Surface Water Quality Monitoring Routine Parameters

FIELD	*** Priority**
WATER TEMPERATURE (ºC)	**Y**
PH (standard units)	**Y**
DISSOLVED OXYGEN (mg/L)	**Y**
SPECIFIC CONDUCTANCE (µmhos/cm @ 25ºC)	**Y**
SECCHI DISC (meters) +	**Y**
DAYS SINCE PRECIPITATION EVENT (days)	
SALINITY - ppt (saltwater only)	**Y**
CHLORINE RESIDUAL (mg/L) (downstream of WWTPs)	
PRIMARY CONTACT, OBSERVED ACTIVITY (# OF PEOPLE OBSERVED)	**Y***
EVIDENCE OF PRIMARY CONTACT RECREATION (1 = OBSERVED, 0 = NOT OBSERVED)	**Y***
* Parameter Used/Needed for Regulatory Purposes + Important for reservoir ranking	

FLOW	*** Priority**
FLOW SEVERITY: 1=No Flow, 2=Low, 3=Normal, 4=Flood, 5=High, 6=Dry	**Y**
INSTANTANEOUS FLOW STREAM (cfs, ft^3/s)	**Y**
FLOW METHOD: 1=Flow Gage, 2=Electronic, 3=Mechanical, 4=Weir/Flume	

BACTERIOLOGICAL	*** Priority**
E. COLI (#/100 mL) (freshwater only)	**Y**
ENTEROCOCCUS (#/100 mL) (saltwater only)	**Y**

CONVENTIONAL PARAMETERS - INORGANIC	*** Priority**
ALKALINITY, TOTAL (mg/L as $CaCO_3$)	
TOTAL SUSPENDED SOLIDS (mg/L)	
VOLATILE SUSPENDED SOLIDS (mg/L)	
TOTAL DISSOLVED SOLIDS (mg/L)	**Y**
CHLORIDE (mg/L as Cl)	**Y**
SULFATE (mg/L as SO_4)	**Y**
TOTAL ORGANIC CARBON (mg/L as C)	
CARBON, DISSOLVED ORGANIC, DNPC (DOC) MG/L	**Y***
* Parameter Used/Needed for Regulatory Purposes	

CONVENTIONAL PARAMETERS - NUTRIENTS	*** Priority**
NITRITE + NITRATE-NITROGEN or **NITRATE-NITROGEN (mg/L as N)**	**Y****
NITRITE-NITROGEN (mg/L as N)	******
TOTAL NITROGEN (mg/L as N)	******
TOTAL KJELDAHL NITROGEN (mg/L as N)	******
AMMONIA-NITROGEN (mg/L as N)	**Y**
ORTHO-PHOSPHATE (mg/L as P)	
TOTAL PHOSPHATE (mg/L as P)	**Y****
CHLOROPHYLL-A (Φg/L)	**Y****
** Parameter requested for the development and calculation of nutrient criteria (if only NITRATE-NITROGEN is analyzed, it is recommended that NITRITE-NITROGEN be reported as well).	

24 HOUR (Diel) PARAMETERS	*** Priority**
DISSOLVED OXYGEN, 24-HOUR AVG (mg/L)	**Y**
DISSOLVED OXYGEN, # MEASUREMENTS DURING 24-HR	**Y**
DISSOLVED OXYGEN, 24-HOUR MAX.(mg/L)	**Y**
DISSOLVED OXYGEN, 24-HOUR MIN. (mg/L)	**Y**
WATER TEMPERATURE, 24-HR AVERAGE (EC)	
WATER TEMPERATURE, # OF MEASUREMENTS DURING 24-HRS	
WATER TEMPERATURE, MAXIMUM 24-HR (EC)	
WATER TEMPERATURE, MINIMUM 24-HR (EC)	
SPECIFIC CONDUCTANCE, 24-HR AVERAGE (EC)	
SPECIFIC CONDUCTANCE, # OF MEASUREMENTS DURING 24-HRS	
SPECIFIC CONDUCTANCE, MAXIMUM 24-HR (EC)	
SPECIFIC CONDUCTANCE, MINIMUM 24-HR (EC)	
pH, # OF MEASUREMENTS DURING 24-HRS	
pH, MAXIMUM 24-HR (EC)	
pH, MINIMUM 24-HR (EC)	
SALINITY, 24-HR AVERAGE (EC)	
SALINITY, # OF MEASUREMENTS DURING 24-HRS	
SALINITY, MAXIMUM 24-HR (EC)	
SALINITY, MINIMUM 24-HR (EC)	

METALS IN WATER	* Priority
DISSOLVED (µg/L)	
ALUMINUM (Al) Δ	Y
ARSENIC (As) Δ □	Y
CADMIUM (Cd) Δ □	Y
CHROMIUM (Cr) Δ □	Y
COPPER(Cu) Δ	Y
LEAD (Pb) Δ □	Y
NICKEL (Ni) Δ □	Y
SILVER (Ag) Δ	Y
ZINC (Zn) Δ	Y
BARIUM (Ba) □	Y
IRON (Fe)	
MANGANESE (Mn)	
MOLYBDENUM (Mo)	
Δ= AQUATIC LIFE USE; □= HUMAN HEALTH	
TOTAL (µg/L)	
MERCURY (Hg) Δ □	Y
SELENIUM (Se) Δ □	Y
TOTAL HARDNESS (mg/L as $CaCO_3$) Δ	Y
Δ= AQUATIC LIFE USE; □= HUMAN HEALTH	

METALS IN SEDIMENT (mg/kg-dry weight)	* **Priority**
ALUMINUM (Al)	**Y**
ARSENIC (As)	**Y**
BARIUM (Ba)	**Y**
CADMIUM (Ca)	**Y**
CHROMIUM (Cr)	**Y**
COPPER (Cu)	**Y**
LEAD (Pb)	**Y**
MANGANESE (Mn)	**Y**
MERCURY (Hg)	**Y**
NICKEL (Ni)	**Y**
SELENIUM (Se)	**Y**
SILVER (Ag)	**Y**
ZINC (Zn)	**Y**
Sediment Conventionals	
OIL & GREASE (mg/kg)	
PERCENT SOLIDS IN SEDIMENT, DRY WEIGHT	
TOTAL ORGANIC CARBON, DRY WEIGHT (mg/kg)	
SEDIMENT PARTICLE SIZE <0.0039 CLAY % DRY WT	
SEDIMENT PARTICLE SIZE 0.0039-.0625 SILT % DRY WT	
SEDIMENT PARTICLE SIZE 0.0625-2MM SAND % DRY WT	
SEDIMENT PARTICLE SIZE >2.0MM GRAVEL % DRY WT	
The highlighted sediment conventionals are not used for regulatory purposes but are extremely important in determining the availability of sediment toxics. Sediment grain size and TOC are recommended when analyzing metals and/or organics in sediment.	