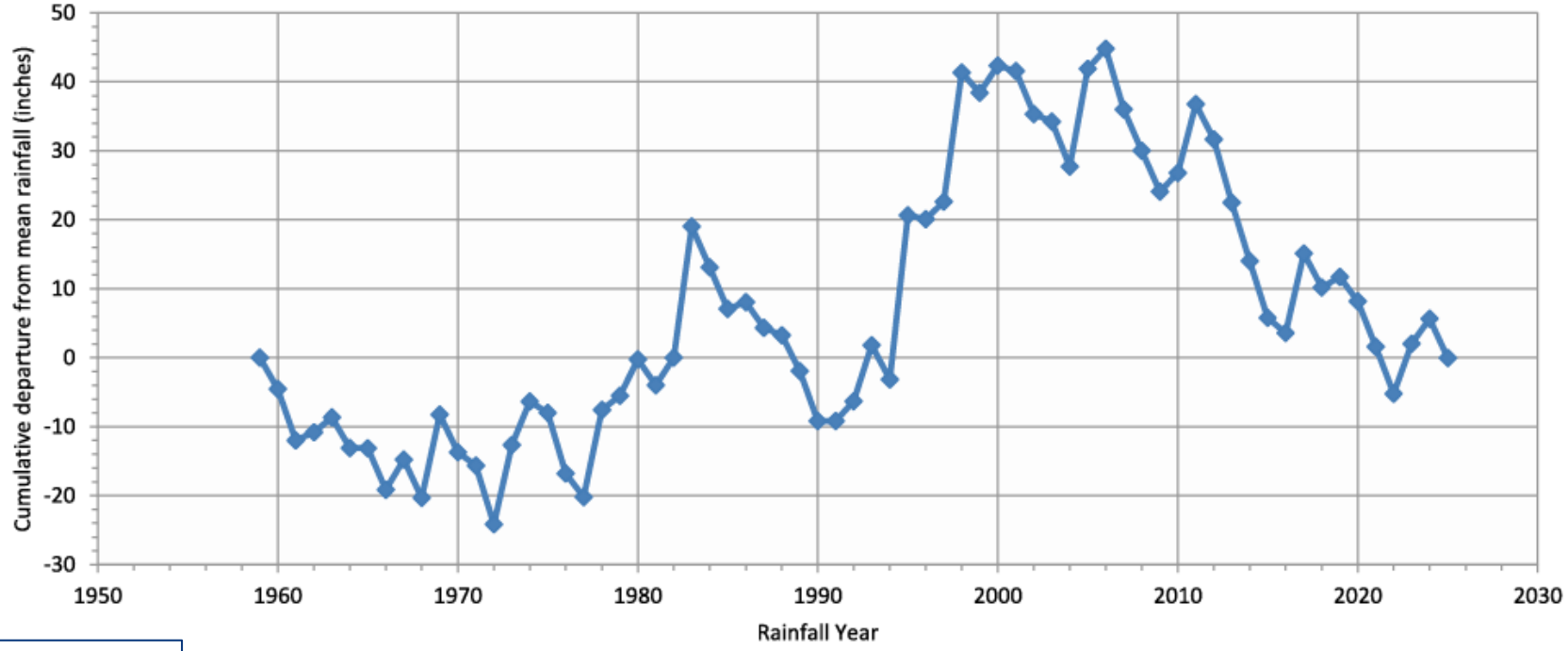
Action Item 9a. Presentation of the Draft 2025 Annual Monitoring Report

Los Osos Groundwater Basin Management Committee

Item 9a. Presentation of the Draft 2025 Annual Monitoring Report

- Public comment period: 05/20/2026 to 05/31/2026 at 5pm
- Please submit written public comments to danheimel@confluencees.com
- Recommendation: Receive a presentation from Basin Management Committee (BMC) Staff on the Public Draft 2025 Annual Monitoring Report (AMR) and confirm schedule for the BMC to consider approval of the Final Draft 2025 AMR and submission to the Court.

