

**SECTION 5**  
**WATERSHED GOALS AND OBJECTIVES**

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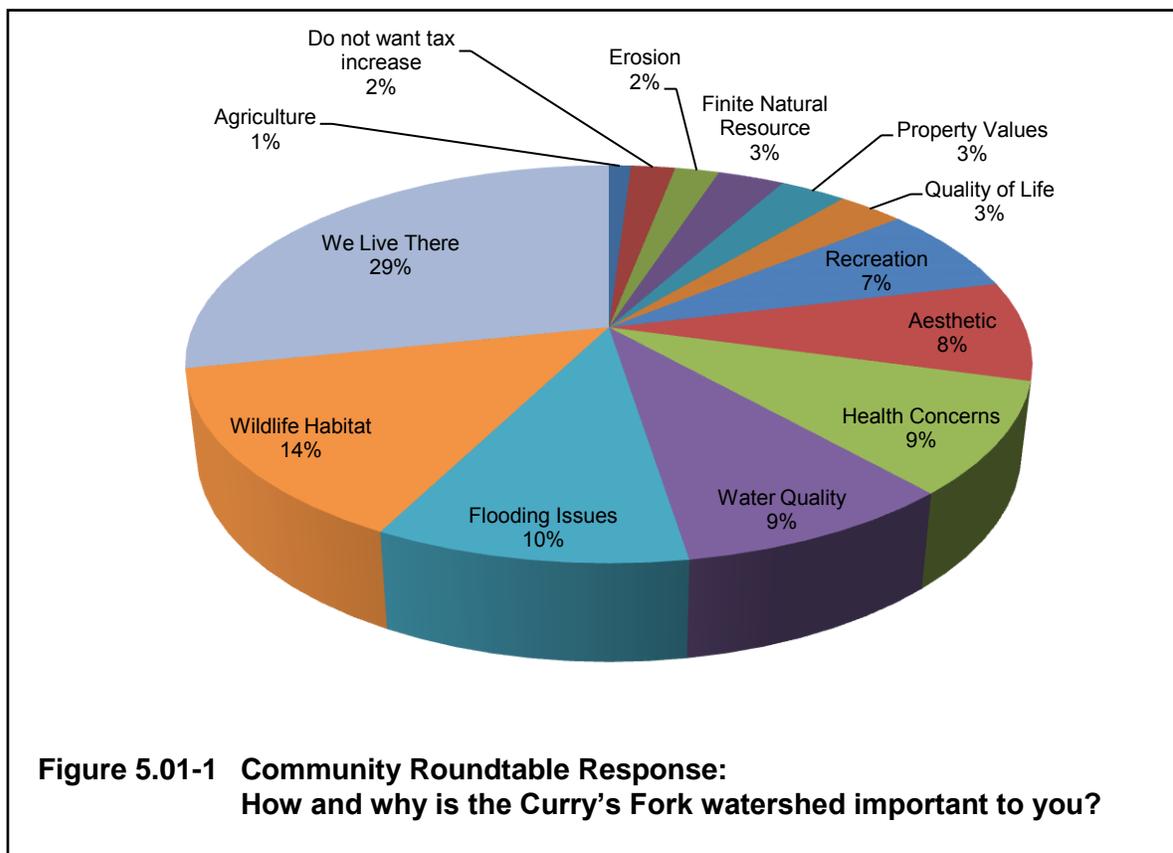
### 5.01 GOALS SELECTION PROCESS

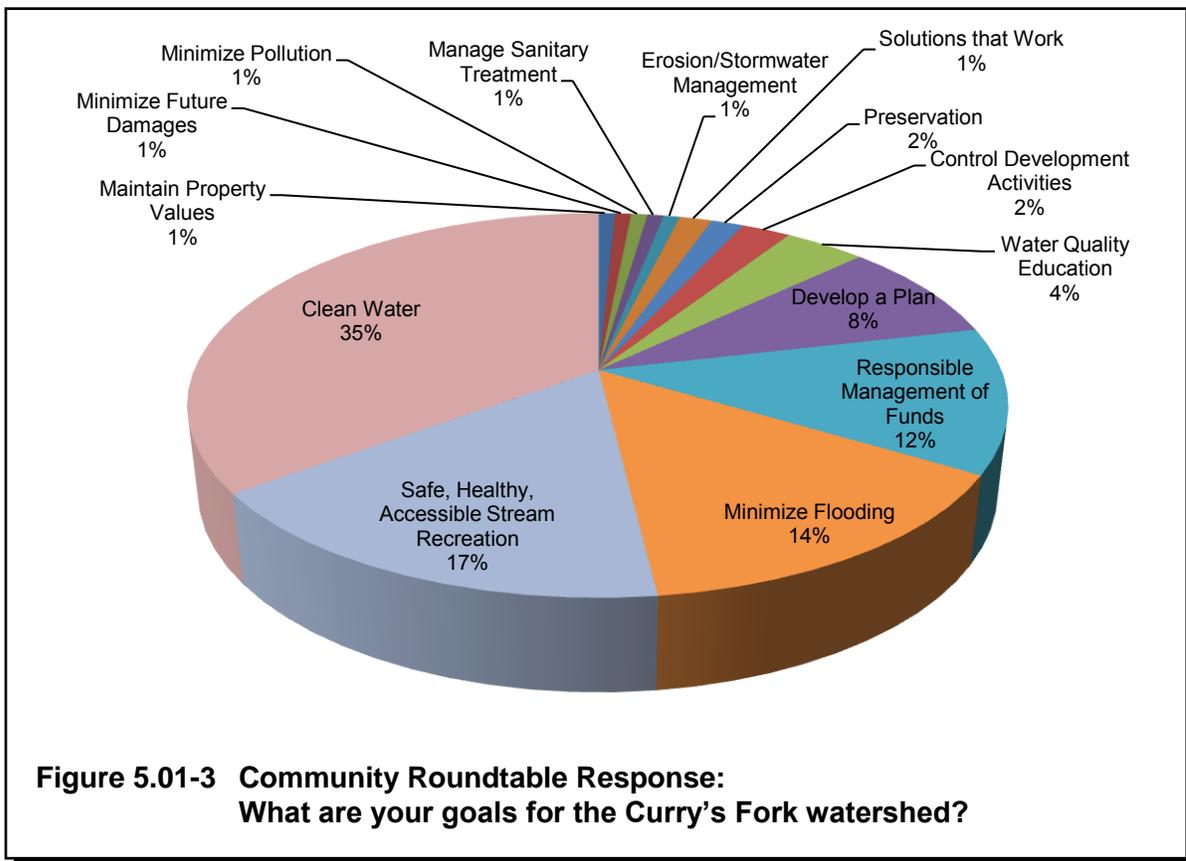
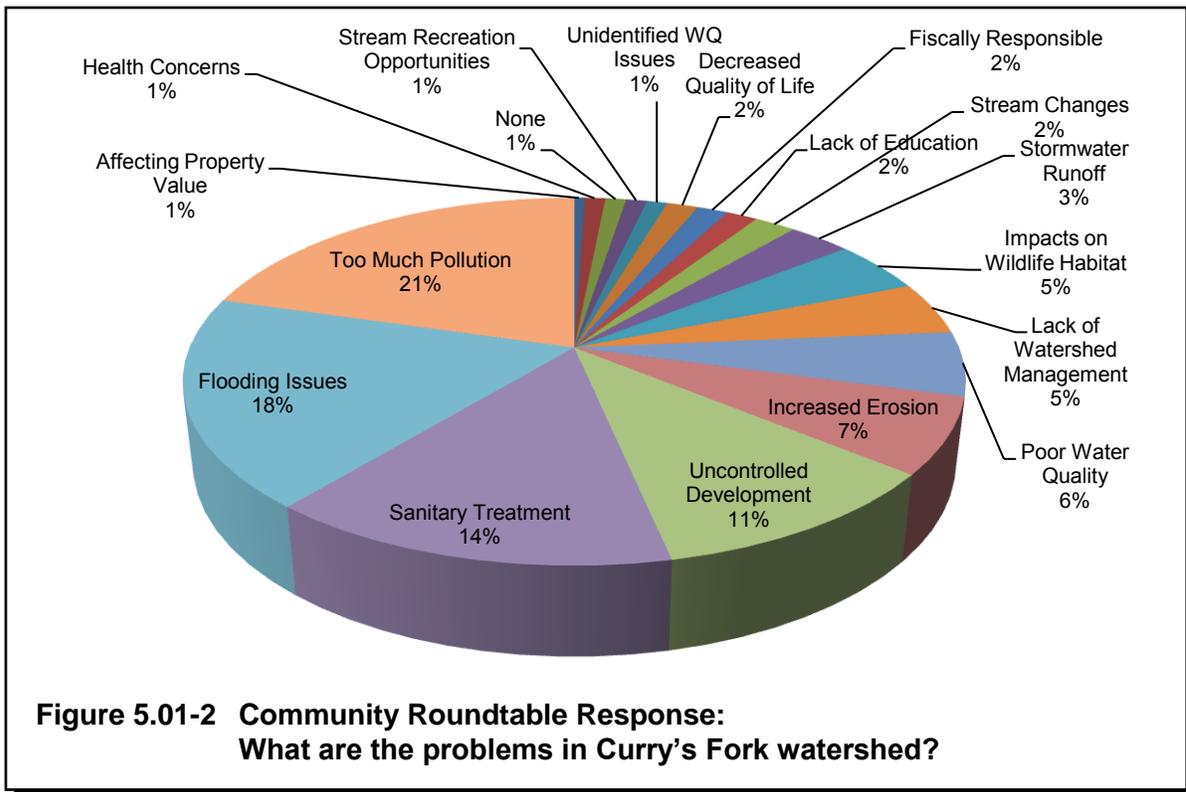
Watershed goals were developed based on input, expertise, and recommendations from the Curry's Fork Technical Committee (TC) and the watershed community.

A Watershed Roundtable meeting was held on September 24, 2009, to allow watershed residents to express their concerns for the watershed and to help identify the goals for their watershed. Over 90 members of the community attended the Roundtable to express their opinions and answer three important questions, which were:

1. How and why is the Curry's Fork watershed important to you?
2. What are the problems in the Curry's Fork watershed?
3. What are your goals for the Curry's Fork watershed?

The community feedback was summarized and presented to the TC. Figures 5.01-1, 5.01-2, and 5.01-3 show the responses from the watershed community to the three above questions, respectively. The TC used the results of the Roundtable and developed four goals for the Curry's Fork watershed.





**5.02 WATERSHED GOALS**

The four primary goals for Curry's Fork Watershed unanimously agreed upon by TC members are the following:

1. Improve and protect water quality for our generation and future generations.
2. Promote a safe, healthy, and accessible watershed for recreation and wildlife.
3. Utilize programs and practices to decrease potential flooding impacts.
4. Develop and implement a cost-effective watershed plan that economically utilizes funds.

Water quality goals of the WP include reducing pollutant loads to meet WQS and water quality targets. Tables 5.02-1 and 5.02-2 show reductions required for fecal coliform and total nitrogen to meet WQS or water quality targets. Refer to Section 4.14 for sediment loads in Curry's Fork. Average loads for fecal coliform and total nitrogen for each sampling site were calculated using the average measured flow and average pollutant concentration. Target loads to meet WQS and water quality targets were calculated using the average measured flow, a fecal coliform concentration of 400 colonies/100 ml and a nutrient concentration of 1.4 mg/l. Because the lower detection limit used on the phosphorus samples was higher than the draft target ranges, discussed in further detail in Section 4.01.B., phosphorus loads and associated load reductions were not calculated. Showing a required load reduction based on phosphorus results would be misleading and show a significant reduction required for all sampling sites.

Sampling Site	Load at WQS (Colonies/day)	Average Measured Load (Colonies/day)	Load Reduction to Meet WQS (Colonies/day)	Percent Reduction Required to Meet WQS
NC2	2.6E+10	3.7E+10	1.2E+10	31%
NC1b	1.2E+11	8.6E+11	7.4E+11	86%
NC1a	6.7E+11	1.0E+13	9.8E+12	94%
NC1	3.8E+11	6.9E+12	6.5E+12	95%
SC2	7.9E+10	8.5E+11	7.7E+11	91%
SC1	2.5E+11	6.7E+12	6.5E+12	96%
AR1a	7.8E+10	1.0E+12	9.5E+11	92%
AR1	1.7E+11	2.0E+12	1.8E+12	91%
CF3	5.0E+11	1.1E+13	1.1E+13	96%
CF2	9.4E+11	1.6E+13	1.5E+13	94%
CF1	1.2E+12	1.9E+13	1.8E+13	94%

**Table 5.02-1 Fecal Coliform Loads and Load Reduction Targets**

Sampling Site	Load at WQS (lbs/day)	Average Measured Load (lbs/day)	Load Reduction to Meet Water Quality Target (lbs/day)	Percent Reduction Required to Meet Water Quality Target
NC2	19.8	19.1	Meets Water Quality Target, No Reduction Required	
NC1b	95.5	170.0	74.6	44%
NC1a	513.6	1,596.8	1,083.2	68%
NC1	291.8	673.0	381.2	57%
SC2	61.1	45.7	Meets Water Quality Target, No Reduction Required	
SC1	191.7	148.2	Meets Water Quality Target, No Reduction Required	
AR1a	60.6	33.7	Meets Water Quality Target, No Reduction Required	
AR1a	83.1	130.1	47.0	36%
CF3	384.4	532.2	147.8	28%
CF2	816.1	27,682.0	26,865.9	97%
CF1	893.4	989.8	96.4	10%

**Table 5.02-2 Nitrogen Loads and Load Reduction Targets**

The goals of the Watershed Plan (WP) will be met through the implementation of best management practices (BMPs) and were selected based on the decision-making process described in Subsection 1.04.

**5.03 BEST MANAGEMENT PRACTICES**

The United States Environmental Protection Agency (USEPA) defines BMPs in the Code of Federal Regulations (CFR), 40 CFR 122.2 as:

“...schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of “waters of the United States”. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.”

BMPs are the projects and practices implemented within the watershed to meet the goals and objectives of the watershed. The selection of appropriate BMPs (or solutions) for the watershed is a critical portion of the WP.

BMPs were selected by the community and TC to address the identified pollutants of concern and pollutant sources in the watershed after a thorough inventory of existing programs. Refer to Subsection 1.04 for a description of the decision-making process.

Effective implementation of the WP requires that the information learned about the watershed be translated into appropriate BMPs and solutions. The following information in this section provides an overview for how BMPs and solutions were selected based on data and activities in the watershed.

A. Entire Watershed

Curry's Fork has characteristics that are generally found across the watershed:

1. Educated and affluent population.
2. Community interest in environmental issues and desire to improve the environment.
3. Significant portion of the area (84 percent) served by on-site wastewater systems such as septic tanks.
4. Rapid growth in the last 40 years with projections for continued growth in the future.
5. Environmentally progressive local government.

Although each subwatershed in Curry's Fork is unique, there are common issues found in most of the subwatersheds such as:

1. Exceedances in WQS for bacteria.
2. Poor biological and physical habitat assessments (with the exception of a few locations).
3. Insufficient riparian buffer and/or encroached floodplains in numerous locations within the watershed.
4. Erosion and sediment production in varying levels of severity.
5. Incidents of high nutrient levels.

Many BMPs at the watershed scale will address both impairments in Curry's Fork (PCR and WAH), while some will need to be focused on one more than the other.

