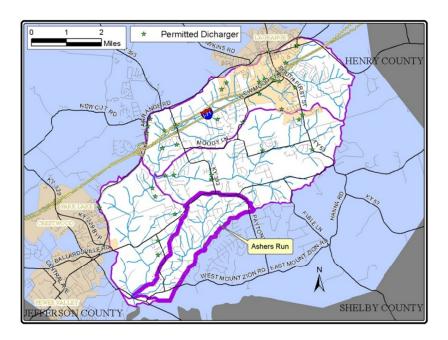
### Ashers Run Subwatershed

Curry's Fork Aquatic Habitat Roundtable Wednesday February 2, 2011 John Black Community Center



#### Watershed Aquatic Habitat Conditions

#### Biological Assessment - "Worse" Condition, High Priority Restoration

Worst biological assessment of any subwatershed.

Para	meters/Pollu	tants of Concern	Probable Sources						
Stressed	Stressed aquatic community, poor Disturbed stream habitat, low flow conditions								
macroinvert	ebrate and fis	h counts.		to small subwatershed size, assessment					
				performed outside of preferred time period					

### Physical Habitat - "Worse" Condition, High Priority Restoration

Overall poor habitat conditions but some site specific good riparian corridor width and minimal straightening in the downstream section.

Parameters of Concern	Probable Sources				
High entrenchment near Floyd's Fork confluence.	Land use changes and residential impacts in				
Poor upstream riparian width.	upper portion of subwatershed. Low flow conditions due to subwatershed size.				

#### Water Chemistry - "Better" Condition, Medium Priority Protection

Best water chemistry conditions of any subwatershed.

Pollutants of Concern	Probable Sources						
Minimal Concerns	Land use changes and residential impacts in						
	upper portion of subwatershed						

## Ashers Run Subwatershed

Curry's Fork Aquatic Habitat Roundtable Wednesday February 2, 2011 John Black Community Center

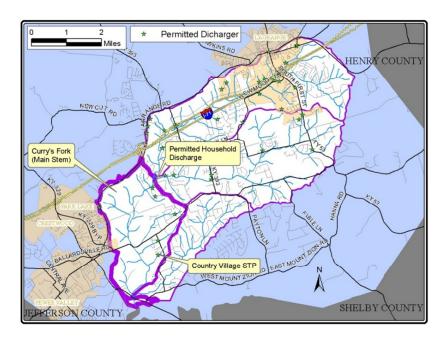
#### **Proposed Solutions / Remediation Activities**

On a scale of 1 to 5 with 5 being "extremely effective" and 1 being "not at all effective", how effective do you think these solutions will be at improving aquatic habitat conditions in Ashers Run? The solutions are listed in no particular order or rank. Circle your selection.

No.	Aquatic Habitat Remediation Activity			<b>→</b>	Least Effective			
1	Complete stream restoration projects that have been identified as feasible to implement and effective.	5	4	3	2	1	No Opinion	
2	Implement BMP's to address to improve habitat and riparian areas along agricultural lands.	5	4	3	2	1	No Opinion	
3	Use the findings of the Watershed Plan to augment the implementation of Oldham County's Stormwater Quality Management Plan	5	4	3	2	1	No Opinion	
4	Encourage producers with marginal pasture lands to put their land into conservation easements	5	4	3	2	1	No Opinion	
5	Develop and implement Agricultural Water Quality Plans.	5	4	3	2	1	No Opinion	

# Curry's Fork (Main Stem) Subwatershed

Curry's Fork Aquatic Habitat Roundtable Wednesday February 2, 2011 John Black Community Center



#### Watershed Aquatic Habitat Conditions

#### Biological Assessment - "Better" Condition, High Priority Protection

Best biological assessment of any subwatershed.

Parameters/Pollutants of Concern	Probable Sources					
Minimal concerns	Upstream impacts from North and South Curry's					
	Fork.					

### Physical Habitat - "Average" Condition, Medium Priority Restoration/Protection

Good riparian corridor width and minimal corridor encroachment on main stem.

Parameters of Concern	Probable Sources							
Highest sediment production. High entrenchment	, , , ,							
and poor bank stability, especially near confluence with Floyd's Fork.	conditions, land use changes and residential impacts from tributaries and upstream from North and South Curry's Fork.							

#### Water Chemistry - "Average" Condition, Medium Priority Restoration/Protection

pH levels very good throughout subwatershed.

