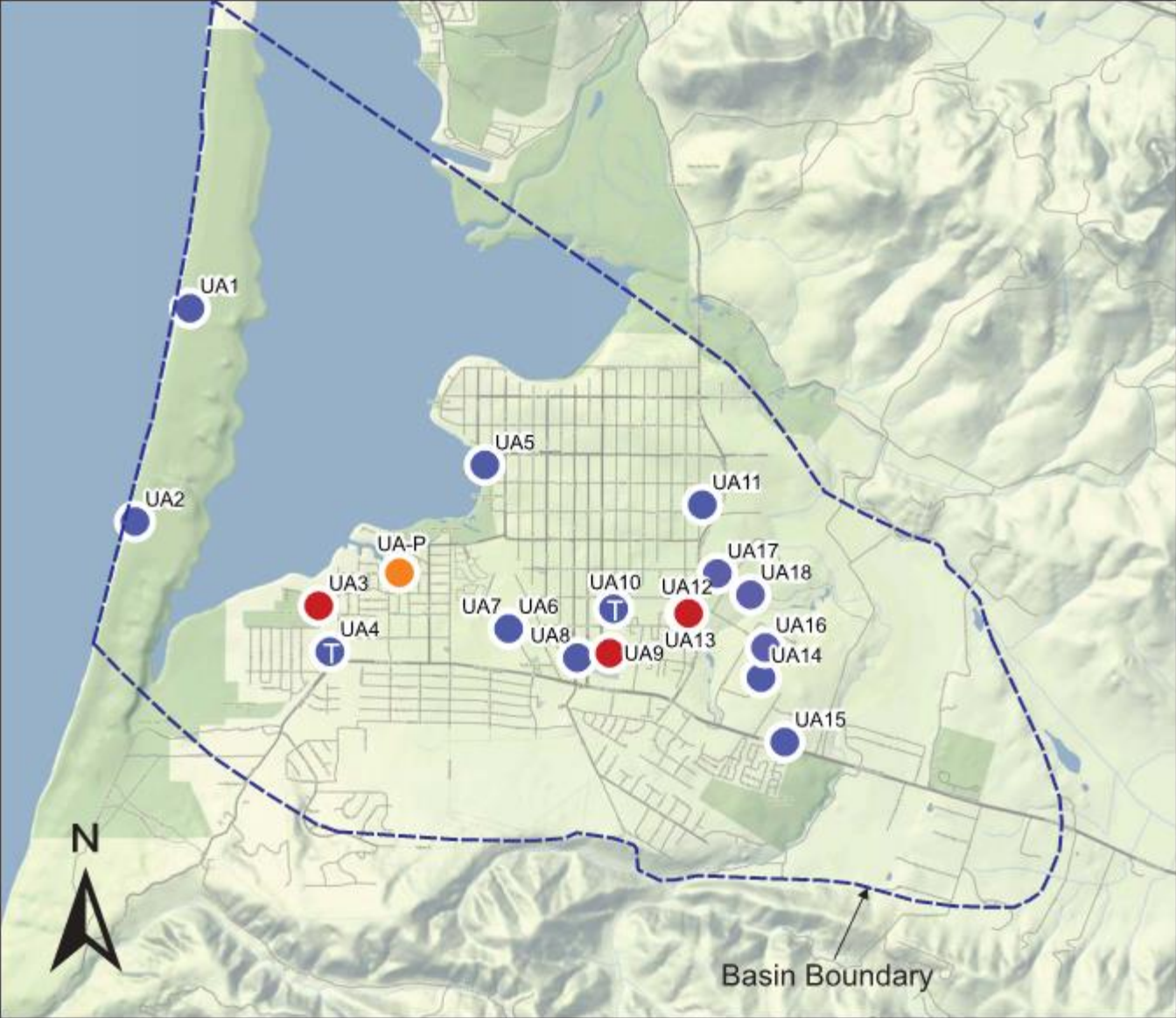
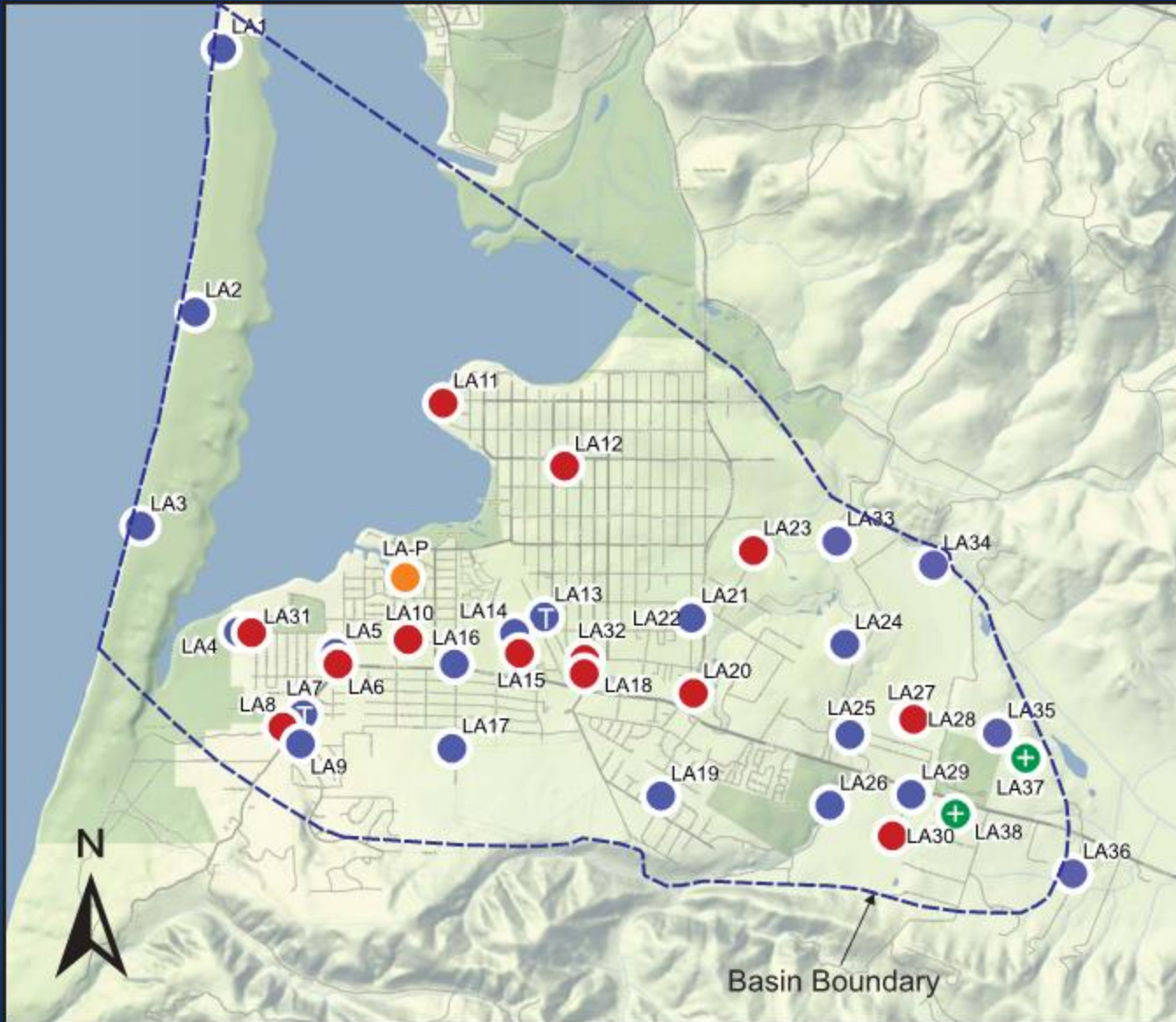