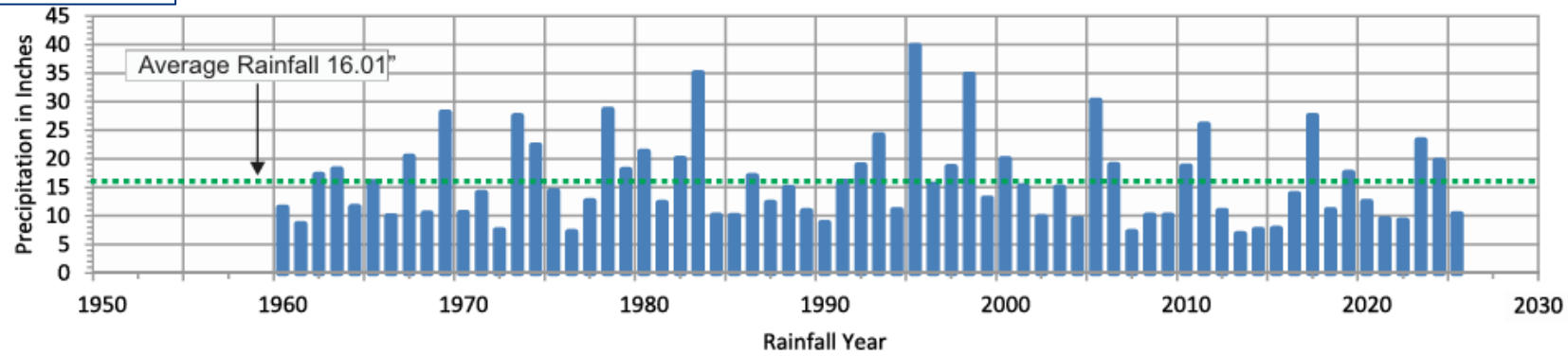
Cumulative Departure from Mean Rainfall
Morro Bay Fire Department 1959-2025



DRAFT

2025 Precipitation
Rainfall Year (July – June): 12.03 in
Calendar Year: 19.52 in

Rainfall per Water Year
Morro Bay Fire Department



Los Osos Creek Stream Gage

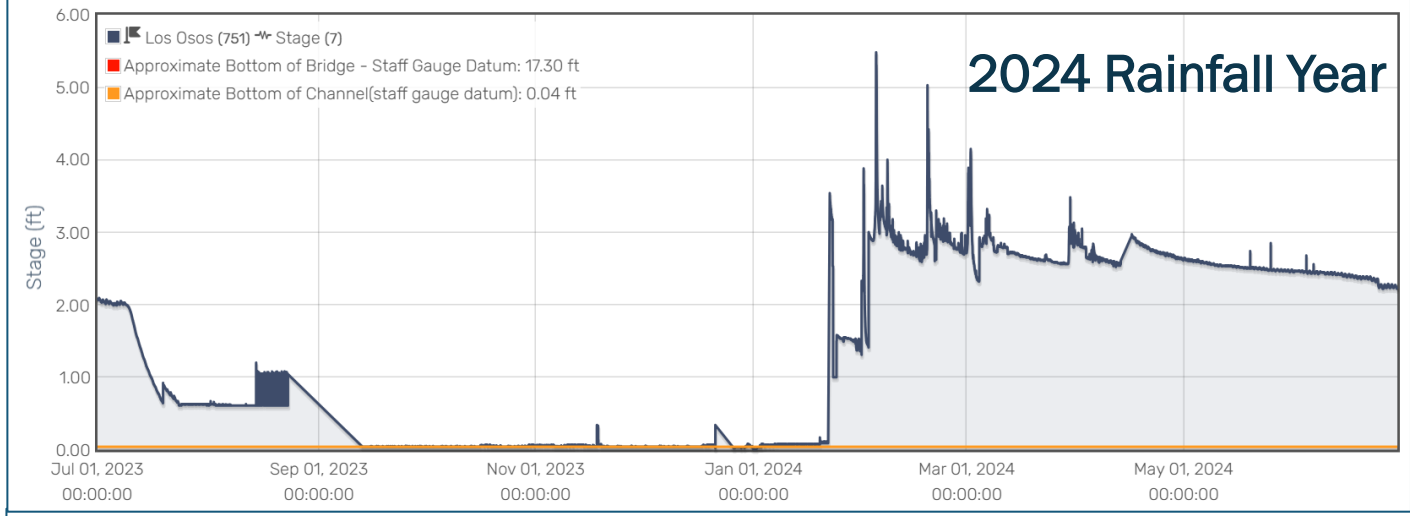
2024 Rainfall Year
(Jul 2023 – Jun 2024)
Precipitation: 21.63 in

