
Modeling Potential Sources

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SELECT

- Land use/ land cover data updated
- Watersheds boundary defined
- Data layers needed for SELECT
 - Land use
 - Hydrography (stream network)
 - Watershed boundary
 - County boundary
 - Census
- Population density
 - Cattle
 - Wildlife (deer)
 - Feral hogs

Potential Sources

Range Cattle

- Density: 5 acres per animal
- Land Use
 - Rangeland
 - Mixed Forest
 - Riparian Forest

Pasture Cattle

- Density: 2 acres per animal
- Land Use
 - Managed Pasture

Septic

- 70 gallons per day per person
- 10^6 CFU/100 mL
- Rural Population (1990 census)
 - Robertson County: 10379
 - Brazos County: 14203

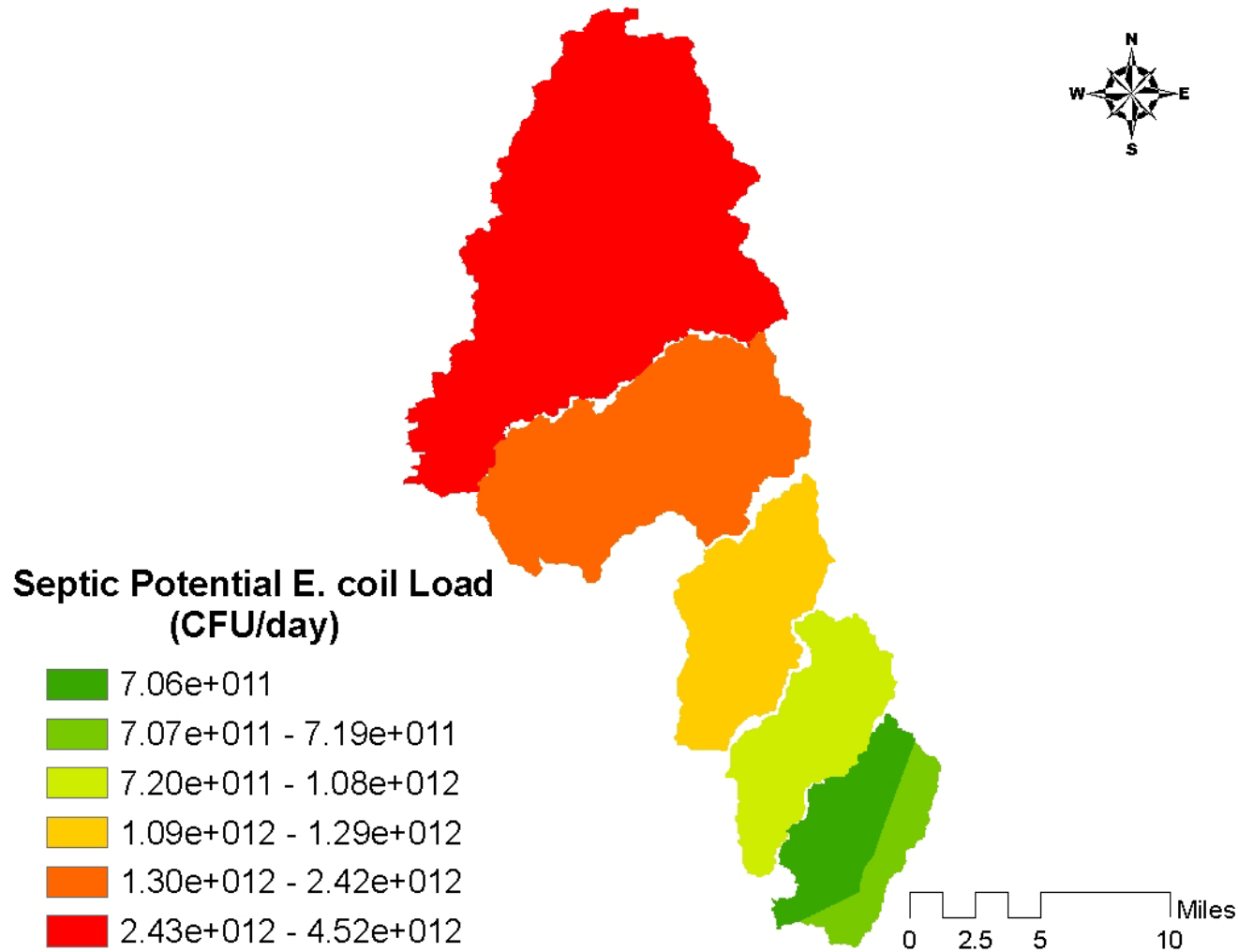
Deer

- Density: 37 acres per animal
- Land Use
 - Rangeland
 - Managed Pasture
 - Mixed Forest
 - Riparian Forest

