

FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
OXNARD PLAIN FOREBAY
2014

Goal: Protect water quality at public drinking water wells (nitrate and TDS) and irrigation suitability (TDS). (Note TDS = total dissolved solids)

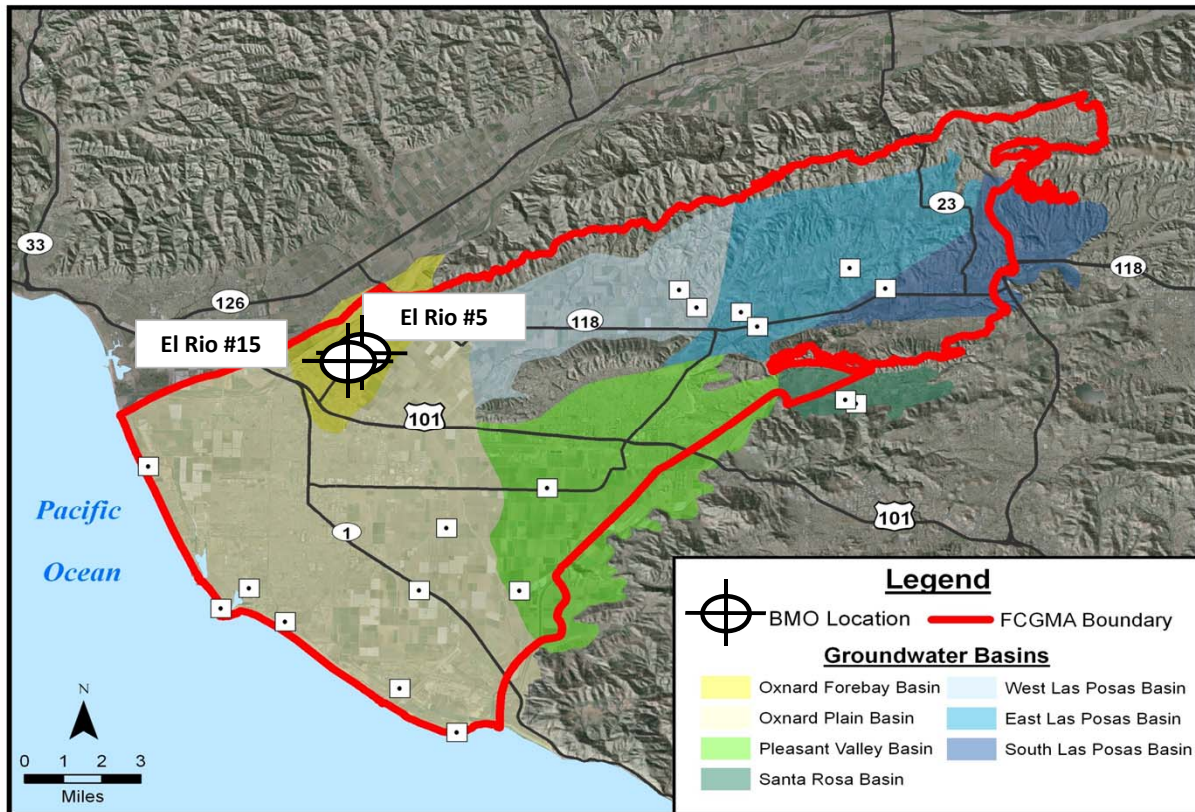
BMOs: Nitrate Concentration: 22.5 mg/L-NO₃ (50% of State of California MCL)

TDS Concentration: 1,200 mg/L (LARWQCB Basin Plan Objective)

Status Summary: In 2014, average nitrate concentrations were above the BMO at well El Rio #5 and at well El Rio #15. Average TDS concentrations were above the BMO at well El Rio #5 yet below the BMO at well El Rio #15. Declining water levels during 2014 have contributed to increasing nitrate and TDS concentrations, compared to those in 2013.

Status Summary Table

State Well Number (name)	Depth (ft)	Nitrate (mg/L)		TDS (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Nitrate	TDS
02N22W23B02S (El Rio #5)	135-277	22.5	78	1,200	1,338	↑	↑
02N22W23C05S (El Rio #15)	140-310	22.5	25	1,200	1,087	↑	↑



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
OXNARD PLAIN - UPPER AQUIFER SYSTEM
2014

Goal: Prevent saline intrusion in the Oxnard and Mugu Aquifers. Primary source is seawater inflow via aquifer outcrops in submarine canyons near Port Hueneme and Pt. Mugu.

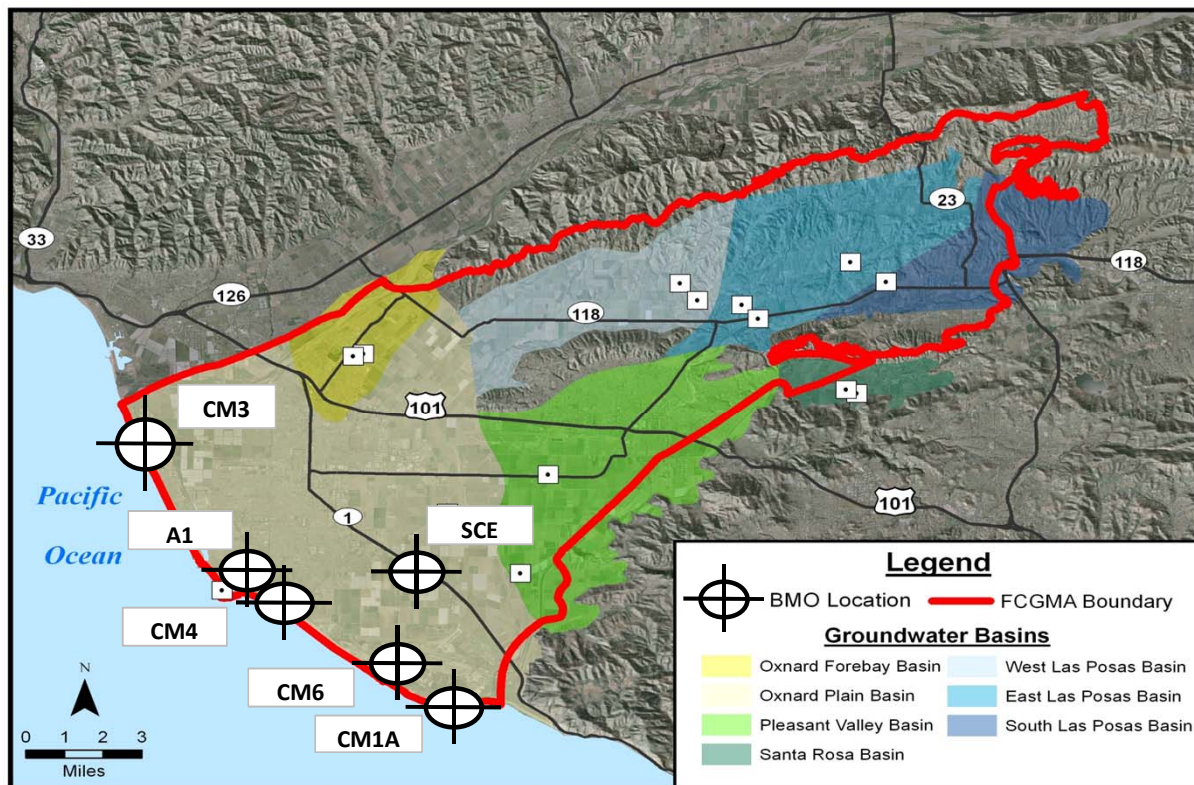
BMOs: Water Levels: Average groundwater elevations sufficient to maintain slight seaward groundwater gradient. Elevation varies with location.

Chloride Concentration: 150 mg/L Chloride (LARWQCB Basin Plan Objective).

Status Summary: Water level BMOs were not met in 2014. A comparison of water levels indicates that water levels have declined at all nine monitoring locations over the past three years. Chloride BMOs were met at approximately 40% of the monitoring locations. Consistent with past results, chloride BMOs were not met near Port Hueneme (CM4) and Pt. Mugu (CM6 and CM1A).

Status Summary Table

State Well Number (name)	Depth (ft)	Water Level (ft msl)		Chloride (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Water Level	Chloride
01N23W01C05S (CM3-145)	120-145	3	2	150	45	↓	→
01N22W20J08S (A1-195)	155-195	4	-6	150	139	↓	→
01N22W20J07S (A1-320)	280-320	8	-7	150	40	↓	→
01N22W28G05S (CM4-200)	180-200	5	-6	150	168	↓	→
01N22W28G04S (CM4-275)	255-275	8	-7	150	6,770	↓	→
01N21W19L12S (SCE-220)	200-220	5	-17	150	66	↓	→
01S22W01H04S (CM6-200)	180-200	5	-16	150	2,188	↓	↓
01S22W01H03S (CM6-330)	310-330	8	-37	150	2,655	↓	↑
01S21W08L04S (CM1A-220)	200-220	5	-10	150	16,400	↓	→



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
OXNARD PLAIN - LOWER AQUIFER SYSTEM
2014

Goal: Prevent saline intrusion in the LAS. Sources are seawater inflow via aquifer outcrops in submarine canyons near Port Hueneme and Pt. Mugu and marine sediments.

