

# Water Quality and Twenty-five Mile Creek



September 16, 2016



# Why Install Conservation Practices?

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- ▶ Agricultural Practices can affect water quality
  - ▶ Animal waste
  - ▶ Fertilizer
  - ▶ Pesticides
  - ▶ Soil erosion and sediment transport



# Why Worry About Water Quality

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## ➤ Health Related Issues

- ▶ Drinking water quality for humans
- ▶ Safe swimming/wading/boating
- ▶ Drinking water quality for livestock

## ➤ Effect on Aquatic Animals

fish and other critters who live in the water, some of which we like to eat

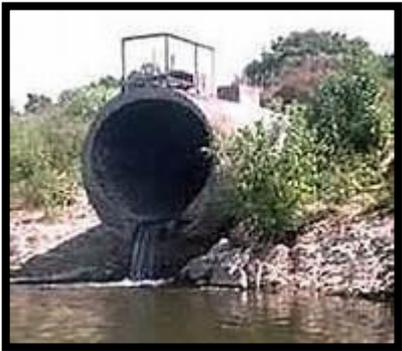


# Sources of Pollutants

- **Industrial (point sources)**
- **Wildlife**
- **Agriculture**
  - ▶ Animal waste (pathogens, nutrients, O<sub>2</sub> demanding material)
  - ▶ Fertilizer
  - ▶ Pesticides
  - ▶ Soil Erosion and sediment transport

- **Municipal**

- ▶ Runoff from roofs, parking lots, roads
- ▶ Leaking sewer lines & overflows
- ▶ Leaking septic systems
- ▶ Pet waste



# How Do Agricultural Practices Affect Water Quality?

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- ▶ Animal Waste Fecal Coliform production rates (units per animal per day)

