



Your Home Watershed

Update

A semi-annual newsletter for Gallatin Watershed residents

Promoting conservation and enhancement of our water resources while supporting the traditions of community, agriculture and recreation.

Fall 2008

In this Issue

Low Impact Development ... page 2

Gallatin Conservation District News ... page 2

Water - Landowner Rights ... page 3

Kid's Korner ... page 3

Letter from the GGWC Chair ... page 4

Quotable Quotes

"When the well is dry, we know the worth of water."

- **Benjamin Franklin, (1706 - 1790), Poor Richards Almanac, 1746**

The Gallatin Watershed: Volunteer Stream Monitoring

Residents living in the Gallatin watershed enjoy a multitude of benefits from the numerous streams that flow into the East Gallatin and West Gallatin Rivers. On any given day, we see residents enjoying all the recreational opportunities our rivers and streams provide. Plus, we use the water for domestic and agricultural purposes that are vital to everyone in the watershed. Keeping the water resources healthy is important to everyone.

The Greater Gallatin Watershed Council (GGWC) developed and implemented a Volunteer Water Quality Monitoring Program in the summer of 2008 to address the health of several of our local streams. The program is funded by a Watershed Stewardship Grant from the Laird Norton Family Foundation. Volunteers, also known as the *Gallatin Stream Team*, have begun monitoring three streams: Bozeman Creek, Bridger Creek, and Thompson Creek.

The purpose of the program is to collect long-term water quality data. The information collected will be available to the public and can be used by the county and the state to assist in water quality and



Gallatin Stream Keepers collecting data on Bozeman Creek. Photo Courtesy GGWC.

land use decisions as well as helping to identify specific problems that may require further study. The information gathered can be found at the Montana Volunteer Water Quality Database Repository, <http://www.mtwatercourse.org/vwm/login.php>.

In July, the Gallatin Stream Team received hands-on training from scientists with the Montana Department of

"Volunteers" continued page 2

Tips to Help Keep Our Water Clean and Healthy

- ◆ Pick up after your pet by disposing waste in the trash or toilet.
- ◆ Minimize the use of fertilizers and pesticides on your lawn and always follow product label instructions. Consider "natural" alternatives such as biological controls and composting. Visit your local nursery for recommendations.
- ◆ Never throw grass clippings, leaves, and garden waste into a stream, storm sewer or drainage ditch.
- ◆ Plant a water-wise garden and select plants that have low requirements for water, fertilizers and pesticides.
- ◆ Wash your vehicle on your lawn or at the car-wash, not your driveway.
- ◆ Prevent and/or repair vehicle fuel and oil leaks.
- ◆ Never wash paintbrushes in the driveway, sidewalk or gutter, because the rinse water will enter a storm drain.
- ◆ Use biodegradable soap when washing exterior windows or building and pour the excess water on your lawn or down the sink or toilet.
- ◆ Hazardous household products, such as paints and solvents, should be disposed of at the City of Bozeman Convenience Station open to both city and county residents. Call 582-2273. Never pour down the drain or throw into household trash.

For more tips, please go to <http://www.epa.gov/owow/nps/prevent.html>

Low Impact Development for Montana's Fastest Growing County

By Debra Earl

Gallatin County is the fastest growing county in Montana. According to the Census and Economic Information Center, Gallatin County's population increased at a rate of 28.8% since the 2000 census. New development changes our landscape and water resources. Paved surfaces do not allow rain or snowmelt to percolate into the ground. The result is an accumulation of polluted stormwater runoff that adversely affects water quality, causes erosion and increases chances of flooding.

Although new development has the potential to harm rivers, streams, and ground water, low impact development (LID) can minimize these impacts. We are in an excellent position to encourage site designs that will protect local water resources as we grow. With support from Sonoran Institute, GGWC formed a Stormwater Work Group to explore the feasibility of implementing LID designs locally.

LID is an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized micro-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate,

filter, store, evaporate, and detain runoff close to its source. These landscape features are the building blocks of LID. (*Urban Design Tools: www.lid-stormwater.net*)

The Work Group met to discuss options for encouraging LID designs in new development. Using the Metropolitan Council Urban Small Sites Best Management Practices Manual by Barr Engineering, the group chose several LID designs and summarized guidelines for implementing LID. The specific designs include: constructed wetlands, bio retention, on-lot infiltration (rain gardens, rain barrels, soakaway pits), driveway designs, parking lot designs, and filter strips. These designs provide options and flexibility. GGWC presented the guidelines to development professionals on August 20, 2008. Our next step is to continue promoting LID to planning review boards and other development professionals and incorporating their feedback into the guidelines.

