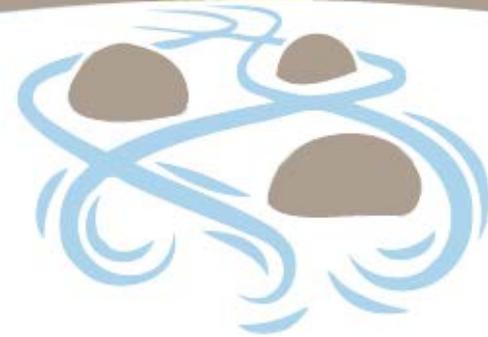


Ventura River Watershed

Management Plan



Development Plan & Schedule

Lorraine Walter

Ventura River Watershed Coordinator

February 6, 2014



Table of Contents (Draft)

Part 1. Introduction

Part 2. Watershed Characterization

Part 3. Goals, Projects and Programs

Part 4. Short-Term Action Plan

Part 5. References and Supporting Material



Part 1. Introduction

1.1 Major Findings and Recommendations

1.2 Ventura River Watershed Council

1.1 Major Findings and Recommendations

**Key concerns, opportunities and constraints,
linked to associated, priority actions.**

“Whereas we are concerned about...,

Whereas we have the opportunity to...,

Whereas we are constrained by...,

Therefore our priorities areprojects x, y, z...”

Plan Development Schedule

To address time constraints:

Technical Advisory Committees begin working on parts of the plan.

Full Council meetings go on hold.

Fewer e-newsletters distributed.

TACs may call Council meeting if vote needed.
Otherwise, **next full Council meeting in June.**

Plan Development Schedule

Lead		Jan	Feb	Mar	Apr
	Clean Water				
	Water Quality Characterization				
Staff	1st Pass Draft - to review list				
Staff	2nd Pass Draft - to TAC				
TAC	Resolution of differences - to staff or Council				
Staff	Final Pre-layout Draft - to Council				
TAC	Key Findings				
TAC	Existing Projects & Programs				
TAC	Key Recommendations				



Part 2. Watershed Characterization

2.1 Location and Quick Facts

2.2 Physical Features

2.3 Hydrology and Flooding

2.4 Water Supply and Demand

2.5 Water Quality

2.6 Ecosystems

2.7 Socioeconomics



Watershed Characterization

Describes baseline conditions.

Content is as static and timeless as possible.
Changes less than other parts of the plan.

Issues and concerns related to baseline
conditions addressed elsewhere in the plan.

Watershed Characterization

Written for a general audience. Provides understandable descriptions and explanations.

Points to sources of technical data.

There is not time, in this first version of the plan, to cover much history.



2.5 Water Quality

2.5.1 Surface Water Quality

2.5.2 Groundwater Quality

2.5.3 Wastewater Quality

2.5.4 Near-Shore Ocean Water Quality

2.5.5 Drinking Water Quality



Water Quality Characterization - Concerns

1. Include more data sources.
2. Issues with the Nitrogen Concentration map.
3. Our nutrient/nitrate issue is not that bad.
4. Costs of cleaning water and complying with regulations not addressed.

Water Quality Characterization - Concerns

- 1. Include more data sources (WPD, VCAILG, Ojai Valley Sanitary District, Fruit Growers Lab)**

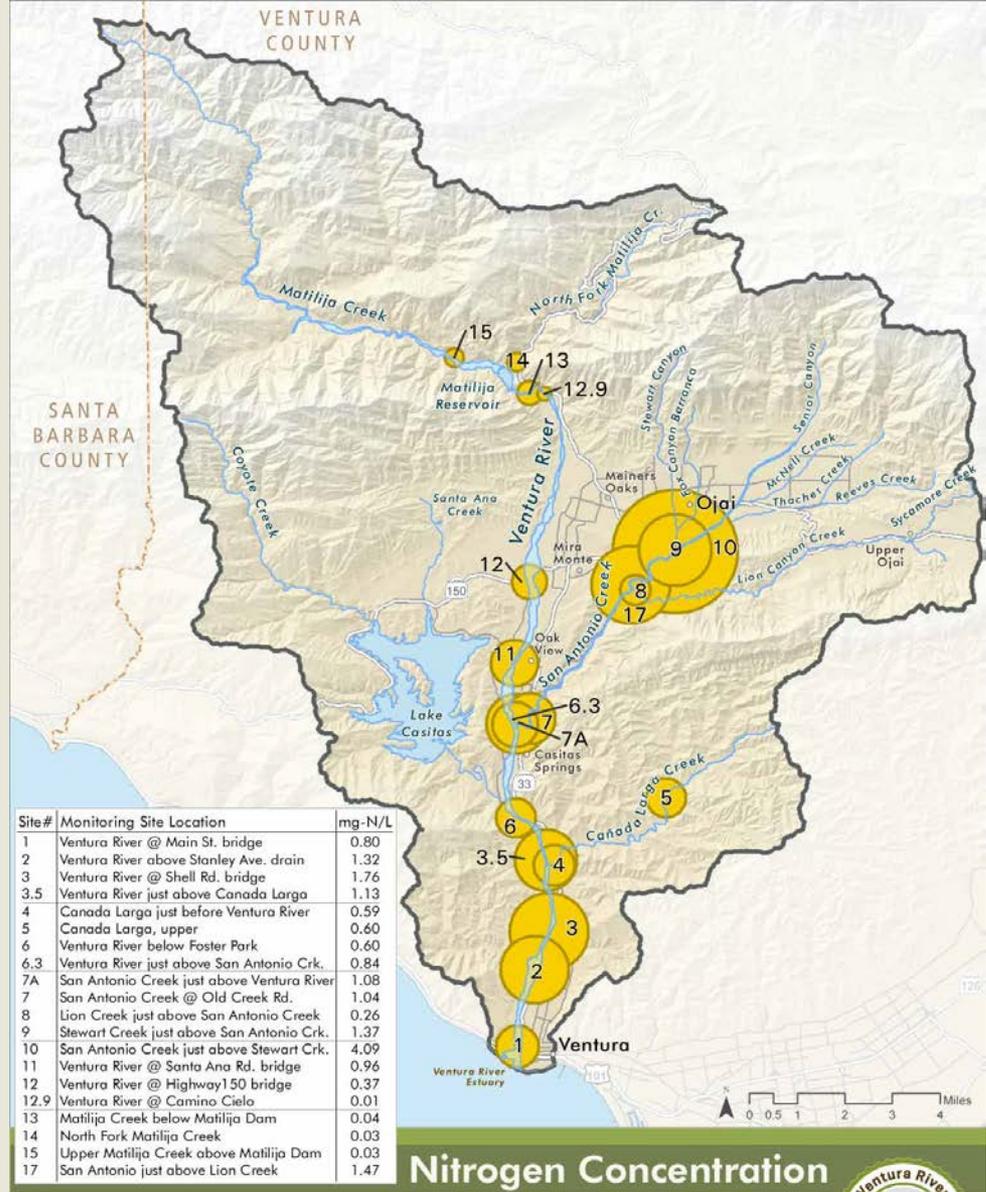
Help needed with this.

Please submit (general audience-level, i.e., interpreted) tables, graphs, charts, maps, etc.



