

Homeless Encampment Phase 1A: Water Quality Monitoring and Trash Assessments Program *Project Update: February 9, 2022* Richard Meyerhoff, GEI Consultants Ryan Kearns, CWE Jason Pereira, CWE Steven Wolosoff, CDM Smith







PROJECT OBJECTIVES

- Assess potential impacts of three areas of concentrated homeless encampment activity on water quality during dry weather conditions; and
- Quantify potential water quality and trash deposition impacts caused by homeless encampments to assist SAWPA and its member agencies in assessing the magnitude of impacts and determining appropriate next steps, if any.





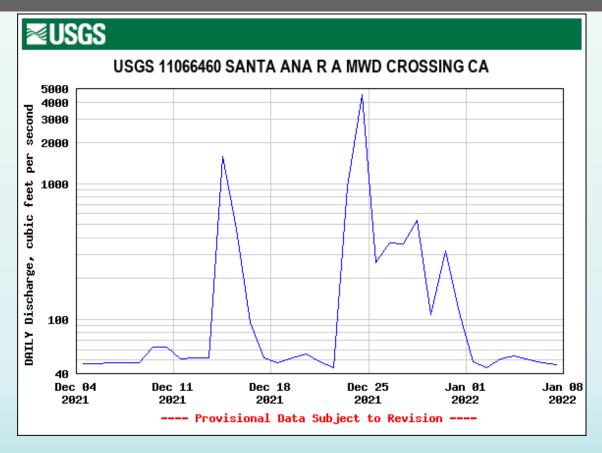
ASSESSMENT LOCATIONS

- Assessments are being conducted upstream and downstream of three areas of homeless encampments:
 - Market Street Bridge (MSB)
 - Mission Boulevard Bridge (MBB)
 - Van Buren Bridge (VBB)



PROJECT STATUS

- Four dry weather sampling events completed
 - September 21, 2021
 - October 21, 2021
 - November 18, 2021
 - January 6, 2022
 - Over 5 inches of rain recorded by the Riverside Airport rain gauge between 12/14/21 and 12/30/21
- Data collection:
 - Water samples to analyze for total suspended solids (TSS), E. coli, and human bacteria marker HF183
 - Sonde measurements for temperature, dissolved oxygen, pH, specific conductivity and turbidity



- Rapid trash assessment, photographs and field observations using State Water Board protocols
- Bacteria markers for dogs (DG37) and pigs (Pig2Bac) added to final two sample events in November and January after November meeting discussion

SUMMARY OF GENERAL OBSERVATIONS

- Rapid Trash Assessments
 - Most sites typically rated as "marginal"
 - Generally improved trash conditions at study sites following December wet weather event
- E. coli Results
 - Typically observed in higher concentrations below areas of homeless encampments
 - Overall trend is increased E. coli concentrations from most upstream to most downstream site –
 same pattern observed in other studies
- Human Marker (HF183)
 - Observed at some sites, especially Van Buren Bridge encampment area, but always at low levels (below detection limit)
- Dog (DG37) and Pig (Pig2Bac) Markers (only two of four sample events)
 - Dog Only observed at one site in November; result was below detection limit
 - Pig Significant detections in November and January at the downstream Mission Blvd Bridge site and upstream/downstream of the Van Buren Bridge sites

NEXT STEPS

- Finalize QA/QC of all data
- Prepare Draft Study Report for stakeholder review
 - Submit no later than April 30, 2022
- Prepare Final Study Report
 - Submit no later than June 30, 2022



2/17/2022

