

## **8. CONCLUSIONS**

AMD remediation in the WBSR watershed will require large capital investments and annual O&M expenditures. A project of this scale will require a long-term commitment from governments at the federal, state, and local levels, and the involvement and support of local stakeholders. However, by incurring these large costs, remediation of AMD-impaired streams will have numerous local economic benefits. This report investigates and, where possible, quantifies these benefits.

### **8.1 Remediation generates jobs and stimulates the local economy**

To build remediation projects, money is spent on engineers and contractors, alkaline materials and construction equipment. These expenditures on labor, materials, and machinery pump money into the local economy and generate jobs. Salaries and expenditures are circulated through the local economy.

Depending on which technologies are ultimately chosen at each AMD source, remediation expenditures will generate local benefits of up to \$616 million for capital expenditures, and up to \$23 million per year for O&M. Even greater economic gains would accrue to the state as a whole.

More than one-half of the jobs created as a result of these expenditures will be green-collar jobs: Workers will be directly employed to design, build, operate, and maintain these systems.

### **8.2 Recreational spending will increase with cleaner waters**

Outdoor recreation is big business, and the cleaner the streams, the more people will spend on equipment, transportation, and lodging. In Pennsylvania, almost \$4 billion was spent on fishing, hunting, and wildlife viewing in 2006. People who participate in a wider range of outdoor recreational activities spend even more money.

AMD directly impacts fishing opportunities. After remediation of the WBSR watershed, an additional \$22.3 million in sport fishing revenues could be expected to be generated each year. Additional recreation spending—over and above that for fishing—would be expected after remediation is completed.

### **8.3 Property values will increase with AMD remediation**

Based on an analysis of parcels in Clearfield County, property values near AMD-impacted streams are reduced and are projected to increase with AMD remediation. In Clearfield County alone, the total value lost by owners of the 2,734 parcels within 200 feet of AMD-impacted streams is \$4,077,682, for an average of \$2,587 per acre or \$1,491 per parcel.

#### **8.4 Drinking water options will be cheaper and more plentiful**

Both public and private drinking water systems have been affected by AMD in the WBSR watershed. Public systems face increased treatment requirements and costs when source water is impacted by AMD. Several systems in the watershed are considering using reserve and emergency sources that are impacted by AMD; these systems would benefit from nearby AMD remediation projects.

Private systems have also been impacted by AMD. More than \$11 million has been spent on waterline extensions to bring clean water to 696 residences and five businesses within the WBSR watershed.

Remediating AMD across the watershed would open up more plentiful and cheaper source water options for public water systems, and would minimize the need for additional spending on waterline extensions for private residences and businesses.

#### **8.5 Residents are willing to pay for remediation**

Based on a mail survey of Pennsylvanians living both within and outside of the WBSR watershed, the best estimate of total WTP for AMD remediation in the watershed was calculated as \$73.6 million. Low and high estimates of \$18 and \$171 million provide a broader range.

#### **8.6 Summary**

To make the most informed decisions possible about AMD remediation across the WBSR watershed, policymakers and the general public should consider not just the costs, but also the benefits. As described in this report, a number of economic benefits can be expected upon completion of AMD remediation. These benefits are significant and extend outside the watershed to the entire state of Pennsylvania.