# Chapter 5 Pollutant Source Assessment

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#### Review

- Spatially Explicit Load Enrichment Calculation Tool (SELECT) was utilized to estimate potential bacteria loads from different sources
- Potential loads were estimated at the subwatershed level
- All SELECT outputs in Chapter 5 are identical to those presented at the Aug. 2010 Partnership meeting, except for the Septic Systems map

#### Functions Of Work Groups

Populations applied to appropriate land use

### **Functions of SELECT**

Determine Population Estimates

Bacteria loading is calculated per subwatershed

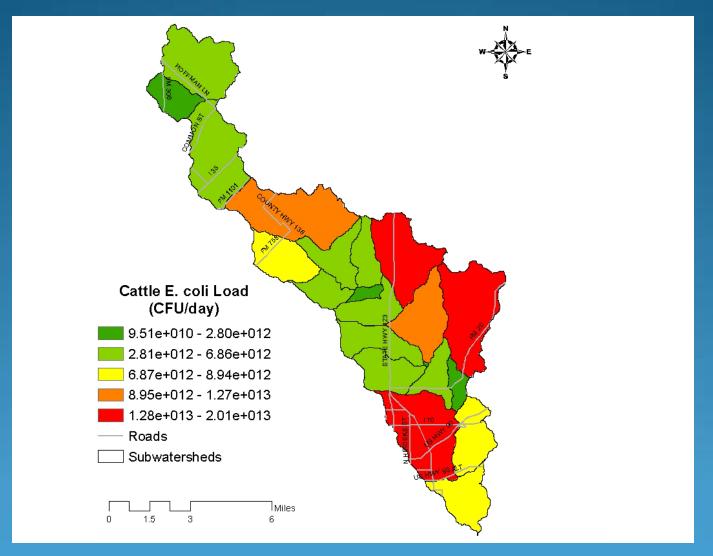
Useful in directing implementation

Create map of where loading occurs

#### **SELECT Inputs**

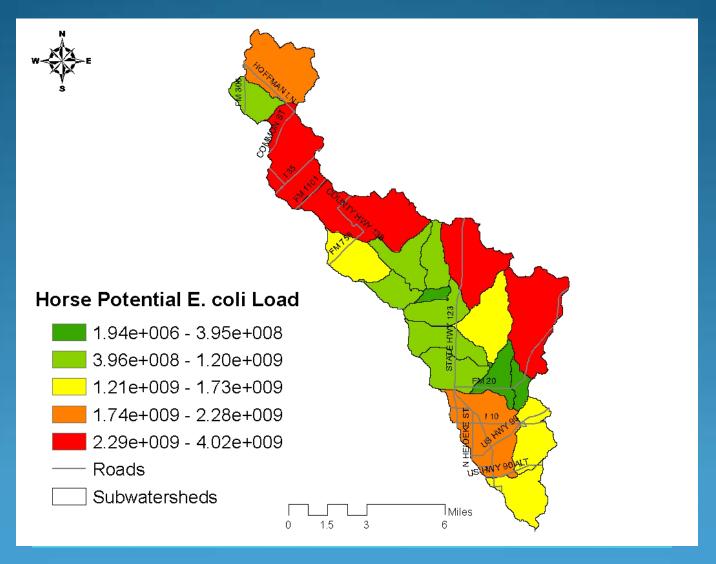
- Agriculture Work Group
  - Livestock: cattle, horse and goat populations
  - Wildlife populations (deer)
  - Feral hog populations
- Urban Work Group
  - Dog populations
  - Urban runoff
- Wastewater Work Group
  - Septic systems

