

Upper Cumberland River TMDLE Fact Sheet

Project Name:	Upper Cumberland River Fecal Coliform TMDL (equivalent)
Location:	Southeastern Kentucky draining the counties of Knox, Bell, Harlan, Whitley, McCreary and Pulaski.
Scope/Size:	TMDL covers 218 miles of the upper Cumberland River and its tributaries.
TMDL Issues:	Point Source/straight pipes.
Data Sources:	Ambient monitoring, Intensive Surveys, municipal and package plant facilities monitoring, and compliance sampling surveys.
Monitoring Plan:	Monthly sampling of the upper Cumberland River mainstem and tributaries during PCR season and random compliance sampling inspections at wastewater plants.
Control Measures:	NPDES permits and enforcement. Federal funds to upgrade WWTPs. Education campaigns to inform local communities of straight pipe problems. Possible legislation aimed at preventing new straight pipe discharges.
TMDL Development:	Ambient monitoring data collected in 1984 and 1985 indicated exceedances of the FC criteria for primary contact recreation use on the Cumberland River in Pineville. Monitoring in 1990 during bioassay compliance testing, and further intensive survey monitoring in 1993 and 1994 indicated that the majority of the pollution was coming from wastewater plants and straight pipe discharges. All point sources are required to meet a FC limit of 200 colonies/100 ml as an average with a 400 colonies/100 ml maximum (frequency depends upon the size of the facility.) This provides a margin of safety because the stream standard is met at the end of the pipe and dilution from normal flows in the receiving stream will lower the FC concentration well below the standard. The goal for straight pipe discharges is elimination. Enforcement actions resulted in improved performance from permitted discharges. Noncomplying WWTPs and straight pipe discharges continue to cause stream pollution and the need to continue swimming advisories. Education and other forms of assistance with possible state laws requiring adequate wastewater treatment systems from new residences will reduce fecal contamination from straight pipe sources.
Implementation Controls:	Fines, compliance inspections and monitoring have reduced the level of fecal contamination from WWTPs. These will continue. Communities will receive educational, technical, and financial assistance to help eliminate straight pipe sources of fecal contamination.