**Cattle – 100 billion**

**Sheep – 12 billion**

**Pigs – 11 billion**

**Dogs – 8 billion**

**Chickens – 1.4 billion**

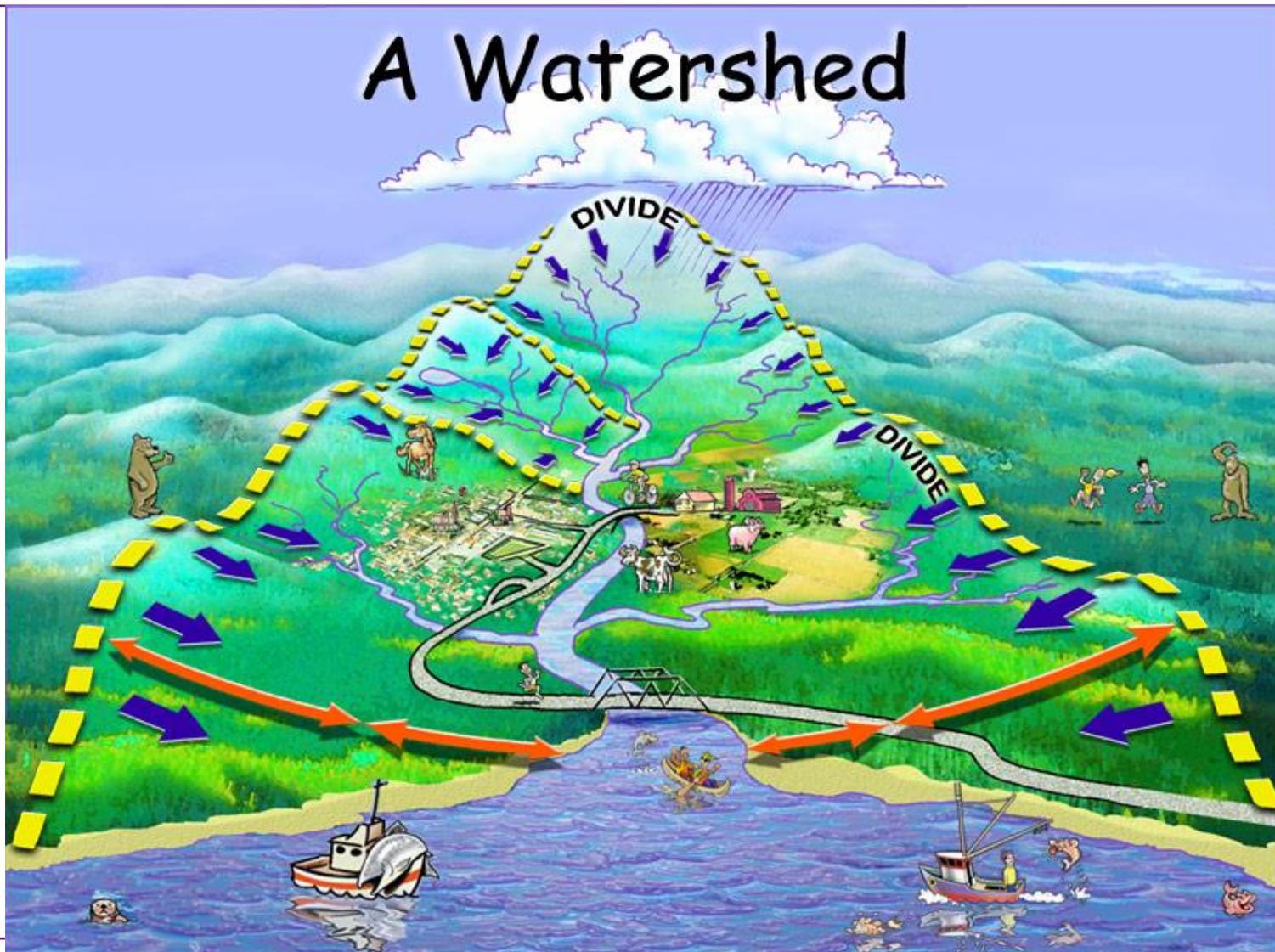
**Turkeys – 1 billion**

**Horses – 400 million**



- ▶ Water Quality Standard for freshwater is 126 units/100ml

# Watersheds



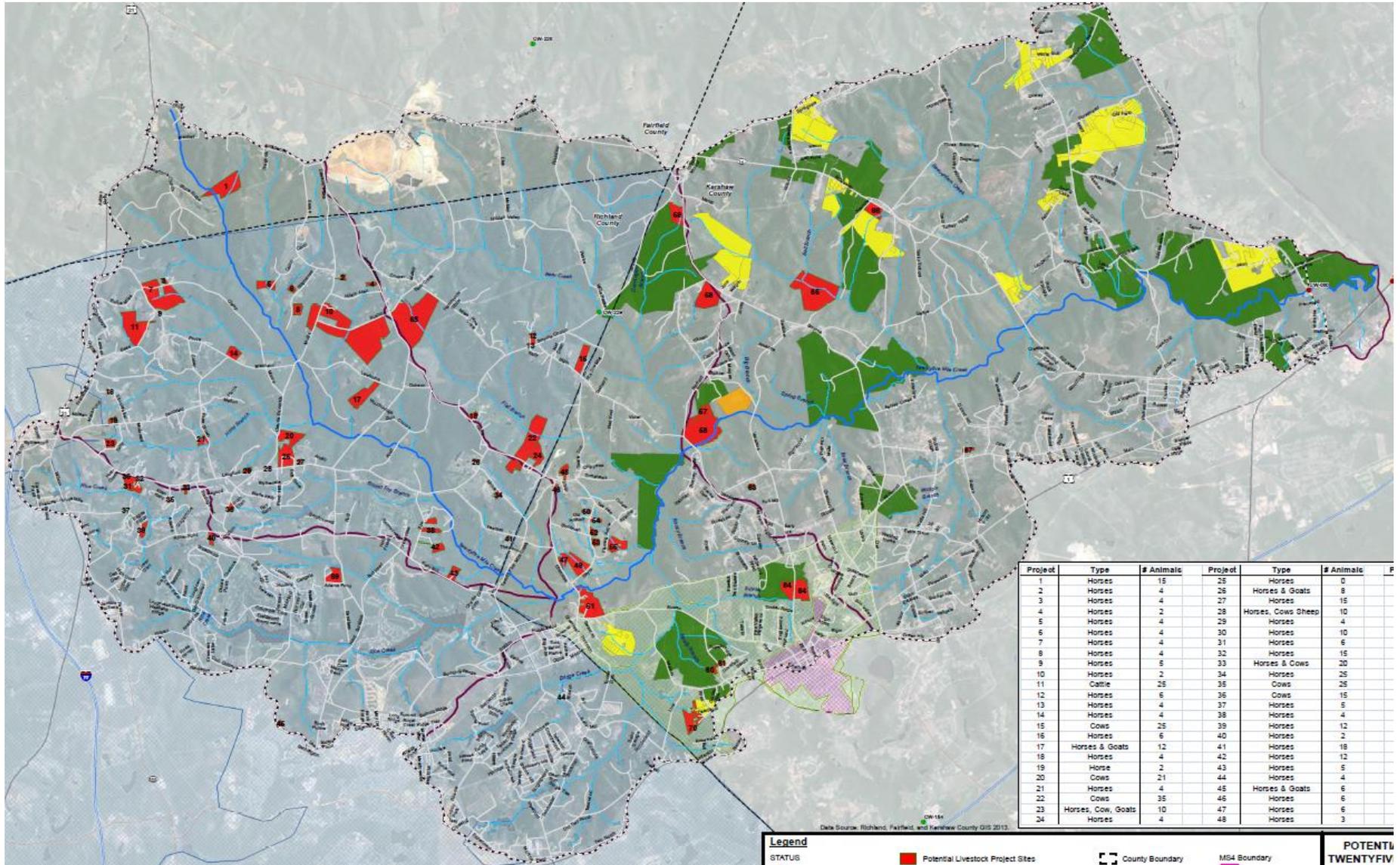
# Agricultural Pollutant Contribution to a Watershed



- **Twenty-five Mile Creek –**  
approximately 85% of bacteria from agricultural sources
- **Twelvemile Creek –**  
approximately 83% of bacteria from agricultural sources
- **Hollow Creek –**  
Approximately 80% of bacterial from agricultural sources



