

Chapter 8 – Challenges

The voluntary nature of NPS management is also its greatest challenge. With few regulatory requirements, improvements to streams impaired by nonpoint source pollutants are dependent upon a group of local stakeholders recognizing a problem and voluntarily acting upon it. A strong local stakeholder group can make a measurable difference in the streams of their watershed. The resources of those volunteers are strained, however. It is becoming increasingly difficult to find either funding or time to make the match required for a nonpoint source grant.

In addition, the amount of available funding is far over-shadowed by the magnitude of the water quality impact. For example, Colorado's allocation of the national nonpoint source appropriation is approximately \$1.9 million per year. However, the estimate to clean up just the Upper Animas River Basin is \$30 million dollars. The cost to restore water quality impacted by legacy mining issues statewide is estimated to cost nearly \$314 million. Similarly, an analysis conducted by Colorado State University found that upgrading all agricultural irrigation management, including nutrient and pest management, would cost \$45 million annually.

Selenium remains a ubiquitous issue in Colorado's waterbodies. In some cases, ongoing human-related activities are exacerbating the problem, but in others the impairments may be a result of Colorado's geologic history. The Watershed Program will have ongoing challenges in determining the appropriate cause, whether natural or man-induced, of the selenium impairments. An analysis conducted by the Grand Valley Selenium Task Force concluded that costs to address selenium impairments in the Colorado River basin are estimated between \$300 million to \$1.3 billion.

The interaction between nonpoint sources and point sources of pollution (those that require a discharge permit) is more apparent, in particular with stormwater runoff and inactive mine sites. In a watershed such as the Upper Animas or Willow Creek, it is likely not possible to restore streams without active treatment of draining adits and mine tunnels. For draining abandoned mines, the lack of a Good Samaritan Provision in the CWA hinders groups from addressing critical restoration activities due to potential long-term liability. Alternatives, such as active treatment of abandoned mine discharges involves large upfront capital expenditures, ongoing operation and maintenance costs, and requires a discharge permit. Such an approach involves significant resources, and due to the associated Colorado Discharge Permit System (CDPS) permit requirements, falls outside the purview of the nonpoint source program.

Finally, the need for data continues to challenge the program. In many instances, it may be possible to develop a TMDL for an impaired stream segment using existing data. But the data may be insufficient to prioritize the specific actions necessary to restore the segment, or be sufficient to effectively plan and design potential BMPs to address the impairment. Often, additional data collection and analysis is needed to effectively develop TMDLs or watershed implementation plans.

Continued coordination with the Environmental Data Unit and TMDL groups within the Division continues to provide valuable data regarding NPS priorities, so that limited 319(h) funds can be put to the greatest benefit. The MRP continues to collect pre- and post-project data to provide additional data needed to document water quality improvements. The Division will also continue to work with DRMS, the Colorado Water Conservation Board and other state and federal partners to leverage multiple sources of funds to maximize water quality benefit.