Water Quality Characterization - Concerns

2. Issues with the Nitrogen Concentration map.



Site#	Monitoring Site Location	mg-N/L
1	Ventura River @ Main St. bridge	0.80
2	Ventura River above Stanley Ave. drain	1.32
3	Ventura River @ Shell Rd. bridge	1.76
3.5	Ventura River just above Canada Larga	1.13
4	Canada Larga just before Ventura River	0.59
5	Canada Larga, upper	0.60
6	Ventura River below Foster Park	0.60
6.3	Ventura River just above San Antonio Crk.	0.84
7A	San Antonio Creek just above Ventura River	1.08
7	San Antonio Creek @ Old Creek Rd.	1.04
8	Lion Creek just above San Antonio Creek	0.26
9	Stewart Creek just above San Antonio Crk.	1.37
10	San Antonio Creek just above Stewart Crk.	4.09
11	Ventura River @ Santa Ana Rd. bridge	0.96
12	Ventura River @ Highway 150 bridge	0.37
12.9	Ventura River @ Camino Cielo	0.01
13	Matilija Creek below Matilija Dam	0.04
14	North Fork Matilija Creek	0.03
15	Upper Matilija Creek above Matilija Dam	0.03
17	San Antonio just above Lion Creek	1.47

Nitrogen Concentration

Data from Santa Barbara Channelkeeper's Stream Team Monitoring Program (2001-2011)

A number of different water quality thresholds (federal, state, regional and local) exist for nitrogen. The Ventura River-specific regulation, the Algae TMDL, is based on achieving a dry-weather total nitrogen concentration below 1.15 mg-N/L.

* The TMDL limit applies to total nitrogen (TN); nitrate is just one constituent of TN, but nitrate is the largest component and at polluted locations contributes over 90% of the TN.

Ventura River Watershed

Site # and Average Nitrate mg-N/L



Map data includes both **wet- and dry-weather** nitrogen concentrations. Does not indicate the locations that have historically been below the Algae TMDL's **dry-weather** target concentration.



Water Quality Characterization – Concerns

2. Our nutrient/nitrate issue is not that bad, especially compared to drinking water standards. Should emphasize historical improvements.

Discuss.

GEOTRACKER GAMA

LOCAL INFORMATION

CITY
UNINCORPORATED

COUNTY
VENTURA - [VIEW WATER REPORTS](#)

GROUNDWATER BASIN
OJAI VALLEY (4-2)

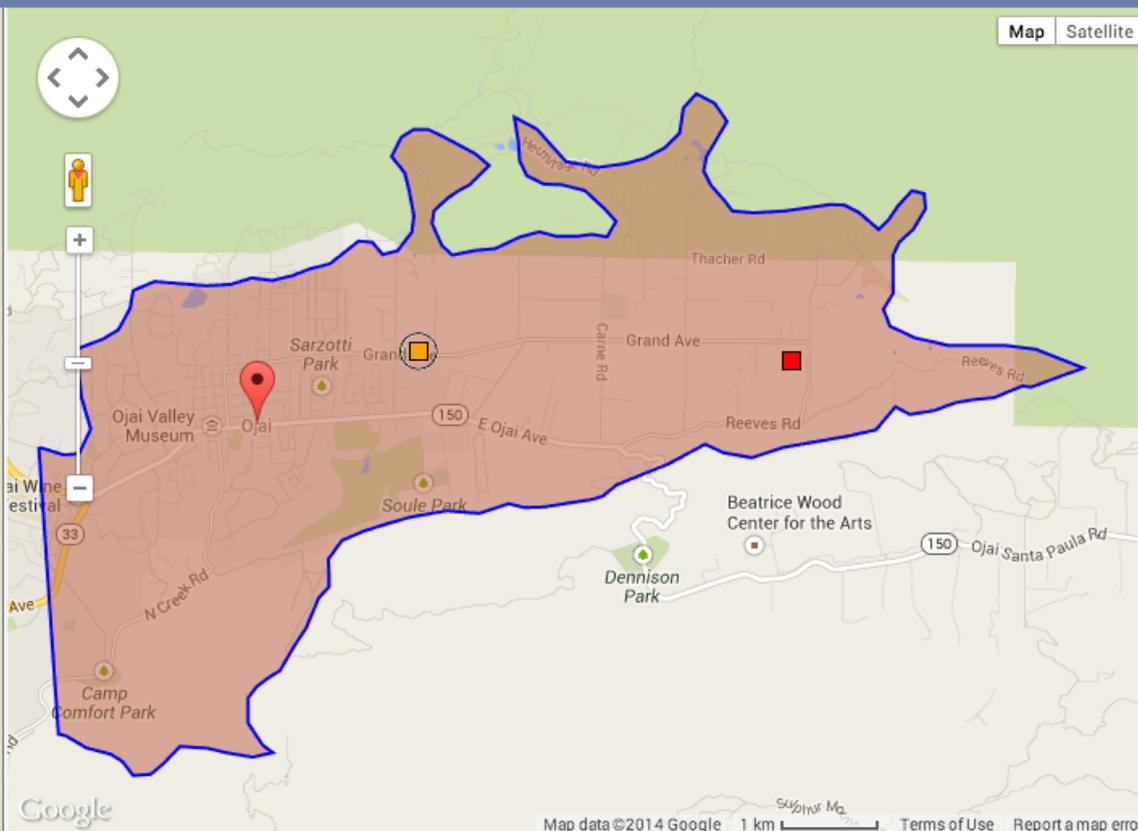
[VIEW 22 ENVIRONMENTAL MONITORING WELL BORING LOGS](#)

- SUPPLY WELLS - CDPH (within one mile of actual location)
- SUPPLY WELLS - OTHER (within 1/2 mile of actual location)
- ▲ MONITORING WELLS - REGULATED SITES (exact locations displayed)
- ICONS WITH A CIRCLE AROUND THEM SIGNIFY A CLUSTER OF WELLS

ADDITIONAL TOOLS

- DEPTH-TO-WATER
- DEPTH-TO-WATER CHANGE
- GROUNDWATER ELEVATION
- HYDRO FRACTURED WELLS
- OIL / GAS FIELD BOUNDARIES
- PCAS

* Comparison concentration is 45 MG/L (MCL).
Click [here](#) for more information.



