

Curry's Fork Watershed Plan  
 Technical Committee Meeting Minutes  
 Oldham County Fiscal Court  
 June 10, 2009, 1:30 P.M.

Attendees

<b>Name</b>	<b>Representing</b>	<b>Contact</b>
John Bennett	Lagrange Utilities Commission	luc@insightbb.com
Shawn Boyle	Oldham County	sboyle@oldhamcounty.net
Elsie Carter	City of LaGrange/Watershed Watch	mayorelsie@aol.com
Angela Crain	USGS	ascrain@usgs.gov
Mike Croasdaile	University of Louisville Stream Institute	m.croasdaile@louisville.edu
John Crosby	Home Builders Association of Louisville	john@hbal.com
Scott Davis	Oldham County Magistrate	mail@scottmdavis.net
Clark Dorman	Kentucky Division of Water	clark.dorman@ky.gov
Linda Fountain	Solid Waste & Recycling	lfountain@oldhamcounty.net
Steve Greenwell	Oldham County Magistrate	springhillsteve@bellsouth.net
Ernest Hall	Oldham County Solid Waste	erhall@windstream.net
Horace Harrod	Oldham County Sewer District-Veolia Water	Horace.harrod@farmcreditbank.com
Todd Lafollette	Oldham County Health Department	ToddG.Lafollette@ky.gov
Corrine Mulberry	Curry's Fork Watershed Technical Advisor	scubagirl07@insightbb.com
Darlene Rusnak	City of LaGrange/Watershed Watch	drunsnak@lagrangeky.net
Paul Maron	Strand Associates, Inc.	paul.maron@strand.com
Kurt Mason	Oldham County Conservation District	Kurt.Mason@ky.usda.gov
Tony Miller	Third Rock Consulting	tmiller@thirdrockconsultants.com
Traci Missun	Oldham County Cooperative Extension Services	traci.missun@uky.edu
Rob Nicholas	Oldham County Sewer District-Veolia Water	robert.nicholas@veoliawaterna.com
Andrea Rogers	Strand Associates, Inc.	andrea.rogers@strand.com
Gordon Robinson	Local Resident	grobinsn@bellsouth.net
Charlie Roth	Kentucky Division of Water	charlie.Roth@ky.gov
Beth Stuber	Oldham County Engineer	bstuber@oldhamcounty.net
Stuart Stricker	Oldham County Board of Education	stuart.strickler@oldham.kyschools.us
Tim Tyree	Stormwater Manager Oldham County Fiscal Court	ttyree@oldhamcounty.net
John Webb	Kentucky Division of Water	john.webb@ky.gov

1. Introduction and Welcome

Beth Stuber and Andrea Rogers gave a warm welcome to the attendees. Beth welcomed new faces. Andrea described the handout materials available including past meeting minutes and agendas. Notebooks will be maintained containing previous and current meeting materials for reference during the meetings.

2. Watershed Planning – An Overview

Corrine Mulberry discussed the watershed planning process (see PowerPoint presentation). She described the legislative history and importance of planning. The main stem from mile marker 0 to 4.8 is impaired. The goals of the plan is to address impaired areas and protect healthy stream branches.

### 3. Water Quality Monitoring Update

Paul Maron led the discussion on where we are now in the planning process. The existing water quality data has been compiled and year one sampling is complete. We are collecting additional sampling to target areas identified from year one results. A water quality report reviewing existing data and year one sampling has been compiled. The report was substantial in size and depth of information. The water quality report and watershed based plan will be divided into two separate documents. The target audience of the watershed based plan will be local decision makers and residents. The water quality document will target water quality professionals.

### 4. Outreach and Education

A Web site is being authored to distribute information to the community at large. Tim Tyree and Andrea Rogers discussed the Web site. A link will be provided on the Oldham County Web site for the Curry's Fork Web site. The Web site has two goals; education information and stakeholder upkeep. A link will be e-mailed to the group for review and feedback. Another Web site is named "The Fork", so the group was asked to brainstorm alternative group names for the Curry's Fork Web site.

