

# Santa Ana Regional Monitoring Program

February 2021 Update

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2/3/21



**CDM  
Smith**

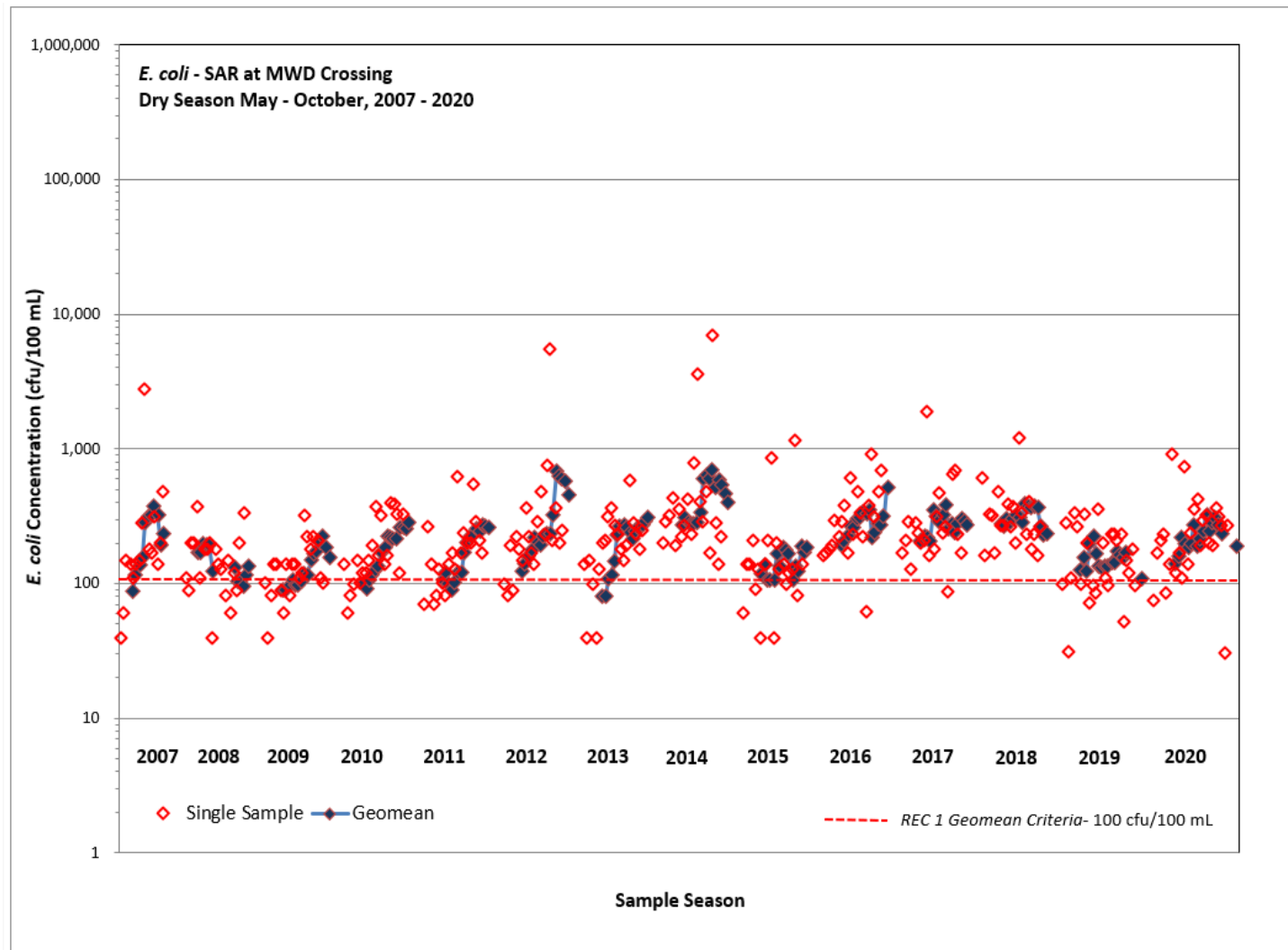
# Outline

- 2020 Dry Season results
- Changes to monitoring for 2021-22
- Dashboard as alternative format for quarterly reporting

