



Using The Clean Water State Revolving Fund For Watersheds Impaired By Mining

The Problem

In contrast to historical mining activities, modern mining operations are generally well designed, operated and regulated. But problems caused by past mining activities remain. Mining can affect nearby bodies of water--both directly, by disturbing surface and ground water, and indirectly through runoff. The result can be serious pollution and public health problems. Some mining-related water problems are increased sedimentation, released toxins and solutions leached from impoundments which generate acids from waste rock and pit walls. Mine dust and tailings are troubling as well. There are believed to be between 200,000 and 500,000 inactive and abandoned hardrock mines nationwide. In 1995, Region 3 of the Environmental Protection Agency (EPA) found that 5,100 miles of streams in the Appalachian region were adversely affected by acid mine drainage. Much of this can be attributed to abandoned coal mines. Many stakeholders are concerned: federal agencies, states, tribes, local governments, industry and environmental groups. A watershed approach to solving these problems fosters communication and cooperation among all stakeholders.

What is the Clean Water State Revolving Fund (CWSRF)

The 51 CWSRF programs work like banks (each state and Puerto Rico has one). Federal and state contributions are used to capitalize or set-up the programs. These assets (in excess of \$27 billion) are used to make low-interest loans for important water quality projects. The CWSRF programs currently issue approximately \$3 billion in loans annually. Funds are repaid to the CWSRF's over terms as long as twenty years. Repaid funds are recycled to fund other water quality projects. The CWSRF can also provide loan guarantees, bond insurance, and refinancing of existing debt.

What's in it for You?

In considering the impacts of mining on the environment, EPA expects the CWSRF to become a significant source of funding for nonpoint source projects, such as mining. Certain mining sites that contribute to water quality impairment could benefit from this huge financial resource. Loans are issued at below market rates (0% to less than market), offering borrowers significant savings over the life of the loan.

Sources of Loan Repayment

Though finding a source of repayment may prove challenging, it does not have to be unnecessarily burdensome. Many users of the CWSRF have demonstrated a high degree of creativity in identifying sources of loan repayment. The source of repayment need not come from the project itself. Some possibilities include

- fees paid by developers on other lands
- recreational fees (fishing licenses, park entrance fees)
- stormwater management fees
- wastewater user charges
- donations or dues made to nonprofit groups and associations
- resource extraction fees

The CWSRF will invest 10% of its funds on polluted runoff projects by 2001.

--Clean Water Action Plan

Restrictions

Inactive or abandoned hardrock mines permitted under the National Pollutant Discharge and Elimination System (NPDES) or coal mines permitted under the Surface Mining Control and Reclamation Act (SMCRA) may be eligible for CWSRF funding if publicly owned. Active hardrock mines that are permitted under NPDES are not eligible for funding unless publicly owned. Active SMCRA permitted coal mines must also be publicly owned to become fundable under the CWSRF. Non-permitted inactive or abandoned mines may be fundable as Section 319 nonpoint source projects if they are part of a state's Nonpoint Source Management Plan. **Mining activities are singled out as a priority for funding under Section 319.**

Eligible Projects

Potential projects include the removal of tailings from stream beds and flood plains, also the remediation of aquatic or secondary impacts by means of:

- discharge diversion
- runoff dispersion
- sediment control and collection
- grading and capping of contaminated sources
- backfilling of mine openings
- replanting and soil stabilization

The following are examples of mining projects, that while funded under the Clean Water Act as Section 319 nonpoint source grants, would be eligible for loans from the CWSRF.

The Colorado Division of Minerals and Geology and an operating mining company are cooperating to reduce the drainage of heavy metals into a tributary of Clear Creek. The processing of mine wastes for a heap leaching operation provides an opportunity for the mining company to do site reclamation and drainage stabilization. The \$52,000

Nonpoint Source grant will be used for grading and capping mine tailings, the placement of check dams and other stabilization techniques.

The Westmoreland County Conservation District, in cooperation with the Western Pennsylvania Coalition for Abandoned Mine Reclamation, used a NPS grant to complete acid mine drainage remediation work to reduce contamination from an abandoned coal mining site.

The Colorado Division of Minerals and Geology, in association with the Animas Watershed initiative, (which includes local citizens, agencies, mining interests, and state and federal land managers), is conducting a project to improve water quality by removing mine wastes from drainage areas and neutralizing acid mine water using limestone backfill of the mine entrance. The mine waste area will then be regraded and revegetated.

A \$89,000 grant with the Colorado San Juan Resource Conservation and Development organization will demonstrate the use of hydrologic controls and revegetation to reduce heavy metal contamination of the Animas River watershed.

A \$47,000 NPS grant to an earthmoving company is being used to remove mill tailings and mine waste from the Kerber Creek, Colorado stream channel and dispose of them in a nearby waste repository. After the mine waste and tailings have been removed from the creek, the banks will be stabilized and revegetated.

Since 1989 the CWSRF program has funded 1,100 projects, investing more than \$830 million to clean up polluted runoff.

I'm Interested--What Next?

Since the CWSRF is managed largely by the states, project funding may vary according to priorities within each state. Projects become eligible for funding by being included in the state Nonpoint Source Management Plan, the state Priority List, or part of a National Estuary Program Comprehensive Conservation and Management Plan. Those interested in cleaning up polluted runoff resulting from mining activities should seek out their CWSRF programs, learn how their state program works, and participate in the annual process that determines which projects are funded.

For more information on the CWSRF, or for a program representative in your state, please contact:

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