

Alta Irrigation District Area Management Zone Pilot Study

Steering Committee Meeting

Alta Irrigation District
APRIL 18, 2019



MEETING AGENDA

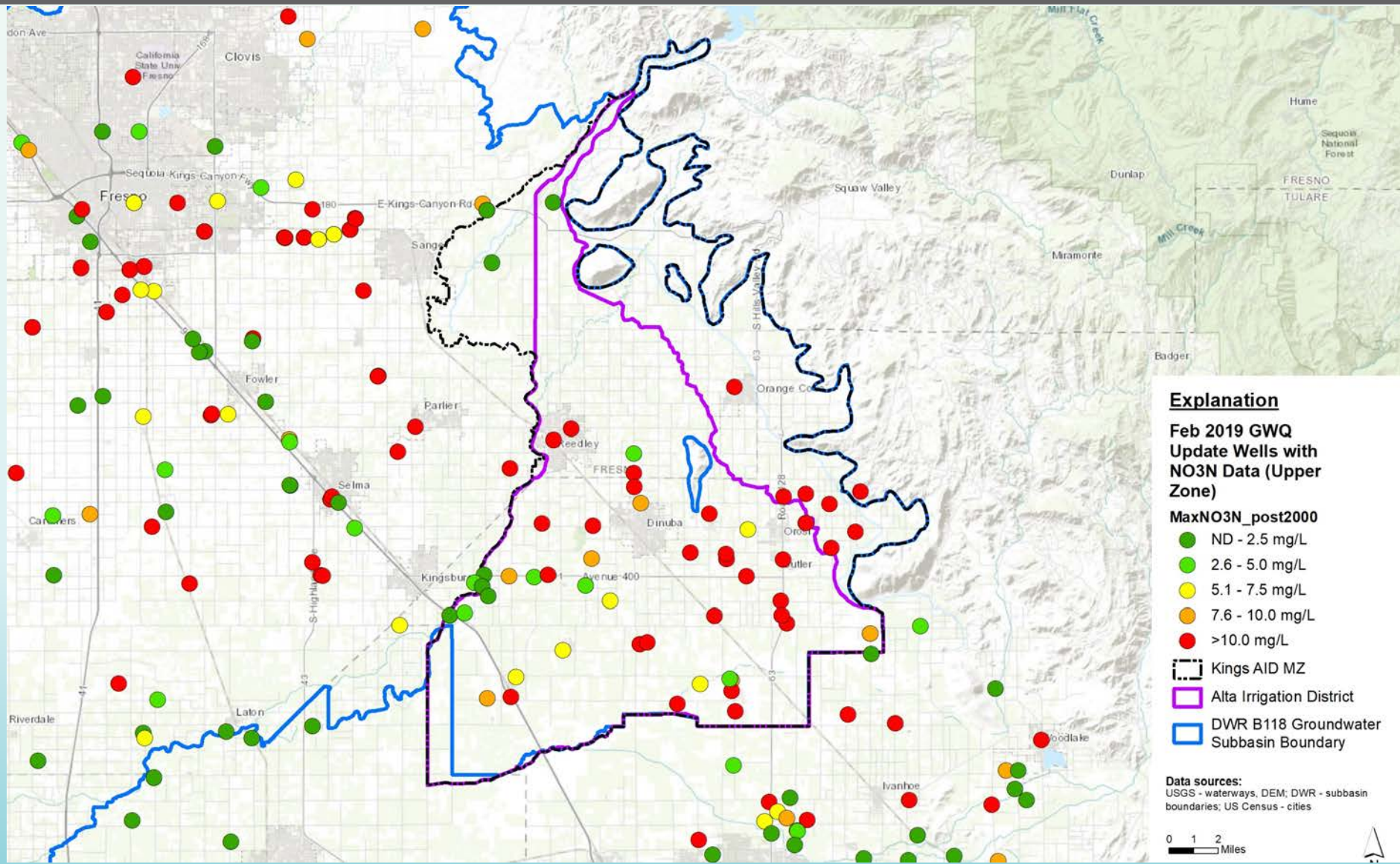
- Introductions/Agenda Review
- Status of State Board Approval of Basin Plan Amendment/
Nitrate Control Program Adoption Update
- Initial Groundwater Quality Assessment - Update
- Refinement of Areas with Potentially High Nitrate – Update
- Early Action Plan
- Identification of Permitted Dischargers in Kings River East/AID MZ
- Public Education & Outreach Opportunity
- Project Schedule
- Posting Pilot Study Materials
- Review Action Items
- Schedule Next Meeting



