

Fall 2007



# Natural News

A Publication of The U.S. Environmental Protection Agency, Region 8 Ecosystem Protection Program



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*A mockup of the future Mineral County Fairgrounds.*

*~ Photo: Mineral County Fairgrounds Association*

## Brownfields Grant for Revitalizing the Willow Creek Watershed

~ Ted Lanzano, EPA Region 8

EPA has been involved in the Willow Creek watershed since 1999. The work done by the community in collaboration with EPA Region 8

and the State of Colorado is described on the Willow Creek Reclamation Committee website at:

[www.willowcreede.org](http://www.willowcreede.org)

Now, an EPA Region 8 Brownfields grant is being used to help build the new Mineral County Fairgrounds, a much needed community asset.

*(Continued on page 2)*



*Willow Creek adjacent to mine tailing and contaminated soil.*

*~ Photo by Daniel Heffernan, USEPA Region 8*

The long anticipated environmental cleanup work in Creede, Colorado is underway. This fall, construction equipment broke ground and crews began removing mine tailings and contaminated soil along Willow Creek to make way for the construction of the Fairgrounds.

Nestled in the heart of the San Juan Mountains in southwestern Colorado, Creede (with a population of around 400) has a rich mining history. While the town is transitioning to new economic activities, the culture and the physical remnants of mining are as visible and well preserved here as in any place in the West. Unfortunately, the legacy of mining activity has also left behind a host of environmental problems caused by acid runoff and heavy metals from mining waste.

Willow Creek, a tributary of the Rio Grande River, is downstream from 11 major former mining sites and is contaminated with zinc, lead, cadmium and other heavy metals. Eliminating this source of contamination is key to restoring the aquatic and riparian habitat on the 46-acre site, and also important to downstream users in the agriculture-rich San Luis Valley. On this project, the Mineral County Fairgrounds Association (MCFA) is using a \$200,000 EPA Brownfields grant to clean up the floodplain area. This project is one of several that EPA and the town of Creede are carrying out in the watershed to address mining contamination.

Zeke Ward of the Willow Creek Reclamation Committee elaborates on the cleanup, "Some of the contamination can simply be isolated by putting clean material over the top of it. But the ultimate goal is to eliminate any possibility that any metals can get into the ground water or have a pathway to affect humans."

For Creede and the rest of Mineral County, the redevelopment of the site is big news. Project leaders have put together ambitious plans for an indoor arena, recreation center, classrooms, and exhibition and office space. Plans for the exterior portions of the project are just as bold: rotational livestock grazing, experimental crop cultivation, athletic fields, interpretive trails, and a sculpture art park are all being considered.

Jenny Inge of the MCFA explains, "We believe that having an indoor and outdoor recreation facility this close to the majority of our county population could be a big draw in attracting people to move here. And while Creede has never been anxious to overdevelop, we're aware that development is inevitable, so if we're going to grow we'd like to have something to say about how we grow."

The vision and leadership of the Mineral County Fairgrounds Association (MCFA), the Willow Creek Reclamation Committee, and community members have been instrumental in returning this contaminated site to productive use. Creede's innovative project serves as a model for other communities that are transitioning from a mining-based economy to an economy increasingly dependent on natural assets: clean land, clean water, and healthy ecosystems.

### **Brownfields Grant Opportunities**

EPA's Brownfields Program is currently accepting FY08 funding proposals for its Assessment, Cleanup, Revolving Loan Fund, and Job Training Programs (*submission deadline is October 12, 2007*). EPA offers financial and technical support to states, tribes and local communities to identify, assess, cleanup, and reuse/redevelop brownfields properties.

Also, grants for Technical Assistance to Brownfields Communities are available, and the deadline for submission is October 3, 2007. For more information or to view the request for proposals, visit [www.epa.gov/brownfields](http://www.epa.gov/brownfields) or contact **Ted Lanzano** at [lanzano.ted@epa.gov](mailto:lanzano.ted@epa.gov) or (303) 312-6596.