**Los Osos Basin
Management Committee
Draft Annual Report for
2018**

Upper Aquifer Monitoring Wells

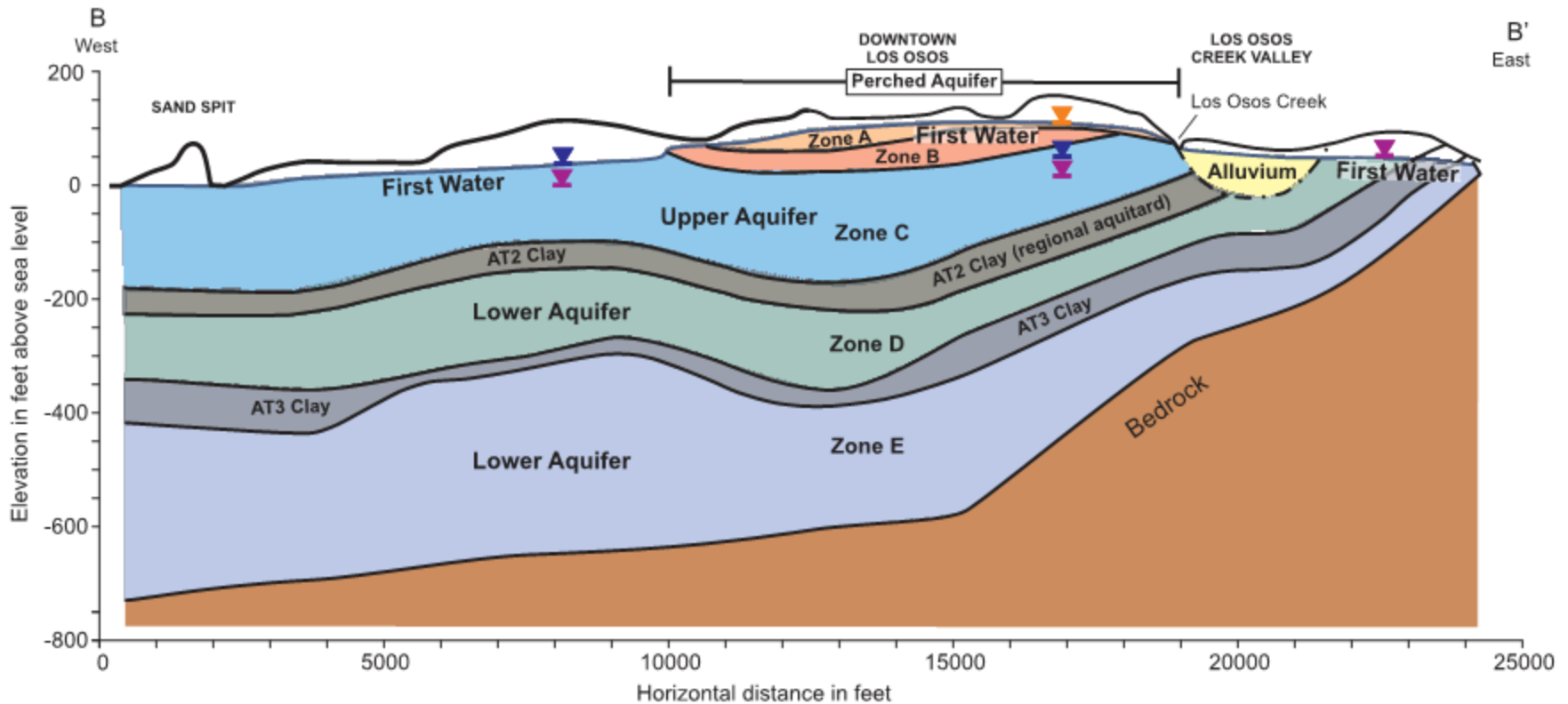


Lower Aquifer Monitoring Wells

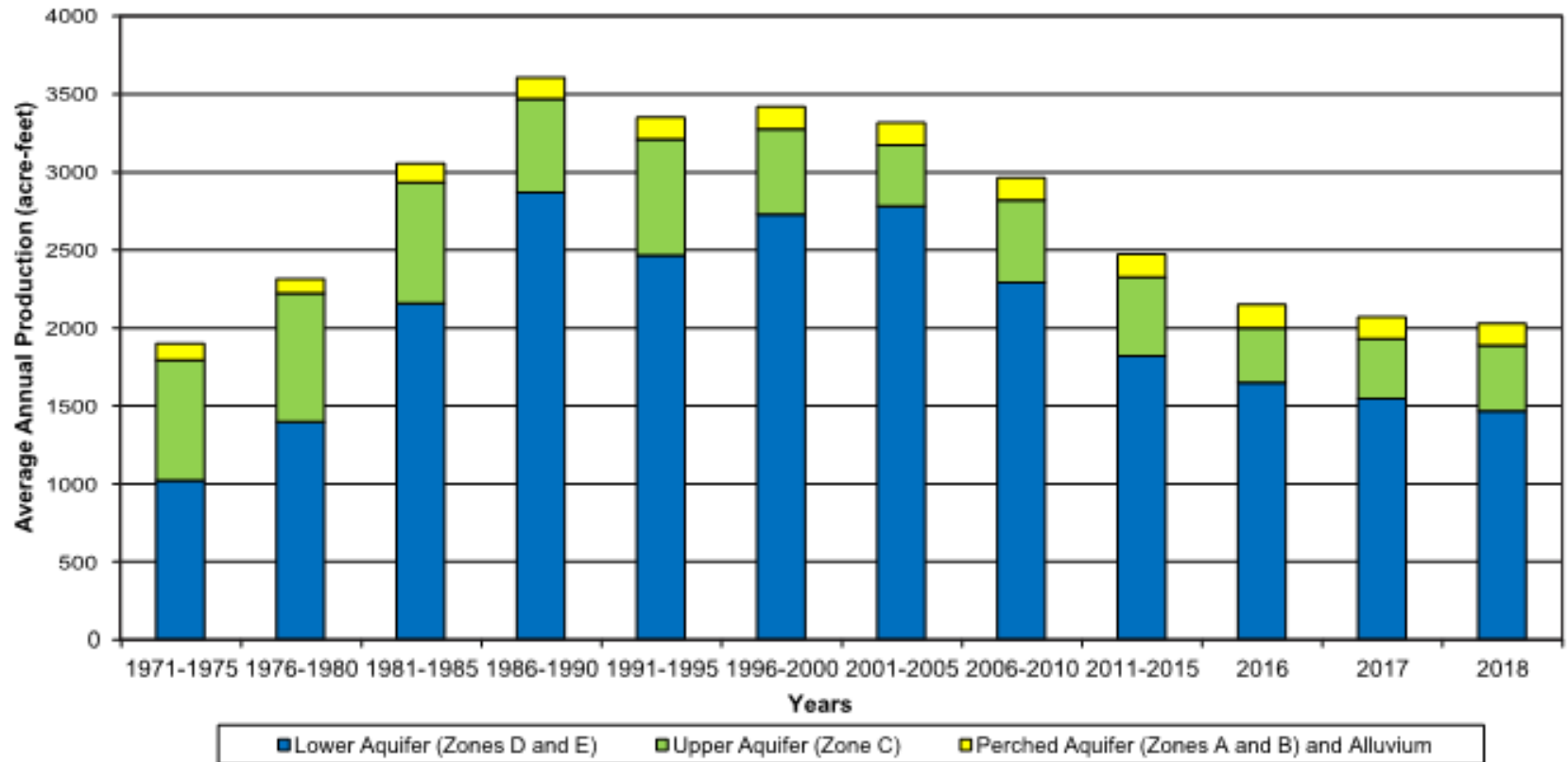


Basin Cross Section