MAP SIZE:

10 MATCHING WELLS FOR NITRATE AS NO3 (10% ABOVE COMPARISON CONCENTRATION)

DATASETS - [ADDITIONAL INFORMATION](#)

ENVIRONMENTAL MONITORING:

Monitoring Wells - Water Board Regulated Sites

SUPPLY WELLS:

Supply Wells - CDPH GAMA - SWRCB Domestic GAMA - USGS GAMA - LLNL DPR DWR
 USGS - NWIS

GIS LAYER - SELECTING A GIS LAYER WILL LIMIT YOUR QUERY TO RESULTS IN THAT GIS LAYER

Groundwater Basins

OJAI VALLEY (4-2)

Wells With Results

OF Nitrate as NO3 - (MCL = 45 MG/L)

IN THE PAST

ALL YEARS

Go

[EXPORT](#)

LOCATIONS FOUND

1 WELL

56.9

[\[ZOOM IN ON LOCATION\]](#)

[\[VIEW WELLS IN CLUSTER\]](#)

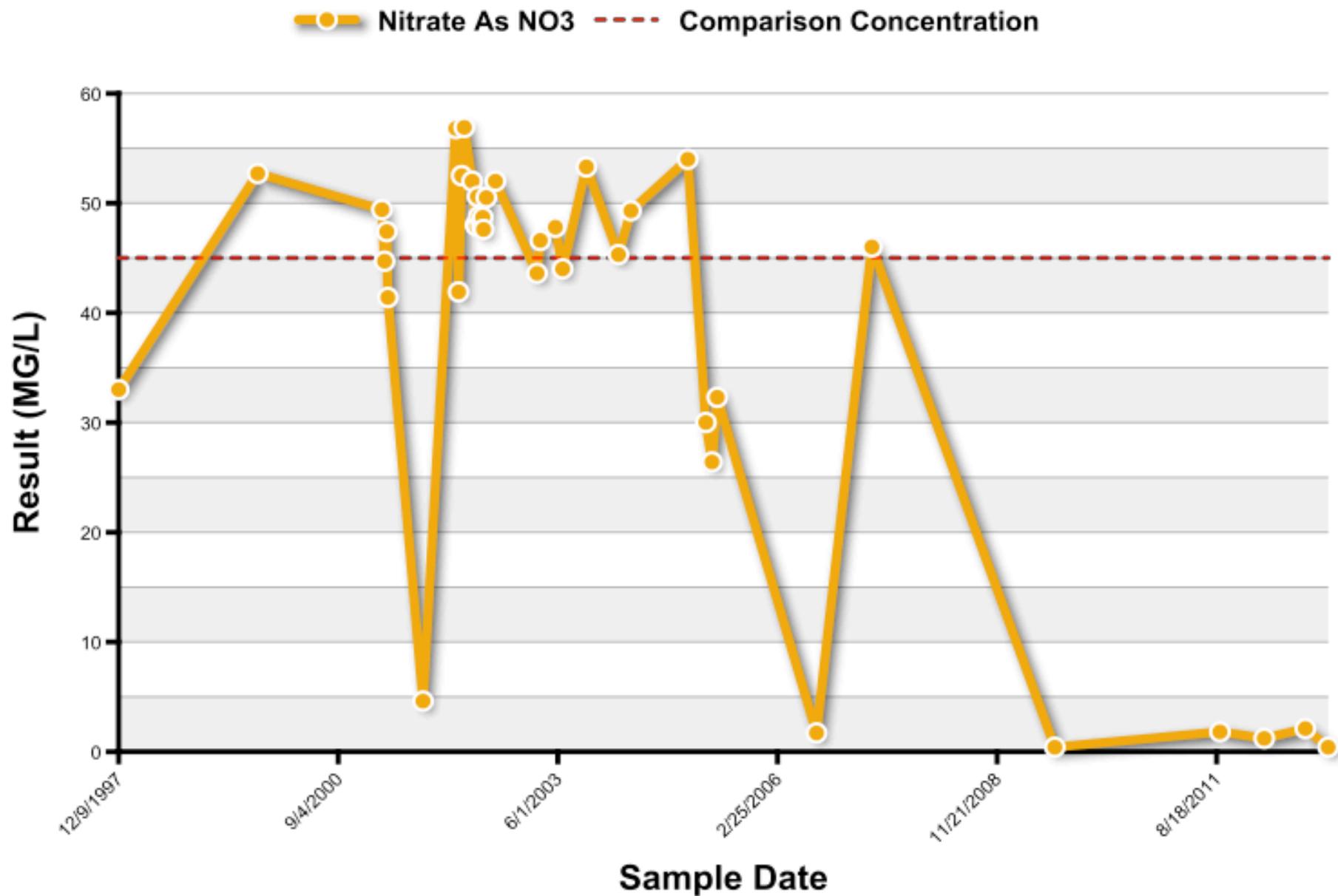
9 WELL CLUSTER

31.9

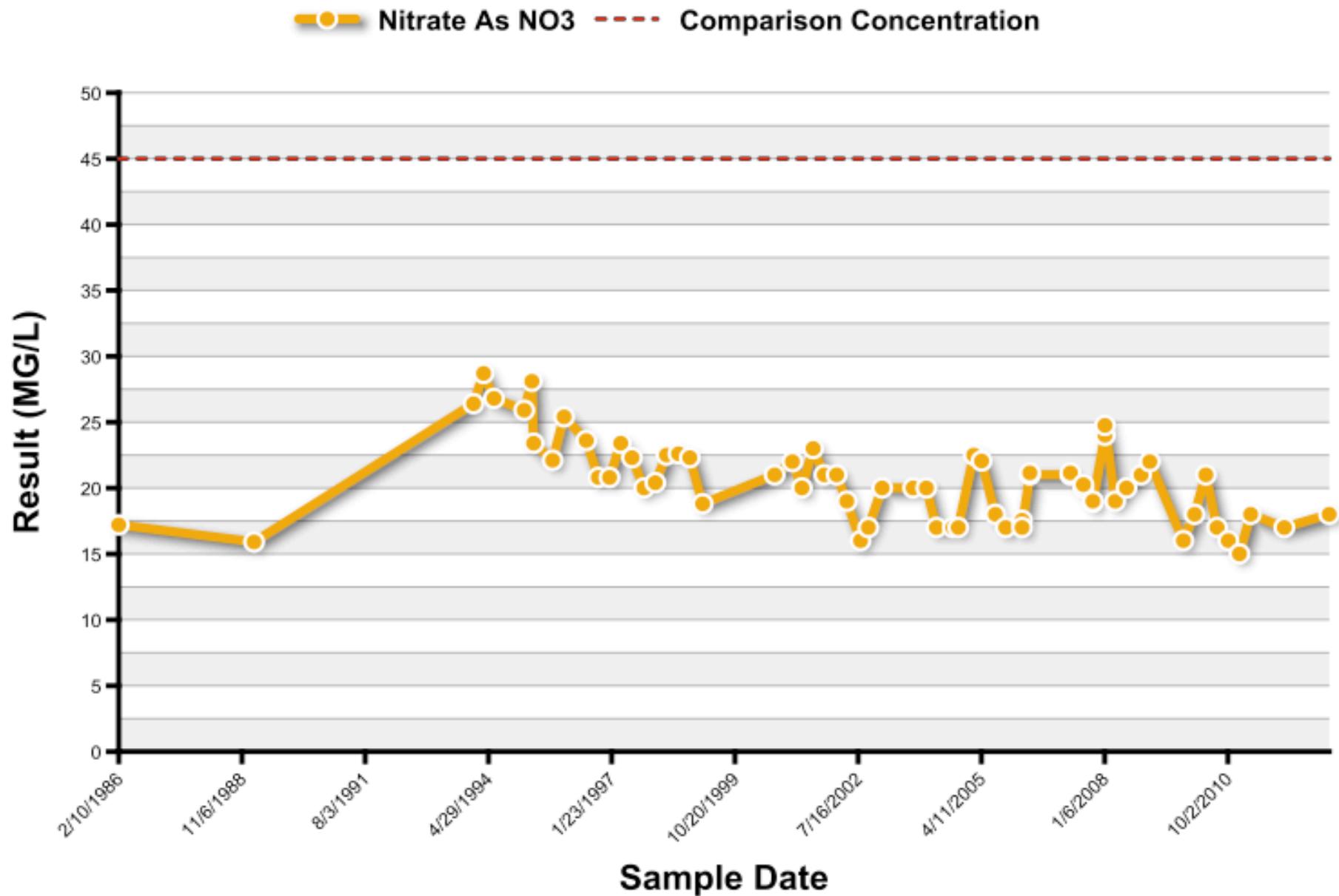
[\[ZOOM IN ON LOCATION\]](#)

