BEAVER LAKE WATERSHED NEWS

Our Mission: To proactively protect, enhance, and sustain water quality in Beaver Lake and the integrity of its watershed.



Dear Beaver Lake Watershed Landowner,

With Arkansas making its way into the Spring season, we hope you are enjoying the beautiful sights of the watershed from spring ephemerals, to emerging wildlife and spring rains. With warmer weather comes great opportunities to steward any scale of landscapes for the coming year. Land stewardship can come in many forms, and the Alliance is excited to highlight a few different methods like natural stream channel design, sediment control basins, and ponds in this Beaver Lake watershed news!

As always, the Alliance is available to assist with any projects big or small on properties in the Beaver Lake watershed. Our staff provides free site visits to assist with selecting the right land management practice for you, as well as potential connections to financial assistance. Call or email today to learn more about the process and how you can implement conservation on your property.

In this issue, we invite you to save the date for the 20th annual War Eagle Appreciation Day, meet our new parttime staff, read about 2023 watershed successes, and much more. Thank you, for your continued support!

Sincerely, The Alliance Team

















NATURAL STREAM CHANNEL DESIGN

Water is a powerful force, and over time, can alter the shape of streams and rivers. "Cut banks," or areas of streams where water flow has caused significant erosion, can be a common, but worrying sight in Northwest Arkansas. Land changes like urban developments, agriculture over-use, riparian buffer clearing, and other changes upstream are common catalysts for erosion on streambanks. This erosion can not only cause significant loss of land but can also dump tons of sediment into streams, which then makes its way downstream into Beaver Lake, the drinking water source for 1 in 5 Arkansans. The good news is that returning a stream to its natural state can help alleviate these negative impacts and the Alliance is available to assist with the process!



Above: A cut bank on Brush Creek near Goshen, AR.

Many avenues exist to address stream erosion. Riprap, or the layering of rocks along a streambank, can provide short-term stabilization and soil cover, although after a few large flood events, the riprap disappears or additional erosion occurs, it is not a long-term solution for restoration.



Above: Riprap along a stream. Photo via Wikipedia.

Riprap also does not add in a riparian area or reconnect the floodplain - essential steps to reducing erosion along a streambank. Natural stream channel designs and installations include stabilization along the banks, with natural materials like rock, tree roots, and vegetation, and most often, include a riparian buffer addition. During floods or high water events, a natural stream bank can buffer and slow flow with strategically placed structures and the strong, deep root systems of native plants. In the case of riprap, the water flow speed can be further increased, potentially causing further erosion downstream as water is deflected off the riprap. The lack of vegetation from riprap installations can raise the temperatures of streams as there are no large canopies present to provide shade and habitat that is beneficial to aquatic and terrestrial life. Similar methods like concrete channelization of streams also have negative effects on stream structure, wildlife, and more.

The multi-step process of natural stream design bank stabilization can help landowners reduce active erosion with the stabilization of banks and reduce flooding impacts both on the property in question, and downstream. For long-term restoration, we encourage you to learn more about natural stream channel design. After all, Mother Nature can be our best teacher!



Above: The restored section of Brush Creek as seen in 1st photo. Project completed by Watershed Conservation Resource Center.

If you are experiencing erosion along a stream or river bank, the Alliance is available to provide a free site visit to assist with the process of natural stream channel design, riparian planting guidance, and more.

Email info@beaverwatershedalliance.org or text/call 479-750-8007 to schedule a free visit.

























Save the Date! WAR EAGLE APPRECIATION DAY SATURDAY, JUNE IST 11 AM - 1 PM KEITH HAMM PAVILLION, WITHROW SPRINGS STATE PARK

Save the date! The 20th annual War Eagle Appreciation Day is scheduled for Saturday, June 1st at Withrow Springs State Park. This event is a great opportunity to get the whole family out to learn about the wonderful resources the War Eagle watershed and War Eagle creek provide.

The War Eagle Creek watershed contains 215,779 acres of mostly rural land, including 468 miles of streams. War Eagle Creek is the largest tributary to Beaver Lake, with the watershed accounting for 1/3rd of all water entering the lake, making it an important place to protect and appreciate, as Beaver Lake is the drinking water source for 1 in 5 Arkansans!