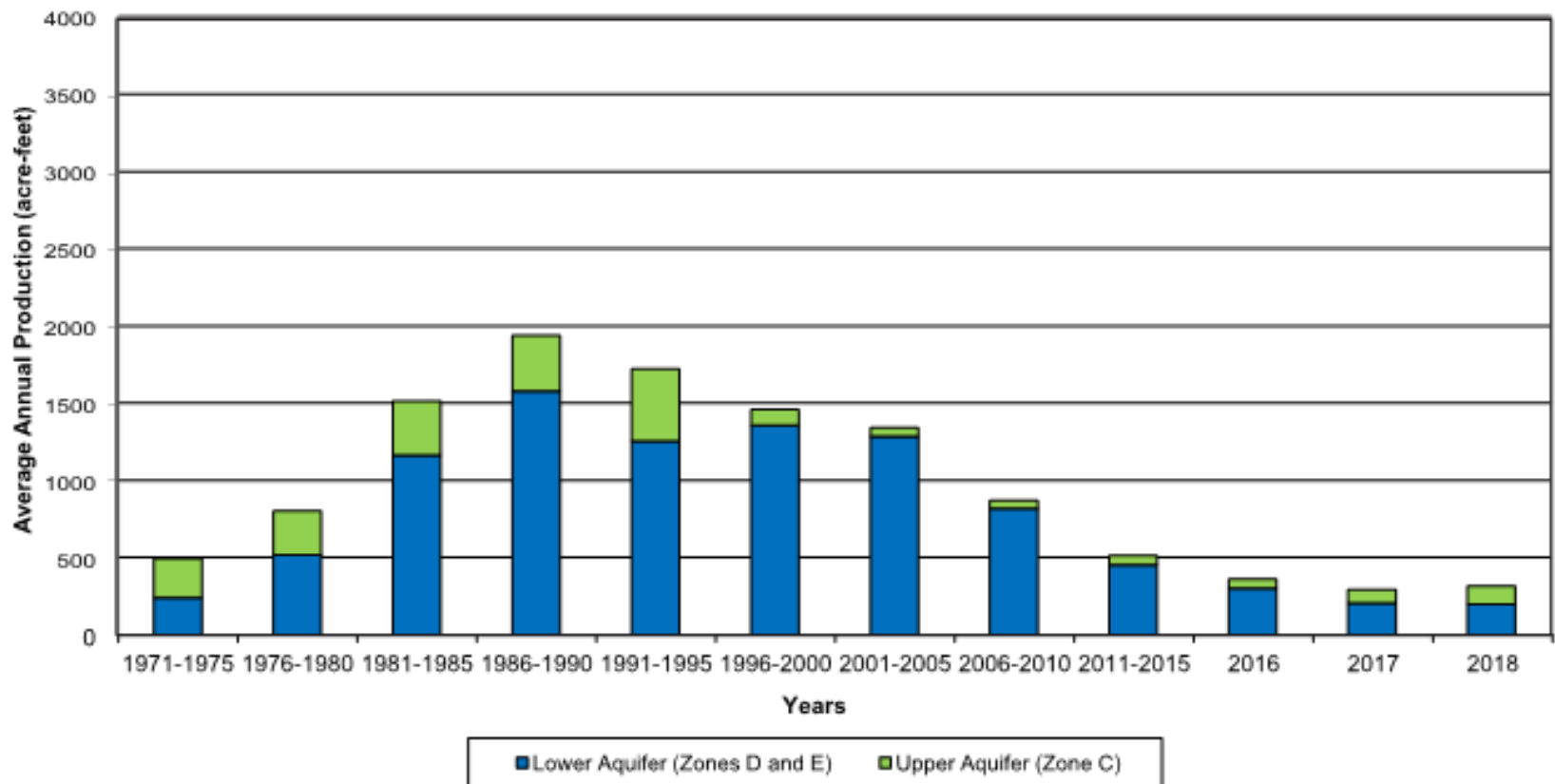
4



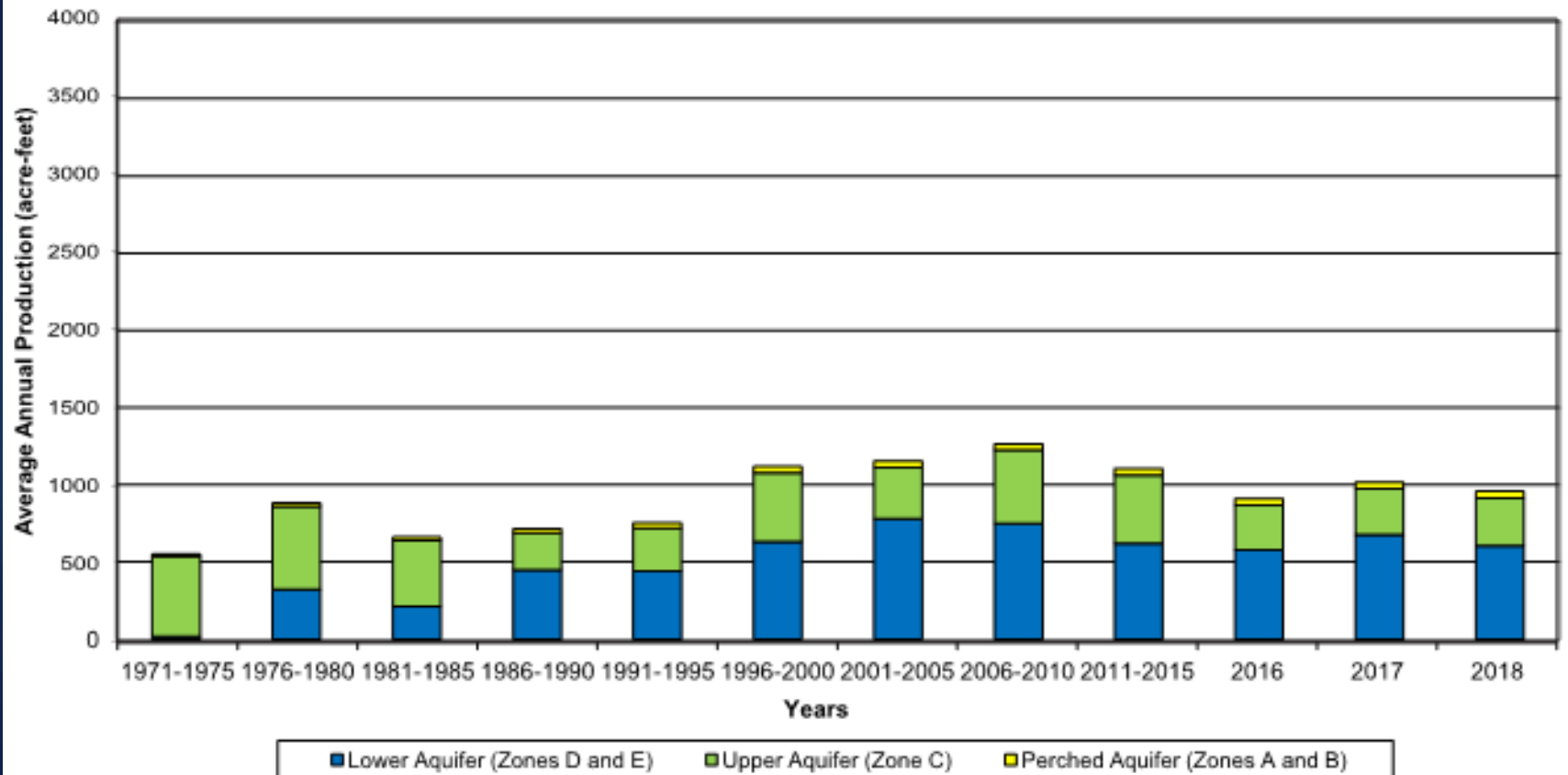
BASIN TOTAL
1971-2018 Groundwater Production
Los Osos Groundwater Basin



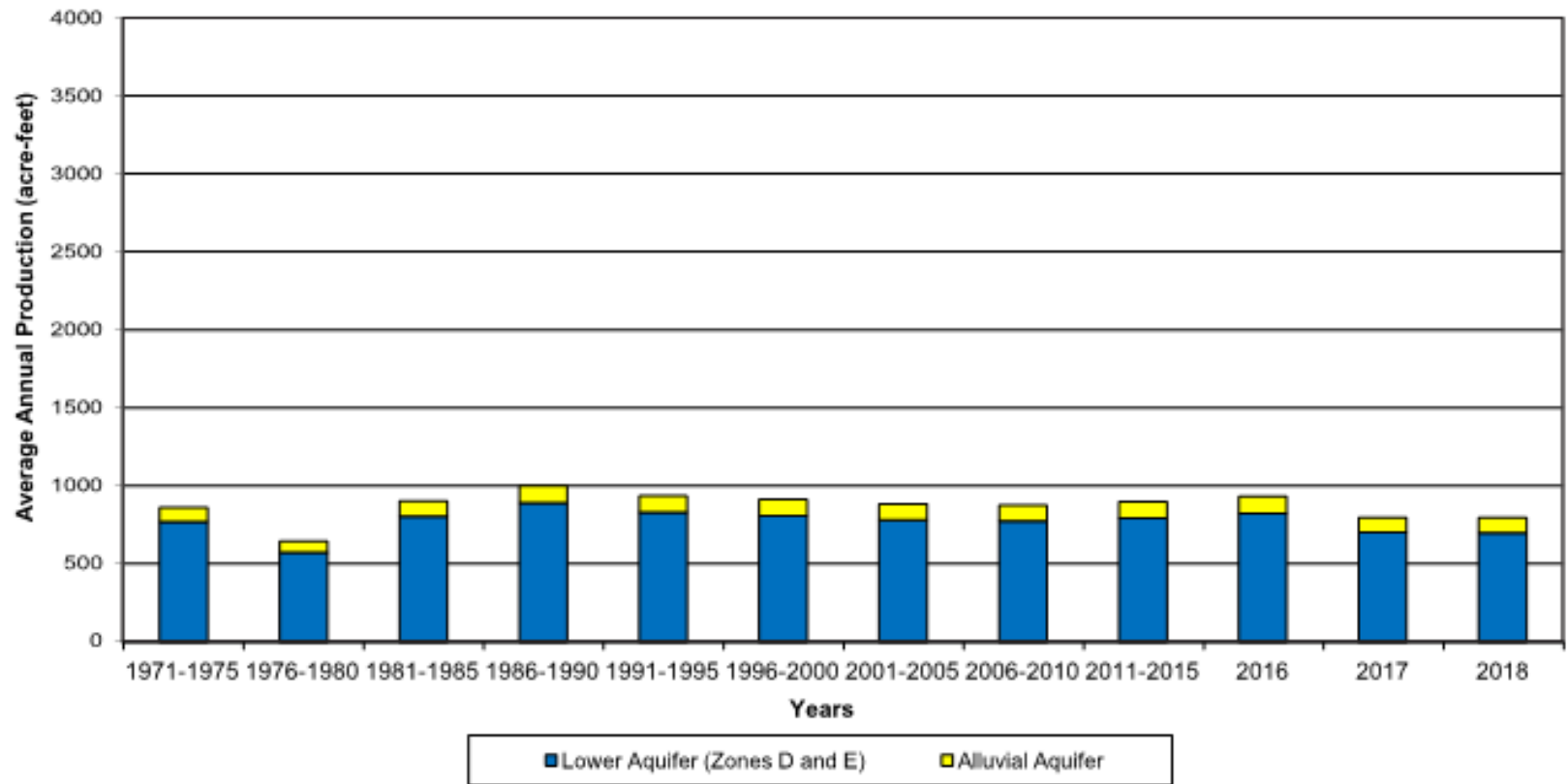
WESTERN AREA
1971-2018 Groundwater Production
Los Osos Groundwater Basin