### Daily Potential *E. coli* loads resulting from Cattle

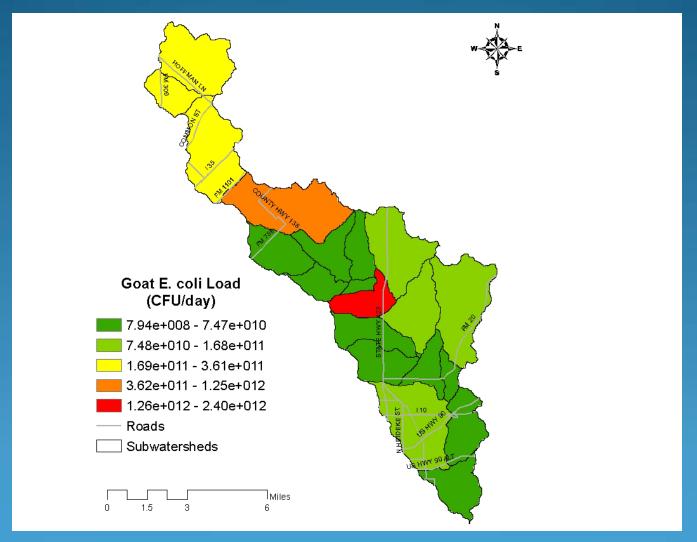


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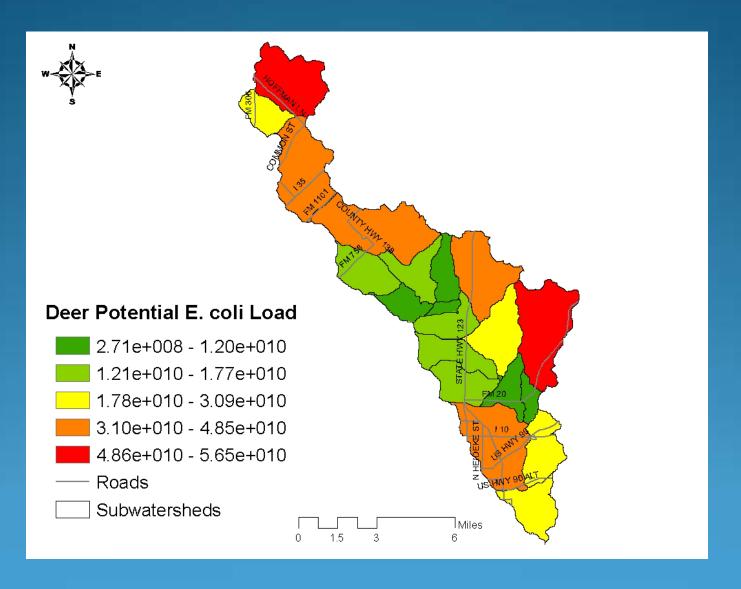
### Daily Potential *E. coli* loads resulting from Horses



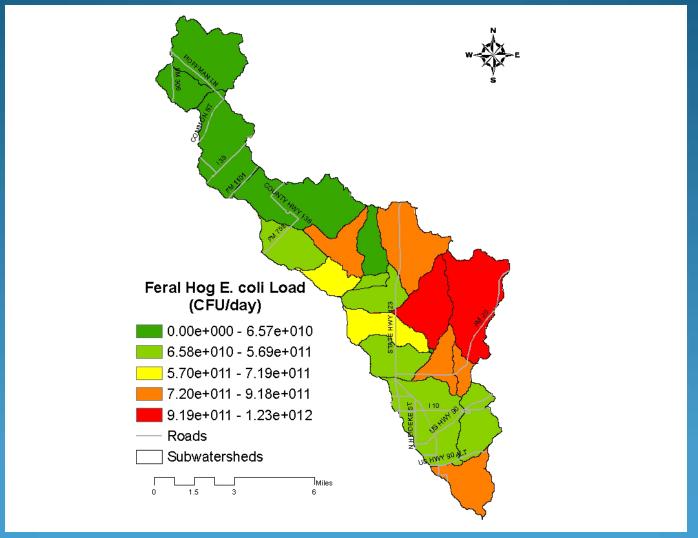
#### Daily Potential E. coli Loads from Goats



#### Daily Potential E. coli Loads from Deer



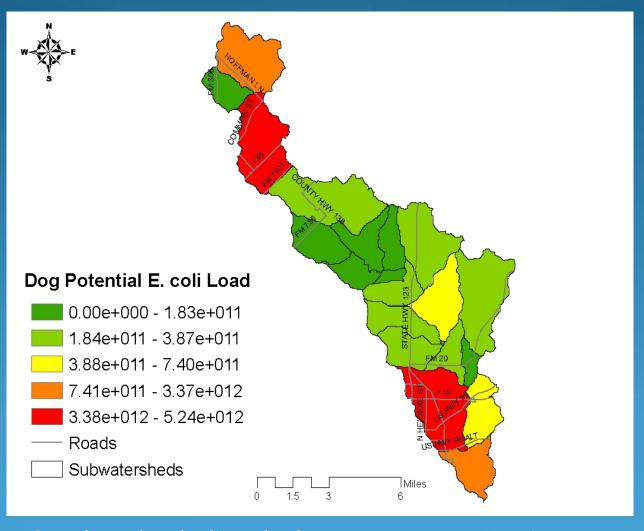
## Daily Potential *E. coli* Loads from Feral Hogs



