

# Lethal Levels of 6PPD-Quinone in Anchorage Waterways

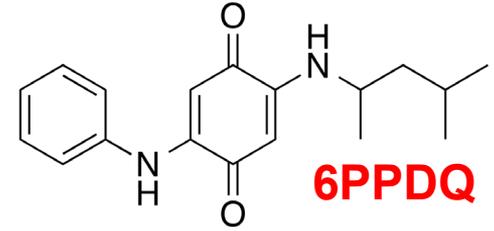
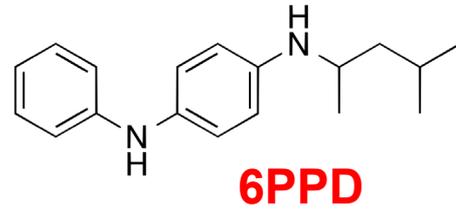
Brian DiMento, Elizabeth Gruen (NSF REU), Zachary Redman, Patrick Tomco



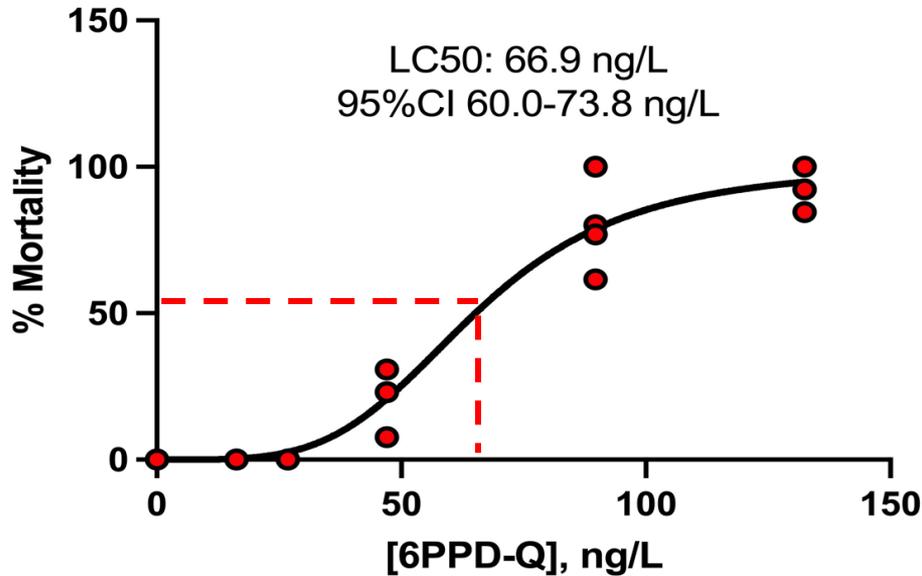
Chemistry Department  
UNIVERSITY of ALASKA ANCHORAGE