The Alliance and several community partners are gearing up for an exciting 20th-anniversary event. Attendees can enjoy a free grilled lunch, listen to live local music, and learn from several local environmental and cultural organizations that will have interactive educational booths set up. The event will be held at Withrow Springs State Park's Keith Ham Pavilion, which is only a 10-minute drive from Huntsville, or 30-40 minutes from Springdale/ Fayetteville areas. The event also includes an award to a local resident making exceptional strides towards the stewardship of the watershed and creek. Don't miss out on this great event! Follow along on the Alliance website at www.beaverwatershedalliance.org/events for the most up-to-date information.

SMART GROWTH FOR SOURCE WATER PROTECTION ADVANCES IN ELKINS, AR

Prairie Restoration to be installed near Elkins Community Center & Bunch Park

Work will begin this year on another Smart Growth for Source Water Protection project in Northwest Arkansas thanks to funding from the Arkansas Natural Resources Department and the US EPA. The Alliance will be working with the City of Elkins and Ozark Ecological Restoration Inc., to create a "micro-prairie" adjacent to Bunch Park and the Elkins Community Center, where the Alliance office is located. The project aims to protect the water quality of the nearby East Fork of the White River, a main tributary to Beaver Lake, a drinking water source for Northwest Arkansas and beyond, by reducing erosion and sediment flowing into the river. The project will begin with work by Ozark Ecological Restoration, Inc., an award-winning nonprofit with a mission to conserve and restore Ozark species, communities, and ecosystems through partnerships with public agencies, private landowners, and other non-profit organizations. The group has contributed to the successful

restoration and management of over twenty ecologically sensitive prairies, wetlands, and other ecosystems throughout Northwest Arkansas and surrounding areas and will be working to turn this 3-acre lot into its historic prairie landscape.

The project will also include trails, which will be a great opportunity for the community to enjoy walking and birdwatching, all while immersed in beautiful native plants. Signage will be installed to further educate on the project and its impacts on water quality. The Alliance hopes to use the area as an educational hub for landowners interested in implementing similar practices on their land, as well as for nearby Elkins schools to use for field trips and outdoor classroom days. Work is set to begin mid-spring of 2024, with an estimated completion date in the spring of 2025.















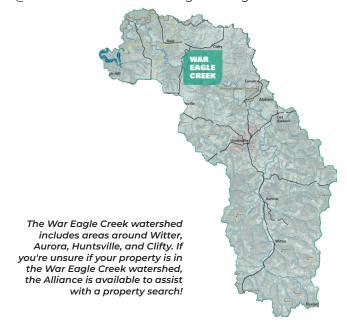


LAND MANAGEMENT PRACTICE HIGHLIGHT

Water & Sediment Control Basins and Ponds

Oftentimes, water quality protecting land management practices can have many other benefits to a property. Land management practices like water/sediment control basins and ponds are the perfect examples of such practices. These control basins and ponds can play a significant role in protecting water quality in creeks, streams, and rivers. A water & sediment control basin is defined as "an earthen embankment or a combination ridge and channel constructed across the slope of minor watercourses to form a sediment trap and water detention basin with a stable outlet." A pond, while very similar, is defined as "a water impoundment made by constructing an embankment or by excavating a pit or dugout. Ponds constructed by the first method are referred to as embankment ponds, and those constructed by the second method are referred to as excavated ponds. Ponds constructed by both the excavation and the embankment methods are classified as embankment ponds if the depth of water impounded against the embankment at the auxiliary spillway elevation is 3 feet or more." While a water & sediment control basin's purpose is to reduce gully erosion, trap sediment from highly erodible surfaces like unpaved roads, and reduce downstream runoff, a pond is also able to provide water for livestock, fish and wildlife, recreation, fire control, and other related uses.

Special funding through the War Eagle Creek Regional Conservation Partnership Program (WEC RCPP) may be available to landowners within the War Eagle Creek watershed (shown on the map below) to implement these water quality protecting land management practices. This funding is not eligible for correcting leaky ponds but may be eligible for increasing the health of current ponds. Contact the Alliance to see if your property may be a good fit for a water & sediment control basin or pond by emailing info@beaverwatershedalliance.org or calling 479-750-8007.



GRASSLANDS PARTNERSHIP - CALL FOR PARTICIPANTS

University of Arkansas - Division of Agriculture

In cooperation with the US Department of Agriculture and the University of Tennessee, the University of Arkansas – Division of Agriculture is recruiting farms engaged in forage production, primarily on pasture lands, to participate in a new program, "Grasslands Partnership." This project is focused on documenting the impact of six grassland management practices on soil carbon storage, input costs, profitability, productivity, and, for some practices, responses of grassland birds and pollinators. Participants are encouraged to install at least three of the

designated practices and required to maintain them for 5 years.