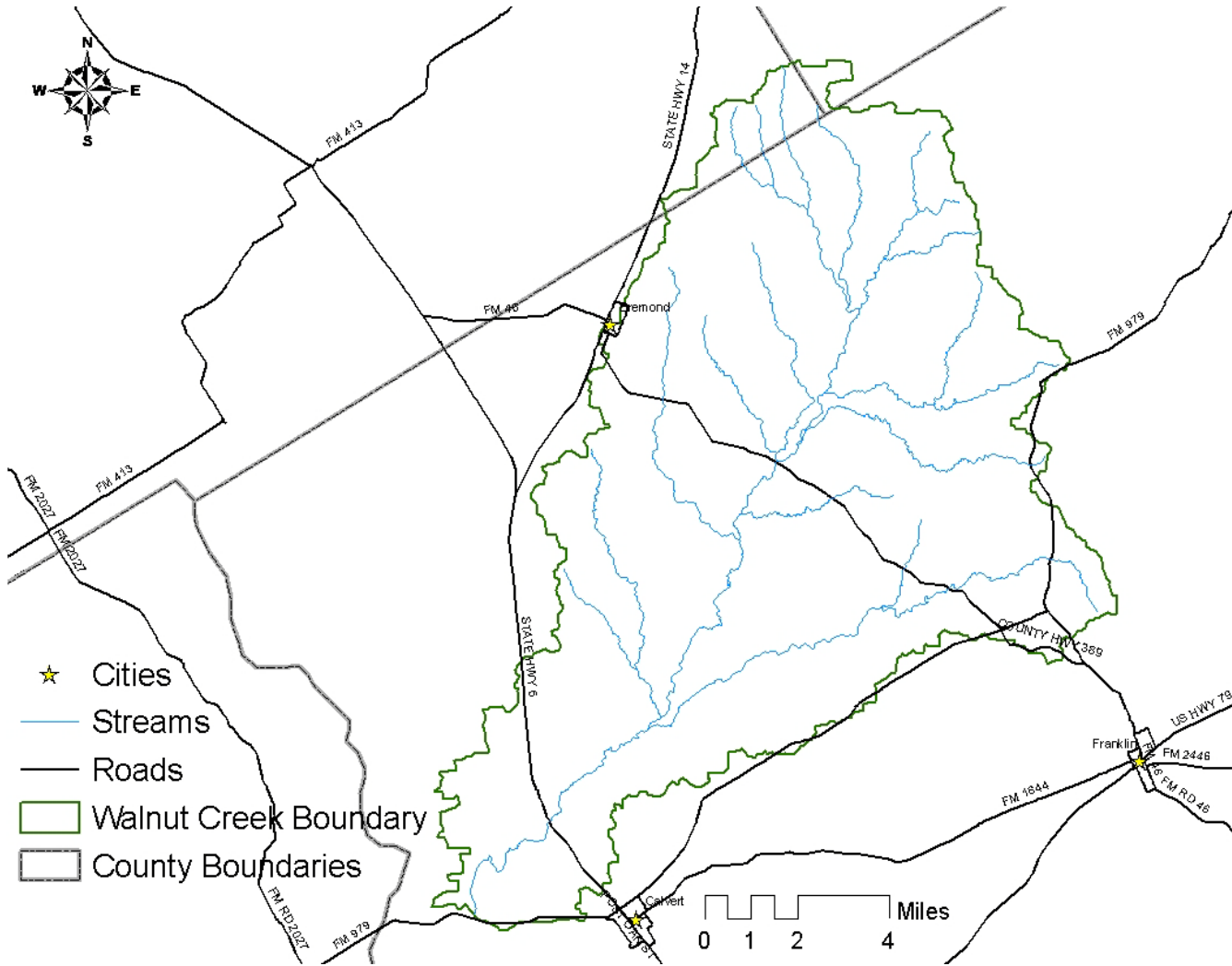
Feral Hogs

- Density: 20 acres per animal
- Land Use
 - Rangeland
 - Managed Pasture
 - Mixed Forest
 - Riparian Forest