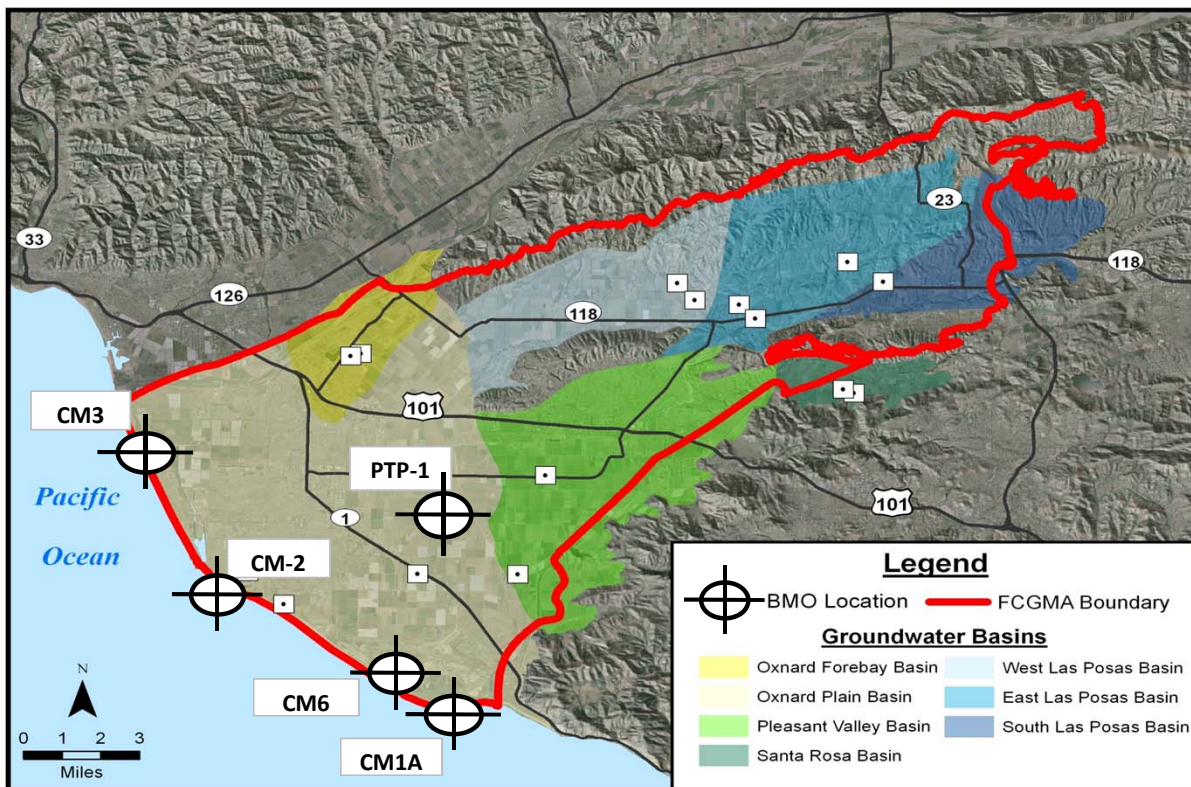
BMOs: Water Levels: Average groundwater elevations sufficient to maintain slight seaward groundwater gradient. Elevation varies with location.

Chloride Concentration: 150 mg/L Chloride (LARWQCB Basin Plan Objective).

Status Summary: In 2014, water level BMOs were not met. Average water level at inland PTP-#1 location was below its respective BMO by 133 feet. As long as water levels remain depressed, the potential for saline intrusion remains. Consistent with the past, chloride BMOs were not met near Port Hueneme (CM2) and Pt. Mugu (CM1A) (areas of documented seawater intrusion).

Status Summary Table

State Well Number (name)	Depth (ft)	Water Level (ft msl)		Chloride (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Water Level	Chloride
01N23W01C04S (CM3-695)	630-695	17	-17	150	36		
01N22W29D02S (CM2-760)	720-760	19	-26	150	10,850		
01S22W01H01S (CM6-550)	490-550	13	-65	150	227		
01S21W08L03S (CM1A-565)	525-565	14	-80	150	6,013		
01N21W07J02S (PTP #1)	590-1280	20	-113	150	41		



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
PLEASANT VALLEY BASIN
2014









Goal: Prevent inland migration of saline groundwater from coastal areas, underlying sources, and fine-grained interbeds.

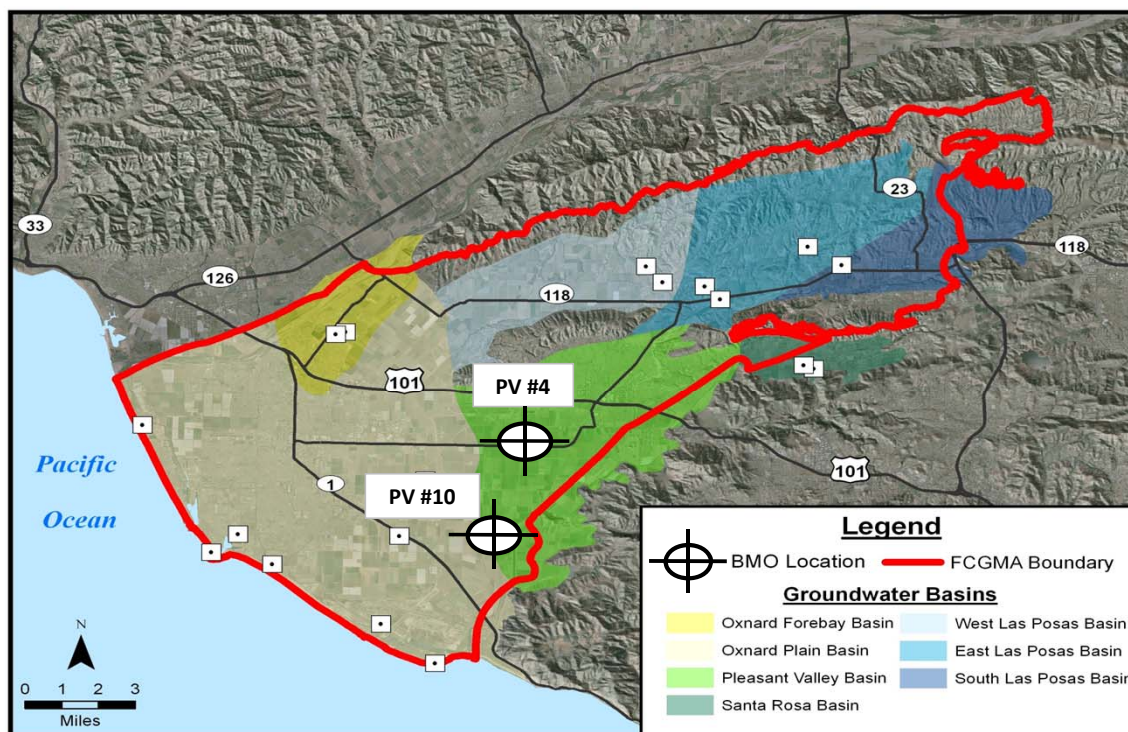
BMOs: Water Levels: Average groundwater elevations sufficient to prevent landward migration from coastal areas and minimize vertical gradients.

Chloride Concentration: 150 mg/L Chloride (LARWQCB Basin Plan Objective).

Status Summary: In 2014, water level BMOs were not met at either location. Water levels have fluctuated annually yet the overall waterlevels have declined during the last 3 of the last 5 years, remaining significantly below the BMOs. The chloride BMO is met at both monitoring locations. Over the past 5-years, the chloride concentrations at both monitoring locations have fluctuated, yet are within the range of fluctuation.

Status Summary Table

State Well Number (name)	Depth (ft)	Water Level (ft msl)		Chloride (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Water Level	Chloride
01N21W03K01S (PV #4)	403-1433	20	 -81	150	 111		
01N21W21H02S (PV #10)	503-863	20	 -110	150	 106		



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
ARROYO SANTA ROSA BASIN
2014

Goal: Meet LARWQCB Basin Plan Objectives for nitrate and chloride.

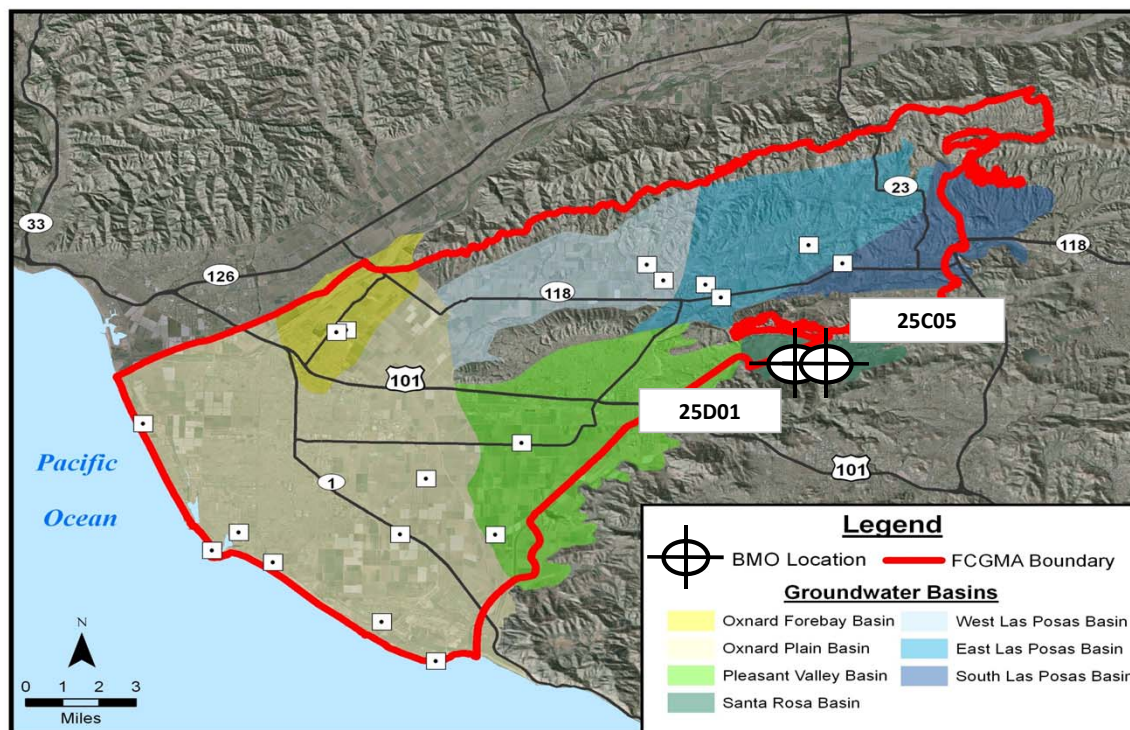
BMOs: Nitrate Concentration: 45 mg/L-NO₃ (LARWQCB Basin Plan Objective & State of CA MCL)

Chloride Concentration: 150 mg/L (LARWQCB Basin Plan Objective)

Status Summary: Based on the available data, only one of the four BMOs was met in 2014. For the water quality sample collected from 25C05, the Nitrate concentration was just below its BMO (43 vs. 45 mg/L) and the chloride concentration was above the BMO (181 vs. 150 mg/L). For the water quality sample collected from 25D01, both the nitrate and chloride concentrations exceeded their BMOs 90 vs. 45 mg/L and 159 vs. 150 mg/L, respectively. Over the past 5 years: nitrate concentrations declined in well 25C01 and increased in well 25D01; and chloride concentrations have increased.

Status Summary Table

State Well Number (name)	Depth (ft)	Nitrate (mg/L)		Chloride (mg/L)		5-yr Trend *	
		BMO	2014 Ave	BMO	2014 Ave	Nitrate	Chloride
02N20W25C05S	160-260	45	43	150	181	↓	↑
02N20W25D01S	Unknown	45	90	150	159	↑	↑



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD

LAS POSAS BASINS

2014

Goal: Maintain chloride and TDS concentrations suitable for irrigation of salt-sensitive crops, particularly avocados and berries. BMOs for SLP are equal to the concentrations observed in surface water in Arroyo Las Posas.

