

Curry's Fork Technical Committee Meeting

December 10th, 2009 9:30 – 11:00 am

Oldham County Fiscal Court Building

I. Welcome and Introductions

Paul Maron welcomed the stakeholders and provided introductions of team members.

II. Project Overview

Paul provided a refresher on the project's overall goals and objectives (see attached copy of presentation).

III. Watershed Roundtable Meeting Results

On September 24, 2009 a watershed community roundtable was held at the John Black Center. There were approximately 100 residents, local officials, and technical stakeholders. Three high points from the meeting discussion was the importance of the watershed, problems and goals. All responses were documented and categorized into subgroups.

- a. The primary response to the question "How and why is the Curry's Fork watershed important to you?" because we live there. Secondary responses include wildlife habitat, flood issues and water quality.
- b. The second question posed was "What are the problems in Curry's Fork watershed?". Too much pollution, Flooding concerns, sanitary treatment, and uncontrolled development were the primary responses.
- c. The third question asked was "What are your goals for the Curry's Fork watershed?". The most common responses were clean water, safe accessible healthy stream recreation, and minimizing flooding.

In general, the group was highly educated and provided specific answers to the questions. Flood was a reoccurring concern. One avenue to address concerns is through education.

At the sign in table, there was a mapping exercise to locate where you lived, worked and played in the watershed. For the summary report it is recommended to include a digital copy of the resulting map to show where the meeting attendees resided.

As a result of the roundtable, a Centerfield Elementary Teacher reached out for educational materials to conduct a water quality unit with local information. Beth Stuber volunteered to present at her classroom. The presentation included two exercises, one with a plastic tarp demonstrating movement of pollutants with kool-aid and a spray gun. The second demonstration was addressing the speed of water thorough a watershed. The kids lined up in a straight line and passed the ball. The second time the kids were staggered and at various heights. The teachers were extremely complimentary of Beth and her presentation materials.

IV. Watershed Website

The website has been updated to include recent activities. The Technical Committee meeting minutes are posted along with Roundtable Meeting follow up materials. One area for enhancement is the links to other watershed organizations. A request will be distributed by email to provide web addresses. On the other side of this is to post the Curry's Fork website on your homepage. We are opening the floor for comments, questions on the website.

V. Status of Water Quality Data Collection & Analyses

SAI has collected one additional year of water quality data ending in October 2009. There are over 2,000 data points collected within the watershed. The next phase after data is collected is to analyze the data. Preliminary conclusions will be presented to the technical group February 2010. Curry's Fork was identified by DOW as impaired for bacteria and partially impaired for warm aquatic habitat. The bacteria data will be analyzed from January to June 2010. The warm aquatic habitat will be reviewed from July to December 2010.

VI. Incorporating Technical Committee Program Information

Over the past four Technical Committee meetings, materials were presented about agencies programmatic efforts from USDA to US ACE to Sewer Infrastructure. Program narratives are to be distributed to the presenters for the first round of reviews. Then a comprehensive active agencies programs narrative will be distributed to the technical committee at large for review.

VII. Timeline and Schedule 2010

Internal schedule and timeline which corresponds to the proposed milestones for KDOW approval were reviewed. The stream restoration activities were requested to be added to the timeline. See attached project schedule for details.

VIII. Closing

OCFC needs to ensure that the final Watershed Plan is useful. Specifically, quantifiable results and objectives are needed in order to measure progress. Technical Committee members stressed the need to improve water quality. Additional comments and discussion during the meeting included an overview on the status of the Stream Restoration Project and the need to include an update in subsequent Technical Committee Meetings. Also, the need to address the perception that uncontrolled development is the primary cause of water quality problems in the watershed needs to be addressed (both via education/outreach as well within the context of the Plan. And finally, Technical Committee members mentioned the need to Plan Ahead on all phases of the watershed planning and implementation. In particular it was noted that local ordinances dealing with water quality/landuse and stormwater need to be better coordinated in terms of putting them together into a single stormwater ordinance.

Project Goal & Objectives

The goal of the project is to improve the water quality of Curry's Fork.

To be accomplished through:

1. Development a Watershed Based Plan (based on EPA's nine required elements)
2. Targeted implementation of selected aspects of the plan

What is a Watershed Plan?

A watershed-based plan is...

- is a **flexible** framework for managing water quality and quantity in the watershed;
- includes **strategies** to address the most important issues;
- includes **point and nonpoint** source control strategies;
- provides a framework for **implementation** of prioritized issue

Why Plan?

It's Required

Clean Water Act Section 319(h) Nonpoint Source Pollution Control Grants require the development of a comprehensive watershed plan prior to implementing solutions/controls with 319(h) Grant funds.

Why Curry's Fork?