[\[VIEW WELLS IN CLUSTER\]](#)

Nitrate As NO3 Results for 5601117-002



Nitrate As NO3 Results for 5610014-004



GEOTRACKER GAMA

LOCAL INFORMATION

CITY
MIRA MONTE

COUNTY
VENTURA - [VIEW WATER REPORTS](#)

GROUNDWATER BASIN
VENTURA RIVER VALLEY - UPPER VENTURA RIVER (4-3.01)

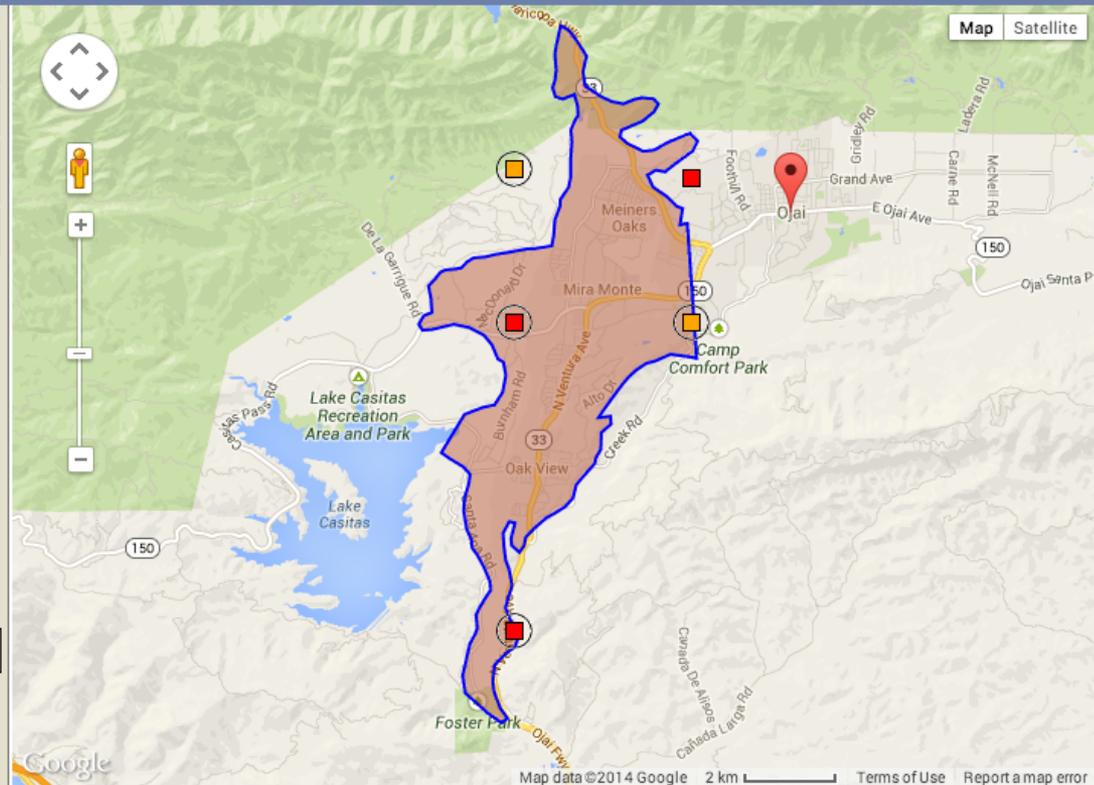
[VIEW 23 ENVIRONMENTAL MONITORING WELL BORING LOGS](#)

- SUPPLY WELLS - CDPH (within one mile of actual location)
- SUPPLY WELLS - OTHER (within 1/2 mile of actual location)
- ▲ MONITORING WELLS - REGULATED SITES (exact locations displayed)
- ICONS WITH A CIRCLE AROUND THEM SIGNIFY A CLUSTER OF WELLS

ADDITIONAL TOOLS

- DEPTH-TO-WATER
- DEPTH-TO-WATER CHANGE
- GROUNDWATER ELEVATION
- HYDRO FRACTURED WELLS
- OIL / GAS FIELD BOUNDARIES
- PCAS ALL PCAS

* Comparison concentration is 45 MG/L (MCL).
Click [here](#) for more information.



MAP SIZE: 640x480

20 MATCHING WELLS FOR NITRATE AS NO3 (35% ABOVE COMPARISON CONCENTRATION)

DATASETS - [ADDITIONAL INFORMATION](#)

ENVIRONMENTAL MONITORING:

Monitoring Wells - Water Board Regulated Sites

SUPPLY WELLS:

Supply Wells - CDPH GAMA - SWRCB Domestic GAMA - USGS GAMA - LLLN DPR DWR
 USGS - NWIS

GIS LAYER - SELECTING A GIS LAYER WILL LIMIT YOUR QUERY TO RESULTS IN THAT GIS LAYER

Groundwater Basins

VENTURA RIVER VALLEY - UPPER VENTURA RIVER (4-3.01)

Wells With Results

OF Nitrate as NO3 - (MCL = 45 MG/L)

