

Lampasas River Watershed Partnership

Habitat and Wildlife and Agricultural Issues Work Group

Lisa Prcin
Watershed Coordinator
Texas AgriLife Research at
Blackland Research & Extension Center

Past Business

Work Group Collaboration

- ▶ Agricultural Issues and Habitat and Wildlife Work Groups have decided to join together
- ▶ Discuss specific causes and sources of nonpoint source pollution stemming agriculture, wildlife and feral hogs
- ▶ Estimate populations and distribution of possible sources, including:
 - Sheep
 - Goats
 - Horses
 - Deer
 - Feral Hogs
 - Cattle

Work Group Collaborations

- ▶ Work Group collaborations will not be final until the Steering Committee votes and approves this change
- ▶ Need new Work Group name
 - Agriculture Nonpoint Source
 - Agriculture and Habitat Nonpoint Source
 - Rural Nonpoint Source
 - Other Suggestions?

April Work Group Meetings

▶ Habitat and Wildlife Work Group

- Stakeholder Concerns
 - Recreational river users leaving solid waste behind and not respecting landowners
 - Erosion and stream bank failure
 - Water rights? Who owns what part of the river?
- Possible Solutions
 - Barriers placed at access points to limit access of automobiles to river
 - Education to recreational users
- Land Use
 - Discussed two land use scenarios
 - Work group agreed to use Option 1 - combine Rangeland and Pasture into one class
- Source Populations
 - Deer - gather survey data from all WMAs within the watershed before making a decision
 - Feral Hogs - based on population data of 12 feral hogs per square mile in 1997, work group agreed upon 20 feral hogs per acre

April Work Group Meetings

- ▶ **Agricultural Issues Work Group**
 - **Stakeholder Concerns**
 - Solid waste disposal, i.e. illegal dumping within river
 - Brush control programs
 - Bank failure
 - Increase in feral hogs and their impact on the watershed
 - **Possible Solutions**
 - Riparian buffers
 - Brush control with possible cost share from NRCS
 - **Land Use**
 - Discussed two land use scenarios
 - Work group agreed to use Option 1 – combine Rangeland and Pasture into one class
 - **Source populations**
 - Work Group agreed up one uniform stocking rate of 1AU:20 acres

2010 Integrated Report

- ▶ Public Comment Period ended March 8th, 2010
- ▶ Surface Water Quality Monitoring staff has reviewed and incorporated comments
- ▶ DRAFT 2010 Texas Integrated Report will be presented to the TCEQ Commission for its consideration to approve the IR and submit to the EPA at the August 25th agenda.
- ▶ Final draft and responses to public comments will be posted on the following web site upon Commissioner approval: <http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/10twqi/10twqi>

Modeling Support for Lampasas River Watershed– SELECT (06/21/10)