DATA ANALYSIS - UPDATE

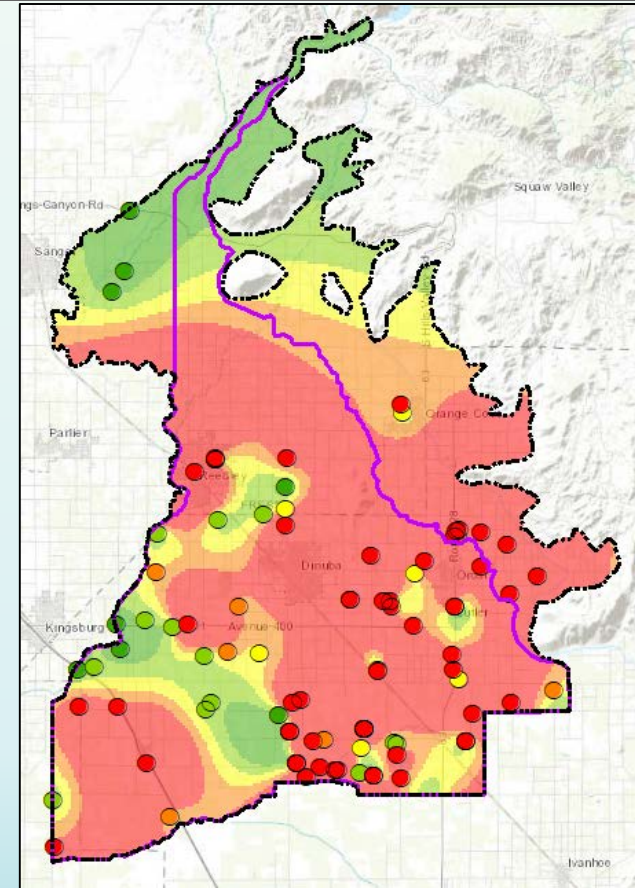
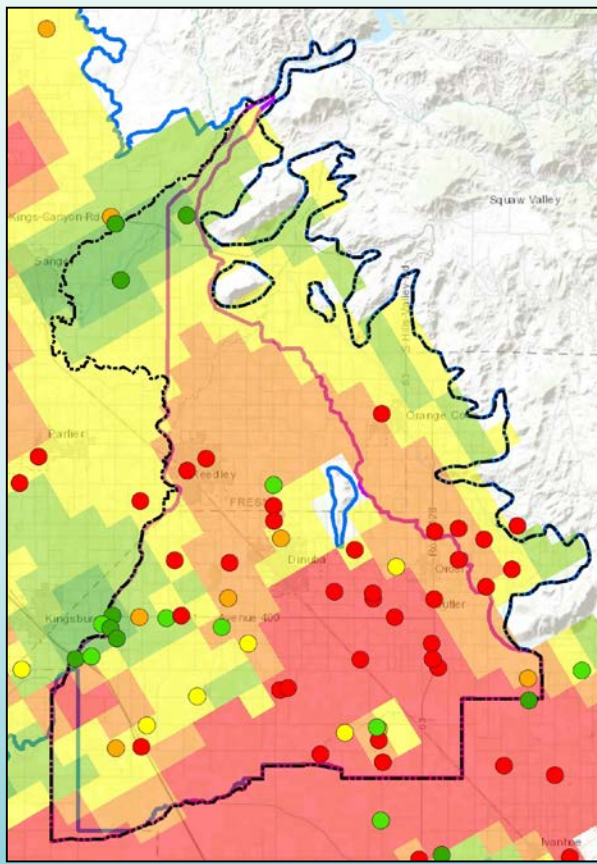
- Initial Groundwater Quality Assessment
- Wells Exceeding Nitrate Objective

PRELIMINARY UPDATED UPPER ZONE NITRATE (POST-2000 MAXIMUM)



NITRATE IN UPPER ZONE: UPDATED MAP

- Updated vs Original High Resolution CV-SALTS Upper Zone Nitrate Datasets
- Post-2000 average data