IN THE PAST

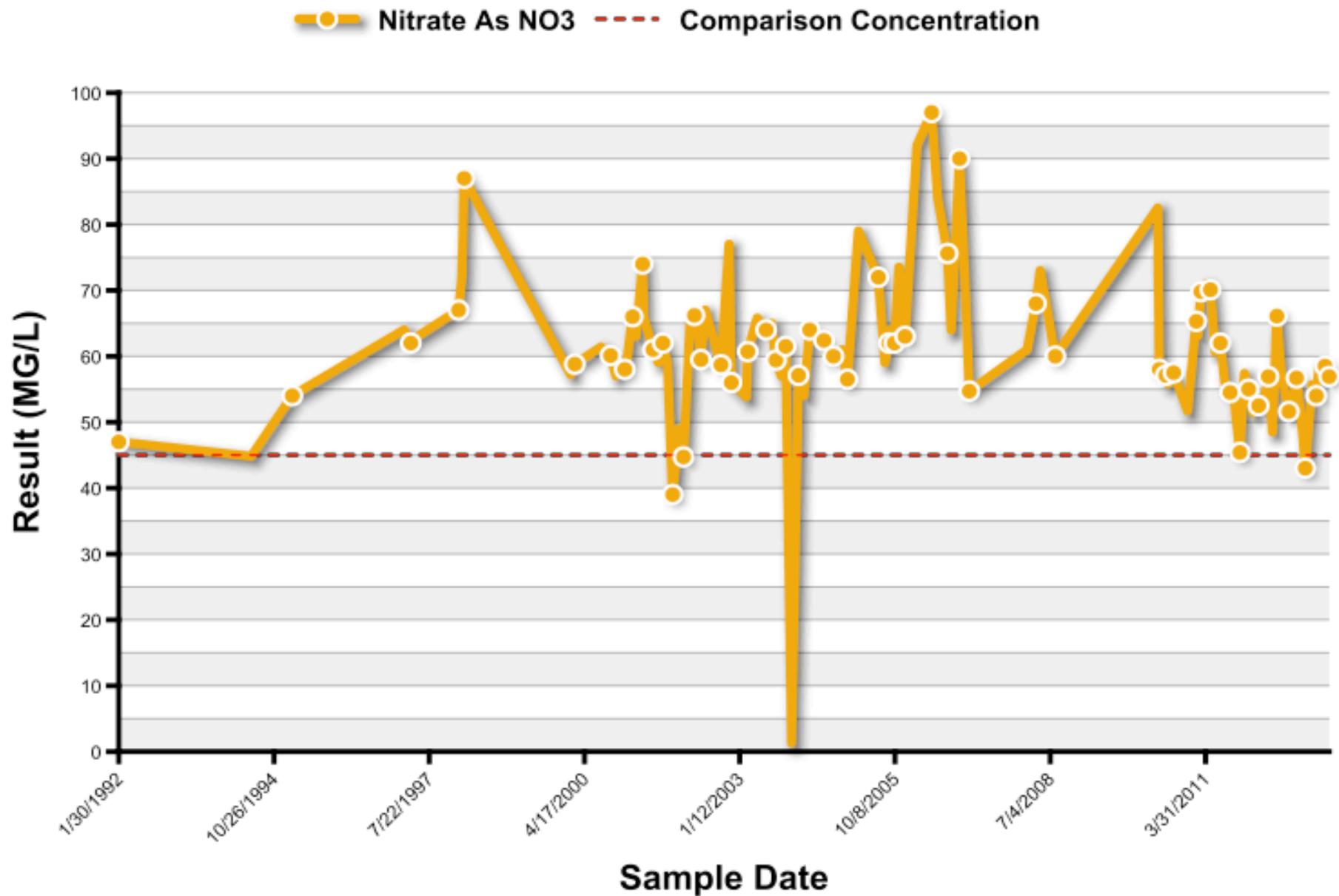
ALL YEARS

Go [EXPORT](#)

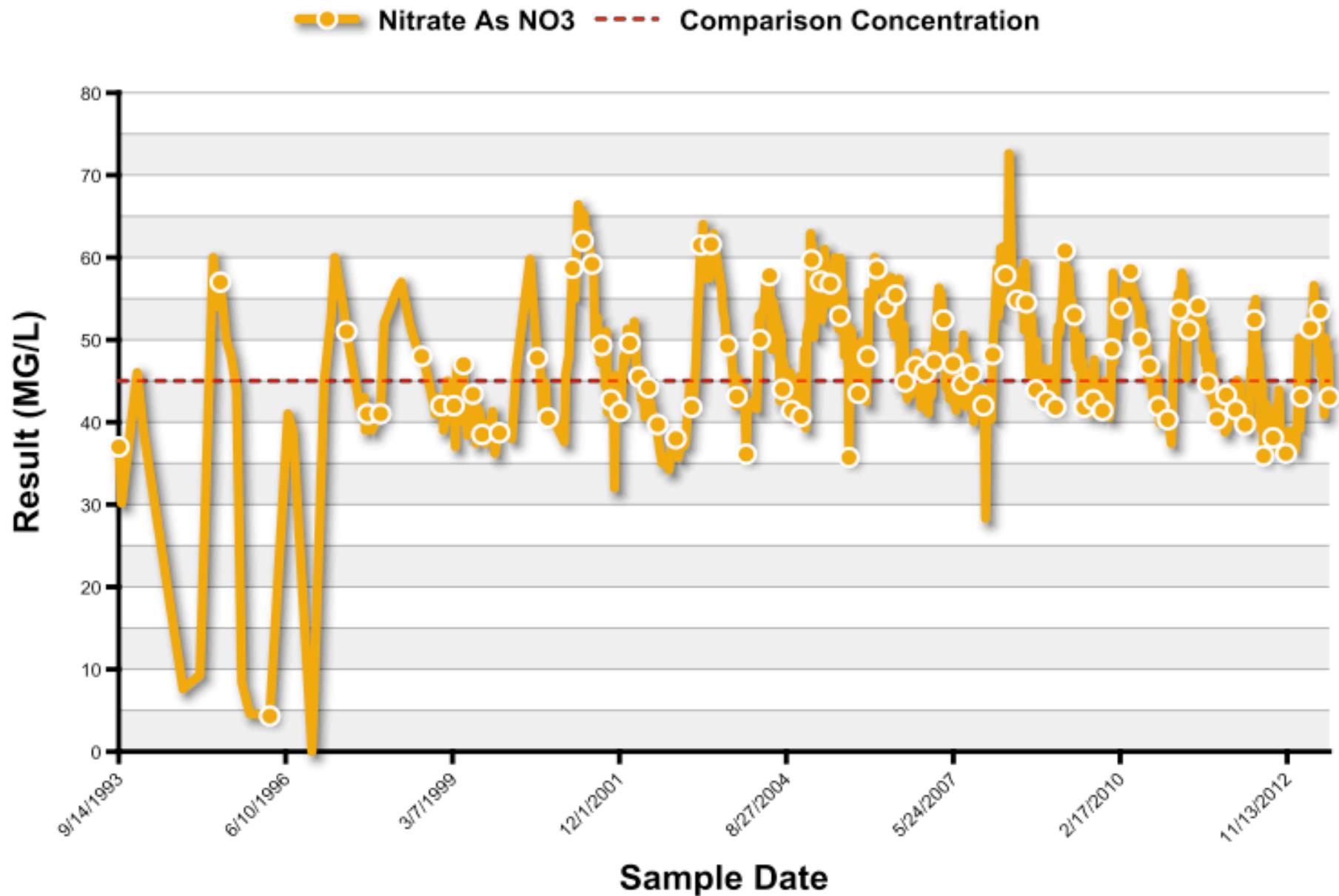
LOCATIONS FOUND

■ 12 WELL CLUSTER	97	[ZOOM IN ON LOCATION]	[VIEW WELLS IN CLUSTER]
■ 1 WELL	76.1	[ZOOM IN ON LOCATION]	[VIEW WELLS IN CLUSTER]
■ 2 WELL CLUSTER	54.3	[ZOOM IN ON LOCATION]	[VIEW WELLS IN CLUSTER]
■ 2 WELL CLUSTER	28	[ZOOM IN ON LOCATION]	[VIEW WELLS IN CLUSTER]
■ 3 WELL CLUSTER	26.4	[ZOOM IN ON LOCATION]	[VIEW WELLS IN CLUSTER]