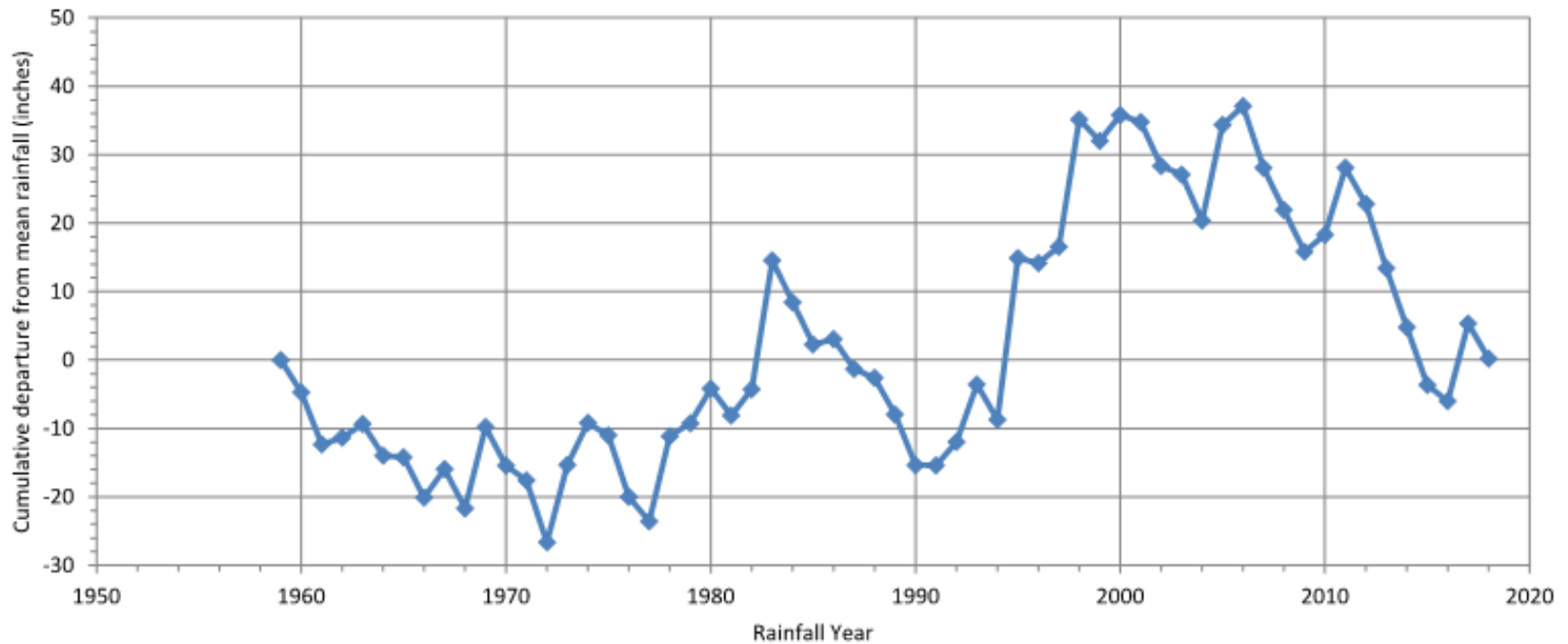
CENTRAL AREA
1971-2018 Groundwater Production
Los Osos Groundwater Basin



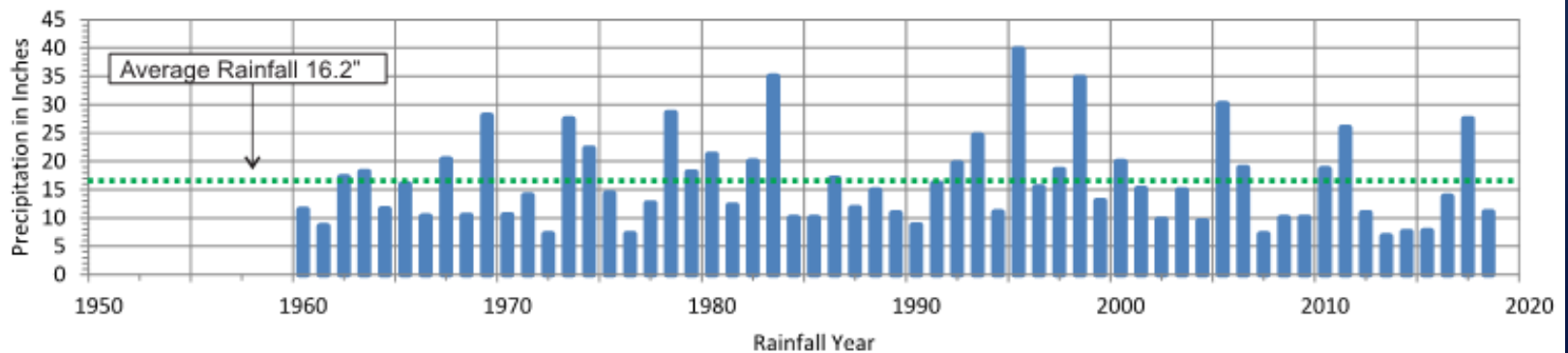
EASTERN AREA
1971-2018 Groundwater Production
Los Osos Groundwater Basin