For more information or to request a presentation please contact Debbie Earl at 994-1910 or dzarnt@montana.edu.

Debbie Earl is the Interim Director for the Montana Watercourse at the Montana Water Center, Bozeman, MT.

“Volunteers” Continued

Environmental Quality, the Gallatin Local Water Quality District, and the Montana Watercourse. They learned how to use their field equipment, how to collect water samples for laboratory analysis, how to do pebble counts for substrate analysis, and how to collect aquatic insects. Each Stream Team then spent the summer collecting water quality information

on their specific stream. We all had fun learning about each stream, getting to know our neighbors, and making new friends!

We finished our 2008 monitoring in September, but the program is not over yet. We are already preparing for 2009! Interested in learning more? Please contact, Sharlyn Izurieta, Watershed Coordinator, 219-3739.

Did You Know?

One gallon of oil in the storm drain can pollute up to one million gallons of stormwater.

Gallatin Conservation District News

By Marcie Murnion-Learn

The *Natural Streambed and Land Preservation Act of 1975*, commonly known as the 310 Law, was enacted by the Legislature in 1975 for the purpose of protecting and preserving the State's waterways. The Gallatin Conservation District, formed in 1949, administers the 310 law in Gallatin County.

A 310 permit is required by any person proposing a project that would physically alter or modify the bed or banks of a perennial stream, river, or spring. A project may be a culvert, footbridge, headgate, diversion, bank stabilization, etc. A perennial stream is defined as: a stream, which in the absence of diversion, impoundment, appropriation, or extreme drought, flows continuously at all seasons of the year and during dry as well as wet years. Man-made irrigation ditches do not require a 310 permit, except at river diversion locations.

For additional information on the 310 law, planning support, grants & loans, and education resources, please visit www.gallatincd.mt.nacdnet.org.

Marcie Murnion-Learn, is the District Administrator for the Gallatin Conservation District, Bozeman, MT.

Quotable Quotes

“Filthy water cannot be washed”
West African Proverb

Water-Landowner Rights and Obligations

By Susan Duncan

In Montana landowners with “live” water on or adjacent to their property have certain rights and obligations attached to the use of water on their property. Understanding these rights and obligations maintains good neighbor relations.

If the watercourse is a natural stream, the landowner should consult the Gallatin Conservation District about stream alteration rules.

If the water course is an irrigation ditch, the landowner needs to contact the ditch company that owns the irrigation ditch infrastructure, whether he owns rights in the ditch or not.

A ditch company is a group of water right holders (landowners) that have banded together to finance and build the infrastructure of headgates and ditches needed to divert water from a surface water source (a river) and deliver it to its members. It is a mini utility company. The ditch company may be a loose association of neighbors or an incorporated entity. The water rights they hold may be held individually or held



An irrigation ditch next to College Avenue in Bozeman. Photo courtesy of the GGWC

by the ditch company and issued as shares. There are 37 ditch companies diverting water from the West Gallatin River for irrigation. Most are over 80 years old, with water rights dating before 1909.

Irrigation ditches have easements on them. The easement insures access to the property of all landowners bordering the ditch to periodically clean out the bed of the ditch, restore ditch banks, and remove debris with large earthmoving equipment. Larger ditches may have a road along the ditch to facilitate maintenance. Legally, the easement is as large as is needed to maintain the ditch or repair its integrity in case of a blowout.

The easement precludes landowners from altering the path of the ditch, impeding the flow of water, or obstructing maintenance operations. Any alterations to the path of the ditch need prior approval from the ditch company – re-alignment, road crossings, culverts. Anything that impedes water flow – landscape plantings, decorative bridges, lawn clippings and debris, temporary dams – is not allowed within the ditch easement.

If the landowner also owns rights in the ditch, he is expected to pay his maintenance assessments and use water only in the quantity (and for the purposes) allowed by his water right.

Susan Duncan is a board member of the GGWC and the Association of Gallatin Agricultural Irrigators (AGAI), Belgrade, MT.

Did You Know?

The United States uses about 346,000 million gallons of fresh water every day!