Education and outreach to the general public and specific stakeholders about the watershed and the WP, including recommendations and effectiveness over time, will be essential to effectively implement solutions and achieve improvements in water quality. When considering which BMPs to apply throughout the watershed, the educated population and well-regarded school system make education-based BMPs particularly attractive. The high percentage of college-educated adults indicates the community's receptiveness to education, but information from the TC indicated the majority of adults had little to no environmental education or awareness of proper practices to prevent pollution or improve water quality. Addressing the entire population, including residents and leaders, will promote better environmental practices that can be taught to other members of the community.

1. PCR

With such a significant portion of the watershed relying on on-site wastewater systems, making certain those systems are properly installed and maintained, as well as identifying systems that are failing (so they can be addressed), will likely promote lower bacteria levels in the watershed. As wastewater needs increase in response to further growth in the watershed, appropriate planning will be essential to provide an efficient wastewater system that meets the needs of the community and the environment at a bearable cost.

2. WAH

From a watershed perspective, the primary drivers of WAH impairment are related to poor or insufficient physical/biological habit and higher nutrient concentrations. Habitat issues have been linked to stream channel modification, encroachment within the floodplain, and loss of riparian buffer as well as increased impervious area that increases the speed and volume of stormwater reaching the streams. BMPs can help to protect and/or restore the floodplain and

riparian buffer will help establish more natural systems that can better support life and provide more stable streams. Along the same lines, practices that slow the speed and volume of stormwater reaching the waterways will allow for the banks to stabilize and reduce the amount of sediment and other nonpoint source pollutants from reaching the streams.

B. North Curry's Fork

North Curry's Fork has the largest amount and the highest percentage of developed land in Curry's Fork. Two of the areas identified for potentially failing septic tanks are located in North Curry's Fork. The watershed has the two WWTPs and two permitted residential treatment systems. Pollutant levels generally increased from the upstream to the downstream portions of the subwatershed. Stream bank erosion was high except for the upper reaches that contain only minor headwaters and two lakes. A significant portion of the stream is located between I-71, which serves to protect it from many negative influences. The segments within I-71 show improved habitat than the downstream section (outside of I-71). Although biological surveys were not completed within the area between I-71, it is suspected they would be improved as well. Overall, the subwatershed was given a Medium Priority Restoration for bacteria and a high nutrients priority in the lower section.

1. PCR

The more probable pollutant sources of bacteria in North Curry's Fork were failing on-site wastewater treatment systems, stormwater issues, the Buckner PTP, and the La Grange WWTP. The La Grange WWTP has recently been upgraded and is in the process of a second upgrade. A review of its discharge information shows it contributes a very low amount of bacteria to the stream. The Buckner PTP recently improved the quality of its discharges but has struggled in the past to meet permit requirements. It has been scheduled for decommissioning in the next few years as part of OCEA's consent judgment.

Because the watershed contains two of the areas specifically identified for potentially failing septic systems, targeted efforts to address this issue may be warranted.

2. WAH

The high degree of development in this watershed increases the volume and velocity of stormwater entering streams. Encouraging retrofit or development guidelines to mitigate these effects would improve stream habitat and reduce bank erosion in the subwatershed. Restoration projects particularly outside the protected area of I-71 could have significant benefits for reestablishing healthy biological and physical habitats.

C. South Curry's Fork

South Curry's Fork is more developed in the upper watershed, and particularly along the tributaries. The subwatershed has four small PTPs; one permitted residential system and areas identified with potentially failing septic systems. The streams tend to be channelized with little to no riparian vegetation, especially in the upper reaches of the subwatershed. This high degree of channelization combined with a lack of riparian vegetation contributes to high amounts of stream bank erosion and low DO, which further diminishes the ability to support healthy habitats. There are small nontraditional animal operations in the watershed that were often near the creek and/or its tributaries. Overall, PCR impairment was of less concern than WAH impairment (the watershed was given a Medium Restoration

Priority). BMPs selected specifically for South Curry's Fork should complement but not repeat watershed-wide BMPs.

1. PCR

The more probable pollutant sources of bacteria in the South Curry's Fork were PTPs. The majority of them are slated to be decommissioned in the next few years as part of OCEA's Consent Judgment. Working with OCEA to prioritize the schedule based on the plants' performance and maintenance costs addresses these potential bacteria sources in an effective manner. BMPs focused on making certain these planned plant eliminations occur in the near future will help address bacteria levels and other pollutant levels. BMPs associated with on-site wastewater systems would be better applied on a larger watershed wide scale than focused on just the a subwatershed because of economy of scale and the need for fair enforcement across the entire County. Because livestock operations tend to be smaller and of a nontraditional nature, proprietors may not be as familiar with or exposed to BMPs as traditional and larger operations. Targeting this group may address an overlooked segment of the population.

2. WAH

The more probable sources of WAH impairment were primarily associated with lack of riparian vegetation and channelization with contributions from potentially failing on-site wastewater systems. The subwatershed was given the highest priority for biological and physical habitat restoration. BMPs to address WAH should focus on improving and protecting the riparian zone as well as restoration efforts to address the effects of channelization. Examples might include planting streamside vegetation or other habitat improvements, restoring natural channel sinuosity, or reestablishing floodplains.

D. Asher's Run

Asher's Run is the smallest of the four watersheds. It is the only subwatershed without any KPDES facilities. The majority of development in the watershed is in the upper reaches and on tributaries, which translates to a smaller riparian buffer in those areas. Smaller low intensity animal operations have been established in the upper segment. Bacteria levels decreased from upstream to downstream, which led to the upper reaches having a High Priority Restoration designation and the lower reaches having a High Priority Protection designation. Nutrients and physicochemical levels were not a concern. The downstream area near the confluence was noted for particularly high bank erosion. Otherwise the geomorphology of the subwatershed was a low priority.

1. PCR

More probable sources of bacteria pollution in the subwatershed were low intensity animal operations and failing on-site wastewater systems. Wildlife was also listed as a more probable source but would be difficult, if not impossible, to control. BMPs should be targeted to these sources and in the upper portion of the subwatershed where bacteria loading was more pronounced.

2. WAH

Selected restoration projects could be beneficial to the subwatershed. The geomorphological study identified several locations that were good candidates for stream restoration projects. In

addition, the fact most of the agricultural activity is low-intensity implies that space would be available in unused or nonmaximized agricultural lands for BMPs.

E. Curry's Fork (Main Stem)

Curry's Fork (main stem) is the largest in area of all the subwatersheds and has the highest percentage of cultivated crops in the watershed. There are three KPDES permitted facilities in Curry's Fork: the Country Village STP and two permitted residential systems. There are areas of suspected failing septic tanks and the homes tend to be on larger lots (five acres and larger). The stream corridor is still largely undeveloped but is noted for very high banks with channel straightening. Macroinvertebrate, habitat, and fish assessments yielded highest ratings in Curry's Fork. Because these ratings and the potentially prohibitive cost of remediation activities due to the stream size, Curry's Fork was identified as having higher protection potential. During high flows, Floyd's Fork can back-up into Curry's Fork near the confluence.

1. PCR

The Curry's Fork (main stem) was designated as a High Priority Protection Area for bacteria. The most probable pollution sources were upstream contributions, the permitted residential system, and the Country Village STP, which is slated for eventual decommissioning. Because the subwatershed was assigned a protection designation, BMPs should be focused on maintaining the attributes of the watershed that promote water quality such as the low amount of development along the stream corridor. Education on proper practices and opportunities for conservation would promote good stewardship of this resource and allow water quality to continue to improve.

2. WAH

Opportunities for geomorphological improvements or restoration are available throughout the subwatershed but may be cost-prohibitive outside the upper portion. Working with the agricultural community or other streamside property owners to educate them on protecting and preserving the riparian corridor will help keep land use changes from impacting water quality.

BMPs were identified for individual subwatersheds and for the Curry's Fork watershed as a whole. Potential BMPs were compiled into a single list and were prioritized for implementation purposes into Tier 1 BMPs, Tier 2 BMPs, and Tier 3 BMPs. The tiers represent the priority the solutions were given by the Internal Project Team based on feasibility of implementation and the impact the solution can potentially have on addressing pollutants of concern. Tier 1 BMPs represent the highest priority and Tier 2 and 3 represent lower priorities. Tables 5.03-1, 5.03-2, and 5.03-3 provide information on Tier 1, Tier 2, and Tier 3 BMPs and solutions, respectively, which were necessary to implement in order to achieve recovery of the Curry's Fork watershed. Tables 5.03-1 through 5.03-3 also identify other items vital to the successful implementation of identified solutions. These items include:

- a. Impairment(s) addressed.
- b. Parties responsible for implementing the solution.
- c. Target audience or target area.
- d. Feasibility of implementation.

- e. Cost of implementation.
- f. Expected pollutant load reduction.
- g. Pollutant load reduction per dollar spent.
- h. Potential funding sources or mechanisms.
- i. Technical resources.

A large list of solutions was compiled for the Curry's Fork WP and not all were selected as Tier 1 through Tier 3 solutions. Additional solutions compiled for the WP that were not designated Tier 1 through Tier 3 are shown in Appendix F. The appendix of additional BMPs may be an important resource for future watershed managers charged with evaluating and monitoring WP implementation.

Tables 5.03-4, 5.03-5, and 5.03-6 provides details on action items and milestones associated with implementing Tier 1, Tier 2, and Tier 3 BMPs, respectively. Milestones are critical to creating and tracking progress of a WP. Milestones are planned to implement BMPs and associated action items within certain time categories depending on the difficulty and expected time it takes to implement a BMP. Milestones for this WP were divided into three categories:

- 1. Short-Term Milestones (less than 3 years).
- 2. Mid-Term Milestones (between 3 and 10 years).
- 3. Long-Term Milestones (greater than 10 years).

By breaking down action items into milestones, progress can be tracked easily and expectations of responsible parties will be clearly defined throughout the life of the project.

TABLE 5.03-1--TIER 1 BEST MANAGEMENT PRACTICES

BMP No.	Best Management Practice(s) and Description	Feasibility	Impairment Addressed	Responsible Party/Parties	Targeted Audience/Area	Cost	Expected Pollutant Load Reduction	Pollutant Load Reduction/Dollar	Funding Source(s) and Mechanism(s)	Technical Assistance Needed
<b>ENTIRE WATERSHED TIER 1 BEST MANAGEMENT PRACTICES</b>										
1	Conduct a septic system survey program to identify failing systems for replacement, repair, or elimination.	High	PCR	OCHD; OCEA; OCFC; LUC	Nonsewered Areas with an emphasis on identified pathogen priority areas (Refer to Figure 4.07-1)	\$200 per system	Dependent Upon Action Taken	Dependent Upon Action Taken	319 Grant; OCEA; OCFC General Funds; OCHD	On-site System Inspector; Kentucky On-Site Water Authority (KOWA); OCHD; Certified Laboratory; Sampling Personnel
2	Develop and implement a marketing program for the WP.	High	PCR and WAH	OCFC	Watershed Wide	\$6,000 to develop program. Additional costs vary based on selected advertising and marketing venues	Not Calculable	Not Calculable	319 Grant; SRF; OCFC General Fund	KDOW; OCEA; Consultant(s)
3	Develop and implement a monitoring plan to monitor solutions implemented as part of the WP.	High	PCR and WAH	OCFC	Watershed Wide	\$5,000 to develop program \$25/parameter tested \$650/sampling trip	Not Calculable	Not Calculable	319 Grant; SRF; OCFC General Fund	KDOW; OCEA; Consultant(s)
4	Develop and implement Curry's Fork watershed education and awareness program, including information about the watershed, WP, WP recommendations, project activities, and community activities.	High	PCR	OCFC; Extension Office; Conservation District; NRCS; Salt River Watershed Watch; OCEA; LUC; City of La Grange; OCEA	Property Owners; Extension Office; Conservation District; OCFC; Oldham County Board of Education; LaGrange and Oldham County Stormwater Programs; LUC; OCWD; OCHD, NRCS	\$2,000 per event	Not Calculable	Not Calculable	SRF; 319 Grant; OCFC; Extension Office; Conservation District; NRCS; Salt River Watershed Watch; OCEA; LUC; City of La Grange;	OCFC; Extension Office; Conservation District; NRCS; SRWW; Stormwater District(s); OCEA; LUC; City of La Grange; KDOW
5	Ensure recommendations in the WP are formally communicated to USACE, KDOW, and FWS and encourage these agencies to use recommendations from WP for mitigation projects.	High	WAH	OCFC	KDOW; USGS; FWS; Permit Applicants	\$400	Not Calculable	Not Calculable	SRF; 319 Grant; Stormwater fees	USACE; KDOW; FWS
6	Establish one "Bad Septic Area Map" of failing septic systems for all county planning purposes.	High	PCR	OCHD; OCEA; OCFC; LUC	Watershed Wide	\$1,000	Not Calculable	Not Calculable	SRF; 319 Grant; NRCS; OCFC; OCEA	NRCS; County Extension Office; OCHD; OCEA
7	Evaluate/create an On-site Wastewater Authority (OWA) to provide oversight on on-site wastewater management, operation, and maintenance.	High	PCR	OCEA; OCHD; OCFC; LUC; OCPDS	nonsewered Areas	Dependent Upon Action Taken	Not Calculable	Variable	SRF; 319 Grant; Utility Fees; Stormwater Fees	OCEA; KDOW; Licensed Engineer; KOWA
8	Expand water quality enhancing landscaping practices, such as rain barrels, rain gardens, pervious pavers, etc.	High	WAH	OCEA; Extension Office (Master Gardeners); La Grange; OCPDS	Property Owners; Developers; Elected Officials; Neighborhood Associations	Dependent Upon Action Taken	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; Stormwater Fees; Property Owners	OCFC; OCEA; KDOW; SD1; MSD
9	Engage a Watershed Coordinator to be a link between implementation project responsible parties, funding agencies, watershed residents, OCFC, and technical resources.	High	PCR and WAH	OCFC	Watershed Wide	Part time: \$15,000 per year Full time: \$45,000 per year	Not Calculable	Not Calculable	319 Grant; SRF; OCFC General Fund; Extension Office; NRCS; Conservation District	KDOW; OCEA; Consultant(s)
10	Implement education program for elected officials and Board members on the results and findings of the WP.	High	WAH	OCFC; OCEA; La Grange	Elected Officials; Policy Makers; Board Members; Community Leaders	\$2,000 per seminar	Not Calculable	Not Calculable	319 Grant; Stormwater fees; SRF	OCFC; NRCS; Extension Office; Conservation District(s); Consultant(s)
11	Monitor streams in the watershed to estimate human vs. animal sources of bacterial contamination to support future decision making by OCFC.	High	PCR	OCEA; OCFC	Watershed Wide; Elected Officials	\$250 / sample test \$650 / trip	Not Calculable	Not Calculable	SRF; 319 Grant; Stormwater Fees; Utility Fees	USGS; KDOW; Consultant(s); Certified Laboratory; Sampling personnel
12	Review local ordinances and regulations to identify and resolve impediments to low-impact development and green infrastructure.	High	WAH	OCFC; OCEA; OCPDS; La Grange	Watershed Wide	\$11,000	Dependent Upon Action Taken	Dependent Upon Action Taken	Stormwater Fees; Developer Fees; OCFC General Funds	KDOW; Licensed Engineer; Licensed Attorney
13	Coordinate wastewater expansions in conjunction with planned water line expansions.	Medium	PCR	OCEA; LUC; OCWD; OCFC	Nonsewered Areas; planned water expansion areas	\$2,000/year	Not Calculable	Not Calculable	Stormwater fees; Utility fees; SRF	OCWD; LUC; OCEA; KDOW
14	Educate and provide training to planners, designers, and reviewers about implementing stormwater retrofits in currently developed areas.	Medium	WAH	OCFC; OCEA; OCPDS; La Grange	Designers; Planners; Reviewers; High percentage impervious areas (Refer to Figure 2.02-6 and Table 2.02-5)	\$2,000 per seminar	Not Calculable	Not Calculable	Developer Fees; Stormwater Fees; SRF	Licensed Engineer; KDOW; SD1; MSD
15	Educate and provide training to planners, designers, and reviewers of developments about low-impact design/green infrastructure and current and pending stormwater permit requirements.	Medium	WAH	OCFC; OCEA; OCPDS; La Grange	Planners; Designers; Reviewers; Areas targeted for development (Oldham Reserve; Upper North Curry's above Crystal Lake)	\$2,000 per seminar	Not Calculable	Not Calculable	Developer Fees; Stormwater SRF	Licensed Engineer; KDOW; SD1; MSD
16	Ensure communication, guidelines and replanning/approval for any wastewater system improvements, modifications, or upgrades on a watershed scale with a focus on the priority pathogen protection and restoration areas.	Medium	PCR	OCEA; LUC; OCFC	Watershed Wide	\$1,500/year	Not Calculable	Not Calculable	Sewer fees; OCFC sewer funds; SRF	OCEA; LUC; KDOW; Licensed Engineer
<b>NORTH CURRY'S FORK TIER 1 BEST MANAGEMENT PRACTICES</b>										
17	Eliminate Buckner Treatment Plant in the next 2 years.	High	PCR	OCEA; OCFC	Buckner STP Service Area	\$1,500,000	4.56x10 <sup>8</sup> colonies /day	304 colonies / day / dollar	SRF; Sewer Rates	OCEA; KDOW; Licensed Engineer; LUC; La Grange City
<b>SOUTH CURRY'S FORK TIER 1 BEST MANAGEMENT PRACTICES</b>										
18	Complete a stream restoration project on the downstream section of the main stem of South Curry's Fork near the confluence with North Curry's Fork.	Medium	WAH	OCFC; NRCS; FWS; OCPDS	Downstream section of South Curry's Fork near confluence with North Curry's Fork	\$225 per foot for construction* \$25 per foot for design *May increase depending on additional earthmoving	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; 319 Grant; FWS; NRCS; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS; KDOW
19	Complete a stream restoration project on the main stem reach adjacent to Centerfield Elementary.	High	WAH	OCFC; NRCS; FWS; OCPDS	Main stem reach adjacent to Centerfield Elementary	\$225 per foot for construction \$25 per foot for design	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; 319 Grant; FWS; NRCS; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS; KDOW
20	Eliminate Green Valley Treatment Plant in the next 2 years.	High	PCR	OCEA; OCFC; LUC	Green Valley STP Service Area	\$510,000	9.8x10 <sup>8</sup> colonies / day	19 colonies / day / dollar	SRF; Utility Rates	OCEA; LUC; KDOW; Licensed Engineer
21	Plant streamside vegetation and other streamside habitat improvement projects in the upstream section of the main stem.	High	WAH	OCFC; Property Owners; Future Watershed Group; Oldham County Greenways; OCPDS	Upstream South Curry's Fork main stem areas that are lacking riparian vegetation (Refer to Figure 2.02-2)	\$10 per linear foot of stream	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; 319 Grant; Arbor Day Foundation; Stormwater Fees; Neighborhood Associations; Future Watershed Group; KDOW; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office
<b>ASHER'S RUN TIER 1 BEST MANAGEMENT PRACTICES</b>										
22	Promote on-site wastewater system maintenance, operation and management education, targeting systems that are in low-lying areas and in proximity to waterways in the upper portion of the watershed.	High	PCR	OCHD; Extension Office; KDOW; OCPDS	Property Owners and Associations	\$450 per year \$2,000 per mailing	Not Calculable	Not Calculable	SRF; NRCS; County Extension Office; 319 Grant	OCHD; Licensed on-site Wastewater System installers; KOWA
23	Replace or repair aging/failing on-site wastewater systems targeting systems that are in low-lying areas and in proximity to waterways in the upper portion of the watershed.	High	PCR	OCHD; OCEA; Property Owners	Property Owners	\$4,000 per system	3.79x10 <sup>8</sup> colonies / day / system	94,750 colonies / day / dollar	SRF; 319 Grant; Property Owners	OCHD; Licensed on-site Wastewater System installers; KOWA
24	Educate owners of nontraditional animals/livestock on appropriate BMPs for pathogen reduction in the upper portion of the watershed.	Medium	PCR	Extension Office; NRCS; Producer Organization(s); Conservation District	Nontraditional animal/livestock Producers	\$350 per livestock owner	Not Calculable	Not Calculable	SRF; NRCS; Extension Office; 319 Grant; Conservation District	NRCS; Extension Office; Conservation District
<b>CURRY'S FORK MAIN STEM TIER 1 BEST MANAGEMENT PRACTICES</b>										
25	Complete a stream restoration project in the downstream portion of Curry's Fork main stem near the confluence with Floyds Fork. Cost of project may significantly increase due to amount of earthmoving involved unless a demand for the soil can be identified.	Low	WAH	OCFC; NRCS; FWS; OCPDS	Downstream section of Curry's Fork main stem near the confluence of Floyds Fork	\$225 per foot for construction* \$25 per foot for design * May increase depending on additional earthmoving costs	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; 319 Grant; FWS; NRCS; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS; KDOW