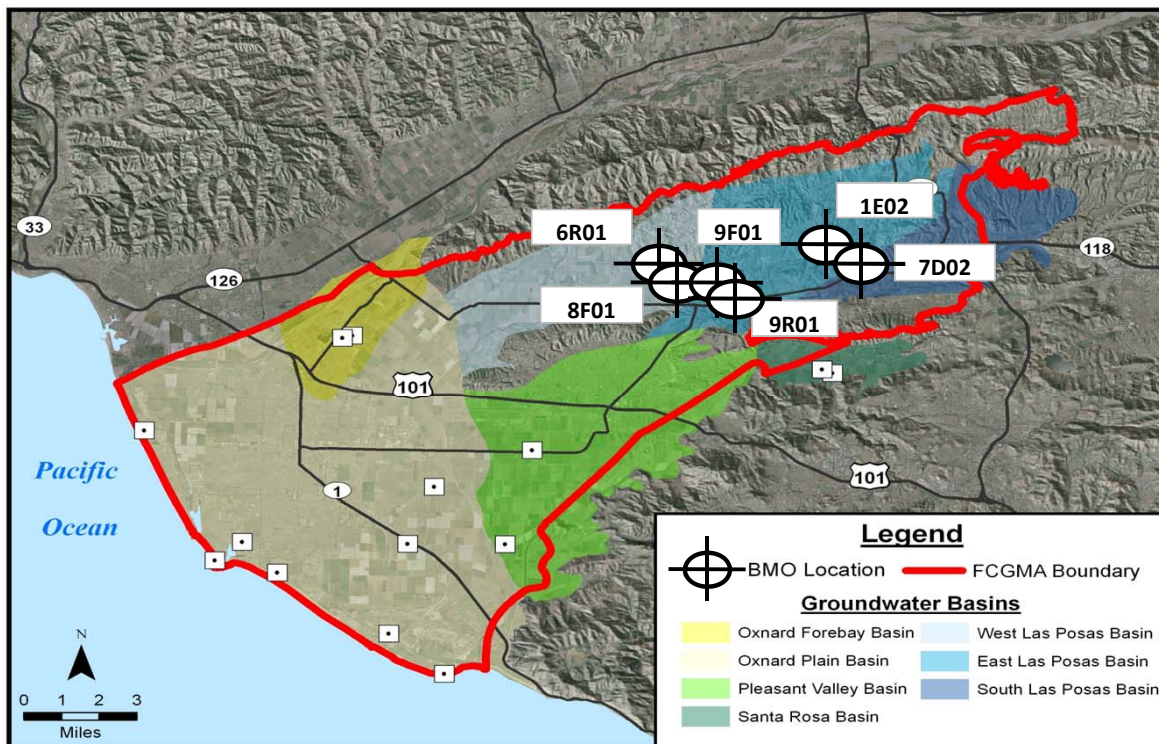
BMOs: Chloride Concentration: WLP & ELP: 100 mg/L; SLP: 160 mg/L.

TDS Concentration: ELP: 500 mg/L; WLP: 600 mg/L; and SLP: 1,500 mg/L.

Status Summary: BMO monitoring locations 1E01 and 6N03 have been replaced with 1E02 and 7D02 respectively. No data is available for BMO monitoring location 6R01 for 2014 (well being repaired). In the ELP Basin the chloride BMO is being met at only one monitoring location, and the TDS BMO is not being met. In the WLP Basin, both BMOs are being met at the one monitoring station. In the SLP Basin, the chloride BMO is being met, while the TDS BMO is not being met. The general five-year trend in the Las Posas basins is rising chloride and TDS concentrations.

Status Summary Table

State Well Number (name)	Depth (ft)	Chloride (mg/L)		TDS (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Chloride	TDS
02N20W09F01S (ELP)	906-1,290	100	175	500	1,510	↑	↑
02N20W09R01S (ELP)	456-724	100	191	500	1,510	↑	↑
02N20W01E02S (ELP) Replacement	680-1,000	100	98	500	757	↑	→
02N20W06R01S (WLP)	1,090-1,512	100	No Data	600	No Data	Insufficient Data	
02N20W08F01S (WLP)	752-1,406	100	11	600	384	→	↑
02N19W07D02S (SLP) Replacement	98-170	160	150	1500	1,240	→	↓



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
OXNARD PLAIN FOREBAY
2014

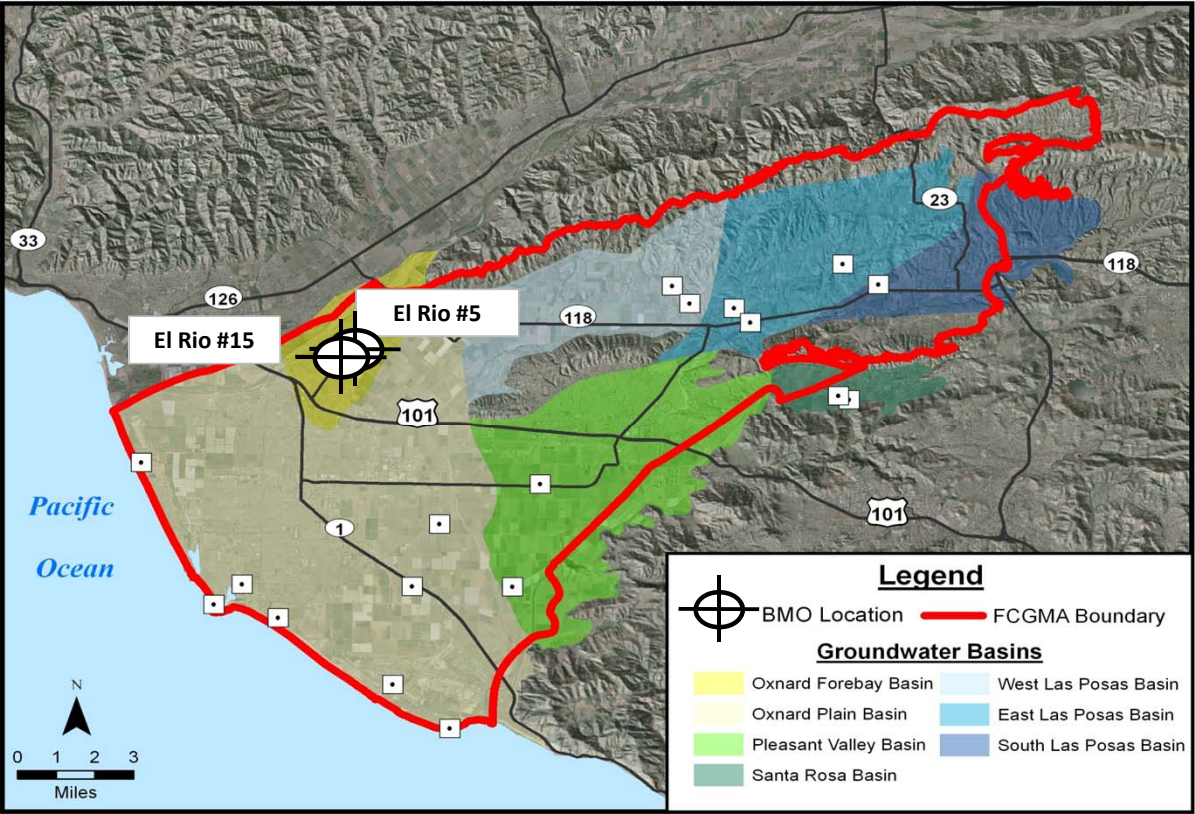
Goal: Protect water quality at public drinking water wells (nitrate and TDS) and irrigation suitability (TDS). (Note TDS = total dissolved solids)

BMOs: Nitrate Concentration: 22.5 mg/L-NO₃ (50% of State of California MCL)
TDS Concentration: 1,200 mg/L (LARWQCB Basin Plan Objective)