Cumulative Departure from Mean Rainfall Morro Bay Fire Department 1959-2018

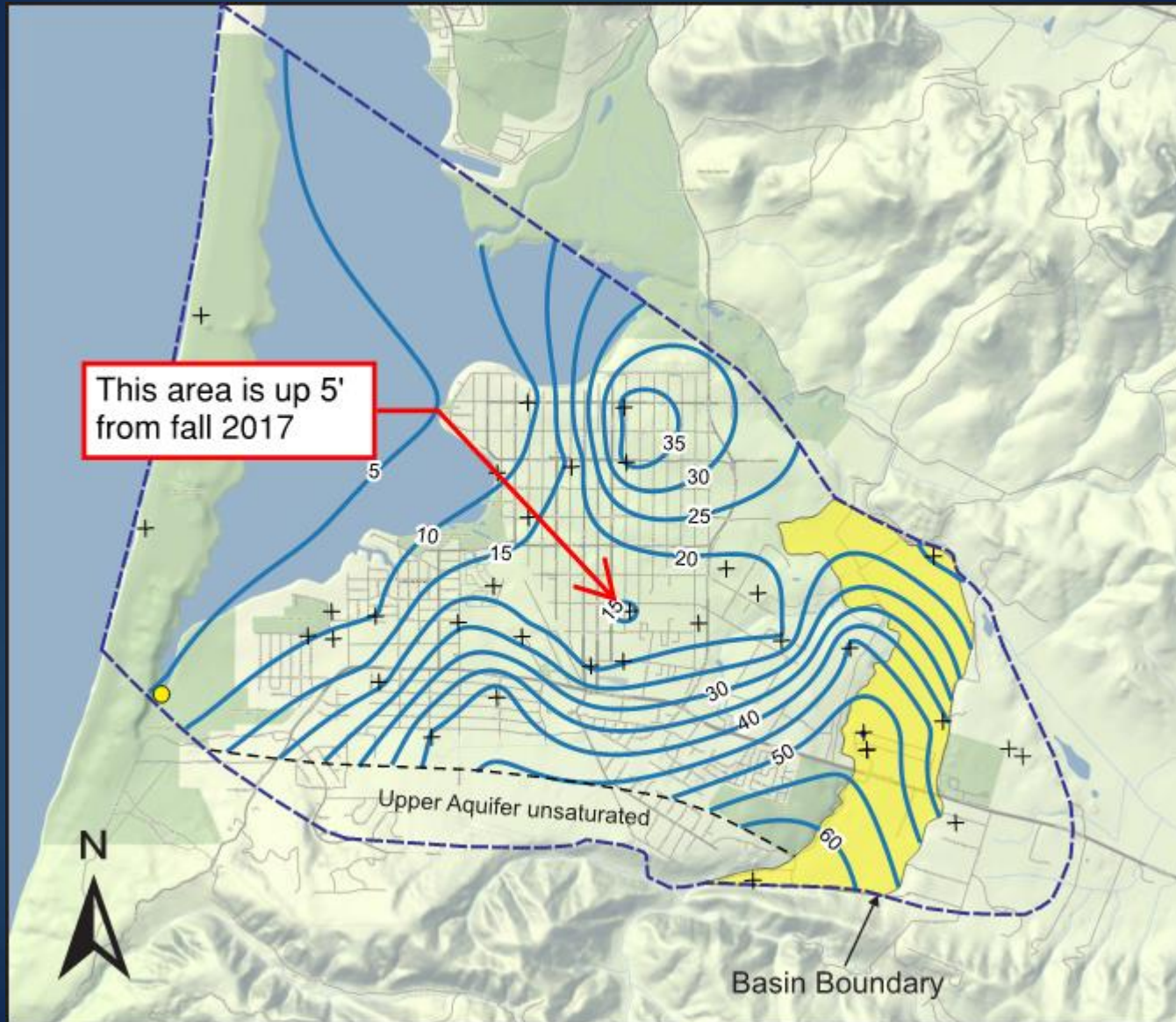


Rainfall per Water Year Morro Bay Fire Department

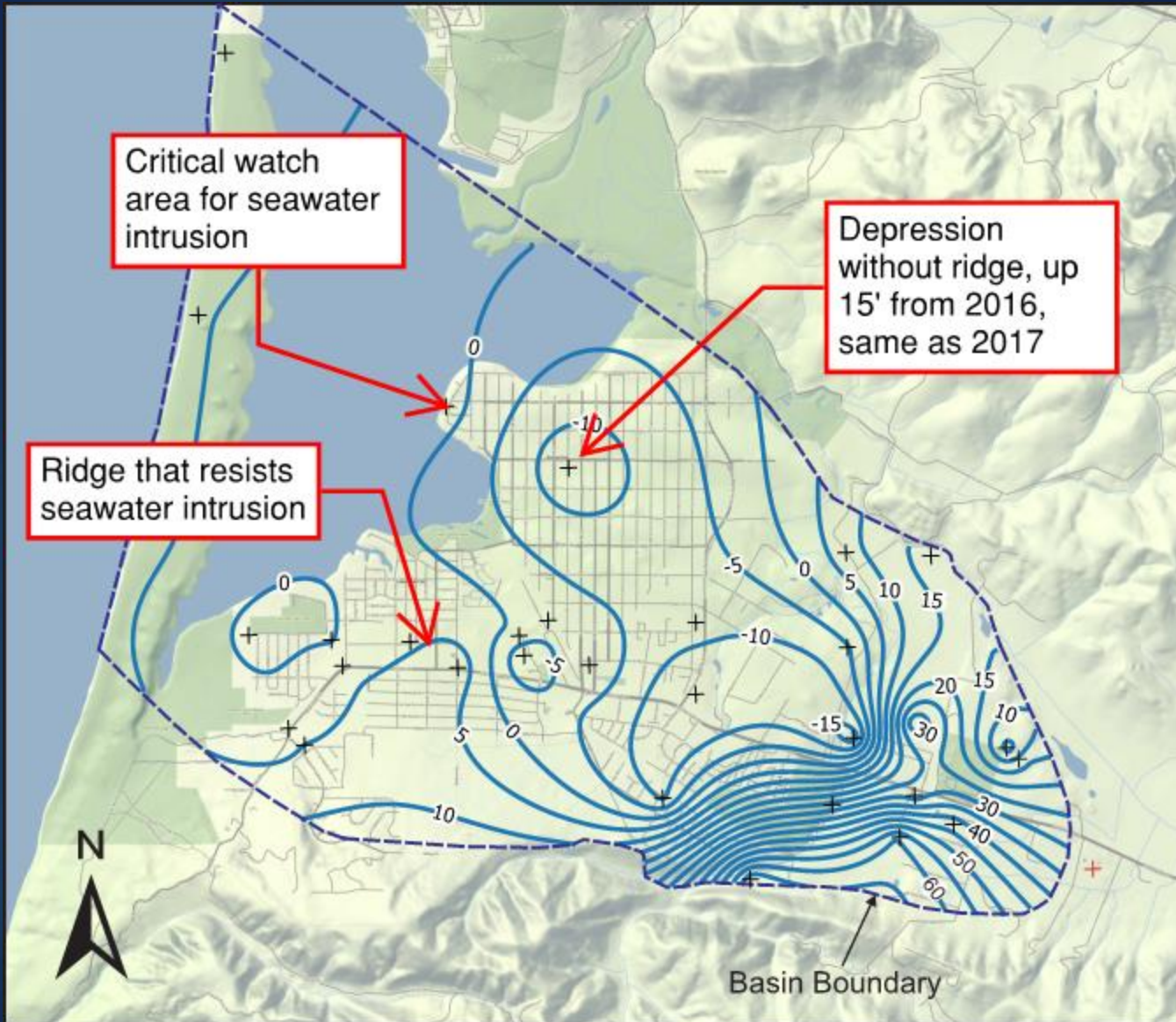


Fall Upper Aquifer Contours

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Fall Lower Aquifer Contours



Seawater Front

12

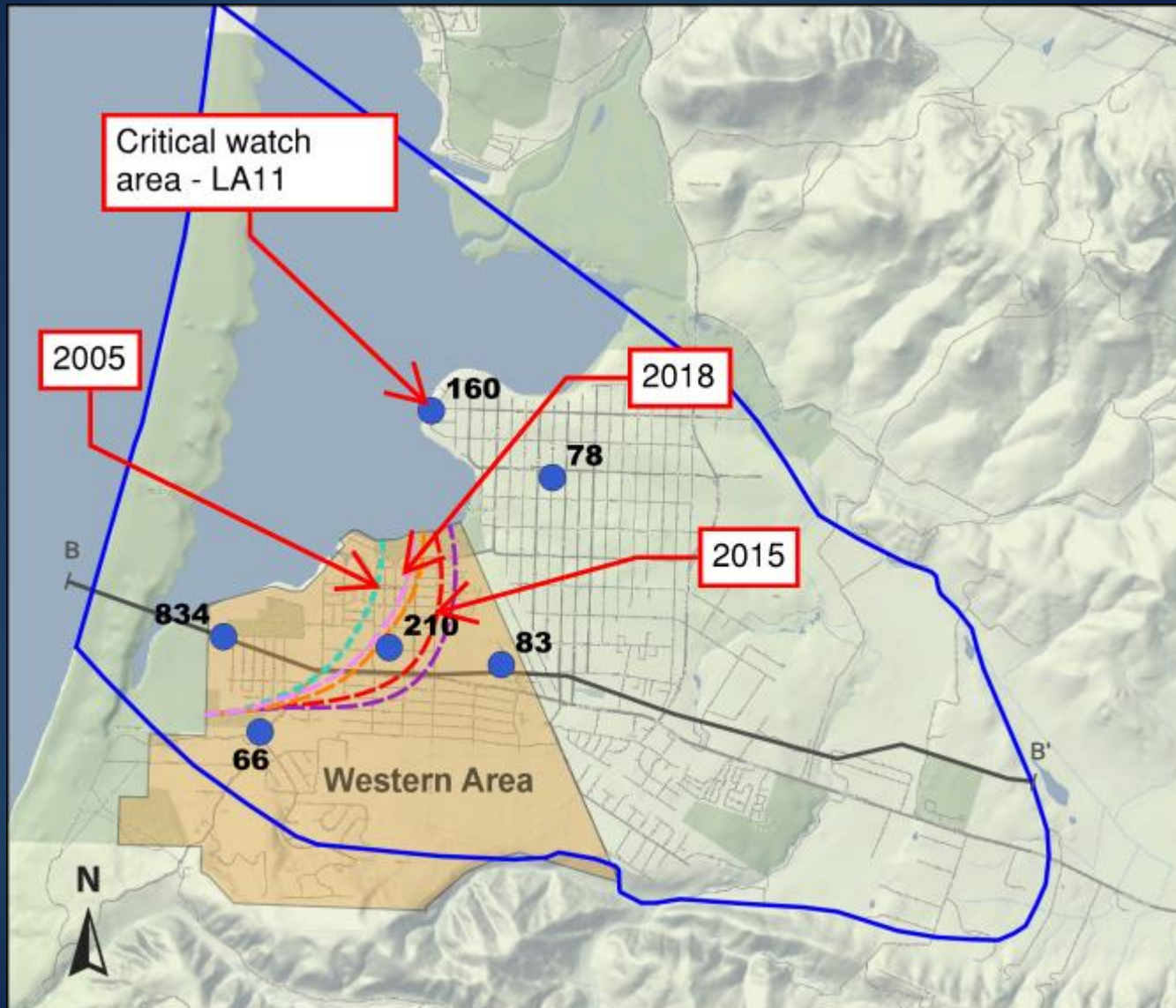


Table 19. Change in Storage Spring 2017 to Spring 2018 (<250 mg/L Chloride)

Basin Area	Aquifer	Zone	Spring 2017 ¹		Change from Spring 2017 to Spring 2018	
			Total	Above Sea Level	Total	Above Sea Level