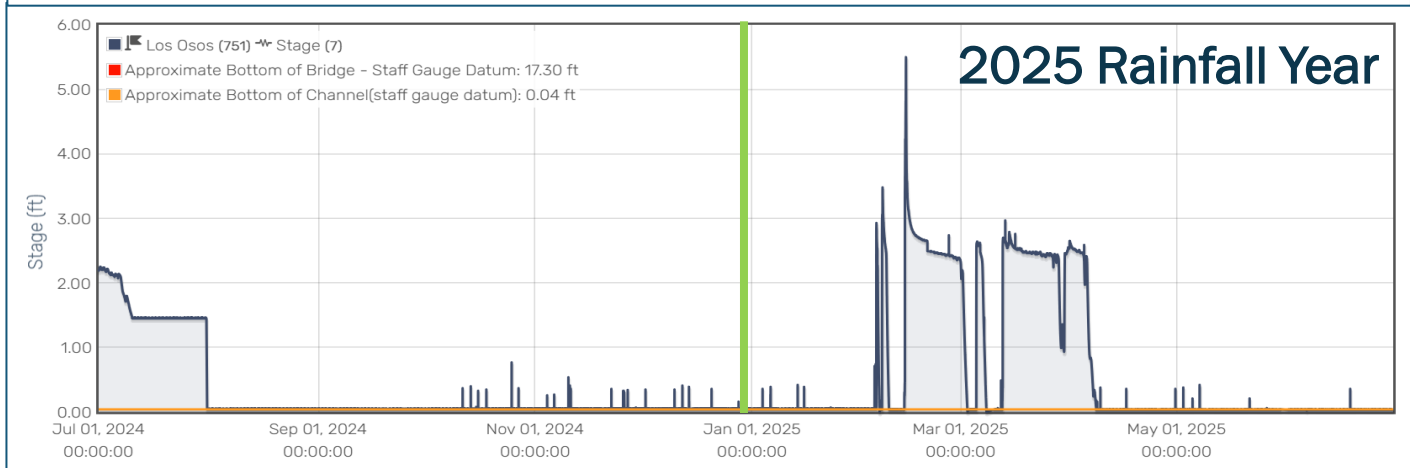
2025 Rainfall Year
(Jul 2024 – Jun 2025)
Precipitation: 12.03 in

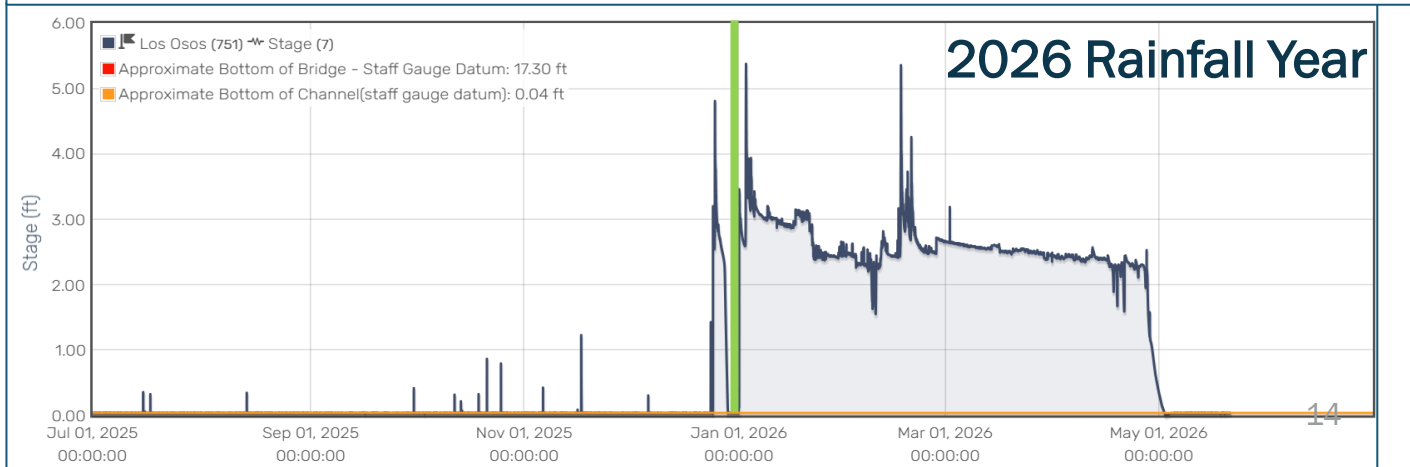
CY 2025
Precipitation: 19.52 in

First half of 2026 Rainfall Year
(Jul 2025 – Dec 2025)
Precipitation: 10.94 in

DRAFT







2025 Groundwater Production

DRAFT

Table 13. Municipal Groundwater Production (2013-2025)				
Year	LOCSD	GSWC	S&T	Total
	Acre-Feet[1]			
2013	726	689	55	1,470
2014	634	564	48	1,246
2015	506	469	32	1,007
2016	519	453	31	1,003
2017	568	450	32	1,050
2018	522	464	32	1,018
2019	506	454	31	991
2020	527	502	34	1,063
2021	503	491	32	1,026
2022	496	491	29	1,016
2023	487	470	27	984
2024	491	505	26	1,022
2025	494	538	29	1,061