## **AWARE Colorado Connects Land Use to Water Quality**

~ By Laurie DiBattista, AWARE Colorado

We at AWARE Colorado have logged many miles visiting communities in the state to inform local decision makers how their land-use choices can impact local water-quality protection. Since 2005, AWARE (Addressing Water and Natural Resource Education) Colorado has given presentations and talked with small to large communities about why effective water quality management starts with strategic planning at the local level.

Cynthia Peterson, AWARE program director, has met with planning commissions, city councils, visioning task forces, county commissioners, homebuilders and others. She reports that post-presentation evaluation surveys are very encouraging. AWARE's educational messages deal mostly with ways to reduce impervious surfaces such as asphalt, cement, roofing and even compacted soil – anything that prevents rain and snowmelt from infiltrating the ground.

The program highlights strategies that use planning and zoning tools such as buffers and setbacks; innovative street and parking lot design; porous pavers and other permeable materials; natural landscaping and tree cover; and model ordinances.

AWARE is an initiative of the League of Women Voters of Colorado Education Fund, a nonprofit and non-advocacy education and research organization. AWARE is funded by the Colorado Department of Public Health and Environment (CDPHE) through grants from the U.S. Environmental Protection Agency. It is guided by a technical advisory committee of experts and also partners with Colorado State University.

AWARE is a charter member of the National Nonpoint Education for Municipal Officials (NEMO) Network, which helps communities better protect natural resources while accommodating growth.

The centerpiece of the AWARE program is its "Water Protection Toolkit for Local Officials." The booklet gives communities ideas about ways to protect water quality; suggested resources for learning more, including links to numerous Web sites; and proven management strategies and practices suitable for Colorado. The toolkits can be viewed or downloaded at [www.awarecolorado.org](http://www.awarecolorado.org). Because of a grant from Coors Brewing Co., the booklets

were mailed to every municipality and county in the state last year.

AWARE's program director and team previously worked on a five-year statewide environmental education campaign, the Colorado Water Protection Project. It informed the public about nonpoint source pollution and simple ways residents can reduce polluted runoff around their homes. Messages were delivered using TV and radio ads, a Web site and newsletter, CDs, brochures, on-air interviews and newspaper articles. Building on that experience, AWARE has spread the word about its new program.

In a recent six-month period, about 5,150 visitors logged onto AWARE's Web site. The AWARE e-newsletter updates about 350 subscribers about the program, resources, articles, and upcoming events that deal with water quality protection. In the last year, AWARE has also given in-depth educational programs in the Pueblo area. Funded by a state Supplemental Environmental Projects grant, the programs address sources of stormwater pollution, structural and nonstructural best management practices and examples of opportunities for local officials to facilitate improved stormwater practices.

AWARE is also working to add a new component, community-based social marketing, to its program. And, AWARE is cosponsoring the second annual Sustaining Colorado's Watershed conference in October, 2007. For more information, visit [www.awarecolorado.org](http://www.awarecolorado.org) or call Cynthia Peterson at (303) 861-5195.

## **Groundwater Foundation to Hold National Conference in Denver, Colorado: Bridging the Gap Between What is Known and What is Practiced**

~ Susan Seacrest, President, Groundwater Foundation

For decades scientists, hydrologists, hydrogeologists, policy makers, and others have worked diligently to find answers to our water-related concerns and issues. Much is known about our water resources, and policy has been enacted to help protect and manage our water. Yet, how has this information impacted day-to-day groundwater-management practices?

The Groundwater Foundation plans to explore this question at its 23rd annual conference by focusing on how current science, technology, and policy can

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promote groundwater-friendly practices at the local level. The conference will be held November 28-30, 2007 at the Sheraton Denver West Hotel in the Denver suburb of Lakewood, Colorado. Invited speakers include: Assistant Secretary for the U.S. Department of the Interior, Mark Limbaugh; U.S. Geological Survey Office of Ground Water, Chief, Bill Alley, and Colorado Supreme Court Justice Gregory Hobbs, Jr. Conference co-sponsors include: AWWA Research Foundation, Water Systems Council, U.S. Geological Survey, and US EPA Region 8.