TABLE 5.03-2--TIER 2 BEST MANAGEMENT PRACTICES

BMP No.	Best Management Practice(s) and Description	Feasibility	Impairment Addressed	Responsible Party/Parties	Targeted Audience/Area	Cost	Expected Pollutant Load Reduction	Pollutant Load Reduction/Dollar	Funding Source(s) and Mechanism(s)	Technical Assistance Needed
<b>ENTIRE WATERSHED TIER 2 BEST MANAGEMENT PRACTICES</b>										
26	Engage community with watershed issues by providing watershed educational and recreational opportunities, including stream clean-ups, water testing, and storm sewer stenciling.	High	WAH	OCFC; Board of Education; Restoration project property owners; Solid Waste Dept.; Oldham County Greenways	Watershed wide	\$1,500 per opportunity	Not Calculable	Not Calculable	319 Grant; SRF; Stormwater Fees; Solid Waste Management; SRWW	OCFC; NRCS; Extension Office; Conservation District; Solid Waste Management; SRWW
27	Improve stream connection to floodplain. Evaluate using National Floodplain Managers Association's "No Adverse Impact" (NAI) Program to maintain or reduce current peak flow levels, thus minimizing any increases in flooding of property.	Medium	WAH	OCFC; OCEA; La Grange; OCPDS	Areas in or adjacent to Floodplains	\$500 to review program applicability to WP \$4,000 to conduct a NAI seminar in Oldham County	Dependent Upon Action Taken	Dependent Upon Action Taken	319 Grant; USDA; NRCS; SRF	FEMA; Association of State Floodplain Managers; Licensed Engineer
<b>NORTH CURRY'S FORK TIER 2 BEST MANAGEMENT PRACTICES</b>										
28	Promote on-site wastewater system maintenance, operation and management education, targeting systems that are in low-lying areas and in proximity to waterways in the upper portion of the watershed.	High	PCR	OCHD; Extension Office; OCFC; OCPDS	Property Owners and Associations	\$5,000/year	Not Calculable	Not Calculable	NRCS; County Extension Office; 319 Grant; SRF	OCHD; Licensed on-site Wastewater System installer; KOWA
29	Use enhanced development guidelines in undeveloped areas and retrofits in developed areas that promote the incorporation of low-impact design elements and water quality BMPs into the design and construction.	High	WAH	OCFC; OCEA; OCPDS; La Grange	Developers; Land-owners; Areas targeted for development; High percent impervious areas; Identified flood prone areas on Moody Lane and Lakewood Valley subdivision	\$7,000	Dependent Upon Action Taken	Dependent Upon Action Taken	Stormwater Fees; OCFC General Funds	Licensed Engineer; KDOW; SD1; MSD
30	Complete a stream restoration project on the downstream section after diverging from I-71, which was identified as having very high restoration potential to reduce high bank erosion rates.	Low	WAH	OCFC; NRCS; FWS; OCPDS	Downstream section of North Curry's Fork	\$225 per foot for construction \$25 per foot for design	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; 319 Grant; FWS; NRCS; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS; KDOW
<b>SOUTH CURRY'S FORK TIER 2 BEST MANAGEMENT PRACTICES</b>										
31	Eliminate Lakewood Treatment Plant in the next 11 to 20 years.	High	PCR	OCEA; OCFC	Lakewood STP Service Area	\$1,090,000	5.2x10 <sup>6</sup> colonies /day	5 colonies /day /dollar	SRF; Utility Rates	OCEA; KDOW; Licensed Engineer
32	Eliminate Lockwood Treatment Plant in the next 11 to 20 years.	High	PCR	OCEA; OCFC	Lockwood STP Service Area	\$342,000	3.5x10 <sup>7</sup> colonies /day	102 colonies /day /dollar	SRF; Utility Rates	OCEA; KDOW; Licensed Engineer
<b>ASHER'S RUN TIER 2 BEST MANAGEMENT PRACTICES</b>										
33	Increase/require the number of inspections of on-site wastewater systems. Possible triggers for inspection might be when property is bought/sold, or when utilities change names in the upper portion of the watershed.	High	PCR	OCHD; OCEA; LG&E; OCFC; OCPDS	Property Owners with on-site systems; Realtors; on-site Wastewater System Inspectors; Areas in the upper portion of Ashers Run	\$300 per inspection	Not Calculable	Not Calculable	NRCS; County Extension Office; 319 Grant; SRF	OCHD; Licensed on-site Wastewater System installer
34	Educate owners of livestock animals on appropriate BMPs for pathogen reduction in the upper portion of the watershed.	Medium	PCR	Extension Office; NRCS; Producer Organization(s); Conservation District; AWQA	Livestock Producers	\$350 per livestock owner	Not Calculable	Not Calculable	NRCS; County Extension Office; 319 Grant; Conservation District; SRF	NRCS; Extension Office; Conservation District; AWQA
35	Encourage producers with marginal pasture lands to put their land into conservation easements, wildlife habitats, and land stewardships.	Medium	WAH	OCFC; NRCS; Extension Office; Conservation District; FSA	Farm-owner;	\$10,000 per acre	Over 70 percent nutrient and TSS reduction per acre converted	Nitrogen: 0.6 mg/yr/dollar Phos.: 0.13 mg/yr/dollar TSS: 175 mg/yr/dollar	OCFC; NRCS; Extension Office; Conservation District; 319 Grant; SRF	OCFC; NRCS; Extension Office; Conservation District(s); FSA
36	Expand use of riparian buffers/filters strips around creek including enhancing 'no-disturb' ordinance to require creating designed buffer/filter strips instead of just open space in the lower portion of the watershed.	Medium	PCR	OCFC; NRCS; Extension Office; Conservation District; OCPDS	Land-owners; Developers; Areas in the lower portion of Ashers Run	\$10 per linear foot of stream	Typically over 50 percent sediment and nutrient removal	Nitrogen: 80 mg/yr/dollar Phos.: 30 mg/yr/dollar TSS: 90 lbs/yr/dollar	OCFC; Developer Fees; NRCS; USDA; Extension Office; Conservation District; SRF; 319 Grant	OCFC; NRCS; Extension Office; Conservation District
37	Implement Agricultural BMPs in the upper portion of the watershed.	Low	PCR	Extension Office; NRCS; Producer Organization(s); AQWA; Conservation District	Farm-owners and Livestock Producers	Site Specific	Dependent Upon Action Taken	Dependent Upon Action Taken	NRCS; County Extension Office; 319 Grant; Conservation District; SRF	NRCS; Extension Office; Conservation District(s); AWQA
<b>CURRY'S FORK MAIN STEM TIER 2 BEST MANAGEMENT PRACTICES</b>										
38	Educate owners of livestock animals on appropriate BMPs for pathogen reduction in the upper portion of the watershed.	Medium	PCR	Extension Office; NRCS; Producer Organization(s); Conservation District; AWQA	Livestock Producers	\$350 per livestock owner	Not Calculable	Not Calculable	NRCS; County Extension Office; 319 Grant; Conservation District; SRF	NRCS; Extension Office; Conservation District; AWQA
39	Expand use of riparian buffers/filters strips around creek including enhancing "no-disturb" ordinance to require creating designed buffer/filter strips instead of just open space in the lower portion of the watershed.	Medium	PCR	OCFC; NRCS; Extension Office; Conservation District; OCPDS	Land-owners; Developers; Areas in the lower portion of Ashers Run	\$10 per linear foot of stream	Typically over 50 percent sediment and nutrient removal	Nitrogen: 80 mg/yr/dollar Phos.: 30 mg/yr/dollar TSS: 90 lbs/yr/dollar	OCFC; Developer Fees; NRCS; USDA; Extension Office; Conservation District; SRF; 319 Grant	OCFC; NRCS; Extension Office; Conservation District
40	Eliminate Country Village Treatment Plant in the next 11 to 20 years.	Medium	PCR	OCEA; OCFC	Country Village STP Service Area	\$900,000	5.6x10 <sup>7</sup> colonies / day	63 colonies / day / dollar	SRF; Utility Rates	OCEA; KDOW; Licensed Engineer
41	Encourage producers with marginal pasture lands to put their land into conservation easements, wildlife habitats, and land stewardships.	Medium	WAH	OCFC; NRCS; Extension Office; Conservation District; FSA	Farm-owner;	\$10,000 per acre	Over 70 percent nutrient and TSS reduction per acre converted	Nitrogen: 0.6 mg/yr/dollar Phos.: 0.13 mg/yr/dollar TSS: 175 mg/yr/dollar	OCFC; NRCS; Extension Office; Conservation District; 319 Grant; SRF	OCFC; NRCS; Extension Office; Conservation District(s); FSA
42	Expand and protect riparian zones/no-disturbance zones around creeks.	Medium	PCR	OCFC; NRCS; FSA; Conservation District; OCPDS	Land-owners; Developers	\$10,000 per acre	Typically over 50 percent sediment and nutrient removal	Nitrogen: 4.7 mg/yr/dollar Phos.: 1.7 mg/yr/dollar TSS: 5.6 lbs/yr/dollar	Developer Fees	OCFC; NRCS; Extension Office; FSA
43	Evaluate existing Purchase Development Programs for applicability in Oldham County. Purchase (or place in conservation easements) properties and/or development rights along creeks to preserve streamside areas and encourage access to streams.	Medium	WAH	OCFC; NRCS; FSA; Conservation District; OCPDS	Land-owners; Developers	\$10,000 per acre	Over 70 percent nutrient and TSS reduction per acre converted	Nitrogen: 0.6 mg/yr/dollar Phos.: 0.13 mg/yr/dollar TSS: 175 mg/yr/dollar	Developer Fees; New Funding through PDR type Program	OCFC; NRCS; Extension Office