Note: [1]Metered production

Table 14. Estimated Basin Groundwater Production (2013-2025)					
Year	Purveyors	Domestic	Community	Agriculture	Total
	Acre-Feet[1]				
2013	1,470	200	140	750	2,560
2014	1,246	220	130	800	2,400
2015	1,007	220	140	800	2,170
2016	1,003	220	140	800	2,160
2017	1,050	220	130	670	2,070
2018	1,018	220	120	670	2,030
2019	991	220	60	630	1,900
2020	1,063	220	80	650	2,010
2021	1,026	220	130	620	2,000
2022	1,016	220	90	680	2,010
2023	984	110	60	500	1,650
2024	1,022	110	50	510	1,690
2025	1,061	110	40	470	1,680

Note: [1]All figures except Purveyors rounded to the nearest 10 acre-feet. Production from non-metered wells (Domestic, Community, Agricultural) estimated per methods described in Appendix G and LOBP Section 4 and Section 7.5. Domestic production beginning in 2023 uses recommended updates from 2023 Water Offset Study (see Appendix G).

2025 Recycled Water Use

DRAFT

Table 27. Planned Recycled Water Uses in the Urban Water Reinvestment Program		
Potential Use	**LOBP Planned Annual Volume (AFY)**	**Actual Annual Volume in 2025 (AFY)**
Broderson Leach Fields	448	422
Bayridge Estates Leach Fields	33	14
Urban Reuse[6]	63	8
Sea Pines Golf Course	40	74
Los Osos Valley Memorial Park	50	0
Agricultural Reuse	146	3
Construction Water	0	0
Total	780	521

[5]This Table was reproduced (with slight edits) from Table 2 of the LOBP.
[6]Urban reuse includes Los Osos Middle School irrigation, Monarch Grove Elementary School irrigation, Los Osos Community Park irrigation, and irrigation for the Los Osos Valley Road median between South Bay Blvd and Fairchild Way.