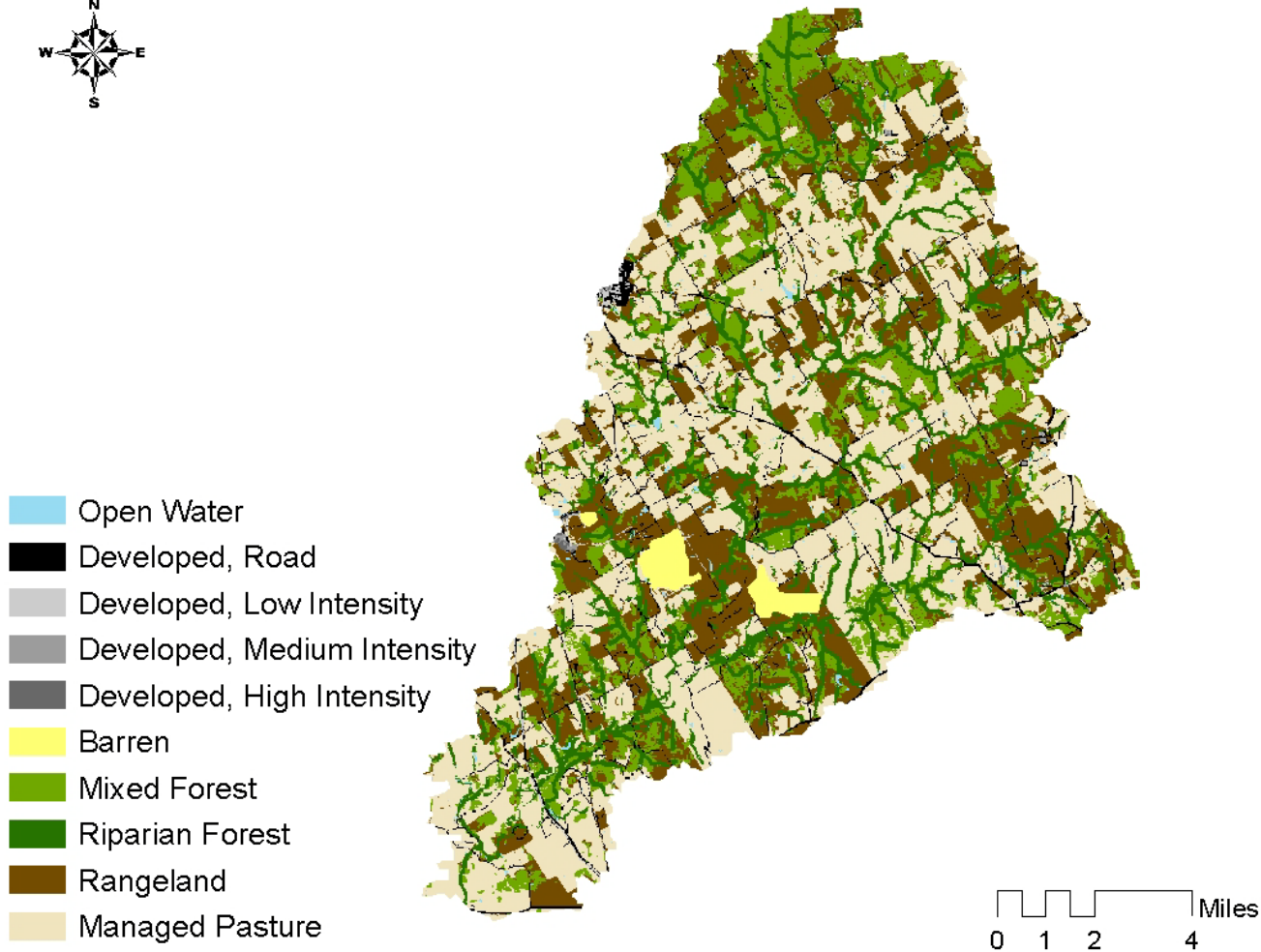
Septic Potential Daily *E. coli* Load



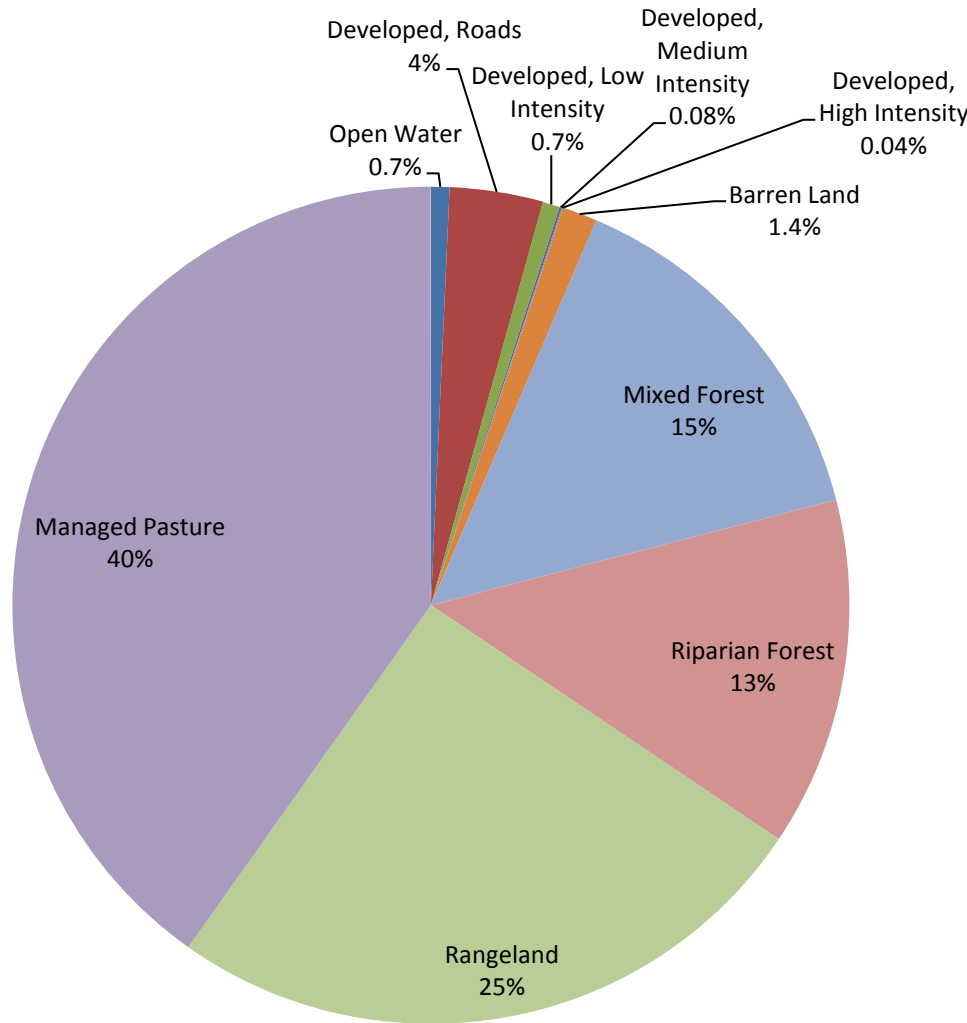
Walnut Creek



Walnut Creek – Land Use

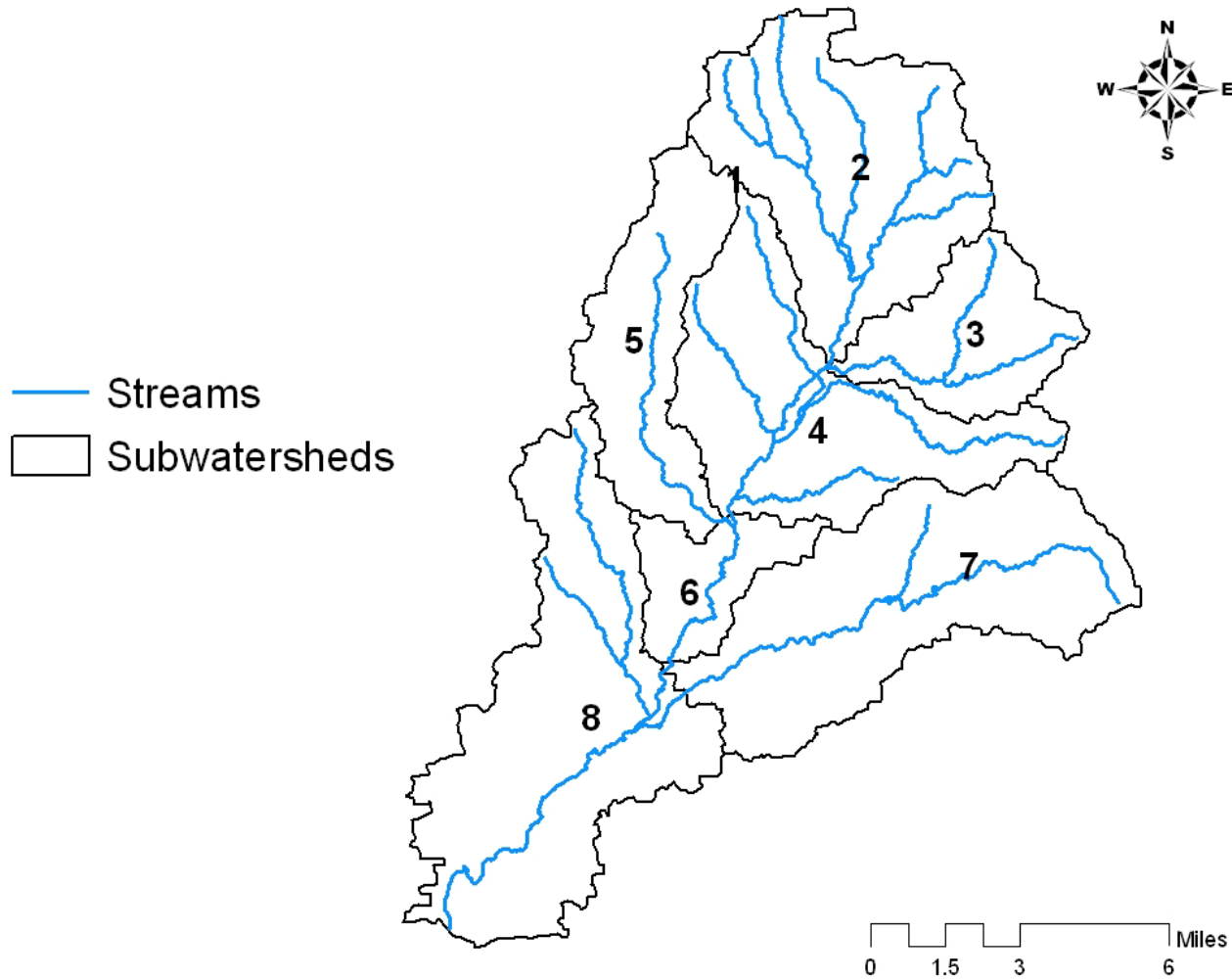