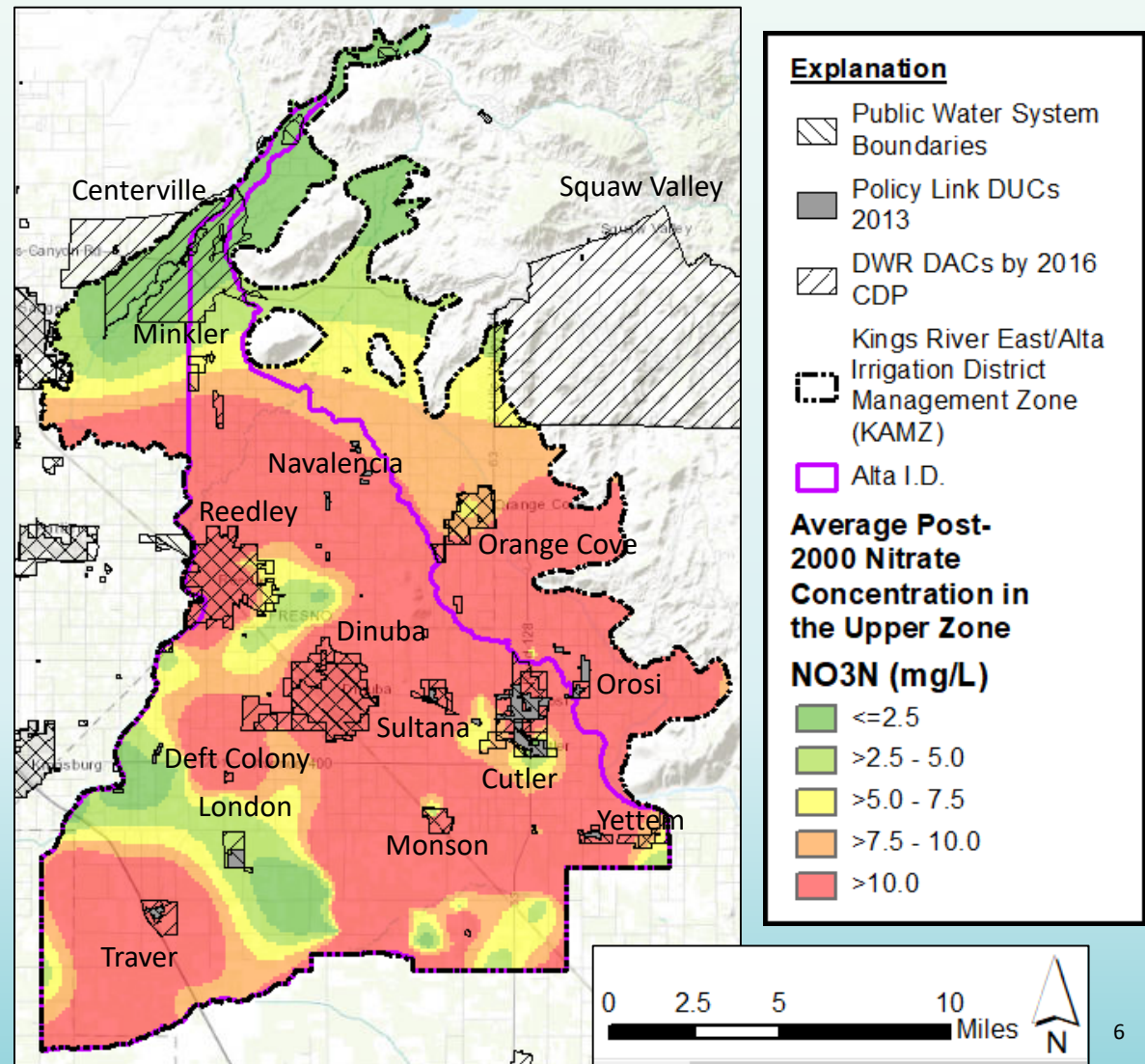


NITRATE IN UPPER ZONE: UPDATED MAP WITH PWS AND DAC/DUC BOUNDARIES

There are approximately 46 PWS, 17 DWR DACs, and 14 Policy Link DUCs in the MZ area.

Based on spatial location:

- 22 out of 46 PWSs,
- 12 out of 17 DACs, and
- 10 out of 14 DUCs overlay ambient Upper Zone NO₃-N >10 mg/L.

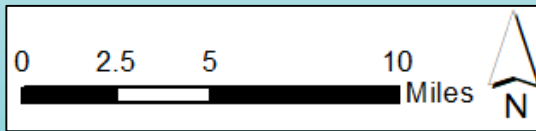
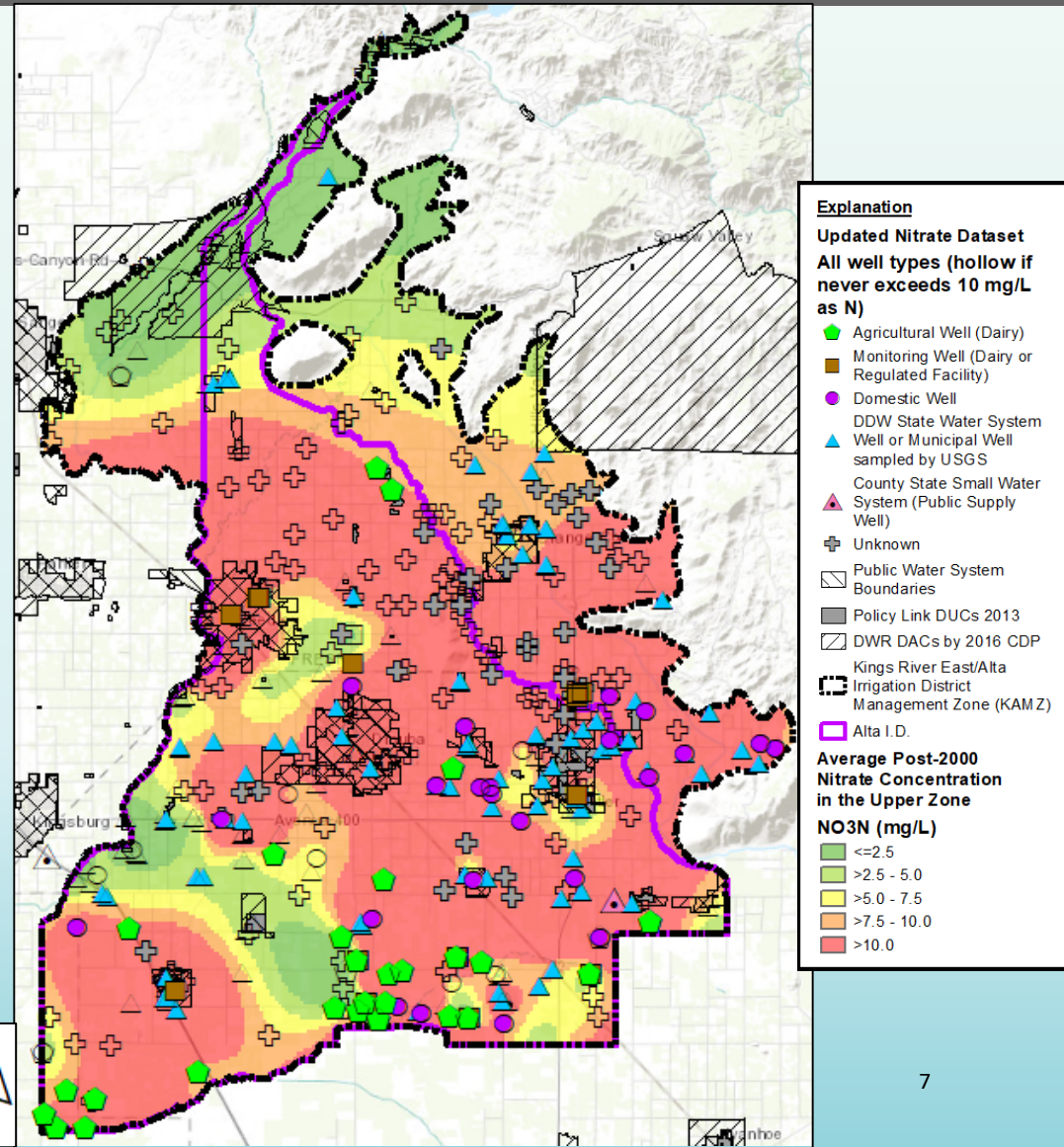