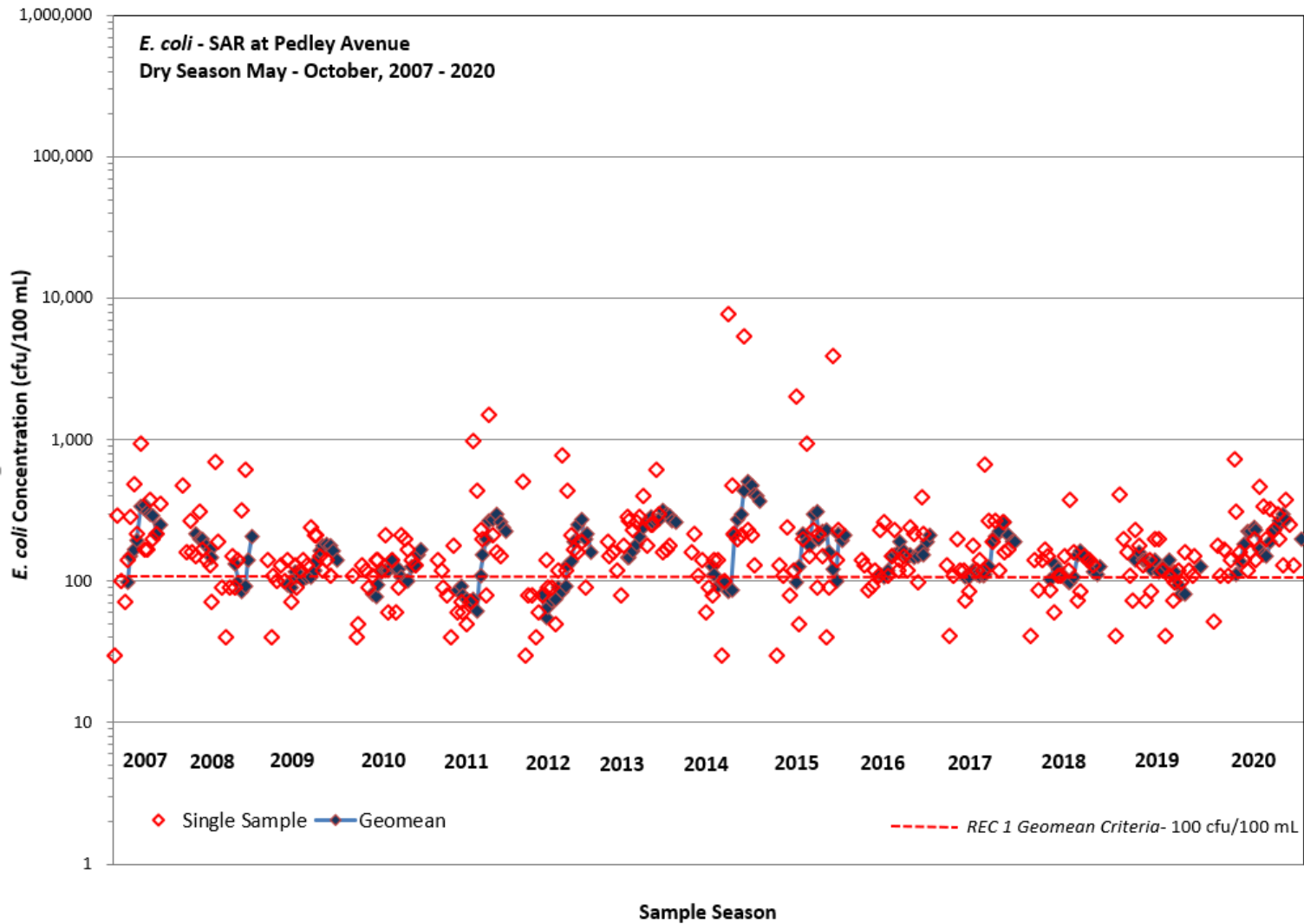


# 2020 Dry Season Results

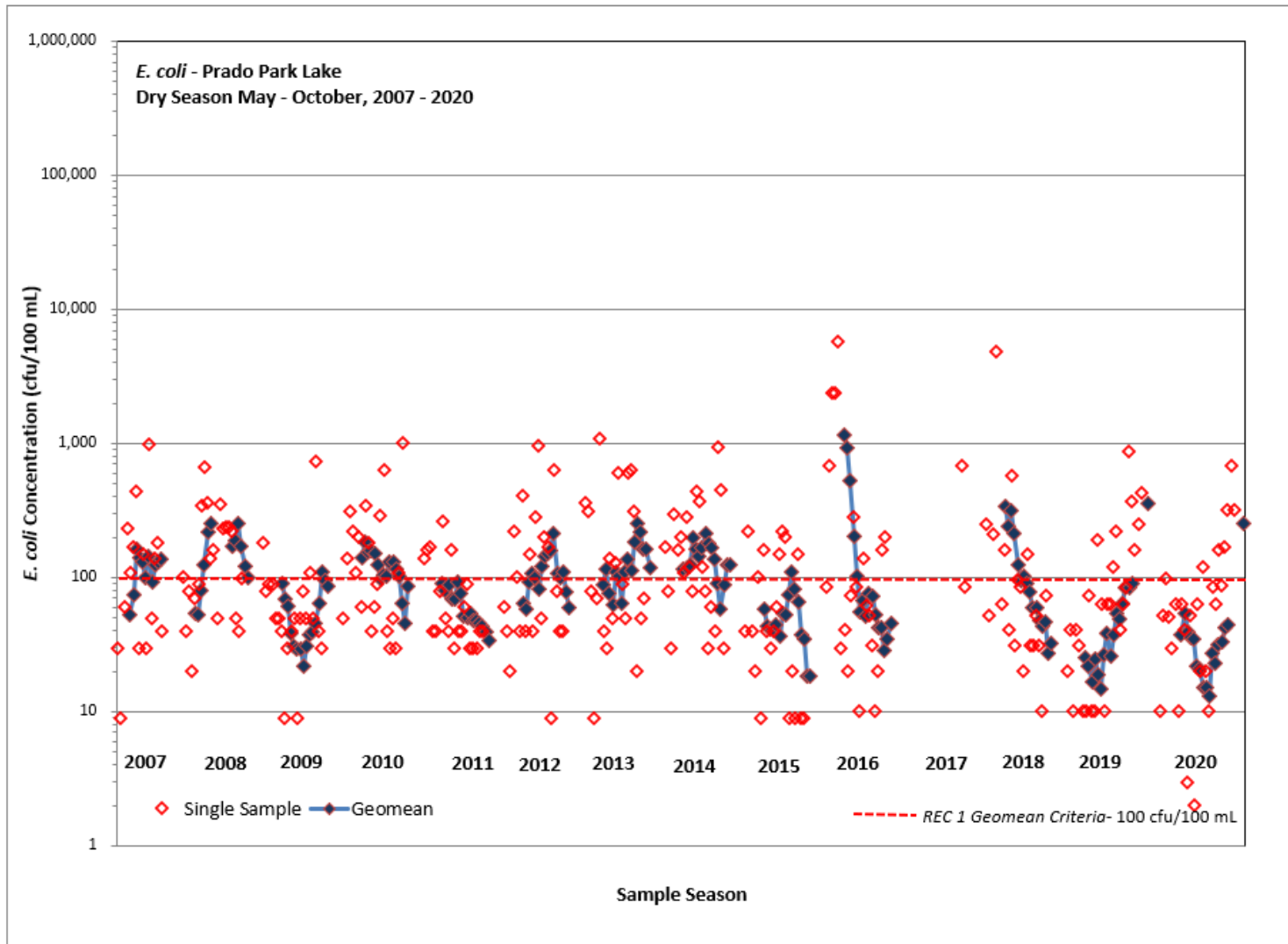
# SAR at MWD Crossing



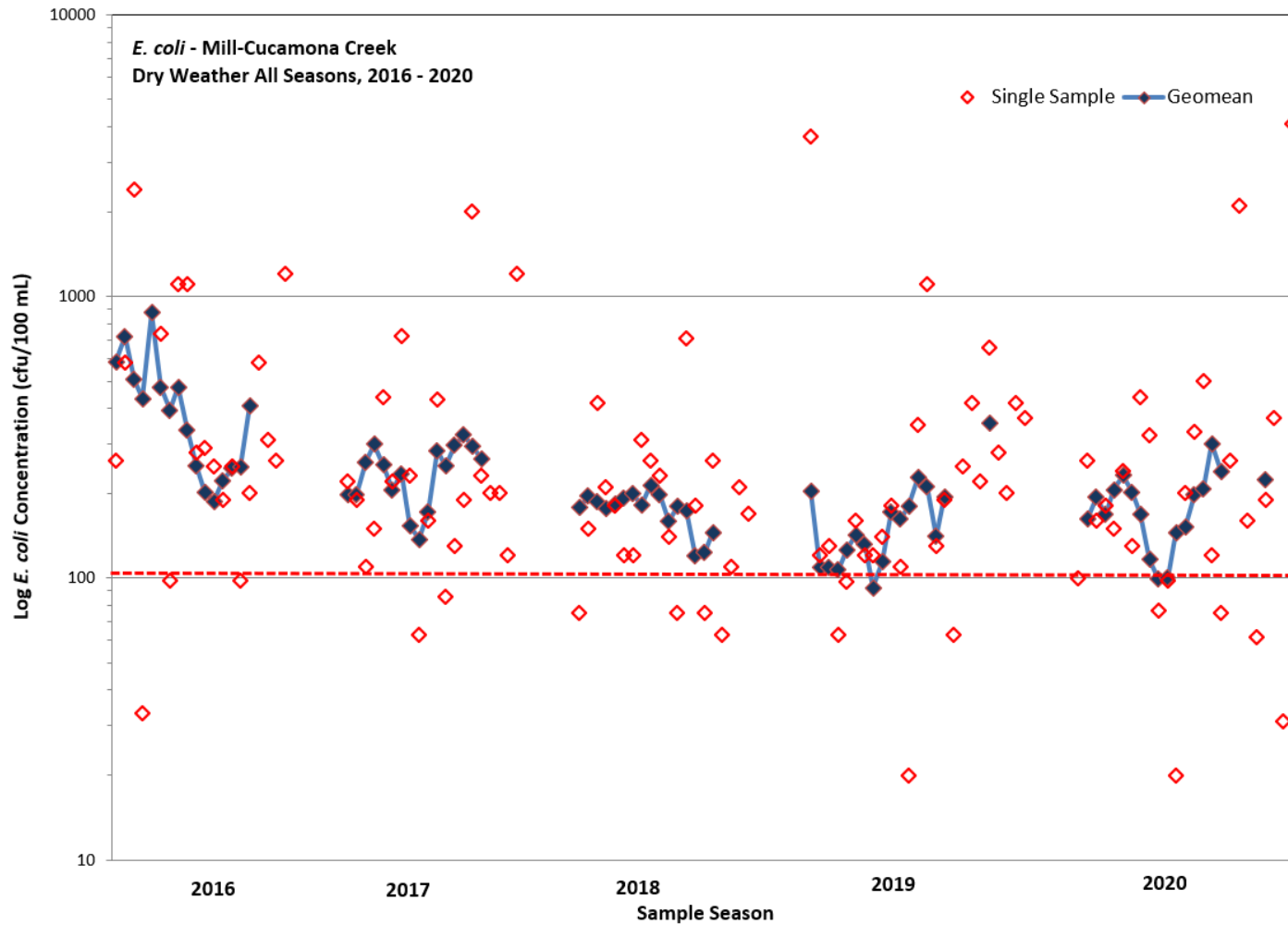
# SAR at Pedley Avenue



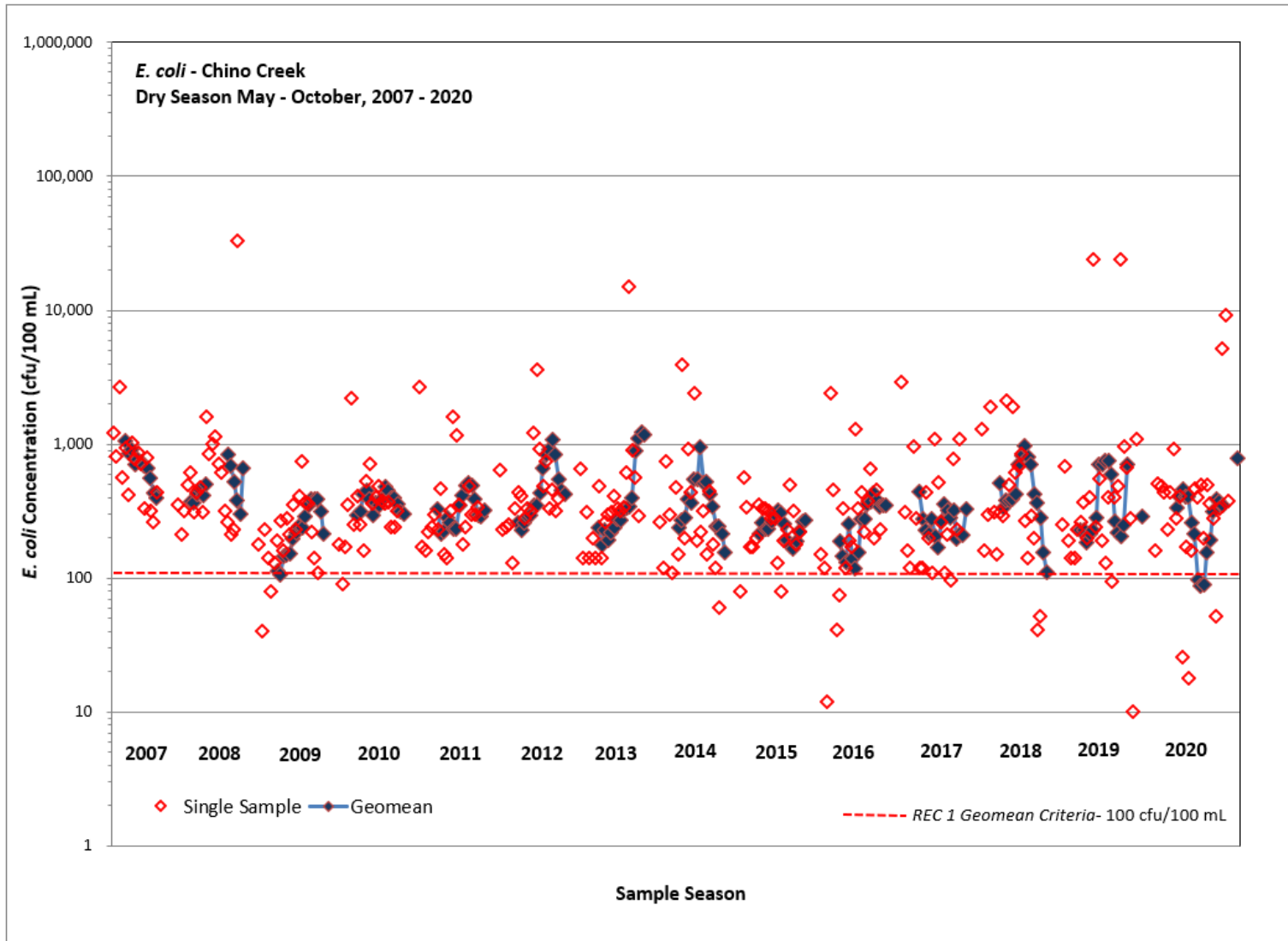
# Prado Park Lake



# Cucamonga Creek



# Chino Creek





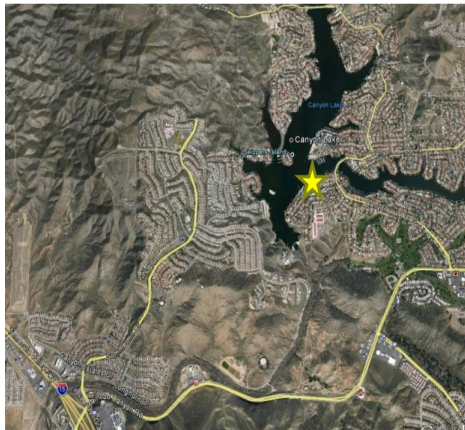


# Monitoring Plan Changes

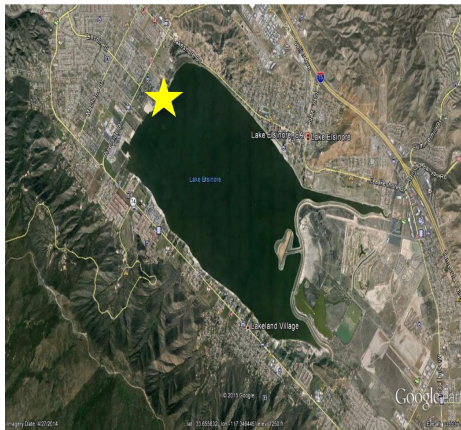
# Proposed Changes to the 2021-22 Monitoring

- Priority 1 lake sites (Big Bear Lake, Lake Elsinore, Canyon Lake, Lake Perris)
- Lake managers may consider moving sampling site to evaluate different swimming sites
- Eliminate redundant sampling at Lake Elsinore
- Work with lab to add lake managers to raw data distribution