Nitrate As NO3 Results for 5610024-003

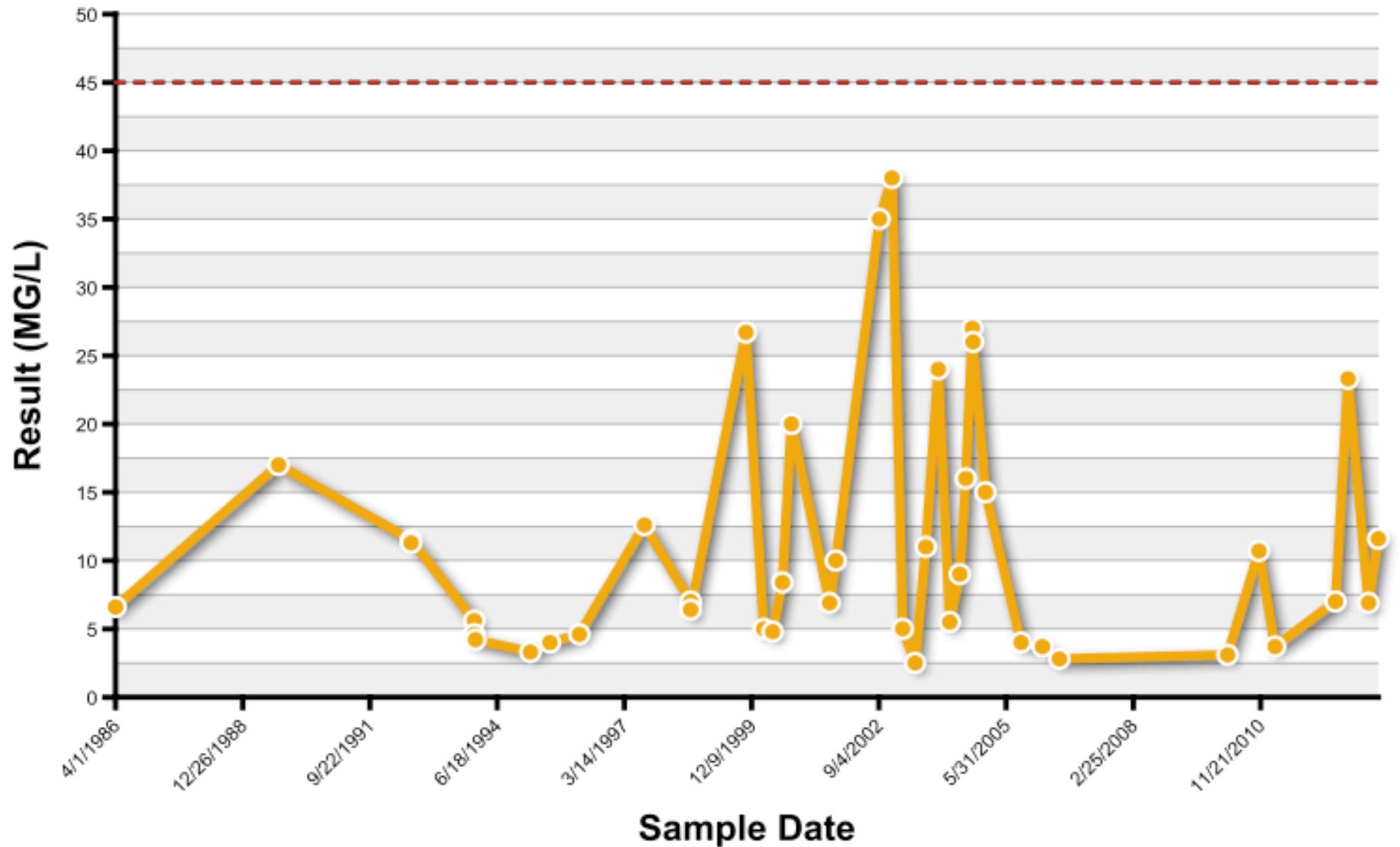


Nitrate As NO3 Results for 5601122-001

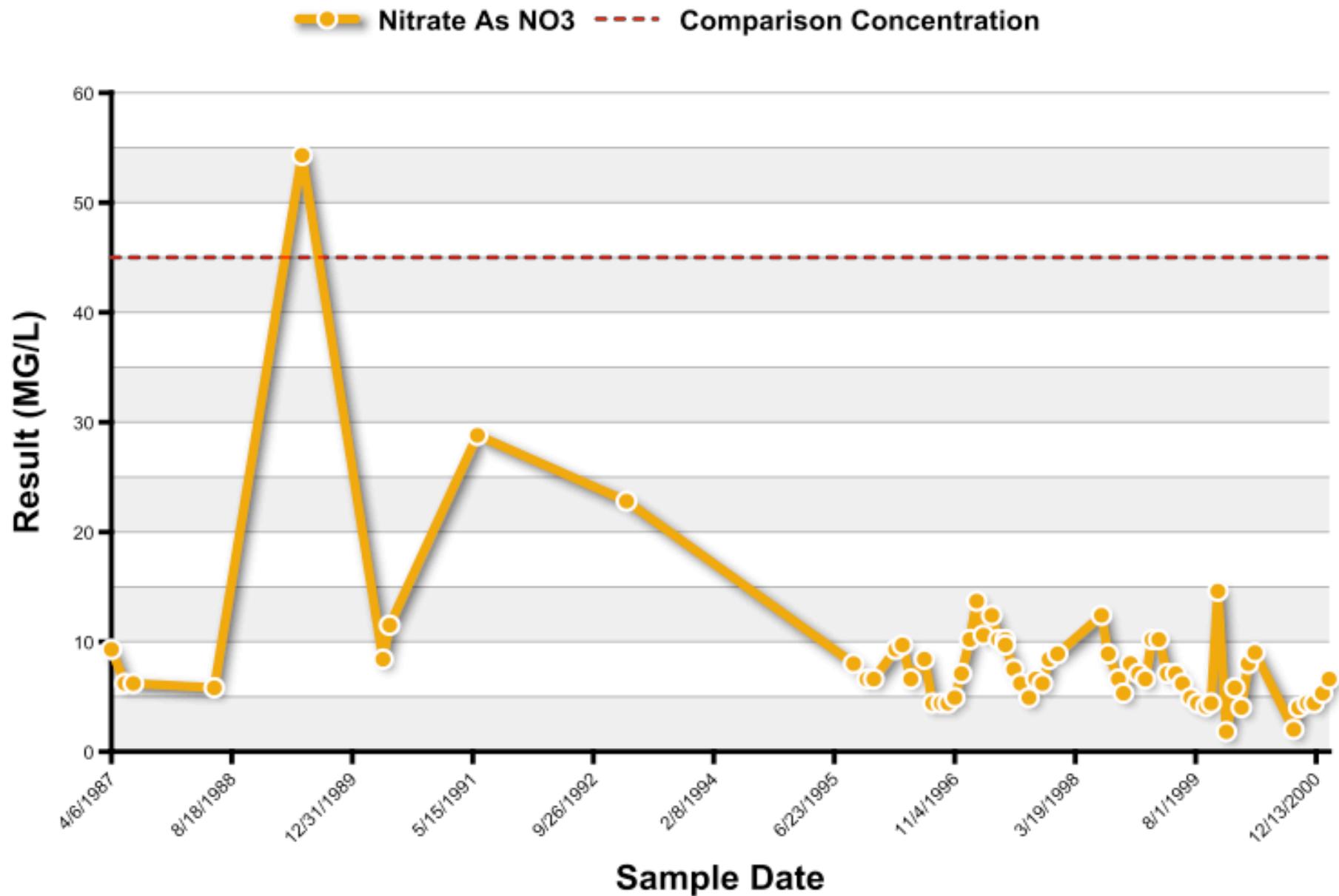


Nitrate As NO3 Results for 5610022-002

● Nitrate As NO3 - - - Comparison Concentration



Nitrate As NO3 Results for 5610017-008



GEOTRACKER GAMA

LOCAL INFORMATION

CITY
UNINCORPORATED

COUNTY
VENTURA - [VIEW WATER REPORTS](#)