NITRATE IN UPPER ZONE: UPDATED MAP WITH WELLS THAT EXCEED NO₃-N MCL (10 MG/L)

Approximately 453 wells in the KAMZ have measured nitrate concentrations.

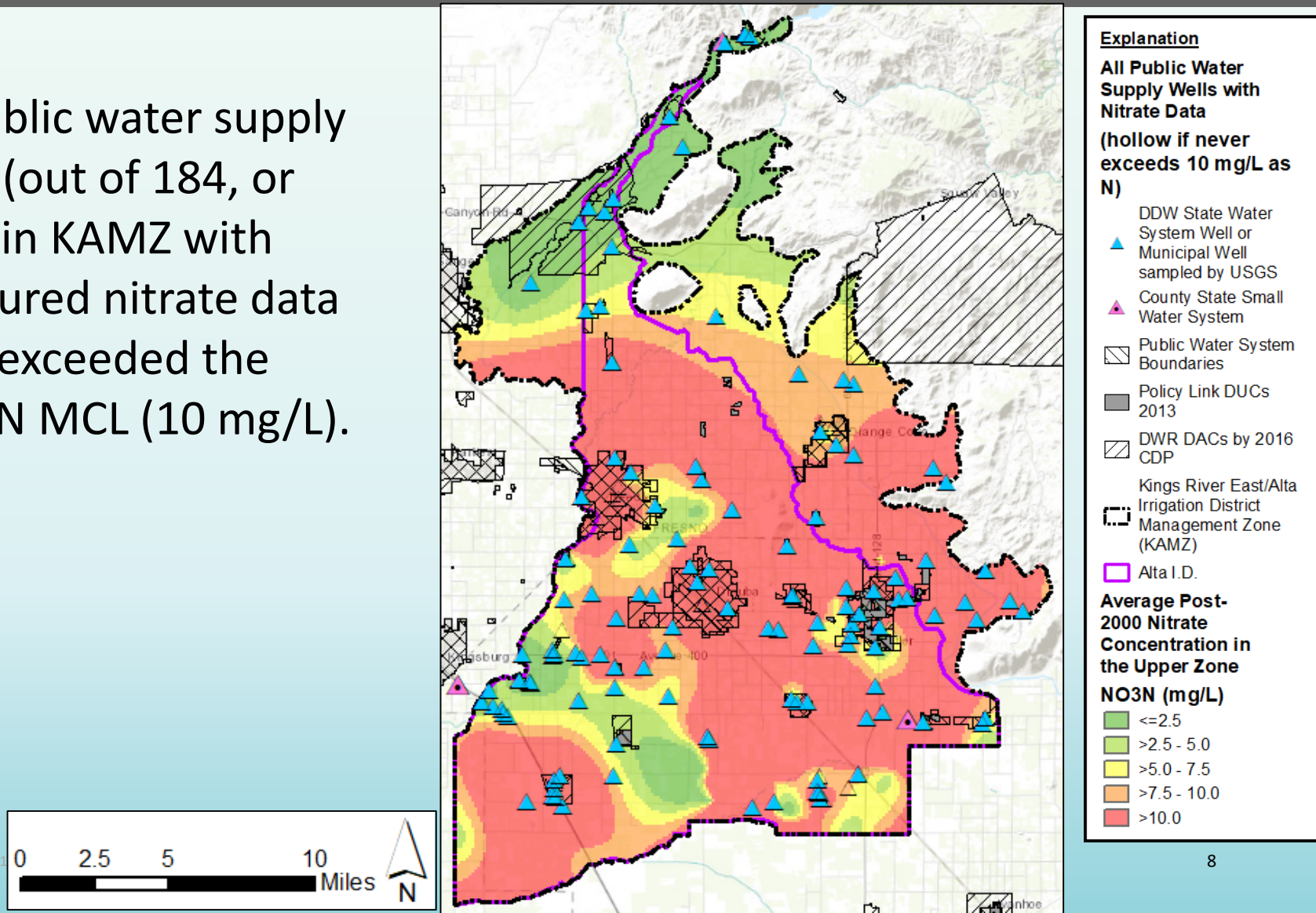
203 of 453 wells have exceeded the NO₃-N MCL (10 mg/L) in the KAMZ:

