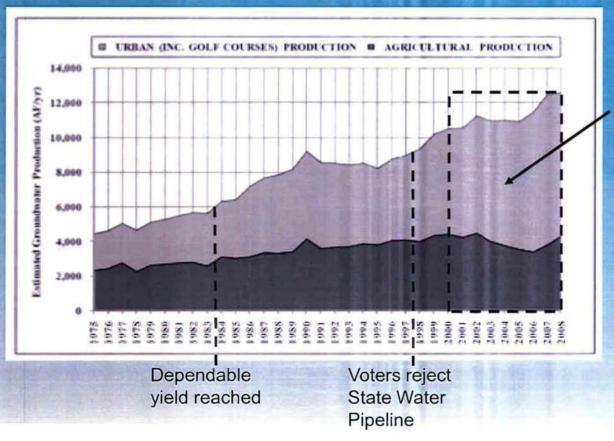
# Summary: Water Studies of the Nipomo Mesa Area (2)

Published	Source	Area	Conclusions
June 1999	DWR	Nipomo Mesa Subarea	Perhaps in overdraft, but overdraft 3K AF/yr by 2020
January 2000 (draft)	DWR	AG-Nipomo Mesa Area	800 AF/yr now, 2K AF/yr overdraft by 2020
April 2002	DWR	AG-Nipomo Mesa Area	Water budget shows overdraft, safe yield analysis shows none at present
2004	SO County Metastudy (Papadopulos)	Nipomo Mesa Water Conservation Area	Overdrafted and consistent with SLO County LoS III Severity
January 2005	Santa Clara Court (final ruling)	Nipomo Mesa Management Area	SM Basin is one basin, but NMMA has significant pumping depressions "a physical solution is necessary" " a reasonable likelihood that drought and overdraft conditions will occur in the Basin in the foreseeable future."

## Convergence of Legislation & Legal Decisions Result in More Local Control

- Stanislaus Natural Heritage v. County of Stanislaus 1996
- County of Amador v. El Dorado County Water Agency 1999
   [CEQA must evaluate long-term water supply]
- Urban Water Management Plans 2001
- LAFCO requirements
- OPR 2002 General Plan Guidelines: Water Element
- State Water Plan 2003
- Attorney General bill linked General Plans for water

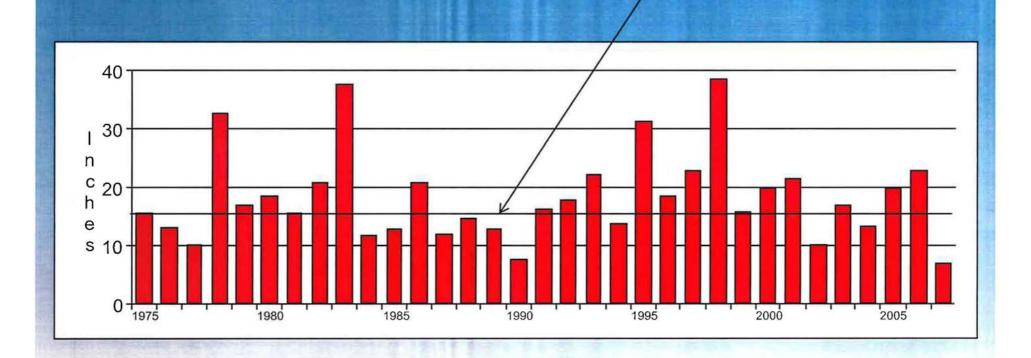
#### Nipomo Mesa Water Use



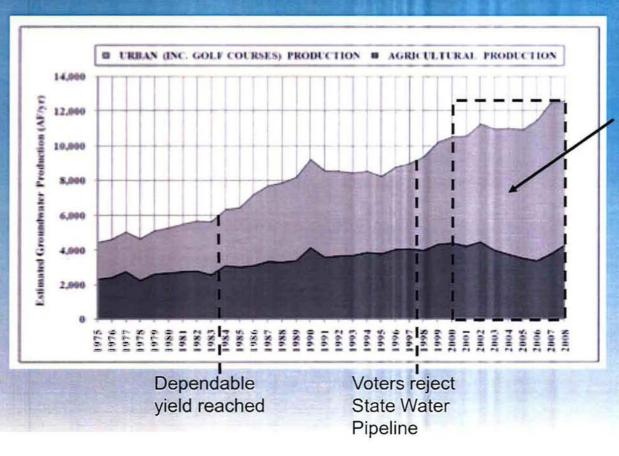
Urban water consumption increased 50% between 2000 and 2008