TABLE 5.03-3--TIER 3 BEST MANAGEMENT PRACTICES

BMP No.	Best Management Practice(s) and Description	Feasibility	Impairment Addressed	Responsible Party/Parties	Targeted Audience/Area	Cost	Expected Pollutant Load Reduction	Pollutant Load Reduction/Dollar	Funding Source(s) and Mechanism(s)	Technical Assistance Needed
<b>ENTIRE WATERSHED TIER 3 BEST MANAGEMENT PRACTICES</b>										
44	Enhance roadside swales to include water-quality improvement functionality, such as using native grass species, elevated grates to trap first flush runoff, use of highly permeable soil, and utilization of an underdrain system.	High	WAH	KYTC; OCFC Road Department; OCEA	Watershed Wide; Neighborhood Groups	\$5 per foot, plus \$2,000 to develop education program.	20 to 40 percent TSS reduction typical	Site Specific	Stormwater Fees; KYTC	KYTC; Stormwater District(s); Licensed Engineer; SD1; MSD
45	Evaluate adopting a on-site wastewater inspection program that will establish the number of inspections of on-site systems.	High	PCR	OCHD; OCEA; LG&E; OCFC; LUC; OCPDS	Property Owners; Realtors; on-site Wastewater System Inspectors	\$3,000 to evaluate program adoption \$200 per inspection	Not Calculable	Not Calculable	County Extension Office; 319 Grant; SRF; Stormwater Fees	OCHD; Licensed on-site Wastewater System installers; KOWA
46	Reassess, and update as appropriate, design criteria for on-site wastewater requirements, including lot size requirements.	High	PCR	OCEA; OCHD; OCFC; LUC; OCPDS	Non-sewered Areas	\$2,600	Not Calculable	Variable	319 Grant; SRF; Utility Rates; Utility Fees	OCEA; KDOW; Licensed Engineer
47	Support and encourage full and expedient development and implementation of Oldham County Environmental Authorities (OCEA) Stormwater Quality Management Plans (SWQMPs).	High	PCR	City of La Grange; OCFC; OCEA; OCPDS	High Percentage Impervious Areas	Dependent on Program Size/Objectives	Dependent Upon Action Taken	Dependent Upon Action Taken	Stormwater Fees	LUC; KDOW; Licensed Engineer
48	Support the formation of a citizen-based watershed group.	High	WAH	OCFC; Watershed residents	Watershed wide	\$1,000 for initial formation	Not Calculable	Not Calculable	319 Grant; SRF; SRWW	OCFC; NRCS; Extension Office; Conservation District; SRWW
49	Use stream restoration projects to educate decision makers and the community on stream conditions and function(s).	High	WAH	OCFC; NRCS; Extension Office; Conservation District	Land-owners; Elected Officials; Students; Developers	\$1,000 per event	Not Calculable	Not Calculable	319 Grant; SRF; Stormwater Fees	OCFC; NRCS; Extension Office; Conservation District; FWS; KDOW;
50	Expand use of riparian buffers/filters strips around creek including enhancing 'no-disturb' ordinance to require creating designed buffer/filter strips instead of just open space.	Medium	WAH	OCFC; NRCS; Extension Office; Conservation District; OCPDS	Land-owners; Developers	\$10 per linear foot of stream	N/A (BMP primarily used for protection activities)	Not Calculable	OCFC; Developer Fees; NRCS; USDA; Extension Office; Conservation District; 319 Grant; SRF	OCFC; NRCS; County Extension Office; Conservation District
51	Evaluate existing Purchase Development Rights (PDR) programs for applicability in Oldham County. Purchase (or place in conservation easements) properties and/or development rights along creeks to preserve streamside areas and encourage access to streams.	Medium	WAH	OCFC; NRCS; FSA; Conservation District; OCPDS	Land-owners; Developers	\$3,000 to research and evaluate program applicability \$10,000 per acre purchase cost	Over 70 percent nutrient and TSS reduction per acre converted	Nitrogen: 0.6 mg/yr/dollar Phos. : 0.13 mg/yr/dollar TSS: 175 mg/yr/dollar	Developer Fees; New Funding through PDR type Program	OCFC; NRCS; County Extension Office
52	Incentivize low-impact design/green infrastructure inclusion in new developments and retrofits to existing developments.	Low	WAH	OCFC; City of La Grange; OCEA; OCPDS	Developers; Property owners; High percentage impervious areas	Site Specific	Dependent Upon Action Taken	Dependent Upon Action Taken	Stormwater Fees	Stormwater District(s); KDOW; Licensed Engineer
<b>NORTH CURRY'S FORK TIER 3 BEST MANAGEMENT PRACTICES</b>										
53	Eliminate Sewer Overflows consistent with the proposed consent decree.	High	PCR	LUC; OCEA; OCFC	Sewered Areas	Dependent Upon Action Taken	500,000 colonies/overflow (median value)	Dependent Upon Action Taken	SRF; Utility Rates	OCFC; OCEA; KDOW; Licensed Engineer
54	Increase/require the number of inspections of on-site wastewater systems. Possible triggers for inspection might be when property is bought/sold, or when utilities change names.	High	PCR	OCHD; OCEA; LG&E; OCFC	Property Owners; Realtors; on-site Wastewater System Inspectors	\$300 per inspection	Not Calculable	Not Calculable	County Extension Office; 319 Grant; SRF	OCHD; Licensed on-site Wastewater System installer; KOWA
55	Promote on-site wastewater system maintenance, operation and management education, targeting systems that are in low-lying areas and in proximity to waterways.	High	PCR	OCHD; Extension Office; KDOW	Property Owners and Associations	\$1,000	Not Calculable	Not Calculable	County Extension Office; 319 Grant; SRF	OCHD; Licensed on-site Wastewater System installer; KOWA
56	Conduct a stream survey along the middle section of North Curry's Fork to identify potential KYTC drainage improvement areas. Identify and implement stormwater reduction, storage and treatment opportunities along the I-71 corridor.	Medium	WAH	UL; OCFC; KYTC;	I-71 corridor; State Right of Way areas; Middle section Tributaries of North Curry's Fork; KYTC	Site specific	Dependent Upon Action Taken	Dependent Upon Action Taken	Stormwater Fees; KYTC; OCFC General Funds; 319 Grant	Licensed Engineer; KYTC; KDOW; UL
<b>SOUTH CURRY'S FORK TIER 3 BEST MANAGEMENT PRACTICES</b>										
57	Complete stream restoration or protection projects on the upstream tributaries, which were identified as very high restoration and protection potential.	High	WAH	OCFC; NRCS; FWS; OCPDS		\$225 per foot for construction \$25 per foot for design	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; 319 Grant; FWS; NRCS; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS; KDOW
58	Complete a stream restoration project in the middle section of the main stem.	High	WAH	OCFC; NRCS; FWS; OCPDS	Middle section of the main stem of South Curry's Fork	\$225 per foot for construction \$25 per foot for design	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; 319 Grant; FWS; NRCS; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS; KDOW
59	Replace or repair aging/failing on-site wastewater systems targeting systems that are in low-lying areas and in proximity to waterways.	High	PCR	OCHD; OCEA; Property Owners	Property Owners	\$4,000 per system	3.79x10 <sup>8</sup> colonies / day / system	94,750 colonies / day / dollar	319 Grant; SRF; Property Owners	OCHD; Licensed on-site Wastewater System installer; KOWA
<b>ASHERS RUN TIER 3 BEST MANAGEMENT PRACTICES</b>										
60	Complete a stream restoration project upstream of Camden Lane in the upstream portion of Ashers Run subwatershed.	Low	WAH	OCFC; NRCS; FWS; OCPDS	Upstream of Camden Lane	\$225 per foot for construction \$25 per foot for design	Dependent Upon Action Taken	Dependent Upon Action Taken	319 Grant; FWS; NRCS; SRF; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS; KDOW
61	Complete a stream restoration project on the lower/downstream portion of Ashers Run near the confluence to address stream banks.	Low	WAH	OCFC; NRCS; FWS; OCPDS	Upstream of Camden Lane	\$225 per foot for construction \$25 per foot for design *May increase depending on additional earth moving	Dependent Upon Action Taken	Dependent Upon Action Taken	319 Grant; FWS; NRCS; SRF; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS; KDOW
<b>CURRY'S FORK MAIN STEM TIER 3 BEST MANAGEMENT PRACTICES</b>										
62	Complete a stream protection project on the single main stem tributary identified as having very high protection potential.	Low	WAH	OCFC; NRCS; FWS; OCPDS	Identified Tributary of Curry's Fork main stem	\$225 per foot for construction \$25 per foot for design	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; 319 Grant; FWS; NRCS; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS; KDOW
63	Complete a stream restoration or protection project on the upstream tributaries, which were identified as high restoration and high protection potential.	Low	WAH	OCFC; NRCS; FWS	Upstream tributaries of Curry's Fork main stem	\$225 per foot for construction \$25 per foot for design	Dependent Upon Action Taken	Dependent Upon Action Taken	SRF; 319 Grant; FWS; NRCS; FEMA	Division of Forestry; NRSC; Extension Office; Conservation Office; Universities; KDFWR; FWS;
64	Eliminate Sewer Overflows consistent with the proposed consent decree.	High	PCR	LUC; OCEA; OCFC	Sewered Areas	Dependent Upon Action Taken	500,000 colonies/overflow (median value)	Dependent Upon Action Taken	SRF; Utility Rates	OCEA; KDOW; Licensed Engineer

TABLE 5.03-4–TIER 1 BEST MANAGEMENT PRACTICES MILESTONES

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
<b>ENTIRE WATERSHED TIER 1 BMP MILESTONES</b>							
1	Conduct a septic system survey program to identify failing systems for replacement, repair, or elimination.	High	PCR	-Evaluate existing programs and develop a program for Curry's Fork/Oldham County. -Secure funding. -Conduct outreach/public awareness about program. -Conduct surveys.	-Evaluate existing programs in other communities. -Meet with responsible parties and technical resources to review and develop a program for Curry's Fork/Oldham County. -Secure funding for implementation. -Focus program implementation in Curry's Fork high priority pathogen restoration areas (see Figure 4.07-1). -Pilot the survey program.	-Evaluate pilot program and make changes as needed. -Continue program implementation in at least one high priority area a year. -Revise priority maps as new data is made available. -Conduct outreach/public awareness about results	-Continue surveys in high priority areas at least once a year.
2	Develop and implement a marketing program for the WP.	High	PCR and WAH	-Identify target audiences. -Develop marketing approaches and materials. -Market Watershed Plan. -Revise marketing approaches and materials as warranted.	-Identify target audiences. -Tailor Watershed Plan outreach and marketing to meet various audiences using social marketing concepts. -Use Watershed Plan Executive Summary as basis for outreach and marketing efforts. -Prioritize audiences and implement marketing via multiple avenues (agency meetings, newspaper and articles).	-Review marketing venues annually for effectiveness. -Modify marketing efforts as needed and as opportunities arise. -Continue marketing Watershed Plan.	-Continue to review marketing venues annually for effectiveness. -Emphasize changes to Watershed Plan based on effectiveness of Plan implementation. -Continue marketing Watershed Plan.
3	Develop and implement a monitoring plan to monitor solutions implemented as part of the WP.	High	PCR and WAH	-Coordinate efforts with other agencies and organizations conducting sampling in Curry's Fork. -Determine parameters that will be monitored. -Request KDOW monitoring as part of Basin Cycle Monitoring Program. -Modify Watershed Plan based on data results.	-Meet with agencies and organizations conducting sampling in Curry's Fork to discuss monitoring needs of the WP. -Coordinate WP sampling with other ongoing sampling efforts. -Prepare and send correspondence from OCFC for KDOW requesting monitoring in Curry's Fork as part of KDOW's Basin Cycle Monitoring - Program (correspondence to be sent no later than summer 2013 for monitoring in 2014).	-Assess all available data (including approved TMDL results) to determine if changes in in-stream water quality have changed over 5 years of implementation. -Meet with agencies and organizations conducting sampling in Curry's Fork to discuss monitoring results and additional monitoring needs. -Coordinate WP sampling with other ongoing sampling efforts. -Modify Watershed Plan implementation as warranted based on monitoring results.	-Meet to discuss and update sampling needs of WP. -Continue WP sampling in coordination with other ongoing sampling efforts. -Prepare and send correspondence from OCFC for KDOW requesting monitoring in Curry's Fork as part of KDOW's Basin Cycle Monitoring Program (correspondence to be sent no later than summer 2018 for monitoring in 2019). -Continue to modify Watershed Plan as warranted based on monitoring results.
4	Develop and implement Curry's Fork watershed education and awareness program, including information about the watershed, WP, WP recommendations, project activities, and community activities.	High	PCR	-Identify target audiences, education goals and existing outreach materials. -Modify existing materials as necessary. -Utilize multiple avenues and social marketing techniques. -Utilize existing programs to carry watershed messages. -Implement at least one watershed education event a year.	-Meet with responsible parties and technical resources to prioritize target audiences, target areas, develop program goals, and secure educational materials. -Review and utilize existing educational materials from USEPA and KDOW. -Modify educational materials for Curry's Fork as necessary. -Utilize multiple avenues and techniques to raise watershed awareness. -Conduct at least one watershed education event a year. -Provide educational materials and opportunities at community events as appropriate. -Coordinate efforts with other educational BMPs.	-Convene responsible parties at least annually for program updates. -Modify education/outreach approaches as warranted. -Continue to conduct at least one watershed education event a year. -Continue to provide educational materials and opportunities at community events as appropriate. -Continue to coordinate efforts with other educational BMPs.	-Convene responsible parties at least annually for program updates. -Continue to modify education/outreach approaches as warranted. -Continue to conduct at least one watershed education event a year. -Continue to provide educational materials and opportunities at community events as appropriate. -Continue to coordinate efforts with other educational BMPs.
5	Ensure recommendations in the WP are formally communicated to United States Army Corps of Engineers (USACE), KDOW, and United States Fish and Wildlife Service (FWS) and encourage these agencies to use recommendations from WP for mitigation projects.	High	WAH	-Communicate stream restoration and protection recommendations with USACE, KDOW, and FWS. -Encourage agencies to target activities in identified priority areas	-Summarize WP stream restoration and protection recommendations. -Meet with USACE, KDOW, and FWS to discuss WP recommendations and opportunities for implementation. -Encourage agencies to target activities in identified priority areas.	-As necessary or warranted, meet with USACE, KDOW, and FWS with any new information or WP changes. -Continue to encourage agencies to target activities in identified priority areas.	-As necessary or warranted, meet with USACE, KDOW, and FWS with any new information or WP changes. -Continue to encourage agencies to target activities in identified priority areas.
6	Establish one "Bad Septic Area Map" for failing septic systems for all county planning purposes.	High	PCR	-Obtain agreement from responsible parties on one "Bad Septic Area Map" for the Curry's Fork Watershed. -Update map as new information is obtained.	-Convene responsible parties and resource agencies to review similarities and differences with bad septic areas. -Obtain agreement on one map to be used for Curry's Fork. -Distribute map.	-Meet to identify new priority areas and update the map as necessary.	-Meet to identify new priority areas and update the map as necessary.