- 79 Public water supply wells (out of 181)
- 1 County State Small WS Public water supply wells (out of 3)
- 33 Domestic wells (out of 45)
- 27 Ag wells (out of 31)
- 29 MWs from dairy/regulated facilities (out of 42)
- 34 Unknown well types (out of 151)



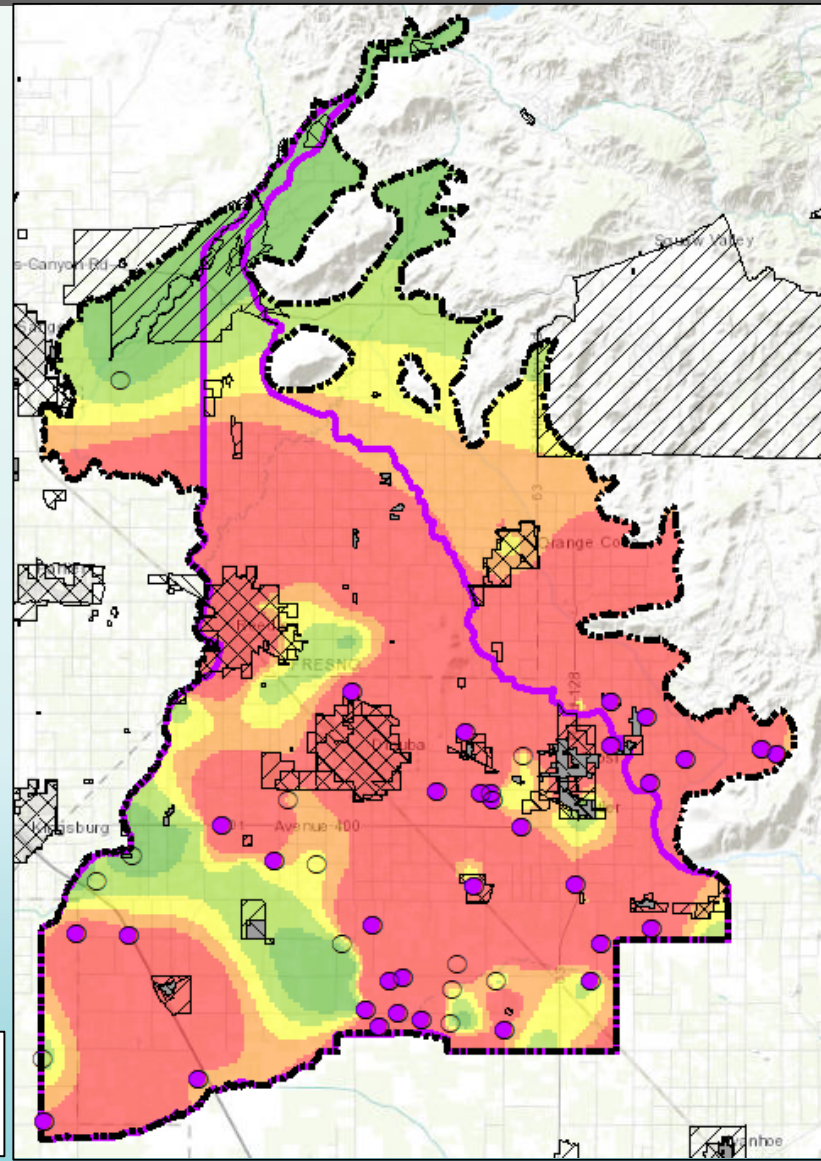
NITRATE IN UPPER ZONE: UPDATED MAP WITH PWS WELLS THAT EXCEED NO3-N MCL (10 MG/L)

80 public water supply wells (out of 184, or 43%) in KAMZ with measured nitrate data have exceeded the NO3-N MCL (10 mg/L).