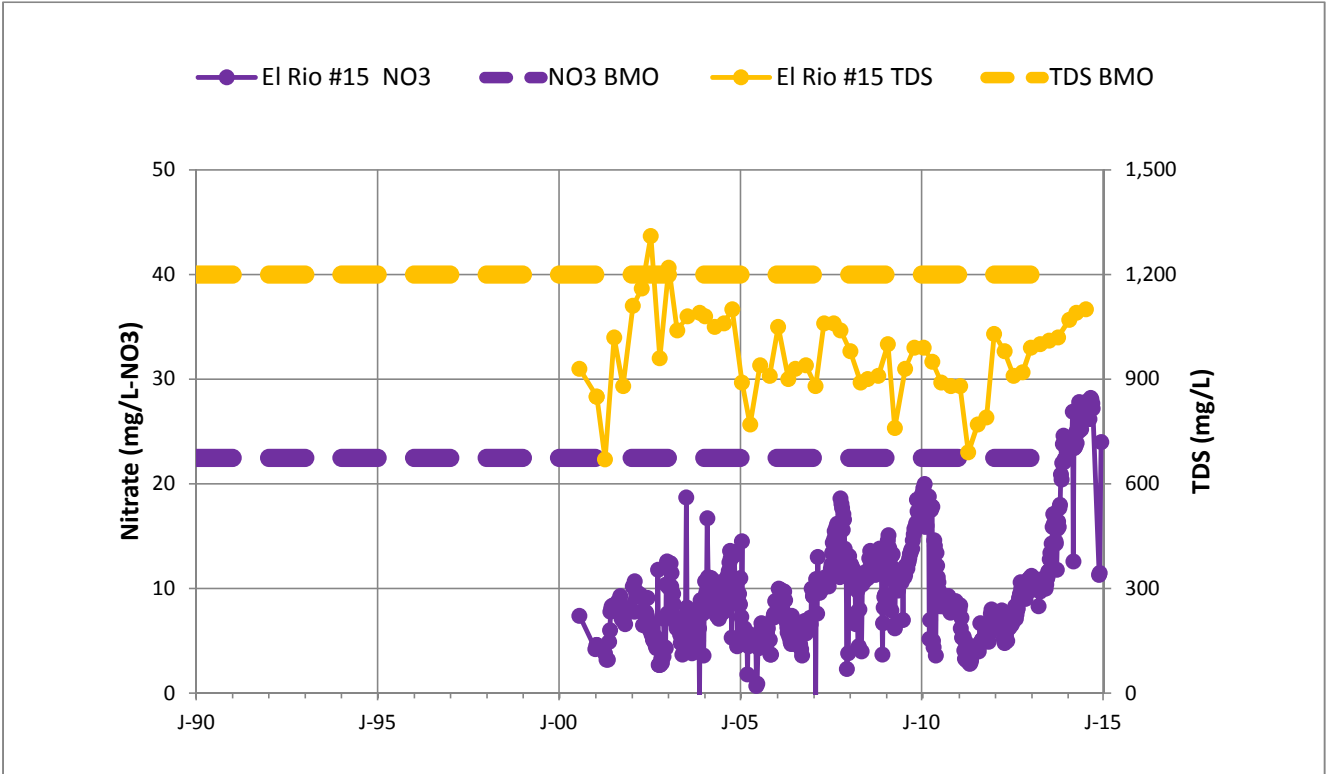
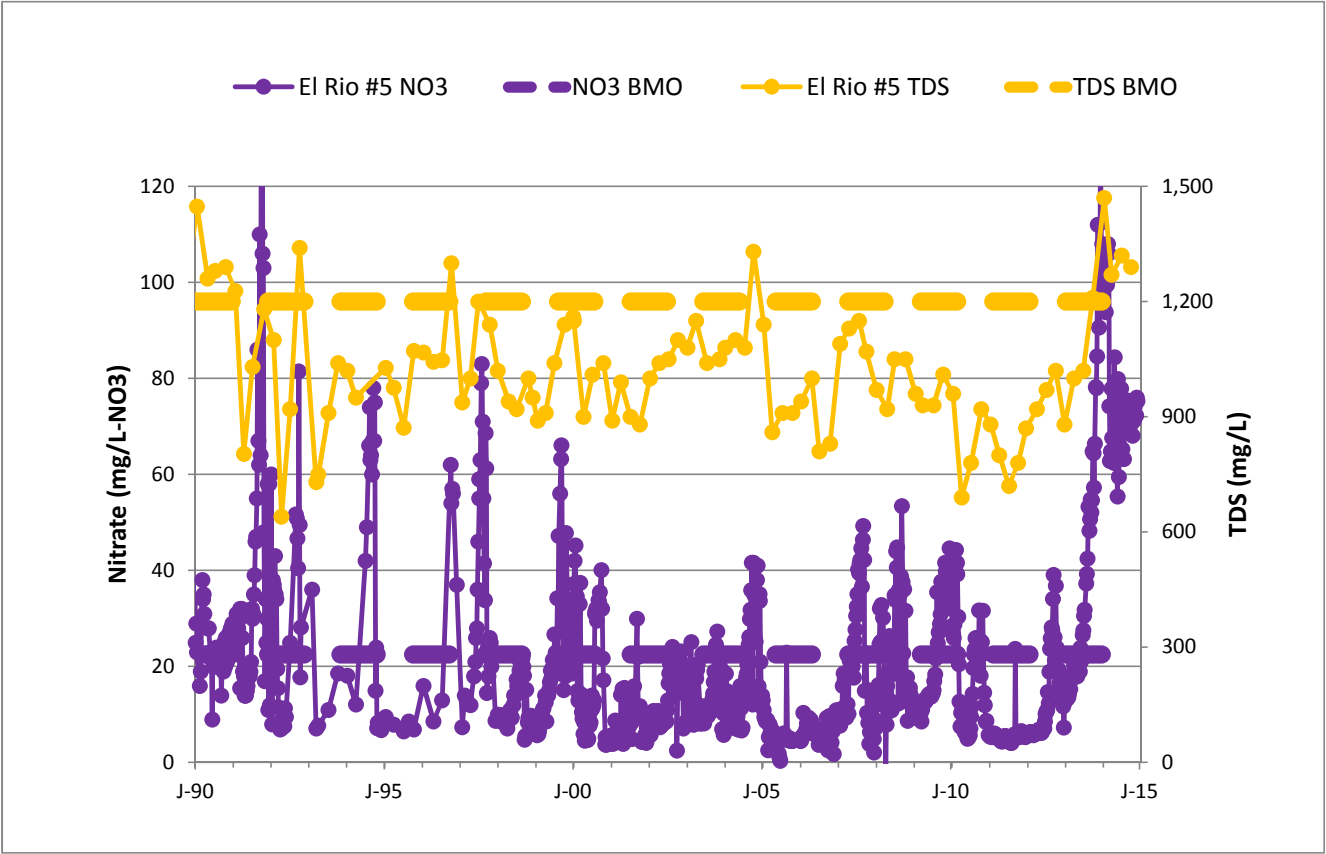
Status Summary: In 2014, average nitrate concentrations were above the BMO at well El Rio #5 and at well El Rio #15. Average TDS concentrations were above the BMO at well El Rio #5 yet below the BMO at well El Rio #15. Declining water levels during 2014 have contributed to increasing nitrate and TDS concentrations, compared to those in 2013.

Status Summary Table

State Well Number (name)	Depth (ft)	Nitrate (mg/L)		TDS (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Nitrate	TDS
02N22W23B02S (El Rio #5)	135-277	22.5	78	1,200	1,338	↑	↑
02N22W23C05S (El Rio #15)	140-310	22.5	25	1,200	1,087	↑	↑



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
OXNARD PLAIN FOREBAY
2014



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
OXNARD PLAIN - UPPER AQUIFER SYSTEM
2014

Goal: Prevent saline intrusion in the Oxnard and Mugu Aquifers. Primary source is seawater inflow via aquifer outcrops in submarine canyons near Port Hueneme and Pt. Mugu.

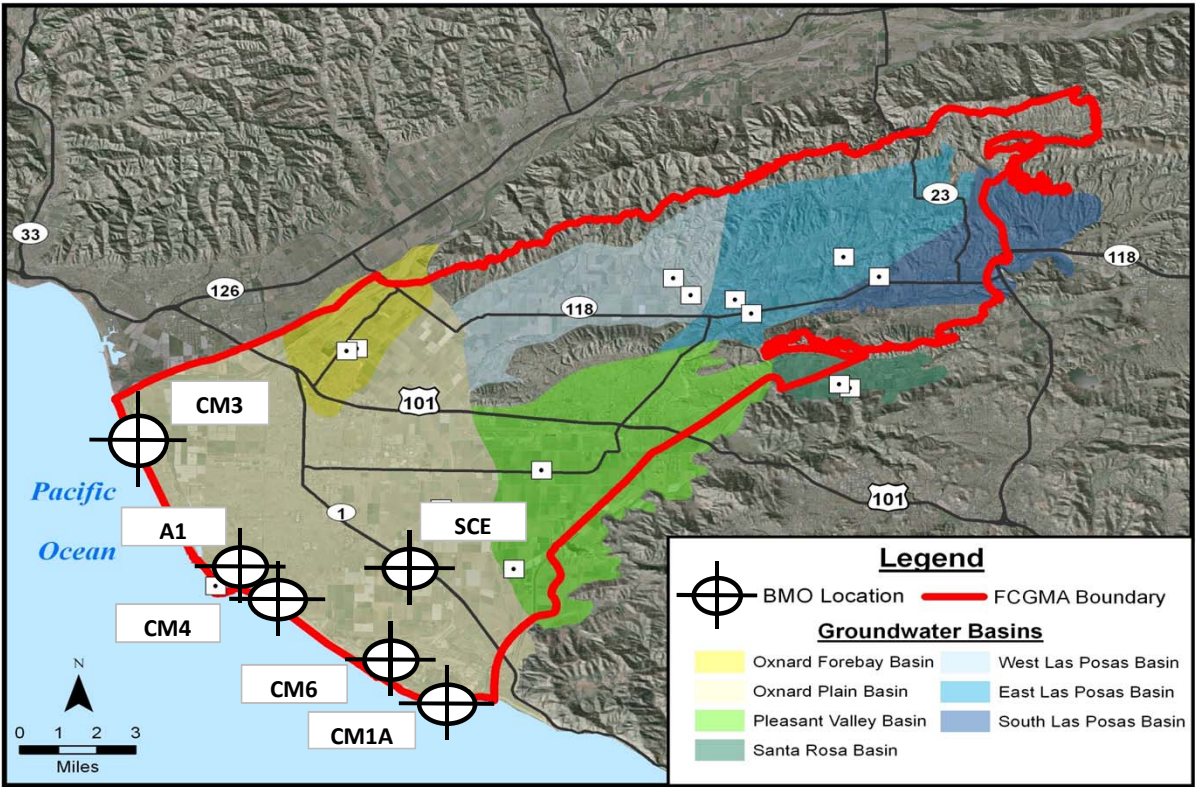
BMOs: Water Levels: Average groundwater elevations sufficient to maintain slight seaward groundwater gradient. Elevation varies with location.

Chloride Concentration: 150 mg/L Chloride (LARWQCB Basin Plan Objective).

