

The South Grand Current

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Headwaters—Where Water Quality Begins

Headwaters rarely get the attention they merit. After all, they don't provide many opportunities for big water recreational activities such as boating, swimming, and fishing. So just exactly what are headwaters and why is it important to focus on them?

Headwaters are the first and second order small streams—intermittent or perennial— that feed into the larger streams of a watershed. This means that they only contain water during a rain event or a wet season (intermittent) or generally have some water in them year round (perennial). A first order stream has no tributaries while a second order stream is formed when two first order streams join together. Our large rivers are fed by a very large number (hundreds or thousands) of headwater streams.

Considering that surface water drains into these small headwaters, it follows that all the sediments, chemicals, fertilizers, and other toxins present in the area also drain into the streams. These pollutants accumulate as they journey down the watershed and impact the entire riverine system—aquatic life, birds, insects, amphibians, recreation, fishing, and water quality. In other words, it is all connected!

Not so long ago—100 - 150 years ago—the landscape around the headwaters in our area was native prairie with forested river corridors. The exception-



Key: 1 - green= first order streams; 2 - blue= second order sreams; 3 - red = third order streams

ally long roots, up to 20 feet long, of the native prairie grasses and flowers served to facilitate filtration and infiltration of stormwaters, while the plants themselves slowed the waters and aided in this process. The prairie plants and trees served as nature's water purifiers.

Contrast that with today's landscape of rooftops, parking lots, highways, plowed fields and annual crops. The urban setting typically does not include features to promote filtering and infiltration of stormwater. The usual goal is to move stormwater away as quickly as possible through a storm drain system resulting in polluted water being dumped in large quantities directly into our streams. Many recent agricultural practices have eliminated much of the vegetated stream corridors causing an increased amount of sediment to wash into the streams. Increased disastrous flooding is a consequence of these and other human activities.

The good news is that we are learning the highly expensive—in terms of impact on human well-being, property loss, water quality, and habitat loss consequences of our activities and officials and many individuals are beginning to take steps to address the issue. However, much more must be done and we all need to be involved in protecting headwaters and all waterways.

One of the most important actions homeowners or owners/operators of agricultural land can take is to restore a natural corridor of any headwater or larger stream that flows through their property. Typically, urban homeowners with any stream—headwater or larger manicure their landscape to the edge of the stream. Hopefully with an understanding of the effects of this practice on water quality, mowing will be replaced with planting of native grasses, flowers, trees and shrubs. Native plantings in any landscape will be beneficial to water quality and quantity.

Other actions include using rain gardens as a landscape feature, hooking rain barrels to downspouts, eliminating or using minimal amounts of lawn chemicals, picking up trash, recycling, making sure only stormwater goes

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down storm drains (this water is NOT treated but goes directly to a stream), and supporting and encouraging action by your local officials to implement stormwater management practices and developments that will benefit water quality.

By learning about your watershed and by getting acquainted with your nearby headwaters, you will be taking an important step in improving the quality of water we all depend on.

For information about water quality and how to get involved in protecting it, go to www.SouthGrandWatershed.com

Volunteer Opportunities to Promote Quality Water

Volunteer opportunities for you to help spread the word include:

- Tabling at community events
- Helping with community rain garden maintenance
- Distributing SGRWA brochures, newsletters, program fliers etc.
- Identifying presentation (water quality related) opportunities

info@southgrandwatershed.com or 816-779-6708 to volunteer

The Importance of Names

Most children as well as adults today spend very little, if any, time in nature. There is evidence that this lack of experiences in nature is contributing to many childhood problems as Richard Louv discusses in his book *Last Child in the Woods*. Louv makes a case that much childhood obesity, attention disorders, and depression are associated with a lack of nature experiences.

All too frequently, today's typical child spends most of his/her time indoors in front of an electronic device and has very little opportunity to get acquainted with the delights of the natural world. Another effect of deprivation of time in nature is that many children and adults do not develop a connection with nature and are not very likely to acquire the knowledge and commitment needed to protect our natural systems.

One way to develop a feeling of connectedness with nature is to learn the names of our native plants. It has been pointed out that most Americans recognize a thousand corporate logos but can identify very few of our native plants and animals. Make plans now to connect with nature and your family by making visits to natural areas a family activity. Take along a plant identification book and everyone will soon learn to identify some of our native plants such as those below.



From top left: bee balm, rattlesnake master, pale purple coneflower, butterfly milkweed, prairie blazing star, big blue stem, river oats

Join or Start a Stream Team

Anyone can start a Stream Team— Individuals, families, schools, youth, community, church or service groups

Being a member of a Stream Team is a great way to have a hands-on contribution to learn about, care for, and protect local waterways. It's also a great way to have fun with others working to promote the health of Missouri Streams.

Call 573-522-4115, ext. 3166 to learn about Stream Teams in your area or visit www.mostreamteam.org

Presentation for Your Group or Organization

Need a program for your group or organization? The SGRWA is available to present programs on water quality related topics such as Rain Gardens, Nonpoint Source Pollution, Watershed 101 etc.

Contact us through our website, www.southgrandwatershed.com or call 779-6708.

SGRWA Meetings

Regularly scheduled Board of Director meetings are usually held the third Wednesday of each month. Check our website for up-to-date meeting and program dates, times and places. Members and others interested in water quality are welcome.

SGRWA Mission

To promote and advocate for the preservation, protection, and restoration of the waters of the South Grand River Watershed.