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
7	Evaluate/create an On-site Wastewater Authority (OWA) to provide oversight on on-site wastewater management, operation, and maintenance.	High	PCR	-Review and present information on existing OWAs to appropriate/responsible parties. -Develop OWA. -Implement OWA. -Coordinate efforts with other BMPs related to and agencies responsible for on-site wastewater systems.	-Review and evaluate existing OWAs in other communities. -Summarize and present OWA information to appropriate parties. -Discuss and develop framework for establishing OWA for Oldham County/Curry's Fork. -Establish and implement OWA. -Coordinate OWA efforts with other BMPs related to on-site wastewater systems. -Develop GWPP.	-OWA meetings at least annually -Begin implementing practices to achieve OWA goals and objectives -Continue to coordinate OWA efforts with other BMPs related to on-site wastewater systems	-Continue to meet annually. -Track progress and activities. -Continue implementing practices to achieve OWA goals and objectives. -Continue to coordinate OWA efforts with other BMPs related to on-site wastewater systems.
8	Expand water quality enhancing landscaping practices, such as rain barrels, rain gardens, pervious pavers, etc.	High	WAH	-Develop demonstration projects on municipal property. -Target education and implementation n areas prone to flooding. -Encourage/support local grant program (using stormwater fees) for implementing BMPs. -Use existing materials and programs to educate property owners and others about BMPs. -Implement at least 2 water quality enhancing landscaping practices per year.	-Ensure SWQMP(s) support and encourage all appropriate BMPs. -Develop a Demonstration Project on municipal property with signage and other educational/outreach potential. -Support/encourage development of a stormwater fee-based grant program for neighborhood associations and other groups to obtain funding for BMP implementation. -Obtain and use existing BMP education materials. -Target those areas identified in the watershed with existing flooding issues and concerns for education and implementation. -Implement water quality enhancing landscaping practices on at least two properties a year	-Revise landscaping enhancements and target areas as necessary based on land-use and property owner changes. -Continue to implement water quality enhancing landscaping and practices on at least two properties a year.	-Continue to meet with willing homeowners and businesses. -Continue to implement water quality enhancing landscaping and practices on at least two properties a year.
9	Engage a Watershed Coordinator to be a link between project responsible parties, funding agencies, watershed residents, OCFC, and technical resources.	High	PCR and WAH	-Develop job description and goals of position. -Interview qualified candidates. -Engage a Watershed Coordinator.	-Evaluate hiring opportunities (in-house, through partnering agencies, and contract). -Develop job goals, job descriptions, and job responsibilities. -Interview qualified candidates; include selected partnering agencies with selection process as feasible. -Engage a Watershed Coordinator. -Begin involving Watershed Coordinator in all WP related activities.	-Watershed Coordinator continues to be lead and be involved in all WP activities. -Watershed Coordinator acts as a link between all involved parties in watershed activities.	-Watershed Coordinator continues to be lead and be involved in all WP activities. -Watershed Coordinator acts as a link between all involved parties in watershed activities.
10	Implement education program for elected officials and Board members on the results and findings of the WP.	High	WAH	-Develop presentation(s) based on Executive Summary from Watershed Plan. -Provide an overview and focused Watershed Plan information to elected officials and Board Members. -Solicit feedback and identify subject areas where additional information and training is needed.	-Present a Watershed Plan overview to the Fiscal Court. -Solicit feedback on both areas of interest and training needs. -Use existing materials and partners to provide training on specific water quality, target areas, BMPs or program areas that have been identified. -Conduct at least one educational event a year. -Coordinate efforts with other educational BMPs.	-Continue educational and training events at least once per year or as new officials are elected. -Update training materials to represent updated water quality regulations and current condition of Curry's Fork.	-Continue educational and training events at least once per year or as new officials are elected. -Update training materials to represent updated water quality regulations and current condition of Curry's Fork.
11	Monitor streams in the watershed to estimate human vs. animal sources of bacterial contamination to support future decision making by OCFC	High	PCR	-Coordinate efforts with other agencies and organizations conducting sampling in Curry's Fork. -Conduct sampling. -Use results for future decision making.	-Meet with other agencies and organizations conducting sampling in Curry's Fork. -Develop an agreed upon sampling protocol. -Coordinate with other sampling efforts. -Develop a single sampling results data base. -Summarize and present sampling results to OCFC.	-If water quality monitoring indicates continue PCR impairment, assess if additional human vs. animal monitoring would assist decision makers.	-If water quality monitoring indicates continue PCR impairment, assess if additional human vs. animal monitoring would assist decision makers.
12	Review local ordinances and regulations to identify and resolve impediments to low-impact development and green infrastructure	High	WAH	-Identify impediments to low-impact practices and green-infrastructure in local ordinances. -Resolve impediments by changing ordinances appropriately.	-Review existing development ordinances. -Identify impediments to low-impact practices and green-infrastructure in local ordinances. -Propose and review potential changes to development ordinances to remove impediments.	-Change development ordinances to remove impediments. -Assess success of ordinance modifications and determine if any additional changes are warranted.	-Assess success of ordinance modifications and determine if any additional changes are warranted
13	Coordinate wastewater expansions in conjunction with planned water line expansions	Medium	PCR	-Compile list and map of planned and proposed wastewater and water expansions. -Modify project schedules to ensure adequate wastewater treatment for areas receiving new water lines.	-Meet to discuss planned and potential projects. -Develop a schedule and comprehensive map of planned wastewater and water expansions/projects. -Modify planned projects to ensure adequate wastewater treatment. -Coordinate construction schedules as necessary. -Develop GWPP.	-Annually meet to discuss and coordinate projects. -Update schedules and comprehensive project map as necessary.	-Annually meet to discuss and coordinate projects. -Update schedules and comprehensive project map as necessary.

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
14	Educate and provide training to planners, designers, and reviewers about implementing stormwater retrofits in currently developed areas.	Medium	WAH	<ul style="list-style-type: none"> <li>-Ensure SWQMP(s) support BMPs and provide training opportunities.</li> <li>-Supplement training where needed.</li> <li>-Conduct a minimum of one training a year for first three years and one every 3 years thereafter.</li> <li>-Evaluate/support/conduct recognition programs.</li> <li>-Establish tracking procedures to monitor implementation low-impact designs and green infrastructure.</li> <li>-Focus on areas identified in Figure 2.02-6 and Table 2.02-5.</li> </ul>	<ul style="list-style-type: none"> <li>-Ensure SWQMP(s) support and encourage all appropriate stormwater retrofit BMPs and provide training opportunities.</li> <li>-Identify audiences not met by SWQMP training (i.e., reviewers) and provide additional training.</li> <li>-Review existing educational materials from KDOW and USEPA..</li> <li>-Work with Stormwater District(s) to utilize existing materials for educational and training materials; modify for Curry's Fork if necessary.</li> <li>-Conduct one training seminar or workshop a year.</li> <li>-Encourage local business, planners, and designers to participate in KY Excel Program.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to provide training opportunities (minimum one every 3 years).</li> <li>-Revise educational and training materials as necessary based on land-use changes in Curry's Fork and new technologies.</li> <li>-Begin monitoring projects incorporating low-impact design and green infrastructure.</li> <li>-Recognize projects and raise awareness through local newspaper articles.</li> <li>-Evaluate and develop a local awards program to recognize outstanding local leaders.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to provide training opportunities (minimum one every 3 years).</li> <li>-Revise educational and training materials as necessary based on land-use changes in Curry's Fork and new technologies.</li> <li>-Monitoring projects incorporating low-impact design and green infrastructure.</li> <li>-Recognize projects and raise awareness through local newspaper articles.</li> <li>-Conduct local awards program to recognize outstanding local leaders.</li> </ul>
15	Educate and provide training to planners, designers, and reviewers of developments about low-impact design/green infrastructure and current and pending stormwater permit requirements.	Medium	WAH	<ul style="list-style-type: none"> <li>-Ensure SWQMP(s) support BMPs and provide training opportunities.</li> <li>-Supplement training where needed.</li> <li>-Conduct a minimum of one training a year for first three years and one every 3 years thereafter.</li> <li>-Evaluate/support/conduct recognition programs.</li> <li>-Establish tracking procedures to monitor implementation low-impact designs and green infrastructure .</li> </ul>	<ul style="list-style-type: none"> <li>-Ensure SWQMP(s) support and encourage all appropriate stormwater retrofit BMPs and provide training opportunities.</li> <li>-Identify audiences not met by SWQMP training (i.e., reviewers) and provide additional training</li> <li>-Review existing educational materials from KDOW and USEPA..</li> <li>-Work with Stormwater District(s) to utilize existing materials for educational and training materials; modify for Curry's Fork if necessary.</li> <li>-Conduct one training seminar or workshop a year.</li> <li>-Encourage local business, planners, designers, etc. to participate in KY Excel Program.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to provide training opportunities (minimum one every 3 years).</li> <li>-Revise educational and training materials as necessary based on land-use changes in Curry's Fork and new technologies.</li> <li>-Begin monitoring projects incorporating low-impact design and green infrastructure.</li> <li>-Recognize projects and raise awareness through local newspaper articles.</li> <li>-Evaluate and develop a local awards program to recognize outstanding local leaders.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to provide training opportunities (minimum one every 3 years).</li> <li>-Revise educational and training materials as necessary based on land-use changes in Curry's Fork and new technologies.</li> <li>-Monitoring projects incorporating low-impact design and green infrastructure.</li> <li>-Recognize projects and raise awareness through local newspaper articles.</li> <li>-Conduct local awards program to recognize outstanding local leaders.</li> </ul>
16	Ensure communication, guidelines and preplanning/approval for any wastewater system improvements, modifications, or upgrades on a watershed scale with a focus on the priority pathogen protection and restoration areas.	Medium	PCR	<ul style="list-style-type: none"> <li>-Use pathogen protection and restoration priority map to guide wastewater system improvements.</li> </ul>	<ul style="list-style-type: none"> <li>-Meet with responsible parties prior to wastewater system improvements.</li> <li>-Review pathogen protection and restoration map developed from WP to focus on high priority areas.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to meet with responsible parties prior to any wastewater system improvements.</li> <li>-Update and review pathogen map based on any new sampling data and wastewater system improvements.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to meet with responsible parties prior to any wastewater system improvements.</li> <li>-Update and review pathogen map based on any new sampling data and wastewater system improvements.</li> </ul>
<b>NORTH CURRY'S FORK TIER 1 BMP MILESTONES</b>							
17	Eliminate Buckner Treatment Plant in the next 2 years.	High	PCR	<ul style="list-style-type: none"> <li>-Propose and review feasible alternatives.</li> <li>-Identify and secure funding sources.</li> <li>-Decommission Buckner WWTP.</li> </ul>	<ul style="list-style-type: none"> <li>-Review and select feasible elimination alternative and funding sources.</li> <li>-Eliminate Buckner Treatment Plant using alternative identified in feasibility analysis.</li> <li>-Provide/require sewer hook-ups to residences in proximity to WWTP (implement concurrent with decommissioning).</li> <li>-Support 201 Wastewater Plan implementation with a focus on priority pathogen protection and restoration areas.</li> </ul>	<ul style="list-style-type: none"> <li>-Begin post-elimination water quality monitoring.</li> <li>-Review post-elimination water quality data.</li> <li>-Utilize post-elimination water quality data to support elimination of other package treatment plants.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue post-elimination water quality monitoring.</li> </ul>
<b>SOUTH CURRY'S FORK TIER 1 BMP MILESTONES</b>							
18	Complete a stream restoration project on the downstream section of the main stem of South Curry's Fork near the confluence with North Curry's Fork.	Medium	WAH	<ul style="list-style-type: none"> <li>-Meet property owners of potential project locations to discuss proposed remediation activities.</li> <li>-Secure funding.</li> <li>-Acquire appropriate easement/properties.</li> <li>-Review and approve restoration design.</li> <li>-Monitor conditions pre-and post-restoration.</li> <li>-Implement restoration.</li> <li>-Implement education program.</li> </ul>	<ul style="list-style-type: none"> <li>-Contact property owner(s) and secure cooperation/buy-in.</li> <li>-Engage property owners in decision making.</li> <li>-Secure funding through identified funding sources.</li> <li>-Ensure restoration design will meet environmental and property owner goals.</li> <li>-Work with property owners to acquire necessary property rights for project.</li> <li>-Acquire appropriate easement/properties.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue with easement/acquisitions.</li> <li>-Review and approve restoration design.</li> <li>-Secure funding.</li> <li>-Assess pre-construction WQ, biological, and habitat conditions at project location.</li> <li>-Begin post-construction water quality monitoring.</li> <li>-Coordinate construction and implementation with other BMPs to utilize project as an educational to monitoring.</li> <li>-Coordinate construction and implementation with other BMPs and utilize project as an education tool.</li> <li>-Implement restoration.</li> </ul>	<ul style="list-style-type: none"> <li>-Maintain restoration/protection project as necessary.</li> <li>-Continue post-construction water quality monitoring.</li> <li>-Continue to coordinate with other BMPs to utilize project as an educational tool.</li> <li>-Evaluate improvements to WQ, biology, and habitat.</li> <li>-Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.</li> </ul>