### 5. Responses to Technical Committee Feedback

Meeting minutes from past meetings were reviewed for comments and feedback. Paul Maron reviewed a total of 25 comments. See enclosed handout summarizing Technical Committee feedback from previous meeting and proposed actions. Please note a watershed roundtable discussion is planned for the fall of 2009.

### 6. Watershed Inventory (including existing programs)

Paul Maron provided an overview of existing materials used for conducting a inventory of watershed features in Curry's Fork. Data accessed thus far has primarily focused on Geographic Information System (GIS). He emphasized the need to identify and document existing programs within the watershed that are improving or protecting water quality.

The following topics were discussed: existing GIS information (water lines, sewer lines, soil types, etc.), limits of the data, reliance on others for more up to date and dynamic information.

Corrine Mulberry then facilitated a group discussion of existing programs within the watershed. She emphasized that "we can't know where we need to go unless we know what we already have." She stated that a series of Technical Committee meetings will be scheduled this summer to further explore and understand the existing programs identified through this brainstorming session. Once the Watershed Inventory is complete, the focus will switch to identifying implementation actions (solutions). As with

most watershed discussions, several implementation ideas were identified; these are identified under the "Implementation/Solutions" subheader below.

### Group Discussion Notes

#### Watershed Inventory:

- Inventory springs in the watershed.
- Ensure that flow (of surface water) is understood. The area has limestone and sinking streams. This will be important for appropriately targeting restoration actions.
- Oldham County Sewer District has numerous wastewater improvement projects underway and/or planned. Plans involve decommissioning many package plants and improving existing Wastewater Treatment Plans. Wastewater improvement efforts also include GIS mapping and reducing Infiltration and Inflow problems with sewer lines. \$1.6 million funding through KIA/EPA. State Revolving Loan fund application ranked out at #19. The most current approved Wastewater Facilities Plan is a 2000-2002 plan that was developed jointly with Jefferson Co.
- LaGrange Utilities provides both water and sewer for the City of LaGrange. An expansion of the LaGrange WWTP is planned.
- In-stream and near stream disturbances are regulated through Clean Water Act Sections 401 and 404 administered by the Kentucky Division of Water and the US Army Corps of Engineers. Certifications and permits are issued for certain activities; technical assistance is provided as well.
- Oldham County's Stormwater Management Plan contains a plethora of stormwater/water quality improvement commitments (education, stormwater mapping, erosion control regulation, etc.)
- The U.S. Geological Survey has conducted extensive monitoring in the Floyds Fork watershed (Curry's Fork is a tributary of Floyds Fork). Bacteria total maximum daily load sampling report is expected in the fall of 2009 with load calculations.
- The County Health Department provides oversight on on-site wastewater systems. Includes both regulatory, technical assistance, and education (septic system maintenance guidelines for homeowners).
- State required Groundwater Protection Plans require homeowners to perform septic system maintenance.
- The volume and velocity of the stream needs to be understood. i.e., groundwater and surface water interaction, influence from Wastewater Treatment Plants (on stream flow), etc.
- The University of Louisville is studying the "Fluvial Geomorphology" of the watershed. That is, they are working to determine where the sediment is coming from in the watershed (upland sediment runoff vs. stream bank contributions of sediment from increased runoff/flow in the stream).
- Oldham County Solid Waste and Recycling programs are varied and numerous. i.e., electronic recycling year-round (and a special after Christmas event), chemical collection amnesty events, educational materials for alternatives to household materials, promoting rain-gardens and the use of rain barrels, etc.
- Growth predictions. Need to identify where and when are likely growth areas.