Conference topics include:

- water quality and quantity connections
- aquifer-based management
- western water policies
- integrated management case studies
- water rights and water law
- sustainable infrastructure and asset management
- groundwater management on federal lands

The conference will also feature tours of the U.S. National Ice Core Laboratory and the Bureau of Reclamation's Hydraulic Laboratory. Special events held in conjunction with the conference include an opening reception featuring the presentation of the 2007 E. Benjamin Nelson Government Service Award and Groundwater Guardian Designation Ceremony during which communities participating in the Foundation's Groundwater Guardian program will be recognized for their efforts on behalf of groundwater protection.

Plan to attend this conference to learn more about how science, technology and policy can help you to protect groundwater now and for the future. For more information, contact The Groundwater Foundation at (800) 858-4844 or via e-mail at [info@groundwater.org](mailto:info@groundwater.org).

The Groundwater Foundation is a non-profit organization based in Lincoln, Nebraska with a mission to educate and motivate the public to care about and for groundwater. Since its inception in 1985, the Foundation

has offered various educational programming for youth and adults. To learn more, visit [www.groundwater.org](http://www.groundwater.org).

## **EPA to Examine Conditions of Nation's Lakes**

The U.S. Environmental Protection Agency is embarking on a three-year study to determine the state of America's lakes. The "Survey of the Nation's Lakes" is the first-ever attempt to assess real-world conditions by studying 909 lakes, ponds and reservoirs whose profiles are representative of all lakes in the United States.

This study is part of a larger EPA effort to assess coastal waters, rivers and wetlands. A similar survey, for wadeable streams, was completed earlier this year. All of the surveys will be repeated to analyze the success of efforts to manage and improve overall water quality. The report on the lakes survey will be released in 2009.

More information about the Survey of the Nation's Lakes: <http://www.epa.gov/owow/lakes/lakesurvey/>

## **Biosolids General Permits Published Final ~ Greg Davis, EPA Region 8**

Biosolids is the new name for what has previously been referred to as sewage sludge. Biosolids are primarily organic treated wastewater materials from municipal wastewater treatment plants -- with the emphasis on the word treated -- that are suitable for recycling as a soil amendment. Sewage sludge now refers to untreated primary and secondary organic solids. This differentiates biosolids which have received stabilization treatment at a municipal wastewater treatment plant from the many other types of sludge that exist (such as oil and gas field wastes) that cannot be beneficially recycled as soil amendments.

Before about 25 years ago, the traditional practice in this Region was to landfill or incinerate what was then called sewage sludge. During the past quarter century, the practice changed to recycling biosolids as soil amendments. Region 8 recycles 85% of the biosolids generated in the six-state Region.

Biosolids are, in effect, a slow release nitrogen fertilizer with low concentrations of other plant nutrients. In addition to significant amounts of nitrogen, biosolids also contain phosphorus, potassium, and essential micronutrients such as zinc

**"Intellectuals solve problems;  
geniuses prevent them."**

**Albert Einstein**

and iron. Many western soils are deficient in micronutrients. Biosolids are rich in organic matter that can improve soil quality by improving water holding capacity, soil structure and air and water transport. Proper use of biosolids can ultimately decrease top soil erosion.

When applied at agronomic rates (the rates at which plants require nitrogen during a defined growth period), biosolids provide an economic benefit in addition to their environmental benefits. Colorado State University agronomists have shown continuous application of three dry tons per acre every other year to dryland wheat produces comparable yields, higher protein content, and larger economic returns compared with the use of 50-60 pounds per acre of commercial nitrogen fertilizer.