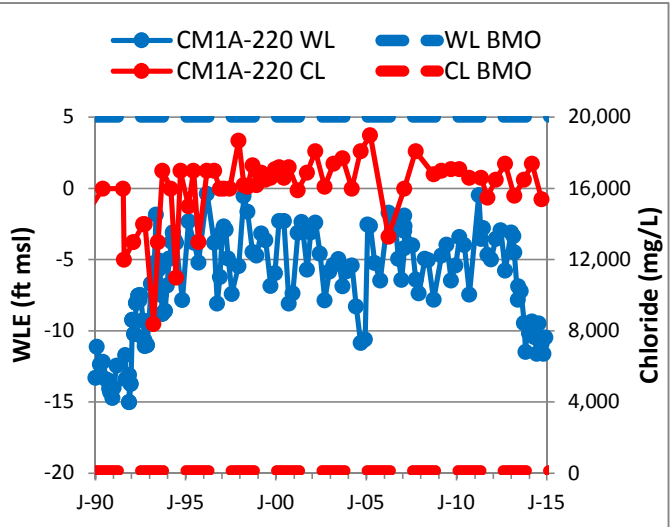
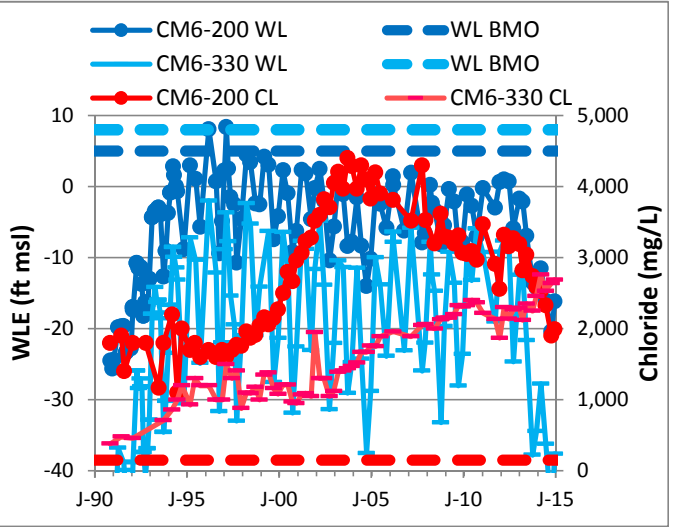
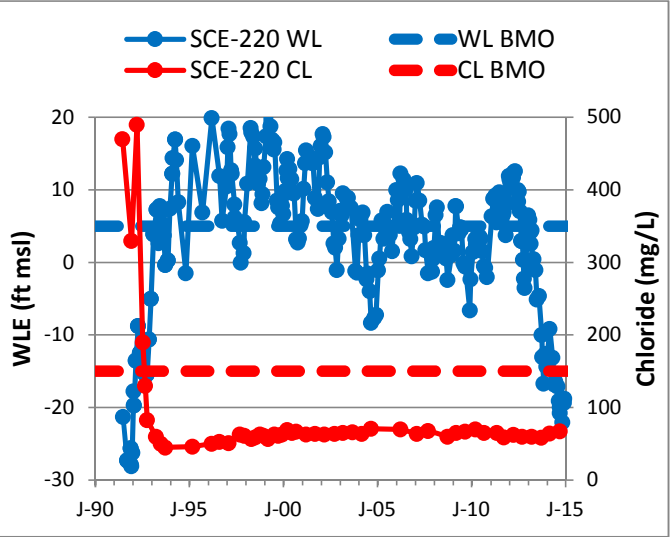
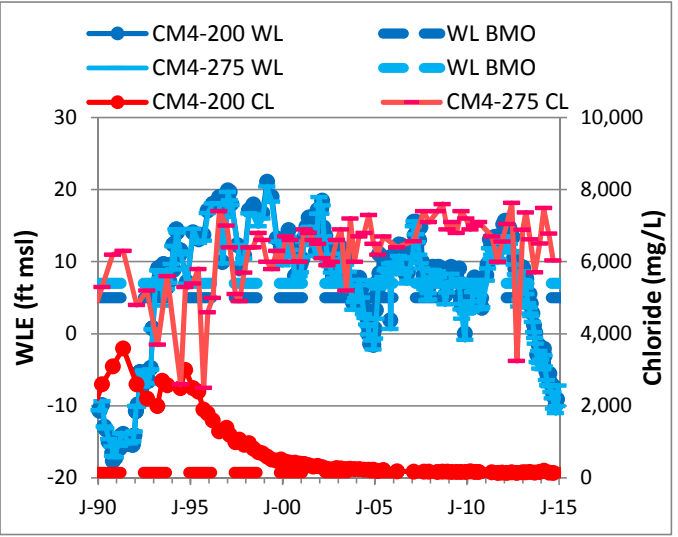
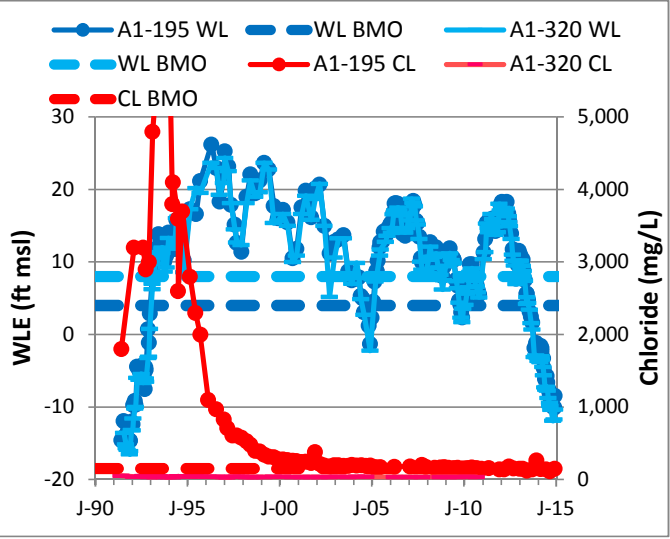
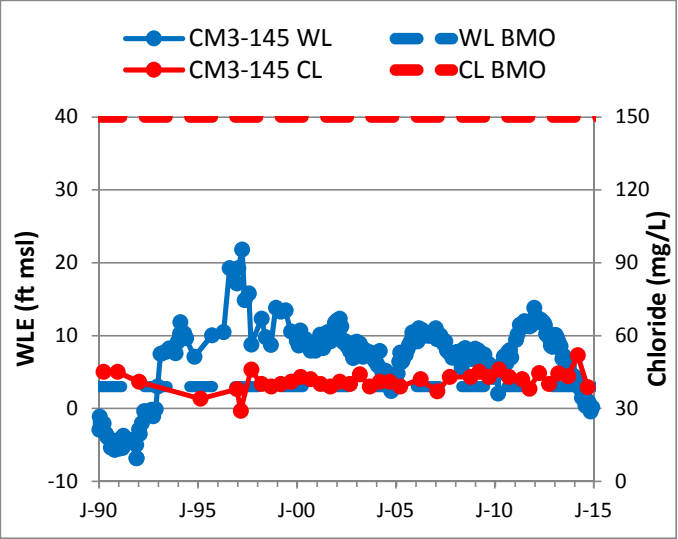
Status Summary: Water level BMOs were not met in 2014. A comparison of water levels indicates that water levels have declined at all nine monitoring locations over the past three years. Chloride BMOs were met at approximately 40% of the monitoring locations. Consistent with past results, chloride BMOs were not met near Port Hueneme (CM4) and Pt. Mugu (CM6 and CM1A).

Status Summary Table

State Well Number (name)	Depth (ft)	Water Level (ft msl)		Chloride (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Water Level	Chloride
01N23W01C05S (CM3-145)	120-145	3	2	150	45		
01N22W20J08S (A1-195)	155-195	4	-6	150	139		
01N22W20J07S (A1-320)	280-320	8	-7	150	40		
01N22W28G05S (CM4-200)	180-200	5	-6	150	168		
01N22W28G04S (CM4-275)	255-275	8	-7	150	6,770		
01N21W19L12S (SCE-220)	200-220	5	-17	150	66		
01S22W01H04S (CM6-200)	180-200	5	-16	150	2,188		
01S22W01H03S (CM6-330)	310-330	8	-37	150	2,655		
01S21W08L04S (CM1A-220)	200-220	5	-10	150	16,400		



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
OXNARD PLAIN - UPPER AQUIFER SYSTEM
2014



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
OXNARD PLAIN - LOWER AQUIFER SYSTEM
2014

Goal: Prevent saline intrusion in the LAS. Sources are seawater inflow via aquifer outcrops in submarine canyons near Port Hueneme and Pt. Mugu and marine sediments.

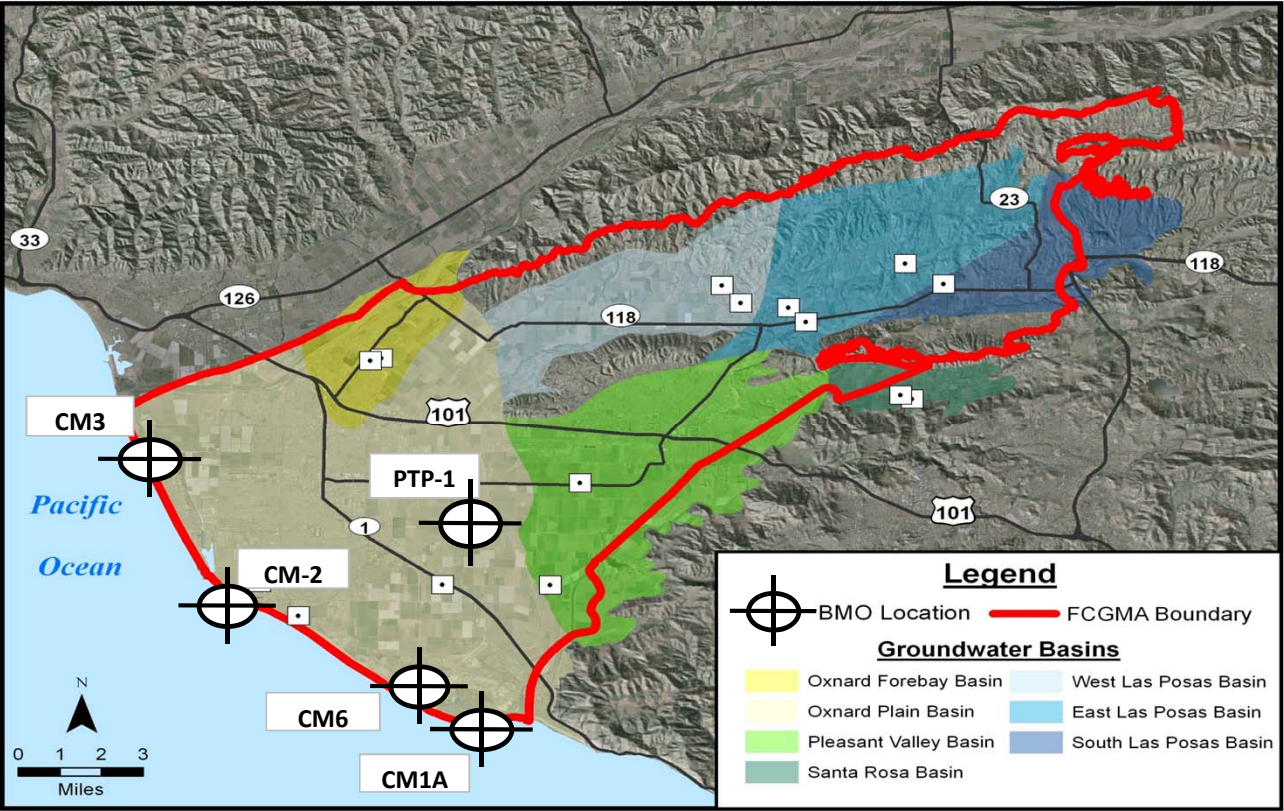
BMOs: Water Levels: Average groundwater elevations sufficient to maintain slight seaward groundwater gradient. Elevation varies with location.

Chloride Concentration: 150 mg/L Chloride (LARWQCB Basin Plan Objective).