Canyon Lake



Lake Elsinore



Lake Perris



Big Bear Lake



# Proposed Changes to the 2021-22 Monitoring

- Priority 3 Sites – Evolving to new phase after five years of data collection

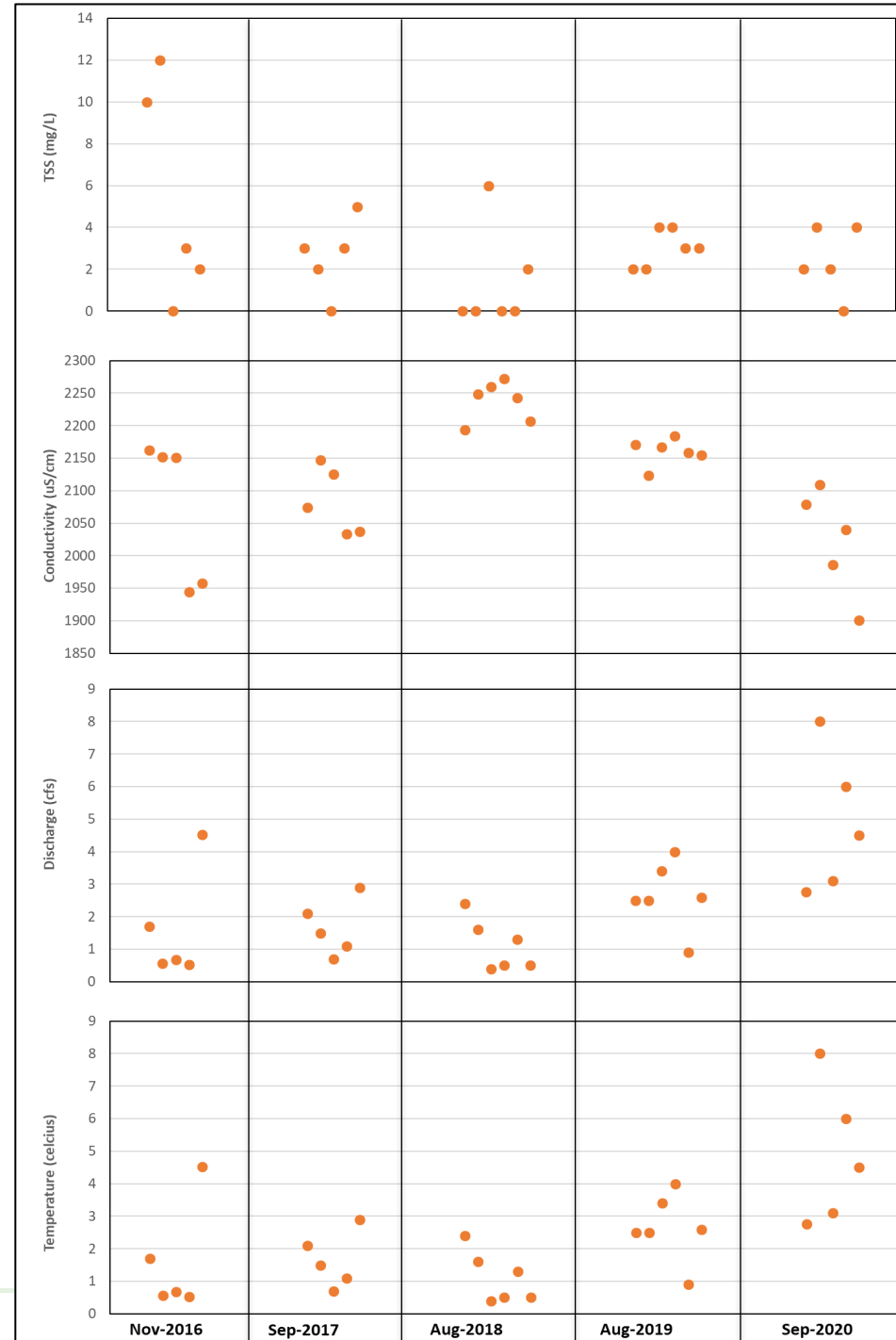
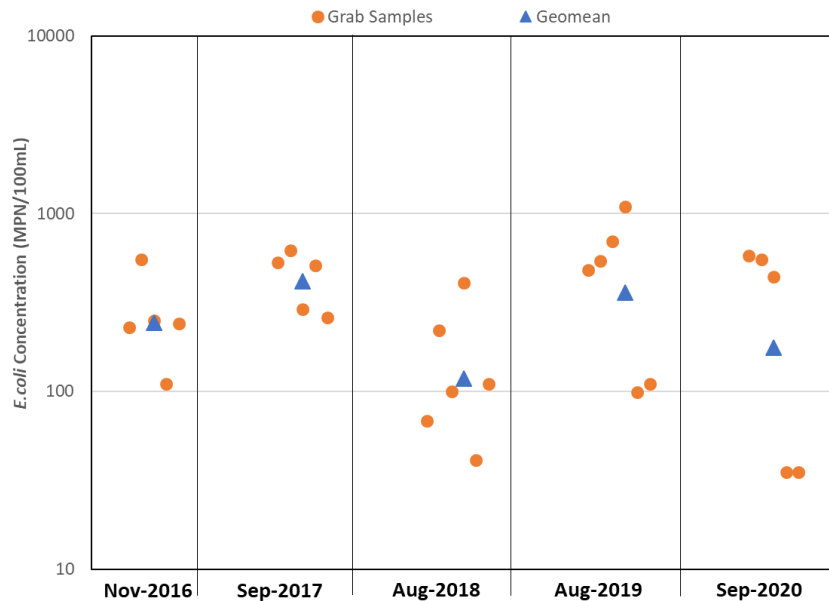
Site ID	Site Description	Delisting Candidate	Source Identification Data Available
P3-OC1	Bolsa Chica Channel	No	Yes
P3-OC2	Borrego Creek	Yes	N/A
P3-OC3	Buck Gully Creek at Little Corona	No	No
P3-OC5	Los Trancos Creek at Crystal Cove	No	No
P3-OC6	Morning Canyon Creek	No	No
P3-OC7	Peters Canyon Wash	No	Yes
P3-OC8	San Diego Creek Reach 1	No	Yes
P3-OC9	San Diego Creek Reach 2	No	Yes
P3-OC11	Serrano Creek	No	Yes
P3-RC1	Goldenstar Creek	No	Yes
P3-SBC1	Santa Ana River Reach 4	Yes	N/A

# Source Identification Plans in Santa Ana Region

- Source identification plans specified in the Basin Plan Amendment monitoring section
- Most cost effective approach for managing dry weather bacteria conditions for inland waters
  - Middle Santa Ana River TMDL Tier 1/2 Surveys
  - Longitudinal sampling within Santa Ana River Reach 3
  - Cucamonga Creek 10-week Surveys
  - OC Watersheds outfall and tributary sampling
  - Source studies in Newport Bay Watershed
  - Goldenstar Creek study under consideration by Riverside Stormwater Program

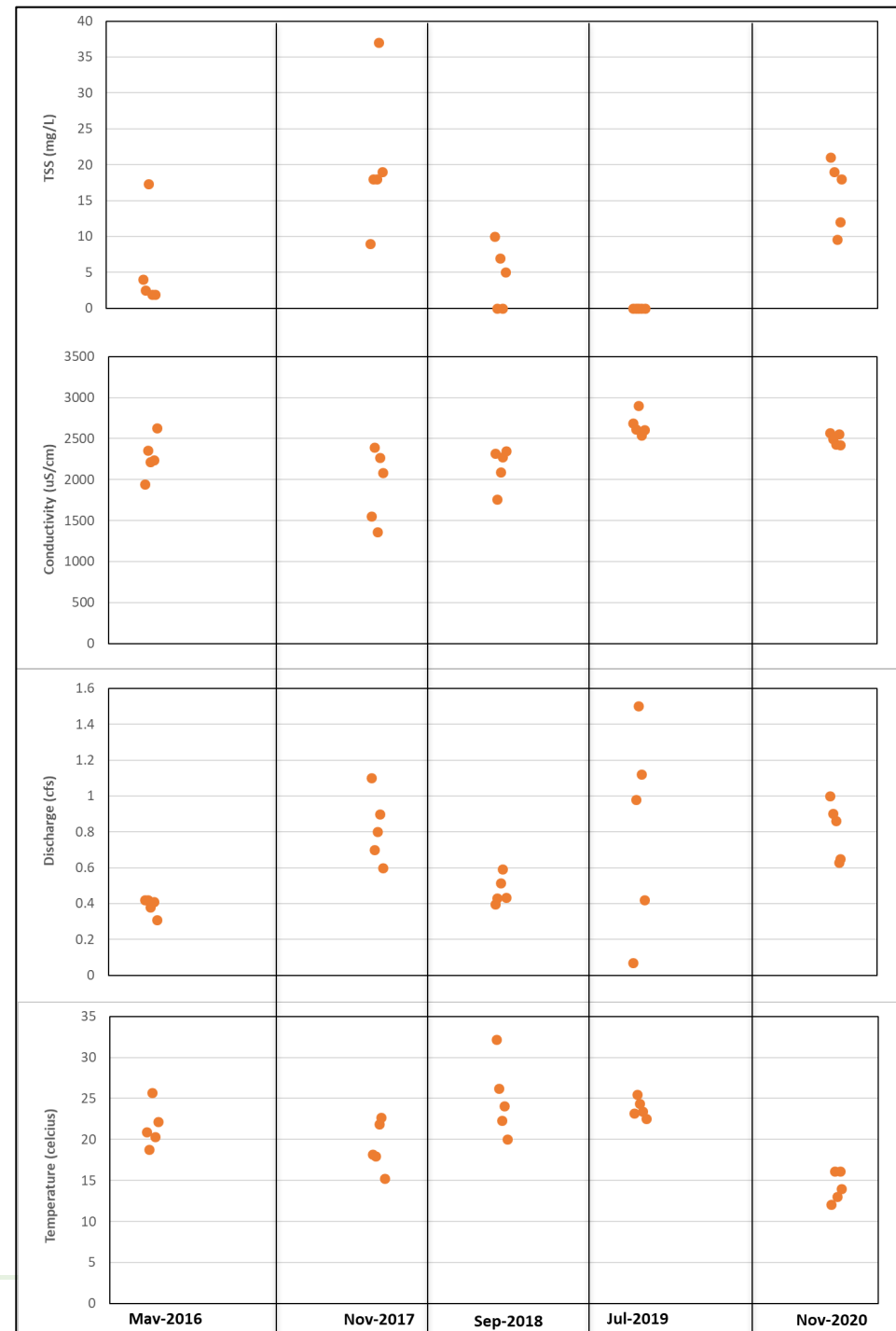
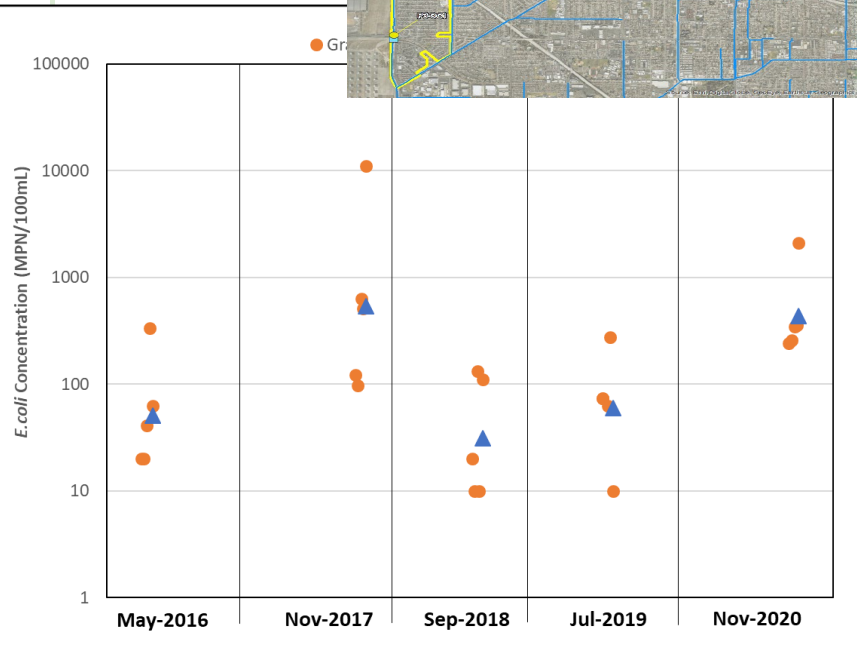
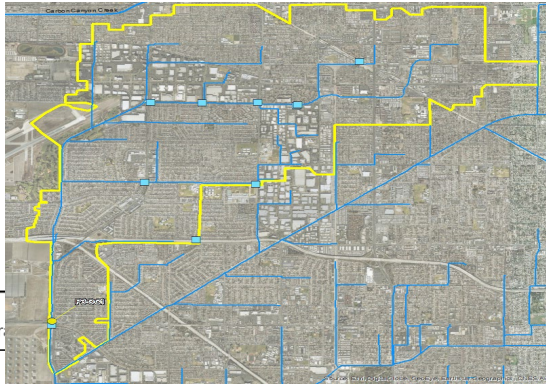
# Goldenstar Creek