			ACRE-FEET			
Western and Central	Perched	A, B	6,000	6,000	-200	-200
	Upper	C	28,500	6,600	100	100
Western	Lower ²	D ³	13,000	<10	1,200	0
Central	Lower ²	D, E	55,100	<10	0	0
Eastern	Alluvial and Lower	Alluvial, D, E	19,200	4,700	-200	-200
TOTAL			121,800	17,300	900	-300

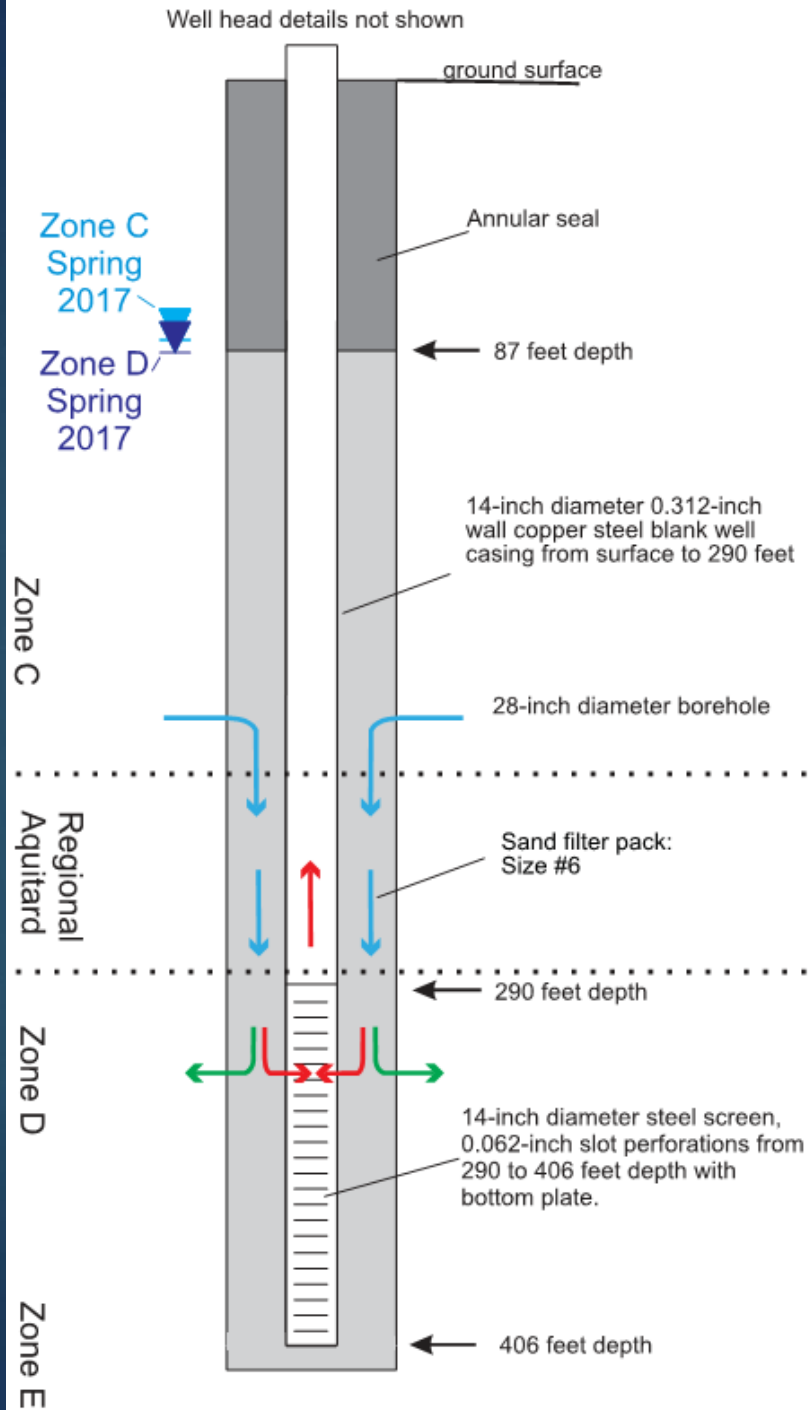
Basin Metrics

- Basin Yield Metric (BYM) – Production divided by Sustainable Yield x 100
- At 100, production matches yield
- BMC goal is a BYM of 80
- Current estimated yield with existing infrastructure = 2,760 acre feet per year (AFY)
- 2018 value is 74