"SWIMMING"

- Does not Support "Swimming" (Non-support of Primary Contact Recreation)
- Fecal Coliform (bacteria)

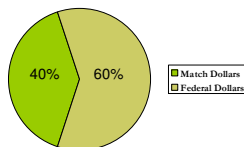
"FISHING"

- Only partially supports "Fishing" (Partial Support of Warmwater Aquatic Habitat)
- Sediment (Siltation), Nutrients (Eutrophication), Dissolved Oxygen

Clean Water Act §319(h) Grant to Oldham County Fiscal Court

□ Budget

- Total of \$1.6 M
 - \$900,000 Federal Dollars
 - \$700,000 Oldham County Match Dollars



□ Contractors

- Strand Assoc. Inc
- UL
- Other

Grant Summary

More on Funding

- Approximately 50% for Watershed Plan development
- Approximately 50% for implementation
- Approximately 47% of budget expended through September 2009

(Total Grant funds = federal + non-federal)

Grant Summary

Timeline

- 2004 – Curry's Fork Watershed Project idea initiated
- 2005 – Oldham County Fiscal Court applied for 319(h) Grant funding
- 2007 – Memorandum of Agreement & Contracts executed

Collaboration

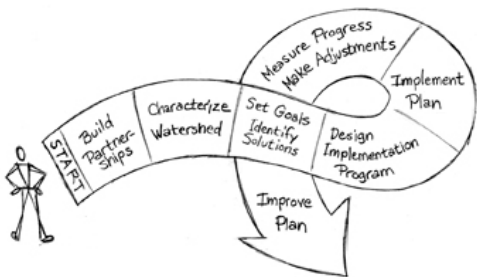
Stakeholder Group

- Formed December 2007
- 4 Meetings (to date)
- Roundtable Meeting in September with 100 +/- participants

Technical Committee

- Formed August 2008
- 8 Meetings (to date)
- Watershed Inventory of existing programs just completed.

Watershed Plan Components



Water Quality Data Collection and Analysis Approach

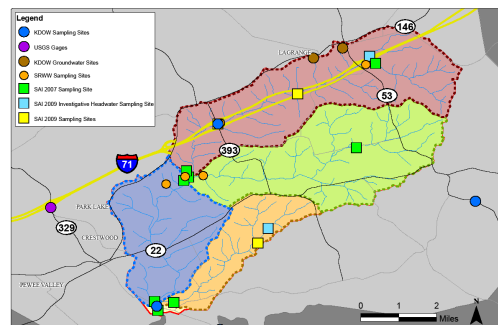


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Water Quality Bodies of Information

- Aquatic Biological and Habitat
 - 3rd Rock
- Fluvial Geomorphology
 - UL Geomorphology Study
- Physical/Chemical
 - SAI Water Quality Sampling 2007 & 2009
- Pathogen Bacteria
 - SAI Water Quality Sampling 2007 & 2009

Total Sampling Site Locations



Curry's Fork Sampling Data Summary

Location	Date	Depth	Alkalinity	Dissolved Oxygen	pH	Surface Temperature	Bottom Temperature	Water Temperature	No. of Samples		Turbidity	Fertilizer & Pesticide	Sediment	Other	Water
									TS	TP					
...

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Water Quality Analysis Team

- Bringing Specialized Knowledge and Experience Together



Division of Water
U of L
Strand
USGS
3rd Rock
Oldham County

Data Analysis Approach

- Segments in Curry's Fork identified on 303(d) list, considered impaired for intended use

Curry's Fork into Floods Fork Oldham County
From River Mile 8.0 to 4.8 Segment Length: 4.8
Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Non-support)
Pollutant(s): Sedimentation/Siltation; Pathogens
Suspected Source(s): Highway/Road/Wedge Runoff (Non-Construction Related); Municipal (Urbanized High Density Area); Package Plant or Other Permitted Small Urban Discharges

The Oldham County Fiscal Court will be awarded \$970,500 in federal Section 319(h) Grant funds (EFY 2006) to develop and implement a Watershed Based Plan for the Curry's Fork watershed.

Source: Final 2006 Integrated Report to Congress on the Condition of Water Resources in Kentucky, 303(d) List

Impairment Focused Analysis

- WQAT Meeting February 2010
- Reviewing Pathogen Data to Focus on Primary Contact Recreation Impairment



Impairment Focused Analysis



- Warm Water Aquatic Habitat WQAT Meeting September 2010

Why Split Focus?

- To minimize time commitment and burden on Team members,
- To focus resources more directly,
- To further progress on the Plan while other research is being done concurrently, and
- To have biological, habitat, nutrient, sediment, and other data available to evaluate WAH

Currys Fork Watershed Based Plan
 Technical Committee Meeting
 December 10, 2009

Oldham County Curry's Fork Project Timeline																				
Task		Month and Year																		
		2009		2010										2011						
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
a	Complete pathogen data analysis and load-duration curves at the subwatershed level																			
b	Technical Committee review and comment on Watershed Inventory narratives																			
c	Water Quality Data Analysis Team reviews subwatershed pathogen data results																			
d	Covene Technical Committee: present pathogen data results and present possible solutions																			
e	Engage Technical Committee with pathogen solution identification																			
f	WAH-impairment (non-pathogen) data analysis																			
g	Host Pathogen Roundtable																			
h	Technical Committee and stakeholder review and comment on draft watershed plan for pathogens																			
i	Water Quality Data Analysis Team reviews subwatershed WAH (non-pathogen) data results																			
j	Convenc Technical Committee: present WAH impairment data results and potential solutions																			
k	Engage Technical Committee with WAH impairment solution identification																			
l	Host WAH-Impairments (non-pathogen) Roundtable																			
m	Draft final Watershed Plan with Technical Committee and stakeholder review and comment																			
n	DOW Review and Approval of Watershed Plan																			
o	Submit BMP Implementation Plan to DOW																			
p	Implement Watershed Plan through Spring 2013																			

◆ - Stakeholder/Technical Committee Meetings and Involvement