

**Curry's Fork Watershed Plan
Technical Committee Meeting**
Wednesday, November 17, 2010
8:30 A.M. to 11:30 A.M.
Oldham County Fiscal Courthouse, La Grange, KY

Curry's Fork Warm Water Aquatic Habitat (WAH) Impairment Data

1) Welcome and Introductions

Paul Maron (Strand Associates) welcomed the six stakeholders in attendance to the meeting. Representatives from La Grange Utilities Commission, University of Louisville, Oldham County Fiscal Court, and Oldham County Sewer District were also in attendance.

2) Project Updates

a) Watershed Plan Completion Schedule

The draft plan is scheduled for completion near the beginning of 2011. The steps remaining to complete the plan are: develop and prioritize WAH solutions, combine solutions with the Primary Contact Recreation (PCR) solutions, host a Roundtable Meeting on the WAH solutions, allow for Technical Committee and public comment on the plan, and send to Kentucky Division of Water (KDOW) for review and approval. After approval of the plan, a Best Management Plan (BMP) Implementation strategy and plan will be developed and solutions will be implemented with 319 funds.

b) Stream Restoration Project

Nick Ozburn (Fish and Wildlife) mentioned in an e-mail to Beth Stuber (Oldham County Fiscal Court) that the easement was returned to the Oldham County Board of Education to resolve the last remaining issue with Real Properties. Construction is anticipated to begin in the spring of 2011.

3) WAH Solution Identification

a) South Curry's Fork

(1) Watershed Characteristics and Concerns

See enclosed copy of presentation.

(2) Solution(s) Identified:

- Protect floodplains up to and beyond the 100-year floodplain.
- Reduce or 'disconnect' impervious area in already developed areas. Disconnecting impervious area could include any number of

BMPs that increase infiltration such as rain gardens, pervious pavement, and curb cuts.

- Require reduction or “disconnection” of impervious areas as part of plan review/approval for undeveloped areas. These could be incorporated into the subdivision regulations.
- Develop an off-site mitigation program to off-set impacts of new development while allowing flexibility and the potential for bigger and greater mitigation opportunities.
- Provide education about basic water quality, postconstruction BMPs (what should they look like, how do they work, and why are they important), how individual actions affect water quality (for example, mowing to the edge of creeks), and the water quality in the communities.
- Increase minimum lot size for homes served by septic systems to 2 acres.
- Decrease lot size through Smart Growth planning and development.
- Provide better maintenance and operations for retention ponds.
- Convert dry detention basins into wet detention basins.
- Convert pasture lands into conservation easements.
- Restore riparian areas around streams with selective plantings in areas with appropriate bank heights and lower opportunities for stream restoration. Using volunteers for this effort could reduce costs and provide educational opportunities.
- Begin stream restoration project at Peyton Lane.
- Organize a watershed group of local residents. A potential option would be to expand Greenways’ focus to include water quality goals.
- Educate planners and reviewers, contractors, developers, and engineers on watershed plan results with an emphasis on priority protection and restoration areas.
- Educate planners and reviewers, contractors, developers, and engineers on green and alternative designs.

- Educate planners and reviewers on new BMPs, how to implement them, and how to require them.
- Eliminate package treatment plants in watershed.
- Require any remaining treatment plants to meet new nutrient limits.
- Encourage the use of MS4 fees to fund water quality BMPs.
- Develop a local grant program with MS4 fees to fund stormwater protection and restoration activities.
- Continue to enforce erosion protection and sediment control ordinances in the county.
- Disconnect impervious areas in Lockwood to address water quality and flooding issues.
- Utilize FILO, USDA MS4, 319, and/or FEMA (predisaster funds), funds and grants to restore creeks and implement BMPs.
- Identify good existing examples of postconstruction BMPs to help educate homeowners, the development community, and officials. Focus on examples that are both aesthetically pleasing and highly functional.
- Focus BMPs and results towards reducing the instream sediment production process.
- Improve outreach (advertising) about opportunities for education and/or grants to implement BMPs.
- Utilize “No Adverse Impact” regulations to address downstream flows.
- Use National Dam Inspection program (NDI) for floodplain mitigation.
- Encourage property owners to place land around streams in conservation easements.
- Utilize future development potential at Oldham Reserve and other areas as opportunities for education, postconstruction controls, and other green or smart growth strategies.

b) North Curry's

(1) Watershed Characteristics and Concerns

See enclosed copy of presentation.

