Kiefer Creek Restoration Project



A Treasure for St. Louis

Kiefer Creek flows through the heart of Castlewood State Park, a natural recreation resource cherished by the St. Louis community for over 100 years. Kiefer Creek is a tributary to the Meramec River, one of the most biologically diverse, free-flowing, and healthy rivers in any urban area in the United States. Kiefer Creek is one of the last tributaries to the lower Meramec that retains its natural beauty and a relatively undeveloped watershed.

The creek's natural beauty is an asset to the community. Unlike their neighbors in nearby watersheds, the people in the Kiefer Creek community can boast about their creek's natural flowing water, as well as the beauty of their forested and hilly watershed. When traveling through the Kiefer Creek watershed, you get the impression you're no longer in the suburban sprawl of St. Louis County - the trees, steeply sloped hillsides and clear flowing water transport you back in time.

Unfortunately, Kiefer Creek exhibits high levels of bacteria after rainfall. In 2010, Kiefer Creek was placed on the 303(d) List of Impaired Waters for exceeding the safe level of bacteria for recreational use, as well as for exceeding the levels of chloride that are healthy for the ecosystems in the creek. However, Kiefer Creek does not look contaminated. Clear waters flow gently through the park, forming pools that are perfect for cooling off on hot summer days, making the creek a popular swimming destination in Castlewood State Park.

The goal of this project is to design and implement a plan to clean up Kiefer Creek. Such a valuable resource can be restored and preserved through strategic improvements in the watershed. We invite you to join us as we embark on the path toward a watershed that is safe for people, pets, and wildlife to enjoy on any day of the year. Participation in this project is voluntary, but we believe that through volunteer participation that we can make improvements that will provide myriad benefits for watershed property owners and the creek's water quality in one of the last, lovely, spring-fed creeks in St. Louis County.

Interested in Helping? Join the Outreach and Events Committee

Help us reach out to more people in the watershed, and help plan events to keep our volunteers active and engaged.

You would be a great outreach committee member if you:

- Are a resident or community member in the area
- Are involved in a local environmental, water protection, parks advocacy, or outdoor recreation group
- Have experience planning events or organizing volunteers
- But more importantly, if you have a passion for Kiefer Creek! Having a positive attitude and an excitement about the creek is essential for event planning and talking to potential volunteers.

Role of members:

- Attend at least three watershed planning meetings per year (there are usually eight meetings per year, two meetings every three months).
- Help with events or outreach. Some examples would be:
 - Assist with planning an event or managing volunteers
 - o Inform people about the creek by working with us to distribute flyers, spread info online, etc.
 - Bring in a group you're involved with for an event. E.g.: a boy/girl scout troop, a biking group, or a church group.

Help Improve the Watershed on Your Own Property

Have you ever considered planting a rain garden or designing your landscape to include native plants? Let the St. Louis Audubon Society help you! Sign up for *Bring Conservation Home*.

Specialists will come to your property and give you a full consultation on how to incorporate native plants into your landscaping. Your yard will be an attractive home for birds, and you'll reduce your home's impact on your watershed by reducing your runoff and yard fertilization. Read more on their flyer on the opposite page.

We're working with the Audubon Society to promote this project because native plant restoration is essential for caring for a watershed. Restoration of native plants on public lands will be an essential part of our watershed plan, but privately owned land is even more important, as homes make up most of the Kiefer watershed. As a landowner, you can help your watershed just by giving your home's landscaping a spring update, whether in the Kiefer Creek watershed or elsewhere.



Volunteers removing invasive bush honeysuckle from Castlewood State Park in March 2012.

Understanding Stormwater Runoff

Many, if not most, of our urban and suburban suffer from the effects of increased stormwater runoff. They see flash floods when it rains, dry steams in between precipitation, erosion, and steeply cut stream banks.

Compared to the areas around it, Kiefer Creek is less paved, which is why the creek flows every day of the year, and why there are such beautiful pools for swimming in Castlewood. In a less paved watershed, rain water is absorbed through the ground and filtered. Water travels to a groundwater reservoir and resurfaces above ground as a spring. These springs flow even when there has not been recent rain - feeding streams like Kiefer Creek.



