



Director's Update: BCWI Produces Boulder Creek Community Stewardship Plan

By Paul Hempel, Executive Director of the Boulder Creek Watershed Initiative

Greetings Members and Friends of BCWI!

Dedicated to informing the community about water resource issues that affect the health of the Boulder Creek Watershed.

BCWI is a 501(c)3 non-profit.

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Boulder Creek Watershed Initiative is proud to announce the recently completed Boulder Creek Community Stewardship Plan.

This project investigated opportunities on how to best engage local citizens, under the umbrella of "StreamTeams", in hands-on activities that help protect and restore the watershed. Water quality monitoring, neighborhood and stream side education and outreach, habitat and wildlife observations, invasive species removal, riparian plantings, creek clean-ups and other hands-on community involvement activities were identified as potential StreamTeam opportunities through the outreach portion of this project. These types of community-driven activities can help foster an environmental stewardship ethic. People involved in community stewardship efforts feel a sense of pride and accomplishment simply by being involved in activities that help protect the watershed.

Twenty-seven different "issues" concerning the overall health of the Boulder Creek watershed were identified from the 28 stakeholder meetings conducted for this project. In a geographic scope, these issues ranged from a need for source water protection in the high country to removing invasive species in portions of eastern Boulder Creek and nearby agricultural ditches.

Maintaining minimum stream flows in South Boulder Creek was the most highlighted issue. Like much of the rest of the watershed, South Boulder Creek water has been diverted and channelized for water users and their needs in both municipal and agricultural settings.

General water quality concerns were also mentioned by stakeholders. Non-point sources of pollution in the form of urban runoff were highlighted as a major concern. Emerging contaminants has become an issue not only for Boulder County residents but also for residents in urban areas nationwide.

Invasive species were also identified as one of the major issues concerning the overall health of the Boulder Creek watershed. Eurasian watermilfoil (EWM), in particular, was singled out as the biggest invasive species threat to portions of Boulder Creek, some of its tributaries and in agricultural ditches.

Continued on page 8.

Past Forums: Mining and Polar Regions

(See the March and April 2007 forums on page 6.)



On 23 January 2007, Jim Cowart (right) from Walsh Environmental and the BCWI Board of Directors joined with Tom Hendricks (left) from Calais Resources to discuss Boulder County's mining history and current reclamation projects. The Caribou Mining District west of Nederland has been mined principally for gold, silver, and iron. Whereas the focus on mining used to be mineral extraction, irrespective of the consequences, the mine is now making efforts to integrate with the community, through hiring local employees, giving tours to school groups, and implementing environmental measures.

Tom emphasized the latter, describing the clean-up of the Burlington Mine site outside Jamestown which presented hazards such as holes, often disguised by vegetation, continuing subsidence, areas of possible future collapses, and leachate which affected local ecosystems and water quality. The cleanup efforts reached its environmental and safety reclamation goals, receiving the 2005 Mined Land Reclamation Board award from the state government.

On 27 February 2007, BCWI kicked off the International Polar Year (IPY) with a panel involving Mark McCaffrey (University of Colorado), E. James Dixon (Institute of Arctic and Alpine Research) and Ted Scambos (National Snow and Ice Data Center). The IPY ends in March 2009, highlighting all aspects of polar science and education including observed changes and impacts.

Mark gave an overview of the 125-year history of IPYs, noting data sharing efforts, the international aspects, and the diversity of scientific and educational activities. Ted focused on icebergs and ice shelves of the Antarctic Peninsula regarding their retreat and volume reduction. James explored archeology on ice, describing his experiences in Alaska with the wealth of human artifacts which have been uncovered due to ice melting.

