

Memorandum

Date: November 11, 2019
To: *Bear Creek Watershed Association*
From: Russell N. Clayshulte, Manager
Re: **Draft 2020 Monitoring Parameters**



Watershed and Special Stream WQ Studies	
Field Chemistry/ Physical	Laboratory Analyses
Temperature (discrete field probe)	Total Nitrogen (GEI)
Temperature (continuous data loggers)	Total Phosphorus (GEI)
Dissolved Oxygen, YSI Probe	E. coli, sites 45, 90, 16c (GEI)
Specific Conductivity, YSI Probe	Total Suspended Sediments, if needed Spring Runoff
pH, YSI Probe	
Manual Flow/ gage readings	
Water Clarity - Staining	
Periphyton Coverage	
Wastewater Treatment Facilities Regulation 85 Requirements	
Field Data	Laboratory Analyses (GEI)
Daily average effluent discharge	Total Nitrogen
Temperature (continuous data loggers, Effluent)	Nitrate/Nitrite as N, dissolved
	Total Ammonia
	Total Inorganic Nitrogen (Calculation = NO ₂ +NO ₃ +NH ₄)
	Total Phosphorus
Monitoring Site Survey - Annual Select Sites	
Macroinvertebrates - 11 sites	Habitat Indices
Pebble Counts	Physical Stream Indices
Embeddedness	
BCR and EGL Sediment Survey - Annual Limited Sites	
Sediment TP (Pore Water): BCR 6 sites, EGL 2 sites	% Total Solids
% TOC (Organics)	
Reservoirs (BCR and Evergreen)	
Field Data	Laboratory Analyses
Temperature (field probe, 1/2-m intervals in central pool)	Total Nitrogen (-1/2m and +1m) (GEI)
Temperature (continuous data loggers, 1/2-2m)	Total Phosphorus (-1/2m and +1m) (GEI)
Dissolved Oxygen (field probe, 1/2-m intervals in central pool thru 4m, then 1m interval)	Chlorophyll a (-1/2m only) (GEI)
Specific Conductivity (field probe, 1/2-m intervals in central pool thru 4m, then 1m interval)	BCR Phytoplankton (June, July, August, September, October) EGL (July, August, September, October) (GEI)
pH (field probe, 1/2-m intervals in central pool thru 4m, then 1m interval)	Zooplankton - annual, species present (GEI), if needed
Total Depth	
Secchi Reading	