(2) Solution(s) Identified:

- Protect floodplains up to and beyond the 100-year floodplain.
- Reduce or “disconnect” impervious area in already developed areas. Disconnecting impervious area could include any number of BMPs that increase infiltration such as rain gardens, pervious pavement, and curb cuts.
- Require reduction or “disconnection” of impervious areas as part of plan review/approval for undeveloped areas. These could be incorporated into the subdivision regulations.
- Develop an off-site mitigation program to offset impacts of new development while allowing flexibility and the potential for bigger and greater mitigation opportunities.
- Provide education about basic water quality, postconstruction BMPs (what they should look like, how do they work, and why are they important), how their individual actions affect water quality (for example, mowing to edge of creeks), and the water quality in the communities.
- Increase minimum lot size for homes served by septic systems to 2 acres.
- Decrease lot size through Smart Growth planning and development.
- Provide better maintenance and operations for retention ponds.
- Convert dry detention basins into wet detention basins.
- Organize a watershed group of local residents. A potential option would be to expand Greenways to include water quality goals.
- Educate planners and reviewers, contractors, developers, and engineers on watershed plan results with an emphasis on priority protection and restoration areas.

- Educate planners and reviewers on new BMPs, how to implement them, and how to require them.
- Eliminate package treatment plants in watershed.
- Require any remaining treatment plants to meet new nutrient limits. LaGrange Utilities Commission has already begun this process and is planning ahead.
- Encourage the use of MS4 fees to fund water quality BMPs.
- Develop a local grant program with MS4 fees to fund stormwater protection and restoration activities.
- Continue to enforce erosion protection and sediment control ordinances in the county.
- Utilize FILO, USDA, MS4, 319, Kentucky Transportation Cabinet (KYTC) and/or FEMA funds (predisaster funds), and grants to restore creeks and implement BMPs.
- Require enhanced development guidelines in undeveloped areas to implement water quality BMPs and postconstruction practices at the front end of projects.
- Coordinate projects with KYTC especially on opportunities for wetlands to store and treat stormwater.
- Implement restoration project at the very end of the main stem of North Curry's Fork.
- Implement restoration project(s) on the tributaries leading into the main stem utilizing existing grade controls.
- Protect existing forested areas.
- Identify good existing examples of postconstruction BMPs to help educate homeowners, the development community, and officials. Focus on examples that are both aesthetically pleasing and highly functional.
- Improve outreach (advertising) about opportunities for education and/or grants to implement BMPs.
- Utilize "No Adverse Impact" regulations to address downstream flows.

- Use National Dam Inspection (NDI) program for floodplain mitigation.
- Encourage property owners to place land around streams in conservation easements.
- Include education on proper dredging techniques and permitting as well as connecting the impact of upstream impairments with in-lake water quality.
- Utilize future development potential along Commerce Parkway and other areas as opportunities for education, postconstruction controls, and other green or smart growth strategies.

c) Curry's Fork (Main Stem)

(1) Watershed Characteristics and Concerns

See enclosed copy of presentation.

(2) Solution(s) Identified:

- Protect floodplains up to and beyond the 100-year floodplain.
- Reduce or “disconnect” impervious area in already developed areas. Disconnecting impervious area could include any number of BMPs that increase infiltration such as rain gardens, pervious pavement, and curb cuts.
- Require reduction or “disconnection” of impervious areas as part of plan review/approval for undeveloped areas. These could be incorporated into the subdivision regulations.
- Develop an off-site mitigation program to offset impacts of new development while allowing flexibility and the potential for bigger and greater mitigation opportunities.
- Provide education about basic water quality, postconstruction BMPs (what they should look like, how do they work, and why they are important), how their individual actions affect water quality (for example, mowing to edge of creeks), and the water quality in their communities.
- Increase minimum lot size for homes served by septic systems to 2 acres.

