

Regional Bacteria Monitoring Program Data Update and Recent Changes

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**CDM
Smith**

Outline

- 2019 dry season conditions
- RB letter dated June 26, 2019
- Cucamonga Creek

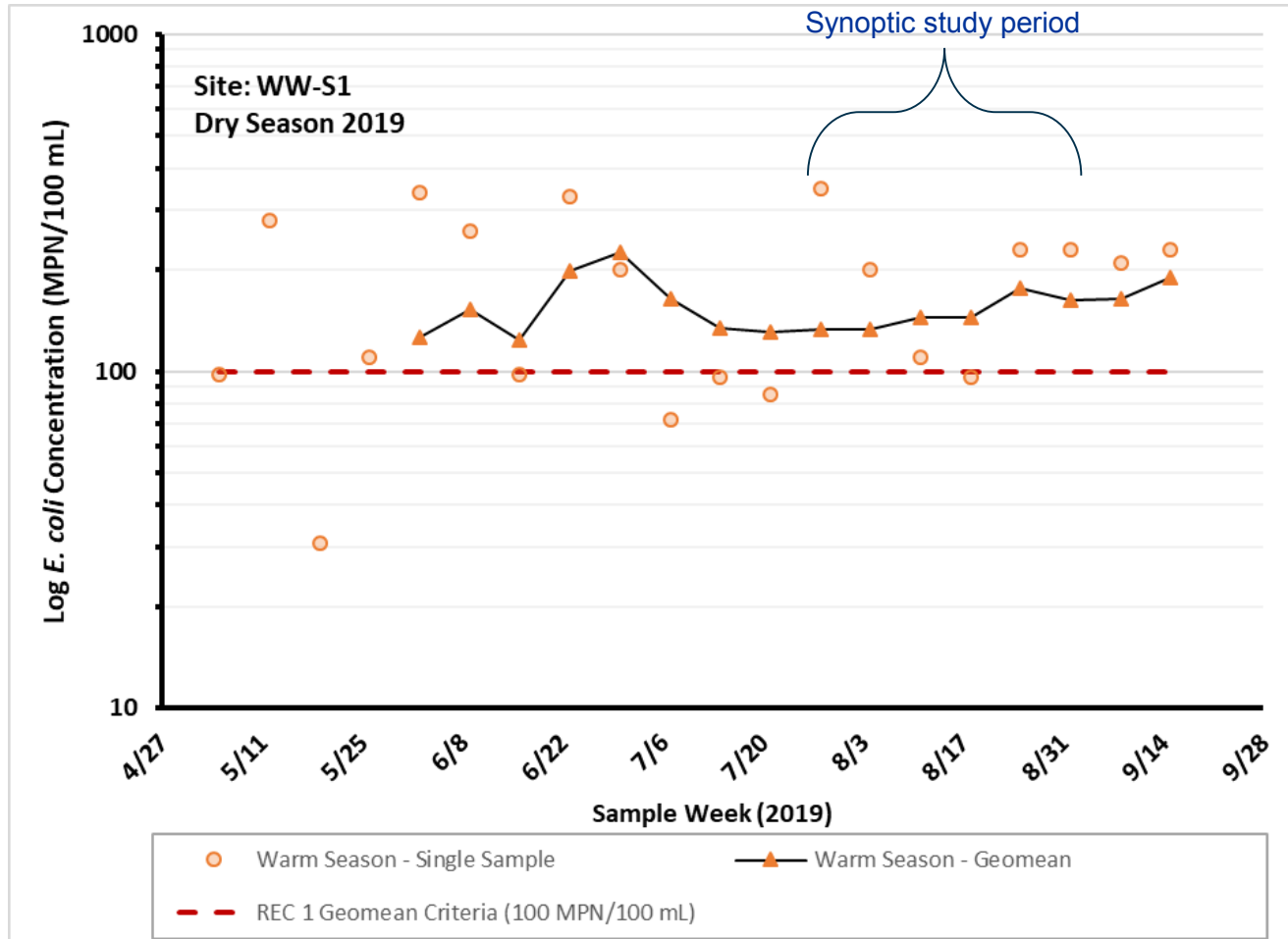
2019 Dry Season



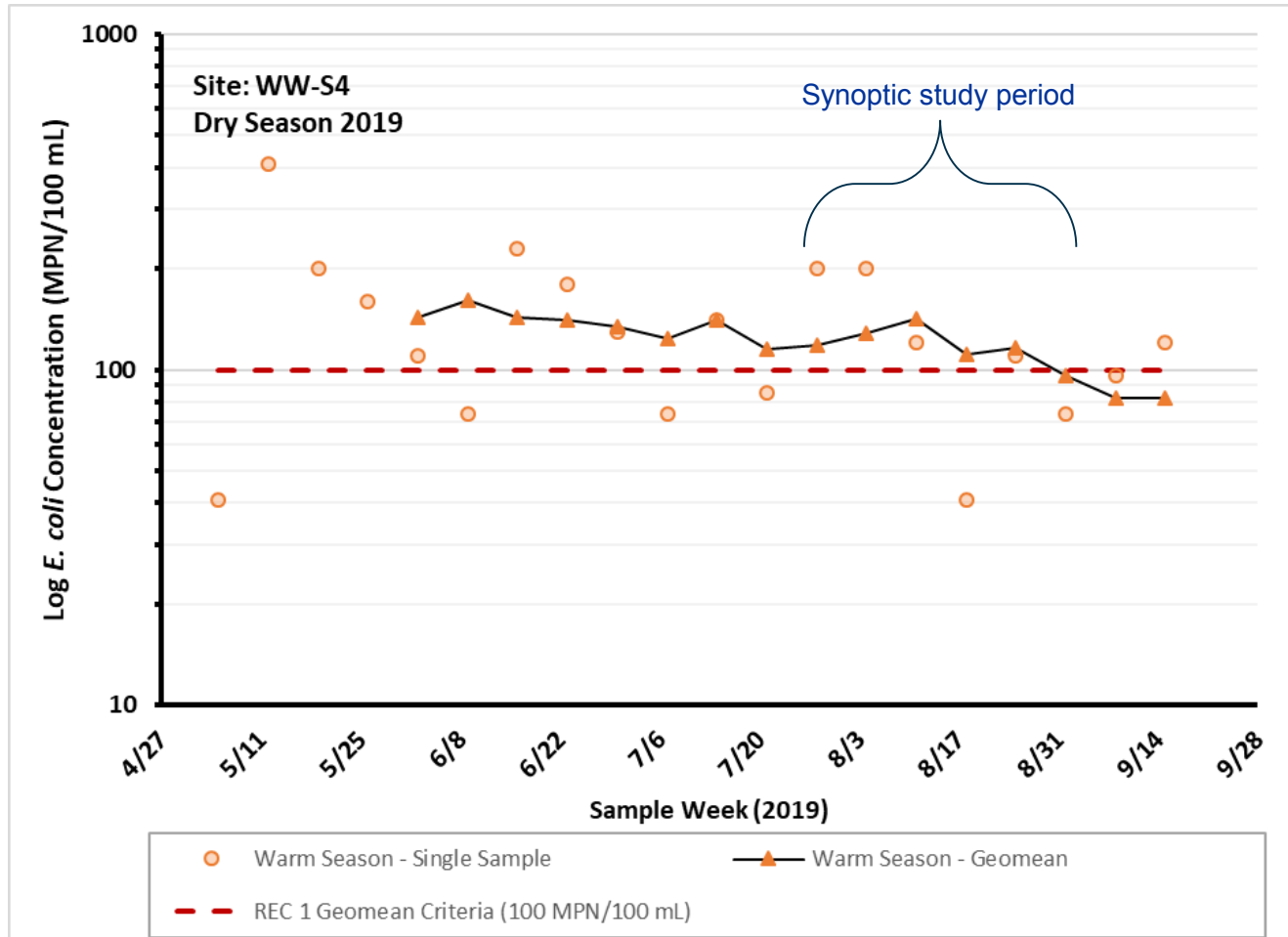
Priority 1

- Very low bacteria concentrations everywhere all of the time – consistent with findings since inception of RMP