- Field notes identify persistent homeless encampments
- Riverside program considering source study



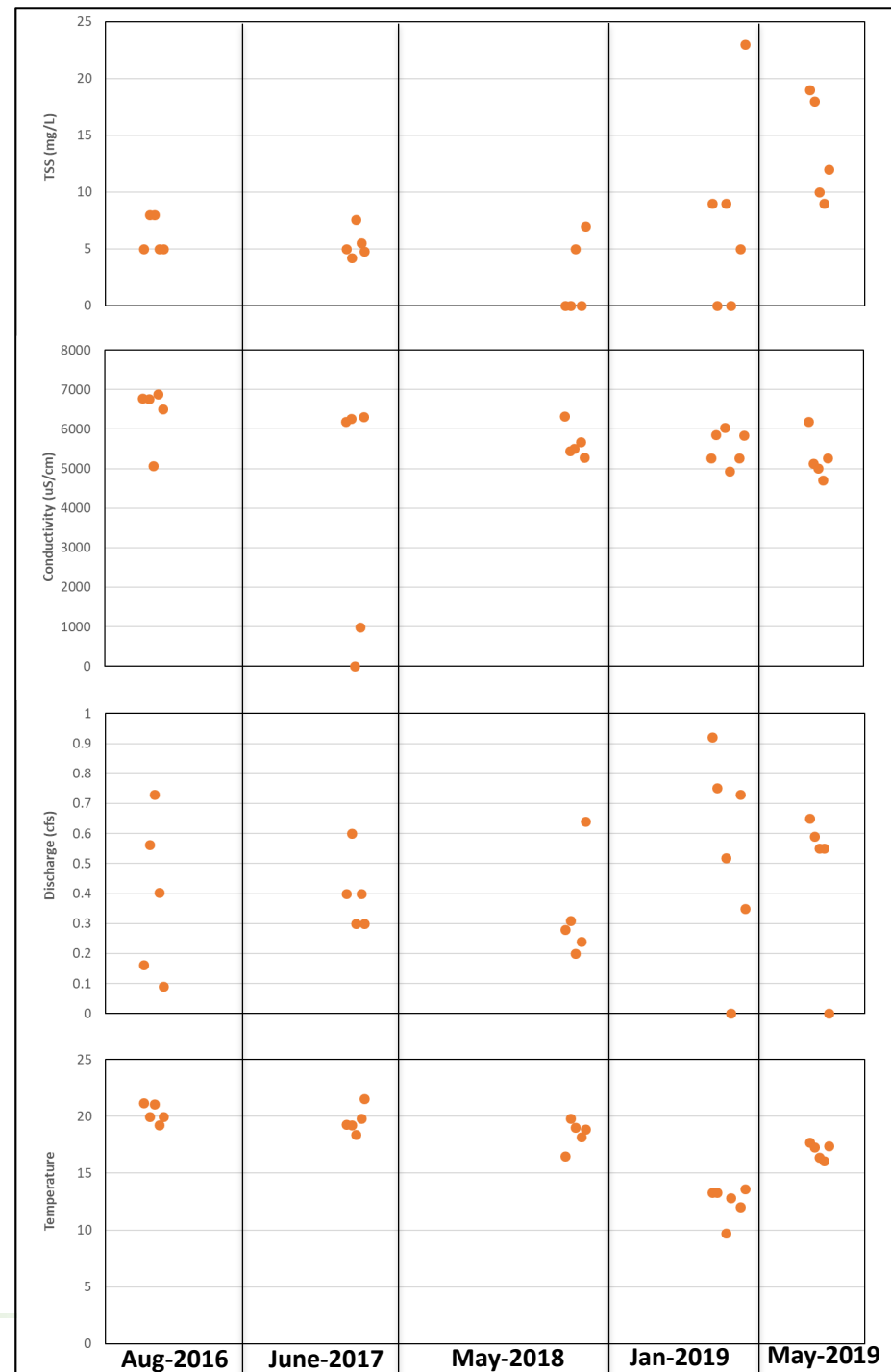
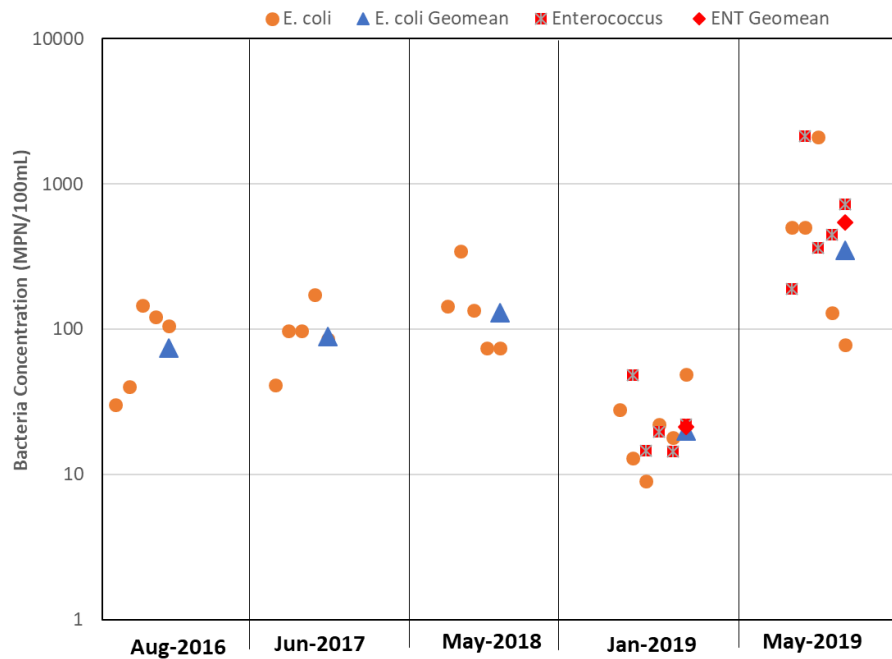
# Bolsa Chica Channel

- OCPW mass emission site
- Sampling at six upstream sites



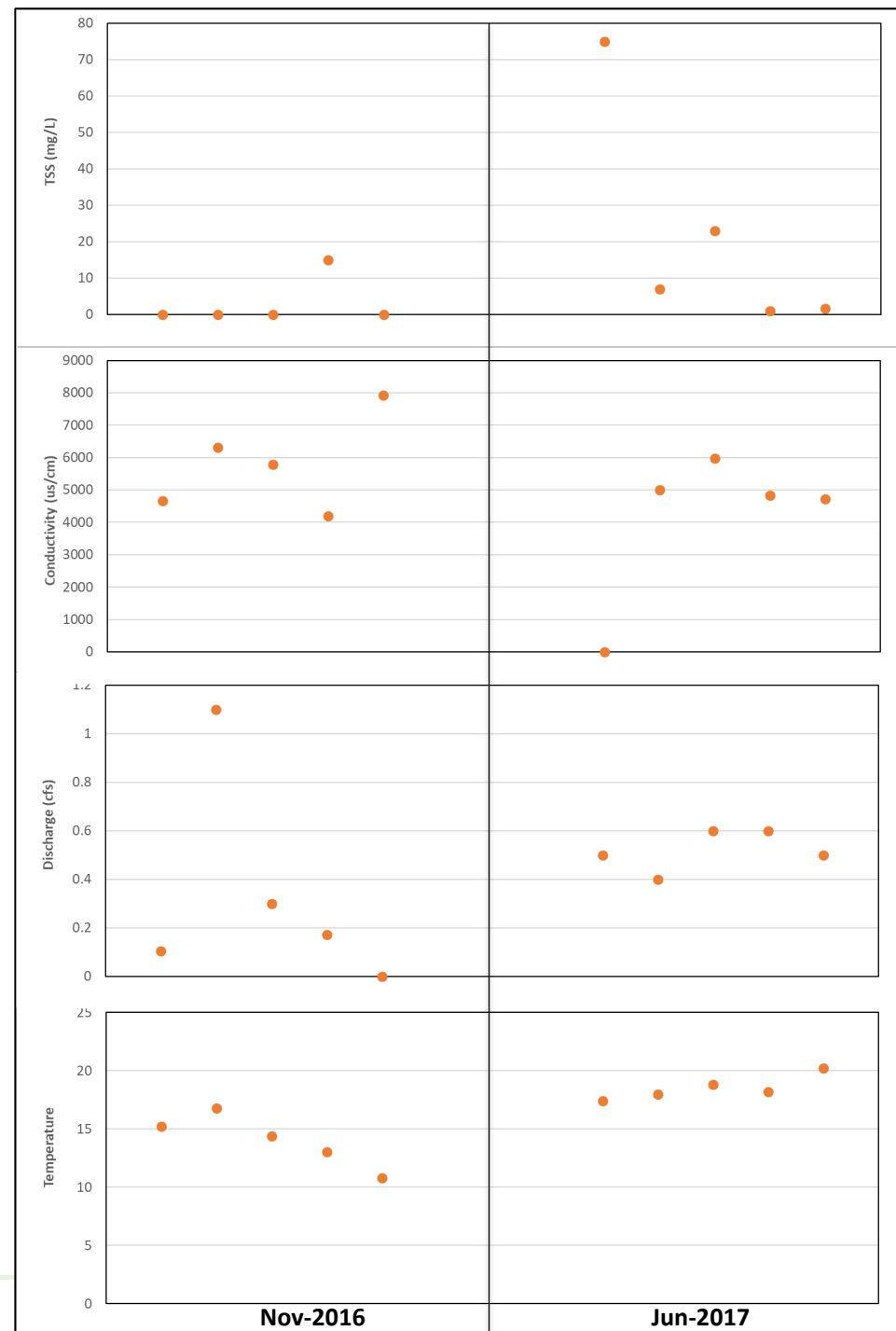
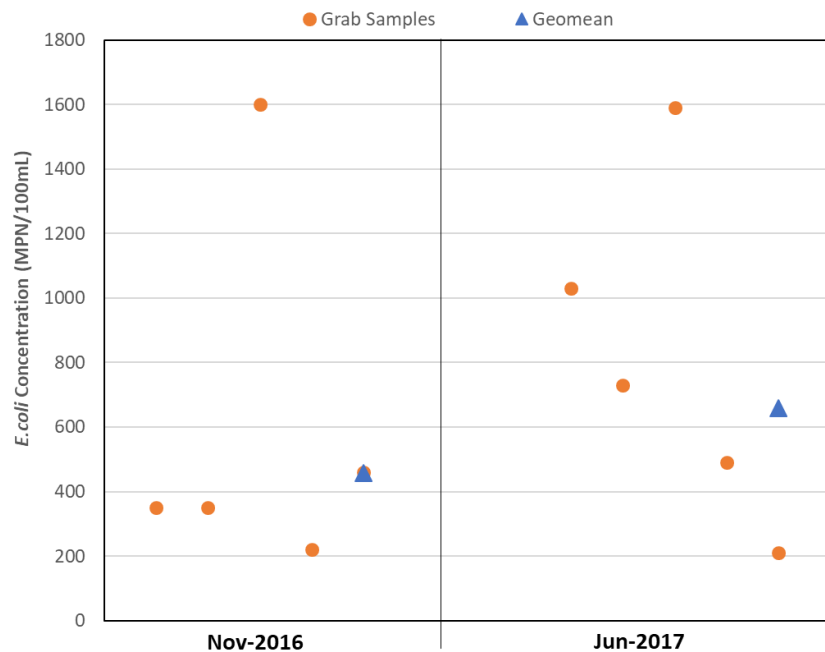
# Buck Gully