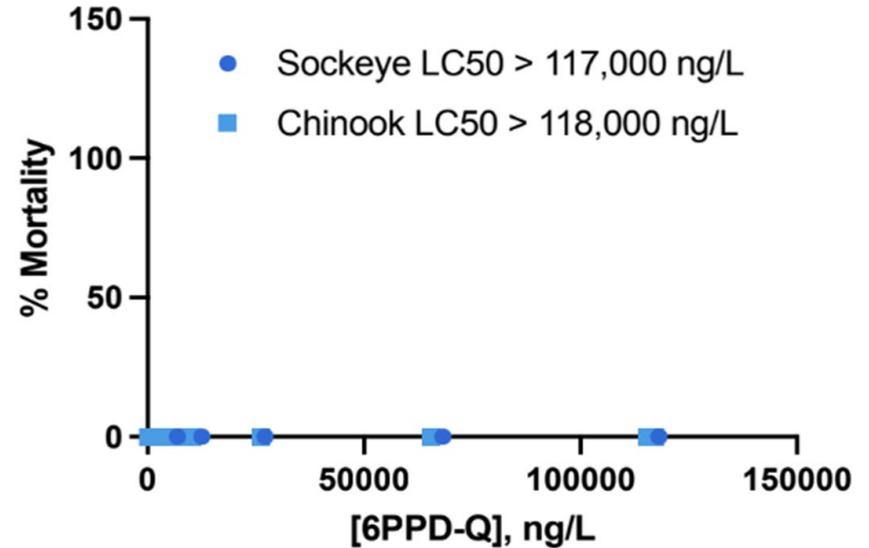
# 6PPD- Quinone



