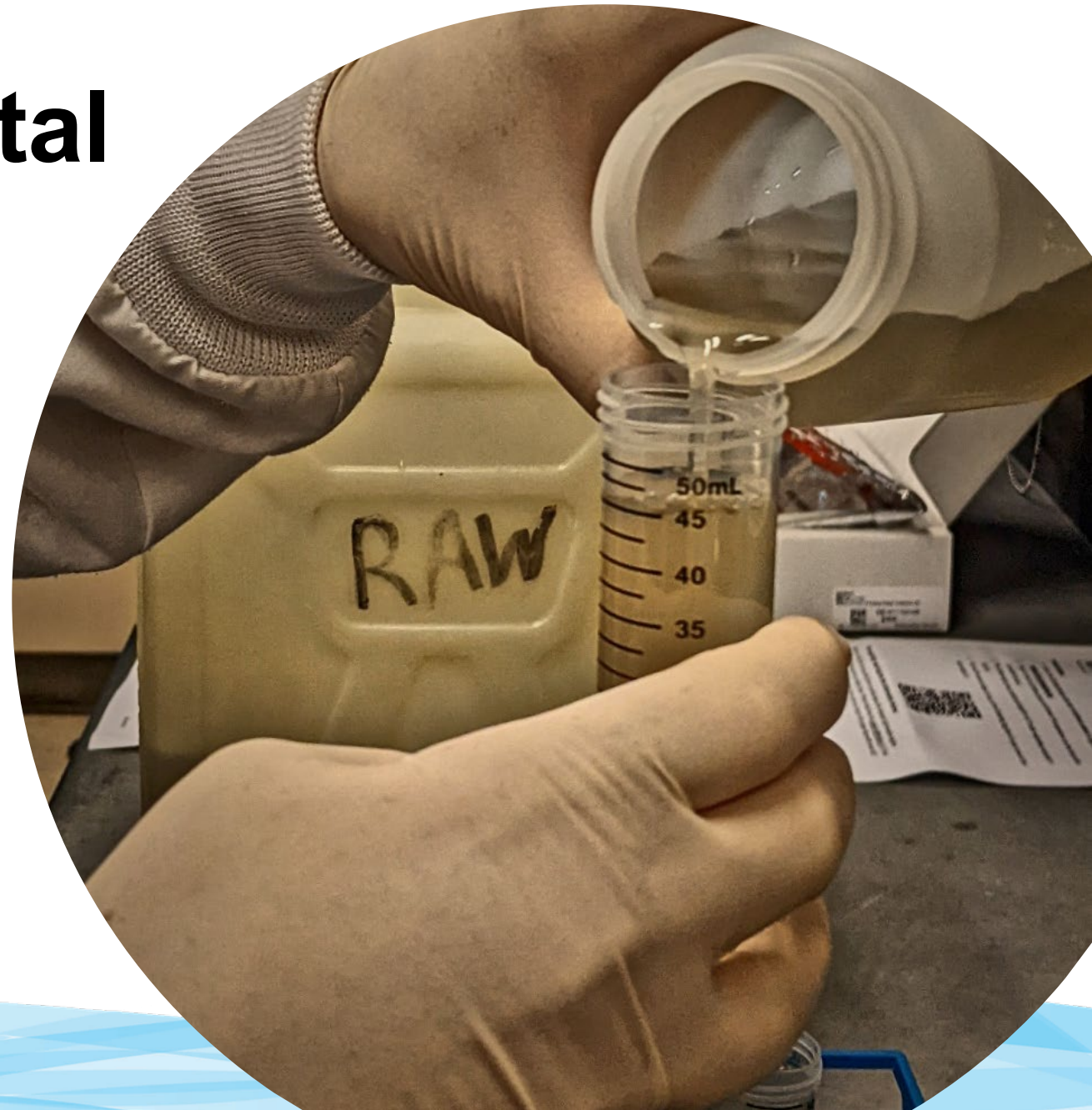


Laguna Environmental Laboratory Update

June 20, 2024
Board of Public Utilities

Robert C. Wilson, Laboratory Supervisor

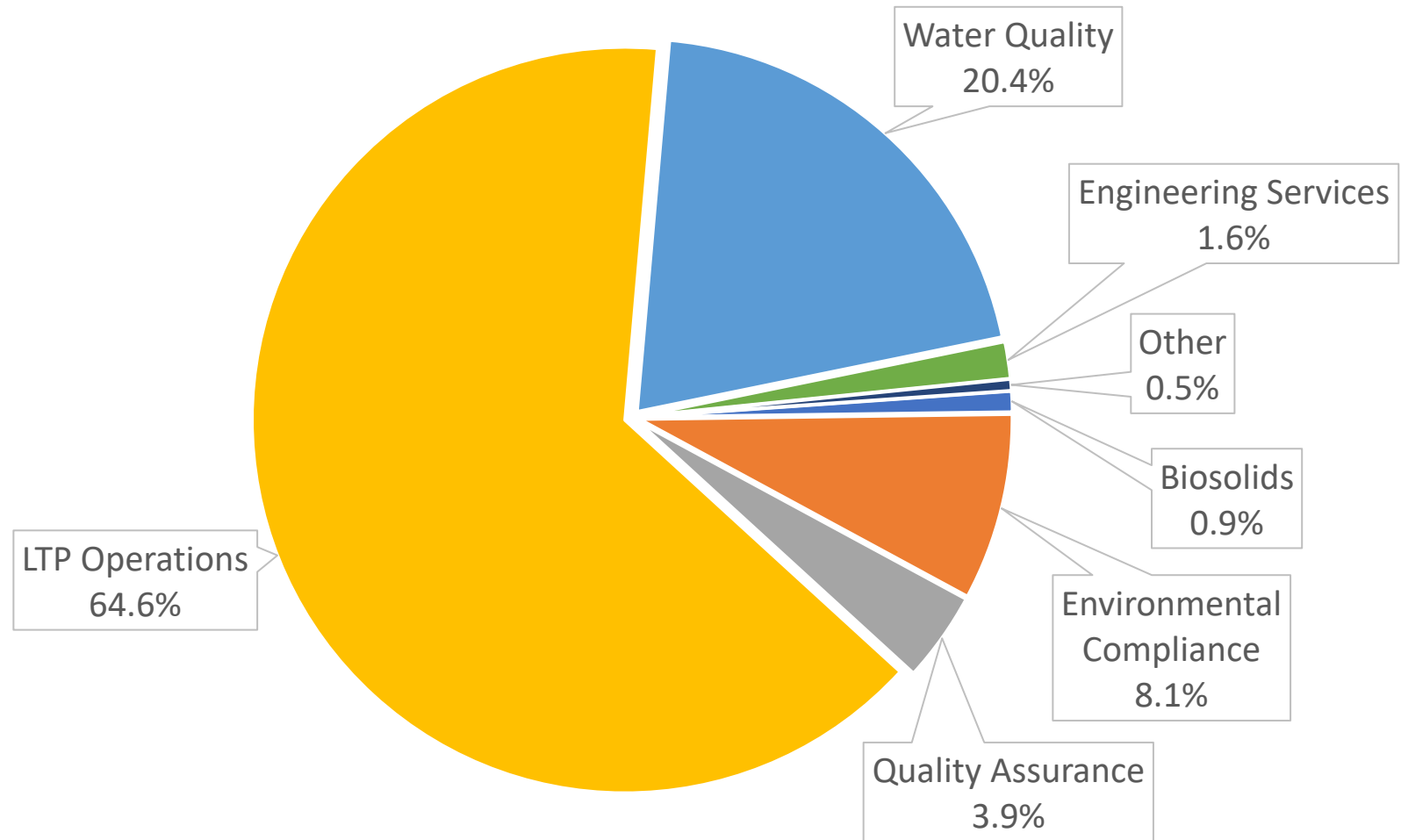




Laguna Environmental Laboratory (LEL)

- LEL was established in 1968 with primary function of physical and chemical measurements of wastewater
- Expansion to add a broader scope of analytical testing in 2000
- Staffing includes sample receiving and preparation, laboratory analysts, information technology and management for a total of 14 people
- Staff processed 10k Samples for a total of 26k analytes in 2023