Walnut Creek – Land Use Percentage

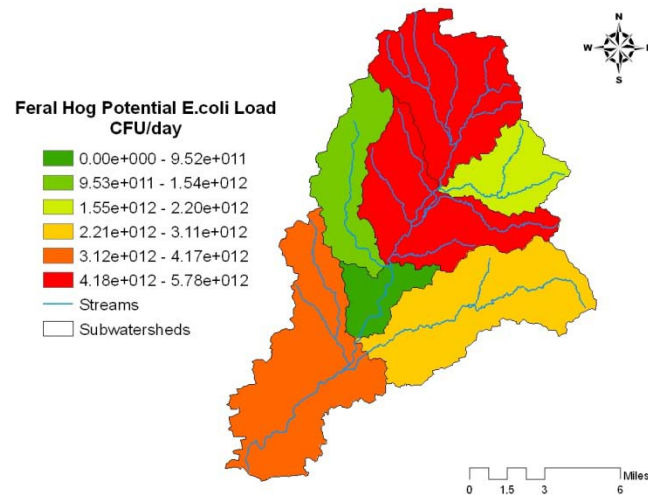
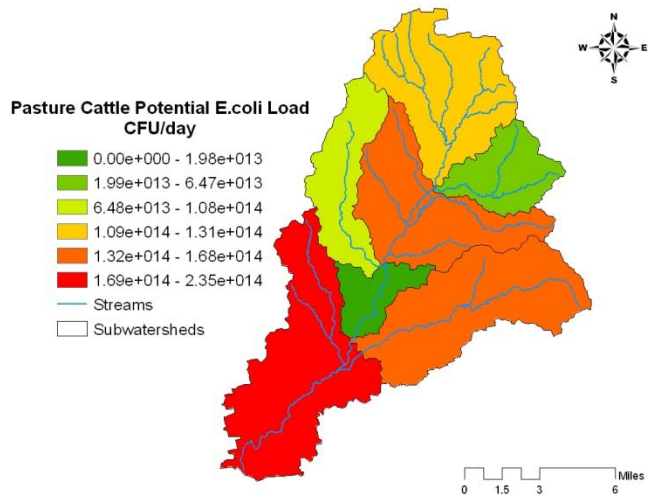
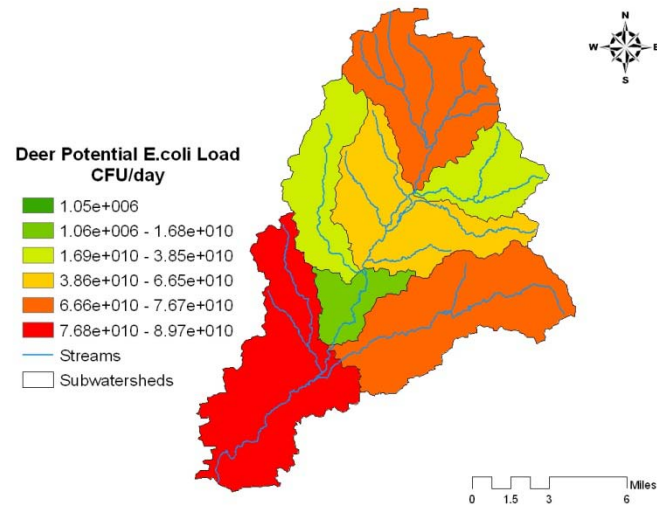
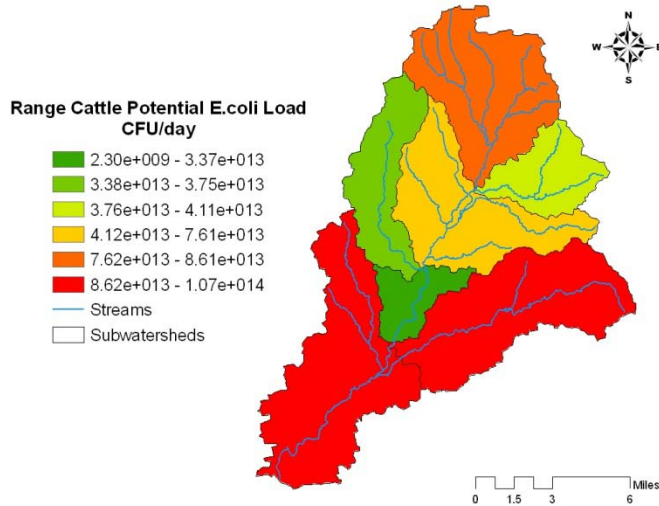