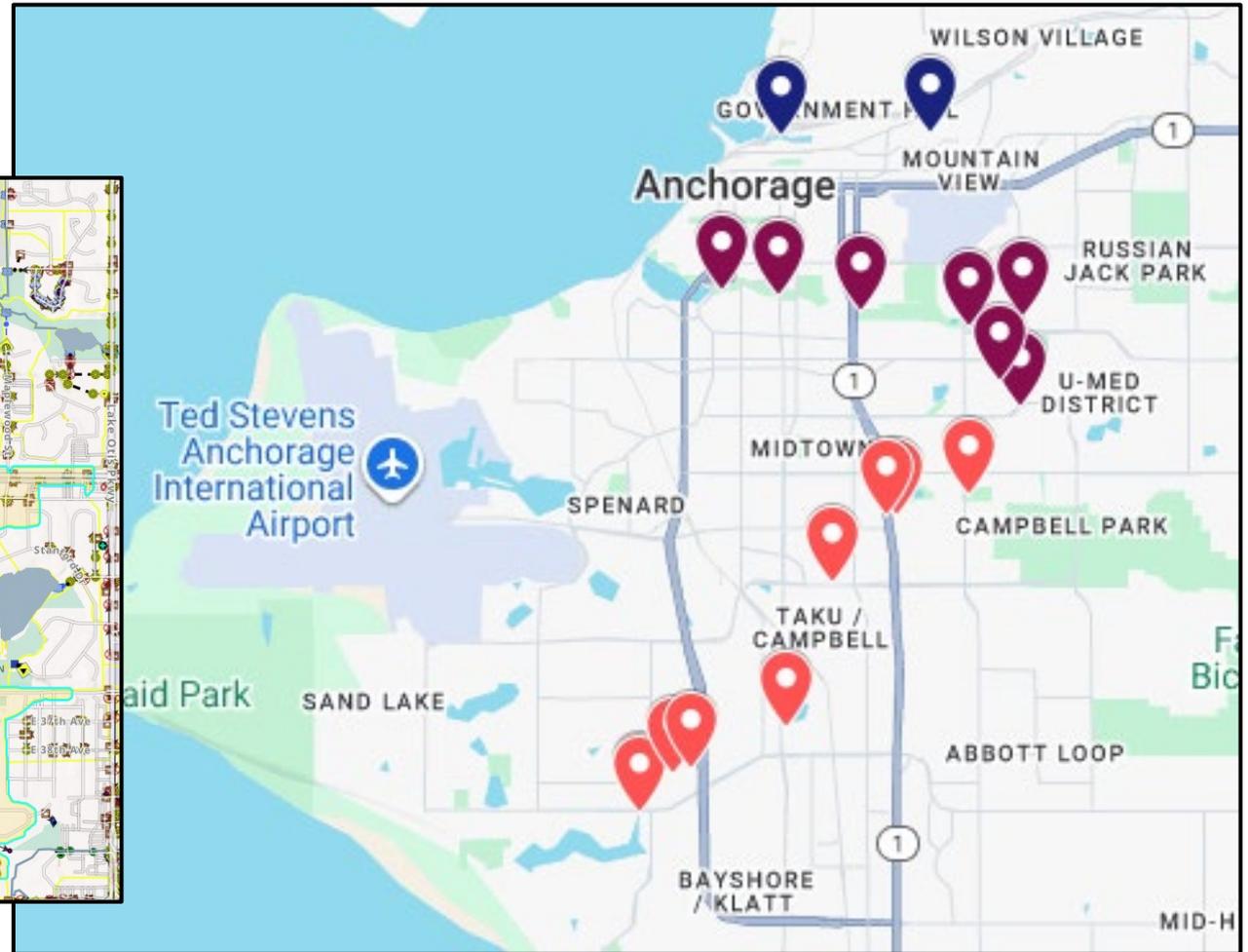
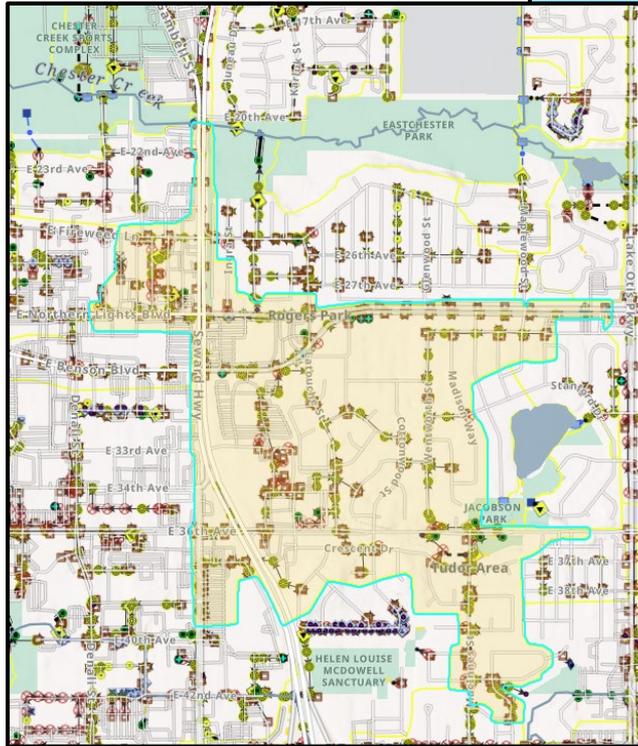
**Coho**