NITRATE KRIGED WQ MAP UPDATE WITH SAMPLED DOMESTIC WELLS THAT EXCEED THE MCL (10 MG/L AS N)

33 Domestic wells (out of 45, or 73%) in the KAMZ with measured nitrate data have exceeded the NO₃-N MCL (10 mg/L).



Explanation

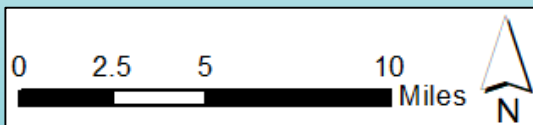
All Domestic Wells with Nitrate Data (hollow if never exceeds 10 mg/L as N)

- Domestic Well
- Public Water System Boundaries
- Policy Link DUCs 2013
- DWR DACs by 2016 CDP
- Kings River East/Alta
- Irrigation District Management Zone (KAMZ)
- Alta I.D.

Average Post-2000 Nitrate Concentration in the Upper Zone

NO₃N (mg/L)

- <=2.5
- >2.5 - 5.0
- >5.0 - 7.5
- >7.5 - 10.0
- >10.0



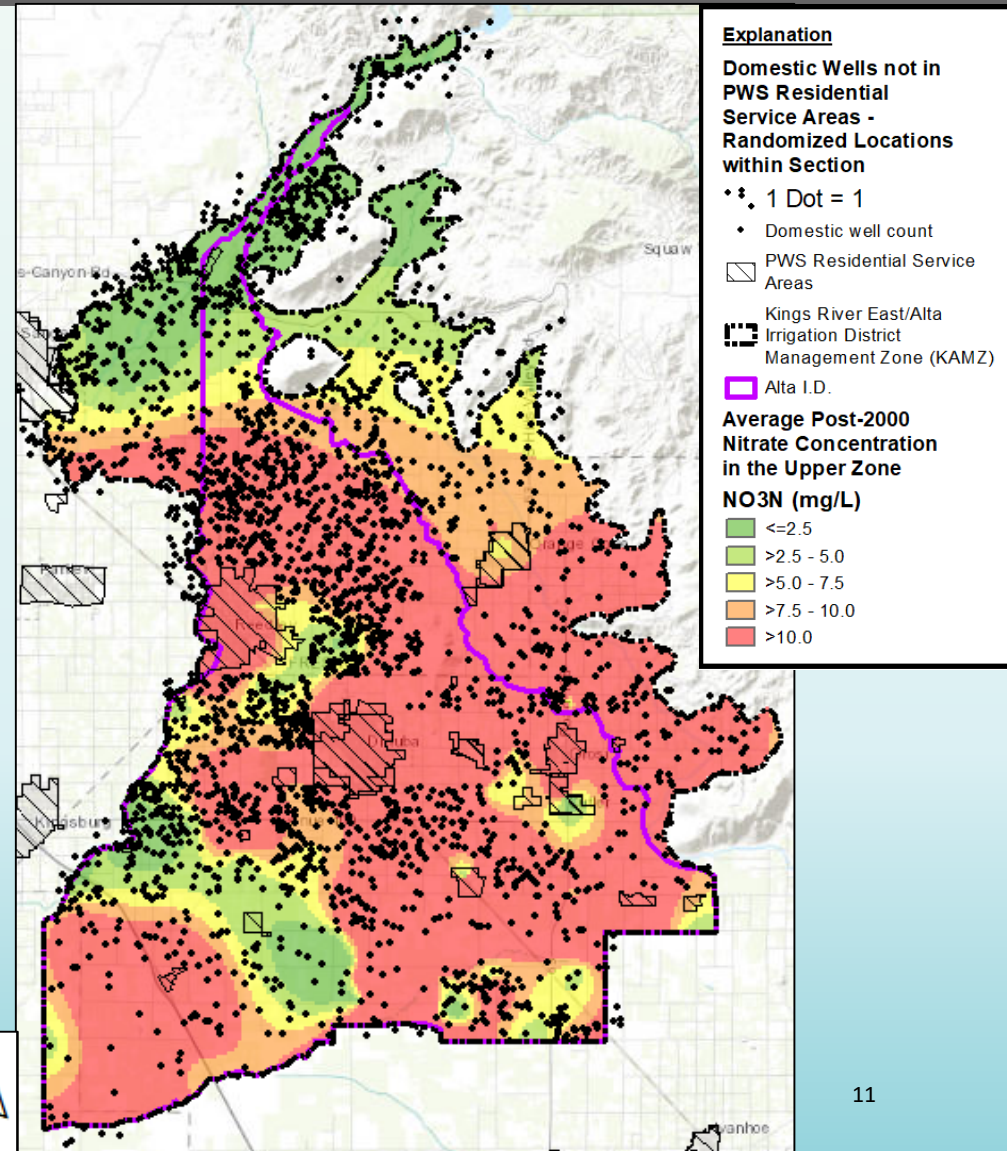
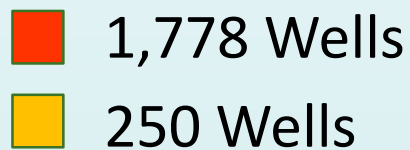