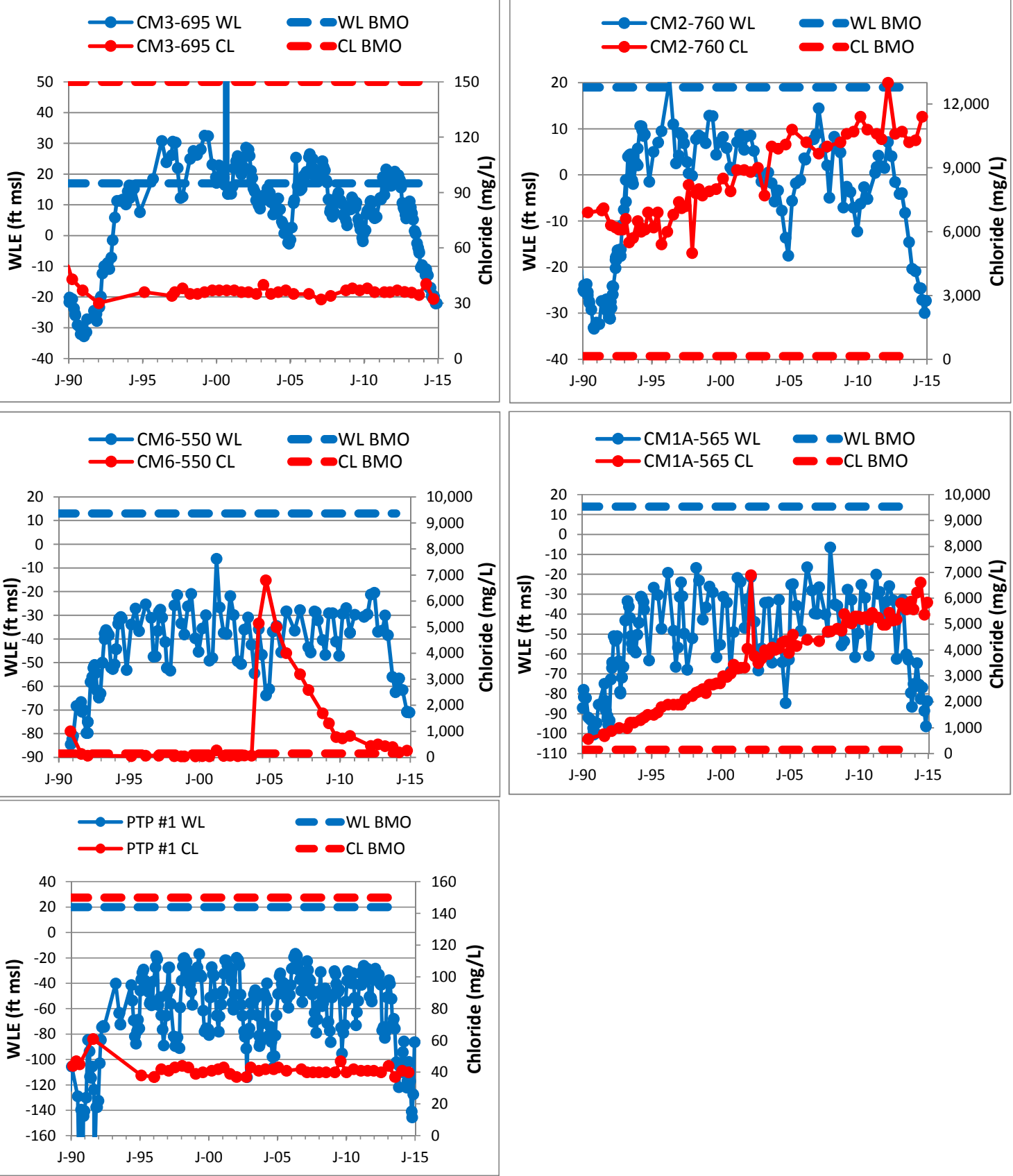
Status Summary: In 2014, water level BMOs were not met. Average water level at inland PTP-#1 location was below its respective BMO by 133 feet. As long as water levels remain depressed, the potential for saline intrusion remains. Consistent with the past, chloride BMOs were not met near Port Hueneme (CM2) and Pt. Mugu (CM1A) (areas of documented seawater intrusion).

Status Summary Table

State Well Number (name)	Depth (ft)	Water Level (ft msl)		Chloride (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Water Level	Chloride
01N23W01C04S (CM3-695)	630-695	17	-17	150	36		
01N22W29D02S (CM2-760)	720-760	19	-26	150	10,850		
01S22W01H01S (CM6-550)	490-550	13	-65	150	227		
01S21W08L03S (CM1A-565)	525-565	14	-80	150	6,013		
01N21W07J02S (PTP #1)	590-1280	20	-113	150	41		



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
OXNARD PLAIN - LOWER AQUIFER SYSTEM
2014



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
PLEASANT VALLEY BASIN
2014

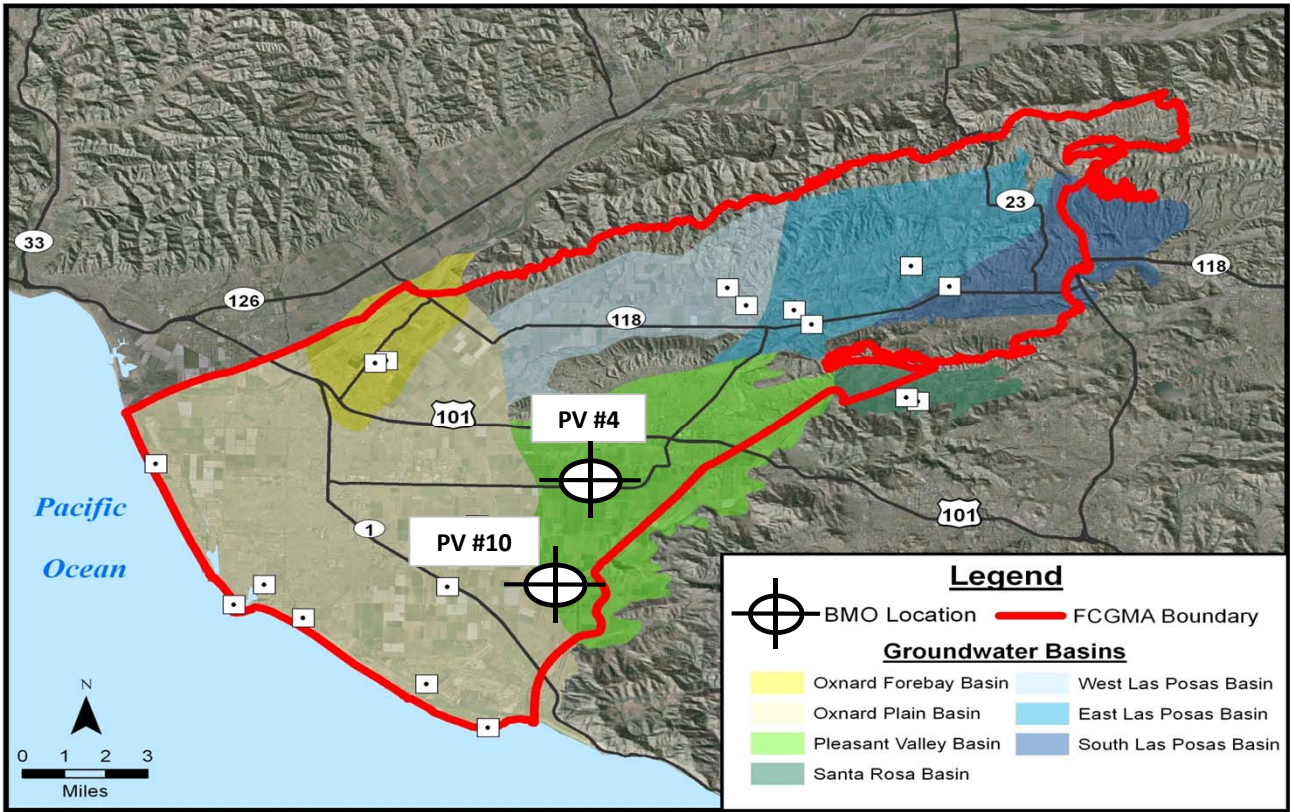
Goal: Prevent inland migration of saline groundwater from coastal areas, underlying sources, and fine-grained interbeds.

BMOs: Water Levels: Average groundwater elevations sufficient to prevent landward migration from coastal areas and minimize vertical gradients.