To learn about the many International Polar Year events that will be held in Boulder, visit <http://cires.colorado.edu/education/k12>



Final Forums for the 2007 BCWI Season

Implementation of a Rainwater Catchment System at an Orphanage in Rwanda
Christine Chatterly, Engineers Without Borders
Tuesday 25 September 2007, 7-8 pm

Academic and Student Influence on Promoting Environmental Ethics
Environment Center
University of Colorado, Boulder
Tuesday 23 October 2007, 7-8 pm

Both forums will be held at the Boulder Public Library, Main Branch, Auditorium
1000 Canyon Blvd, 303-441-3100

Get ready for the
100th Boulder
Creek Watershed
forum &
celebration!
22 January 2008

To receive forum reminders and updates, please join the BCWI email list by sending a request to bcwi@bcn.boulder.co.us or visit <http://www.BASIN.org/news> For additional information on BCWI forums, contact Sheila Murphy at 303-541-3023.



A water supply on Tonga: Rain and groundwater are stored in tanks and gravity fed to homes. (photo: Ilan Kelman).

The Boulder Creek Watershed Forum series is sponsored by:

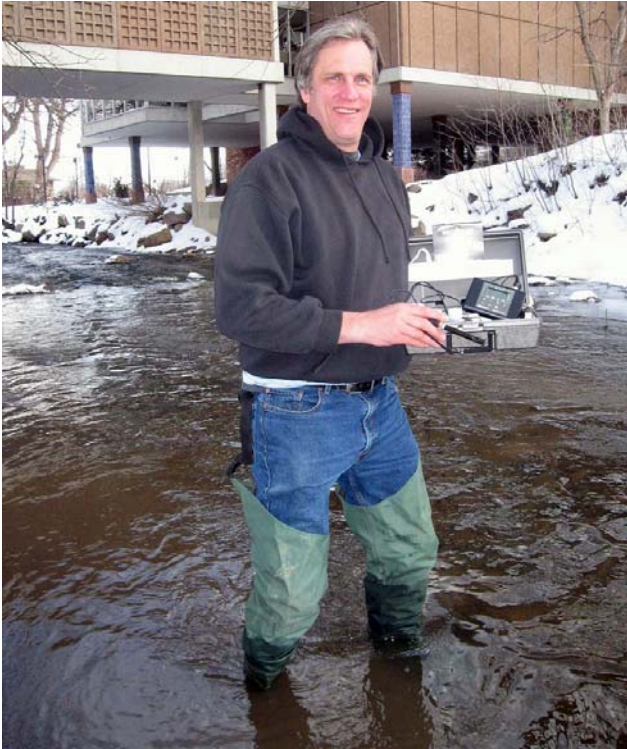
- Boulder Creek Watershed Initiative
- United States Geological Survey
- City of Boulder
- Boulder Public Library
- Moe's Broadway Bagels
<http://moesbroadwaybagel.com>
- Breadworks <http://breadworks.net>
- Caffe Solé <http://www.caffesole.com>

Missed a Boulder Creek Watershed Forum?

Videotapes of all forums are available at the Boulder Public Library and can be checked out for home viewing.

Forums are also televised on Channel 8:
Wednesday 3 PM
Saturday 10:30 AM
Sunday 8:30 PM

Volunteer with BCWI!



BCWI Executive Director Paul Hempel volunteers for Boulder Creek water quality monitoring (photo: Jim Cowart).

BCWI needs more people to join our team of volunteers. Opportunities include:

- Forums: Presenter line-up, forum production, video editor.
- StreamTeams: see the article below.
- Newsletter article writer, editor, and photographer.
- Accountant and bookkeeper.
- Working with local companies to raise funds and products/services donations.
- General clerical duties.
- Internships via CU and Naropa.
- Board of Directors: Arts community, agricultural connections, businesses and others.

BCWI also needs office space, equipment, and supplies to help us manage our projects!

THANKS for your continuing support!



Become a volunteer with the new StreamTeams!

The Keep it Clean Partnership is looking for volunteers for its new StreamTeam program to help protect local waterways through pollution prevention and water conservation activities. StreamTeam participants form a group (a StreamTeam) and adopt a section of a local waterway to protect by performing their choice of water protection activities. Volunteers choose from a variety of activities including creek clean ups, re-vegetation projects, water quality monitoring, aquatic insect sampling, lake monitoring, stream bank restoration, invasive species removal and storm drain marking.