The biosolids general permits published by EPA Region 8 are intended to cover the generation, treatment, and/or the use/disposal of sewage sludge by means of land application, landfill, and surface disposal. Facilities or operations that incinerate sewage sludge are not eligible for coverage under these general permits. In order to provide some flexibility to address different situations, coverage under the general permits will fall into one of the following three categories:

Category 1. Facilities/operations that generate and/or partially treat sewage sludge, but do not use/dispose of sewage sludge.

Category 2. Facilities/operations that use/dispose of sewage sludge and may also generate and/or treat sewage sludge.

Category 3. Wastewater lagoon systems that need to land apply sewage sludge on an occasional, restricted basis.

More information on the general permits and EPA's Biosolids program can be found at:  
<http://www.epa.gov/region8/biosolids>  
 or call Bob Brobst at 303-312-6129 or email [brobst.bob@epa.gov](mailto:brobst.bob@epa.gov)

## Funding Opportunities

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redevelop brownfields properties. Also, grants for Technical Assistance to Brownfields Communities are available, and the deadline for submission is October 3, 2007. For more information or to view the request for proposals, visit [www.epa.gov/brownfields](http://www.epa.gov/brownfields)

**The Norman Foundation** is accepting Letters of Inquiry from U.S. organizations for its Environmental Justice program. The foundation provides grants for general support, projects, and collaborative efforts and welcomes innovative proposals designed to build the capacity of social change organizations working in its areas of interest. Letters of Inquiry Deadline: November 1, 2007

<http://www.normanfdn.org/>

## Programs Newly Listed in the Catalog of Federal Funding

The following new programs were added to the *Catalog of Federal Funding for Watershed Protection*:

U.S. Army Corps of Engineers programs:  
 Snagging and Clearing for Flood Control (CAP Section 208)

- Shore Damage Attributable to Federal Navigation Works (CAP Section 111)
- Beneficial Uses of Dredged Material (CAP Section 204)
- Small Flood Damage Reduction Projects (CAP Section 205)
- Aquatic Ecosystem Restoration (CAP Section 206)
- Project Modifications for Improvement of the Environment (CAP Section 1135)

EPA programs:

- EPA Gulf of Mexico Program
- EPA Communities for a Renewed Environment Program (CARE)

Three additional programs are also listed: Small Business Innovation Research, Water 2025 Challenge Grant Program and Rivers, Trails, and Conservation Assistance Program. The Catalog can be accessed at [www.epa.gov/watershedfunding](http://www.epa.gov/watershedfunding).

## Conferences and Training

**"Sustaining Colorado's Watersheds: Making the Water Quality Connections"**, Oct. 2-4, 2007, Breckenridge, CO. Go to: [www.coloradowater.org/conference/index.htm](http://www.coloradowater.org/conference/index.htm)

## Second Annual Colorado Environmental Film Festival

November 1-3, 2007, American Mountaineering Center, 710 10th Street, Golden, Colo. This event will offer attendees the opportunity to view thought-provoking and entertaining local, national, and international feature length and short films for all ages, participate in a forum on environmental filmmaking, attend an evening reception, and learn from a variety of organizations in the Expo Hall. For more information go to: [www.caee.org/ceff.html](http://www.caee.org/ceff.html).

## Key EPA Internet-Based Tools for Watershed Management

This is a comprehensive, two-part course designed to familiarize users with powerful watershed management tools provided online by US EPA. Presented in a readable, section-based format, the course tutorials are now available for self-paced study. The only requirement is a computer with Internet access.