Kyna McKee
R. Karthikeyan
Biological and Agricultural Engineering

SELECT

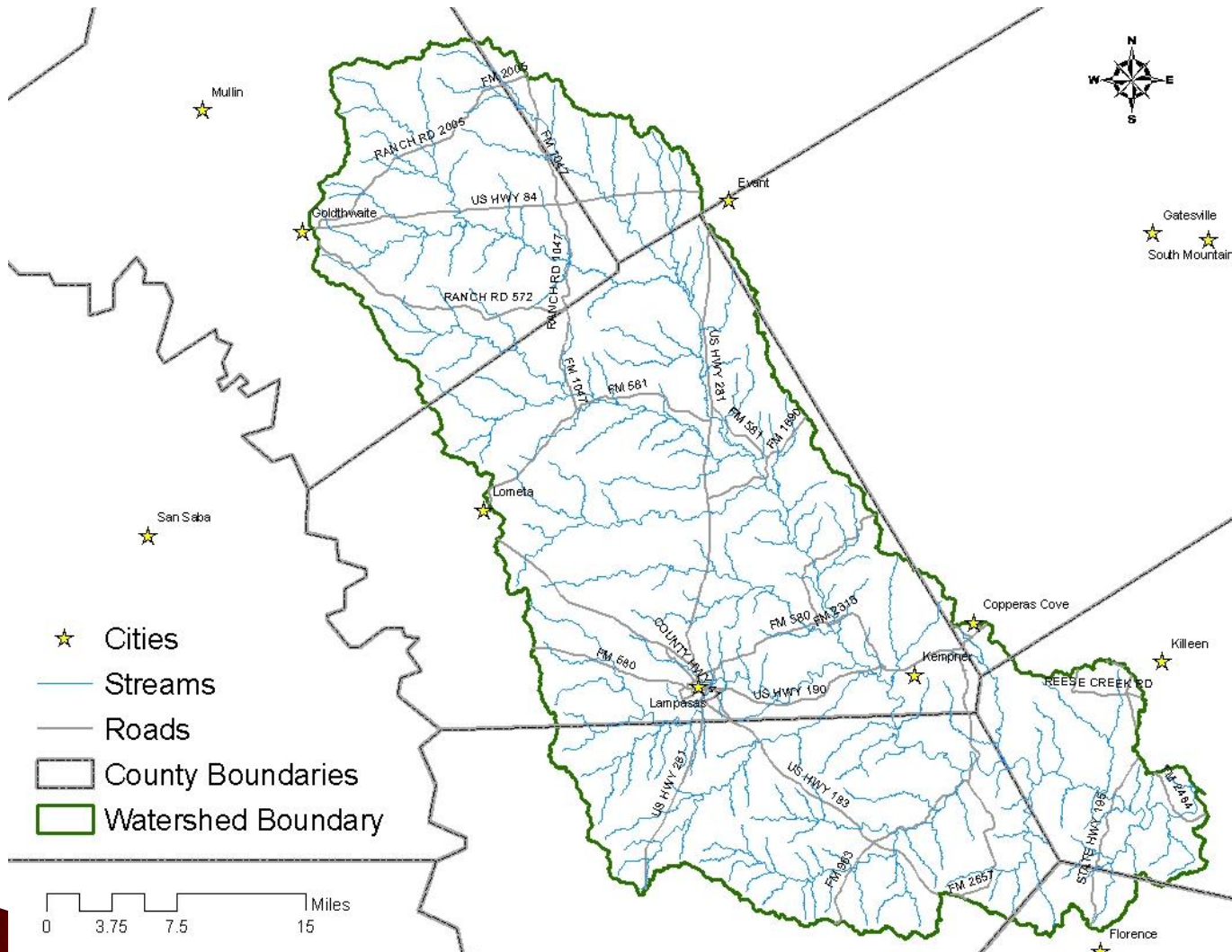
- Land use/ land cover data updated

- Watersheds delineated

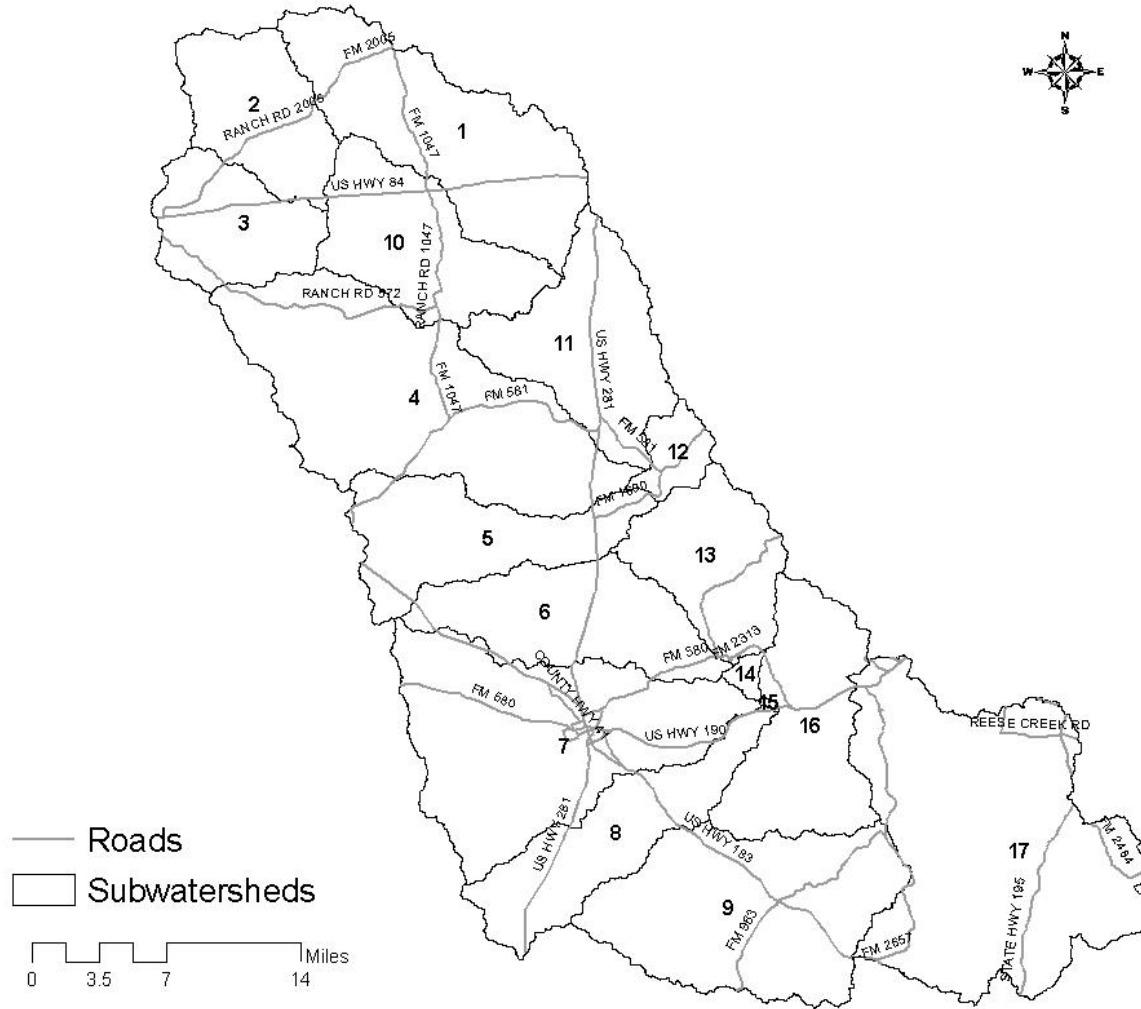
- Data layers needed for SELECT
 - Land use
 - Hydrography (stream network)
 - Urban areas
 - Watershed boundary
 - County boundary