- Watershed Watch volunteers have been monitoring Curry's Fork for an extended period of time. It was noted that the stream has moved in the last 30 years. Photos are available showing the condition of the stream.
- Oldham County Fiscal Court has several ordinances that promote the protection of water quality.
- The Cooperative Extension Service also has numerous programs that help to protect and restore water quality (technical assistance, education, Environmental Stewardship Camp, etc.)
- Evaluate data and statistics from Oldham County Equine document by Ken Happerman).
- Existing 319(h) grant on suburban horse manure management; need to determine status of the project and secure information for the Technical Committee. Also, previous horse muck management project products and materials from Inner Bluegrass initiative should be reviewed.
- The County Conservation District and U.S. Department of Agriculture have many programs targeted specifically at water quality and agriculture (state and federal cost-share programs, technical assistance, engineering assistance, education, etc.). Producers must have an individual "Agriculture Water Quality Plan" for their farm. Historical data is available on programs and where implemented.
- Identify where protected lands are currently located.
- The Board of Education has existing activities within the watershed including the Centerfield School's WWTP, building of a new school and wastewater treatment, and partnership with UL for a stream restoration project. (Road issues too).
- \$13 million State Revolving Loan funds for drinking water in Oldham County approved/planned.

#### Implementation/Solutions:

- Utilize Youth Sport events to provide educational information about Curry's Fork to both youths and adults.
- "Slow it down". Slowing down runoff to Curry's Fork is important and critical. Focus on "slowing down runoff" with both educational efforts and on-the-ground implementation actions.
- Septic System maintenance is needed. The state required Groundwater Protection Plans and Health Department guidelines should be evaluated and either promoted and used or modified for as a homeowner guide for maintaining on-site wastewater systems.
- There are no U.S. Geological Survey stream flow gauges within the watershed. The watershed plan should consider whether or not a stream flow gauge is warranted/needed/feasible.
- The Homebuilders Association can assist with implementing solutions in the watershed (demonstrations of alternative designs, stormwater BMPs, erosion control BMPs, education/outreach, etc.)
- Promote alternative subdivision designs that reduce runoff.
- Encourage collaboration toward the development community.
- Need to utilize public access channels for educational/outreach efforts
- Need to utilize the County's "What's Happening" newsletter for educational/outreach efforts
- Need to promote and participate in creek clean-up events (Ohio River Valley Sweep).
- Encourage collaboration and communication between agencies
- Oldham County needs to know where illegal dumps are located so that they can target them. Create a website link similar to police tips.

June 10, 2009, 1:30 P.M.

- Evaluate Oldham County's set-back ordinances for potential public access/greenways.
- Focus on "buffer initiative" through agricultural agencies for landowners.
- Overlay parcels of land within the watershed. Identify potential areas for protection. Look for trends (landuse changes, farms for sale, etc.)
- Create or promote homeowner-agriculture interface. For example, homeowners may help keep an agricultural/forested buffer by working with farms/producers who face selling their land. Look for opportunities. Work outside of the box.
- Create connections to the stream There are not many access point to the stream
- Utilize 4-H groups for implementation efforts.
- Look at how to utilize existing farm programs more efficiently.
- Field trip opportunities to the stream restoration project on North Curry's Fork

Possible dates for future Technical Committee meetings were discussed. However, several members identified conflicts with the proposed dates after the meeting adjourned. Thus, upcoming Technical Committee meeting dates will forwarded to the Committee via a separate email communication.

#### 7. Closing

Beth Stuber thanked all of the attendees for participating and for providing their time and expertise.

If there are any additions and/or comments, please call me at (502) 583-7020 ext. 141.

Prepared by Andrea Rogers and respectfully submitted to all in attendance.