Basin Metric Preview

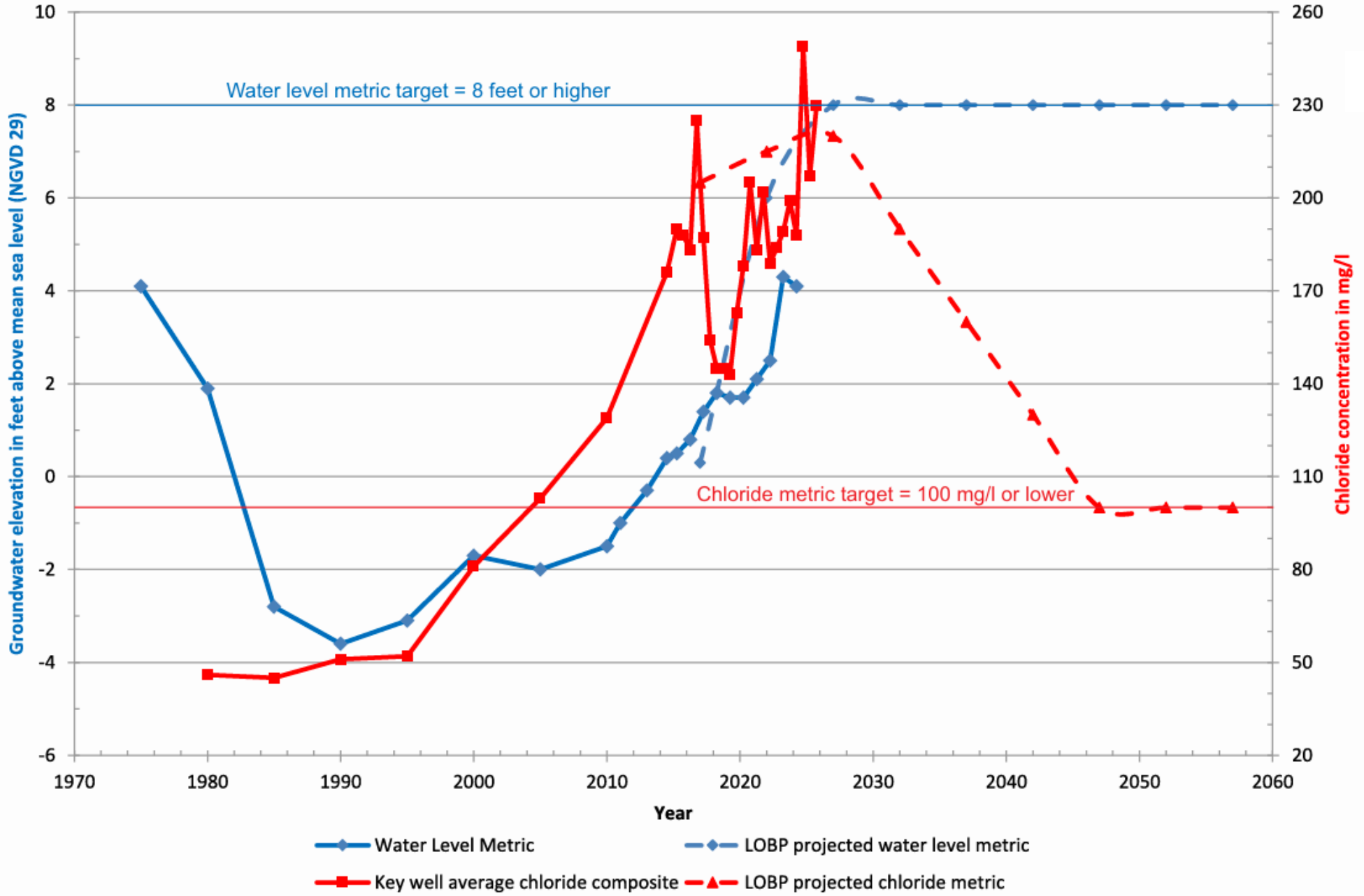
DRAFT

Table ES-2. LOBP Metric Summary			
Metric[1]	**LOBP Goal**	**Calculated Value from 2025 Data**	**Change in Condition from 2024**
Basin Yield Metric[2]	80 or less	71	No change from 71 (steady)
Water Level Metric	8 feet above mean sea level or higher	3.5 feet above mean sea level	Decrease from 4.1 ft. (deterioration)
Chloride Metric	100 mg/L or lower	230 mg/L	Decrease from 249 mg/L (improvement)
Nitrate Metric	10 mg/L or lower	12.9 mg/L (NO_3-N)	Decrease from 15.7 mg/L (improvement)

[1]Revisions to the Water Level, Chloride, and Nitrate Metrics are currently in progress.
[2]An update to the Basin sustainable yield was approved by the BMC in Fall 2025 based on the Transient Model, which is expected to lower the Basin Yield Metric in 2026 (Section 7.5.1).

Water Level Metric calculated using Spring 2024 LA 16 Water Level

Chloride and Water Level Metric
Lower Aquifer



DRAFT

Change In Storage

DRAFT

Table 19. Change in Storage Spring 2024 to Spring 2025 (<250 mg/L Chloride)						
Basin Area	Aquifer	Zone	Spring 2024		Change from Spring 2024 to Spring 2025	
			Total	Above Sea Level	Total	Above Sea Level
			ACRE-FEET			
Western and Central	Perched	A, B	6,300	6,300	-300	-300
	Upper	C	29,800	8,000	-300	-300
Western	Lower[1]	D[2]	16,200	<10	-200	0
Central	Lower[1]	D, E	55,100	<10	0	0
Eastern	Alluvial and Lower	Alluvial, D, E	20,000	5,500	-400	-400
TOTAL			127,400	19,800	-1,200	-1,000

NOTES: [1] Includes fixed and confined storage.