Laguna Environmental Laboratory Clients

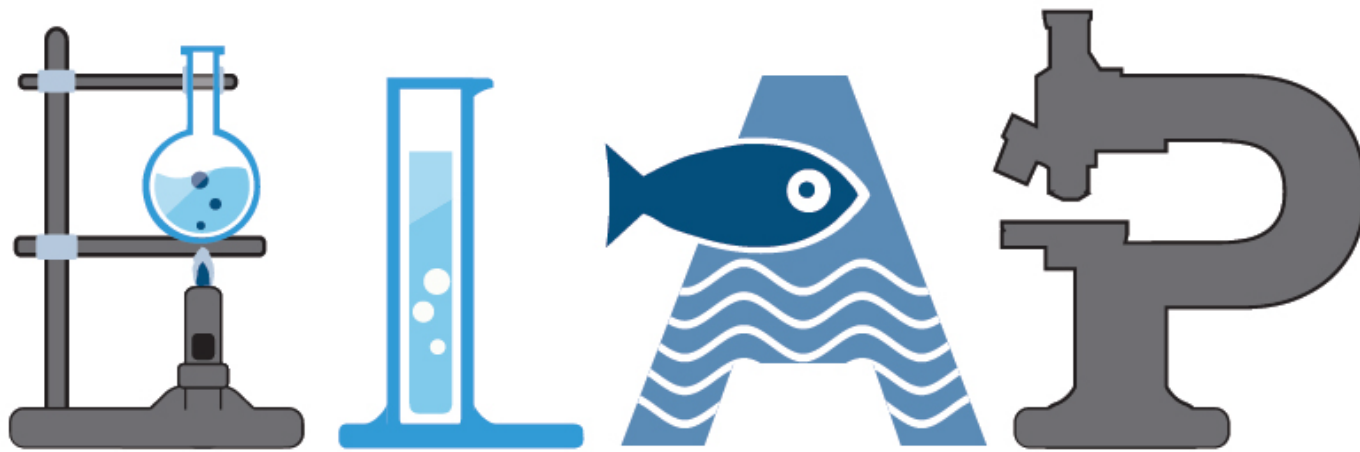


Customer Service

- Upload data for drinking water and wastewater reporting
- Work with clients to provide sample assistance and bottle kits
- Consulting services for Police and Fire
- Support compliance with Contaminants of Emerging Concerns (CECs)



Maintaining Accreditation



Environmental Laboratory Accreditation Program
STATE WATER RESOURCES CONTROL BOARD

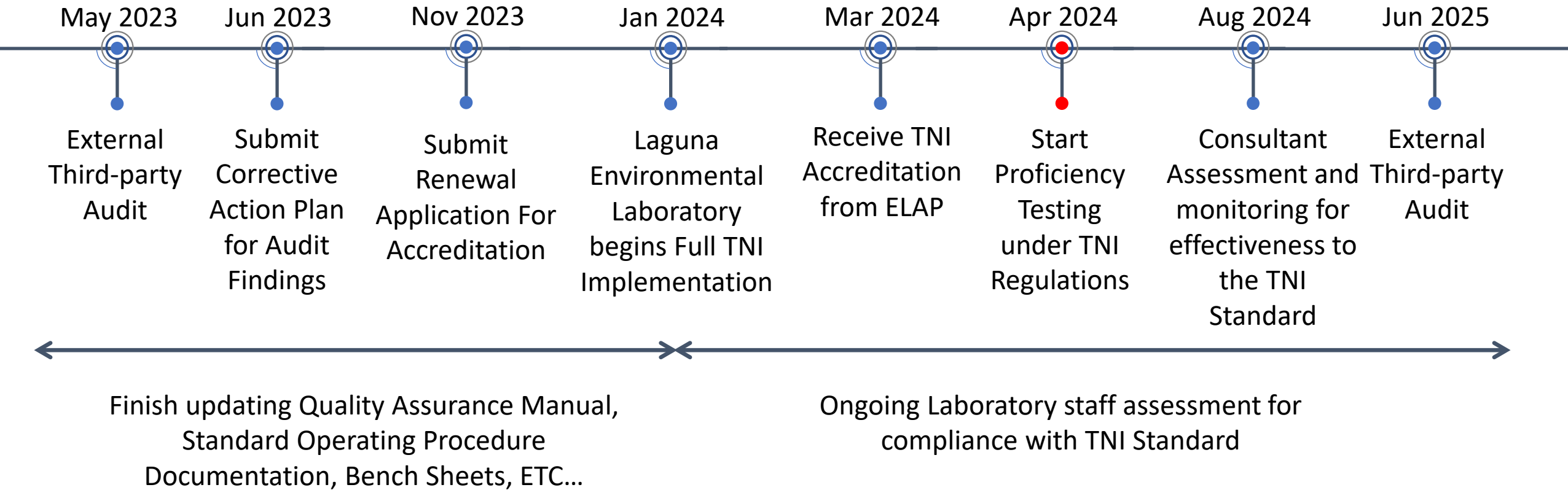
- Environmental Laboratory Accreditation Program (ELAP)
 - Accreditation body for environmental laboratories in California
 - Adopted The NELAC Institute (TNI) standard with laboratories adopting changes by January 2024