**Sockeye and Chinook**



# Sampling Sites



# Collecting Samples



Photo Credit: James Evans, UAA

# Extracting Samples



Photo Credit: James Evans, UAA

# Analyzing Samples



Photo Credit: James Evans, UAA

# Stream Water

250  
200  
150  
100  
50  
0

6PPDQ (ppt)

LC<sub>50</sub>

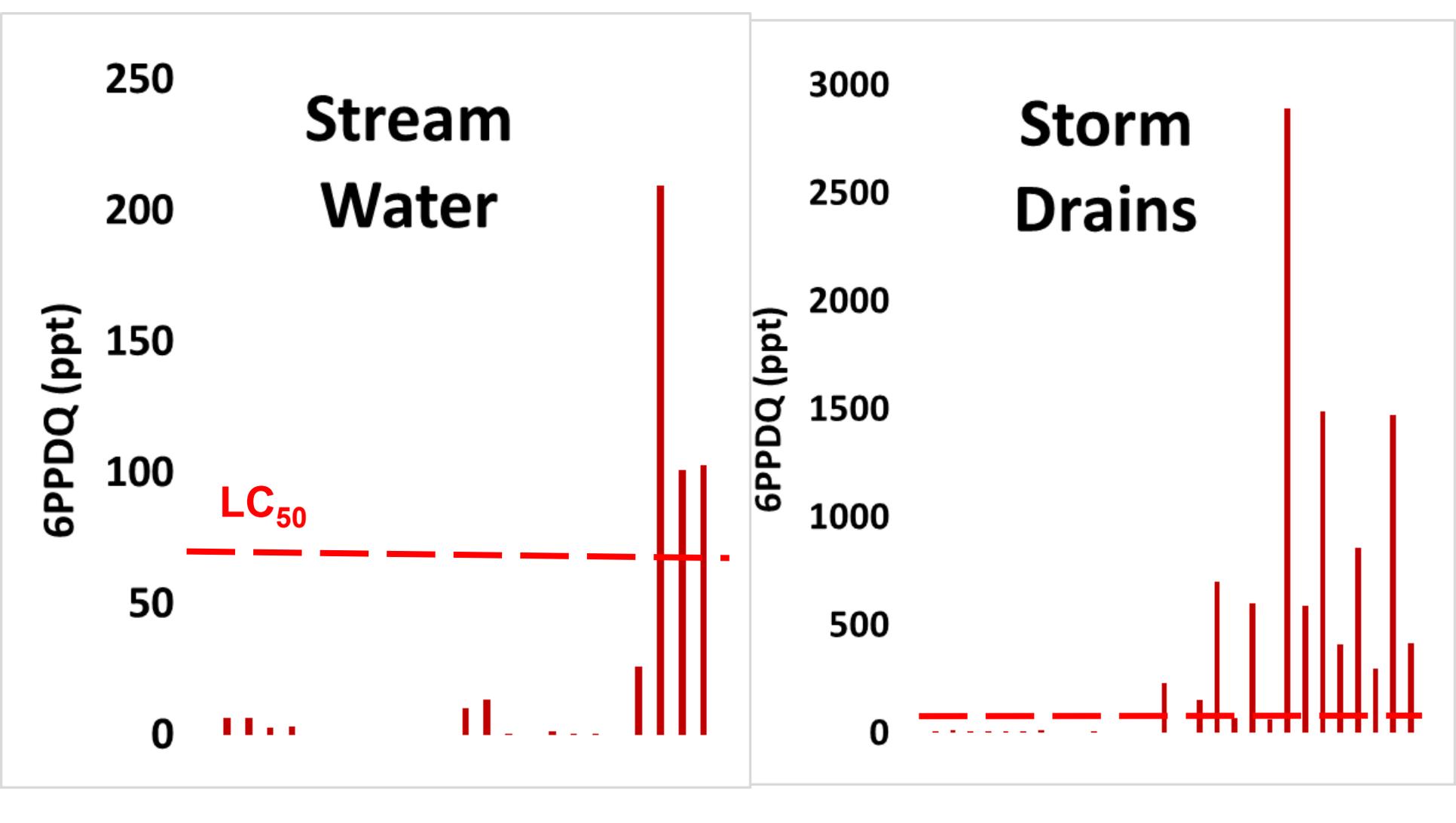
6PPDQ (ppt)