Pollutants of Concern	Probable Sources						
	Upstream contributions from North and South Curry's Fork. There do not appear to be any significant sources within the subwatershed itself.						

# Curry's Fork (Main Stem) Subwatershed

Curry's Fork Aquatic Habitat Roundtable Wednesday February 2, 2011 John Black Community Center

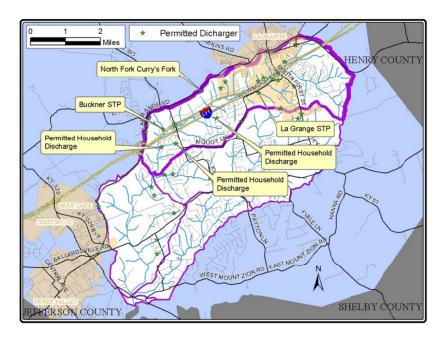
#### Proposed Solutions / Remediation Activities

On a scale of 1 to 5 with 5 being "extremely effective" and 1 being "not at all effective", how effective do you think these solutions will be at improving aquatic habitat conditions in the Curry's Fork (main stem) Area? The solutions are listed in no particular order or rank. Circle your selection.

No.	Aquatic Habitat Remediation Activity	Most	<b>←</b>	<b>→</b>	Le	as	t Effective
1	Require dischargers to the stream to meet more stringent nutrient limits.	5	4	3	2	1	No Opinion
2	Eliminate small treatment plants in the watershed	5	4	3	2	1	No Opinion
3	Eliminate Sewer Overflows	5	4	3	2	1	No Opinion
4	Use the findings of the Watershed Plan to augment the implementation of Oldham County's Stormwater Quality Management Plan	5	4	3	2	1	No Opinion
5	Complete stream restoration projects that have been identified as feasible to implement and effective.	5	4	3	2	1	No Opinion

## North Curry's Fork Subwatershed

Curry's Fork Aquatic Habitat Roundtable Wednesday February 2, 2011 John Black Community Center



#### Watershed Aquatic Habitat Conditions

#### Biological Assessment - "Average" Condition, Medium Priority Restoration/Protection

Some of the best conditions of any subwatershed between I-71 where encroachment is restricted and stream has wide, healthy riparian vegetation.

Parameters/Pollutants of Concern	Probable Sources			
Stressed fish community due to nutrient levels and	Wastewater treatment facilities, corridor			
downstream site specific poor habitat conditions	development in downstream subwatershed.			

### Physical Habitat - "Better" Condition, High Priority Protection

Some of the best conditions of any subwatershed between I-71 where encroachment is restricted and stream has wide, healthy riparian vegetation.

Parameters of Concern	Probable Sources							
Site specific poor conditions downstream near	Stream corridor encroachment, residential							
South Fork confluence with high entrenchment, sediment production, and stream straightening.	impacts. Future land use changes are also a concern.							

### Water Chemistry - "Average" Condition, Medium Priority Restoration/Protection

DO and pH levels very good throughout subwatershed.

Pollutants of Concern	Probable Sources
Worst nutrient levels of any subwatershed.	Wastewater treatment facilities (better now due to
·	increased nutrient removal from these facilities)

# North Curry's Fork Subwatershed

Curry's Fork Aquatic Habitat Roundtable Wednesday February 2, 2011 John Black Community Center

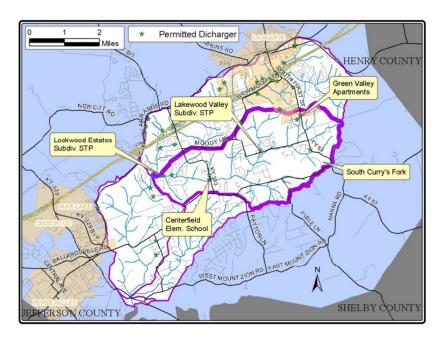
#### **Proposed Solutions / Remediation Activities**

On a scale of 1 to 5 with 5 being "extremely effective" and 1 being "not at all effective", how effective do you think these solutions will be at improving aquatic habitat conditions in North Curry's Fork? The solutions are listed in no particular order or rank. Circle your selection.