### Nipomo Mesa Historical Rainfall

16 inches average rainfall



#### Nipomo Mesa Water Use



Urban water consumption increased 50% between 2000 and 2008

#### Facts that cannot be changed:

- 1- Farmers and private well owners have first rights to the groundwater under the Mesa, with no obligation to reduce pumping (beyond "reasonable and beneficial use").
- 2- The CCWA ("State") pipeline was sized to carry no more water than what was originally contracted for.
- 3- Desal is our only long-term sustainable alternative source, but it will be MUCH more expensive and take as much as 15-20 years to get through enviro & regulatory hurdles.

## Finding the Right Solution

Michael LeBrun

#### How can we avoid seawater intrusion?

We are using twice as much water as is being replaced by rainfall.

This cannot be sustained.

- Half the water used on the Mesa is residential.
- We have no legal rights to restrict the other half.

<u>Importing water</u> will allow reduced groundwater pumping for residential users.

### What have we studied to solve the problem?

- Santa Maria Connection ----> Promising
- Conservation -----> 100% urban reduction required
- Desalination -----> \$100M, 15-20 years
- State Water Pipeline -----> Owners unwilling to sell water
- Other Pipelines -----> \$2M/mile, no supply nearby
- Building Moratorium -----> Not THE solution...

# A building moratorium would not solve the problem – only keep it from accelerating

- Existing water consumers on the Nipomo Mesa <u>still</u> use twice as much water as is being replaced.
- Stopping growth would not stop the <u>decline</u> in our fresh water supply - it would only keep it from accelerating.
- Our water supply would <u>continue to decline</u> with the <u>existing</u> <u>population</u>
- We would need to reduce population to the mid-1980s level to achieve a water balance

## We are LISTENING... Feedback – Your suggestions

- Desalinization
- Conservation
- State Water Pipeline
- Building Moratorium
- Santa Maria Pipeline
- Oceano Pipeline
- •••Stop sending expensive brochures/fancy paper
- ••• Expensive lawyers and consultants
- • Lower NCSD salaries
- ••• Eliminate lawns (conservation)
- •••Rainwater harvesting
- •••Stop Twitchell releases

## Buying water from Santa Maria is the best solution

- Exhaustive expert studies concluded this approach is best
- Adequate supply available (3,000-6,000 acre-feet per year)
- Pipeline could be built in under two years
- Pipeline design ~100% complete and ready for bid
- Construction costs ~\$25M including \$3M already spent for design and permits

### What do the experts\* recommend?

"The TG recommends that the Nipomo Supplemental Water Project be implemented <u>as soon as possible</u>."

(2<sup>nd</sup> Annual Report, Calendar Year 2009)

"The TG recommends that the Nipomo Supplemental Water Project be implemented <u>as soon as possible</u>."

(3rd Annual Report, Calendar Year 2010)

\*Nipomo Mesa Management Area Technical Group (TG)

## What's Next?

## **Financing Proposal**

- Property Tax Assessment to Cover Capital
- Property Owners would vote via mail ballot
- More information is coming...

### In Conclusion

- Our goal is to continue to provide a long-term reliable supply of water
- We only have <u>ONE</u> single source of water AND The threat to our water supply is REAL.
- We have a solution:
  - Responsible
  - Prudent / Lowest Cost
  - Near Term
  - Realistic to protect our local quality of life on the Mesa
- Our commitment: keep the community informed.