StreamTeam is a cooperative program sponsored by the Keep it Clean Partnership (formerly the WASH Project), the Boulder Creek Watershed Initiative, the city of Boulder and the U.S. Geological Survey. The Keep it Clean Partnership is a regional stormwater quality management program serving the communities of Boulder, Boulder County, Erie, Longmont, Louisville and Superior.

For more information:

<http://www.KeepitCleanPartnership.org>

Phone (303) 413-7365

You can do Creek Clean-Ups!



Are you tired of seeing your favorite waterway littered with trash? In just a few hours, would you like to have a positive impact on your local environment? If so, do a Creek Clean Up!

It's Easy!

Get everything you need for your clean up from the Keep it Clean Partnership (KICP) Education office at 4049 N 75th Street, Boulder, 80301. Call or email us to reserve a kit: nouds@bouldercolorado.gov or 303-413-7365.

We offer:

- Guidance in the planning of your clean up.

- Trash collection arranged by KICP.
- A Clean Up Kit that includes trash bags, gloves, pickup tools, and a first aid kit.
- Fun give-aways to thank participants.
- Recognition of accomplishments on the StreamTeam web site.

Make a Difference!

By picking up litter in and along creeks you:

- Improve water quality.
- Prevent storm drains from being blocked.
- Protect animals from ingesting or getting tangled in litter.
- Beautify your community.

Jim Cowart Joins BCWI's Board

BCWI is proud to announce Jim Cowart as our latest addition to our Board of Directors! Jim's energy, ideas and vision, combined with his past experience, make him a perfect addition to the BCWI team.

Jim, a Nederland resident, has been an Environmental Consultant for 33 years and is currently with Walsh Environmental in Boulder.

Jim will assist BCWI in writing grant proposals, direct mail appeals and business outreach, among other duties. In past endeavors, Jim has worked closely with local and federal agencies plus various public and private organizations. He has served on several Boards of Directors with other groups giving him experience with administrative, management, accounting and other fiduciary responsibilities.

Past Forums: China and American Writers

(See the January and February 2007 forums on page 2.)



On 27 March 2007, Ken Driese from the University of Wyoming spoke about the fate of Tiger Leaping Gorge in China which might be flooded for a hydroelectric project. Ken and his wife taught English in Yunnan for a year, traveling extensively around the country and including a trek through the gorge.

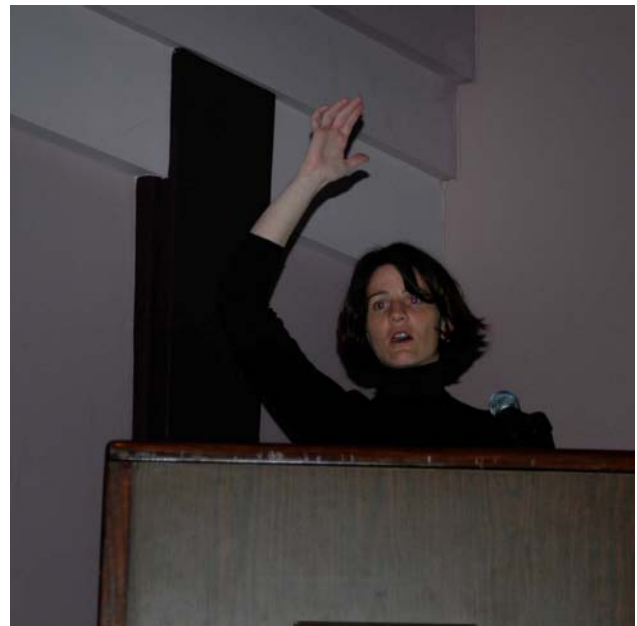
He provided an overview of China and its energy history, noting that the development approach used leads to increasing energy demand. Coal-fired power produces greenhouse gas emissions and air pollution, so the country is looking at alternatives, including hydroelectric. To China, that means large dams flooding historical, cultural, and nature sites.

This commentary was interspersed with Ken's photography, illustrating China's diversity and beauty, the different ways of living there, and the potential costs of realizing their hopes for the future. Questions and discussion considered what could be done about the challenges—and whether or not we should be doing anything.