 - Population density
 - Cattle
 - Wildlife (Deer)
 - Feral Hogs

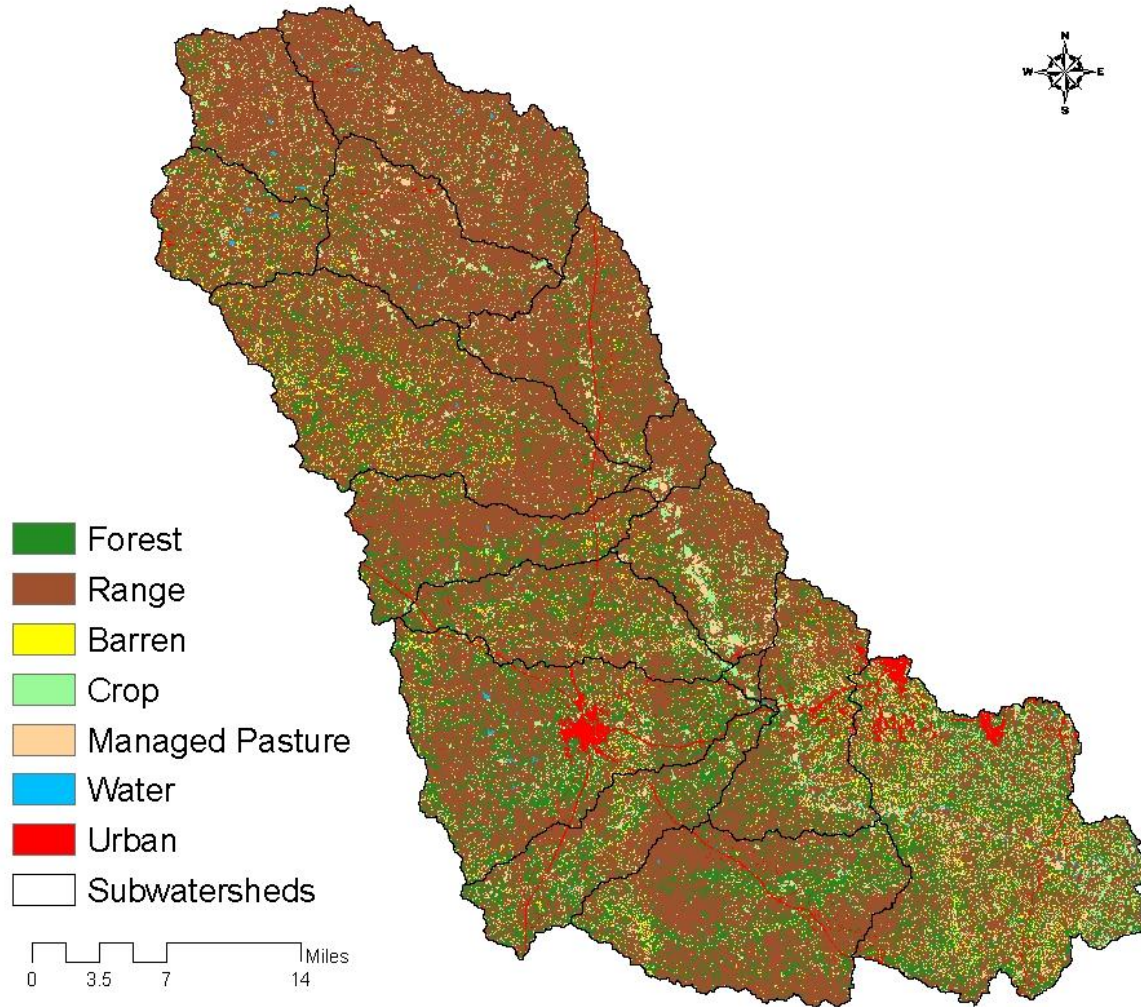
Lamparas River Watershed



Watershed Segments



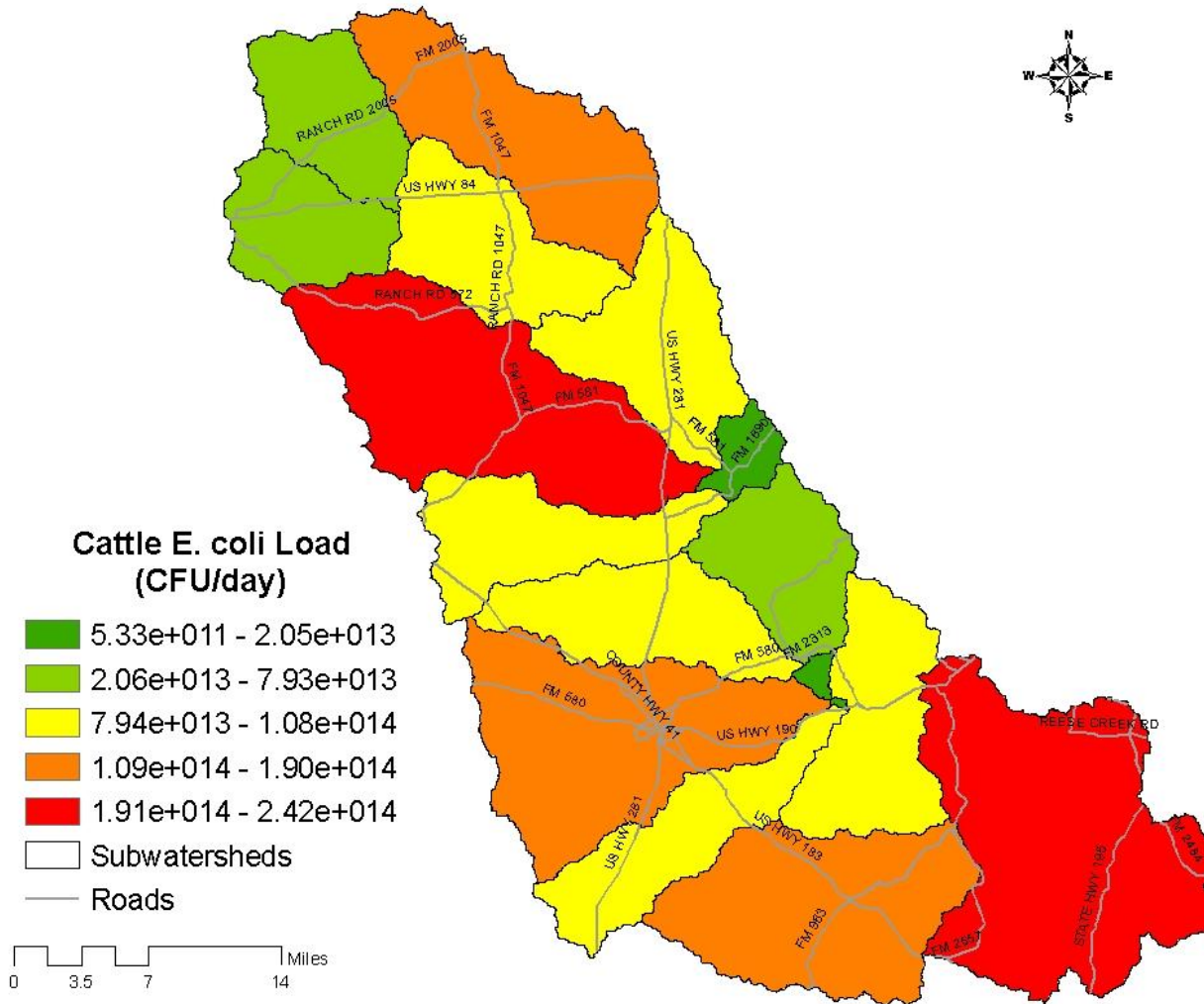
Land Use



Cattle (Stocking Rate)

- ▶ Density: 20 acres per animal
- ▶ Estimated Population: 36,580
- ▶ Land Use
 - Range
 - Forest
 - Managed Pasture