GROUNDWATER BASIN
VENTURA RIVER VALLEY - LOWER
VENTURA RIVER (4-3.02)

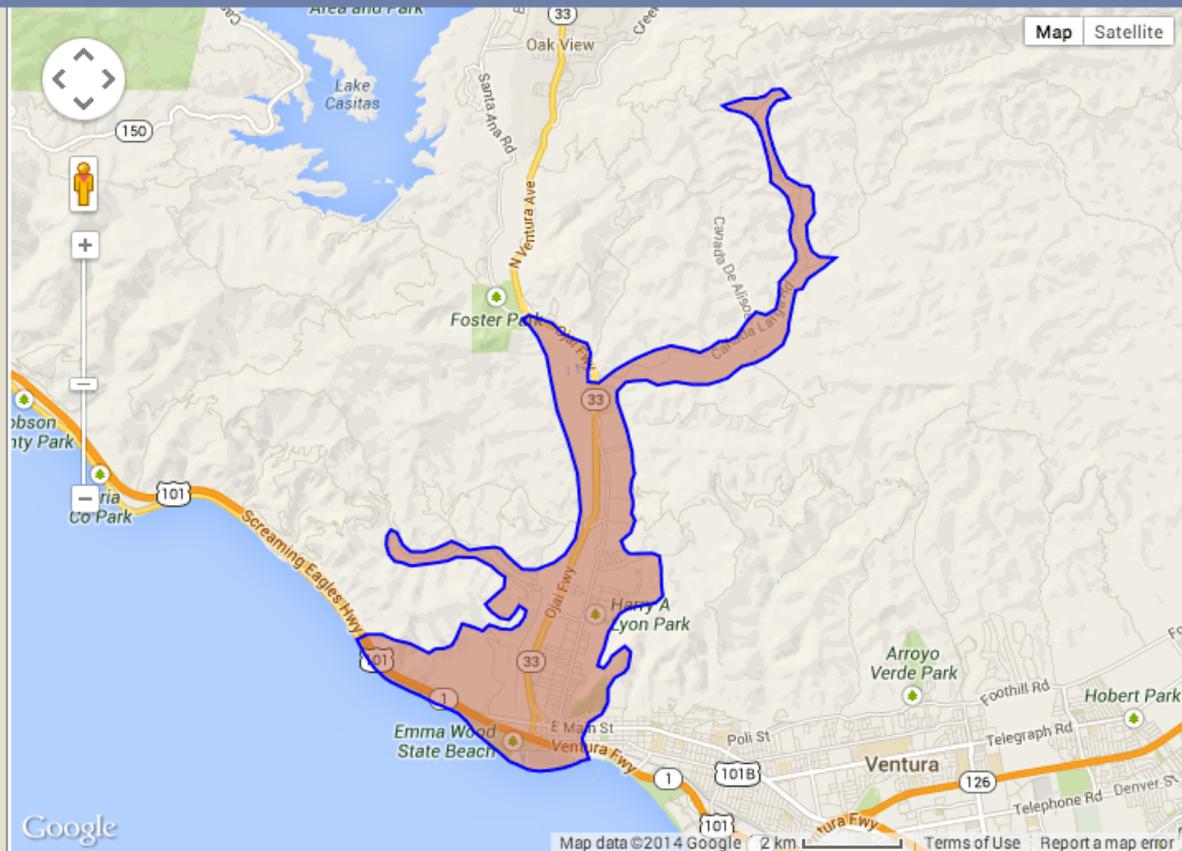
[VIEW 598 ENVIRONMENTAL MONITORING
WELL BORING LOGS](#)

- SUPPLY WELLS - CDPH (within one mile of actual location)
- SUPPLY WELLS - OTHER (within 1/2 mile of actual location)
- MONITORING WELLS - REGULATED SITES (exact locations displayed)
- ICONS WITH A CIRCLE AROUND THEM SIGNIFY A CLUSTER OF WELLS

ADDITIONAL TOOLS

- DEPTH-TO-WATER
- DEPTH-TO-WATER CHANGE
- GROUNDWATER ELEVATION
- HYDRO FRACTURED WELLS
- OIL / GAS FIELD BOUNDARIES
- PCAS

* Comparison concentration is 45 MG/L (MCL).
Click [here](#) for more information.



MAP SIZE:

0 MATCHING WELLS FOR NITRATE AS NO3 (0% ABOVE COMPARISON CONCENTRATION)

DATASETS - [ADDITIONAL INFORMATION](#)

ENVIRONMENTAL MONITORING:

Monitoring Wells - Water Board Regulated Sites

SUPPLY WELLS:

Supply Wells - CDPH GAMA - SWRCB Domestic GAMA - USGS GAMA - LLNL DPR DWR
 USGS - NWIS

GIS LAYER - SELECTING A GIS LAYER WILL LIMIT YOUR QUERY TO RESULTS IN THAT GIS LAYER

Wells With Results

OF

IN THE PAST

[EXPORT](#)

LOCATIONS FOUND

GEOTRACKER GAMA

LOCAL INFORMATION

CITY
UNINCORPORATED

COUNTY
VENTURA - [VIEW WATER REPORTS](#)

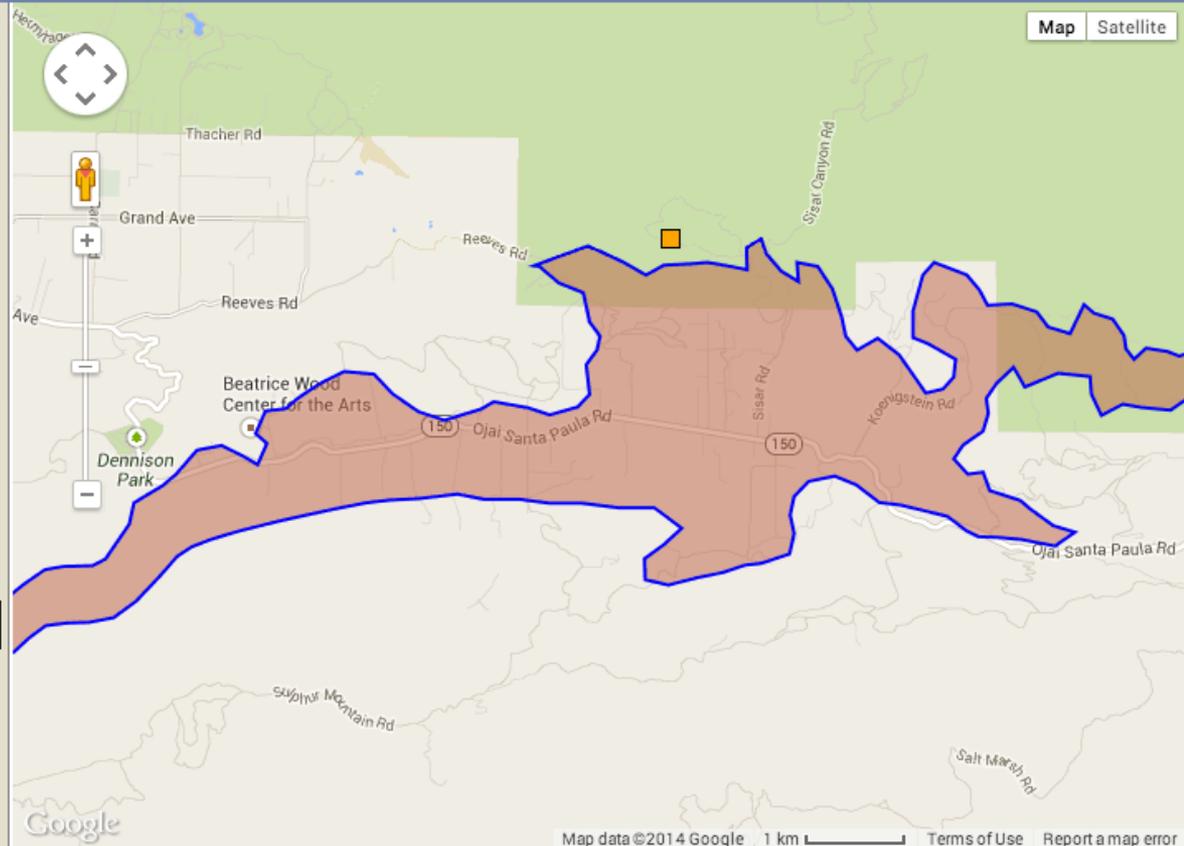
GROUNDWATER BASIN
UPPER OJAI VALLEY (4-1)