Land Use	Area (ac)
Total	88395
Managed Pasture	35514
Rangeland	22452
Mixed Forest	12815
Riparian Forest	11902
Developed, Roads	3178
Barren Land	1201
Open Water	629
Developed, Low Intensity	592
Developed, Medium Intensity	72
Developed, High Intensity	39

Walnut Creek - Subwatersheds

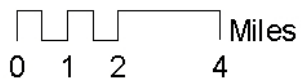
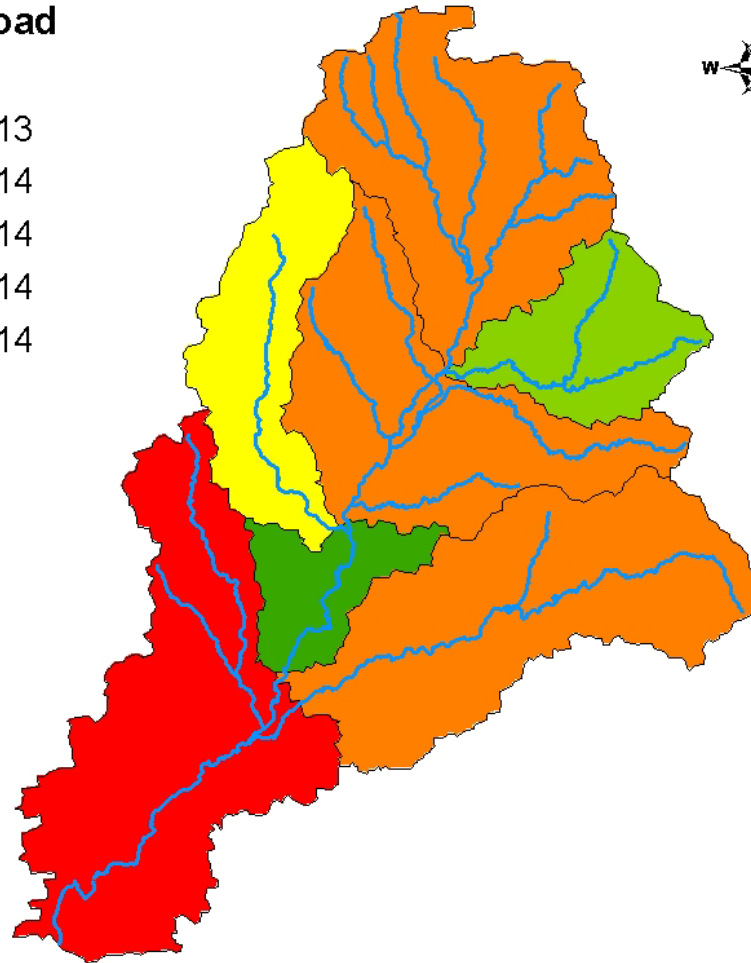
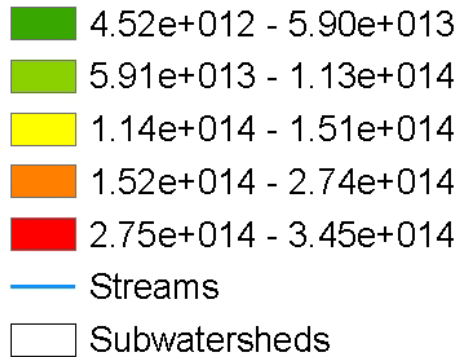