On 24 April 2007, Tina Gianquitto from the Colorado School of Mines spoke about "Narratives of Progress: Elegies on Loss", examining 19th century environmental literature in American history and its representations of nature. Tina termed this work "literary archeology", focusing on visual and textual depictions of the actual and metaphorical importance of rivers.

She discussed her personal experience of rivers, particularly in the context of moving from New York to Colorado which led to different views and understandings of water. That grounding helped her to interpret that wider American literary view of literature, especially in the context of east coast writers exploring the feelings and identities of a young and expanding country and nation.

Natural history became enmeshed with national history, with rivers as connectors and as inspirers. Religion, exploration, and nationalism were prominent themes.



Research Focus: Puerto Rico Water

By Sarah Opitz-Stapleton sarah.stapleton@colorado.edu

Much of the research examining factors contributing to lack of safe drinking water focuses on communities in developing countries. Common factors cited as contributing to drinking water issues are (1) centralization or undue governmental regulation of the water sector and (2) lack of community participation and ownership in water resource management.

Less investigated are the reasons contributing to lack of safe drinking water for communities in developed countries, such as the United States. This research seeks to uncover the potential reasons and relationships contributing to lack of drinking water that meets American drinking water standards in three poor, rural Puerto Rican communities from their perspective. The factors of centralization and community participation are not clear, because the water systems in the selected communities are community owned and operated. The EPA became involved after the communities failed to employ or maintain adequate water treatment. Thus centralization and community participation were not initially factors contributing to the water situation.

Diarrhea and skin infections are fairly common in the communities, but the disease incidence related to water sanitation has never been recorded. Yet the communities are not completely isolated. Cell phones and satellite TV are common, and people commute to work and send their children to schools in the cities. Thus, lack of understanding about the links between water safety and disease is not likely to be a primary reason for failure to comply. Community members are likely to have a different perspective and understanding of the reasons contributing to difficulty in complying.

This research intends to elicit community members' experiences and perceptions to help the communities devise strategies to overcome their difficulties if they so choose. This research does not intend to address the water issues. Rather, it aims to systematically collect community perceptions on their water problems, which has not been done for these communities. The results will be returned to the communities and shared with a local organization working with the communities on water and sanitation issues to facilitate compliance.








One drinking water system in a study site. The upper pipe takes stream water and gravity feeds it through the lower pipe to the houses below (photo: CECIA).

Corporate and individual sponsors welcome!


YES! I will make a (tax-deductible) contribution to the Boulder Creek Watershed Initiative!

My level of support is (check one):

	_____ \$ 500 & up	Belted Kingfisher	<i>Ceryle alcyon</i>
	_____ \$ 100 - 499	Greenback Cutthroat Trout	<i>Oncorhynchus clarki stomias</i>
	_____ \$ 50 - 99	Tiger Salamander	<i>Ambystoma tigrinum</i>
	_____ \$ 20 - 49	Green Darner	<i>Anax junius</i>
	_____ \$ 0 - 19	Golden Stonefly	<i>Hesperoperla pacifica</i>

Enclosed is my check for \$_____. The entire watershed thanks you.

BCWI also needs volunteers! Tasks include video editing, creek cleanup, and outreach events. To get involved, let us know your interests and how to reach you!



PO Box 18
 Boulder, CO 80306
www.BASIN.org/BCWI

Director's Update: Stewardship Plan

Continued from page 1.

For homeowners who live along Boulder Creek and its tributaries, the improper disposal of brush, grass clippings and other vegetation is clogging the waterways and agricultural ditches. Homeowner use of water to wash vehicles along with the over watering and over fertilizing of lawns was also seen as a problem for both water quantity and quality.

StreamTeam objectives include educating people about their relationship to streams and watersheds, providing public involvement opportunities to protect local streams and, the protection of water resources through pollution prevention and water conservation.

BCWI will collaborate with the Keep It Clean Partnership, a consortium of local cities and towns, in the formation of StreamTeams. To find out more about the StreamTeam approach or to sign up to be on a StreamTeam please visit the StreamTeam website at:

http://bcn.boulder.co.us/basin/kicp/stream_teams/index.html

We'll see you around the watershed!