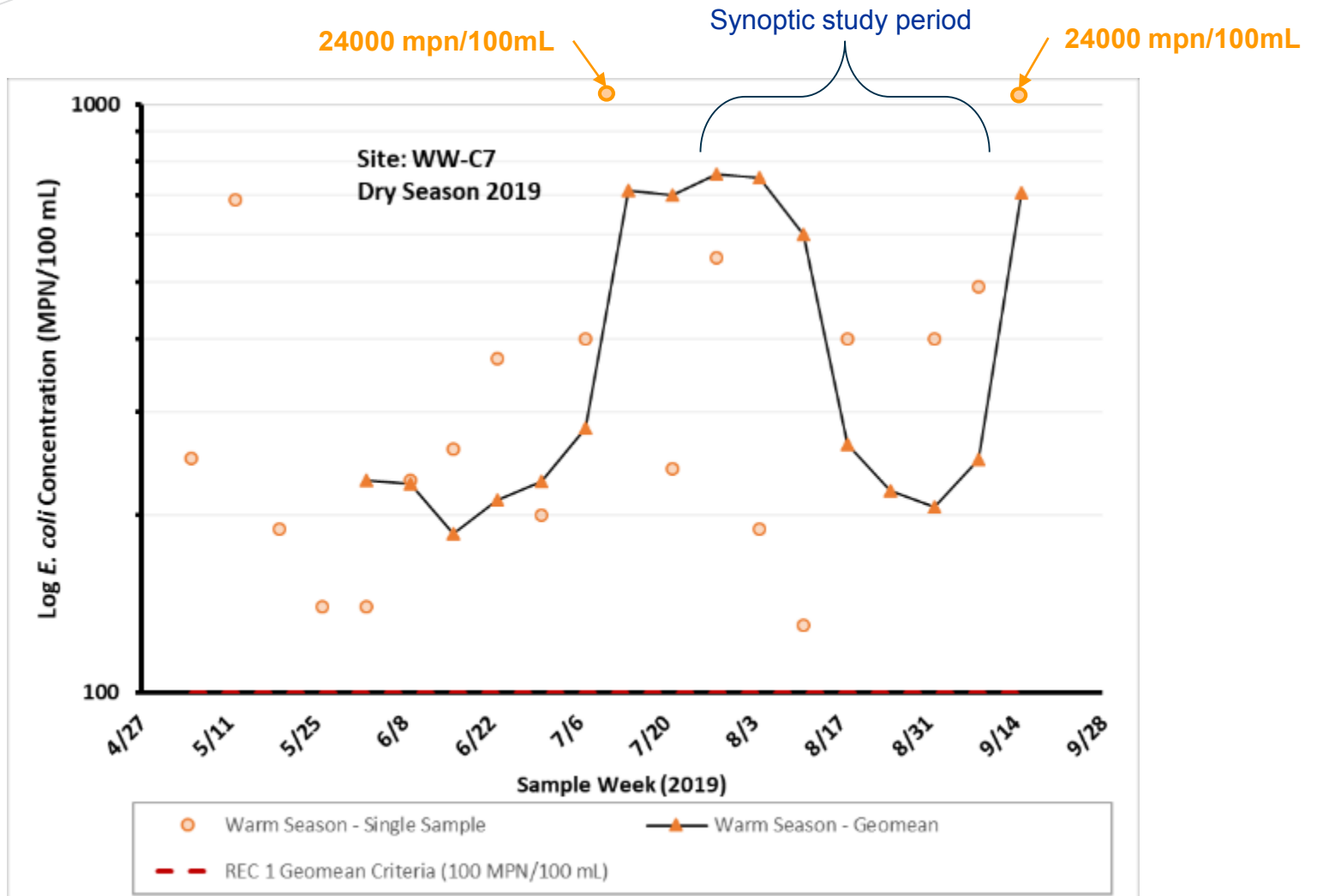
Santa Ana River at MWD



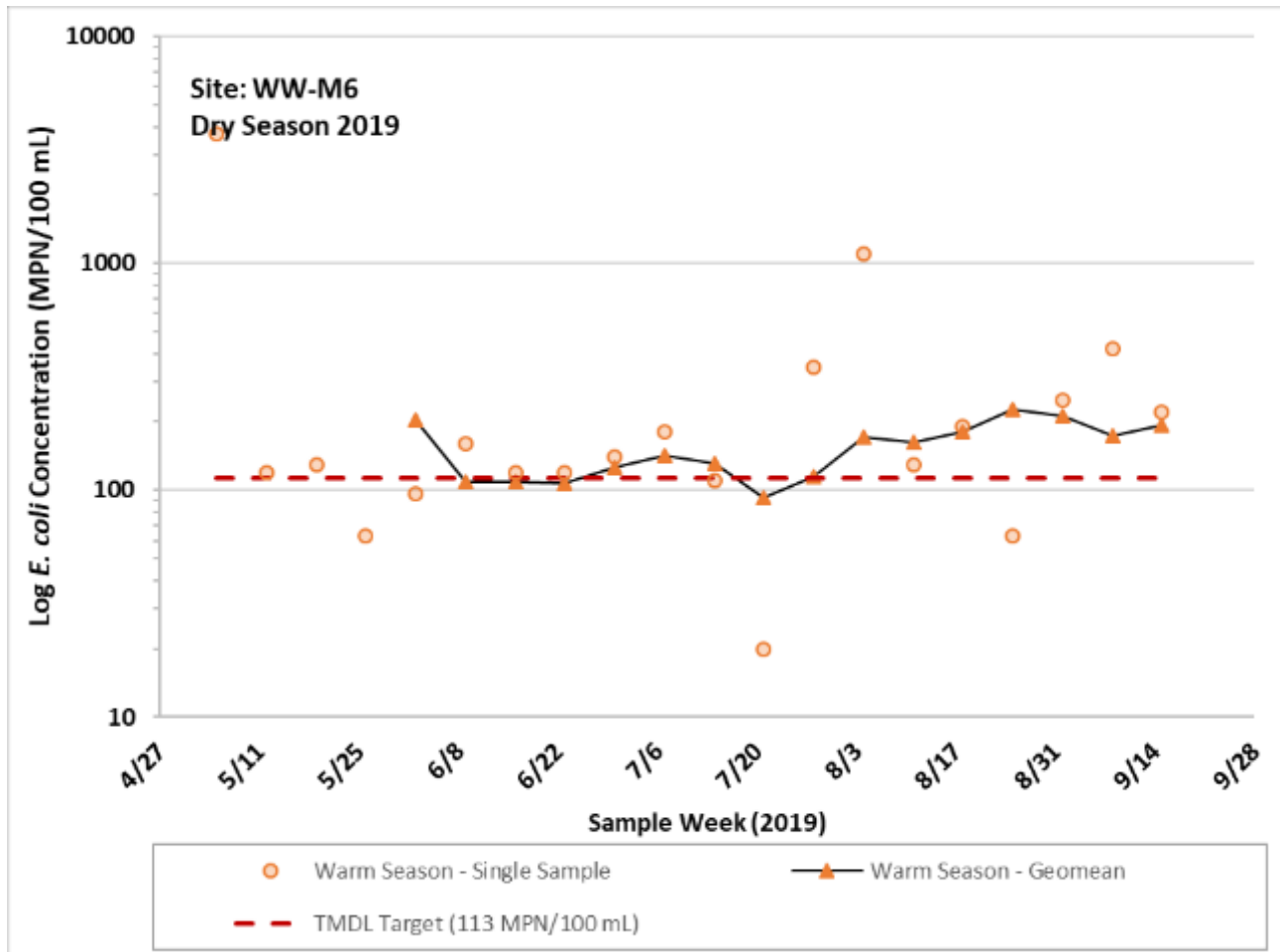
Santa Ana River at Pedley



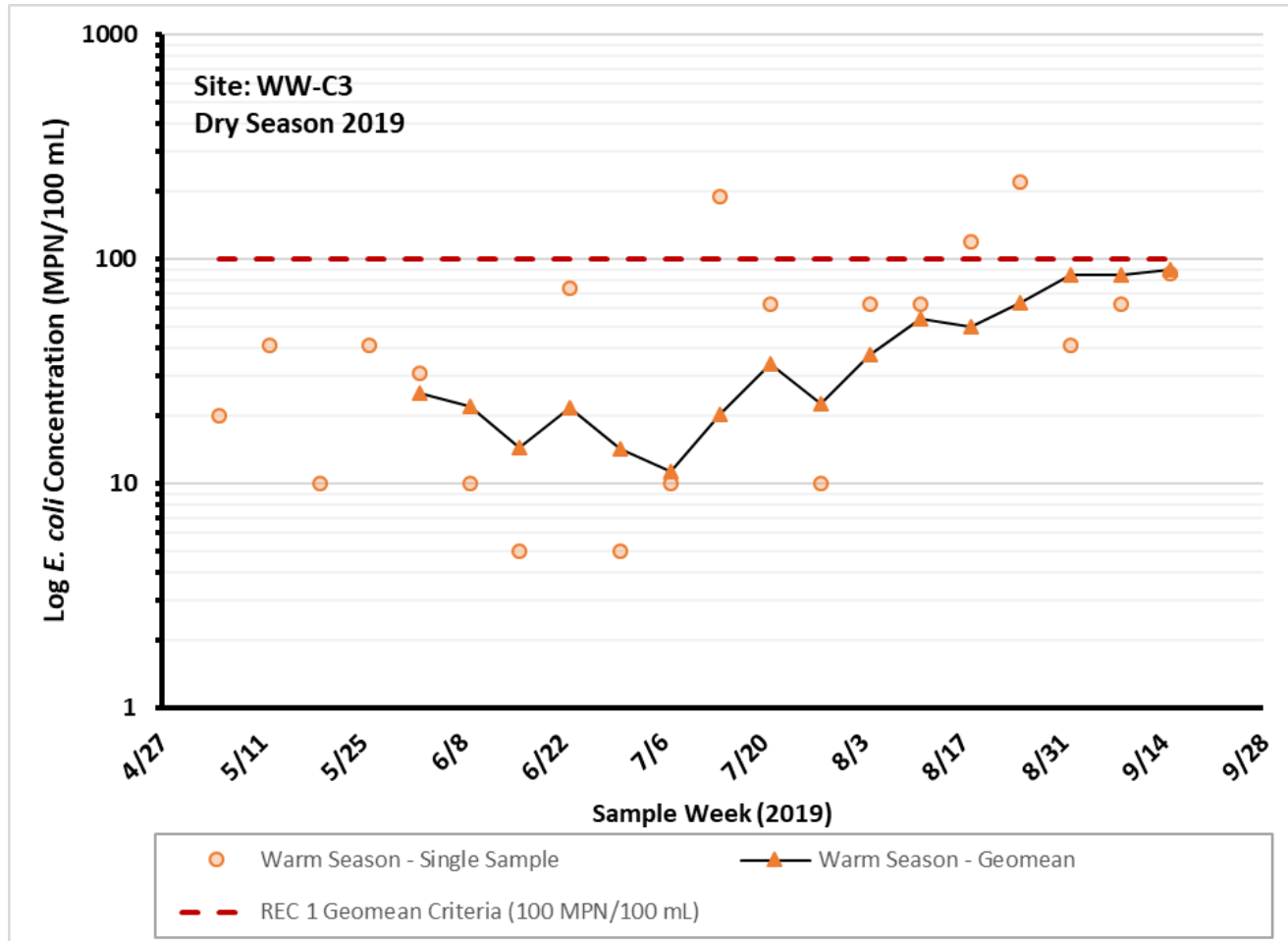
Chino Creek at Central



Mill-Cucamonga Creek

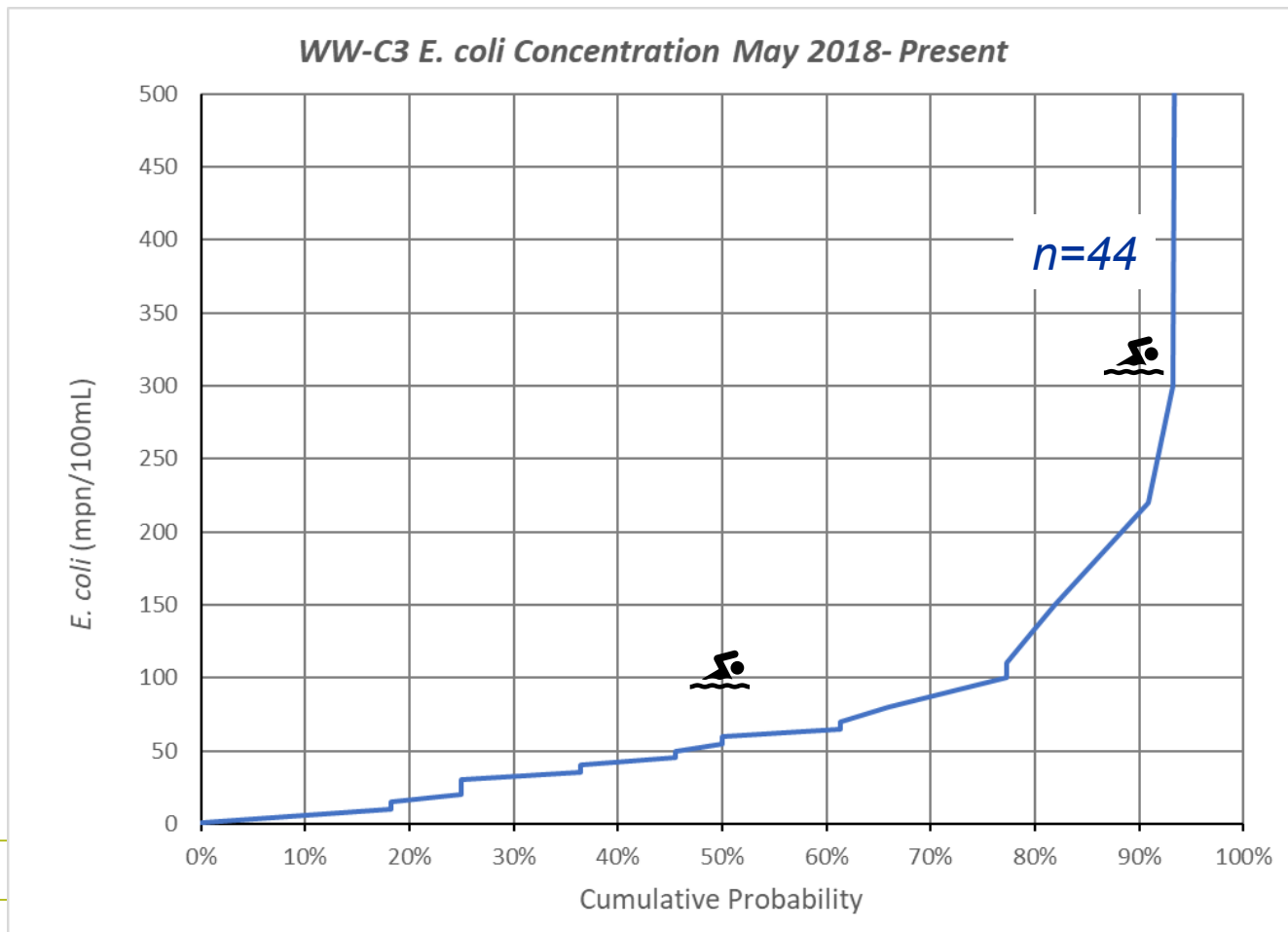


Prado Park Lake



Prado Park Lake

- May consider delisting and exclusion from revisions to MSAR bacteria TMDL



Priority 3 Site Geomeans

- Four years of geomeans provide some insights on future directions

Waterbody	Geomean of <i>E. coli</i> Samples (mpn/100mL)			
	2016	2017	2018	2019
Bolsa Chica Channel	51	534	31	42
Borrego Creek	Dry	Dry	Dry	Dry
Buck Gully Creek	74	89	130	242
Morning Canyon Creek	633	212	1414	190