Kid’s Korner

Tom the Trout’s Word Search

See if you can find and circle these words:

STREAM

GALLATIN

FISH

RUNOFF

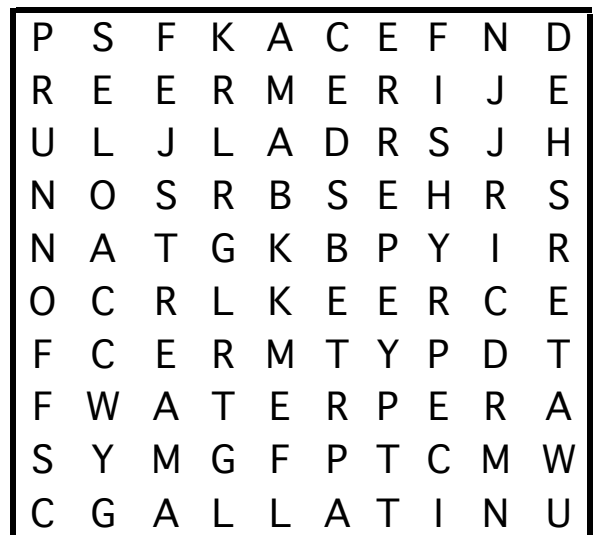


PEBBLES

WATER

CREEK

WATERSHED



Tom is a Westslope Cutthroat Trout, the only native trout in the Gallatin watershed.

Letter from the GGWC Chair

Dear Gallatin Valley Residents and Visitors,

GGWC is very excited about this our latest newsletter and the opportunity to share our work and that of our partners with you. Whether a year-long resident, part-time resident, or occasional visitor to the Gallatin Valley, you undoubtedly value as we do, the sense of community, the role of agriculture in maintaining our open spaces, and the world-class recreational opportunities literally right outside our doors. We welcome you to work with us to ensure that these things that brought or keep us here continue.

Our challenge as residents of the Gallatin watershed will be to continue to work to manage those things we have within our reach, that is, regardless of snowpack and summer rains, we will continue to have adequate water supplies and water quality to ensure a healthful environment while maintaining the lifestyles, business, and recreation that we value so much. Frankly, the job of doing so is going to become more challenging as more people live in the Gallatin watershed placing demands on water supplies and

affecting water quality.

We can't look to the federal or state government to ensure that our water supplies and the many things they support are protected forever. Only we can do that. GGWC, along with our partners, are committed to taking on this task but can only succeed through involving the communities, citizens, and visitors in conserving our water resources. If you're not now involved, please contact us and see how you can help. Whether a gift of your time, a financial donation, or helping with a project that we're working on, we need you to help GGWC make that critical difference to ensure a bright future for our watershed.

We hope that you enjoy our newsletter and find helpful information about how you can make a difference in conservation of our watershed. Please contact us if you have questions or wish to do more. Thank you for helping us to conserve our home!

Sincerely,

Tom Hinz, Chair
Greater Gallatin Watershed Council



Board of Directors

Tom Hinz, Chair
Karin Boyd, Vice Chair
Candace Hamlin, Secretary/Treasurer
Tammy Crone
Susan Duncan
Bart Manion
Mary Jane McGarity
Tom Milesnick
Steve Toohey
Kathleen Williams
Sharlyn Izurieta, Coordinator

Our Partners

Gallatin Local Water Quality District
Gallatin Conservation District
Association of Gallatin Agricultural Irrigators (AGAI)
The Montana Watercourse
The Sonoran Institute
Blue Water Task Force
Thompson Creek Watershed Group

PO Box 751
Bozeman, MT 59771
www.greatergallatin.org
info@greatergallatin.org

Upcoming Events

Fall Tour - October 29th

Annual Meeting - January, 2009

Volunteer Stream Monitoring
Mini-Symposium - Date to be
Determined

The GGWC would like to thank the Gallatin Conservation District and the Department of Natural Resources and Conservation 223 Grant for funding this newsletter.



Help Support the Gallatin Watershed

Enclosed is my tax-deductible donation payable to the
Greater Gallatin Watershed Council:

_____ \$15 _____ \$25 _____ \$50 _____ \$75 _____ \$100 _____ \$Other

Name _____

Address _____

City, State, Zip _____

Tel: _____ Email _____

THANK YOU FOR YOUR CONTRIBUTION