3000  
2500  
2000  
1500  
1000  
500  
0

6PPDQ (ppt)

# Storm Drains

6PPDQ (ppt)

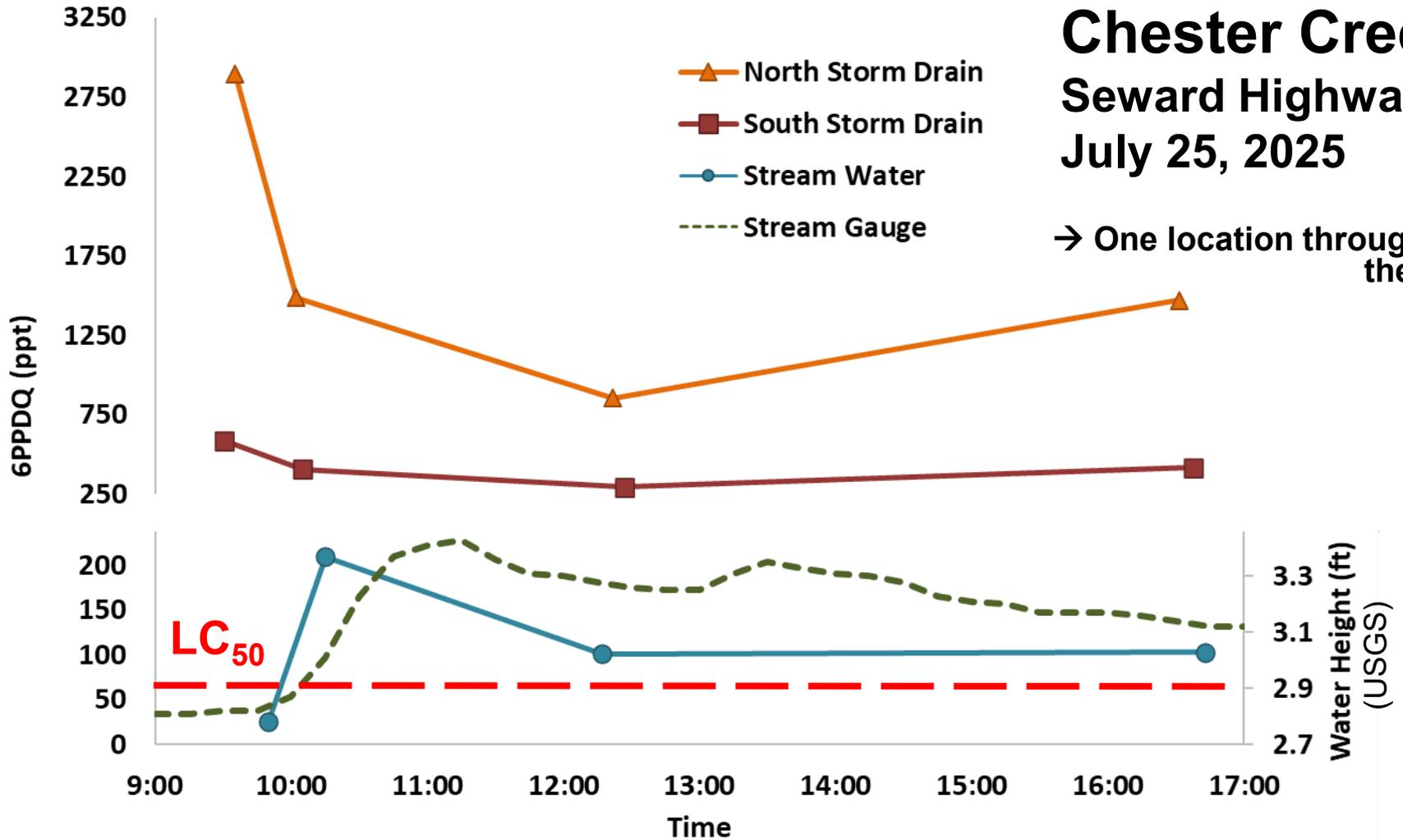


# Chester Creek - July 