Enclosure(s)

c/enc: All Participants

# Curry's Fork Watershed

## Technical Committee Feedback and Responses

	<b>Feedback/Suggestion</b>	<b>Response/Action</b>
1	<u>Stream Restoration Project</u> : Development plans upstream of restoration site (1000 acres). What is the flow design for the restoration project? Should the design be for the ultimate flow in the area?	<i>U of L is considering the future uses of the watershed in their design approach. Final numbers are not available just yet but will incorporate the appropriate design criteria.</i>
2	<u>Implementation – Septic Systems</u> : Old septic tanks that are over 20-30 in developments such as Borewick Farms and Crystal Lake should be targeted.	<i>This will be addressed during “solution identification” stage (late 2009-early 2010) of Watershed Plan development</i>
3	<u>Implementation – Septic Systems</u> : Septic tank inspected whenever the house changes hands.	<i>This will be addressed during “solution identification” stage (late 2009-early 2010) of Watershed Plan development</i>
4	<u>Implementation</u> : Crystal Lake subdivision has a strong neighborhood association.	<i>Watershed Roundtable planned for fall 2009 and another in 2010. Include neighborhood association and residents.</i>
5	<u>Stressors</u> i. Deer population I-71 ii. Package Plants iii. Septic Tanks – Borwick Sewer	<i>Will work to secure improved watershed inventory of wild animals through the Technical Committee We are looking for assistance from wildlife managers on estimating the size of the population so that we can quantify the impact of deer (and other wild animals) on the watershed.</i>  <i>Package plants and septic tanks are identified in the inventory and their impact assessed in the water quality evaluation. Eliminating them (if necessary) will be addressed in the solution identification.</i>
6	<u>Watershed Plan (items to include)</u> : i. Sewers in area ii. Public Education (septic tanks, all land uses, target decision makers) iii. Septic Tank Inspections when homes change hands iv. Changes in Sewer District to Storm v. Greenway group access vi. Parks (identify properties to purchase vii. Teaching Tool with Stream Restoration Project viii. Flooding	<i>Identifying areas without sewers will be completed in the watershed inventory portion of the plan. Areas that can be easily sewers will be identified, with the assistance of Stakeholders, during the ‘solution identification’ stage (late 2009-early 2010) of the Watershed Plan Development</i>  <i>Public Education will be part of the Education and Outreach as well as the solution identification.</i>  <i>Ways to leverage the County’s new stormwater regulating powers (through their MS4 permit) will be explored in the solution</i>

# Curry's Fork Watershed Technical Committee Feedback and Responses

	<b>Feedback/Suggestion</b>	<b>Response/Action</b>
6 (cont)		<p><i>identification stage.</i></p> <p><i>Greenways/conservation easements/etc. are an integral part of the plan and will be highlighted in the final version. Providing access to the watershed has been identified as an effective educational tool by the Technical Committee and will be addressed in the Education and Outreach portions of the plan as well as the Solution Identification.</i></p> <p><i>Plans are in the works to collaborate with U of L on field trips for students, interpretive signs, and establishing outdoor classroom opportunities at the restoration site.</i></p>
7	<u>Technical Committee:</u> Invite Parks and Rec, LaGrange Utility Commission and Farm Services	<i>Complete.</i>
8	<u>Watershed Plan:</u> County Health Department agreed to identify priority subdivisions with septic tanks on a map provided by Strand.	<i>Complete. Priority subdivisions were identified by Todd LaFollette with the Oldham County Health Department and Kurt Mason with the Oldham County Conservation District.</i>
9	<u>Watershed Plan - Stressors:</u> Review industrial discharges and compliance history.	<i>First review found no issues with industrial discharges. A second review is planned with the input of the larger stakeholder group to be sure this conclusion is accurate.</i>
10	<u>Data Analysis:</u> Review bacteria data versus stream flow and wet weather events.	<i>A poor correlation was found after a review of the available data. More sampling is on-going this summer that focuses on establishing a correlation, or firmly concluding that there is not one.</i>
11	<u>Engagement/Outreach:</u> Use quarterly newsletter produced by Oldham County Fiscal Court (What's Happening in Oldham County) to distribute information regarding the watershed plan.	<i>What's Happening in Oldham County is one of several media outlets that are being examined as methods to distribute information. Radio, television, newspaper articles, bill stuffers, information booths, and community meetings are a few of the suggestions that have been collected so far as being effective ways.</i>
12	<u>Technical Committee:</u> Invite USGS and Oldham County Conservation District to tech meetings.	<i>Complete.</i>
13	<u>Water Quality Monitoring:</u> Conduct further sampling between Buckner STP and LaGrange STP to better quantify the impact of each plant on stream water quality.	<i>Underway. Amended QAPP/Monitoring Plan submitted to KDOW; includes new monitoring station.....</i>