The NELAC Institute (TNI)

- NELAC is the National Environmental Laboratories Accreditation Conference.
- To comply with the new standard the laboratory made multiple changes to Quality Assurance Programs with few changes regarding how testing is performed at the bench.
- TNI is Based on the International Organization for Standardization (ISO) and uses format and language consistent with ISO.



TNI Compliance Timeline

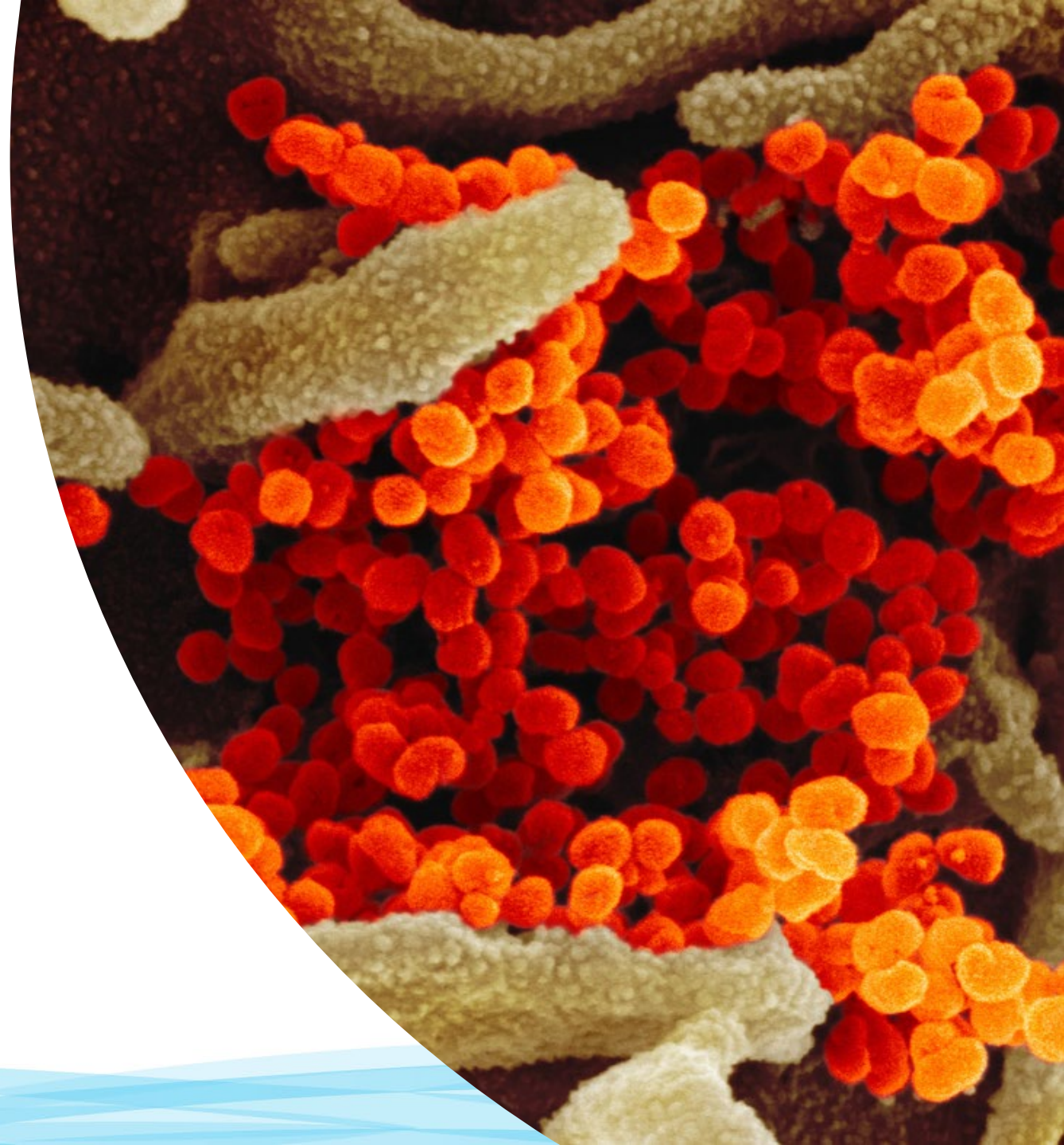


Wastewater Epidemiological Studies

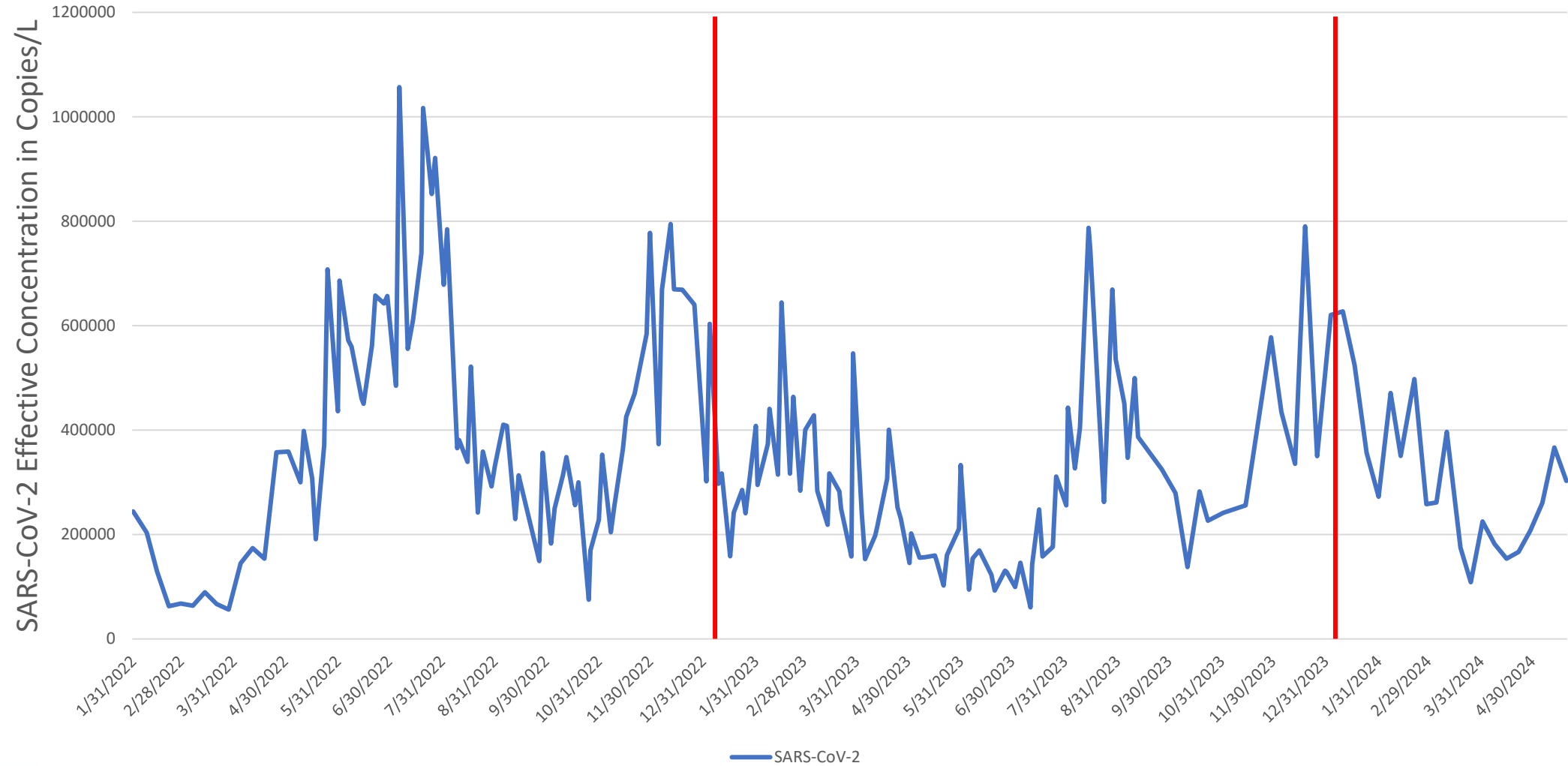
The Water Department is participating in two National Studies