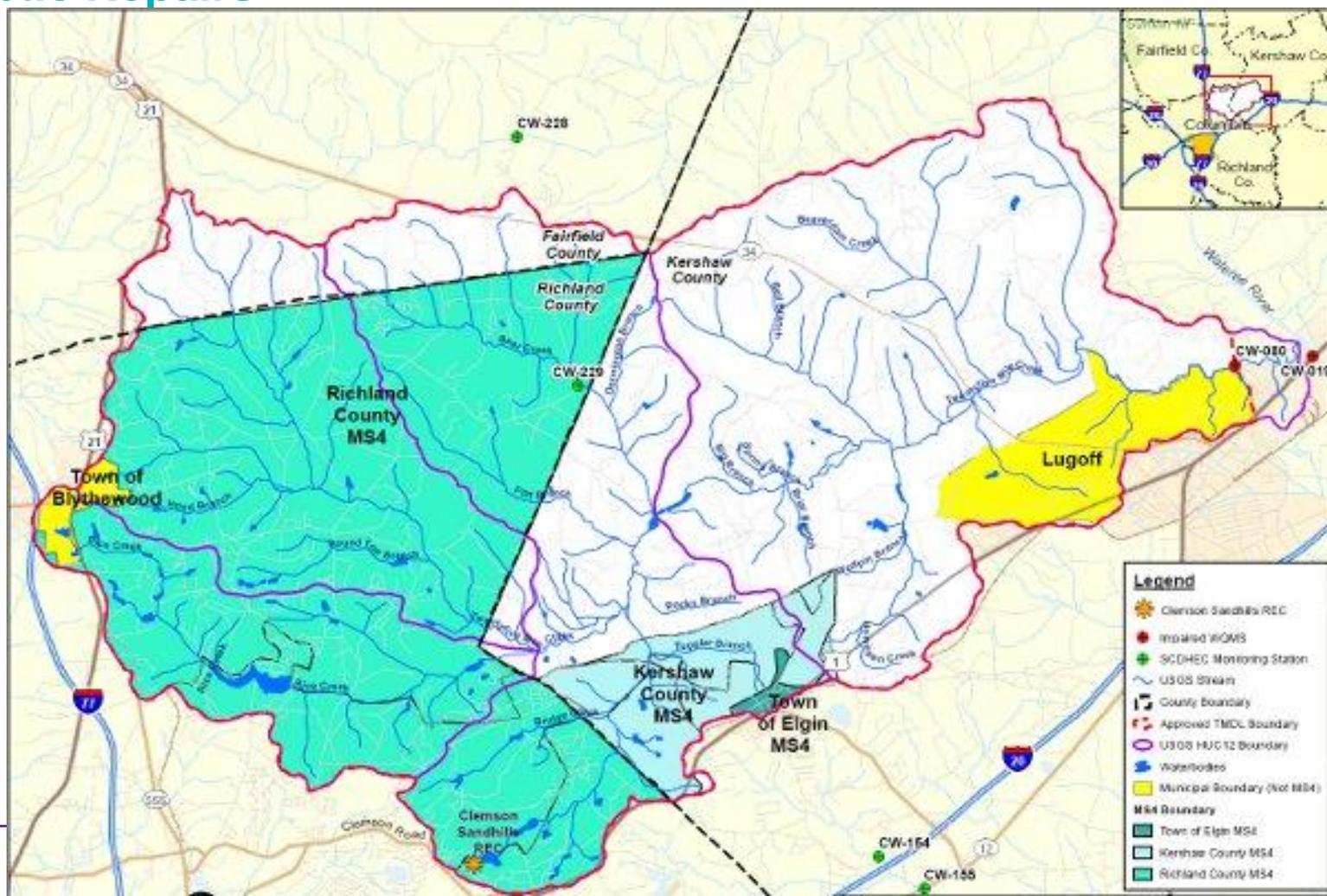
# Estimated 350 horses in Twenty-five Mile Creek Watershed





# Twenty-five Mile Creek Watershed 319 Grant

Cost Share Funds are Available for Installation of **Agricultural BMPs** and **Septic Repairs**







# NRCS EQIP Cost Share Funds

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## Steps to Assistance

How to Get Assistance from NRCS for Farms, Ranches and Forests

1

PLANNING

Visit your local NRCS field office to discuss your goals and work with staff on a conservation plan.

2

APPLICATION

With the help of NRCS, complete an application for financial assistance programs.

3

ELIGIBILITY

Find out if you're eligible for NRCS' variety of financial assistance programs.

4

RANKING

NRCS ranks applications according to local resource concerns.

5

IMPLEMENTING

Put conservation to work by signing a contract and implementing conservation practices.



# Twenty-five Mile Creek Watershed 319 Grant

**Cost share funding available for BMPs such as:**

- Fencing to keep livestock out of streams
- Well and trough for drinking water for livestock
- High impact area stabilization
- Cross fencing
- Composters
- Stream bank stabilization

