



Powers Lake Retrofit



Clean Water Funds: 2011

Clean Water Grant	\$37,632
Leveraged Funds*	\$13,900
Total Project Budget	\$51,532

* Leveraged Funds include required 25% local match

Targeted Water:
Powers Lake

Project Sponsor:
Washington Conservation District

Partners:
South Washington Watershed District, East Metro Water Resources Education Program, City of Woodbury

Grant Period:
January 2011 - December 2012

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Project Narrative

Water quality in Powers Lake is declining. Water monitoring professionals from the Washington Conservation District (WCD), funded by the South Washington Watershed District (SWWD), have determined that average annual phosphorus concentrations are increasing in the lake. Higher phosphorus concentrations lead to more frequent algae blooms and reduced water clarity.

Powers Lake is at risk mainly due to increased urbanization within its watershed (the land area that drains to the lake). Impervious surfaces like roofs and roads not only increase the amount of runoff headed to the lake during every rainfall event, they also increase the rate at which that runoff reaches the lake. Some runoff is directly piped into the lake with no treatment.

WCD and SWWD have developed a plan to address the phosphorus problem in the Powers Lake watershed. The first step was to complete a subwatershed retrofit assessment report for the watershed. The report identifies specific subwatersheds, or catchments, that rank highly in terms of potential for installing cost-effective stormwater management practices that reduce the phosphorus loading to Powers Lake. WCD and SWWD will now use CWF grant funding combined with local match funds to install stormwater treatment projects within two target catchments identified in the report. The proposed stormwater treatment project implementation in just this small area will reduce watershed phosphorus loading to Powers Lake by 10%. This project will be an important step toward reversing the declining water quality trend in Powers Lake and serve as a model for future targeted water quality improvement efforts.



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Targeted water quality BMPs are planned for the Powers Lake subwatershed in Woodbury, Minnesota