

W A T E R R E S O U R C E S

IMPACT

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MEASURING
MONITORING
PERFORMANCE
BY LOCAL
WATERSHED
GROUPS

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MEASURING MONITORING PERFORMANCE
BY LOCAL WATERSHED GROUPS

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In January 2006, the White House Office of Management and Budget released a memorandum indicating that the U.S. Environmental Protection Agency had not demonstrated results under the Clean Water Act Section 319 Program. The memorandum indicated a need to provide proof that water-quality and ecosystem improvements have been made through the efforts of watershed groups, and that the improvements are measurable. This issue of *Water Resources IMPACT* describes success stories from selected watersheds across the nation. The social aspects of volunteerism are placed into perspective, proposed legislation is described that could help clean up watersheds, and the importance of quality assurance is emphasized.

INTRODUCTION

- 4 Who is Monitoring the Lifeline?**
Winfield G. Wright (wgwright@frontier.net)

FEATURE ARTICLES

- 6 The Social Context of Volunteer Environmental Monitoring**
Linda P. Wagenet (lpw2@cornell.edu) and Max J. Pfeffer

An overview of volunteer environmental monitoring with emphasis on water-quality monitoring leads to consideration of the contributions volunteer monitoring can make to more democratic environmental decision making.

- 9 Effects of Mine Remediation on Water Quality and Benthic Macroinvertebrates in the Upper Animas River Watershed, Southwestern Colorado**
J. Robert Owen (jrowenj@comcast.net), Chester Anderson, and William Simon

The Animas River Stakeholders Group in the San Juan Mountains of Colorado coordinated and conducted extensive water-quality and benthic macroinvertebrate sampling showing improvements to the aquatic ecosystem after remediation in the Mineral Creek basin.

- 14 Potential Liability for Good Samaritans Cleaning Up Abandoned Hardrock Mines**
Peter Butler (pbutler@wildblue.net)

The Good Samaritan legislation addresses third-party liability in cleaning up abandoned mines that may prevent interested groups from starting remediation actions.

- 16 Validity and Applications of Citizen Volunteer Water-Quality Data: A Case From Alabama**
William Deutsch (deutschw@auburn.edu), Eric Reutebuch, and Sergio Ruiz-Cordova

The Alabama Water Watch has given citizens training and powerful web-based tools to resolve sources of water degradation and positively influence water-management policy.

- 21 Effectiveness Monitoring by California Community Watershed Groups**
Fraser Shilling (fmshilling@ucdavis.edu) and Richard Harris

Several watershed group success stories are presented where volunteer-monitoring programs have contributed to channel restoration, water quality, and habitat improvements.

- 25 Importance of Quality Assurance Planning for Long-Term Monitoring Programs**
Jo A. Latimore (jlatimore@HRWC.ORG) and Ric Lawson

Michigan's governor created the Michigan Clean Water Corps for collection, verification, and validation by volunteers of water-quality and biological data. At the heart of the program are the volunteers who desire to learn about their local streams and lakes.

Cover Photo: The Paradise Portal, an abandoned mine in Middle Fork Mineral Creek, upper Animas River watershed, known locally by scientists as the "White Death," discharges acid mine drainage with high concentrations of aluminum. The waste-rock pile is more than 100 feet high with thick deposits of aluminum hydroxysulfate mineral (basaluminite), which has precipitated from the mine drainage (photo by Win Wright).

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(Opinions expressed by our columnists are their own and do not represent the opinion or position of AWRA.)

Scheduled Topics for Future Issues ...

NOVEMBER 2007

WATER RESOURCES DISASTER RECOVERY
ERIC J. FITCH (FITCHE@MARIETTA.EDU)

JANUARY 2008

GIS AND WATER RESOURCES
LORRI PELTZ-LEWIS (GUEST EDITOR)
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MARCH 2008

SUPPORTING WATER SUPPLY AND DISTRIBUTION
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