13-1400
Lake Fayetteville Watershed
Outreach & Education

ANRC Project Review
September 24, 2015

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Project Background

• Began September 2013

• Promote pollution prevention BMPs, watershed awareness, and community buy-in with stakeholders and residents

• Capacity building within Lake Fayetteville Watershed Partnership
Watershed is just over 9 square miles

- 8,000 to 9,000 people live in this watershed
- Highly urbanized

- 196 acres (W/A=30.7)
- Clear Creek & Hylton Branch drain into lake
- Built as backup water supply for Fayetteville
- Drains into Clear Creek and flows to the Illinois River
- Primary contact recreation is not permitted

**Legacy Phosphorus**
- Land converted to pasture
- Soils with 80 to 250 ppm P from broiler litter applications*
- Rapid urbanization

*Current Land Distribution*

- 10% Forest
- 41% Urban
- 37% Pasture

What was once **90% Forest**

**History**
Pollutant Concerns

- Nutrients
- Sediment
- Bacteria
- Household waste
- Automotive fluids
- Trash
- Septic leaks

http://www.freewebs.com/toolkitbarnstable/oil-runoff-into-storm-drain.jpg
Major Tasks

• Identify & engage watershed landowners to increase knowledge and understanding of BMPs through public outreach, education, and property assessments

• Update outreach materials & capacity building with Lake Fayetteville Watershed Partnership

• 10 Pollution Prevention Video Podcasts

• BMP workshops
Outreach & BMP Activities

2014 Fall Lake Fayetteville Cleanup

2014 Rain Barrel Workshop @ Botanical Gardens of the Ozarks

BGO Earth Day

2015 Riparian Planting with LFWP & USGBC

Fay. Farmer’s Market Booths

721 students educated about & within watershed
Nearly 3 tons of litter has been removed from Lake Fayetteville, and **626** stakeholders have contributed **$43,711.82** worth of volunteer hours.

<table>
<thead>
<tr>
<th>Event</th>
<th># Volunteers</th>
<th>Litter Removed</th>
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<tbody>
<tr>
<td>Fall 2013</td>
<td>110</td>
<td>1,230 lbs</td>
</tr>
<tr>
<td>Spring 2014</td>
<td>74</td>
<td>1,700 lbs</td>
</tr>
<tr>
<td>Fall 2014</td>
<td>184</td>
<td>1,500 lbs</td>
</tr>
<tr>
<td>Spring 2015</td>
<td>254</td>
<td>1,340 lbs</td>
</tr>
</tbody>
</table>

Total volunteer contributions and In-Kind Match: **$84,279.32**
Riparian Efforts

8 riparian events (shore-area invasive removal, native plant restoration)

Partnered with Fayetteville Parks and Recreation and USGBC-NWA, & UA Honors College for bi-monthly removal of invasive species at Veteran’s Park & special project at North Shore Disc Golf Course with NWA Disc Golf

LFWP
1. Invasive removal
2. Native shrubs planted in riparian area behind Study Center
3. Native plant give-a-way for residents
Fayetteville Parks & Rec Erosion Control
Rain Barrel Workshops

83 rain barrels constructed at workshops in the Lake Fayetteville watershed
LFWP Winter Program provided inroad to with city leaders about management options for Lake Fayetteville which continues to be pursued.

Footprint of LFWP has expanded & momentum continues to build.
Outreach Media

7 Issues
2,958 residents
370 electronic

We Need Your Help on October 18th

Volunteer with your family & friends on October 18, 2014 to remove litter from Lake Fayetteville. Contact cassandra@uark.edu for more details, or visit www.uark.edu to view the event flyer.

Join the Lake Fayetteville Watershed Partnership and many local organizations and sponsors for the Lake Fayetteville Fall Cleanup from 9 am to noon. Lunch provided and door prizes to follow.

What’s In This Issue?

- p. 2 Project Highlights from Your One
- p. 3 What's Coming Up in Your Two

Did you know we need an electronic version of this newsletter? Email cassandra@uark.edu, or call 479-575-5150 to conserve resources. If you no longer wish to receive this publication, we will gladly remove your address.

Grasscycling is the natural recycling of grass clippings by leaving them on the lawn after mowing. Grasscycling saves time, money, effort and, when done properly, is good for the environment and health of the grass.

- Saws less time by eliminating bagging - The "Yard Bag Cancer Cure Plan" found that after six months of grasscycling, homeowners reduced time spent doing yard work by an average of seven hours (Image Ad A 2009)
- Results moisture to the soil - Clippings left on the lawn added about 25% of annual fertilizer nutrients. The fist few hours of clipping contain approximately 15 pounds of nitrogen, 2 pounds of phosphorus and 10 pounds of potassium (farmed converted Cooperative Extension, 2002)
- Promotes water conservation - Grass clippings are 75% to 80% water. When more regularly, grasscycling quickly reaccumulates and reduces moisture and exhausts from lawn care (Maryland Cooperative Extension, 2004)
- Grass clippings do not increase thatch - Numerous research studies on grass clipping and burning concluded that thatch does not result from clippings but from excessive fertilization or thatch, burning (University of Arkansas Cooperative Extension, 2004)
Riparian Buffer Functions and Value

EPISODE 4

Watershed Stakeholders & Partnerships
Best Management Practices
Homemade Cleaning Solutions
Riparian Buffer Functions & Values
Fats, Oils, And Grease Management
Trash Management To Prevent Litter
Septic Maintenance Prevents Pollution
Proper Auto Care Protects Water Quality
Lawn Watering and Pool Drainage
Proper Fertilizer Use
Challenges

• Urban residential outreach is difficult

• Measuring and evaluating behavioral change

• Low response to printed newsletters

• Consistency/changes within roles

Remaining Tasks

• Printing of revised Urban Home*A*Syst booklet

• Remaining site visits

• Final reports
Results

- Impacts largely among stakeholders using watershed vs. living within (interested and invested)

- Good success engaging through social media
  - 661 Youtube views (avg. 1 min 46 seconds)
  - 1,711 Facebook views (30 seconds or less)

- Cleanup participants steadily increased/Awareness is up

- Continuing activity in watershed
  - Organizations adopting sites for invasive removal/native restoration
  - Helped mobilize cities to start taking action where it’s really needed
  - More unified efforts among organizations and user groups
Questions?