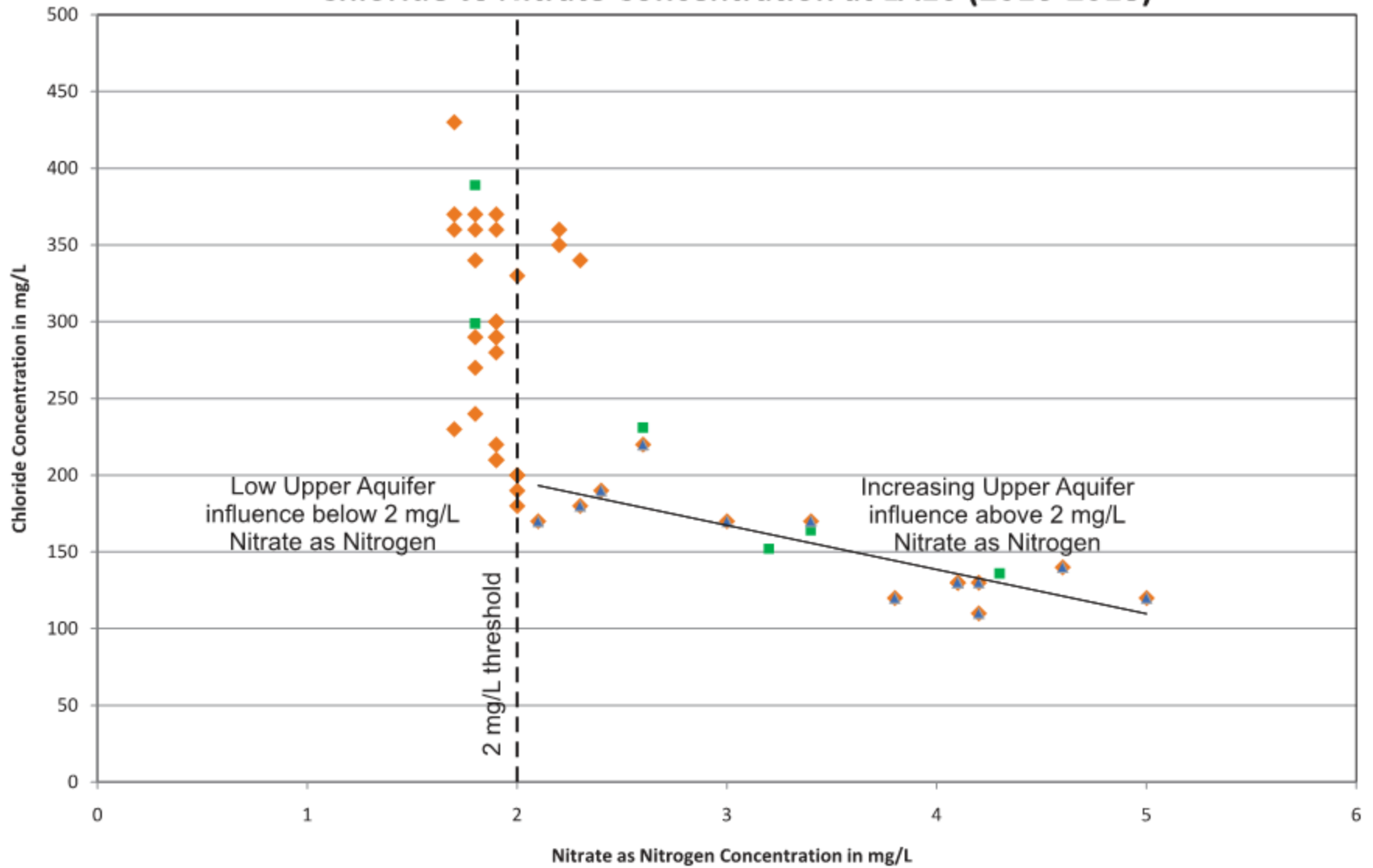
Basin Metrics

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- In order to be successful, wells that make up BYM should match modeled results
- Baywood area production must be closely watched to address seawater front in Pasadena area



Chloride vs Nitrate Concentration at LA10 (2016-2018)