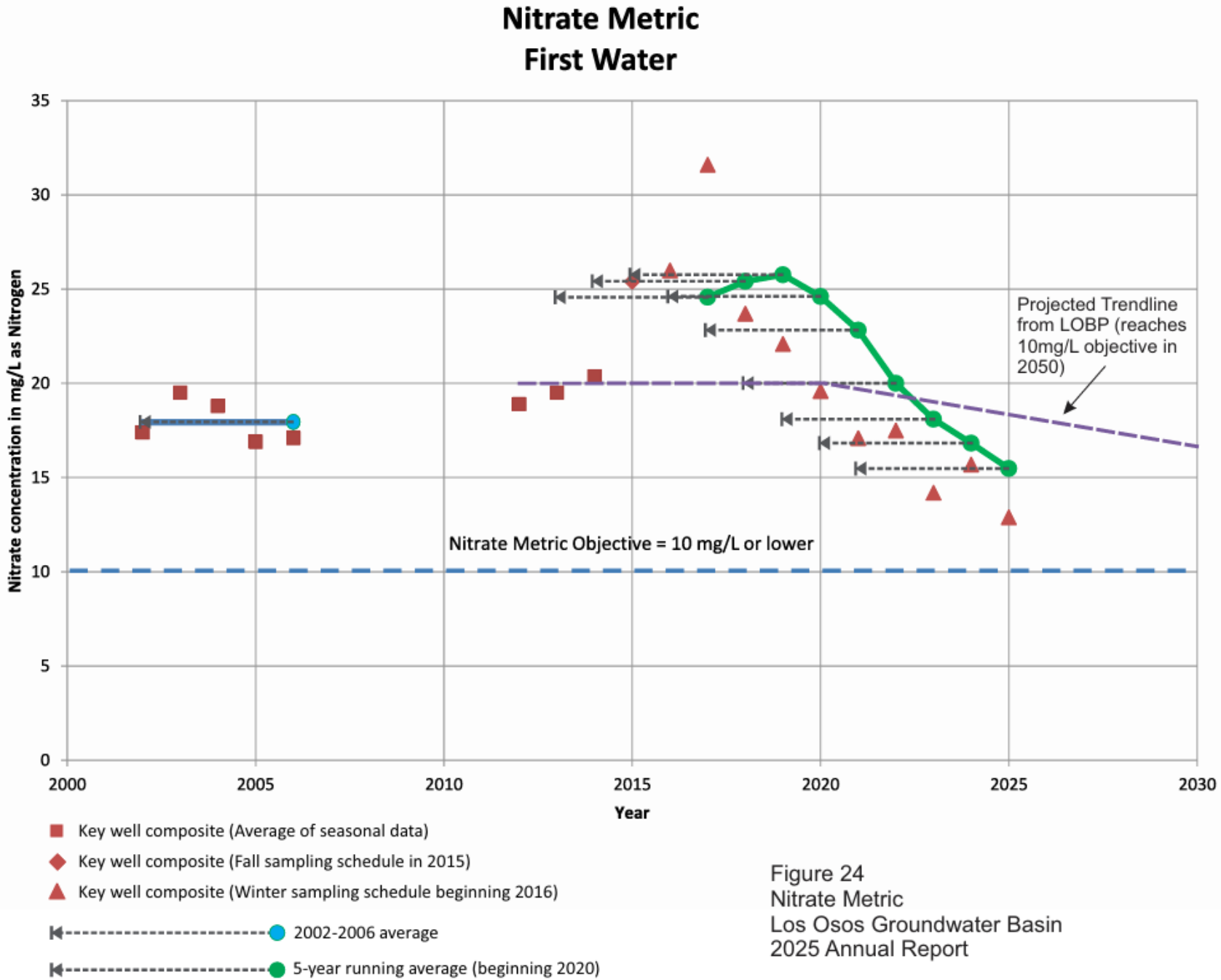
[2] Western Area Zone E not included due to chloride>250 mg/L.

Groundwater in Storage above Sea Level

DRAFT

Table 20. Groundwater in Storage above Sea Level			
Rain Year	Spring	Fall	Rainfall (Sta. 727)*
	acre-feet		inches
2018	17,000	15,100	13.63
2019	17,600	16,600	23.82
2020	17,700	15,800	13.60
2021	17,400	15,200	13.94
2022	16,800	15,000	13.58
2023	19,400	17,900	34.74
2024	19,800	18,000	21.63
2025	18,800	16,800	12.0