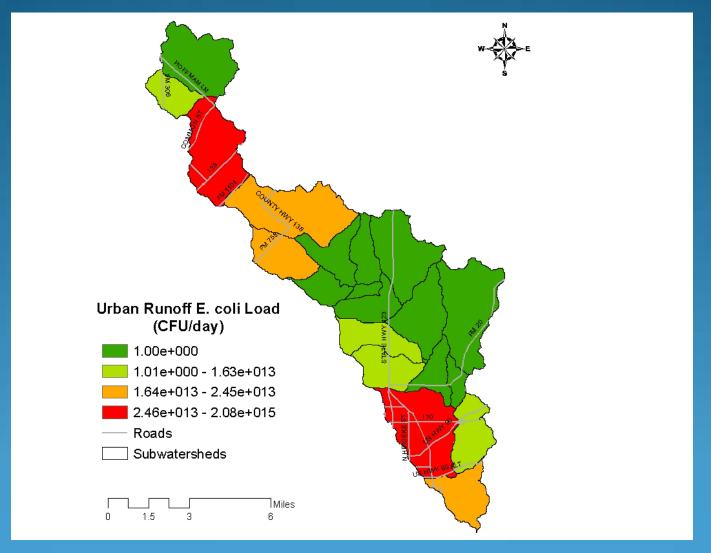
#### **SELECT Inputs**

- Urban Work Group
  - Dog populations
  - Urban runoff
- Wastewater Work Group
  - Septic systems
- Agriculture Work Group
  - Feral hog populations
  - Livestock: cattle, horse and goat populations
  - Wildlife populations (deer)

### Daily Potential *E. coli* Loads from Dogs



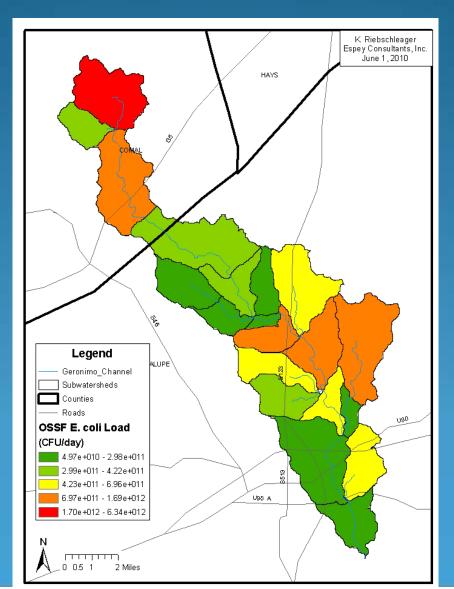
### Daily Potential *E. coli* loads resulting from Urban Runoff



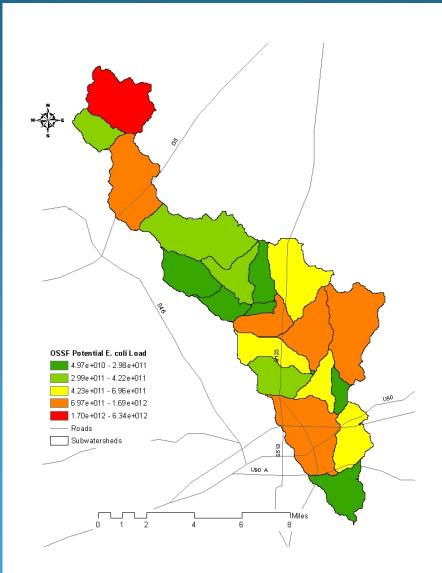
#### **SELECT Inputs**

- Wastewater Work Group
  - Septic systems
- Urban Work Group
  - Dog populations
  - Urban runoff
- Agriculture Work Group
  - Feral hog populations
  - Livestock: cattle, horse and goat populations
  - Wildlife populations (deer)

# Daily Potential *E. coli* Loads from Septic Systems (original)



# Daily Potential *E. coli* Loads from Septic Systems (revised)



### Questions and Discussion