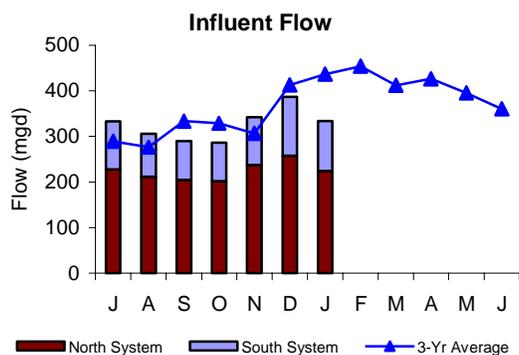
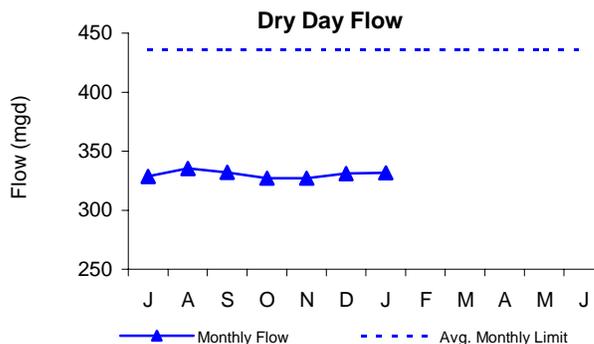


NPDES Permit Compliance: Deer Island January 2001

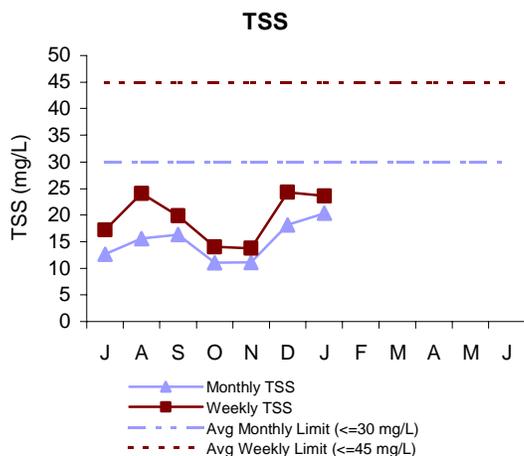
Wastewater effluent quality is monitored by MWRA to assess compliance with water quality standards and the pollutant limits set forth in the NPDES permit issued by EPA and DEP to MWRA. The graphs below display the levels of pollutants measured compared with the NPDES permit limits.



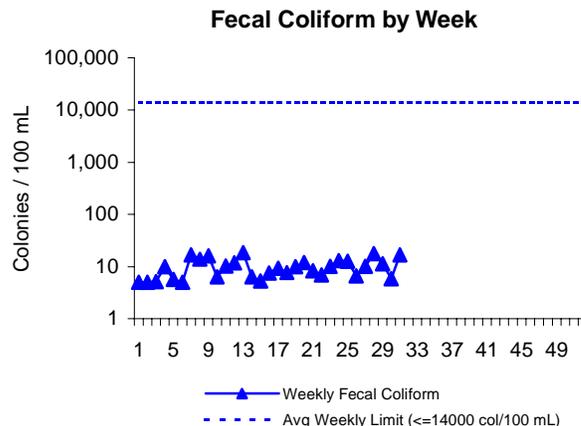
There is no influent flow limit. The graph depicts the total monthly flow from the combined north and south system. The 3-year average represents FY-98, FY-99, and FY-00.



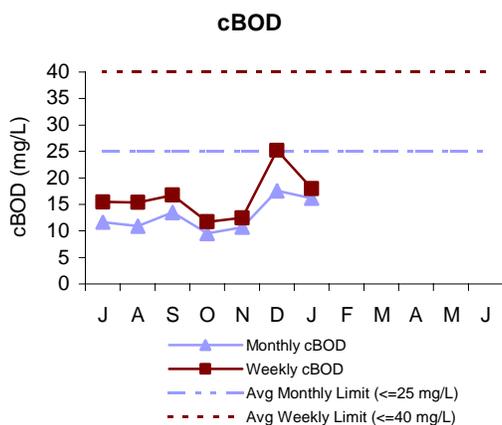
The dry day flow is calculated by averaging influent flow over the previous 365 days during dry weather. The January dry day flow therefore is the average of all dry day flows for the period February 00 to January 01.



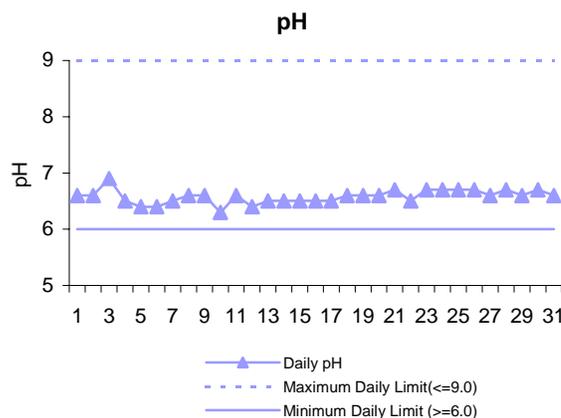
Total Suspended Solids in the effluent is a measure of the amount of solids that remain suspended after treatment. In January, both the weekly and monthly concentrations were below permit limits. The TSS removal rate was 90.3%.



Fecal Coliform is an indicator of the presence of pathogens. The levels of these bacteria after disinfection show how effectively the plant is inactivating many forms of disease-causing microorganisms. There are four conditions in the permit including daily geomean, a weekly geomean, 10% of all samples, and three consecutive samples not to exceed 14000 col/100mL. In January, all of these conditions were met.



The cBOD is a measure of the amount of dissolved oxygen required for the decomposition of organic materials in the environment. In January, both the weekly and monthly concentrations were well below permit limits. The 5-day cBOD removal rate for January was 87.0%.



pH is a measure of the alkalinity or acidity of the effluent. Sudden change in pH does not have an adverse effect on marine environments. Because of the pure oxygen used in the activated sludge reactor, the effluent pH tend to be at the lower pH range. In January, all pH measurements were within the permit limit range.