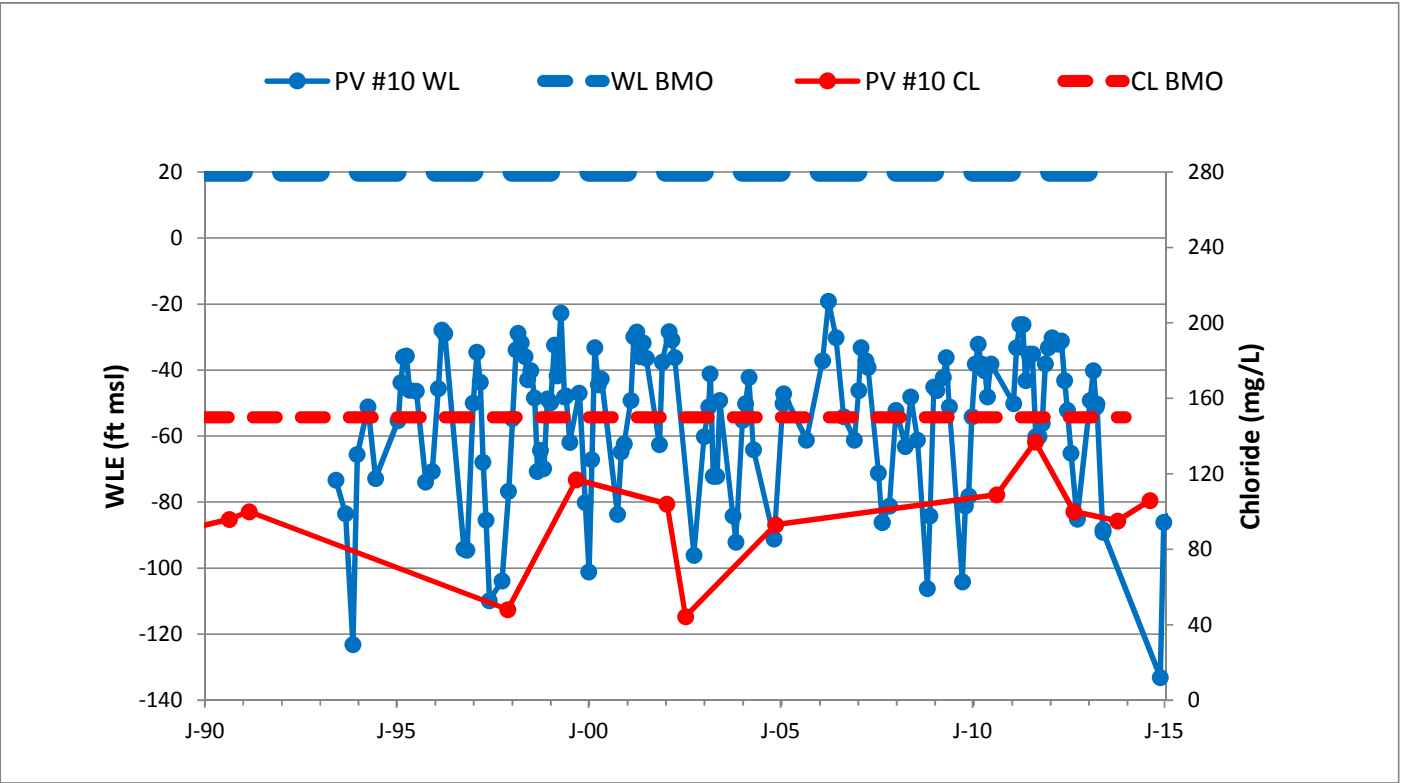
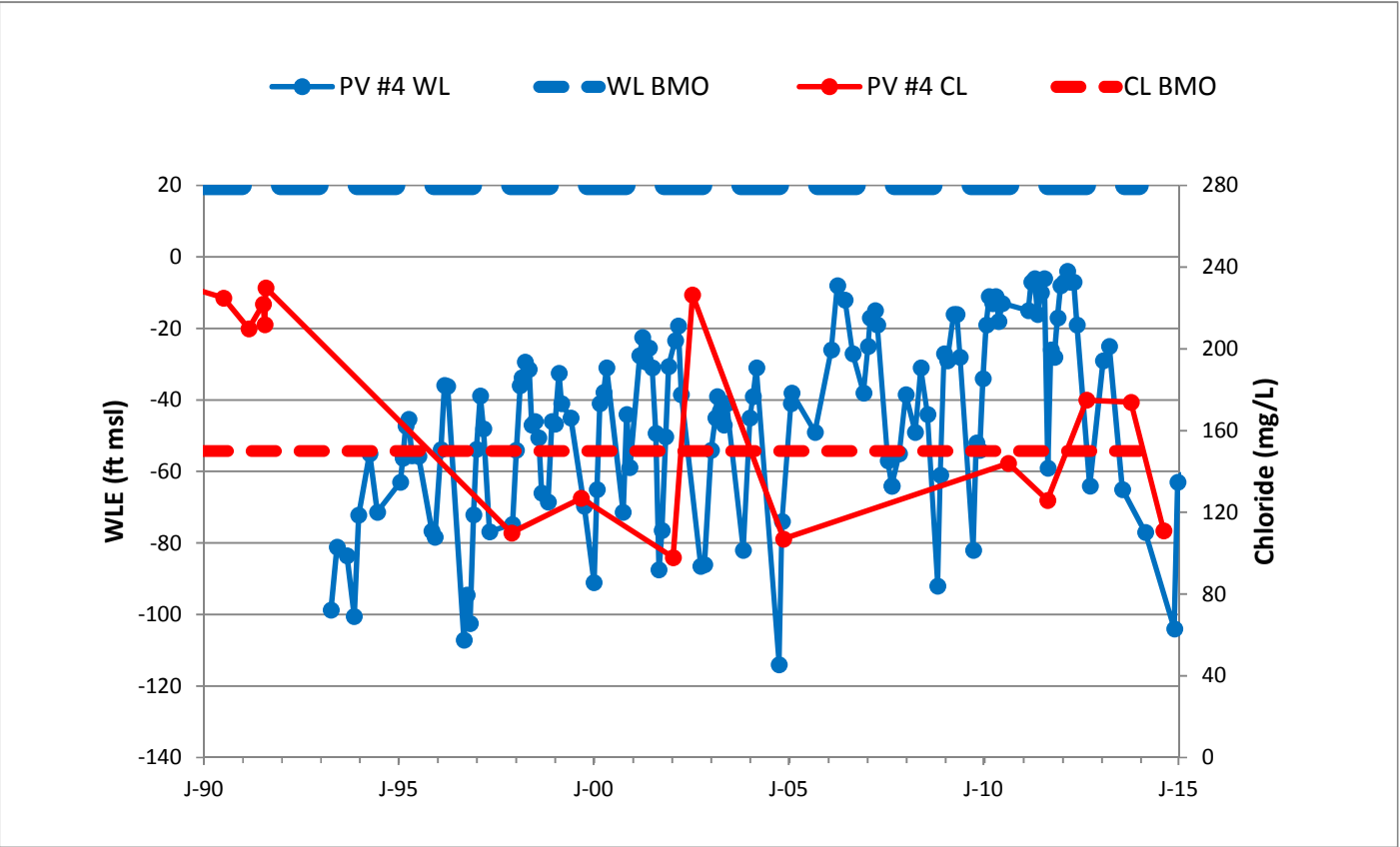
Chloride Concentration: 150 mg/L Chloride (LARWQCB Basin Plan Objective).

Status Summary: In 2014, water level BMOs were not met at either location. Water levels have fluctuated annually yet the overall waterlevels have declined during the last 3 of the last 5 years, remaining significantly below the BMOs. The chloride BMO is met at both monitoring locations. Over the past 5-years, the chloride concentrations at both monitoring locations have fluctuated, yet are within the range of fluctuation.

Status Summary Table							
State Well Number (name)	Depth (ft)	Water Level (ft msl)		Chloride (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Water Level	Chloride
01N21W03K01S (PV #4)	403-1433	20	<div><div></div></div> -81	150	<div><div></div></div> 111	<div><div></div></div>	<div><div></div></div>
01N21W21H02S (PV #10)	503-863	20	<div><div></div></div> -110	150	<div><div></div></div> 106	<div><div></div></div>	<div><div></div></div>



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
PLEASANT VALLEY BASIN
2014



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
ARROYO SANTA ROSA BASIN
2014

Goal: Meet LARWQCB Basin Plan Objectives for nitrate and chloride.

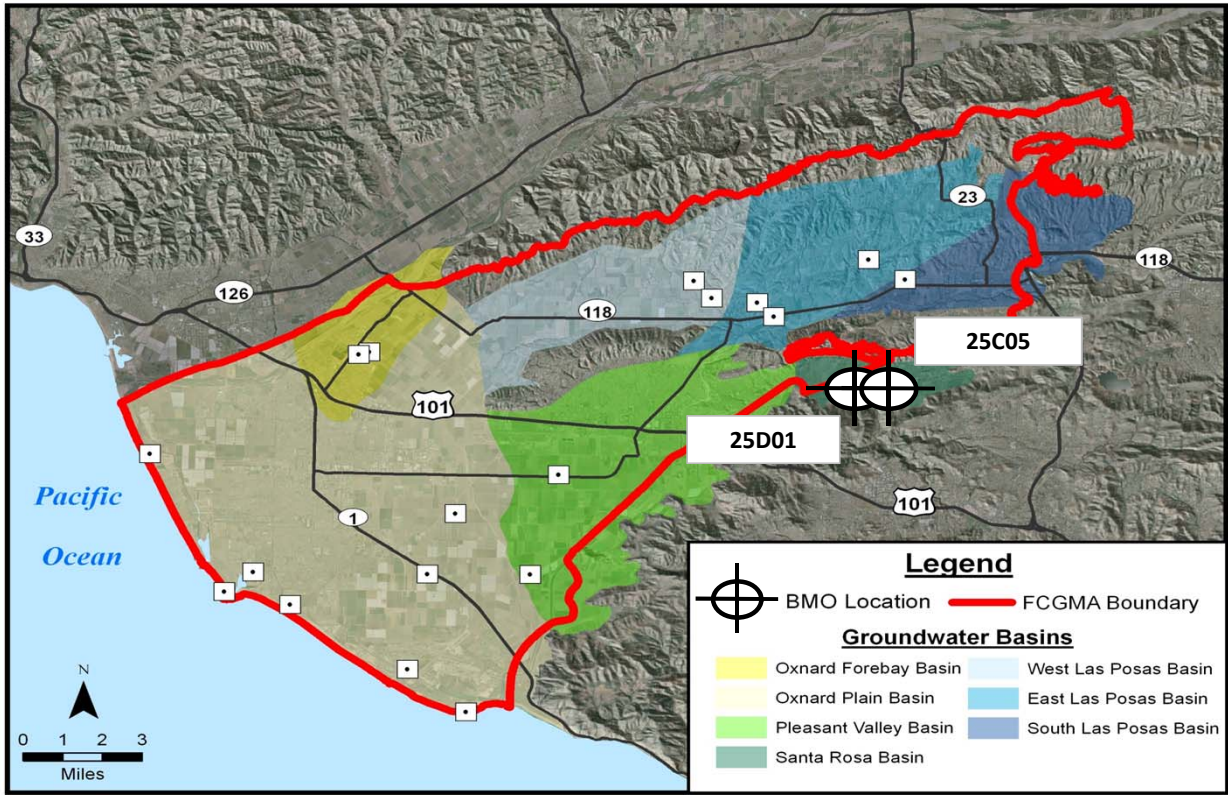
BMOs: Nitrate Concentration: 45 mg/L-NO₃ (LARWQCB Basin Plan Objective & State of CA MCL)

Chloride Concentration: 150 mg/L (LARWQCB Basin Plan Objective)

