



Total Maximum Daily Load (TMDL)

The Department of Mines, Minerals, and Energy (DMME) and other watershed stakeholders has contributed to biological recovery of Dumps Creek.

August 2014

Total Maximum Daily Load (TMDL)

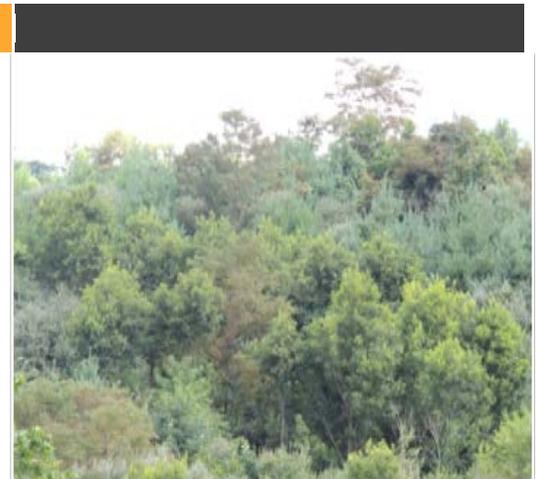
By Joey O'Quinn

DUMPS CREEK WATERSHED IMPROVEMENT

Dumps Creek, a coalfield stream in Russell County Virginia, was listed as impaired for aquatic life use in 2002. A TMDL report was completed in 2004 that identified total dissolved solids (TDS) as the most probable stressor in the watershed. A TMDL Implementation Plan was developed for the watershed in 2008 that identified best management practices (BMPs) needed to reduce TDS for Dumps Creek and restore water quality.

Also in 2008, DMME entered into a Settlement Agreement with an NPDES coal mine permittee that required efforts to help restore the stream. As part of the Settlement, the

permittee agreed to reclamation steps and to collect benthic macroinvertebrate samples at the DEQ monitoring station located in the watershed. In addition to the actions specified in the Settlement, other Dumps Creek watershed improvement activities have been conducted by the state and coal industry in a cooperative effort to restore the stream. Previously coal mined areas have been successfully reclaimed and underground mine water pumping to the watershed has been significantly reduced.



Recently reclaimed mined lands in Dumps Creek

Benthic data collection began in spring 2013 and continued into 2014. DEQ has also been collecting benthic data in the watershed. These recent data collections indicate benthic health in the Dumps Creek watershed is improving and is currently meeting the state's biological standards. Three samples from the non-agency data and two samples from the DEQ data indicate Dumps Creek is on track for delisting in the state's formal 2016 Integrated Report.

The TMDL report utilized scientific data and computer modeling to establish pollution reduction targets to help the river recover. DMME used the report to make decisions regarding land reclamation and stream restoration.



Reforested surface mined lands in the Dumps Creek Watershed

VA DEPT OF MINERALS AND ENERGY
DIVISION OF MINED LAND
RECLAMATION

Water Quality News Letter

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