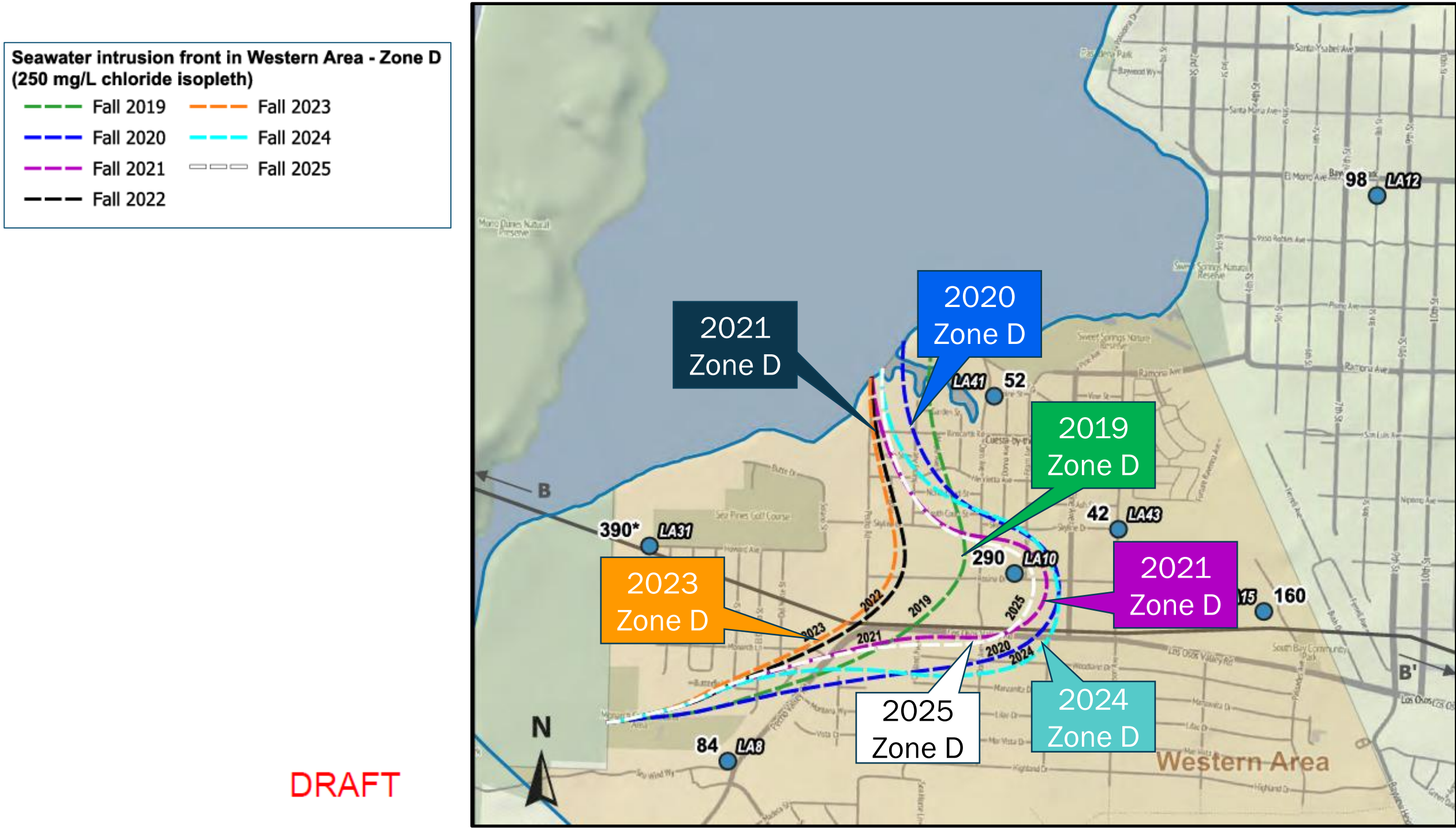
*SLO County Rainfall Year reporting (July1 – June30)

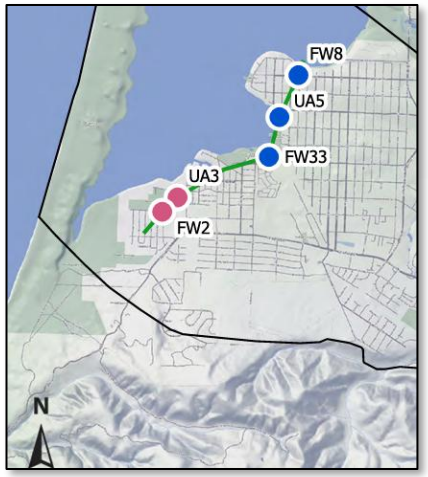


DRAFT

Figure 24
Nitrate Metric
Los Osos Groundwater Basin
2025 Annual Report

Cleath-Harris Geologists


Seawater intrusion front in Western Area - Zone D
(250 mg/L chloride isopleth)
Fall 2019
Fall 2020
Fall 2021
Fall 2022
Fall 2023
Fall 2024
Fall 2025
2021 Zone D
2020 Zone D
2019 Zone D
2023 Zone D
2021 Zone D
2025 Zone D
2024 Zone D
98 LA12
52 LA41
42 LA43
390* LA31
290 LA10
160
84 LA8
B
B'
N
Western Area
DRAFT



Upper Aquifer Water Level Profile

Water levels shown above ground surface in low-lying areas represent artesian pressure within the aquifer.

Elevation in feet (NGVD 29)

60
50
40
30
20
10
0
-10

Sweet Springs (artesian well)

Cuesta Inlet

marsh

marsh

FW2

UA3

UA5

FW8

Ground Surface
Protective Elevation
Well
Spring 2025 Upper Aquifer Water Level Profile (adjusted to NGVD 29 datum)

0 1000 2000 3000 4000 5000 6000 7000 8000 9000

Distance in feet

DRAFT

DRAFT

Status of Basin Infrastructure Projects

Table 28. Basin Infrastructure Projects				
Project Name	**Parties Involved**	**Funding Status**	**Capital Cost**	**Status**
Program A				
Water Systems Interconnection	LOCSD/ GSWC			Completed
Upper Aquifer Well (8th Street)	LOCSD	$307,000		Completed
South Bay Well Nitrate Removal	LOCSD			Completed
Palisades Well Modifications	LOCSD			Completed
Blending Project (Skyline Well)	GSWC			Completed
Water Meters	S&T			Completed
Program B				
LOCSD Wells	LOCSD	Not Funded	LOBP: $2.7 mil	Project not initiated
GSWC Wells	GSWC	Not Funded	LOBP: $3.2 mil	Project not initiated
Community Nitrate Removal Facility	LOCSD/GSWC/S&T	GSWC Portion Funded	GSWC: $1.23 mil	GSWC's Program A Blending Project might be capable of expanding to be the first phase of the Program B Community Nitrate Removal Facility.