25, 2025 - Rain Event



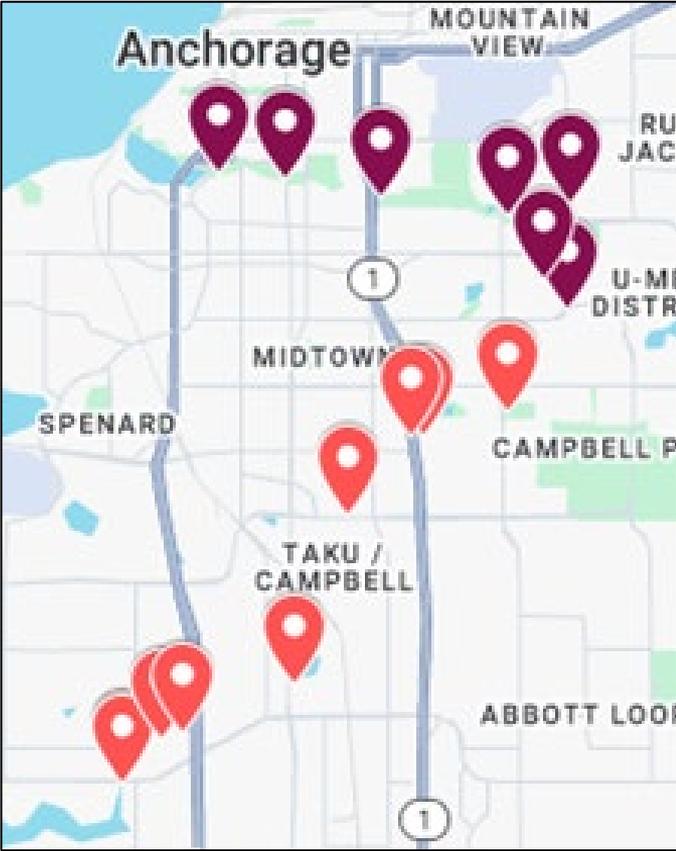
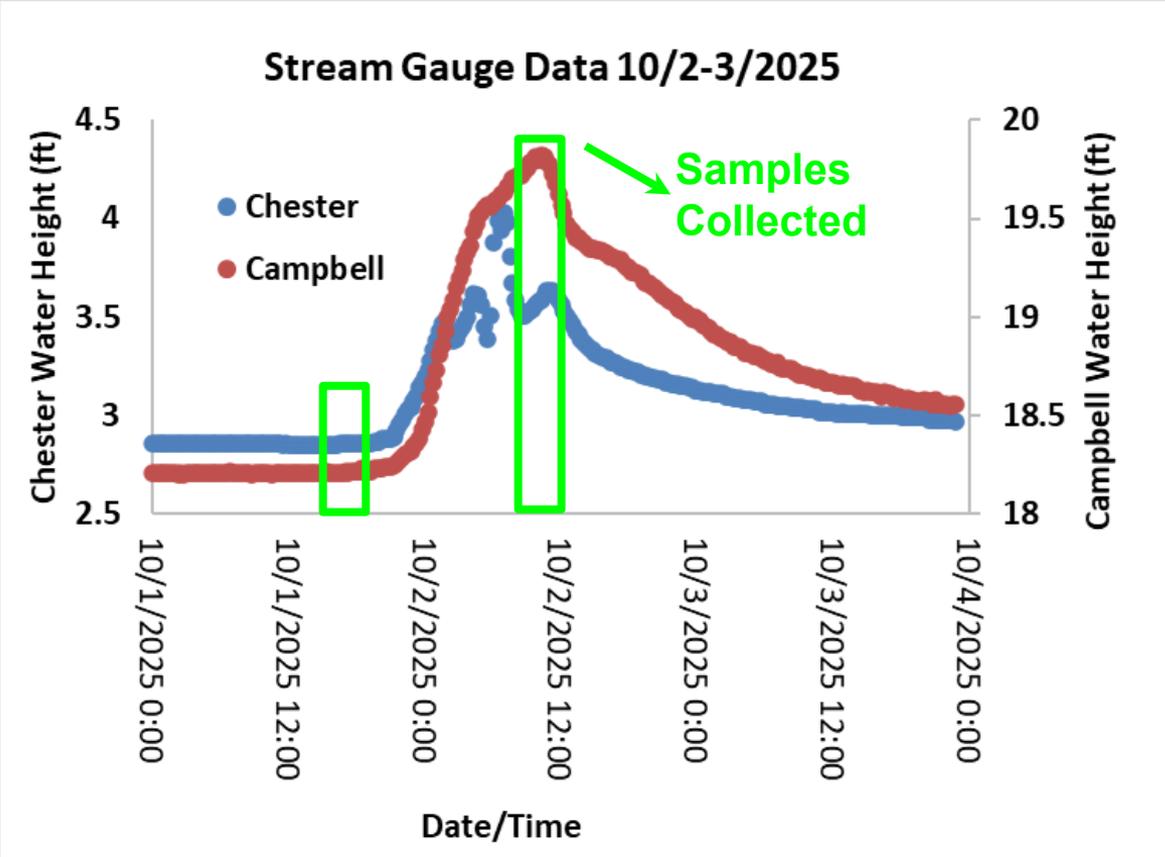
# Chester Creek Seward Highway July 25, 2025