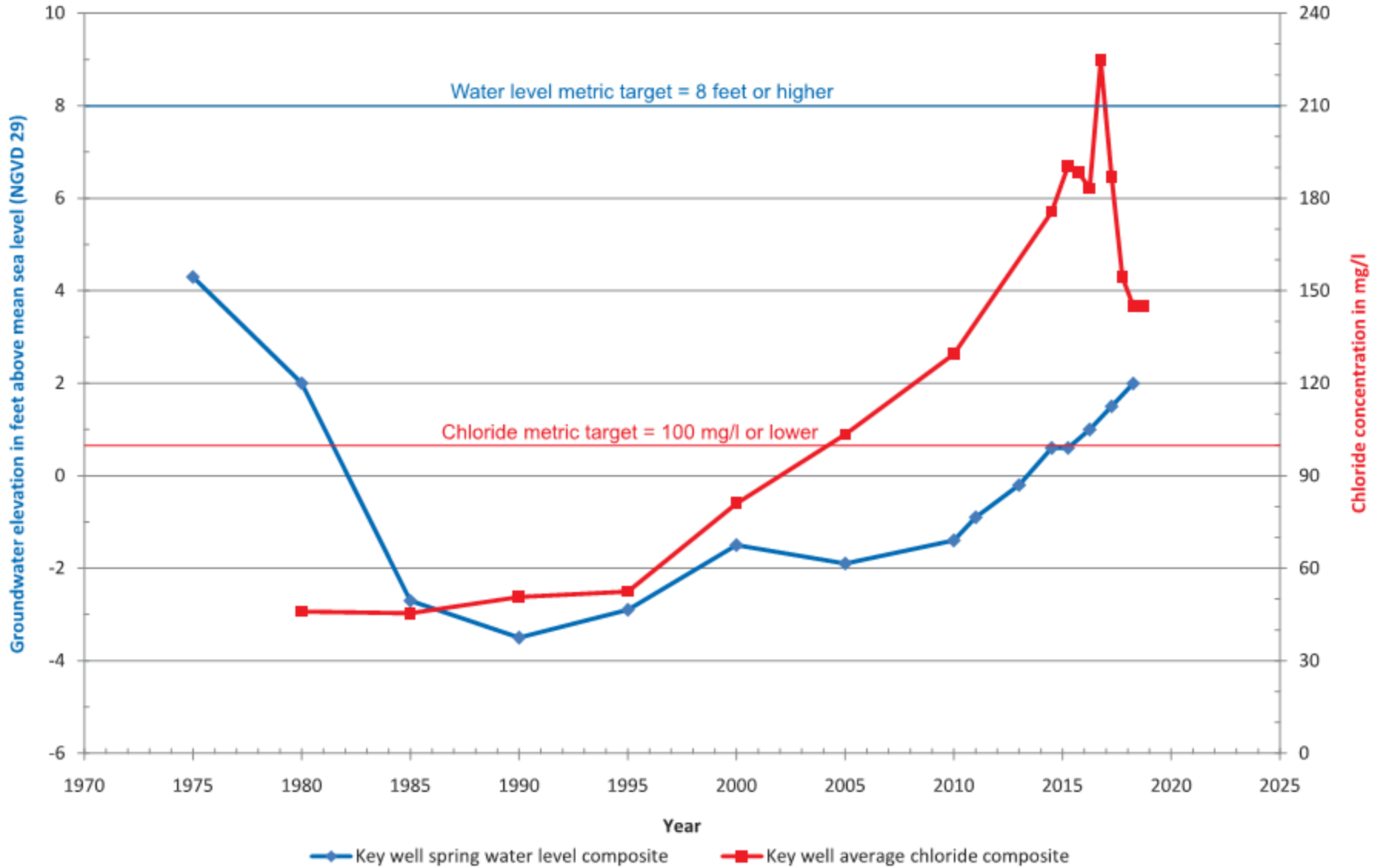


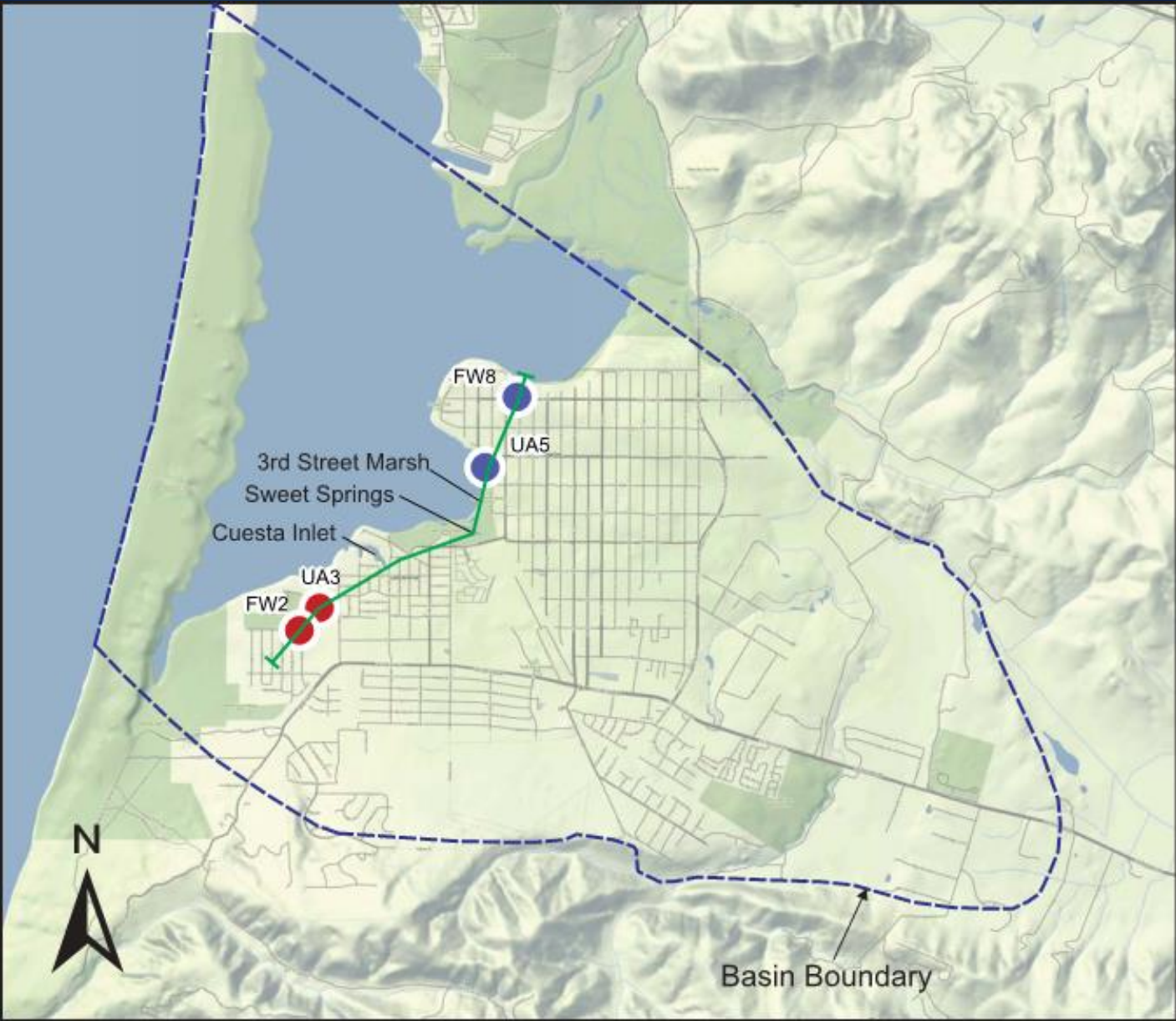
Bore Hole Influence

18

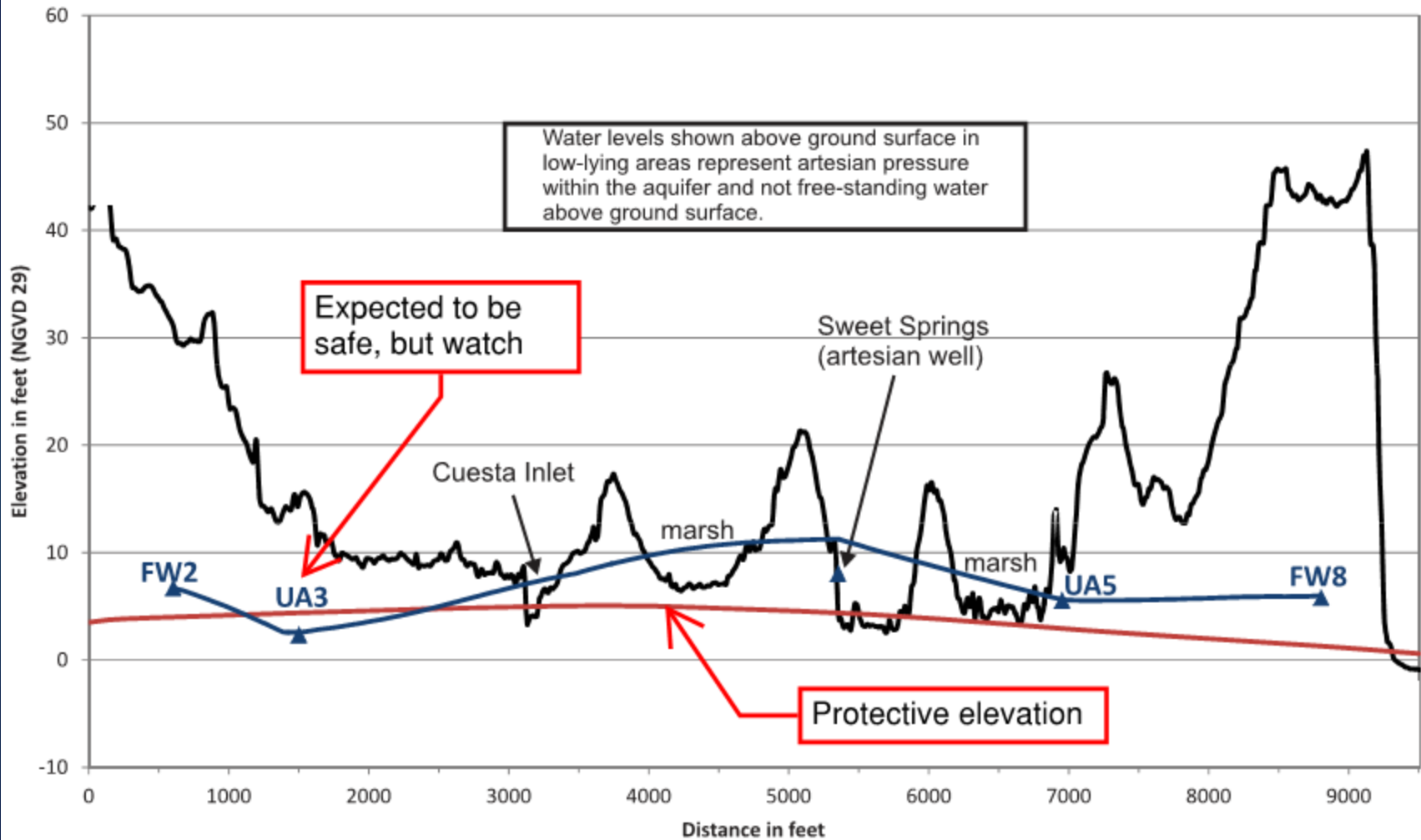
- Production of 2 acre-foot per month addresses influence from upper aquifer
- Important balance between reducing production to protect against SWI, versus minimum production to accommodate sampling
- Benefits of dedicated monitoring wells
- 2017 values corrected in revised metric chart

Chloride and Water Level Metric Lower Aquifer



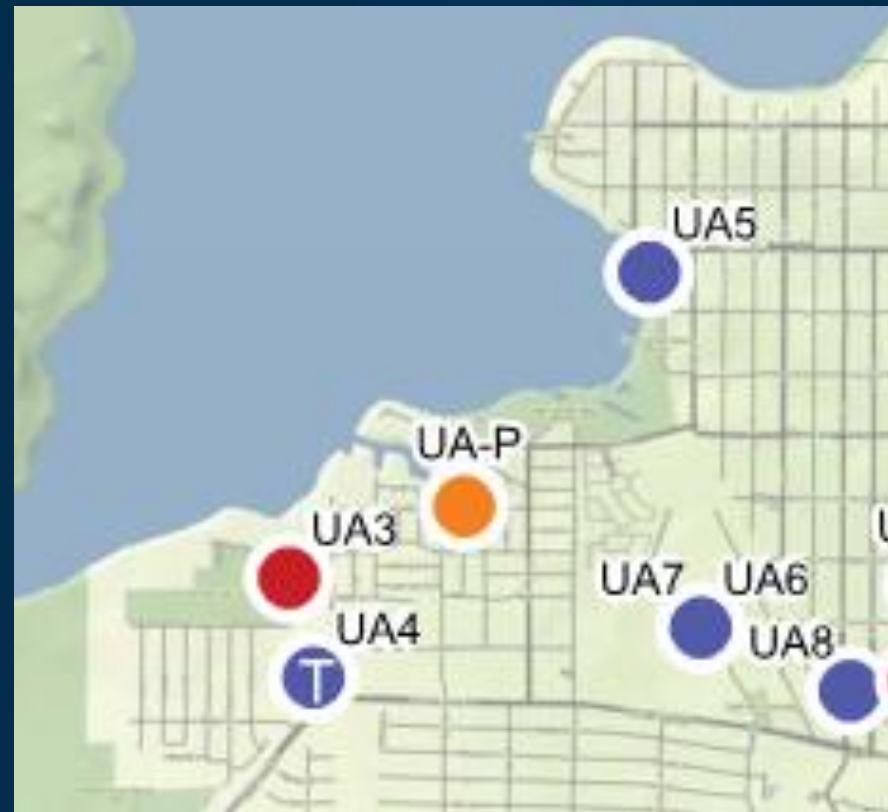


Upper Aquifer Water Level Profile



Next Steps

- Well head survey approved, results pending
- Drill new monitoring well in Cuesta by the Sea area
- Receive staff level input
- Refine chapter 10 for June meeting



Recommendations

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- Complete Basin Plan programs A and C as soon as possible
- Focus on central Baywood area risk as measured at LA11 (Pasadena)
- Address threat of nitrates in lower aquifer
- Continue to optimize use of recycled water
- Consider special meeting at end of June, only if needed