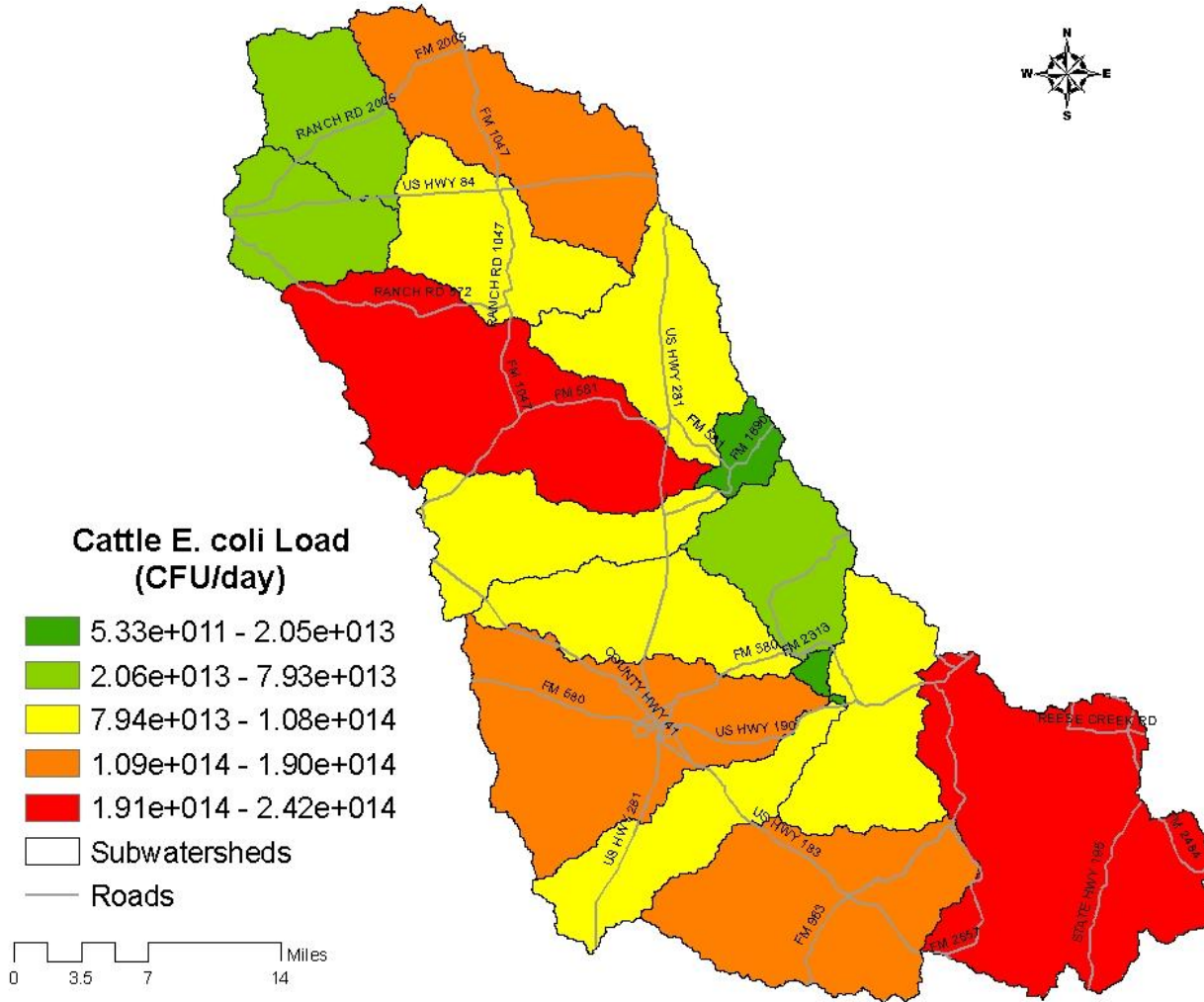
Potential *E. coli* loads resulting from Cattle (Stocking Rate)



Cattle (NAS data)

- ▶ Estimated Population: 38,153
- ▶ Land Use
 - Range
 - Forest
 - Managed Pasture

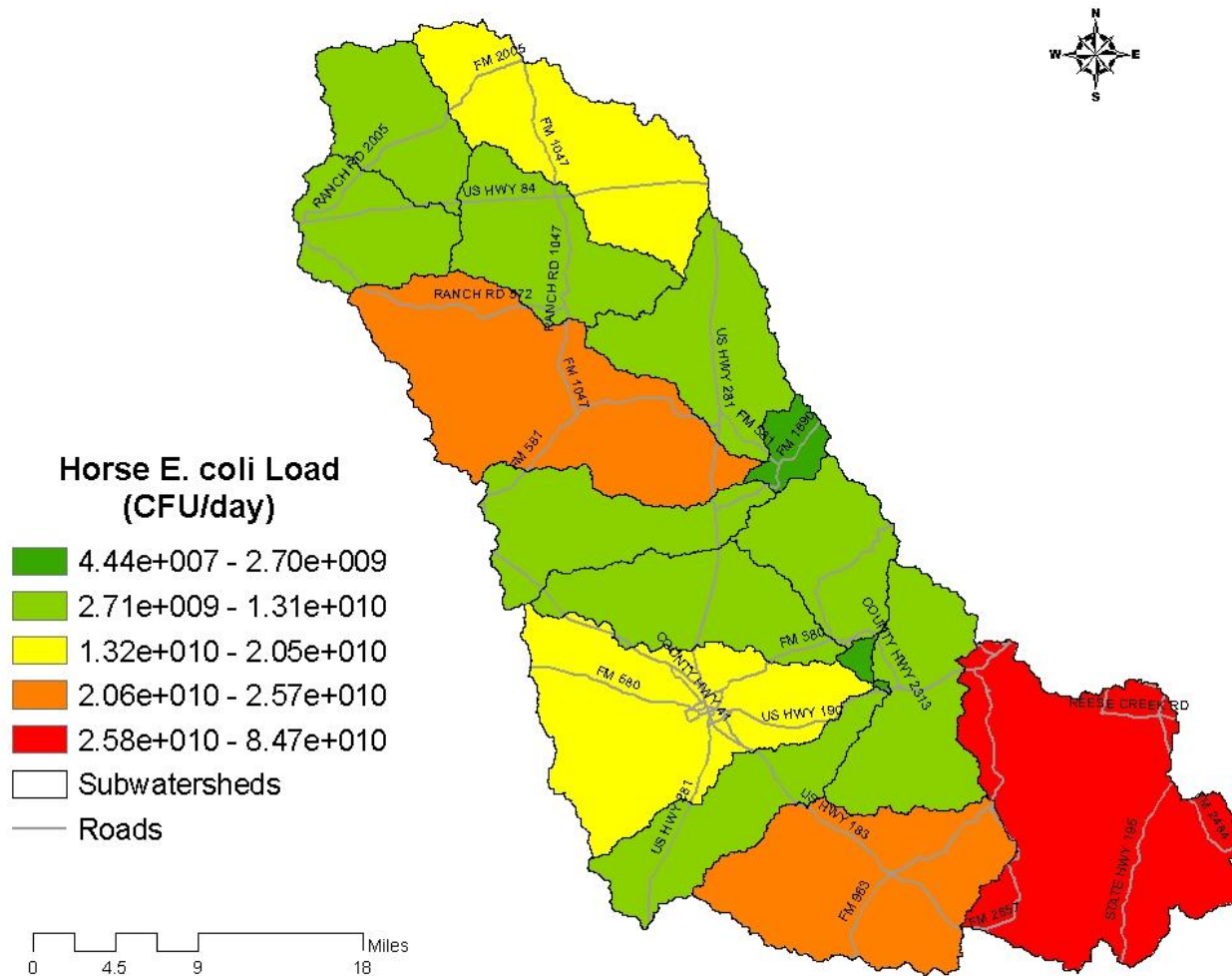
Potential *E. coli* loads resulting from Cattle (NAS data)