- Regional Board evaluating Newport Coastal watershed for next phase



# Los Trancos Creek

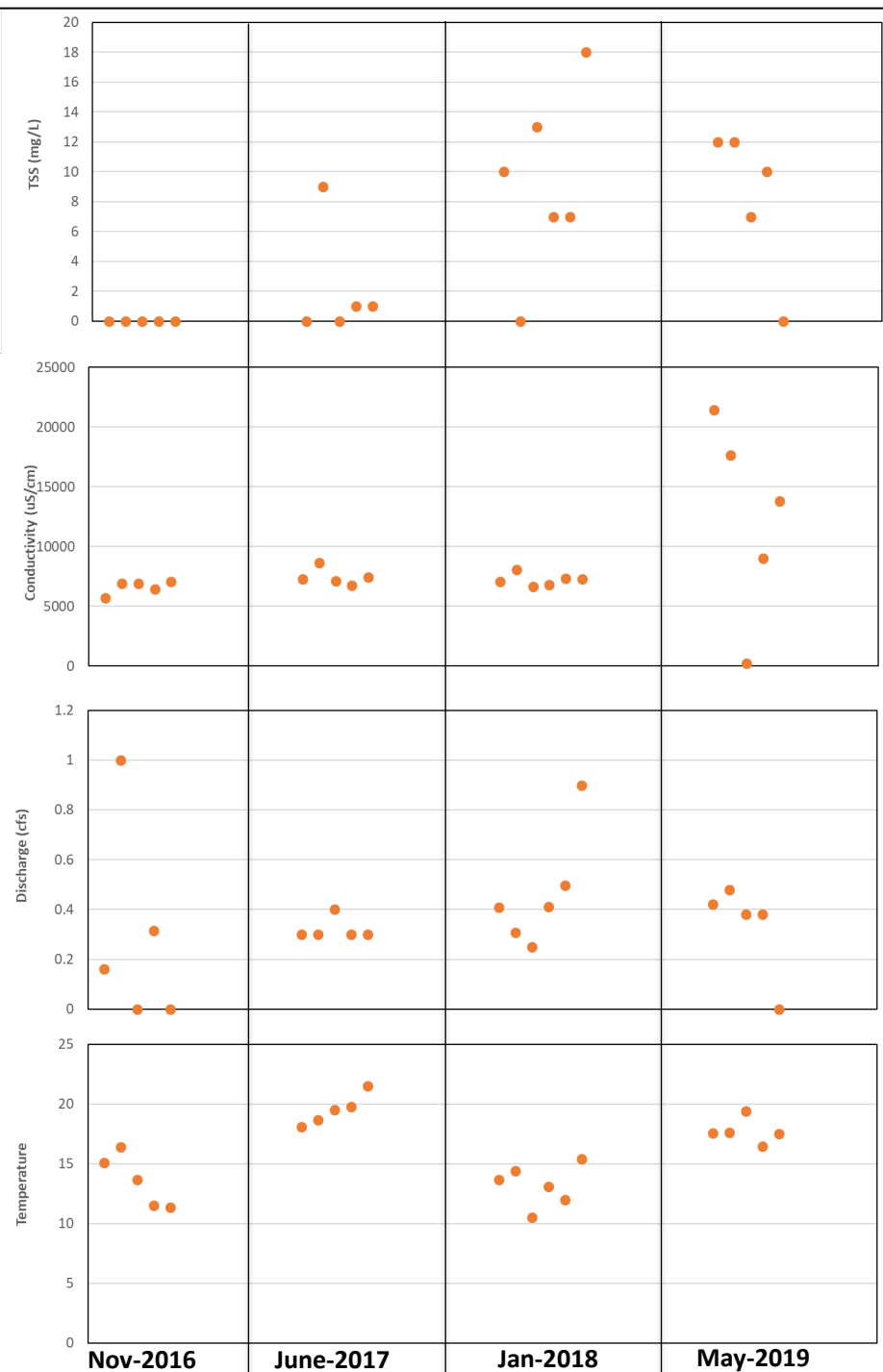
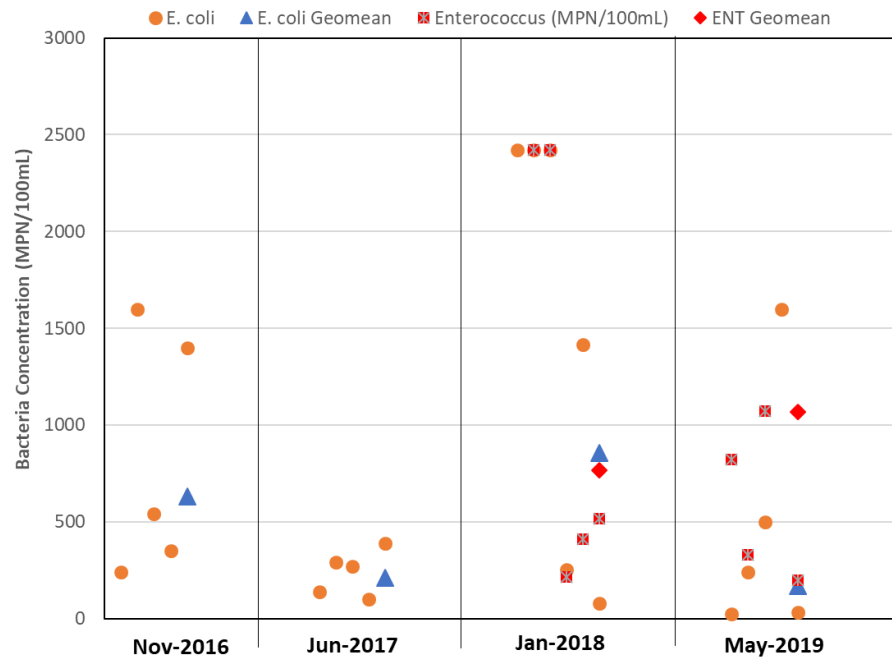
- Regional Board evaluating Newport Coastal watershed for next phase
- Existing intermittent diversion, dry in 2018-20





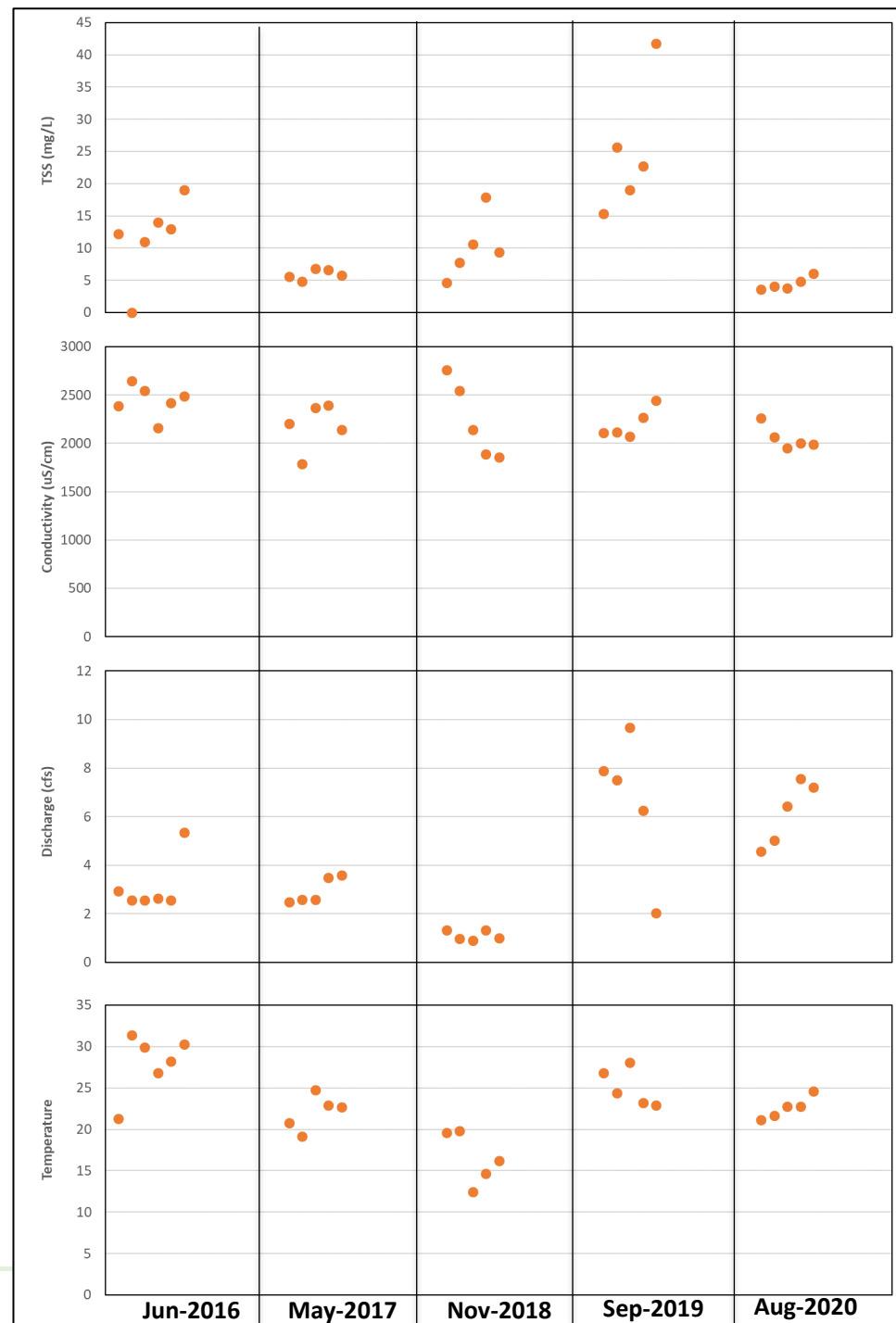
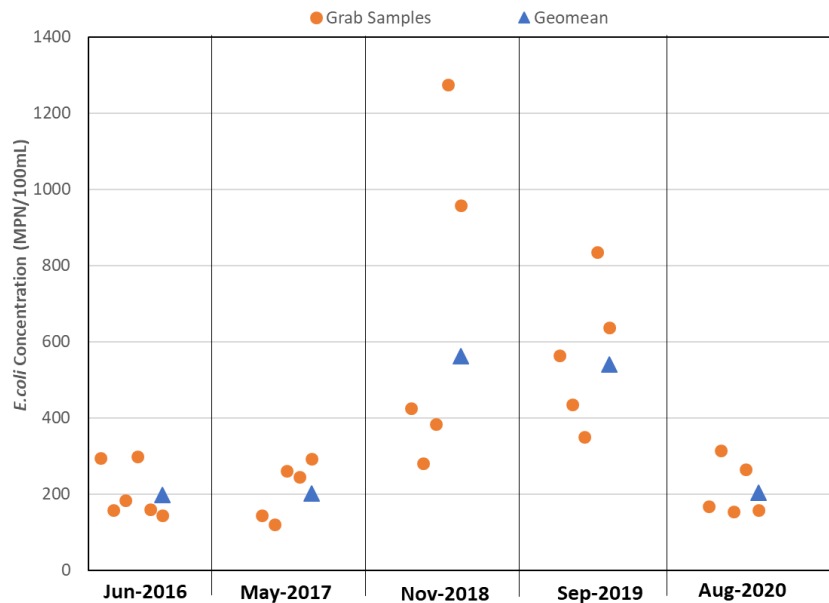
# Morning Canyon Creek