→ One location throughout the day

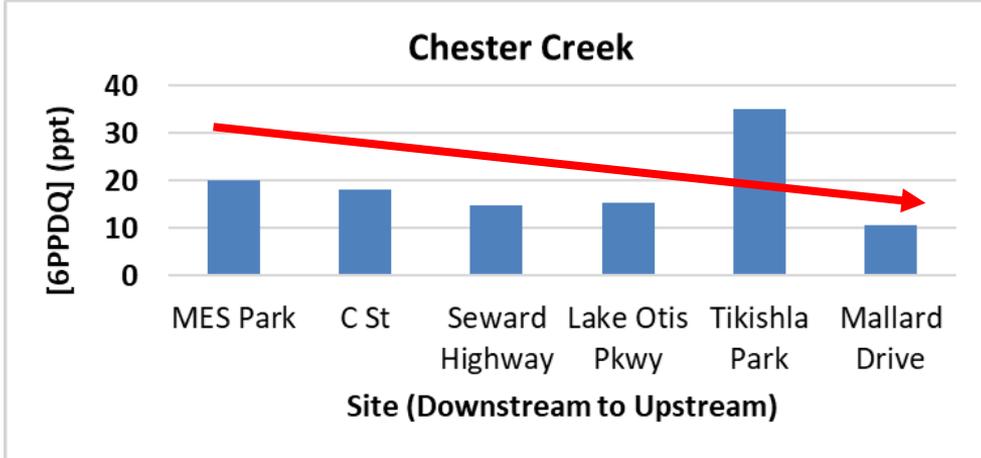
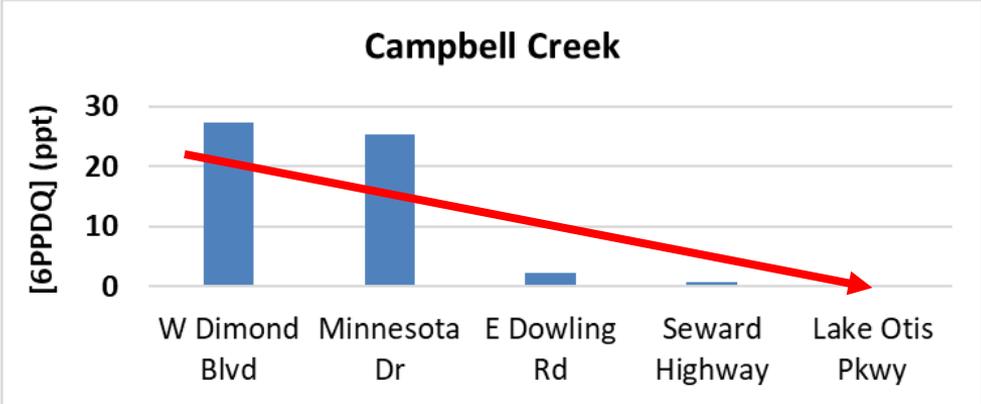