Horses

- ▶ Population calculated using NAS data
- ▶ Estimated Population: 1,288
- ▶ Land Use
 - Range

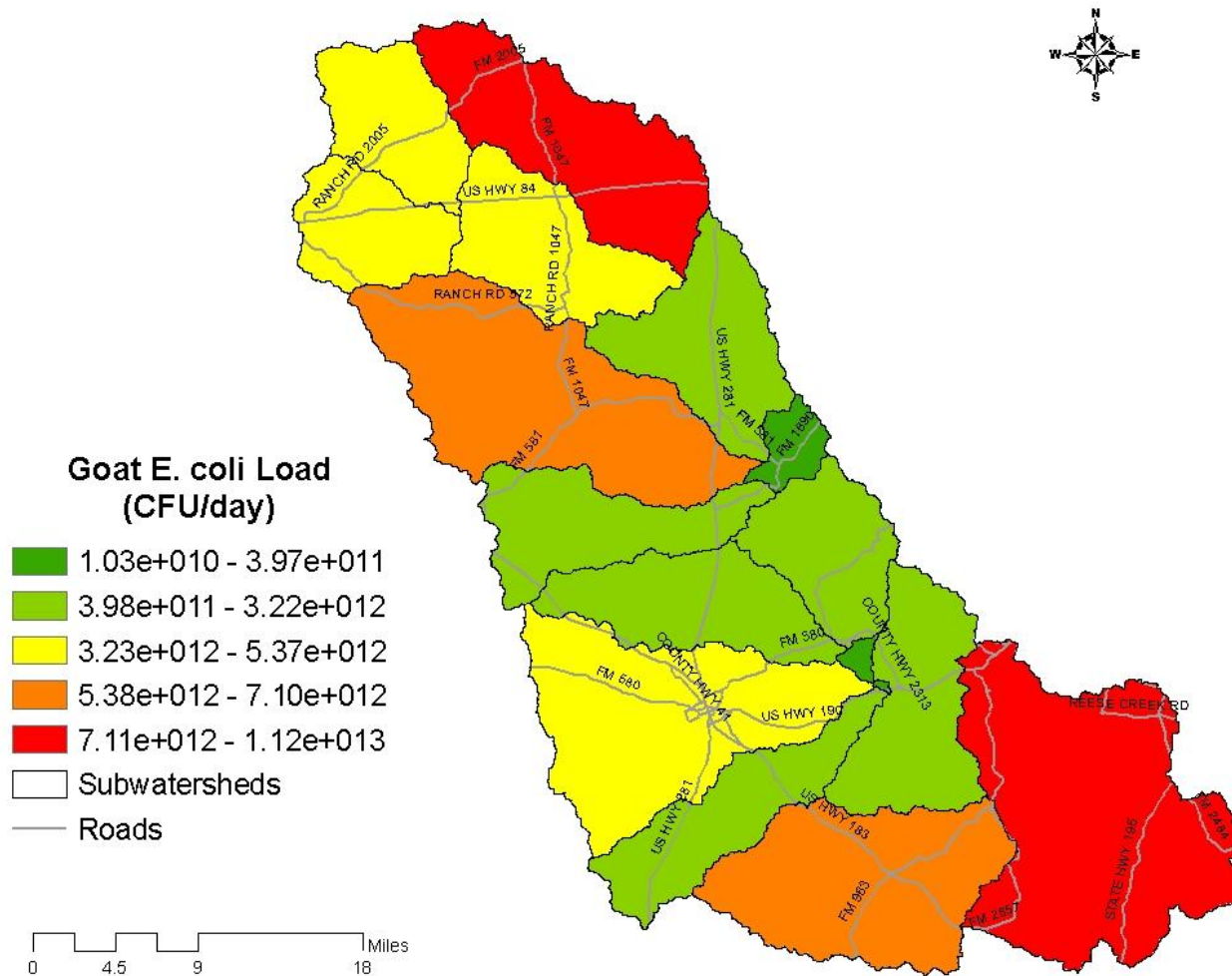
Potential *E. coli* loads resulting from Horses



Goats

- ▶ Population calculated using NAS data
- ▶ Estimated Population: 11,162
- ▶ Land Use
 - Range
 - Forest
 - Managed Pasture