Peters Canyon Wash	206	183	562	540
San Diego Creek Reach 1	349	116	176	184
San Diego Creek Reach 2	208	373	155	24
Serrano Creek	121	1,080	221	864
Goldenstar Creek	242	417	118	360
Santa Ana River Reach 4	48	70	74	38

Priority 4

- Santa Ana Delhi channel at tidal prism exceeded Enterococci anti-deg criteria (September 2019)
 - Construction work occurring upstream on sampling day
 - OCPW is planning to collect follow-up samples
- Cucamonga Creek at Hellman dataset increasing
 - Monthly sampling initiated 2019
 - SBCFCD “10-week” program in 2016-18 provides a 30 sample jumpstart

Monitoring Plan and QAPP Updates



Status Update

- RB approved June 2019 MP and QAPP - added a few key comments in June 26 letter for Task Force to consider
- Changes made in August 2019 addressed some of these additional comments
 - Updates to make consistent with statewide provisions
 - Revised WQOs stated in the documents
 - Monitoring for enterococci in high TDS inland waters
 - Removal of recreational use tiers and STVs no longer applicable
 - Proposal to remove OC sites from RMP not approved by RB
 - OCPW will look at alternative ways to reduce redundancy with core program
 - Correction to terminology regarding targets and allocations for priority 2 (with TMDL) waters

Priority 3 (Impaired no TMDL) Waters

- New sites listed in the 2014/16 303(d) List are added to the RMP: Warm Creek, San Timoteo Creek
- Other waters referenced in Regional Board letter: Jenks Lake and San Antonio Creek



Priority 3 (Impaired no TMDL) Waters

- RB June 26 letter suggests that
 - An assessment is needed for the Priority 3 sites to determine whether they are on track for delisting or justifying an increase in sampling frequency
 - Source evaluation plans are needed, pursuant to Resolution No. R8-2012-0001, where water quality monitoring data indicate significant non-compliance with the applicable pathogen indicator objective
- August 2019 MP extends monitoring priority 3 waters through 2020 dry season, followed by assessment in 2020/21 to propose a course of action in each waterbody
 - Delisting, source evaluation, UAA, others