# October 2-3, 2025 - Rain Event

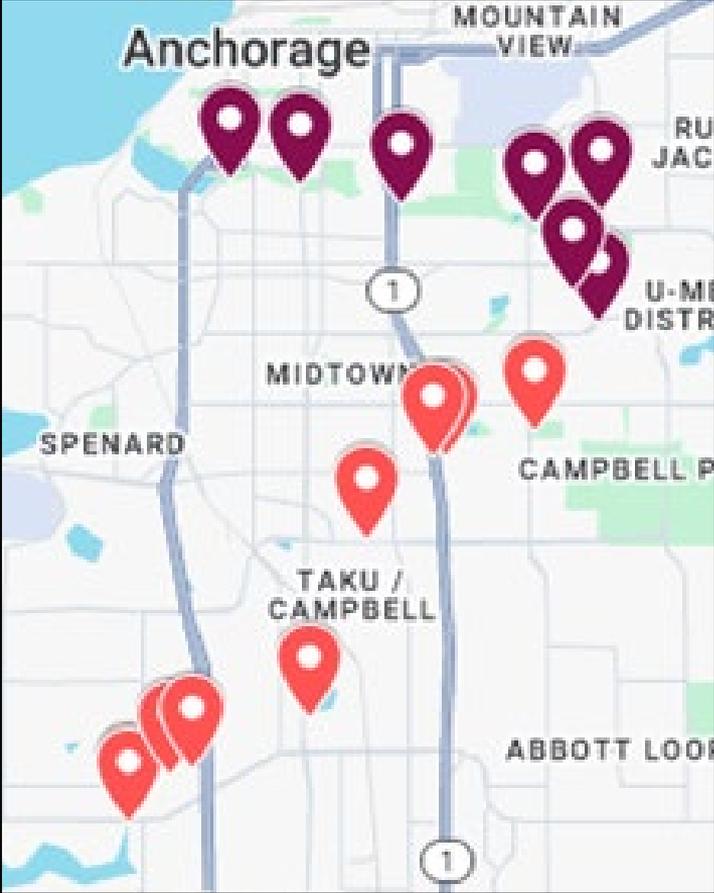
→ Spatial transects



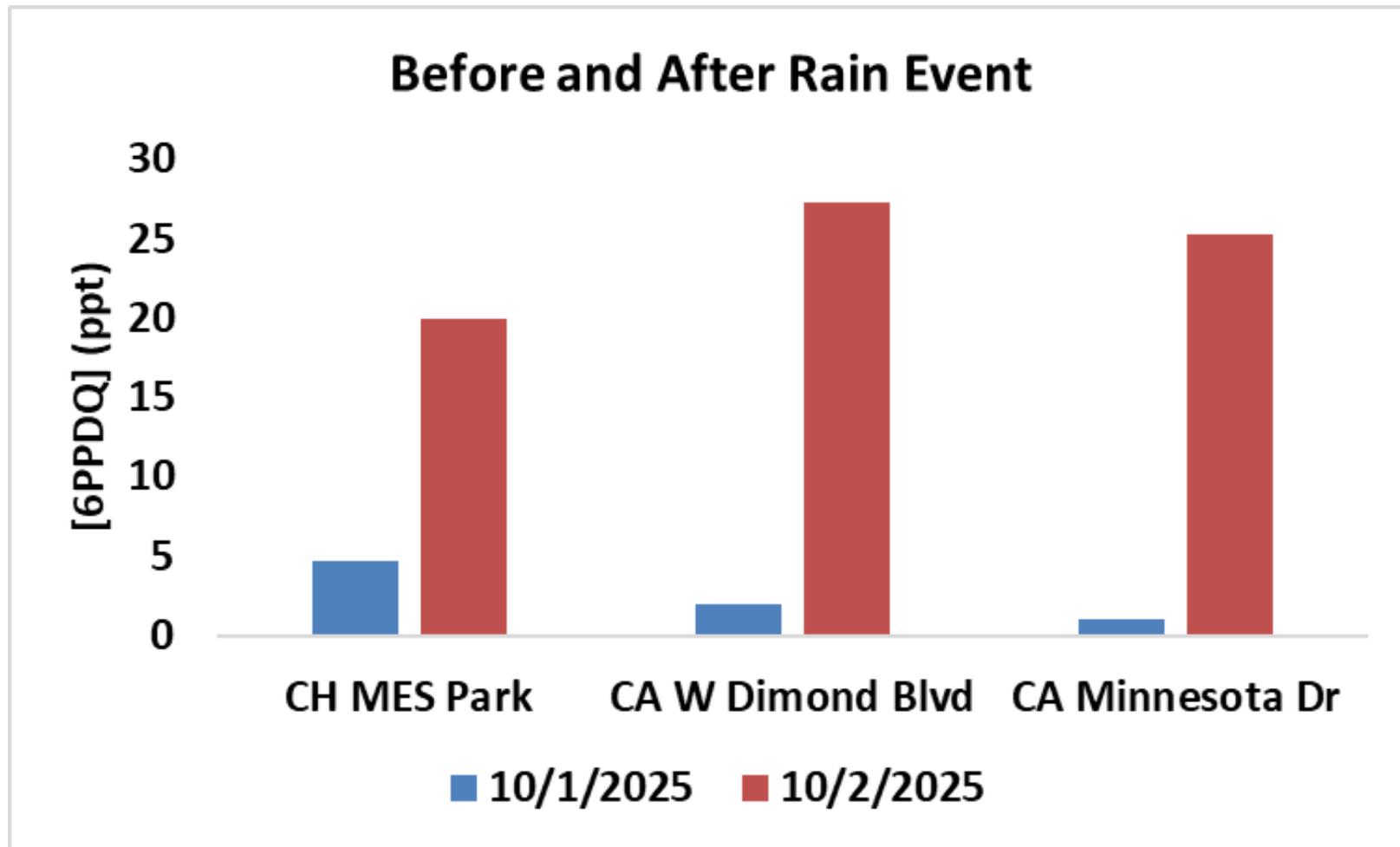
# October 2, 2025 - Rain Event



downstream → → → upstream



# October 2, 2025 - Rain Event



# Other Sampling Efforts



# Future Directions

- Ramp up spatial and temporal coverage of sampling (ADEC funding)
- Stormwater Control Measures/Best Management Practices