- SUPPLY WELLS - CDPH (within one mile of actual location)
- SUPPLY WELLS - OTHER (within 1/2 mile of actual location)
- MONITORING WELLS - REGULATED SITES (exact locations displayed)
- ICONS WITH A CIRCLE AROUND THEM SIGNIFY A CLUSTER OF WELLS

ADDITIONAL TOOLS

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- DEPTH-TO-WATER CHANGE
- GROUNDWATER ELEVATION
- HYDRO FRACTURED WELLS
- OIL / GAS FIELD BOUNDARIES
- PCAS

* Comparison concentration is 45 MG/L (MCL).
Click [here](#) for more information.



Map Satellite

MAP SIZE: 640x480

1 MATCHING WELLS FOR NITRATE AS NO3 (0% ABOVE COMPARISON CONCENTRATION)

DATASETS - [ADDITIONAL INFORMATION](#)

ENVIRONMENTAL MONITORING:

Monitoring Wells - Water Board Regulated Sites

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 USGS - NWIS

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Groundwater Basins

UPPER OJAI VALLEY (4-1)

Wells With Results

OF Nitrate as NO3 - (MCL = 45 MG/L)

IN THE PAST

ALL YEARS

Go [EXPORT](#)

LOCATIONS FOUND

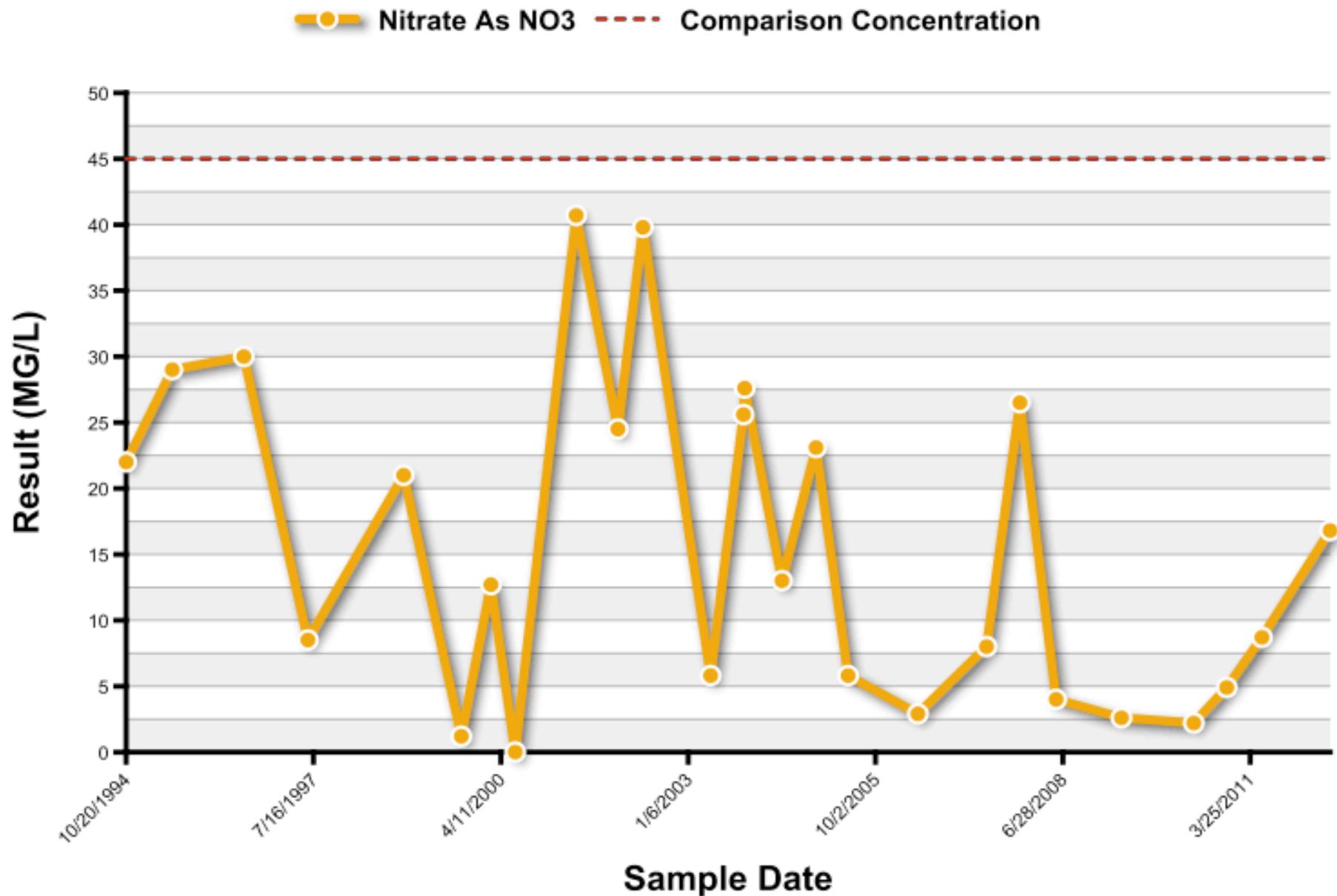
1 WELL

40.7

[\[ZOOM IN ON LOCATION\]](#)

[\[VIEW WELLS IN CLUSTER\]](#)

Nitrate As NO3 Results for 5601120-001



Water Quality Characterization – Concerns

3. Costs of cleaning water and complying with regulations not addressed.

Cost concerns could be addressed in the Socioeconomics section, and in Key Findings & Recommendations.

Or, these could be included in the Characterization section.

Discuss.

Next

Add section draft review time to your schedule.

By 2-12-14 Lorraine will send the 2nd Pass Draft of Water Quality to the Clean Water TAC, plus instructions for TAC meetings and products.

All TACs can begin working on findings & recommendations.

Next scheduled Council meeting: June 5, 2014