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
19	Complete a stream restoration project on the main stem reach adjacent to Centerfield Elementary	High	WAH	<ul style="list-style-type: none"> <li>-Meet property owners of potential project locations to discuss proposed remediation activities.</li> <li>-Secure funding.</li> <li>-Acquire appropriate easement/properties.</li> <li>-Review and approve restoration design</li> <li>-Monitor conditions pre-and post-restoration.</li> <li>-Implement restoration.</li> <li>-Implement education program.</li> </ul>	<ul style="list-style-type: none"> <li>-Contact property owner(s) and secure cooperation/buy-in.</li> <li>-Engage property owners in decision making.</li> <li>-Secure funding through identified funding sources.</li> <li>-Ensure restoration design will meet environmental and property owner goals.</li> <li>-Work with property owners to acquire necessary property rights for project.</li> <li>-Acquire appropriate easement/properties.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue with easement/acquisitions.</li> <li>-Review and approve restoration design.</li> <li>-Secure funding.</li> <li>-Assess pre-construction WQ, biological, and habitat conditions at project location.</li> <li>-Begin post-construction water quality monitoring.</li> <li>-Coordinate construction and implementation with other BMPs to utilize project as an educational to monitoring.</li> <li>-Coordinate construction and implementation with other BMPs and utilize project as an education tool.</li> <li>-Implement restoration.</li> </ul>	<ul style="list-style-type: none"> <li>-Maintain restoration/protection project as necessary.</li> <li>-Continue post-construction water quality monitoring.</li> <li>-Continue to coordinate with other BMPs to utilize project as an educational tool.</li> <li>-Evaluate improvements to WQ, biology, and habitat.</li> <li>-Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.</li> </ul>
20	Eliminate Green Valley Treatment Plant in the next 2 years.	High	PCR	<ul style="list-style-type: none"> <li>-Propose and review feasible alternatives.</li> <li>-Identify and secure funding sources.</li> <li>-Decommission Green Valley Treatment Plant.</li> </ul>	<ul style="list-style-type: none"> <li>-Review and select feasible elimination alternative and funding sources</li> <li>-Eliminate Green Valley Treatment Plant using alternative identified in feasibility analysis.</li> <li>-Provide/require sewer hook-ups to residences in proximity to WWTP (implement concurrent with decommissioning).</li> <li>-Support 201 Wastewater Plan implementation with a focus on priority pathogen protection and restoration areas.</li> </ul>	<ul style="list-style-type: none"> <li>-Begin post-elimination water quality monitoring.</li> <li>-Review post-elimination water quality data.</li> <li>-Utilize post-elimination water quality data to support elimination of other package treatment plants.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue post-decommissioning water quality monitoring.</li> </ul>
21	Plant streamside vegetation and other streamside habitat improvement projects in the upstream section of the main stem.	High	WAH	<ul style="list-style-type: none"> <li>-Locate property owners willing to participate in stream side planting program.</li> <li>-Secure funding.</li> <li>-Engage public/neighbors with stream-side planting event.</li> <li>-Conduct at least one stream side planting event a year.</li> </ul>	<ul style="list-style-type: none"> <li>-Meet with property owners in targeted areas.</li> <li>-Select priority location for stream side plantings.</li> <li>-Coordinate with other planting programs to review and select native species for plantings.</li> <li>-Secure funding.</li> <li>-Coordinate stream side planting event; engage citizens/neighbors with project.</li> <li>-Implement at least one planting project per year along stream.</li> </ul>	<ul style="list-style-type: none"> <li>-Advertise/promote previous stream side planting events</li> <li>-Continue to implement at least one planting project a year along streams.</li> <li>-Continue to locate and facilitate meetings with willing property owners.</li> <li>-Coordinate planting efforts with other BMPs to utilize plantings as an educational tool.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to implement at least one planting project per year along streams.</li> <li>-Continue to locate and facilitate meetings with willing property owners.</li> <li>-Coordinate planting efforts with other BMPs to utilize plantings as an educational tool.</li> </ul>
<b>ASHER'S RUN TIER 1 BMP MILESTONES</b>							
22	Promote on-site wastewater system maintenance, operation and management education, targeting systems that are in low-lying areas and in proximity to waterways in the upper portion of the watershed.	High	PCR	<ul style="list-style-type: none"> <li>-Develop and distribute educational material.</li> <li>-Identify and prioritize target areas.</li> </ul>	<ul style="list-style-type: none"> <li>-In consultation with technical and responsible entities, review existing educational materials; modify for Curry's Fork if necessary.</li> <li>-Disseminate educational materials through existing programs and agents in the watershed.</li> <li>-Using social marketing techniques, raise awareness and provide solutions through as many avenues as possible.</li> <li>-Target homeowners living in proximity to waterways.</li> <li>-Educate homeowners on GWPP requirements.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to distribute educational materials and implement education/awareness program activities.</li> <li>-Track maintenance changes in homeowners through surveys or phone calls to targeted neighborhoods.</li> <li>-Revise educational material based on new priority areas and feedback from neighborhoods already targeted.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to distribute educational materials and implement education/awareness program activities.</li> <li>-Track maintenance changes in homeowners through surveys or phone calls to targeted neighborhoods.</li> <li>-Revise educational material based on new priority areas and feedback from neighborhoods already targeted.</li> </ul>
23	Replace or repair aging/failing on-site wastewater systems targeting systems that are in low-lying areas and in proximity to waterways in the upper portion of the watershed	High	PCR	<ul style="list-style-type: none"> <li>-Target specific systems or areas for upgrades and repairs.</li> <li>-Assist with securing funding as appropriate.</li> <li>-Upgrade or replace at least 10 systems a year.</li> </ul>	<ul style="list-style-type: none"> <li>-Using results from on-site wastewater survey and "Bad Septic System" map, target specific systems or areas for upgrades and repairs.</li> <li>-Meet and work with willing homeowners in to upgrade/replace system.</li> <li>-Perform overdue maintenance on, repair or replace at least 10 priority on-site wastewater systems a year.</li> <li>-Enforce GWPP requirements.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to meet and work with willing homeowners on septic system maintenance, repairs and replacements.</li> <li>-Continue to perform overdue maintenance on, repair or replace at least 10 priority on-site wastewater systems.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to meet and work with willing homeowners on septic system maintenance, repairs and replacements.</li> <li>-Continue to perform overdue maintenance on, repair or replace at least 10 priority on-site wastewater systems .</li> </ul>
24	Educate owners of nontraditional animals/livestock on appropriate BMPs for pathogen reduction in the upper portion of the watershed	Medium	PCR	<ul style="list-style-type: none"> <li>-Identify owners of non-traditional animals and livestock.</li> <li>-Provide BMP information.</li> <li>-Support Agriculture Water Quality Authority (AWQA) compliance.</li> <li>-Implement BMP demonstration project if feasible.</li> </ul>	<ul style="list-style-type: none"> <li>-Review existing educational materials and modify, as necessary, for Curry's Fork.</li> <li>-Coordinate with existing programs to disseminate agricultural BMP information.</li> <li>-For qualifying producers, provide AWQA compliance assistance.</li> <li>-Use alternative education avenues to provide non-traditional animal BMP information.</li> <li>-Provide cost-share program information to qualifying producers.</li> <li>-Meet with at least two owners of non-traditional animals and livestock.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to meet with owners of non-traditional animals and livestock as necessary.</li> <li>-Revise educational material as necessary based on new owners of non-traditional animals/livestock.</li> <li>-Use previous program participants as examples for others to follow.</li> <li>-Support implementation of an agricultural BMP demonstration project.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to meet with owners of non-traditional animals and livestock as necessary.</li> <li>-Revise educational material as necessary based on new owners of non-traditional animals/livestock.</li> <li>-Use previous program participants as examples for others to follow.</li> </ul>

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
<b>CURRY'S FORK MAIN STEM TIER 1 BEST MANAGEMENT PRACTICES</b>							
25	Complete a stream restoration project in the downstream portion of Curry's Fork main stem near the confluence with Floyds Fork. Cost of project may significantly increase due to amount of earthmoving involved unless a demand for the soil can be identified.	Low	WAH	<ul style="list-style-type: none"> <li>-Meet property owners of potential project locations to discuss proposed remediation activities.</li> <li>-Secure funding.</li> <li>-Acquire appropriate easement/properties</li> <li>-Review and approve restoration design.</li> <li>-Monitor conditions pre-and post-restoration.</li> <li>-Implement restoration.</li> <li>-Implement education program..</li> </ul>	<ul style="list-style-type: none"> <li>-Contact property owner(s) and secure cooperation/buy-in.</li> <li>-Engage property owners in decision making.</li> <li>-Secure funding through identified funding sources.</li> <li>-Ensure restoration design will meet environmental and property owner goals.</li> <li>-Work with property owners to acquire necessary property rights for project.</li> <li>-Acquire appropriate easement/properties.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue with easement/acquisitions.</li> <li>-Review and approve restoration design.</li> <li>-Secure funding.</li> <li>-Assess pre-construction WQ, biological, and habitat conditions at project location.</li> <li>-Begin post-construction water quality monitoring.</li> <li>-Coordinate construction and implementation with other BMPs to utilize project as an educational to monitoring.</li> <li>-Coordinate construction and implementation with other BMPs and utilize project as an education tool.</li> <li>-Implement restoration.</li> </ul>	<ul style="list-style-type: none"> <li>-Maintain restoration/protection project as necessary.</li> <li>-Continue post-construction water quality monitoring.</li> <li>-Continue to coordinate with other BMPs to utilize project as an educational tool.</li> <li>-Evaluate improvements to WQ, biology, and habitat.</li> <li>-Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.</li> </ul>

TABLE 5.03-5–TIER 2 BEST MANAGEMENT PRACTICES MILESTONES

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
<b>ENTIRE WATERSHED TIER 2 BMP MILESTONES</b>							
26	Engage community with watershed issues by providing watershed educational and recreational opportunities, including stream clean-ups, water testing, storm sewer stenciling.	High	WAH	<ul style="list-style-type: none"> <li>-Identify education goals and identify opportunities for community engagement.</li> <li>-Modify existing materials or secure new materials for events.</li> <li>-Organize community events that focus on water quality.</li> <li>-Implement at least one watershed education event a year.</li> </ul>	<ul style="list-style-type: none"> <li>-Meet with responsible parties and technical resources to develop program goals and identify opportunities.</li> <li>-Review and utilize existing educational materials from USEPA, and KDOW.</li> <li>-Modify educational materials for Curry's Fork as necessary.</li> <li>-Utilize multiple avenues and techniques to raise watershed awareness and engage community members.</li> <li>-Conduct at least one watershed education event a year.</li> <li>-Provide educational materials and recreational opportunities at community events as appropriate.</li> <li>-Coordinate efforts with other educational BMPs.</li> </ul>	<ul style="list-style-type: none"> <li>-Convene responsible parties at least annually for program updates .</li> <li>-Select new educational/engagement opportunities as warranted.</li> <li>-Continue to conduct at least one watershed education event a year.</li> <li>-Continue to provide educational materials and recreational opportunities at community events as appropriate.</li> <li>-Continue to coordinate efforts with other educational BMPs.</li> <li>-Monitor success by documenting attendance at events and materials distributed.</li> </ul>	<ul style="list-style-type: none"> <li>-Convene responsible parties at least annually for program updates.</li> <li>-Select new educational/engagement opportunities as warranted.</li> <li>-Continue to conduct at least one watershed education event a year.</li> <li>-Continue to provide educational materials and recreational opportunities at community events as appropriate.</li> <li>-Continue to coordinate efforts with other educational BMPs.</li> <li>-Monitor success by documenting attendance at events and materials distributed.</li> </ul>
27	Improve stream connection to floodplain. Evaluate using National Floodplain Managers Association's "No Adverse Impact" (NAI) Program to maintain or reduce current peak flow levels, thus minimizing any increases in flooding of property.	Medium	WAH	<ul style="list-style-type: none"> <li>-Secure funding through identified funding sources.</li> <li>-Identify opportunities to improve stream connection to floodplain.</li> </ul>	<ul style="list-style-type: none"> <li>-Review the "No Adverse Impact" Program's applicability in Oldham County/Curry's Fork.</li> <li>-Use existing no adverse impact (NAI) presentations to present NAI information to responsible parties and technical agencies.</li> <li>-If appropriate, develop NAI program.</li> <li>-Conduct NAI outreach.</li> </ul>	<ul style="list-style-type: none"> <li>-Implement applicable "No Adverse Impact" program items through local ordinances</li> <li>-Begin implementation of program items in identified high priority areas.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue implementation in lower priority areas.</li> </ul>
<b>NORTH CURRY'S FORK TIER 2 BMP MILESTONES</b>							
28	Promote on-site wastewater system maintenance, operation and management education, targeting systems that are in low-lying areas and in proximity to waterways in the upper portion of the watershed.	High	PCR	<ul style="list-style-type: none"> <li>-Develop and distribute educational material.</li> <li>-Identify and prioritize target areas.</li> </ul>	<ul style="list-style-type: none"> <li>-In consultation with technical and responsible entities, review existing educational materials; modify for Curry's Fork if necessary.</li> <li>-Disseminate educational materials through existing programs and agents in the watershed.</li> <li>-Using social marketing techniques, raise awareness and provide solutions through as many avenues as possible.</li> <li>-Target homeowners living in proximity to waterways.</li> <li>-Educate homeowners on GWPP requirements.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to distribute educational materials and implement education/awareness program activities.</li> <li>-Track maintenance changes in homeowners through surveys or phone calls to targeted neighborhoods.</li> <li>-Revise educational material based on new priority areas and feedback from neighborhoods already targeted.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to distribute educational materials and implement education/awareness program activities.</li> <li>-Track maintenance changes in homeowners through surveys or phone calls to targeted neighborhoods.</li> <li>-Revise educational material based on new priority areas and feedback from neighborhoods already targeted.</li> </ul>
29	Use enhanced development guidelines in undeveloped areas and retrofits to developed areas that promote the incorporation of low-impact design elements and water quality BMPs into the design and construction.	High	WAH	<ul style="list-style-type: none"> <li>-Review low-impact designs and BMPs.</li> <li>-Review local ordinances.</li> </ul>	<ul style="list-style-type: none"> <li>-Review and select low-impact designs and BMPs appropriate for Curry's Fork.</li> <li>-Review local ordinances to identify any impediments to installing 'green' infrastructure or BMPs.</li> </ul>	<ul style="list-style-type: none"> <li>-Revise local ordinances to promote incorporation of 'green' infrastructure.</li> <li>-Begin implementation and enforcement of ordinance changes.</li> <li>-Annually review ordinances applicability.</li> <li>-Meet with developers and designers incorporating 'green' designs and discuss if the 'green' designs would have previously been included.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue to meet with developers and designers.</li> <li>-Continue to annual review ordinances applicability.</li> </ul>
30	Complete a stream restoration project on the downstream section after diverging from I-71, which was identified as having very high restoration potential to reduce high bank erosion rates.	Low	WAH	<ul style="list-style-type: none"> <li>-Meet property owners of potential project locations to discuss proposed remediation activities.</li> <li>-Secure funding.</li> <li>-Acquire appropriate easement/properties.</li> <li>-Review and approve restoration design.</li> <li>-Monitor conditions pre-and post-restoration.</li> <li>-Implement restoration.</li> <li>-Implement education program.</li> </ul>	<ul style="list-style-type: none"> <li>-Contact property owner(s) and secure cooperation/buy-in.</li> <li>-Engage property owners in decision making.</li> <li>-Secure funding through identified funding sources.</li> <li>-Ensure restoration design will meet environmental and property owner goals.</li> <li>-Work with property owners to acquire necessary property rights for project.</li> <li>-Acquire appropriate easement/properties.</li> </ul>	<ul style="list-style-type: none"> <li>-Continue with easement/acquisitions..</li> <li>-Review and approve restoration design.</li> <li>-Secure funding.</li> <li>-Assess pre-construction water quality (WQ), biological, and habitat conditions at project location.</li> <li>-Begin post-construction water quality monitoring.</li> <li>-Coordinate construction and implementation with other BMPs to utilize project as an educational to monitoring.</li> <li>-Coordinate construction and implementation with other BMPs and utilize project as an education tool.</li> <li>-Implement restoration.</li> </ul>	<ul style="list-style-type: none"> <li>-Maintain restoration/protection project as necessary.</li> <li>-Continue post-construction water quality monitoring.</li> <li>-Continue to coordinate with other BMPs to utilize project as an educational tool.</li> <li>-Evaluate improvements to WQ, biology, and habitat.</li> <li>-Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.</li> </ul>