Status of Basin Infrastructure Projects

DRAFT

Project Name	Parties Involved	Funding Status	Capital Cost	Status
Program C				
Expansion Well No. 1 (Los Olivos)	GSWC			Completed
Expansion Well No. 2	LOCSD	LOCSD	LOBP: $2.5 mil	The Bay Oaks well is completed and operational as of January 2026.
Expansion Well 3 and LOVR Water Main Upgrade	GSWC/LOCSD	Cooperative Funding	LOBP: $1.6 mil	The deferral from Program C for this project was removed by the BMC on August 16th, 2023.
LOVR Water Main Upgrade	GSWC	May be deferred	LOBP: $1.53 mil	Project may not be required, depending on the pumping capacity of the drilled Program C wells. It may be deferred to Program D.
S&T/GSWC Interconnection	S&T/ GSWC	Pending	LOBP: $30,000	Currently on hold pending further evaluation of the project.

Status of Basin Infrastructure Projects

DRAFT

Project Name	Parties Involved	Funding Status	Capital Cost	Status
Program D				
Shift production within the Lower Aquifer from the Western Area to the Eastern Area of the Basin				Currently being considered for deferment through Adaptive Management. BMC to review on an annual or semi-annual basis.
Program M				
New Zone D/E Lower Aquifer monitoring well in Cuesta by the Sea	All Parties			Completed
New Zone D/E Lower Aquifer monitoring wells at the eastern end of Skyline Drive	All Parties			Completed
Sweet Springs Monitoring Well	All Parties	$150,000 in Rose Foundation Grant Funding	$50,000 match from LOCSD's BMC contribution	In progress, anticipated completion in 2026.
Program U				
Creek Discharge Program	All Parties		TBD	These activities are currently on hold. The Transient Model and Water Recycling Funding Study are intended to better inform the BMC on the most effective opportunities for increasing the Sustainable Yield of the Basin.
8th and El Moro Urban Storm Water Recovery Project	All Parties		TBD	These activities are currently on hold. The Transient Model and Water Recycling Funding Study are intended to better inform the BMC on the most effective opportunities for increasing the Sustainable Yield of the Basin.

Annual Report Recommendations

DRAFT

2025 Annual Report Recommendations

- Updating the Maximum Sustainable Yield now that the location of the second Program C well is finalized and the Transient Model is completed, including revised expectations for recycled water availability and revisions to the Sustainable Yield methodology (Section 7.5.2). – Partially completed - selected WRFP Study Sustainable Yield scenarios included second Program C well and other LOBP programs.
- Re-evaluate Water Level Metric target after completion of wellhead surveys (Section 7.5.3). This task has been expanded to include Water Level, Chloride, and Nitrate Metric updates – In progress (2026)
- A peer review of the Basin model is required by the Stipulated Judgement every 10 years. Upgrading to a fully transient Basin model was recommended prior to the next peer review (Section 7.5.2). Planning and funding efforts for a transient Basin model was initiated in 2021. The transient Basin model would replace the existing steady-state model, once completed. – Transient Model completed
- Water levels at UA5 are below the Protective Elevation for the fourth consecutive year. Continued close monitoring of UA5 water quality by the water purveyor is recommended (Section 7.5.4). – Ongoing
- Install the Sweet Springs Lower Aquifer monitoring well in order to better monitor the movements of the seawater intrusion front (Section 2.2.5). A location for the cluster has been finalized in 2025– Planned for 2026
- A discussion of Chromium-6 concentrations and PFAS concentrations in purveyor wells was recommended for the 2025 Annual Report - Completed

2025 Annual Report Preparation Schedule

DRAFT

- May 20, 2026 – Release of Draft Annual Report for BMC and Public Review
- May 29, 2026– BMC Meeting
  - Review of Draft 2025 Annual Report
- Public Comments Due – May 31, 2026
- June 17, 2026 – BMC Meeting
  - Review and consideration for approval of Final 2024 Annual Report
- Fri June 29, 2026 – Submission of 2025 Annual Report to the Court

28