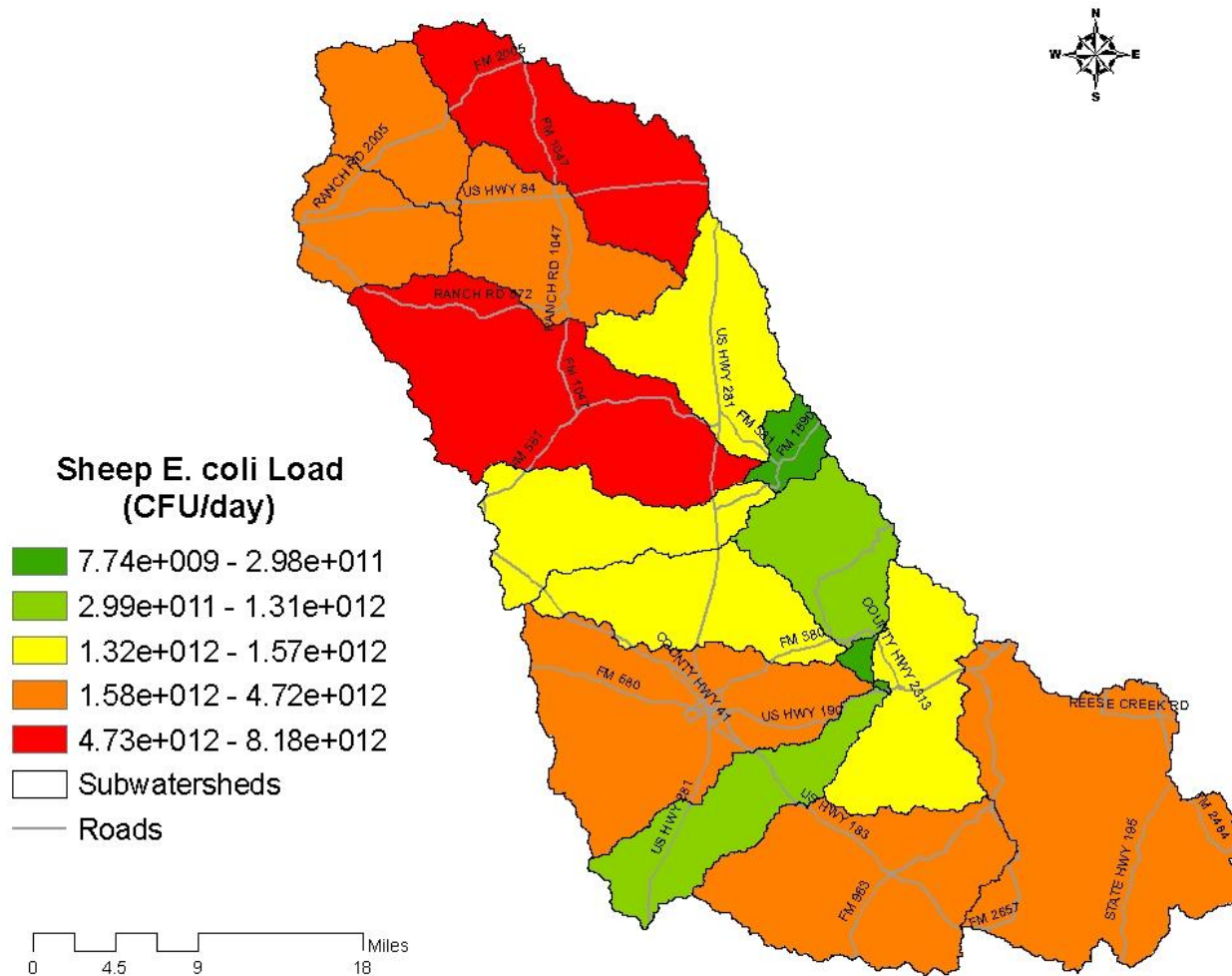
Potential *E. coli* loads resulting from Goats



Sheep

- ▶ Population calculated using NAS data
- ▶ Estimated Population: 7,311
- ▶ Land Use
 - Range
 - Forest
 - Managed Pasture

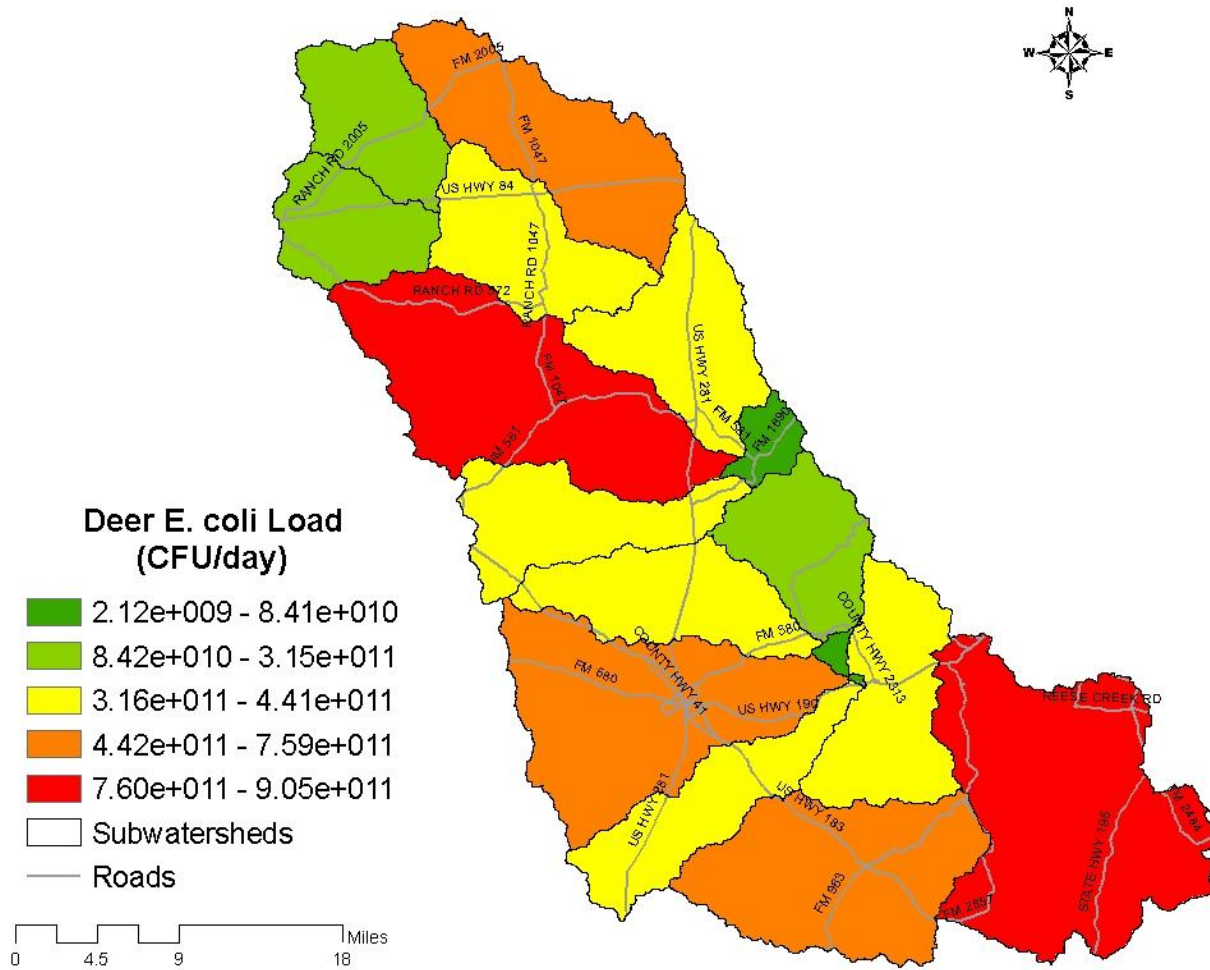
Potential *E. coli* loads resulting from Sheep