In the overview course you will learn to extract reports from EPA water program databases such as the TMDL database, take a spin on Enviromapper for Water, EPA's online mapping application based on the National Hydrography Dataset, and query an interactive funding catalog. In the in-depth course you will get an overview of the Watershed Plan Builder Tool, query water quality standards for a state, generate watershed-wide data summary on impaired waters from WATERS and much more. To explore the course, visit [www.epa.gov/owow/watershed/wacademy/epatools](http://www.epa.gov/owow/watershed/wacademy/epatools)

## Publications and Web Resources

### Plan2Fund Objective Prioritization Tool (OPT)

Does your watershed group need assistance deciding between competing objectives and priorities? Plan2Fund Objective Prioritization Tool (OPT), a free web-based Watershed Planning Tool, can help. OPT allows users to rank competing priorities by providing a user-friendly spreadsheet that makes setting, weighting, and applying criteria simple. Your group can set its priorities with confidence and share this information with decision makers, funders, and constituents. Download Plan2Fund OPT at <http://efc.boisestate.edu/opt>.

**GOOGLE EARTH STREAM FLOW KML FILES** display real-time stream gauges in [Google Earth](http://www.google.com/earth/). Google Earth is an interactive, 3D viewer that seamlessly zooms from a global scale down to less than a meter in many urban areas. To display USGS stream gages, download one of the following files and open it in Google Earth. Stream gages, colored by streamflow condition (390K) This is a

KML file of a USGS real-time stream gage map. Each gage is colored in terms of flow conditions. This file is re-created every hour. Once it is opened in Google Earth, the contents will be refreshed in every hour. <http://water.usgs.gov/waterwatch/kmls/real.kmz>

## Center for Watershed Protection (CWP) Releases Latest Article in the Wetlands and Watersheds Article Series: "The Importance of Protecting Vulnerable Streams and Wetlands at the Local Level"

Visit the website at:

[www.cwp.org/wetlands/articles.htm](http://www.cwp.org/wetlands/articles.htm) to download a copy of the article. Also available are Articles 1, 2 & 3 of the series. All articles are available for free download. Since 2005, CWP has released articles as part of the Wetlands and Watersheds Article Series. Article 6 in the series, "*The Importance of Protecting Vulnerable Streams and Wetlands at the Local Level*," makes the case for expanded local protection of vulnerable streams and wetlands that may not be fully protected by state or federal law due to their perceived isolation from perennial or navigable waters. This article summarizes state and local approaches to closing this gap.

## Two New Publications from the National Association of Counties (NACo)

NACo has updated a publication entitled *Using GIS Tools to Link Land Use Decisions to Water Resource Protection*. The guide provides practical case studies, a list of commonly available tools, and a newly created tools assessment section. *County Wetlands Data Guidebook* is another new NACo publication, which provides a practical introduction to wetlands data and is designed to help county officials obtain and utilize wetlands data and maps for county purposes. These publications are available now at [www.naco.org/techassistance](http://www.naco.org/techassistance)

## Rooftops to Rivers: Green Strategies for Controlling Stormwater and Combined Sewer Overflows

This report highlights green infrastructure as an alternative to traditional stormwater management approaches. It includes economic benefits of green solutions, policy recommendations for local decision makers and case studies from the U.S. and Canada. [www.nrdc.org/water/pollution/rooftops/contents.asp](http://www.nrdc.org/water/pollution/rooftops/contents.asp).

### **Web Site Encourages Green Infrastructure**

Hosted by The Conservation Fund and the USDA Forest Service, [www.greeninfrastructure.net](http://www.greeninfrastructure.net), illustrates that identifying and planning for green infrastructure provides a framework for smart conservation and smart growth to ensure abundant clean water and healthy landscapes into the future. The site includes a section on Elements of Successful Green Infrastructure Initiatives; examples of benefits; profiles of related projects around the country (including the Mountain West where the Chatfield Basin is featured); and more.

### **"Water Infrastructure: Successful Strategies for Local Leadership" DVD**

EPA's Local Government Advisory Committee (LGAC) received a **2007 Bronze Telly** for their new DVD that highlights how local governments are addressing aging sewer and water systems to meet current and future challenges facing our communities. The DVD features five local officials telling how they successfully met the needs of their communities for sustainable water infrastructure. The staggering costs of maintaining and improving water and wastewater systems challenge local leaders in practically every American community. The video can be accessed at:

[www.epa.gov/waterinfrastructure](http://www.epa.gov/waterinfrastructure).