Funding for practice installation will be provided. Please visit **https://grasslandspartnership.org** to review the project's geographic area, participant requirements, and the grasslands management practices. If the program is of interest, please complete the "Interest Form" available on the website, and a project representative will follow-up with you.





















MEET THE NEW ALLIANCE STAFF!

The Alliance recently welcomed two new staff members to the team in March to make up the largest staff to date of eight team members! Kindle Hon and Chad Chamberlain are both current students at the University of Arkansas and will be assisting the Alliance part-time with various projects including a low-tech erosion control pilot program, outreach tabling, source water protection signage management, and much more. Learn more about Kindle and Chad below and don't hesitate to reach out to either of them to learn more about their fields of expertise and their projects with the Alliance. The Alliance is thrilled to welcome both to the team to support workforce development in Northwest Arkansas and looks forward to further progressing the Beaver Lake protection strategy with this robust and talented team.

Kindle Hon, Watershed Specialist



Kindle joined the Beaver Watershed Alliance in March 2024. She holds a Bachelor of Science in Geology from Florida State University and is currently working towards a Master of Science in Geology from the University of Arkansas. Kindle's master's thesis focuses on

understanding the potential controls on bedrock valley widening in the Buffalo River, AR. She is passionate about riverine geomorphology and how understanding the processes that shape our rivers and streams can help us better manage our watershed. Kindle's hobbies include hiking, mountain biking, kayaking, and gardening. Kindle can be reached by email at

kindle@beaverwatershedalliance.org

Chad Chamberlain, Alliance Intern



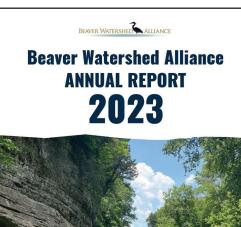
Chad is joining the Alliance as an intern as part of his studies in Landscape Architecture at the University of Arkansas. His passions in this field of study include sustainability, environmental revitalization, and bioremediation techniques. As an Arkansas native, he spent much of

his life exploring the diversity of waterways throughout the state. His enjoyment of these natural resources has resulted in a desire to see them stay clean and healthy for future generations. Chad can be reached by email at <code>chad@beaverwatershedalliance.org</code>

2023 WATERSHED SUCCESSES

The work the Alliance does wouldn't be possible without the dedication of local landowners working hard to protect water quality in the watershed by implementing best management practices on their land. With 70% of the watershed being forested land, and 30% pasture or grassland, and much of that land falling under private ownership, it is essential for the Alliance to work with private landowners to hit important milestones like the ones shared in our annual reports. By sharing our 2023 annual report, we would like to extend our sincere gratitude to the landowners, partners, sponsors, and general supporters (like those who read our tri-annual newsletter!) for making this essential work possible. Collaborative work and partnerships are the cornerstone of great source water protection work and we think the 2023 Alliance Annual Report is the perfect reflection of

Scan the QR code below with your phone camera or visit www.beaverwatershedalliance.org/annual-reportsnewsletters/toviewthe 2023 Annual Report for A Message From our Director, Your Impact by the Numbers, 2023 Partner Impacts in the Watershed, Watershed Success Stories, and more!



Mission:To proactively protect, enhance and sustain water quality in Beaver Lake and the integrity of its watershed.

Open your phone camera and point at the QR code above to be directed to the annual report on the Alliance website!

























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CONTACT US

Want more information?

Phone: 479-750-8007

Email: info@beaverwatershedalliance.org

Web: beaverwatershedalliance.org

Our records indicate that you own or reside on property in the Beaver Lake watershed. To receive a digital copy or be removed from this mailing list, please notify us.



Stories inside this issue:

- Natural Stream Design
- Smart Growth Update
- 20th Annual War Eagle Appreciation Day
- AND MORE!



U.S. Secretary of the Interior, Deb Haaland, visited Northwest Arkansas in March to recognize a \$4.4 million investment for the War Eagle Creek through the America the Beautiful Initiative. Pictured from left to right: Alliance Program Director Larry Berry, Deb Haaland, Alliance Executive Director Becky Roark, and Alliance Senior Ecologist Daniel Hagood.