EARLY ACTION PLAN

- Process to Identify Residents with Impacted Domestic Wells
- Discuss Other EAP Elements

INTERSECTION OF PUBLIC WATER SUPPLY SERVICE AREAS, APPROXIMATE DOMESTIC WELL LOCATIONS AND MAPPED ELEVATED NITRATE IN UPPER ZONE DATASETS

Estimated number of Domestic wells located in areas where $\text{NO}_3\text{-N}$ concentrations (outside of PWS service areas) appear to be elevated

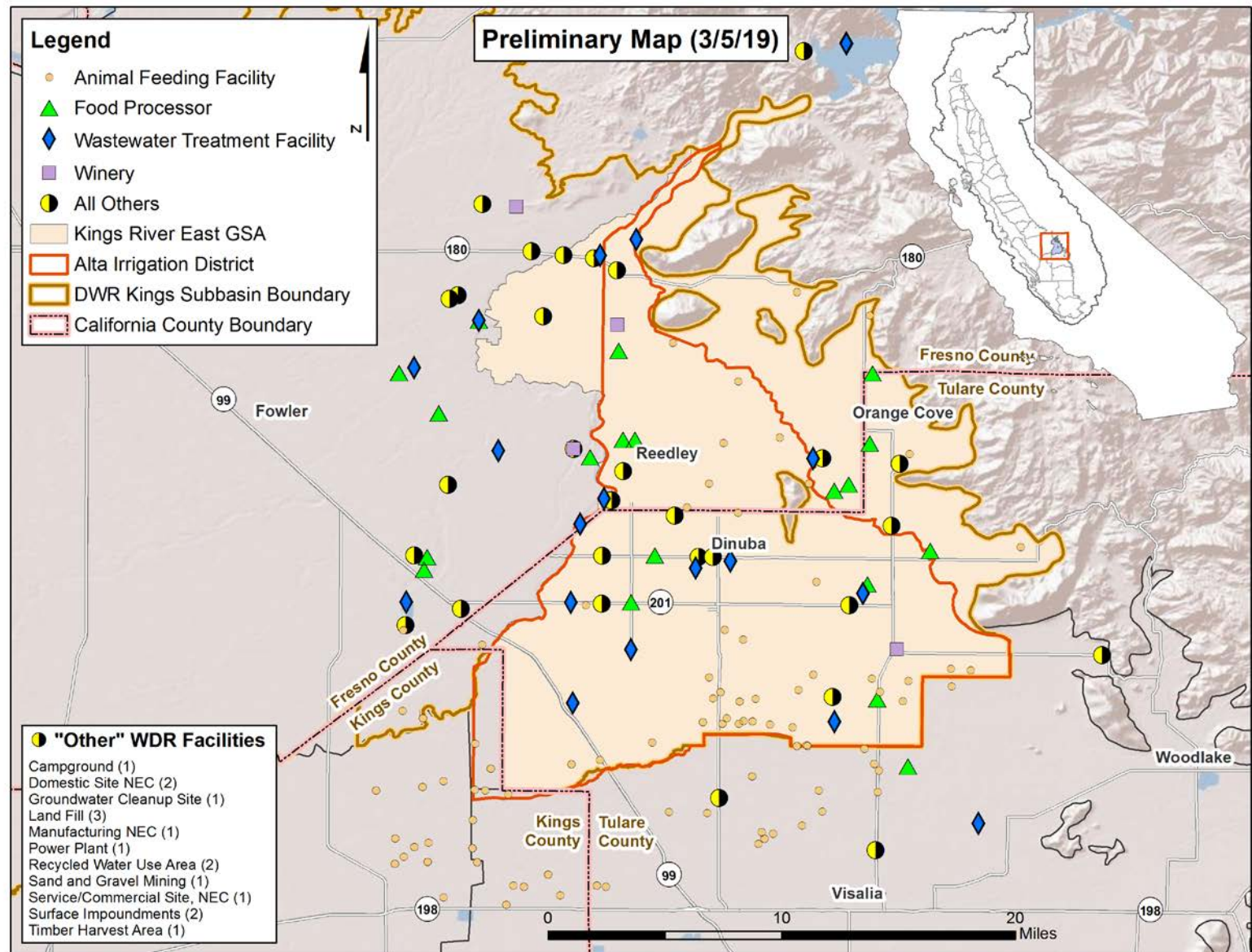




IDENTIFICATION OF PERMITTED DISCHARGERS

- Updated List
- Outreach Efforts
- Identification of Nitrate Management Practices