- Regional Board evaluating Newport Coastal watershed for next phase



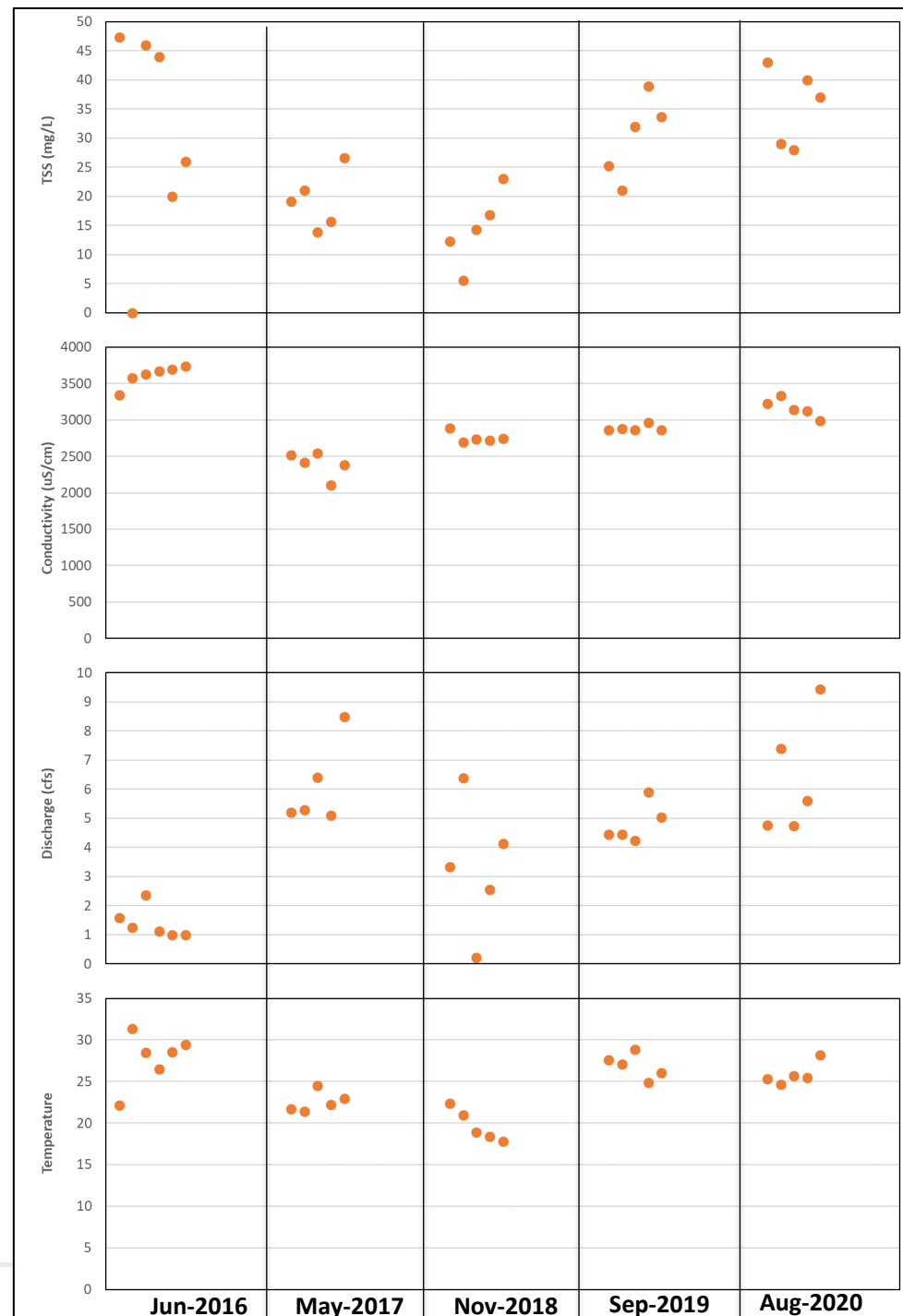
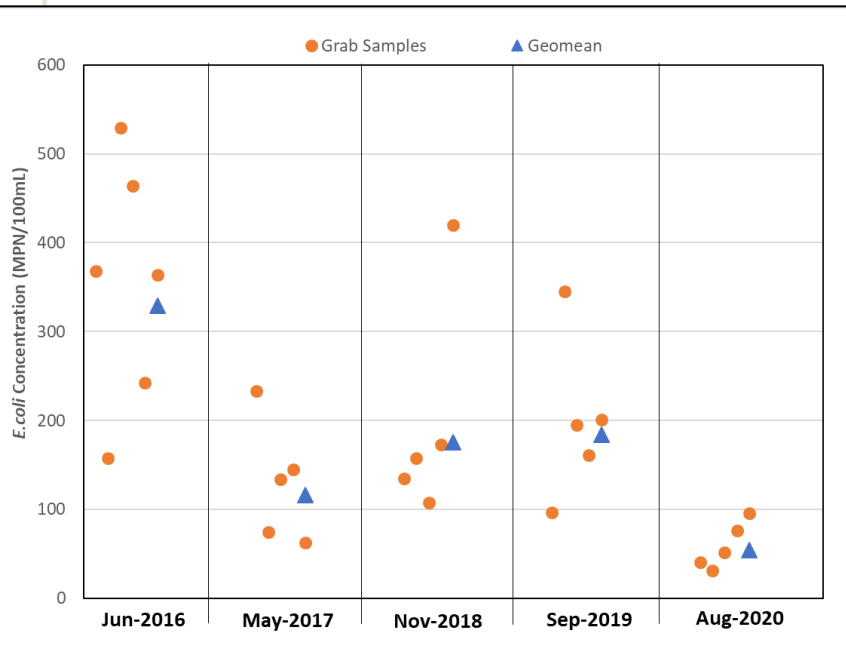
# Peters Canyon Wash

- Dry weather diversions for Se at key upstream tribs,
- DWF ~5 cfs at SDC confluence



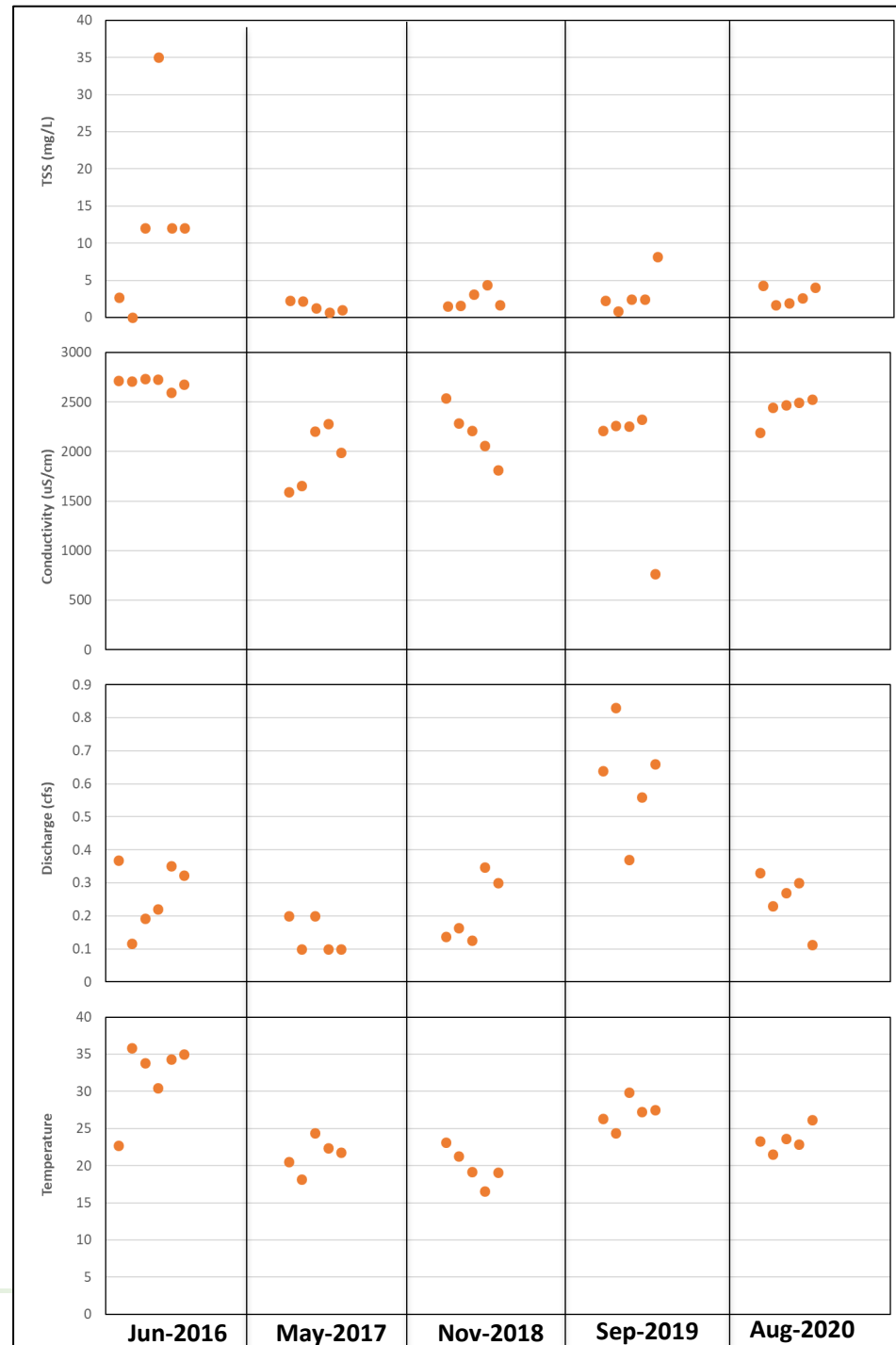
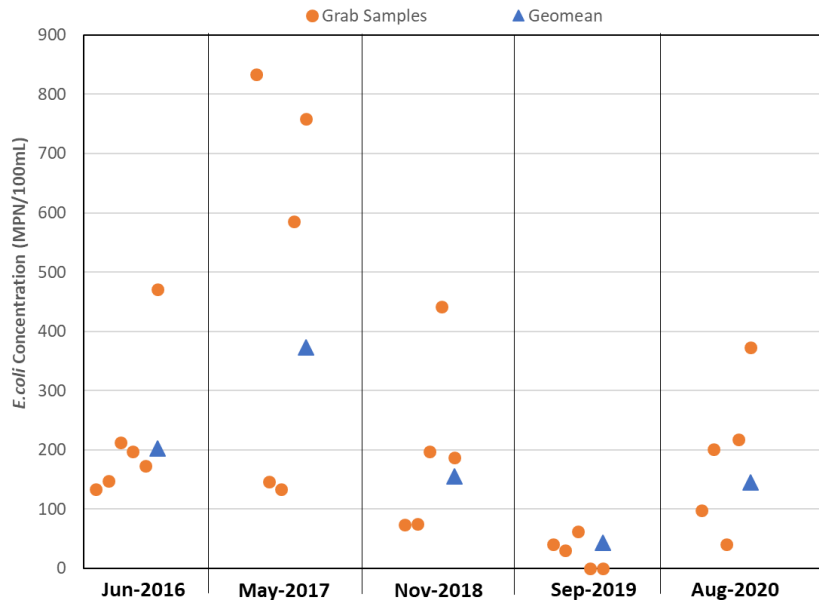
# San Diego Creek Rch 1