Walnut Creek - Potential *E. coli* loads

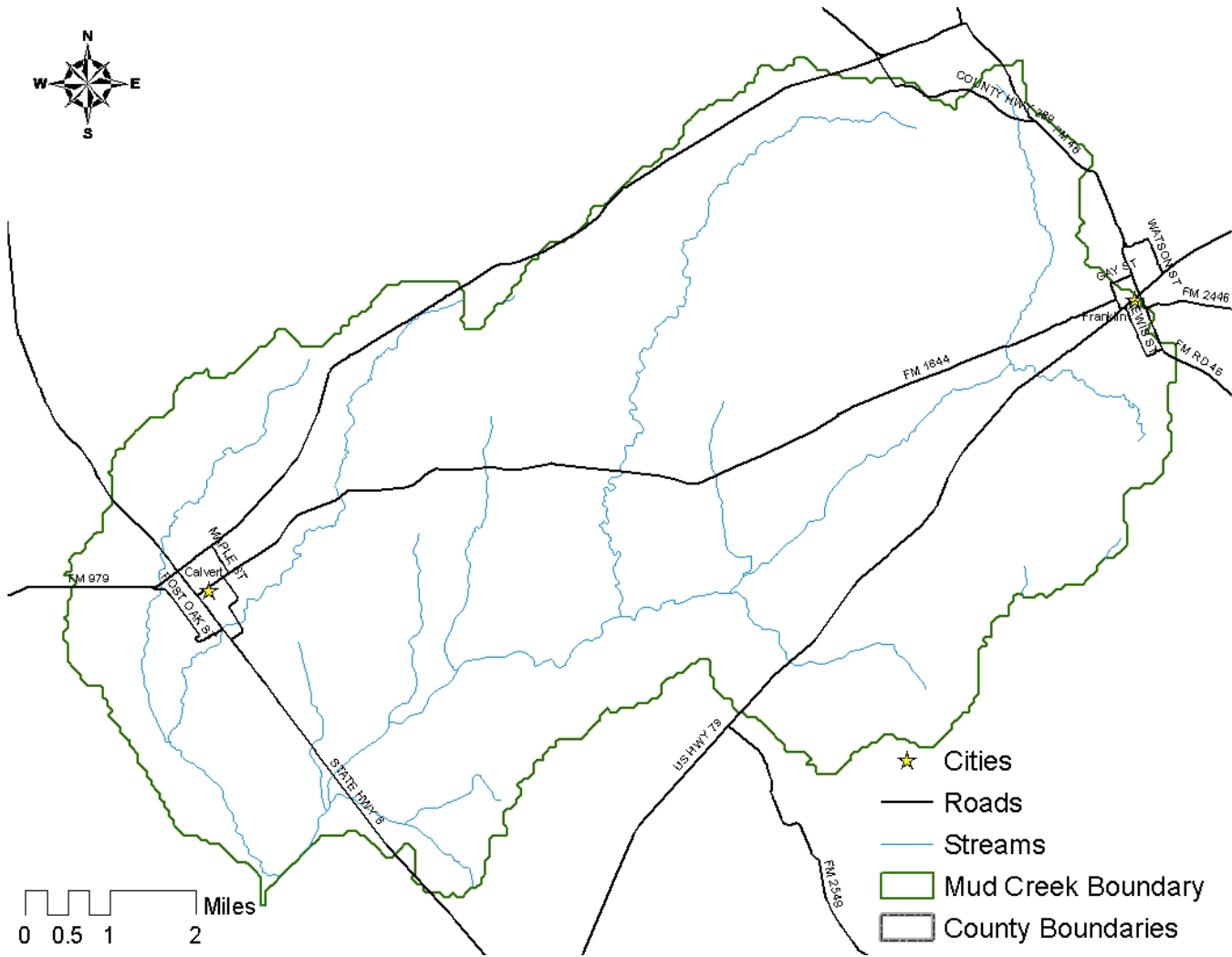


Walnut Creek - Total Potential Daily *E. coli* load

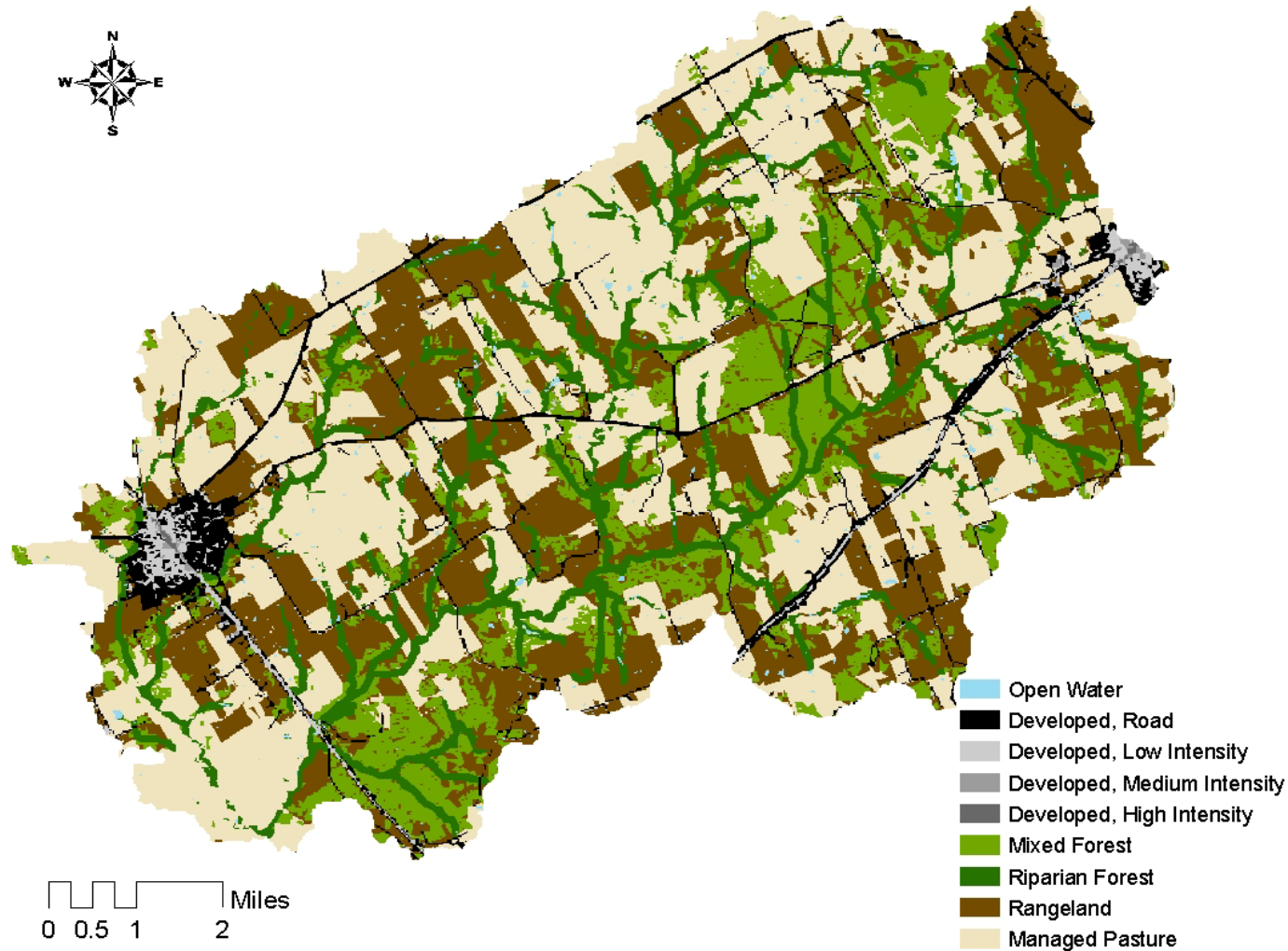
Total Potential *E. coli* Load (CFU/day)