Other Important RB Suggestions

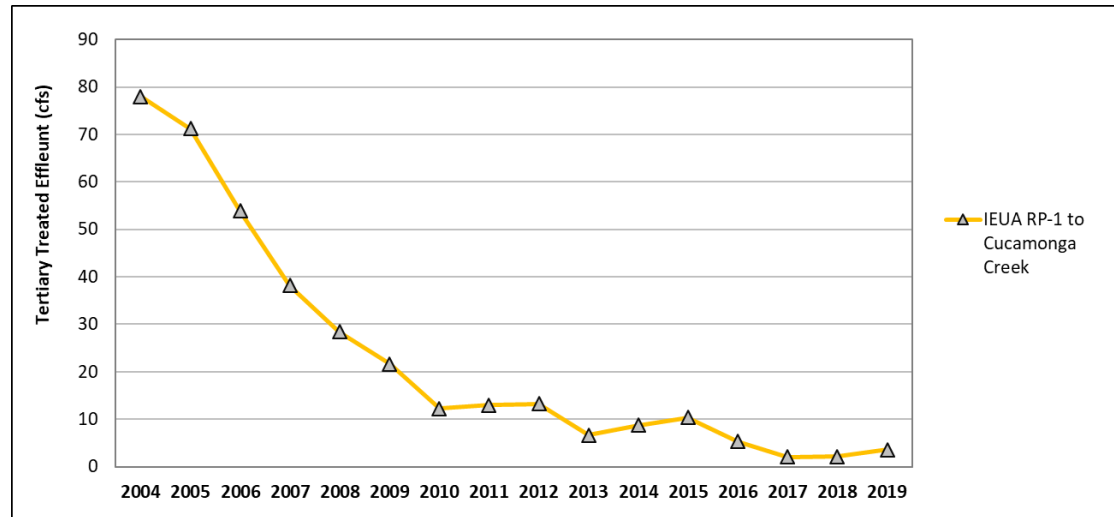
- Regarding the role of harmful algal blooms (HABs), RB June 26 letter requests Task Force consider
 -future monitoring of cyanobacteria/cyanotoxins to guide all aspects of protecting REC1 use... REC 2 use would also have to be taken into account as would impacts to domestic pets (i.e., dogs)....
- From RB priority list of issues (2019-22)
 - “For REC1 bacteria objectives consider the development of region-specific reference/natural sources exclusion policy, development of a limited REC1 use and/or development of UAAs to remove REC1 for certain waters”

Cucamonga Creek



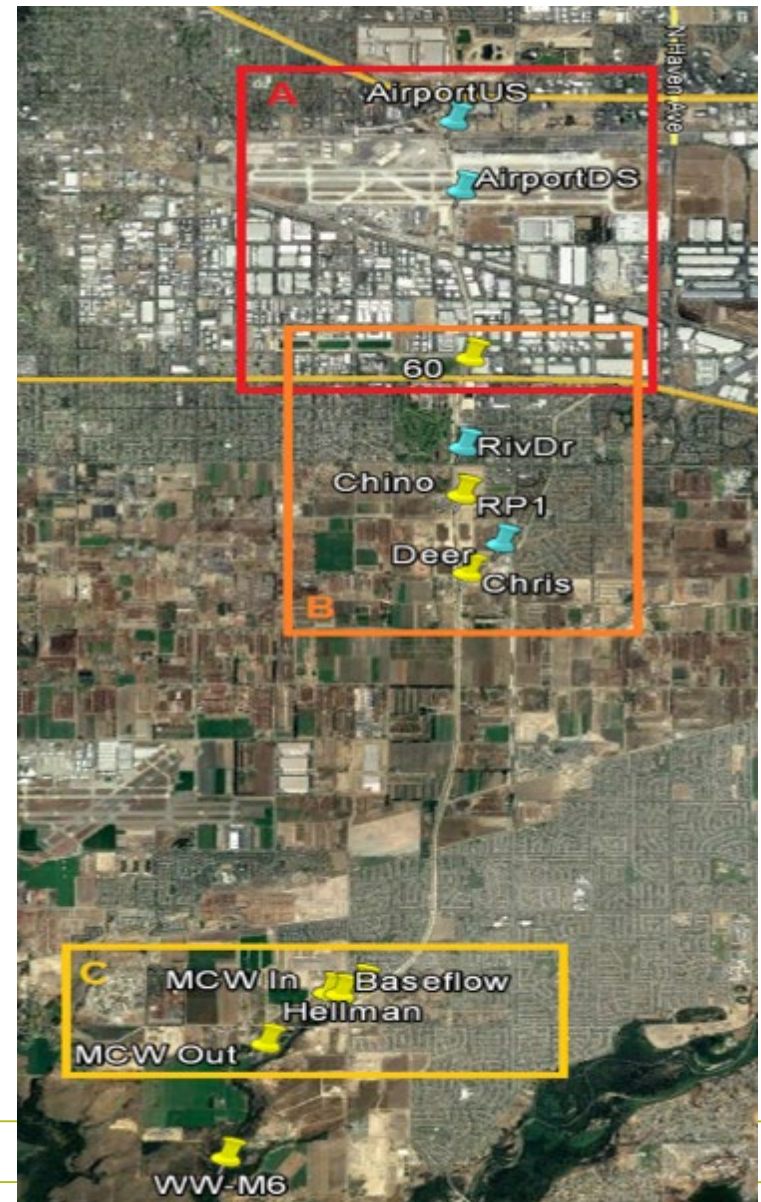
Priority 4: Cucamonga Creek @ Hellman Ave