### **WaterSense**

WaterSense is a voluntary public-private partnership program sponsored by the U.S. Environmental Protection Agency. Its mission is to protect the future of our nation's water supply by promoting and enhancing the market for water-efficient products and services. Go to: <http://www.epa.gov/watersense/>

### **"After the Storm" Video**

DVD copies of the popular half-hour television special about watersheds – *After the Storm* – co-produced by The Weather Channel (TWC) and the EPA are now available at no charge. This program premiered on TWC in 2004 and continues to be a very popular vehicle to educate citizens about stormwater management. The program highlights three case studies – Santa Monica Bay, the Mississippi River Basin/Gulf of Mexico, and New York City – where polluted runoff threatens watershed health. To order a free copy of *After the Storm*, contact NSCEP at 800-490-9198 or send an email to [nscep@bps-lmit.com](mailto:nscep@bps-lmit.com) and please refer to *After the Storm* (DVD), EPA 841-C-06-001 OR *After the Storm* (VHS), EPA 840-V-04-001.

### **"Better Site Design: A Handbook for Changing Development Rules in Your Community"**

This handbook is free as a PDF download at:

<http://www.cwp.org/PublicationStore/bsd.htm>

### **EPA Releases Nonpoint Source Outreach Toolbox**

EPA has released the Nonpoint Source Outreach Toolbox, a comprehensive set of Web-based resources designed to assist communities across the U.S. conduct locally effective watershed education and outreach activities. The Toolbox, online at

[www.epa.gov/nps/toolbox](http://www.epa.gov/nps/toolbox), includes a searchable catalog of nearly 800 print, radio, and TV ads and outreach materials in the following categories: lawn and garden care, motor vehicle care, pet care, septic system care, household chemicals and waste, and general stormwater and storm drain awareness. This repository of contemporary, audience-tested materials is designed to meet the needs of professionals who might be strapped for ideas, money, time or staff to develop messages and products for their own communities. The Toolbox also provides EPA's publication "Getting in Step - A Guide to Conducting Watershed Outreach Campaigns", as well as a comprehensive collection of surveys and evaluations of outreach programs from around the country and a collection of logos, slogans, and mascots to help unify a community's campaign.

### **The USFS Publishes the "Technical Guide to Managing Ground Water Resources" (May 2007).**

This guide is intended to provide guidance for implementing the USDA Forest Service national ground-water policy. It describes hydrological, geological, and ecological concepts, as well as managerial responsibilities that must be considered to ensure the wise use and sustainable use of ground water resources on USFS lands. Go to:

<http://www.fs.fed.us/publications/>

### **Watershed-Based NPDES Permitting Technical Guidance**

EPA has published a new technical guidance that will help integrate National Pollutant Discharge Elimination System (NPDES) permits into watershed management plans. "Watershed-Based NPDES Permitting Technical Guidance" is a follow up to the 2003 implementation guidance and leads permitting interested parties through the analysis of watershed data and developing a framework for implementing an NPDES program. The agency is accepting comments on the guidance on a continuing basis. For an electronic copy of the guidance:

[www.epa.gov/npdes/watersheds](http://www.epa.gov/npdes/watersheds)

### **The Green Hour**

The National Wildlife Federation (NWF) created this Web site to provide parents with the information and inspiration to get their children outside for an hour every day. Learn why this is so important and how it will benefit your children. <http://www.greenhour.org/>





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## Natural News

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If you have an article concerning ecosystem protection, community based environmental protection, or watersheds; we would like to hear from you!

**We need your help in updating our mailing list in order to keep Natural News coming to you! Please contact John DiPentino at (303) 312-6594 or [dipentino.john@epa.gov](mailto:dipentino.john@epa.gov), or write to him at the return address below.**

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