- Includes return flows from San Joaquin Marsh
- 2020 was compliant
- OCPW data on key tribs



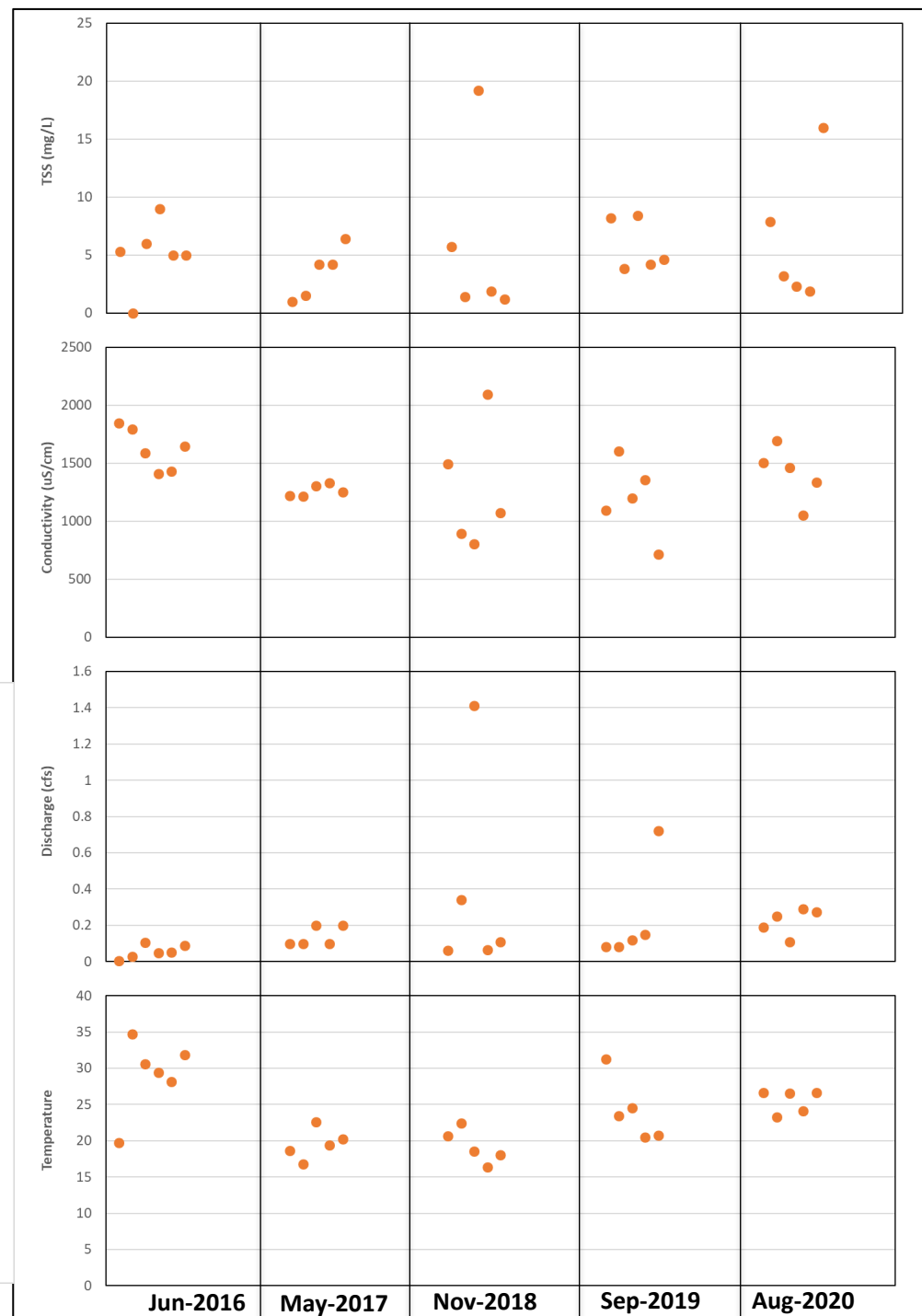
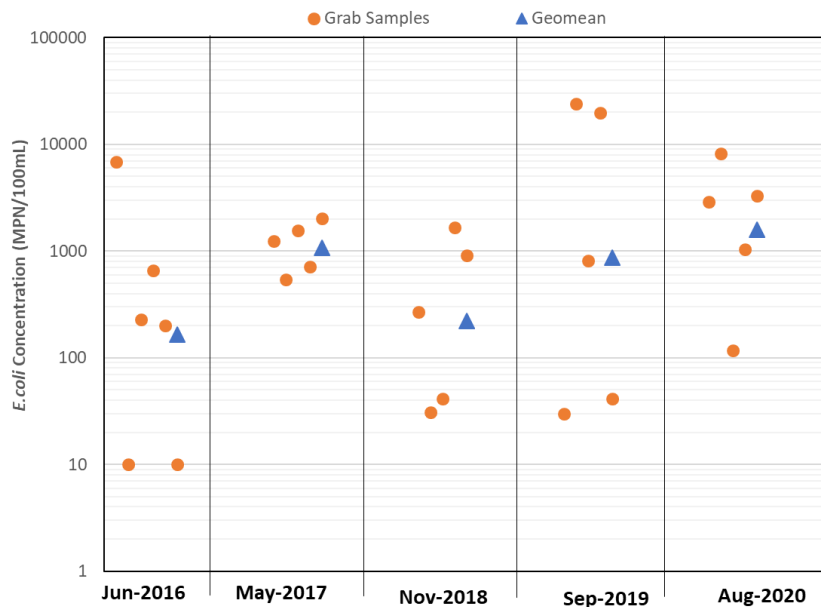
# San Diego Creek Rch 2

- Upstream of Peters Canyon confluence
- Multiple U/S NTS controls
- DWF rate  $\sim 0.3$  cfs
- OCPW data on key tribs



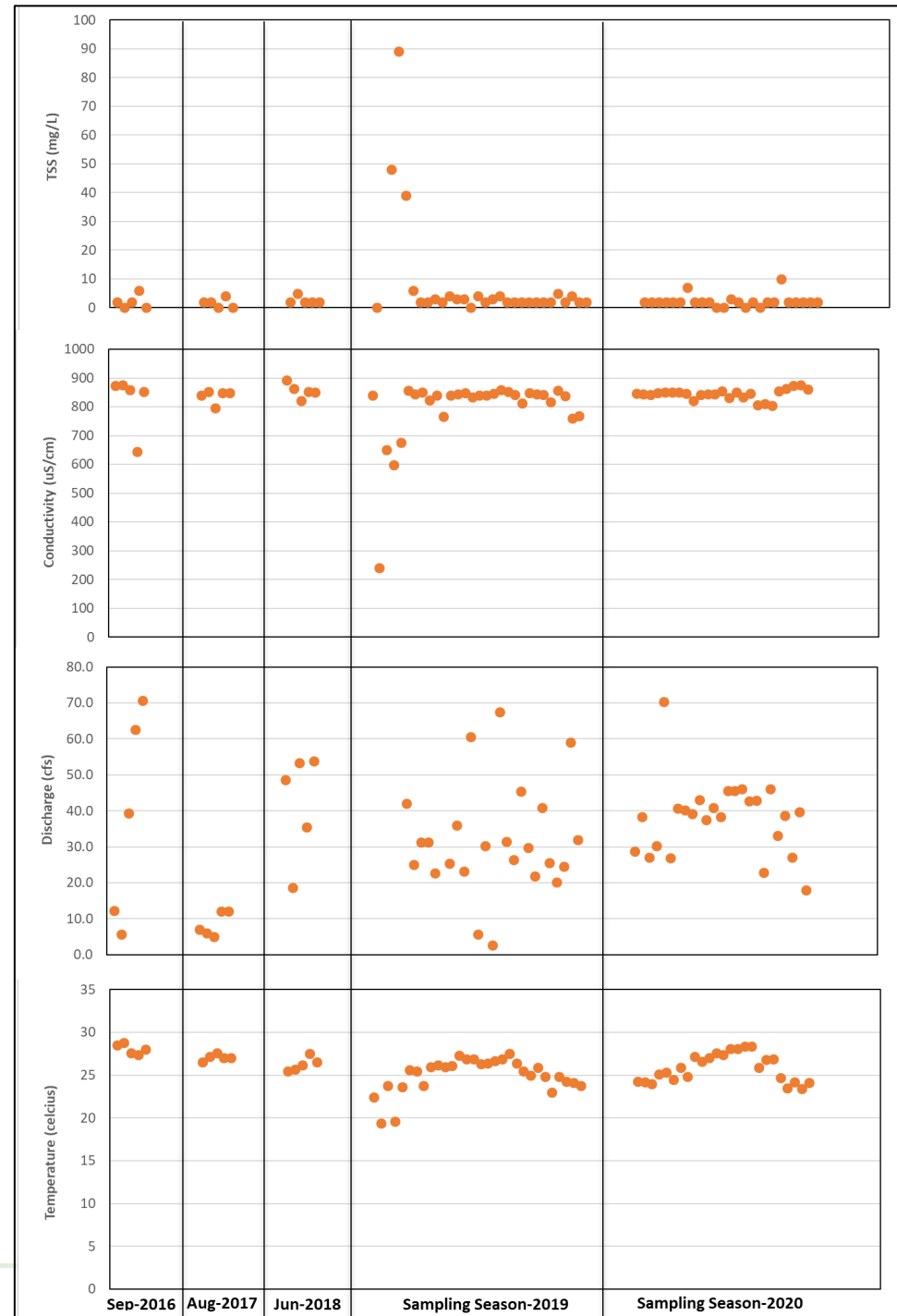
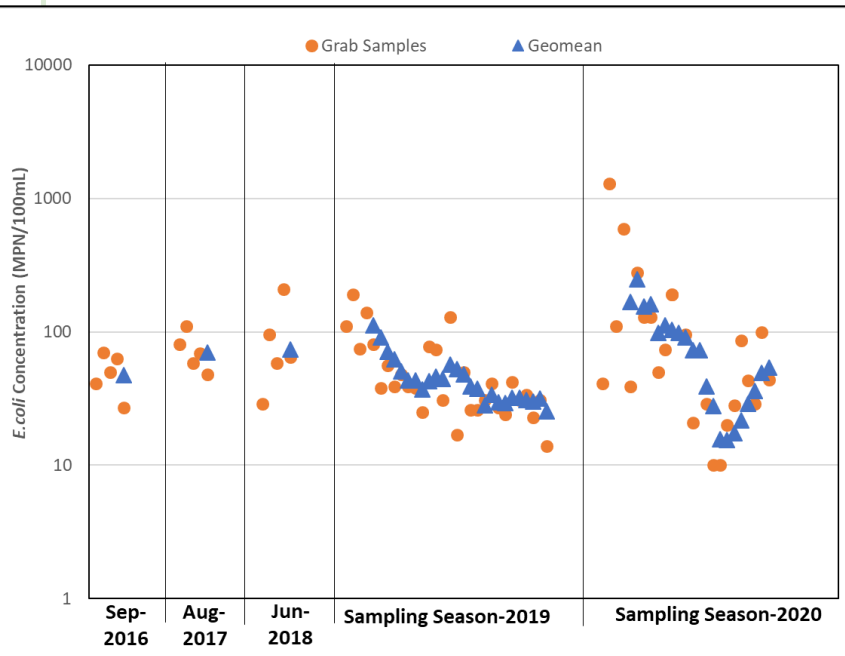
# Serrano Creek