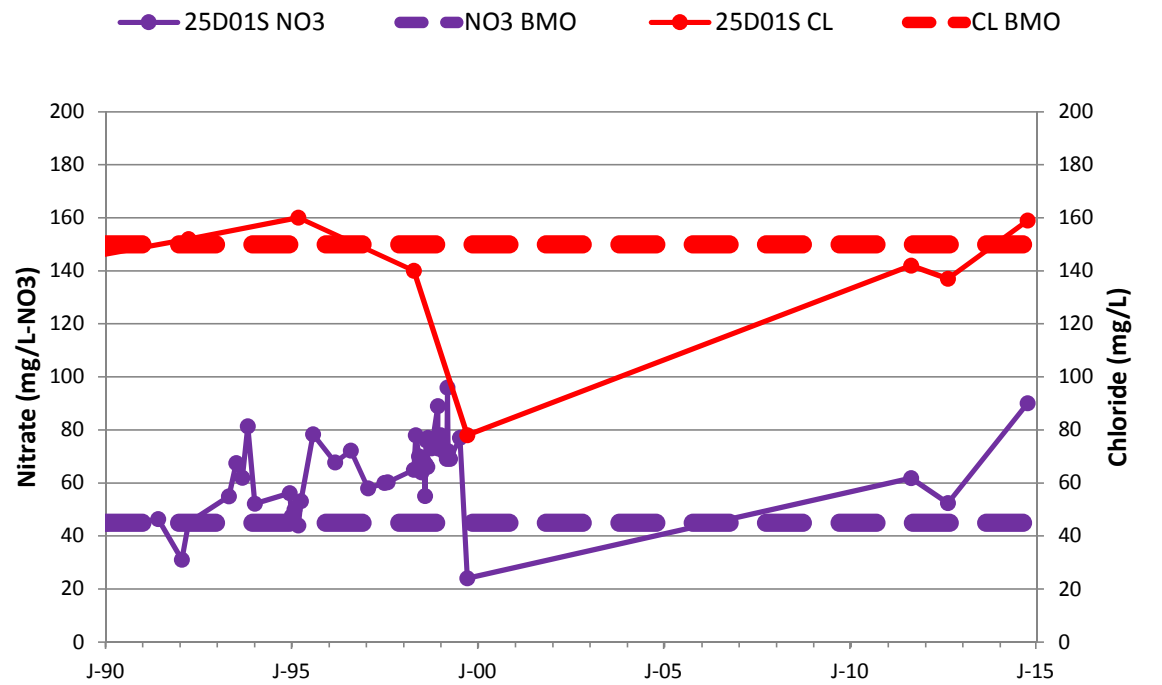
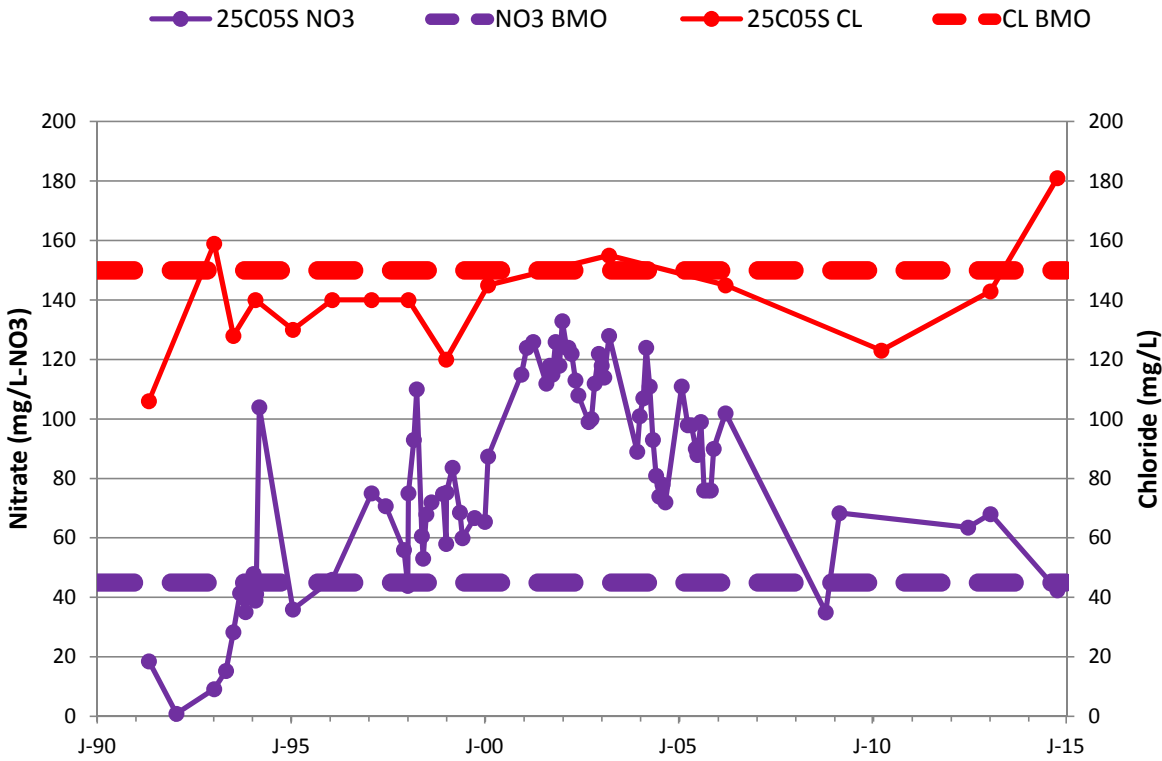
Status Summary: Based on the available data, only one of the four BMOs was met in 2014. For the water quality sample collected from 25C05, the Nitrate concentration was just below its BMO (43 vs. 45 mg/L) and the chloride concentration was above the BMO (181 vs. 150 mg/L). For the water quality sample collected from 25D01, both the nitrate and chloride concentrations exceeded their BMOs 90 vs. 45 mg/L and 159 vs. 150 mg/L, respectively. Over the past 5 years: nitrate concentrations declined in well 25C01 and increased in well 25D01; and chloride concentrations have increased.

Status Summary Table

State Well Number (name)	Depth (ft)	Nitrate (mg/L)		Chloride (mg/L)		5-yr Trend *	
		BMO	2014 Ave	BMO	2014 Ave	Nitrate	Chloride
02N20W25C05S	160-260	45	43	150	181	↓	↑
02N20W25D01S	Unknown	45	90	150	159	↑	↑



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
ARROYO SANTA ROSA BASIN
2014



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
LAS POSAS BASINS
2014

Goal: Maintain chloride and TDS concentrations suitable for irrigation of salt-sensitive crops, particularly avocados and berries. BMOs for SLP are equal to the concentrations observed in surface water in Arroyo Las Posas.

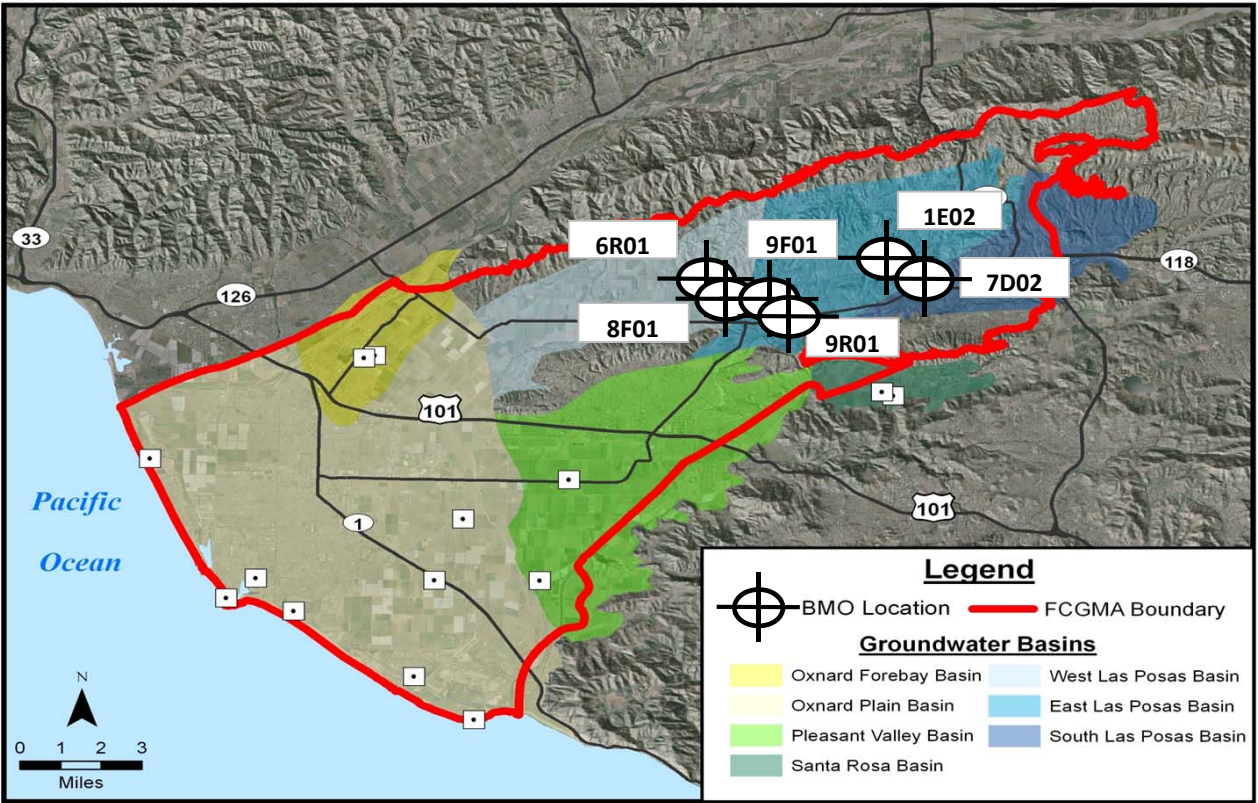
BMOs: Chloride Concentration: WLP & ELP: 100 mg/L; SLP: 160 mg/L.

TDS Concentration: ELP: 500 mg/L; WLP: 600 mg/L; and SLP: 1,500 mg/L.

Status Summary: BMO monitoring locations 1E01 and 6N03 have been replaced with 1E02 and 7D02 respectively. No data is available for BMO monitoring location 6R01 for 2014 (well being repaired). In the ELP Basin the chloride BMO is being met at only one monitoring location, and the TDS BMO is not being met. In the WLP Basin, both BMOs are being met at the one monitoring station. In the SLP Basin, the chloride BMO is being met, while the TDS BMO is not being met. The general five-year trend in the Las Posas basins is rising chloride and TDS concentrations.

Status Summary Table

State Well Number (name)	Depth (ft)	Chloride (mg/L)		TDS (mg/L)		5-yr Trend	
		BMO	2014 Ave	BMO	2014 Ave	Chloride	TDS
02N20W09F01S (ELP)	906-1,290	100	175	500	1,510	↑	↑
02N20W09R01S (ELP)	456-724	100	191	500	1,510	↑	↑
02N20W01E02S (ELP) Replacement	680-1,000	100	98	500	757	↑	→
02N20W06R01S (WLP)	1,090-1,512	100	No Data	600	No Data	Insufficient Data	
02N20W08F01S (WLP)	752-1,406	100	11	600	384	→	↑
02N19W07D02S (SLP) Replacement	98-170	160	150	1500	1,240	→	↓



FOX CANYON GMA BASIN MANAGEMENT OBJECTIVES REPORT CARD
LAS POSAS BASINS
2014