LOCATION OF KEY DISCHARGERS



PUBLIC EDUCATION & OUTREACH OPPORTUNITY

- Overview of Related PEOC Efforts
- Discuss Potential Outreach Materials for MZ





PROJECT SCHEDULE

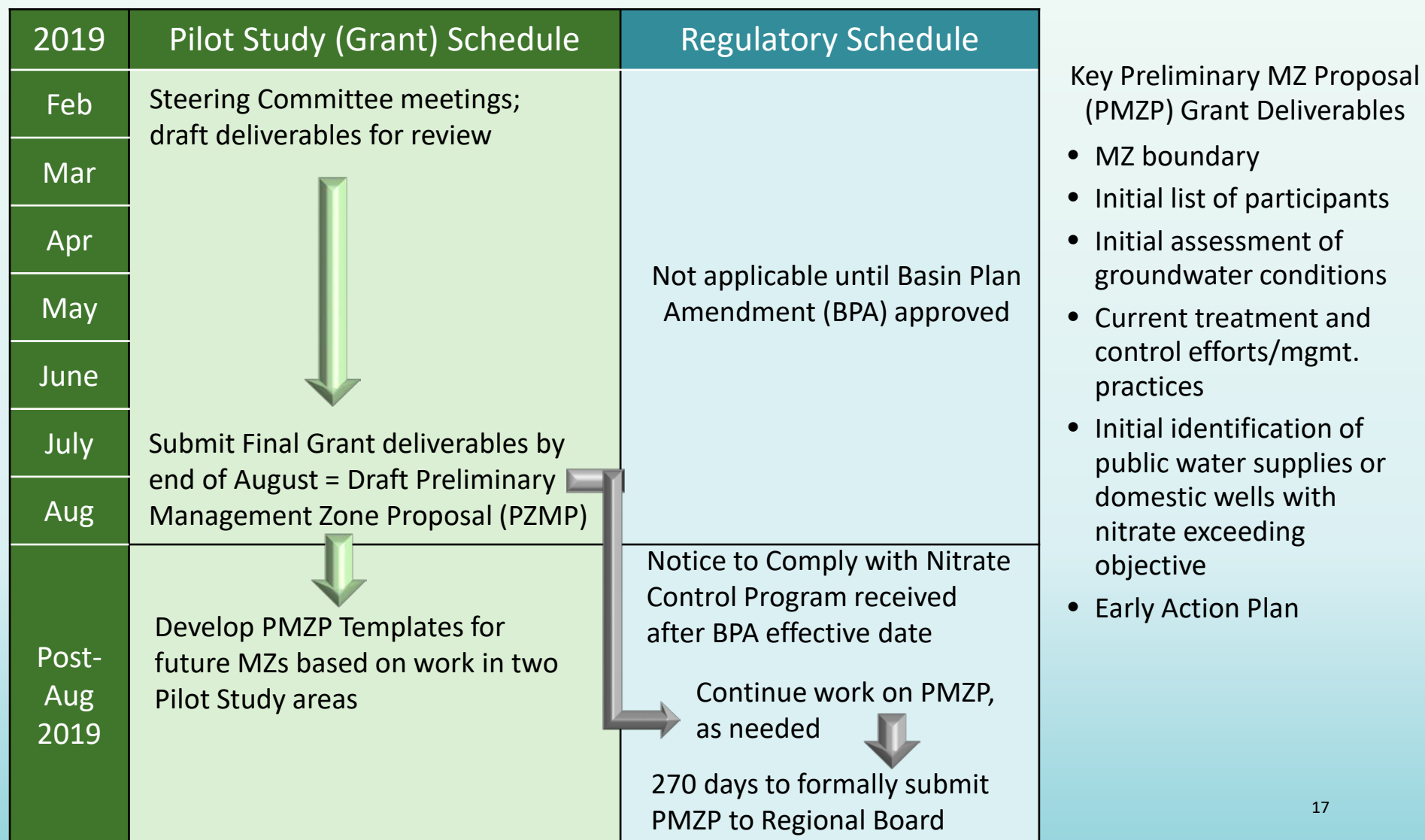
NITRATE CONTROL PROGRAM SCHEDULE

2019	2020												2021												2022			
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A
Management Zone Pilot Study Technical Assistance Grant Prepare Preliminary Management Zone (PMZP) Proposal with Early Action Plan (EAP)	270 days																											
	Submit PMZP with EAP w/i 270 days of Notice to Comply									Board Review																		
										No minimum deadline			180 days						Board Review			No minimum deadline			180 days			
													Submit FMZP w/i 180 days of receipt of Board comments												Submit MZIP w/i 6 months of Board accepting FMZP			
										60 days																		
									Begin implementation of EAP w/i 60 days of submittal unless Board deems incomplete																			

- Assumption – Notice to comply received by January 1, 2020
- Board Review of Deliverables – No minimum deadline in regulation

FMZP = Final Management Zone Proposal;
MZIP = Management Zone Implementation Plan

MANAGEMENT ZONE (MZ) PROJECT SCHEDULE – PILOT STUDY VS. REGULATORY DELIVERABLES





FINAL AGENDA ITEMS

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- Posting Pilot Study Materials
- Review of Action Items
- Schedule Future Meeting



Adjournment

KINGS RIVER WATER QUALITY COALITION AREA

Kings River Water Quality Coalition Area

Kings Subbasin

Kings River East GSA

Alta Irrigation District

