

East Fork Little Sandy River TMDL Fact Sheet

Project Name: East Fork Little Sandy River Dissolved Oxygen TMDL

Location: Boyd County, KY

Scope/Size: River mile 25 to mile 19 of the East Fork Little Sandy River near Ashland, KY

TMDL Issues: Point Source

Data Sources: Ambient monitoring and 1991 water quality survey

Data Mechanism: KY QUAL2E predictive modelling and in stream monitoring

Control Measures: NPDES Permits

Summary: In 1991 KY DOW collected water quality data on the East Fork Little Sandy River to verify a predictive QUAL2E model run. As expected dissolved oxygen (D.O.) violations were found along the East Fork Little Sandy River and Shope Creek near Ashland. Forty wastewater package plants ranging in size from 500 gallons per day (gpd) to 50,000 gpd discharge in the area and contribute pollutants resulting in violations of the D.O. standard. The model run and survey showed that the critical condition for D.O. is during high temperatures (summer) and low flow conditions.

TMDL

Development: Due to the small size, improper maintenance and poor operation of the package plants, it was concluded that the best TMDL strategy would be to eliminate all the package plants and send the flows to a regional facility near Ashland discharging to the Ohio River. Thus, the TMDL for point source discharge is 0 mg/l for BOD5 and ammonia for the East Fork Little Sandy River.

Implementation Controls:

The DOW will not permit new wastewater discharges or approve a plant expansion in the referenced basin. All existing dischargers will be required to tie into the regional sewer line. The project should be completed by 1997. Monitoring of the stream is planned after removal of the dischargers.

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