

Evaluating TMDL Effectiveness

Highlighting Planning and Monitoring Programs in Nebraska

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- **Ambient Stream Monitoring Program**
 - 101 fixed stations located on main stem and tributary streams across the state
 - Sampled monthly for traditional chemical and physical parameters
- **Basin Rotation Monitoring Program**
 - Six-year rotation covering the 13 major river basins in the state
 - 1-3 basins per year are sampled weekly, May-September
 - Sites selected each year using a weighted scoring system, allows us to prioritize monitoring streams in 319 project areas
- **Special Studies**
 - One year targeted monitoring projects, typically used to gather additional data for 319 projects
 - Helps target BMP implementation by identifying pollutant load contributions from individual watersheds within project area

Connection to TMDLs

- TMDL/5-alt development has followed 319 projects
 - Limited staff resources to dedicate to TMDL prioritization
- Example
 - 319 project with TMDL/5-alt calculations in place
 - Basin Rotation/special studies: establish baseline, return and sample after 6 years, then reassess
 - TMDL effectiveness is assessed through the lens of evaluating 319 plan progress

Success Stories

- **Antelope Creek – Lincoln**
 - Listed for *E. coli* in 2004, TMDL developed 2007
 - Numerous small projects, BMPs, and monitoring over ~20 years
 - Delisted in 2018 Integrated Report
- **Shell Creek – Northeast Nebraska**
 - Listed for atrazine in 2006, TMDL developed 2007
 - Watershed management plan (2005-present)
 - Delisted in 2018 Integrated Report
 - Student-led volunteer monitoring program established in partnership with local high schools (2002-present)

Thank you!