# Curry's Fork Watershed

## Technical Committee Feedback and Responses

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14	<u>Watershed Plan - Stressor:</u> Green Valley effluent does not discharge directly to a stream, it first enters a farm pond which should improve the effluent quality before it enters the stream.	<i>This will be addressed in watershed inventory and opportunity section of WBP.</i>
15	<u>Watershed Plan - Stressor:</u> Lakewood and Lockwood have chronic inflow and infiltration problems with frequent overflows.	<i>This will be addressed in watershed inventory and opportunity section of WBP.</i>
16	<u>Watershed Plan - Stressor:</u> Centerfield Elementary package plant is dated and could be a potential stressor.	<i>This will be addressed in watershed inventory and opportunity section of WBP.</i>
17	<u>Watershed Plan - Stressors:</u> SC1 (South Currys Fork monitoring station) could have the highest bacteria levels because it is in close proximity to the Lockwood discharge point.	<i>This will be addressed in watershed inventory and opportunity section of WBP.</i>
18	<u>Watershed Plan – Stressors and Priority Area for remediation:</u> The poor effluent quality from Country Village STP should make it a first priority in the watershed.  Country Village STP is already a priority is planned for decommissioning in 3 -5 years.	<i>Will verify decommissioning status through more detailed Watershed Inventory process and the Technical Committee</i>
19	<u>Watershed Plan – Stressors:</u> Curry's Fork has a large number of domestic animals as well as horses, donkeys, lama and other animals.	<i>Will work to secure improved watershed inventory of domestic animals through the Technical Committee</i>
20	<u>Watershed Plan – Stressors:</u> Deible Dairy Farm has been out of production for over 10 years.	<i>Thank you! Verified through KDOW Permits Branch. Farm is beef operation with KNDOP (No KPDES CAFO permit).</i>
21	<u>Implementation:</u> BMPs discussed/recommended include: Homeowner BMPs (proper lawn care, reduce paved surfaces, pet waste clean-up, etc.) Septic System Maintenance Clustered Septic Systems Improve/Eliminate Package Treatment Plants Extend Sewer Service Area Riparian Buffer/Filter Strips Grade Stabilization Structures Constructed Wetlands Agriculture Practices (fence animals away from streams, soil testing, waste management plans, tec.)	<i>Address during “solution identification” stage (late 2009-early 2010) of Watershed Plan development</i>
22	<u>Implementation:</u> Perception of many of the BMPs must be changed so they understand purpose and benefits of their implementation.	<i>This will be addressed during development of Education/Outreach component of Watershed Plan.</i>



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	<b>Feedback/Suggestion</b>	<b>Response/Action</b>
23	<u>Implementation</u> : Proper sewage disposal and septic tank maintenance and treatment plants are considered priorities for the watershed due to the elevated bacteria levels. And, proper installation and implementation.	<i>This will be addressed during "solution identification" and Education/Outreach component of Watershed Plan.</i>
24	<u>Implementation</u> : Developers leave a buffer around streams that does not function well. The buffer is just untouched space, not a space next to streams that has been designated to buffer and filter runoff, which is considerably more effective.	<i>This will be addressed during "solution identification" stage (late 2009-early 2010) of Watershed Plan development</i>
25	<u>Engagement/Outreach</u> : Watershed Roundtable planned for early 2009.	<i>Revised to Fall 2009 and 2010 (two Roundtables – one for Watershed Inventory and Characterization and one for "solutions").</i>