No.	Aquatic Habitat Remediation Activity	Mos	: ◀		►L	eas	st Effective
1	Use enhanced development guidelines in undeveloped areas that promote the incorporation of low-impact design elements and water quality BMP's into the design and construction.	5 1	4	3	2	1	No Opinion
2	Eliminate Sewer Overflows	5	4	3	2	1	No Opinion
3	Require dischargers to the stream to meet more stringent nutrient limits.	5	4	3	2	1	No Opinion
4	Complete stream restoration projects that have been identified as feasible to implement and effective.	5	4	3	2	1	No Opinion
5	Increase stormwater infiltration into the ground to address flooding and water quality issues	5	4	3	2	1	No Opinion

## South Curry's Fork Subwatershed

Curry's Fork Aquatic Habitat Roundtable Wednesday February 2, 2011 John Black Community Center



#### Watershed Aquatic Habitat Conditions

#### Biological Assessment - "Worse" Condition, High Priority Restoration

Overall poor biological assessment.

Parameters/Pollutants of Concern	Probable Sources						
,	Disturbed stream habitat, lack of riparian						
pollutant resistant species and low counts of	vegetation, poor DO conditions, land use changes						
pollutant sensitive species	and residential impacts						

#### Physical Habitat - "Worse" Condition, High Priority Restoration

Overall poor conditions but downstream section has some site specific good conditions with good riparian vegetation and minimal stream straightening.

Parameters of Concern	Probable Sources						
Worst riparian width upstream, worst overall stream straightening, high entrenchment near Curry's Fork confluence, high TSS levels and high sediment production	clearing of riparian vegetation.						

#### Water Chemistry - "Average" Condition, Medium Priority Restoration/Protection

Very good pH and nutrient conditions.

Pollutants of Concern	Probable Sources				
Worst DO conditions of any subwatershed	Higher average stream temperatures due to lack				
	of riparian vegetation and stream straightening				

## South Curry's Fork Subwatershed

Curry's Fork Aquatic Habitat Roundtable Wednesday February 2, 2011 John Black Community Center

#### Proposed Solutions / Remediation Activities

On a scale of 1 to 5 with 5 being "extremely effective" and 1 being "not at all effective", how effective do you think these solutions will be at improving aquatic habitat conditions in the South Curry's Fork? The solutions are listed in no particular order or rank. Circle your selection.

No.	Aquatic Habitat Remediation Activity	Most ← → Least Effec			st Effective		
1	Utilize BMP's that maximize infiltration, reduce runoff, and improve water quality.	5	4	3	2	1	No Opinion
2	Use enhanced development guidelines in undeveloped areas that promote the incorporation of low-impact design elements and water quality BMP's into the design and construction.	5	4	3	2	1	No Opinion
3	Require dischargers to the stream to meet more stringent nutrient limits.	5	4	3	2	1	No Opinion
4	Implement BMP's to address to improve habitat and riparian areas along agricultural lands.	5	4	3	2	1	No Opinion
5	Complete stream restoration projects that have been identified as feasible to implement and effective.	5	4	3	2	1	No Opinion
6	Use the findings of the Watershed Plan to augment the implementation of Oldham County's Stormwater Quality Management Plan	5	4	3	2	1	No Opinion

## Entire Curry's Fork Watershed

Curry's Fork Aquatic Habitat Roundtable Wednesday February 2, 2011 John Black Community Center

#### **Proposed Solutions / Remediation Activities**

On a scale of 1 to 5 with 5 being "extremely effective" and 1 being "not at all effective", how effective do you think these solutions will be at improving aquatic habitat conditions in Curry's Fork Watershed? Circle your selection. The solutions are listed in no particular order or rank. Under the 'Rank' column, please rank your top 5 proposed solutions 1 through 5, 1 being the highest rank and 5 being the lowest rank.

No.	Aquatic Habitat Remediation Activity	c Habitat Remediation Activity Most ← ➤ Least Effective					Rank
1	Educate planners, designers, reviewers, etc. of developments on low- impact design and incentivize its inclusion in new developments and re- developments.	5	4	3	2	1	
2	Expand and the level of protection for floodplains	5	4	3	2	1	
3	Expand and enhance "no-disturb"/riparian zones around creeks.	5	4	3	2	1	
4	Promote the use of voluntary conservation easements to protect lands around creeks.	5	4	3	2	1	
5	Preserve forested areas	5	4	3	2	1	
6	Improve the performance and regulation of on-site wastewater systems	5	4	3	2	1	
7	Use stream restoration projects to improve stream function and to educate.	5	4	3	2	1	
8	Provide watershed educational and recreational opportunities	5	4	3	2	1	
9	Establish a citizen-based watershed group.	5	4	3	2	1	