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
<b>SOUTH CURRY'S FORK TIER 2 BMP MILESTONES</b>							
31	Eliminate Lakewood Treatment Plant in the next 11 to 20 years.	High	PCR	-Propose and review feasible alternatives. -Identify and secure funding sources. -Decommission Lakewood Treatment Plant.	-Review and select feasible elimination alternative and funding sources. -Eliminate Lakewood Treatment Plant using alternative identified in feasibility analysis. -Provide/require sewer hook-ups to residences in proximity to WWTP (implement concurrent with decommissioning). -Support 201 Wastewater Plan implementation with a focus on priority pathogen protection and restoration areas.	-Begin post-elimination water quality monitoring. -Review post-elimination water quality data. -Utilize post-elimination water quality data to support elimination of other package treatment plants.	-Continue post-decommissioning water quality monitoring.
32	Eliminate Lockwood Treatment Plant in the next 11 to 20 years.	High	PCR	-Propose and review feasible alternatives. -Identify and secure funding sources. -Decommission Lockwood Treatment Plant.	-Review and select feasible elimination alternative and funding sources. -Eliminate Lockwood Treatment Plant using alternative identified in feasibility analysis. -Provide/require sewer hook-ups to residences in proximity to WWTP (implement concurrent with decommissioning). -Support 201 Wastewater Plan implementation with a focus on priority pathogen protection and restoration areas.	-Begin post-elimination water quality monitoring. -Review post-elimination water quality data. -Utilize post-elimination water quality data to support elimination of other package treatment plants.	-Continue post-decommissioning water quality monitoring.
<b>ASHER'S RUN TIER 2 BMP MILESTONES</b>							
33	Increase/require the number of inspections of on-site wastewater systems. Possible triggers for inspection might be when property is bought/sold, or when utilities change names in the upper portion of the watershed.	High	PCR	-Establish inspection triggers. -Incorporate triggers into local ordinances.	-Discuss and select appropriate inspection triggers. -Develop inspection program guidelines and procedures. -Establish who will perform inspections. -Review and propose changes to local development/housing ordinances to incorporate triggers.	-Change local ordinances based on previous review. -Begin inspections. -Document inspection locations and results. -Coordinate inspection results with other BMPs related to on-site wastewater systems. -Enforce the development of GWPPs for on-site wastewater systems.	-Continue inspections. -Continue coordinating inspection results with other BMPs related to on-site wastewater systems.
34	Educate owners of livestock animals on appropriate BMPs for pathogen reduction in the upper portion of the watershed.	Medium	PCR	-Identify owners of livestock. -Provide BMP information. -Support AWQA compliance. -Implement BMP demonstration project if feasible.	-Review existing educational materials and modify, as necessary, for Curry's Fork. -Coordinate with existing programs to disseminate agricultural BMP information. -For qualifying producers, provide AWQA compliance assistance. -Provide cost-share program information to qualifying producers. -Meet with at least two owners of livestock.	-Continue to meet with owners of livestock as necessary. -Revise educational material as necessary based on new owners of livestock. -Use previous program participants as examples for others to follow. -Support implementation of an agricultural BMP demonstration project.	-Continue to meet with owners of livestock as necessary. -Revise educational material as necessary based on new owners of livestock. -Use previous program participants as examples for others to follow.
35	Encourage producers with marginal pasture lands to put their land into conservation easements, wildlife habitats, land and stewardships.	Medium	WAH	-Identify producers with marginal pasture lands. -Provide information to landowners on existing conservation easement type programs.	-Identify agriculture areas with marginal pasture lands. -Review existing conservation easement type program materials and modify, as necessary, for Curry's Fork. -Coordinate with existing programs to disseminate BMP information. -For qualifying producers, provide AWQA compliance assistance. -Provide cost-share and incentive payment program information to qualifying producers. -Meet with at least two owners of livestock. -Facilitate funding with willing property owners of marginal pasture land.	-Secure funding. -Remove at least one pasture from production and into a conservation easement type program. -Continue to identify marginal pasture lands that can be placed into conservation easements.	-Continue to meet with property owners to identify marginal pasture lands that can be placed into conservation easements. -Continue to facilitate information and funding. -Use previous program participant(s) as examples for others to follow.
36	Expand use of riparian buffers/filters strips around creek including enhancing "no-disturb" ordinance to require creating designed buffer/filter strips instead of just open space in the lower portion of the watershed.	Medium	PCR	-Review County "set back" ordinances to improve water quality benefit. -Identify needed changes to local ordinances. -Conduct outreach on proposed changes. -Implement revised design standards .	-Review Oldham County's current "set-back" standards and identify potential ways to expand water quality protection. -Collaborate with responsible parties and technical resources to revise local ordinances as warranted. -Establish revised design standards buffer/filter strips.	-Conduct outreach changes on proposed changes. -Change local ordinances based on previous review. -Begin implementation and enforcement of ordinance changes. -Document number of cases buffer strips were implemented where previously open space would have been sufficient.	-Annually review ordinance applicability. -Continue to enforce ordinance changes. -Continue to document use of buffer strips.
37	Implement Agricultural BMPs in the upper portion of the watershed.	Low	PCR	-Identify producers. -Provide BMP information. -Provide AWQA compliance assistance. -Implement BMP demonstration project if feasible.	-Review existing educational materials and modify, as necessary, for Curry's Fork. -Coordinate with existing programs to disseminate agricultural BMP information. -For qualifying producers, provide AWQA compliance assistance. -Provide cost-share and incentive program information to qualifying producers. -Meet with at least two owners of livestock.	-Continue to meet with owners of livestock as necessary -Revise educational material as necessary based on new owners of livestock. -Use previous program participants as examples for others to follow. -Support implementation of an agricultural BMP demonstration project.	-Continue to meet with owners of livestock as necessary. -Revise educational material as necessary based on new owners of livestock. -Use previous program participants as examples for others to follow.

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
<b>CURRY'S FORK MAIN STEM TIER 2 BMP MILESTONES</b>							
38	Educate owners of livestock animals on appropriate BMPs for pathogen reduction in the upper portion of the watershed.	Medium	PCR	-Establish inspection triggers. -Incorporate triggers into local ordinances.	-Discuss and select appropriate inspection triggers. -Develop inspection program guidelines and procedures. -Establish who will perform inspections. -Review and propose changes to local development/housing ordinances to incorporate triggers.	-Change local ordinances based on previous review. -Begin inspections. -Document inspection locations and results. -Coordinate inspection results with other BMPs related to on-site wastewater systems.	-Continue inspections. -Continue coordinating inspection results with other BMPs related to on-site wastewater systems.
39	Expand use of riparian buffers/filters strips around creek including enhancing "no-disturb" ordinance to require creating designed buffer/filter strips instead of just open space in the lower portion of the watershed.	Medium	PCR	-Review County "set back" ordinances to improve water quality benefit. -Identify needed changes to local ordinances. -Conduct outreach on proposed changes. -Implement revised design standards .	-Review Oldham County's current "set-back" standards and identify potential ways to expand water quality protection. -Collaborate with responsible parties and technical resources to revise local ordinances as warranted. -Establish revised design standards buffer/filter strips.	-Conduct outreach changes on proposed changes. -Change local ordinances based on previous review. -Begin implementation and enforcement of ordinance changes. -Document number of cases buffer strips were implemented where previously open space would have been sufficient.	-Annually review ordinances applicability. -Continue to enforce ordinance changes. -Continue to document use of buffer strips.
40	Eliminate Country Village Treatment Plant in the next 11 to 20 years.	Medium	PCR	-Propose and review feasible alternatives. -Identify and secure funding sources. -Decommission Country Village Treatment Plant.	-Review and select feasible elimination alternative and funding sources. -Eliminate Country Village Treatment Plant using alternative identified in feasibility analysis. -Provide/require sewer hook-ups to residences in proximity to WWTP (implement concurrent with decommissioning). -Support 201 Wastewater Plan implementation with a focus on priority pathogen protection and restoration areas.	-Begin post-elimination water quality monitoring. -Review post-elimination water quality data. -Utilize post-elimination water quality data to support elimination of other package treatment plants.	-Continue post-decommissioning water quality monitoring.
41	Encourage producers with marginal pasture lands to put their land into conservation easements, wildlife habitats, and land stewardships.	Medium	WAH	-Identify producers with marginal pasture lands. -Provide information to landowners on existing conservation easement type programs.	-Identify agriculture areas with marginal pasture lands -Review existing conservation easement type program materials and modify, as necessary, for Curry's Fork. -Coordinate with existing programs to disseminate BMP information. -For qualifying producers, provide AWQA compliance assistance. -Provide cost-share and incentive payment program information to qualifying producers. -Meet with at least two owners of livestock. -Facilitate funding with willing property owners of marginal pasture land.	-Secure funding. -Remove at least one pasture from production and into a conservation easement type program. -Continue to identify marginal pasture lands that can be placed into conservation easements.	-Continue to meet with property owners to identify marginal pasture lands that can be placed into conservation easements. -Continue to facilitate information and funding. -Use previous program participant(s) as examples for others to follow.
42	Expand and protect riparian zones/no-disturbance zones around creeks.	Medium	PCR	-Identify changes required in local ordinances. -Implement a riparian education program.	-Review local ordinances to identify required changes. -Change local ordinances based on previous review. -Review existing riparian educational materials and modify, as necessary, for Curry's Fork. -Use multiple avenues to raise awareness about the importance of riparian zones.	-Begin implementation and enforcement of ordinance changes. -Annually review ordinances applicability. -Continue to enforce ordinance changes. -Modify educational outreach efforts as necessary.	-Annually review ordinances applicability. -Continue to enforce ordinance changes. -Continue to modify and conduct educational and outreach programs targeted towards protecting riparian areas.
43	Evaluate existing Purchase Development Programs for applicability in Oldham County. Purchase (or place in conservation easements) properties and/or development rights along creeks to preserve streamside areas and encourage access to streams.	Medium	WAH	-Propose and review feasible alternatives. -Identify and secure funding sources. -Establish at least one conservation easement.	-Evaluate existing Purchase Development Rights (PDR) programs and summarize for responsible parties and technical agency staff. -Adopt or modify a PDR-type incentive program. -Identify and prioritize specific locations for preservation or conversion to parks. -Contact and meet with owners of identified areas. -Secure funding through identified funding sources. -Facilitate funding with willing property owners of marginal pasture land.	-Secure funding. -Promote/advertise opportunities. -Establish at least one conservation easement. -Continue to meet with property owners to facilitate information and funding.	-Continue to meet with property owners to potential properties to facilitate information and funding. -Acquire easements as opportunities arise.

TABLE 5.03-6–TIER 3 BEST MANAGEMENT PRACTICES MILESTONES

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
<b>ENTIRE WATERSHED TIER 3 BMP MILESTONES</b>							
44	Enhance roadside swales to include water-quality improvement functionality, such as using native grass species, elevated grates to trap first flush runoff, use of highly permeable soil, and utilization of an underdrain system.	High	WAH	-Compile list of swale enhancement BMPs. -Identify potential swale enhancement locations. -Secure funding. -Implement at least 1 enhancement per year in flood prone areas .	-Identify and prioritize potential swale enhancement project areas with a focus on flood prone areas. -Review and compile a list of feasible swale enhancement alternatives for Curry's Fork. -Complete at least 1 swale enhancement per year in identified flood prone areas.	-Promote swale enhancement BMPs and initiatives through local media and other outlets. -Complete at least 1 swale enhancement per year in flood prone areas. -Begin swale enhancement alternatives in other areas in the watershed. -Review available swale enhancement alternatives annually for new technologies or improvements.	-Continue to implement swale enhancement alternatives . -Continue to promote swale enhancement program. -Review available swale enhancement alternatives annually for new technologies or improvements.
45	Evaluate adopting a on-site wastewater inspection program that will establish the number of inspections of on-site systems.	High	PCR	-Establish program guidelines and procedures. -Incorporate triggers into local ordinances.	-Develop inspection program guidelines and procedures. -Establish who will perform inspections. -Review and propose changes to local development/housing ordinances to incorporate triggers. -Develop GWPP for systems.	-Change local ordinances based on previous review. -Begin inspections. -Document inspection locations and results. -Coordinate inspection results with other BMPs related to on-site wastewater systems.	-Continue inspections. -Continue coordinating inspection results with other BMPs related to on-site wastewater systems.
46	Reassess, and update as appropriate, design criteria for on-site wastewater requirements, including lot size requirements.	High	PCR	-Compile and review existing design criteria. -Change as necessary.	-Review and discuss design intent of current regulations. -Discuss new potential regulations and requirements based on an enhanced design to improve operation, maintenance and management of system. Include GWPP requirements in regulations. -Propose changes, as necessary, to update existing design criteria.	-Review and reassess on-site wastewater design criteria. -Update design criteria as necessary.	-Review and reassess on-site wastewater design criteria. -Update design criteria as necessary.
47	Support and encourage full and expedient development and implementation of Oldham County Environmental Authorities (OCEA) Stormwater Quality Management Plans (SWQMP).	High	PCR	-Use findings of WP to support development and implementation of OCEA's SWQMP.	-Modify/update SWQMP(s) as necessary to improve and expedite stormwater program implementation and as required by new Clean Water Act 402(p) guidelines. -Collaborate with watershed partners to reduce duplicity and obtain implementation assistance.	-Annually meet to review and discuss progress on implementing SWQMP. -Continue to coordinate WP efforts and utilize WP recommendations to support development of the SWQMP.	-Annually meet to review and discuss progress on implementing SWQMP. -Continue to coordinate WP efforts and utilize WP recommendations to support development of the SWQMP.
48	Support the formation of a citizen-based watershed group.	High	WAH	-Coordinate efforts with other watershed educational and outreach activities. -Facilitate initial meeting to form citizen-based watershed group. -Advertise and assist with recruiting participants.	-Facilitate initial watershed group meetings to form citizen-based watershed group. -Help group establish specific goals and objectives. -Provide technical support and resources for citizen-based watershed group. -Advertise group on website and during other watershed plan activities	-Continue to provide technical support and resources for citizen-based watershed group. -Advertise group with other watershed activities and functions. -Coordinate watershed plan activities with watershed group.	-Continue to provide technical support and resources for citizen-based watershed group. -Advertise group with other watershed activities and functions. -Coordinate watershed plan activities with watershed group.
49	Use stream restoration projects to educate decision makers and the community on stream conditions and function(s).	High	WAH	-Coordinate efforts with other stream protection and restoration projects. -Invite community to stream restoration projects that are completed or under construction. -Allow project designer to discuss project.	-Compile list of completed and ongoing WP stream restoration projects. -Meet with responsible parties to review and prioritize stream restoration projects used for education. -Advertise stream restoration project and educational opportunity. -Prepare educational materials.	-Conduct one educational opportunity a year at identified stream restoration projects. -Continue these activities for new stream restoration projects.	-Conduct one educational opportunity a year at identified stream restoration projects. -Continue these activities for new stream restoration projects.
50	Expand use of riparian buffers/filters strips around creek including enhancing 'no-disturb' ordinance to require creating designed buffer/filter strips instead of just open space.	Medium	WAH	-Review County "set back" ordinances to improve water quality benefit. -Identify needed changes to local ordinances. -Conduct outreach on proposed changes. -Implement revised design standards .	-Review Oldham County's current "set-back" standards and identify potential ways to expand water quality protection. -Collaborate with responsible parties and technical resources to revise local ordinances as warranted. -Establish revised design standards buffer/filter strips.	-Conduct outreach changes on proposed changes. -Change local ordinances based on previous review. -Begin implementation and enforcement of ordinance changes. -Document number of cases buffer strips were implemented where previously open space would have been sufficient.	-Annually review ordinances applicability. -Continue to enforce ordinance changes. -Continue to document use of buffer strips.
51	Evaluate existing Purchase Development Rights (PDR) programs for applicability in Oldham County. Purchase (or place in conservation easements) properties and/or development rights along creeks to preserve streamside areas and encourage access to streams.	Medium	WAH	-Propose and review feasible alternatives. -Identify and secure funding sources.	-Identify and prioritize areas for preservation or conversion to parks. -Contact and meet with owners of identified areas. -Secure funding through identified funding sources. -Facilitate funding with willing property owners of marginal pasture land.	-Secure funding. -Establish at least one conservation easement. -Continue to meet with property owners to potential.l properties to facilitate information and funding.	-Continue to meet with property owners to potential properties to facilitate information and funding. -Acquire easements as opportunities arise.