Multiple viral studies including:

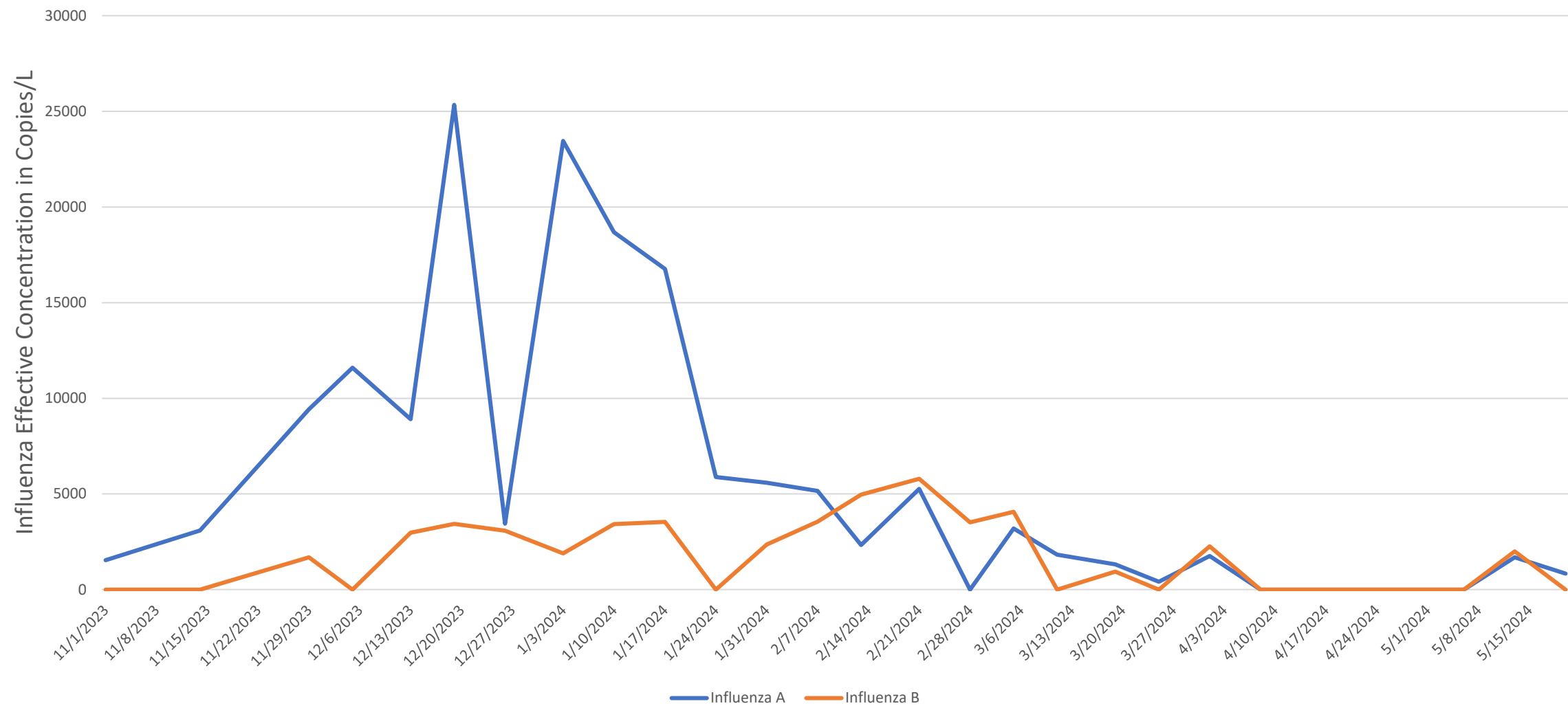
- SARS-CoV-2
- Influenza A and B
- RSV
- Human Metapneumovirus
- Norovirus
- Rotavirus
- Mpox
- Hepatitis A



