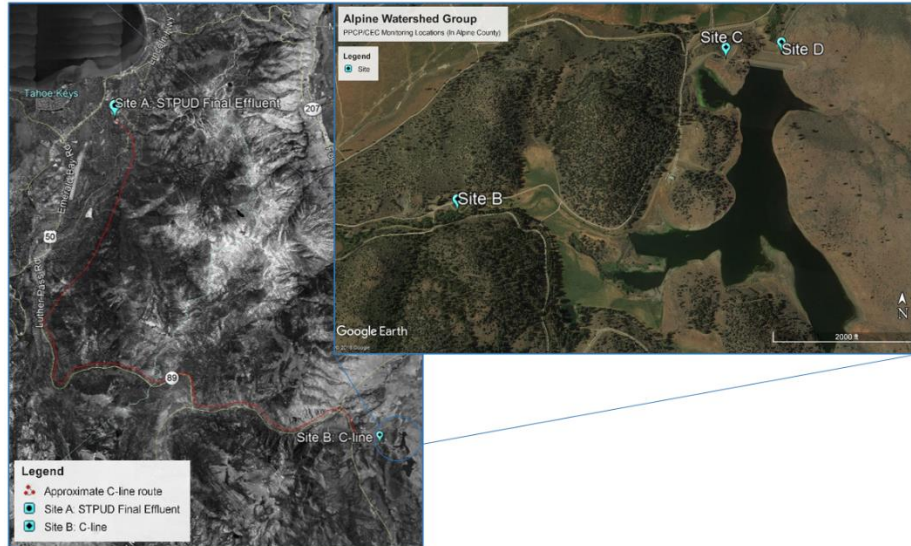


PPCP Monitoring Project

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 1st Sampling Event

The first monitoring event collected samples at Sites A, B, and C on April 23, 2018. At all three sites the compounds TCPP, nonylphenol, nonylphenol monoethoxylate, sulfamethoxazole, naproxen, meprobamate, DEET, and caffeine were most abundant. Twenty-nine of the forty compounds under examination were detected. However, even of these 29 compounds, nearly all measured at relatively low levels. 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	Site A	Site B	Site C
TCPP	Flame retardant	2500	2300	1800
Nonylphenol	Non-ionic detergent metabolite	1700	1500	630
Nonylphenol Monoethoxylate	Surfactant, detergent	1600	570	580
Sulfamethoxazole	Antibiotic	1500	1100	730
Naproxen	Anti-inflammatory	1100	990	400
Meprobamate	Anxiolytic drug, treats tension and anxiety (sedative)	640	420	470
DEET	Insect repellent	600	780	460
Caffeine	Stimulant	68	170	5400

The results of this study indicated that only caffeine at Site C exceeded the monitoring trigger levels developed by the California State Regional Water Quality Control Board. However, the detected presence of 29 CECs indicates that monitoring efforts should continue.