

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



BACKGROUND

In December 2018, SAWPA commissioned a two-part study:

- Task 1 Literature Review and Assessment of Existing Information
 - Assess current nature and extent of stream and waterbodyadjacent homeless encampments in the upper watershed
 - Provide best information about the relationships between presence of homeless encampments and impacts to water quality and riparian/aquatic habitats
- Task 2 Preparation of Preliminary Monitoring Program
 - Develop a <u>Preliminary</u> Monitoring Program to assess the potential impacts of homeless encampments on water quality and riparian and aquatic habitats



PHASE 1A MONITORING PROGRAM

- Upstream and downstream monitoring locations of three major encampments:
 - Market Street Bridge (MSB-1, MSB-2)
 - Mission Boulevard Bridge (MBB-1, MBB-2)
 - Van Buren Boulevard Bridge (VBB-1, VBB-2)
- Preliminary Field Visits to confirm existence and density of encampments
 - July 15, 2021 (complete)
 - August 26, 2021
- Four Dry Weather Events
 - September through December 2021



AERIAL VIEW OF VAN BUREN BOULEVARD BRIDGE

VBB-1 (upstream site)

- Located upstream of the Union Pacific Railroad Bridge
- Accessed via Santa Ana River Trail near Wilderness Avenue

VBB-2 (downstream site)

- Located just upstream of the Van Buren Boulevard Bridge
- Accessed via Santa Ana River Trail or northeast corner of the VBB bridge
- Avoiding confluences with RWQCP effluent outfall and Hole Lake



ESTIMATION OF VBB ENCAMPMENTS (JUNE 26 & 27, 2021)

- SAWPA obtained 3-inch high resolution imagery of the Santa Ana River Watershed
 - Estimated 144 encampments within the Van Buren Blvd sample reach; total of 430 encampments estimated between Van Buren Blvd and Riverside Ave Bridges



VAN BUREN BOULEVARD BRIDGE (JULY 15, 2021)







MISSION BOULEVARD BRIDGE (JULY 15, 2021)



MARKET STREET BRIDGE (JULY 15, 2021)



NEXT STEPS

- Conduct Second Preliminary Field Visit on August 26th, 2021
- Conduct First Dry Weather Event in September (~September 16)
 - Collect water quality samples for Total Suspended Solids, E. coli, and Human Fecal Marker 183 (HF 183)
 - Collect water quality parameters (Temperature, pH, Dissolved Oxygen, Turbidity, Conductivity)
 - Perform Rapid Trash Assessments using California State Water Board protocol
 - 1) Level of Trash

4) Threat to Human Health

2) Number of Items Found

- 5) Illegal Dumping
- 3) Threat to Aquatic Life
- 6) Accumulation of Trash

Questions