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
52	Incentivize low-impact design/green infrastructure inclusion in new developments and retrofits to existing developments.	Low	WAH	-Work with developers to identify appropriate incentives. -Include incentives in development/redevelopment ordinances.	-Meet with local developers to identify potential incentives. -Review potential incentives for incorporation of low-impact design/green infrastructure. -Review existing development ordinances. -Identify changes required in ordinances to incorporate green incentives. -Identify funding source/mechanism.	-Select appropriate incentives to include in ordinances. -Change development ordinances to include green incentives. -Begin providing incentives for green infrastructure in new developments and retrofits to developed areas. -Advertise and promote incentives to developers working within Curry's Fork.	-Review incentives and ordinances annually for potential updates. -Add/subtract incentives and qualifiers for incentives as necessary.
<b>NORTH CURRY'S FORK TIER 3 BMP MILESTONES</b>							
53	Eliminate Sewer Overflows consistent with the proposed consent decree.	High	PCR	-Review identified sewer overflow locations. -Implement corrective actions to eliminate sewer overflows.	-Develop a map of known and identified problem areas. -Review and select feasible alternatives to eliminate sewer overflows on a site specific basis. -Secure funding.	-Secure funding. -Begin implementing feasible alternatives. -Update map as problems are resolved or new problems are identified.	-Continue implementing feasible alternatives. -Update map as problems are resolved or new problems are identified.
54	Increase/require the number of inspections of on-site wastewater systems. Possible triggers for inspection might be when property is bought/sold, or when utilities change names.	High	PCR	-Establish inspection triggers. -Incorporate triggers into local ordinances.	-Discuss and select appropriate inspection triggers. -Develop inspection program guidelines and procedures. -Establish who will perform inspections. -Review and propose changes to local development/housing ordinances to incorporate triggers. -Develop GWPPs for systems.	-Change local ordinances based on previous review. -Begin inspections. -Document inspection locations and results. -Coordinate inspection results with other BMPs related to on-site wastewater systems.	-Continue inspections. -Continue coordinating inspection results with other BMPs related to on-site wastewater systems.
55	Promote on-site wastewater system maintenance, operation and management education, targeting systems that are in low-lying areas and in proximity to waterways.	High	PCR	-Develop and distribute educational material. -Identify and prioritize target areas.	-In consultation with technical and responsible entities, review existing educational materials; modify for Curry's Fork if necessary. -Disseminate educational materials through existing programs and agents in the watershed. -Using social marketing techniques, raise awareness and provide solutions through as many avenues as possible. -Target homeowners living in proximity to waterways. -Educate homeowners on GWPP requirements.	-Continue to distribute educational materials and implement education/awareness program activities. -Track maintenance changes in homeowners through surveys or phone calls to targeted neighborhoods. -Revise educational material based on new priority areas and feedback from neighborhoods already targeted.	-Continue to distribute educational materials and implement education/awareness program activities. -Track maintenance changes in homeowners through surveys or phone calls to targeted neighborhoods. -Revise educational material based on new priority areas and feedback from neighborhoods already targeted.
56	Conduct a stream survey along the middle section of North Curry's Fork to identify potential KYTC drainage improvement areas. Identify and implement stormwater reduction, storage and treatment opportunities along the I-71 corridor.	Medium	WAH	-Conduct a site reconnaissance with KYTC and University of Louisville Stream Institute staff to identify problem drainage areas. -Collaborate on solutions -Secure funding. -Remediate drainage issues.	-Review recommendations and results of UL Geomorphology study. -Conduct a stream reconnaissance along the middle section of North Curry's Fork to identify potential KYTC drainage improvement areas. -Collaborate on drainage solutions. -Secure funding. -Implement solutions.	-Continue to implement I/I drainage remediation projects. -Promote water quality improvement practices in local media.	-Continue to implement I/I drainage remediation projects. -Continue to promote water quality improvement practices in local media.
<b>SOUTH CURRY'S FORK TIER 3 BMP MILESTONES</b>							
57	Complete stream restoration or protection projects on the upstream tributaries, which were identified as very high restoration and protection potential.	High	WAH	-Meet property owners of potential project locations to discuss proposed remediation activities. -Secure funding. -Acquire appropriate easement/properties. -Review and approve restoration design. -Monitor conditions pre-and post-restoration. -Implement restoration. -Implement education program.	-Contact property owner(s) and secure cooperation/buy-in. -Engage property owners in decision making. -Secure funding through identified funding sources. -Ensure restoration design will meet environmental and property owner goals. -Work with property owners to acquire necessary property rights for project. -Acquire appropriate easement/properties.	-Continue with easement/acquisitions. -Review and approve restoration design. -Secure funding. -Assess pre-construction WQ, biological, and habitat conditions at project location. -Begin post-construction water quality monitoring. -Coordinate construction and implementation with other BMPs to utilize project as an educational tool to monitoring. -Coordinate construction and implementation with other BMPs and utilize project as an education tool. -Implement restoration.	-Maintain restoration/protection project as necessary. -Continue post-construction water quality monitoring. -Continue to coordinate with other BMPs to utilize project as an educational tool. -Evaluate improvements to WQ, biology, and habitat. -Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.
58	Complete a stream restoration project in the middle section of the main stem.	High	WAH	-Meet property owners of potential project locations to discuss proposed remediation activities. -Secure funding. -Acquire appropriate easement/properties. -Review and approve restoration design. -Monitor conditions pre-and post-restoration. -Implement restoration. -Implement education program.	-Contact property owner(s) and secure cooperation/buy-in. -Engage property owners in decision making. -Secure funding through identified funding sources. -Ensure restoration design will meet environmental and property owner goals. -Work with property owners to acquire necessary property rights for project. -Acquire appropriate easement/properties.	-Continue with easement/acquisitions. -Review and approve restoration design. -Secure funding. -Assess pre-construction WQ, biological, and habitat conditions at project location. -Begin post-construction water quality monitoring. -Coordinate construction and implementation with other BMPs to utilize project as an educational tool to monitoring. -Coordinate construction and implementation with other BMPs and utilize project as an education tool. -Implement restoration.	-Maintain restoration/protection project as necessary. -Continue post-construction water quality monitoring. -Continue to coordinate with other BMPs to utilize project as an educational tool. -Evaluate improvements to WQ, biology, and habitat. -Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.

BMP No.	BMP(s)	Feasibility	Impairment Addressed	Action Items	Milestones		
					Short Term (1 to 3 years)	Mid-Term (3 to 10 years)	Long Term (10+ years)
59	Replace or repair aging/failing on-site wastewater systems targeting systems that are in low-lying areas and in proximity to waterways.	High	PCR	-Target specific systems or areas for upgrades and repairs. -Assist with securing funding as appropriate. -Upgrade or replace at least 10 systems a year.	-Using results from on-site wastewater survey and "Bad Septic System" map, target specific systems or areas for upgrades and repairs. -Meet and work with willing homeowners in to upgrade/replace system. -Perform overdue maintenance on, repair or replace at least 10 priority on-site wastewater systems a year. -Enforce GWPP requirements.	-Continue to meet and work with willing homeowners on septic system maintenance, repairs and replacements. -Continue to perform overdue maintenance on, repair or replace at least 10 priority on-site wastewater systems.	-Continue to meet and work with willing homeowners on septic system maintenance, repairs and replacements. -Continue to perform overdue maintenance on, repair or replace at least 10 priority on-site wastewater systems .
<b>ASHER'S RUN TIER 3 BMP MILESTONES</b>							
60	Complete a stream restoration project upstream of Camden Lane in the Asher's Run subwatershed.	Low	WAH	-Meet property owners of potential project locations to discuss proposed remediation activities. -Secure funding. -Acquire appropriate easement/properties. -Review and approve restoration design. -Monitor conditions pre-and post-restoration. -Implement restoration. -Implement education program.	-Contact property owner(s) and secure cooperation/buy-in. -Engage property owners in decision making. -Secure funding through identified funding sources. -Ensure restoration design will meet environmental and property owner goals. -Work with property owners to acquire necessary property rights for project. -Acquire appropriate easement/properties.	-Continue with easement/acquisitions. -Review and approve restoration design. -Secure funding. -Assess pre-construction WQ, biological, and habitat conditions at project location. -Begin post-construction water quality monitoring. -Coordinate construction and implementation with other BMPs to utilize project as an educational tool to monitoring. -Coordinate construction and implementation with other BMPs and utilize project as an education tool. -Implement restoration.	-Maintain restoration/protection project as necessary. -Continue post-construction water quality monitoring. -Continue to coordinate with other BMPs to utilize project as an educational tool. -Evaluate improvements to WQ, biology, and habitat. -Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.
61	Complete a stream restoration project on the lower/downstream portion of Asher's Run near the confluence to address stream banks.	Low	WAH	-Meet property owners of potential project locations to discuss proposed remediation activities. -Secure funding. -Acquire appropriate easement/properties. -Review and approve restoration design. -Monitor conditions pre-and post-restoration. -Implement restoration. -Implement education program.	-Contact property owner(s) and secure cooperation/buy-in. -Engage property owners in decision making. -Secure funding through identified funding sources. -Ensure restoration design will meet environmental and property owner goals. -Work with property owners to acquire necessary property rights for project. -Acquire appropriate easement/properties.	-Continue with easement/acquisitions. -Review and approve restoration design. -Secure funding. -Assess pre-construction WQ, biological, and habitat conditions at project location. -Begin post-construction water quality monitoring. -Coordinate construction and implementation with other BMPs to utilize project as an educational tool to monitoring. -Coordinate construction and implementation with other BMPs and utilize project as an education tool. -Implement restoration.	-Maintain restoration/protection project as necessary. -Continue post-construction water quality monitoring. -Continue to coordinate with other BMPs to utilize project as an educational tool. -Evaluate improvements to WQ, biology, and habitat. -Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.
<b>CURRY'S FORK MAIN STEM TIER 3 BMP MILESTONES</b>							
62	Complete a stream protection project on the single main stem tributary identified as having very high protection potential.	Low	WAH	-Meet property owners of potential project locations to discuss proposed remediation activities. -Secure funding. -Acquire appropriate easement/properties. -Review and approve restoration design. -Monitor conditions pre-and post-restoration. -Implement restoration. -Implement education program.	-Contact property owner(s) and secure cooperation/buy-in. -Engage property owners in decision making. -Secure funding through identified funding sources. -Ensure restoration design will meet environmental and property owner goals. -Work with property owners to acquire necessary property rights for project. -Acquire appropriate easement/properties.	-Continue with easement/acquisitions. -Review and approve restoration design. -Secure funding. -Assess pre-construction WQ, biological, and habitat conditions at project location. -Begin post-construction water quality monitoring. -Coordinate construction and implementation with other BMPs to utilize project as an educational to monitoring. -Coordinate construction and implementation with other BMPs and utilize project as an education tool. -Implement restoration.	-Maintain restoration/protection project as necessary. -Continue post-construction water quality monitoring. -Continue to coordinate with other BMPs to utilize project as an educational tool. -Evaluate improvements to WQ, biology, and habitat. -Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.
63	Complete a stream restoration or protection project on the upstream tributaries, which were identified as high restoration and high protection potential.	Low	WAH	-Meet property owners of potential project locations to discuss proposed remediation activities. -Secure funding. -Acquire appropriate easement/properties -Review and approve restoration design. -Monitor conditions pre-and post-restoration. -Implement restoration. -Implement education program.	-Contact property owner(s) and secure cooperation/buy-in. -Engage property owners in decision making. -Secure funding through identified funding sources. -Ensure restoration design will meet environmental and property owner goals. -Work with property owners to acquire necessary property rights for project. -Acquire appropriate easement/properties.	-Continue with easement/acquisitions. -Review and approve restoration design. -Secure funding. -Assess pre-construction WQ, biological, and habitat conditions at project location. -Begin post-construction water quality monitoring. -Coordinate construction and implementation with other BMPs to utilize project as an educational to monitoring. -Coordinate construction and implementation with other BMPs and utilize project as an education tool. -Implement restoration.	-Maintain restoration/protection project as necessary. -Continue post-construction water quality monitoring. -Continue to coordinate with other BMPs to utilize project as an educational tool. -Evaluate improvements to WQ, biology, and habitat. -Continue to use restoration site as an educational tool for demonstrating stream dynamics and restoration techniques.
64	Eliminate Sewer Overflows consistent with the proposed consent decree.	Low	PCR	-Review identified sewer overflow locations. -Implement corrective actions to eliminate sewer overflows.	-Develop a map of known and identified problem areas. -Review and select feasible alternatives to eliminate sewer overflows on a site specific basis. -Secure funding.	-Secure funding. -Begin implementing feasible alternatives. -Update map as problems are resolved or new problems are identified.	-Continue implementing feasible alternatives. -Update map as problems are resolved or new problems are identified.

## 5.04 BEST MANAGEMENT PRACTICE IMPLEMENTATION COORDINATION

It is important to note a number of BMPs listed in Tables 5.03-1 through 5.03-3 will be more efficient and feasible if the responsible parties involved implement them in coordination with each other. Many entities and organizations listed as responsible parties and as technical assistance have existing watershed programs and initiatives in place that can be participated in, built upon, or used as a basis for the proposed BMPs in Tables 5.03-1, 5.03-2, and 5.03-3. Subsection 2.06 lists many of the current watershed programs and initiatives within the Curry's Fork watershed. Not only can existing programs be used as a reference, but BMPs that are being implemented can be implemented in coordination with one another to increase their overall effectiveness, reach a larger audience, and decrease implementation costs. BMPs should not be implemented before reviewing other recommended BMPs and ongoing projects within a project area. The subheadings below summarize what topics the Tier 1 BMPs focus on.

### A. Sewage Discharge Eliminations and Changes BMPs

1. Coordinate wastewater and drinking line expansions (BMP No. 13).
2. Elimination of WWTP or identified package treatment plants (BMP Nos. 17, 20, 31, 32, and 40).
3. Communicate WP priority areas with planning of wastewater system improvements (BMP No. 16).
4. Eliminate sewer overflows (BMP Nos. 53 and 64).

### B. On-Site Wastewater System BMPs

1. Implement a septic system survey or inspection program (BMP Nos. 1, 33, 45, and 54).
2. Establish a "Bad Septic Area Map" for Oldham County (BMP No. 6).
3. Evaluate/Create an on-site wastewater authority (BMP No. 7).
4. Promote on-site wastewater system maintenance (BMP Nos. 22, 28, and 55).
5. Replace or repair failing on-site wastewater systems (BMP Nos. 23 and 59).
6. Reassess on-site wastewater system design criteria (BMP No. 46).
7. Work with local entities and state and federal agencies to promote and implement recommendations from the WP (BMP No. 5).

### C. Watershed Education, Participation, Coordination, and Marketing BMPs

1. Engage a Watershed Coordinator (BMP No. 9).
2. Develop and implement a WP marketing program (BMP Nos. 2 and 5).
3. Develop and implement various WP education and awareness programs (BMP Nos. 4, 10, 14, and 15).
4. Engage the community with watershed issues (BMP No. 26).
5. Support the formation of a citizen-based watershed group (BMP No. 48).
6. Use stream restoration projects as educational tools (BMP No. 49).

D. Stormwater BMPs

1. Expand water quality enhancing landscaping practices (BMP No. 8).
2. Review ordinances for impediments to low-impact development (BMP No. 12).
3. Implement enhanced development guidelines in undeveloped areas and retrofits to developed areas (BMP No. 29).
4. Enhance roadside swales (BMP No. 44).
5. Incentivize low-impact development/green infrastructure (BMP No. 52).
6. Support the development and implementation of the OCEA SWQMP (BMP No. 47).

E. Restoration and Protection Project BMPs

1. Implement stream restoration and protection projects in identified priority areas (BMP Nos. 18, 19, 21, 25, 30, 56, 57, 58, 60, 61, 62, and 63).
2. Improve stream connection with floodplain (BMP No. 27).

F. Water Quality Sampling BMPs

Develop and implement a monitoring plan (BMP Nos. 3 and 11).

G. Agriculture BMPs

1. Provide support and educational resources for agricultural landowners (BMP Nos. 24, 34, and 38).
2. Implement agricultural BMPs (BMP No. 37).
3. Encourage producers with marginal pasture lands to put land into conservation easements (BMP Nos. 35 and 41).

H. Streamside BMPs

1. Expand use of riparian buffers around creek and enhance “no-disturb” ordinance (BMP Nos. 36, 39, 42, and 50).
2. Purchase properties or development rights along streams to preserve streamside areas (BMP Nos. 43 and 51).