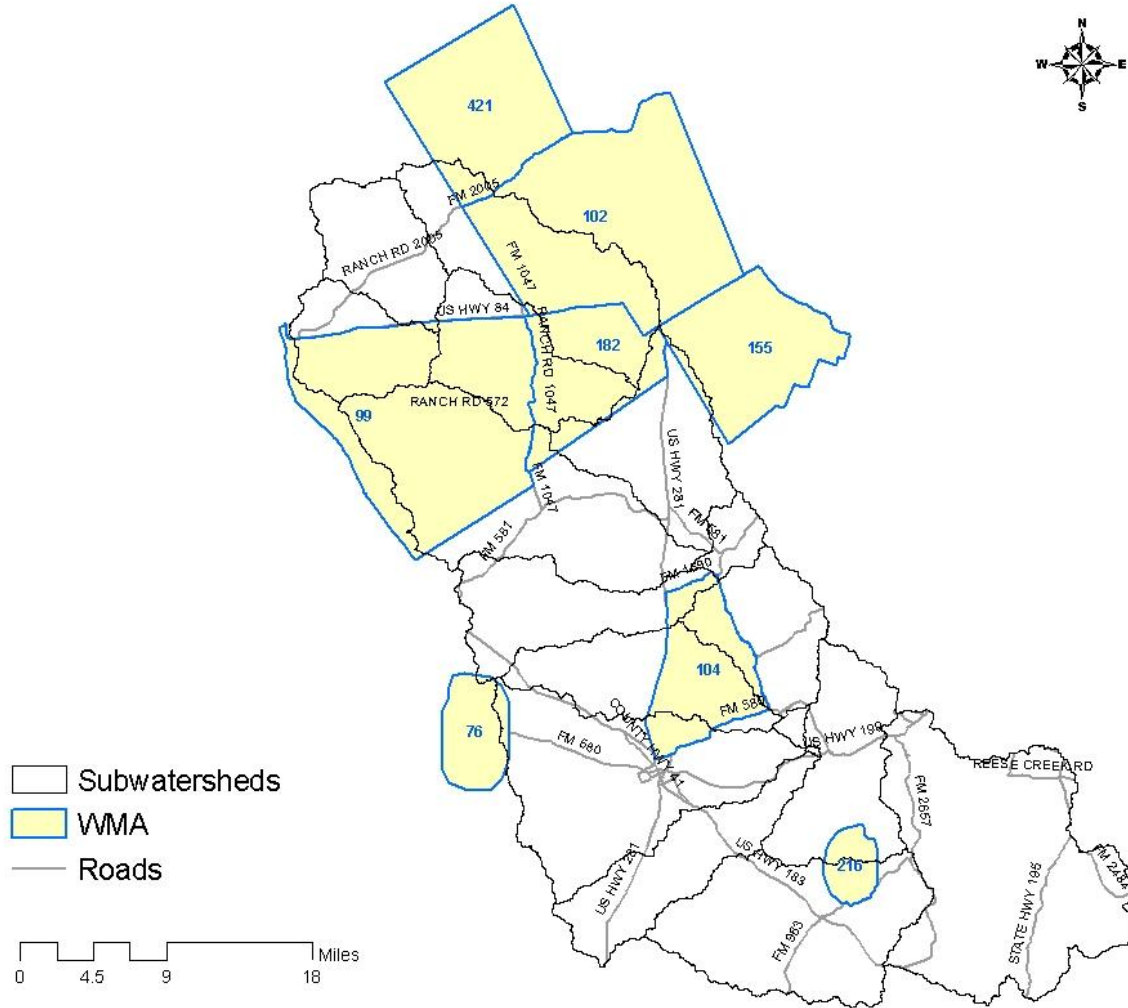
Deer (TPWD)

- ▶ Density: 17 acres per animal
- ▶ Estimated Population: 41,249
- ▶ Land Use
 - Range
 - Forest

Potential *E. coli* loads resulting from Deer (TPWD)



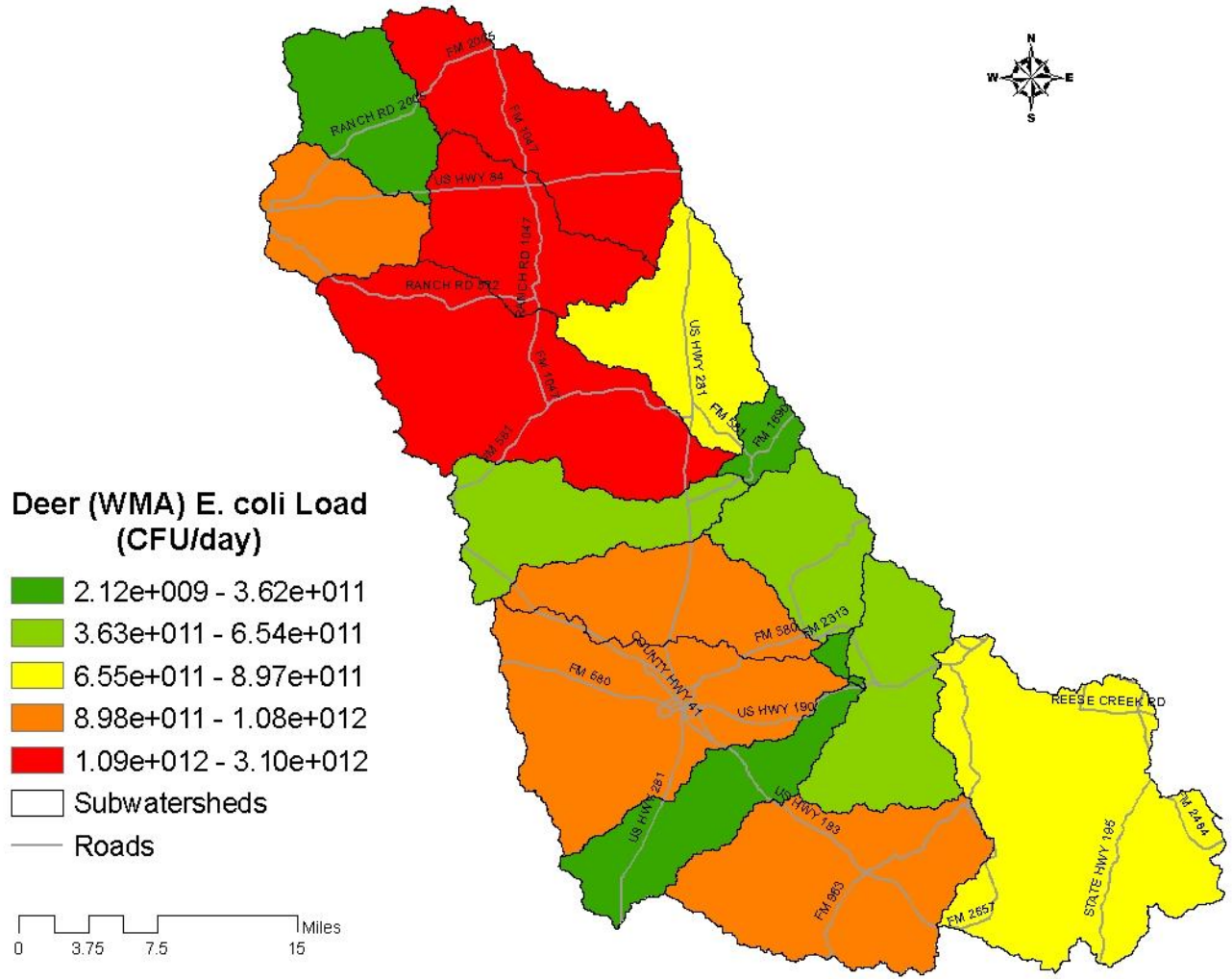
Deer (WMA)