- Increased sampling to **monthly** monitoring year-round.
- To re-evaluate antideg target for new normal RP1 flows



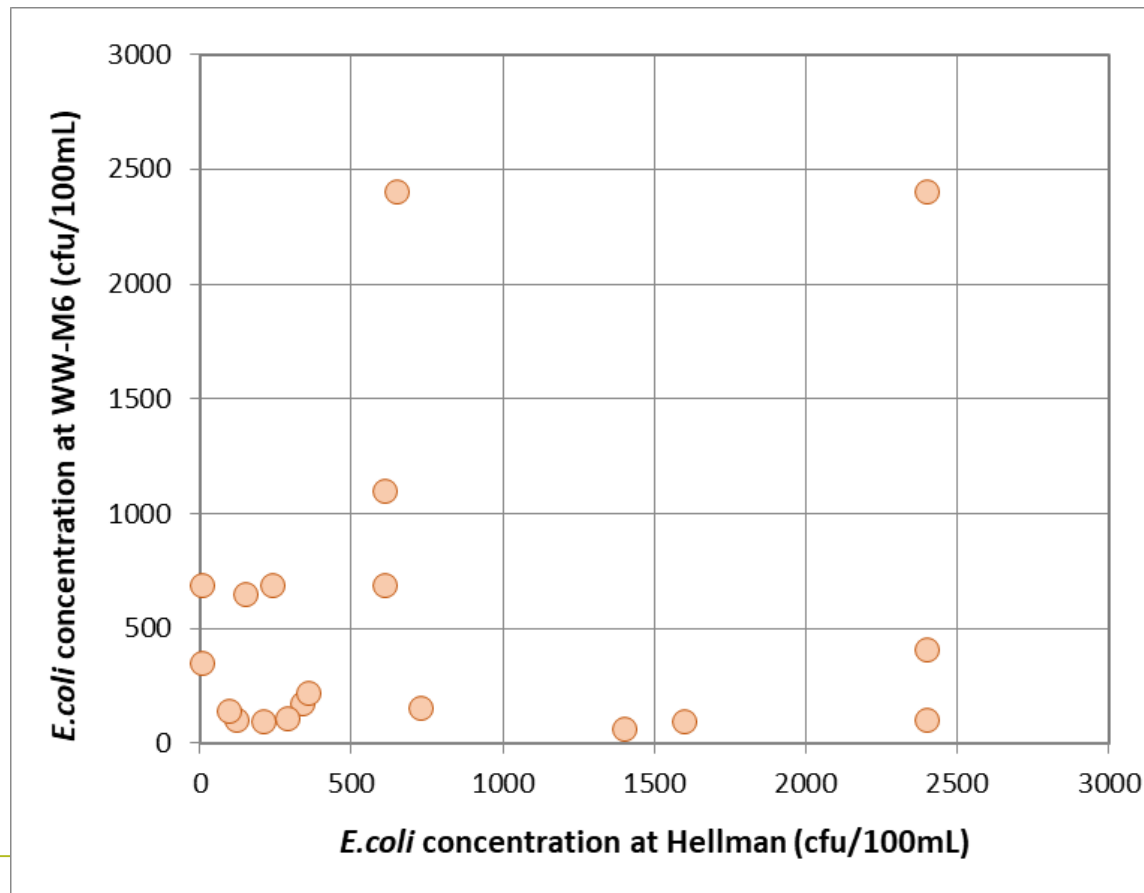
Synoptic Surveys in 2016-2018

- Longitudinal sampling along Cucamonga Creek over 10 consecutive weeks
- Focused on outfalls in San Bernardino County only
- Geomean (2017-18) in Cucamonga Creek at Hwy 60 is 20 mpn/100mL



Synoptic Surveys in 2016-2018

- No relationship between concentration at Hellman Avenue and at WW-M6 compliance site



Synoptic Surveys in 2016-2018

- SBCFCD led 10-week studies
 - blend of inflows does not consider flows from Eastvale
 - suggests variable nature of net growth versus decay
 - CHRIS basin outflow remains a key source of *E. coli* load