- Decrease lot size through Smart Growth planning and development.
- Provide better maintenance and operations for retention ponds.
- Convert dry detention basins into wet detention basins.
- Convert pasture lands into conservation easements.
- Restore riparian areas around streams with selective plantings in areas with appropriate bank heights and lower opportunities for stream restoration.
- Organize a watershed group of local residents. A potential option would be to expand Greenways' focus to include water quality goals.
- Educate planners and reviewers, contractors, developers, and engineers on watershed plan results with an emphasis on priority protection and restoration areas.
- Educate planners and reviewers on new BMPs, how to implement them, and how to require them.
- Eliminate package treatment plants in watershed.
- Require any remaining treatment plants to meet new nutrient limits.
- Encourage the use of MS4 fees to fund water quality BMPs.
- Develop a local grant program with MS4 fees to fund stormwater protection and restoration activities.
- Continue to enforce erosion protection and sediment control ordinances in the county.
- Utilize FILO, USDA, MS4, 319, and/or FEMA funds (predisaster funds), and grants to restore creeks and implement BMPs.
- Protect existing forested areas.
- Provide main stem restoration projects in conjunction with work on tributaries.

- Utilize the high banks in the watershed to offset the cost of restoration by selling the excess dirt.
- Identify good existing examples of postconstruction BMPs to help educate homeowners, the development community, and officials.
- Focus on examples that are both aesthetically pleasing and highly functional.
- Improve outreach (advertising) about opportunities for education and/or grants to implement BMPs.
- Utilize “No Adverse Impact” regulations to address downstream flows.
- Use National Dam Inspection (NDI) program for floodplain mitigation.
- Encourage property owners to place land around streams in conservation easements.

d) Asher’s Run

(1) Watershed Characteristics and Concerns

See enclosed copy of presentation.

(2) Solution(s) Identified:

- Protect floodplains up to and beyond the 100-year floodplain.
- Reduce or “disconnect” impervious area in already developed areas. Disconnecting impervious area could include any number of BMPs that increase infiltration such as rain gardens, pervious pavement, and curb cuts.
- Require reduction or “disconnection” of impervious areas as part of plan review/approval for undeveloped areas. These could be incorporated into the subdivision regulations.
- Develop an off-site mitigation program to offset impacts of new development while allowing flexibility and the potential for bigger and greater mitigation opportunities.
- Provide education about basic water quality, postconstruction BMPs (what they should look like, how do they work, and why

they are important), how their individual actions affect water quality (for example, mowing to the edge of creeks), and the water quality in their communities.

- Increase minimum lot size for homes served by septic systems to 2 acres.
- Decrease lot size through Smart Growth planning and development.
- Provide better maintenance and operations for retention ponds.
- Convert dry detention basins into wet detention basins.
- Convert pasture lands into conservation easements.
- Restore riparian areas around streams with selective plantings in areas with appropriate bank heights and decrease opportunities for stream restoration.
- Organize a watershed group of local residents. A potential option would be to expand Greenways' focus to include water quality goals.
- Educate planners and reviewers, contractors, developers, and engineers on watershed plan results with an emphasis on priority protection and restoration areas.
- Educate planners and reviewers on new BMPs, how to implement them, and how to require them.
- Encourage the use of MS4 fees to fund water quality BMPs.
- Develop a local grant program with MS4 fees to fund stormwater protection and restoration activities.
- Continue to enforce erosion protection and sediment control ordinances in the county.
- Utilize FILO, USDA, MS4, 319, and/or FEMA funds and grants to restore creeks and implement BMPs.
- Protect existing forested areas.
- Focus restoration work on the lower portions of the main stem. Focus on the larger tributary in the upper area.

- Identify good existing examples of postconstruction BMPs to help educate homeowners, the development community, and officials. Focus on examples that are both aesthetically pleasing and highly functional.
- Improve outreach (advertising) about opportunities for education and/or grants to implement BMPs.
- Utilize “No Adverse Impact” regulations to address downstream flows.
- Use National Dam Inspection (NDI) program for floodplain mitigation.

4) Prioritizing Solutions

Minutes will be distributed with the identified solutions for the Technical Committee’s review. Once the solutions have been finalized, an on-line survey will be used to prioritize solutions.