WMA Populations

Year	Southwest Hamilton	Simms Creek	Vista Mountain - South	Donalson Creek	Lucy Creek	Panther Creek	Pecan Wells	North Vista Mountain	All WMAs
2000	141	--	--	--	--	--	--	--	--
2001	175	82	--	--	178	226	--	--	--
2002	173	76	201	56	119	231	--	--	143
2003	193	69	241	74	116	149	375	121	167
2004	193	64	207	70	87	259	368	76	166
2005	188	68	197	59	110	199	551	70	180
2006	191	72	160	72	127	222	696	89	204
2007	109	56	142	63	94	223	507	119	164
2008	227	141	139	83	105	185	191	144	152
2009	195	156	138	101	84	249	159	88	146
Average Five Year	179	87	178	72	113	216	407	101	165
Average (2005 - 2009)	182	99	155	76	104	216	421	102	169

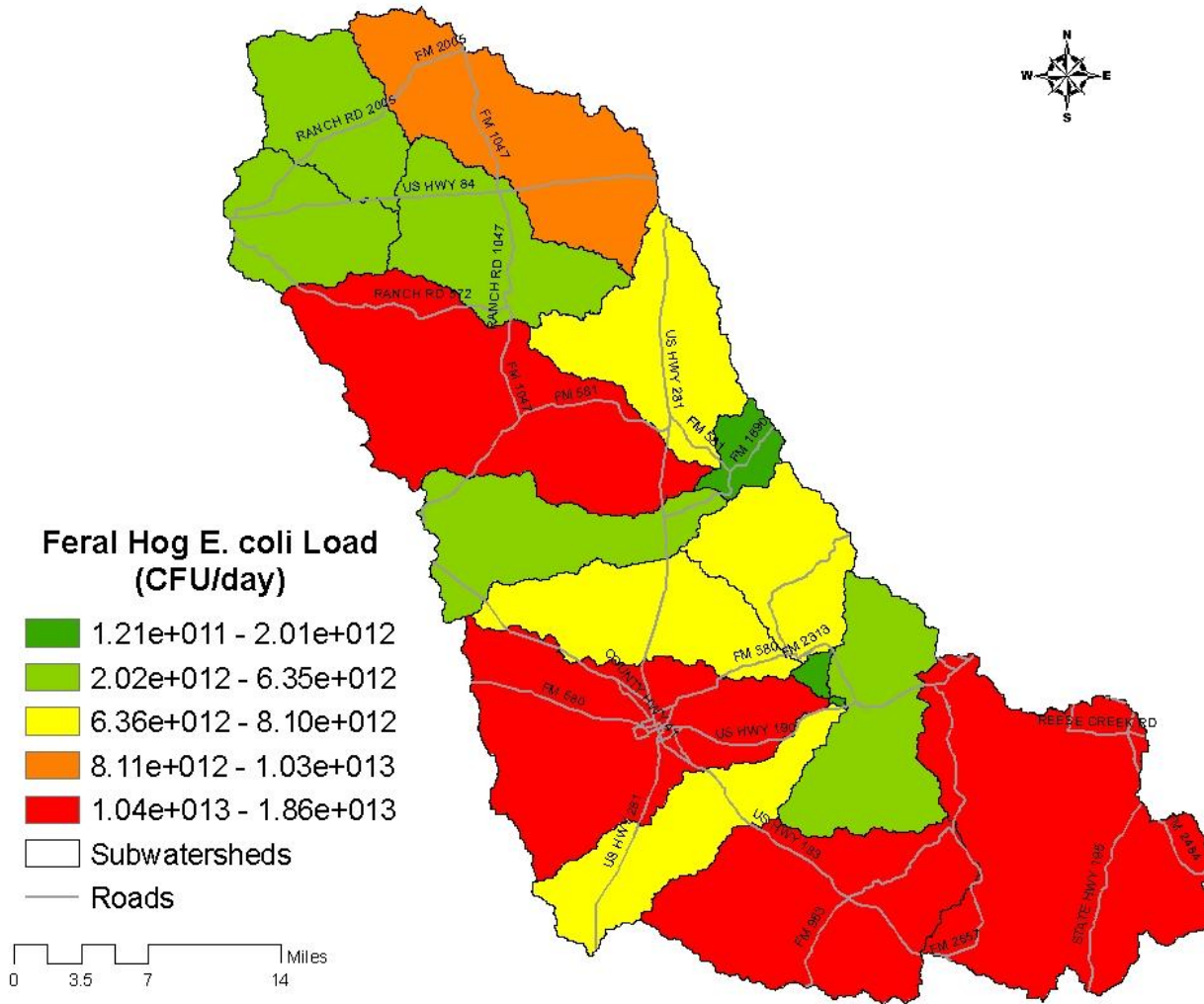
Potential *E. coli* loads resulting from Deer (WMA)



Feral Hogs

- ▶ Density: 32 acres per animal
- ▶ Estimated Population: 24,263
- ▶ Land Use
 - Forest
 - Range
 - Barren
 - Crop
 - Managed Pasture
 - 100 meter buffer around streams

Potential *E. coli* loads resulting from Feral Hogs



Open Discussion

Next Steps

Upcoming Business

- ▶ Possible dates for July Steering Committee meeting
 - Thursday, July 8th
 - Thursday, July 15th
- ▶ Tentative items for discussion
 - Sampling location recommendations for upcoming Bacterial Source Tracking project
 - Steering Committee approval of initial SELECT analysis
 - Discussion of bacterial load reductions based on LDC analysis
- ▶ NRCS Riparian Function Workshop
 - Is there any interest in organizing one for stakeholders