- Monthly OCPW samples at two upstream tribs
- Nakase Brothers nursery
- Equestrian land use adjacent to channel



# Santa Ana River Rch 4

- Upper bound of ongoing mainstem Reach 3 sampling
- Delisting candidate





# Online Reporting via a Data Summary Dashboard

# Quarterly Reports

- Brief PDF report delivered via e-mail
- Tabular data summaries only
- Narrow focus on data over 3 month window



# Online Reporting Opportunity



Connect to latest databases



Accessed from a web browser



Convenient access to sets of raw data



Collection of useful data visualizations



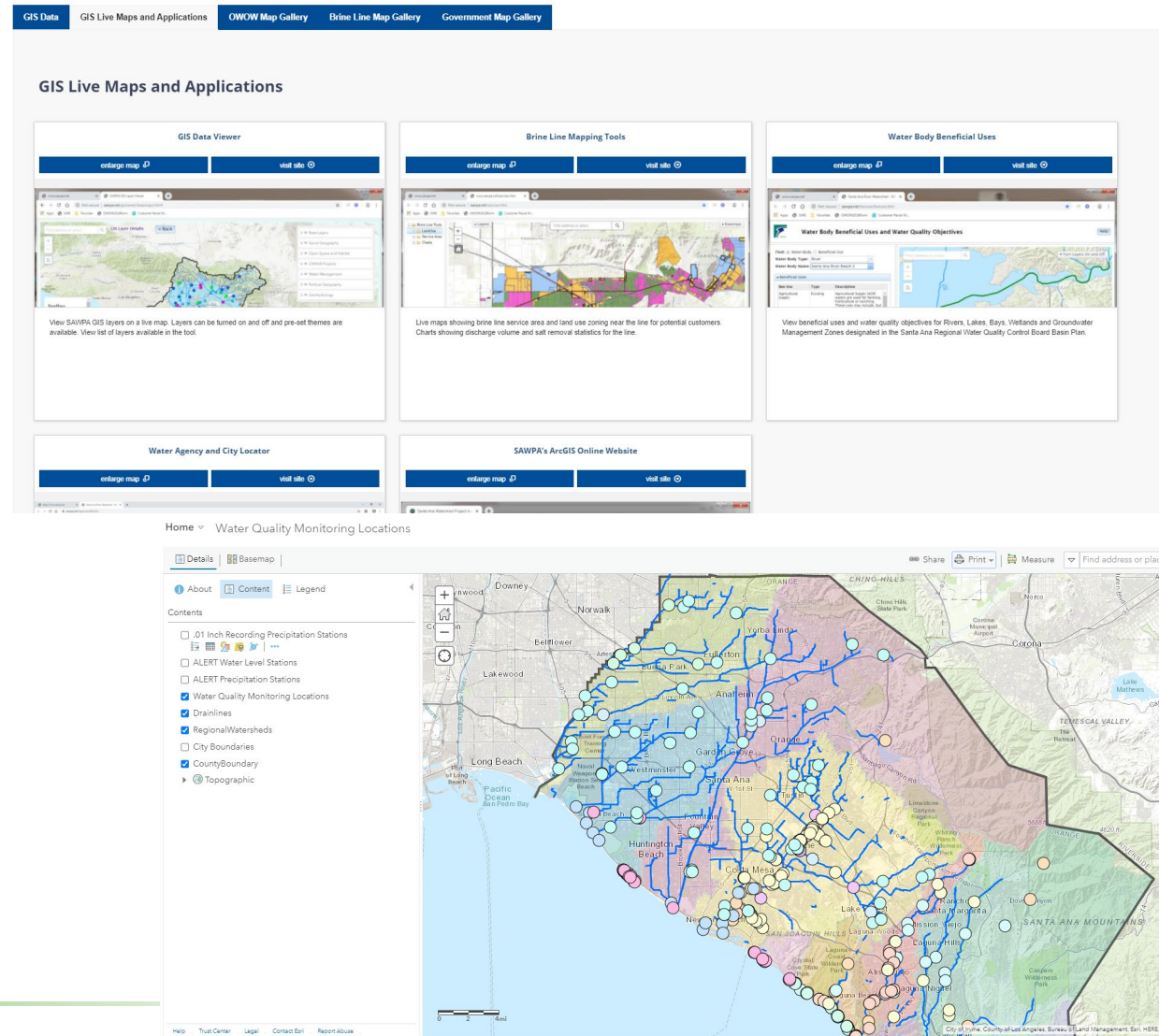
Provide interactive data exploration

Existing  
tools

Enhanced  
functionality

# Existing Portals in Santa Ana Watershed

- SAWPA website
- OC Watersheds site



# Dashboard Example 1: mywaterway.epa.gov

WATERSHED: Railroad Canyon Reservoir-San Jacinto River (180702) [Go](#) OR [Use My Location](#)

The map displays the watershed boundary with a dashed outline. A data download window for 'Canyon Lake M3' is open, showing monitoring data options and download formats.

**Canyon Lake M3**

Measurements:

Download Monitoring Data:

Characteristic Group	Number of Measurements
<input checked="" type="checkbox"/> Other	48
<input checked="" type="checkbox"/> Nutrients	144
<input checked="" type="checkbox"/> Physical	48

Data Download Format: [xls](#) [csv](#)

[More Information](#) (opens new browser tab)

1 of 2

Esri, HERE, NPS Powered by Esri

[Overview](#) [Show Text](#)

## Your Waters: What We Know

Waters in your community are connected within a local [watershed](#). The **dashed outline on the map shows your watershed**.

Water quality is monitored for physical, chemical and biological factors. The monitoring results are assessed against EPA approved water quality standards or thresholds. Water can be impaired, meaning it is not able to be used for certain purposes.... [Show more](#)

DISCLAIMER

**1** Waterbodies

**16** Monitoring Locations

**0** Permitted Dischargers

**Waterbody Conditions:**

● Good ● Impaired ▲ Condition Unknown

[Expand All](#)

Overall condition of waterbodies in the Railroad Canyon Reservoir-San Jacinto River watershed.

**Canyon Lake (Railroad Canyon Reservoir)**  
State Waterbody ID: CAL8021100019990208151525

**Year Last Reported:** 2016

**Waterbody Condition:** Impaired

**Organization Name (ID):** California (CA\_SWRCB)

Evaluated Use	Condition
Aquatic Life	Impaired
Recreation	Good

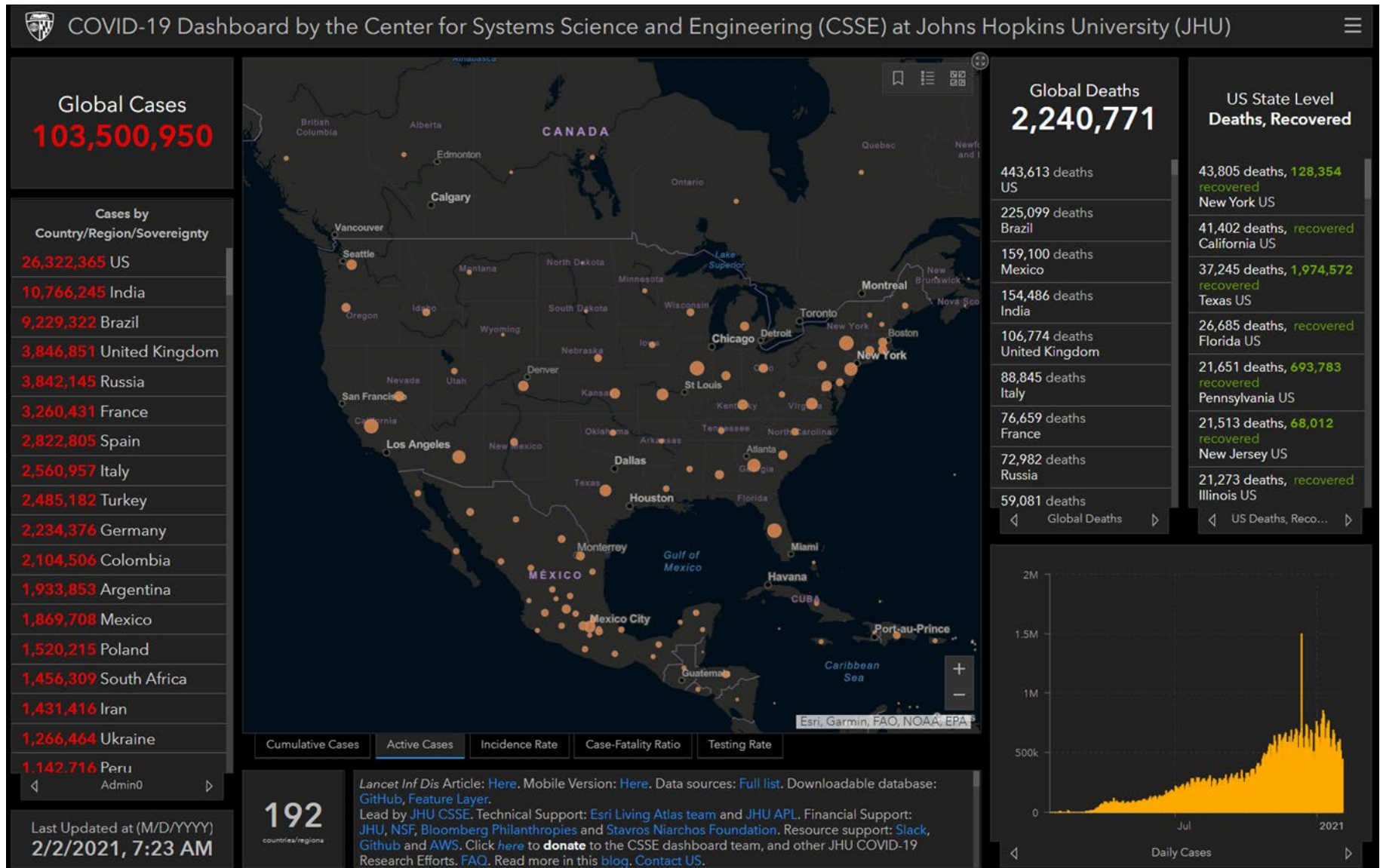
**Impairment Categories were identified:**

- [Nitrogen and/or Phosphorus](#)

[View Waterbody Report](#) (opens new browser tab)

[View on Map](#)

# Dashboard Example 2: coronavirus.jhu.edu





# Dashboard Example 3: CDM Smith Newark Lead Service Line Replacement