SARS-CoV-2



Influenza

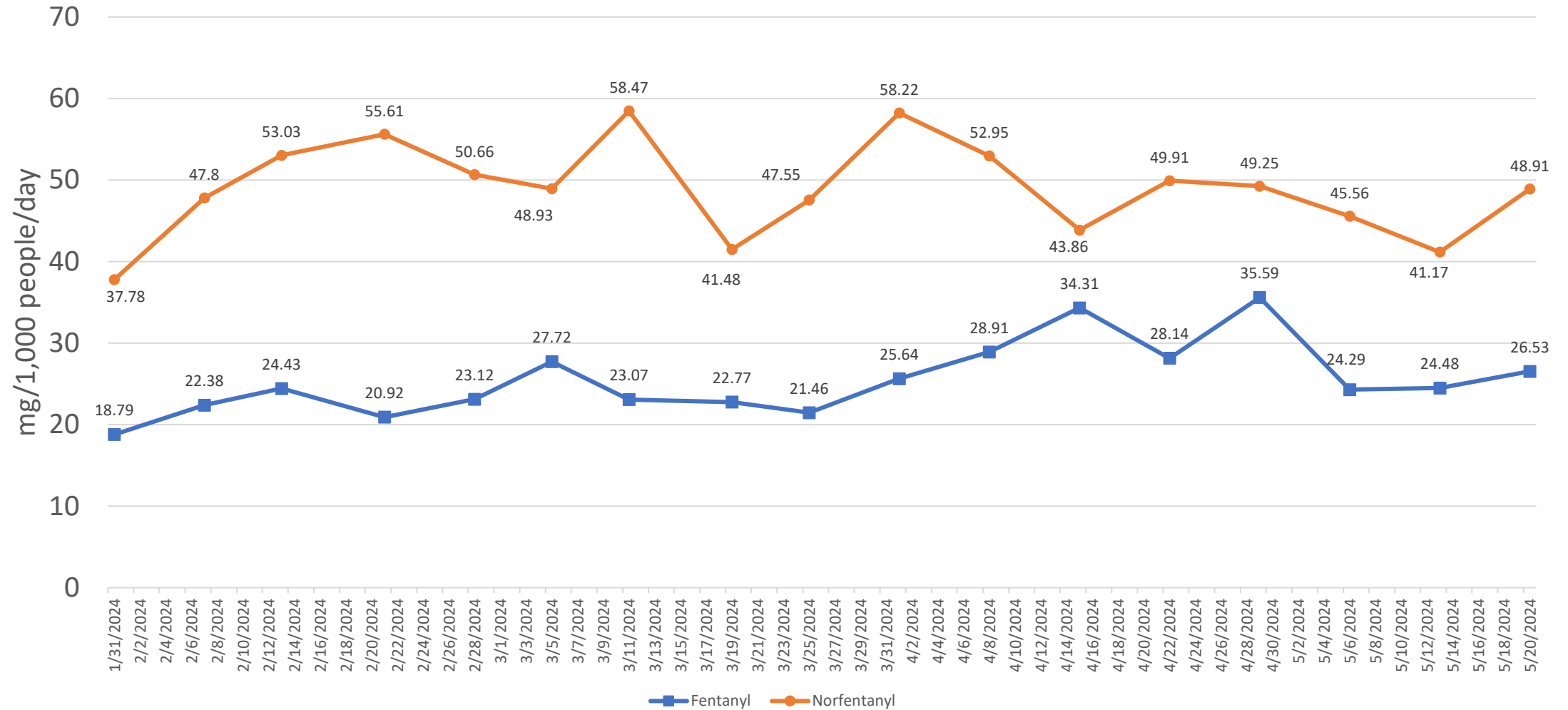


Illicit Drugs

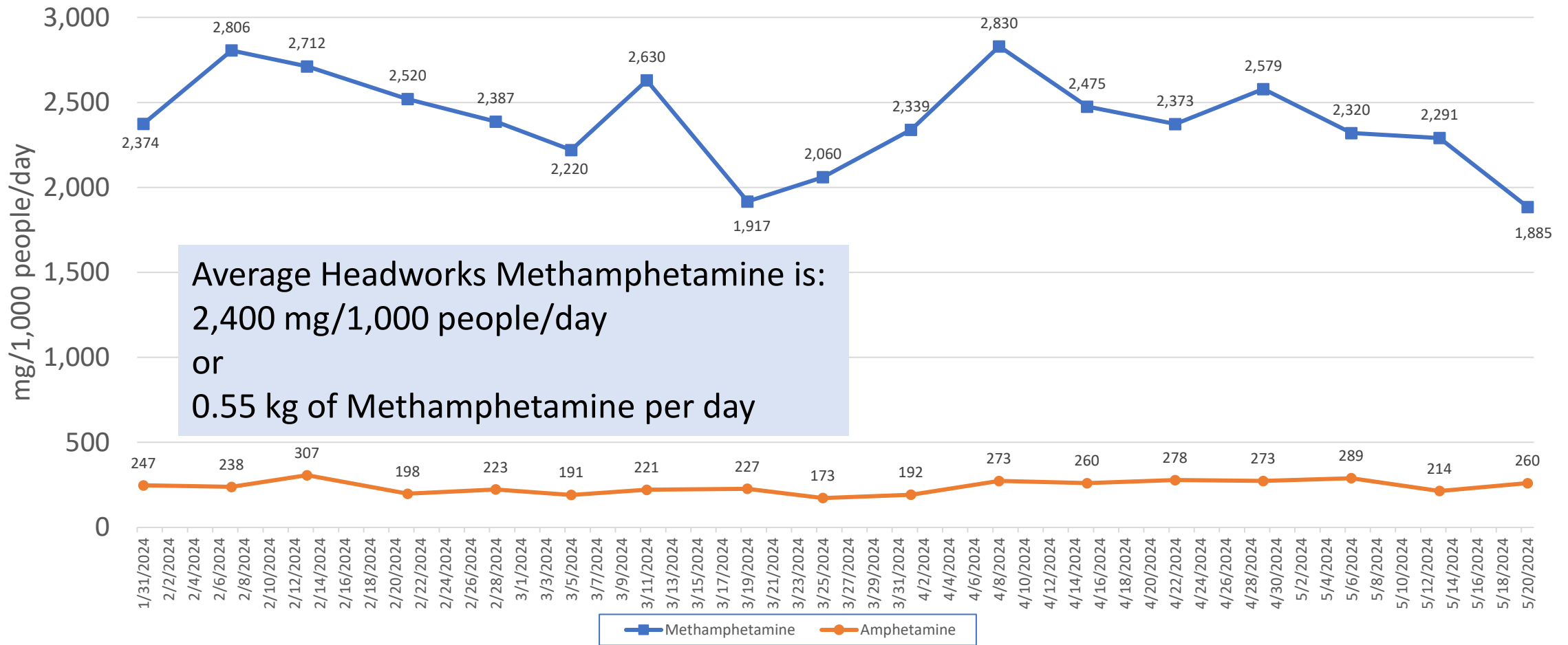
- Development of data for public health needs in disadvantaged communities.
- Data is collected from wastewater influent for:
 - Fentanyl
 - Cocaine
 - Methamphetamine
 - Xylazine



Fentanyl Consumption Estimate



Methamphetamine Consumption Estimate





Thank you