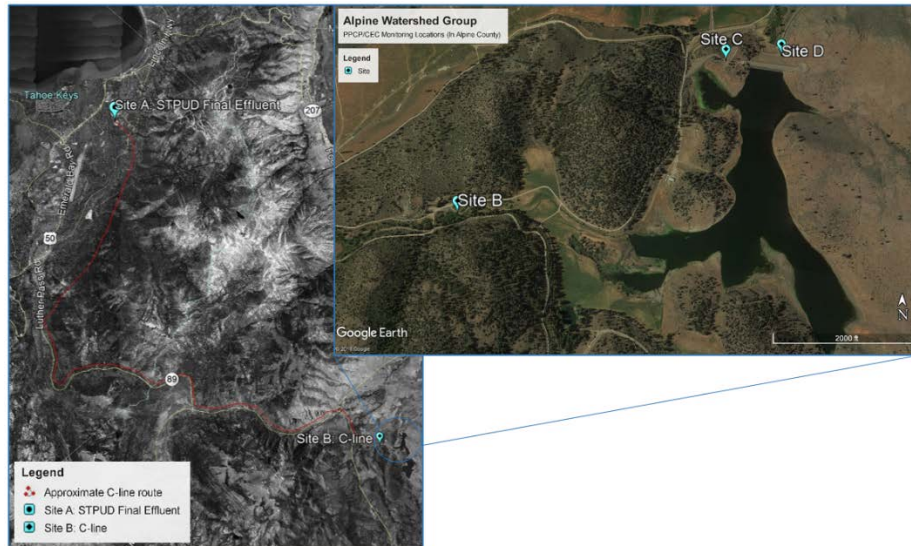


# PPCP Monitoring Project

On December 5, 2017, Alpine County contracted Alpine Watershed Group to monitor the secondary treated wastewater effluent that travels from South Lake Tahoe Public Utility District's facility to Harvey Place Reservoir and downstream for Pharmaceuticals and Personal Care Products (PPCPs) and other Contaminants of Emerging Concern (CECs). PPCPs and CECs represent human bio-indicators that may impact aquatic organisms or agriculture.



## Sampling Locations



## Summary of 3rd Sampling Event

The third monitoring event collected samples at Sites A & D on October 10, 2018. At these sites the compounds caffeine, sucralose, acesulfame-K, theobromine, theophylline, 1,7-Dimethylxanthine, and 2,4-D were found to be the most abundant. These findings were slightly different from the first and second monitoring events due to the program switching labs. The new lab, Eurofins, offered far more compounds for the PPCP/CEC analyses (40 vs 103). Forty-one of the one hundred and three compounds under examination were detected. There were many compounds the previous lab did not offer analyses for and are indicated by NA (not available) in the chart below. The lab reports in nanograms per liter (ng/L) which is equal to one part per trillion (ppt). To better understand how small 1 part per trillion is you could think of 1 second in approximately 32,000 years equaling 1 ppt.

## Most Abundant Compound Results (ng/L)

Compound	Description/Function	April Results				July	October	
		Site A	Site B	Site C	Site D	Site A	Site D	
TCP	Flame retardant	2500	2300	1800	1800	1400	1100	
Acesulfame-K	Sugar substitute	NA	NA	NA	NA	28000	23000	
Theobromine	Alkaloid found in chocolate, tea, kola nut	NA	NA	NA	NA	17000	15000	
Theophylline	Bronchodilator/anti-inflammatory	NA	NA	NA	NA	12000	16000	
Dimethylxanthine	Stimulant	NA	NA	NA	NA	8100	9800	
2,4-D	Plant growth hormone mimic	NA	NA	NA	NA	3400	970	
Iohexol	Contrast agent for x-ray	86	94	430	420	2360	1730	
Sucralose	Artificial sweetener	NA	NA	NA	NA	32000	31000	
Caffeine	Stimulant	68	170	5400	1400	52000	43000	