But in a paved watershed, water cannot be absorbed into the ground. Instead, the water that hits the pavement immediately washes into a storm drain. From there, it goes directly into the creek, causing a flash flood. The sudden rush of water increases erosion of the banks and harms the delicate ecosystems in the creek.

Help increase the unpaved surfaces in the Kiefer watershed or your home watershed by planting native plants, a rain garden, or installing a rain barrel.

If you're interested in reducing your home's impact on stormwater runoff, consider signing up for *Bring Conservation Home*, or call us at (314) 727-0600 to talk about how to get started on your new tree, native plants, rain garden, or rain barrel.



St. Louis Audubon's Bring Conservation Home Program



An Urban Habitat Restoration Program

Our Bring Conservation Home Program provides <u>on-site assistance</u> to small, private landowners in the greater St. Louis area for the restoration of native plant and animal habitat on their grounds. The Bring Conservation Home Program will offer advice in landscaping with environmentally healthy and sustainable <u>native plant species</u>, the removal of <u>invasive plant species</u> such as bush honeysuckle, <u>water conservation</u> on the urban landscape, and other <u>stewardship practices</u> that promote healthy habitat for birds, native wildlife and people.

After receipt of your application, we will contact you to schedule a visit by our trained habitat technicians. They will perform a landscape assessment using the program criteria and provide you a written report with simple steps to improve its habitat value. A follow-up visit will be performed upon request, and with compliance to the initial recommendations, you will be awarded one of three different levels of achievement (silver, gold or platinum).

A modest program fee of \$25 (for Audubon members) will be payable in advance of the initial site visit. If you are not an Audubon member, a \$50 fee will cover your participation in Bring Conservation Home and one year of support to the St. Louis Audubon Society. The fee includes one initial site assessment and consultation visit plus one follow-up certification visit.

The Healthy Yard Pledge

- Reduce pesticide use
- Conserve water
- Protect water quality
- Remove invasive exotic plants
- Plant native species
- Support birds and other wildlife on my property

These principles form the foundation of the Bring Conservation Home program. All applicants are asked to commit to their implementation on their landscape.



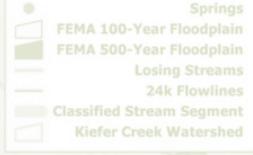
Dave Tylka, environmental consultant, educator and native plant expert, leads a training session for Bring Conservation Home Habitat Technicians.

For complete program details, including an application, visit http://www.stlouisaudubon.org/BCH/index.php For specific questions, please contact Mitch at (314) 599–7390 or director@stlouisaudubon.org.

Upcoming Events

Hike in Castlewood State Park

Saturday, May 12, 10 am Saturday, June 9, 10 am Saturday, July 14, 10 am



Want to learn more about Kiefer? Join us on the second Saturday of every month in Castlewood State Park. We hike for about an hour and a half, then sit together for snacks and conversation. See the beauty of Kiefer Creek, the watershed, and the Meramec firsthand, learn about the local plants and wildlife, and meet other people interested in the watershed. Bring your friends, your kids, and your dogs!

Watershed Planning Meeting

Saturday, May 12, 12 pm Saturday, July 14, 12 pm

We hold watershed planning meetings every three months or more. These meetings are an essential part of the project, where watershed residents, visitors to the creek, and our partnering organizations come together to learn about the creek and our work. They are important as a way to make sure everyone's perspectives are taken into account as we make decisions about restoring and preserving Kiefer Creek. If you are interested in the future of Kiefer Creek, come to the meeting to learn more and have your voice heard!

To keep up to date with the events calendar, **sign up for our email list at www.kiefercreek.weebly.com/survey.html**. You can also sign up to volunteer and tell us about how you came to be interested in Kiefer Creek.

Visit: www.kiefercreek.weebly.com

Like: www.facebook.com/kiefercreek

Email: kiefercreek@gmail.com

Call: (314) 727-0600

Scan this QR code with your smartphone's QR reader to bring you to the sign up page.





www.moenviron.org

The Missouri Coalition for the Environment is an independent, 501(c)(3) non-profit organization that works to protect and restore the environment through education, public engagement, and legal action. Founded in 1969 in St. Louis, the Missouri Coalition for the Environment is the region's oldest independent citizens' group created to address a broad range of environmental policy issues.



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