

# MS4 Monitoring Requirement Comparison

	Impaired waters monitoring	Baseline monitoring (IDDE)	Catchment Investigation Procedure (IDDE)
<b>area covered</b>	All outfalls to stormwater impaired waters	Outfalls and interconnections in priority areas (urbanized area, discharges to impaired waters or in basin where DCIA > 11%) that are categorized as either high or low priority catchments (see IDDE section of this website or appendix B of permit for more information)	Problem, High Priority and Low Priority catchments in the priority area.
<b>type of sampling</b>	Wet weather	Dry weather	Dry weather manhole investigation Wet weather screening at outfall for catchment with at least one SVF
<b>timing of sample collection</b>	Any rain event that: - results in a discharge - is at least 48 hours after a prior rain event that resulted in discharge  Collect the sample within the first 6 hours of discharge	When no more than 0.1 inch of rain has fallen in last 24 hours	Dry weather: when no more than 0.1 inch of rain has fallen in last 24 hours  Wet weather: March through June
<b>pollutant(s) to screen for and thresholds</b>	The listed stormwater pollutant of concern:  <u>Nitrogen:</u> send sample to lab to measure Total Nitrogen (>2.5mg/l) OR use test strips to measure ammonia and nitrate and estimate TN using formula on CLEAR MS4 website  <u>Phosphorus:</u> send sample to lab to measure Total Phosphorus (> 0.3 mg/l)  <u>Bacteria:</u> For discharges to freshwater: E. coli (AA, A, and B waterbodies) (>235 col/100ml for swimming areas) (>410 col/100ml for all others) Total coliform (AA waterbodies only) (>500 col/100ml)  For discharges to SA or SB waterbodies: Fecal coliform (>31 col/100ml for SA) and (>260 col/100ml for SB) Enterococci (>104 col/100ml for swimming areas) and (>500 col/100ml for all others)  <u>Other pollutant of concern:</u> screen for turbidity (> 5 NTU)	Listed stormwater pollutants of concern (if any)  ammonia ( ≥ 0.5mg/l)  chlorine (detectable level)  conductivity ( >1,500 μS for freshwater)  salinity ( ≥ 0.5ppt for freshwater)  E. coli (freshwater) or Enterococcus (saline/brakish) (see thresholds under IW monitoring (yellow) column)  surfactants ( ≥ 0.25 mg/l)  tempearaure (no threshold)	<u>Dry wx:</u> ammonia ( ≥ 0.5mg/l) chlorine (detectable level) surfactants ( ≥ 0.25 mg/l)  <u>Wet wx:</u> Listed stormwater pollutants of concern (if any)  ammonia ( ≥ 0.5mg/l)  chlorine (detectable)  conductivity ( >1,500 μS for freshwater)  salinity ( ≥ 0.5ppt for freshwater)  E. coli (freshwater) or Enterococcus (saline/brakish) (see thresholds under IW monitoring (yellow) column)  surfactants ( ≥ 0.25 mg/l)  tempearaure (no threshold)
<b>follow-up</b>	For any sample that exceeds the listed threshold, investigate the outfall's drainage area to find sources of pollutant. You might consider land use, development patterns, commercial activities, industrial activities, DCIA, natural sources, residential activities, etc.  Implement BMP program to mitigate suspected sources of pollutant.	If a sample exceeds all three thresholds for ammonia, surfactants and bacteria (or ammonia, surfactants and detectable chlorine), then rank the catchment at the top of the High Priority catchments for investigation.	After all illicit discharges in a section of your stormwater system are confirmed and removed, conduct dry weather screening (and wet weather if any SVFs are present) within one year.  Conduct follow-up dry weather screening (and wet weather if any SVFs are present) within 5 years.
<b>deadlines</b>	Screen all outfalls to impaired waters by end of permit term 6/30/22 (all MS4s)  Begin annual monitoring of worst 6 outfalls once 50% of all outfalls have been screened by 6/30/20 (2004 MS4s) or 6/30/2021 (2017 MS4s)	Complete baseline sampling:  6/30/20 (2004 MS4s)  6/30/22 (2017 MS4s)	Complete catchment investigation procedure in 80% of MS4 served by Problem catchments by 6/30/2020.  Complete catchment investigation procedure in 100% of MS4 served by Problem catchments by 6/30/2022.  Complete catchment investigation procedure in 100% of catchments with indications of sewer input (highest High Priority catchments by 6/30/2022.  Complete catchment investigation procedure in 40% of area served by all MS4 catchments by 6/30/2022.  Complete catchment investigation procedure in 100% of area served by all MS4 catchments by 6/30/2027.



Parameter threshold values in red text are for guidance only. They aren't from the MS4 Permit.