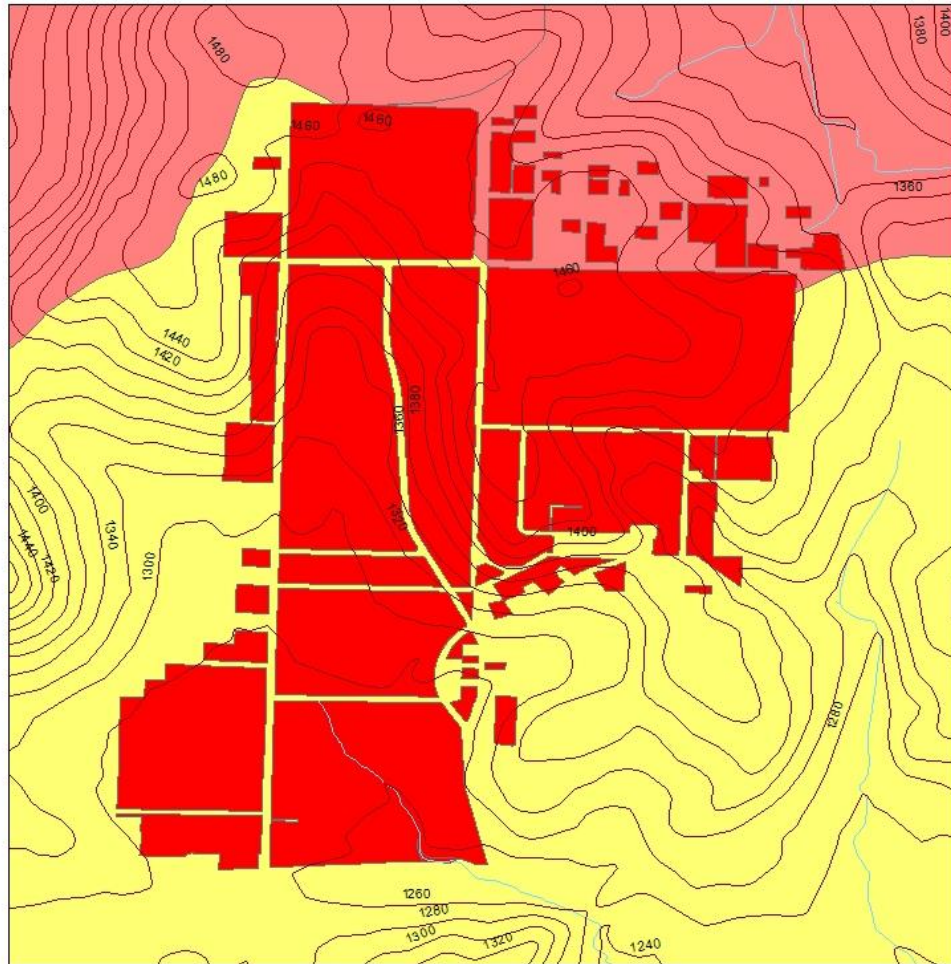


University of Arkansas Watershed Management Plan

What is a watershed?

- A watershed is a drainage basin for a stream or collection of streams. Watersheds are defined by topography and geology.

Topographic Map of the University of Arkansas



Legend

- Contours
- Beaver Reservoir Watershed
- Illinois River Watershed
- Streams
- University of Arkansas

0 0.15 0.3 0.6 Miles



June 27, 2017

What's Happening Now?

- University of Arkansas Stormwater Management Plan (University of Arkansas, 2009)
 - Current Actions:
 - Protect citizens and properties from flooding
 - Improve surface and subsurface waters for aquatic life and other uses
 - Preserve and maintain surface waters, wetlands, and riparian areas
 - Educate citizens, businesses, and industries on water quality
 - Identify the way urban drainage can become community amenities
- Fayetteville Stormwater Management Plan (City of Fayetteville, 2015)
 - Current Actions:
 - Public education and outreach
 - Public involvement and participation
 - Control construction site stormwater runoff control
 - Reduction and prevention of pollution in City facilities
 - Control pollution incidents and unlawful (illicit) discharges into drainage system
- The University of Arkansas is composed of two watersheds, the Beaver Reservoir Watershed and Illinois River Watershed. Both watersheds contain multiple impaired sub-watersheds which could be improved with the help of the University of Arkansas. The watersheds surrounding the University of Arkansas main campus are currently experiencing the following negative impacts (Melissa Terry, 2005):
 - Streambank Erosion
 - Runoff from miles of gravel road
 - Lack of riparian zones/buffer strips
 - Dwindling aquatic habitat
 - Stormwater runoff
 - Runoff from gravel mining
 - Junkyard cars in the river
 - Need for stronger water quality testing for wells, springs, creeks, and rivers
- Both the Beaver Watershed Alliance and the Illinois River Watershed Partnership follow the EPA's *Handbook for Developing Watershed Plans to Restore and Protect Our Waters* (United States Environmental Protection Agency, Office for Water, 2008). A few of the elements used to protect the watersheds are as follows:
 - Build partnerships
 - Identify sources of pollution
 - Determine water quality
 - Monitor management actions to test effectiveness

Goals of The University of Arkansas Watershed Management Plan

- Reduce negative impacts the University of Arkansas has on its watersheds.
- Educate students and community on the U of A campus about the impacts they have on watersheds and best management practices (BMPs) they can implement.
- Protect streams within the University of Arkansas campus.
- Improve management of the main campus stormwater drainage system to prevent downstream and watershed contamination.

What can be done to help?

- Green Solutions
 - Green Roofs
 - Rain Gardens
 - Disconnect Roof Drains
 - Pervious Pavement
 - Swales
 - Bulb-out Bioretention Planters
 - Creek Daylighting
 - Stricter Construction Regulations
- Volunteer Opportunities
 - Litter Pick Up
 - Upstream Art
 - Construction of Stormwater Mitigation Apparatuses

There are many avenues of involvement through organizations located in the City of Fayetteville and on the University of Arkansas campus. Access to these organizations can be found below.

- Upstream Art
 - <https://nwaupstreamart.com/>
- University of Arkansas Registered Student Organizations
 - <http://sustainability.uark.edu/get-involved/join-a-registered-student-organization.php>
 - Horticulture Club
 - Crop, Soil, and Environmental Sciences Undergraduate Club
 - RecycleBacks
 - Young Democrats of Arkansas Environmental Task Force
 - Razorback Food Recovery
 - The Wells Project
 - <https://www.netimpact.org/chapters/university-of-arkansas-undergraduate>
 - Net Impact

Contacts

- Watershed Stakeholders
 - Illinois River Watershed Partnership
 - <http://www.irwp.org/>
 - Beaver Watershed Alliance
 - <http://beaverwatershedalliance.org>
 - White River Watershed
 - <http://www.ozarkswaterwatch.org/watershed-facts/>
 - <http://www.beaverlakesmart.org/beaver-lake/upper-white-river-basin-watershed/>
- Sustainability Contacts
 - Office for Sustainability
 - 479-575-3715
 - <http://sustainability.uark.edu/>
 - Dr. Marty Matlock
 - Executive Director Office for Sustainability
 - 479-575-2849
 - mmatlock@uark.edu

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<http://www.fayetteville-ar.gov/DocumentCenter/View/1689>

FTN Associates, Ltd. July 2012. *Watershed-Based Management Plan for the Upper Illinois River Watershed, Northwest Arkansas*.

<http://www.irwp.org/water-quality-monitoring/watershed-based-plan/>

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