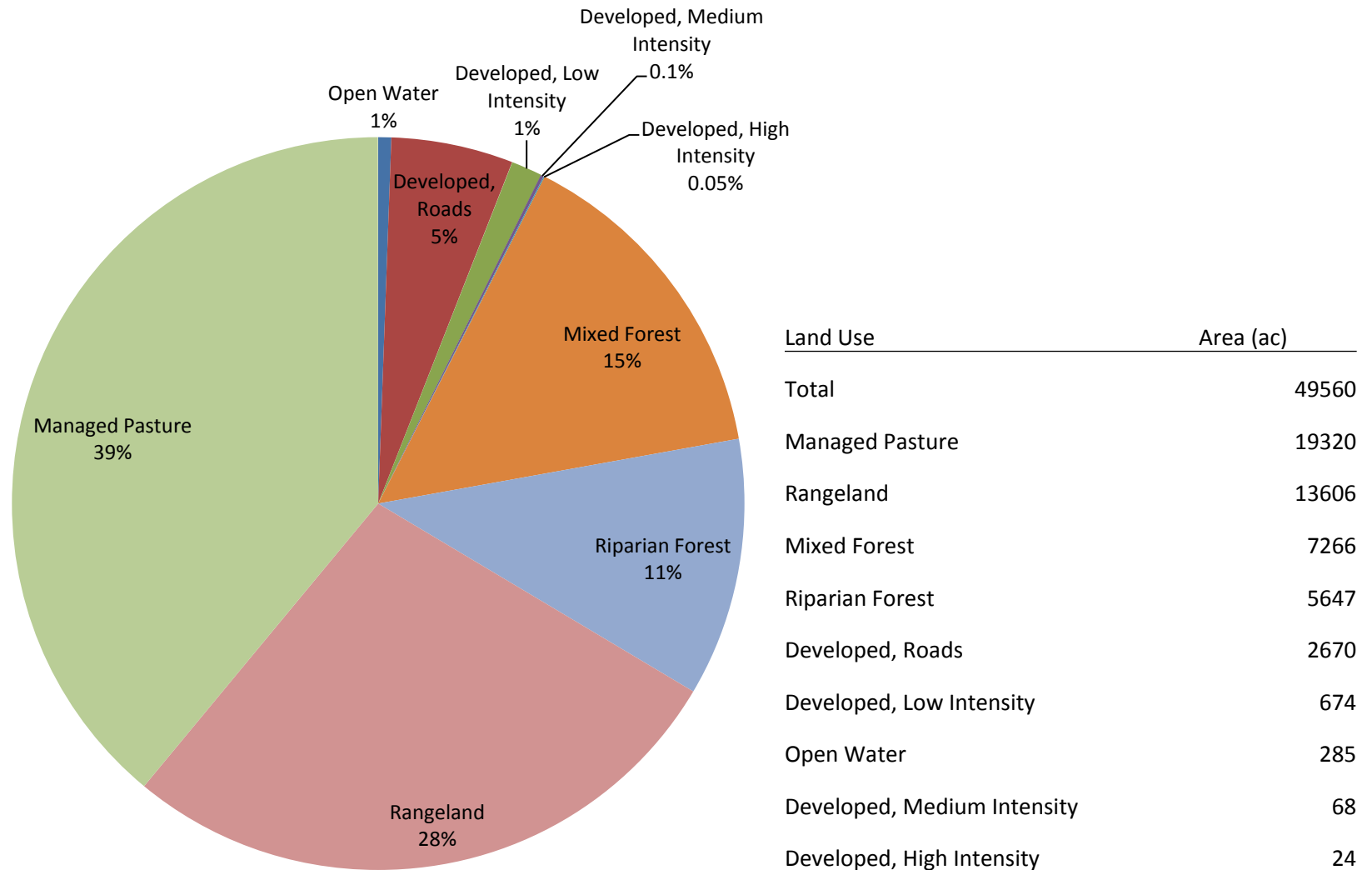
Mud Creek



Mud Creek – Land Use



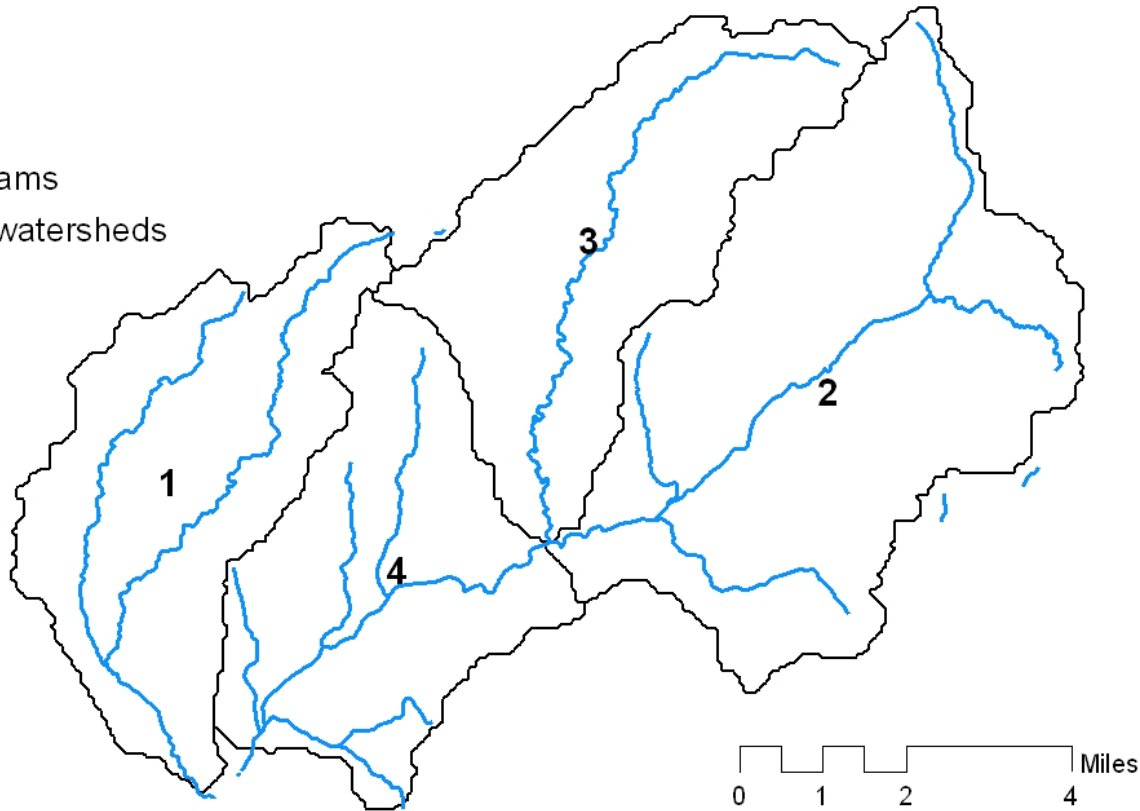
Mud Creek – Land Use Percentage



Mud Creek - Subwatersheds

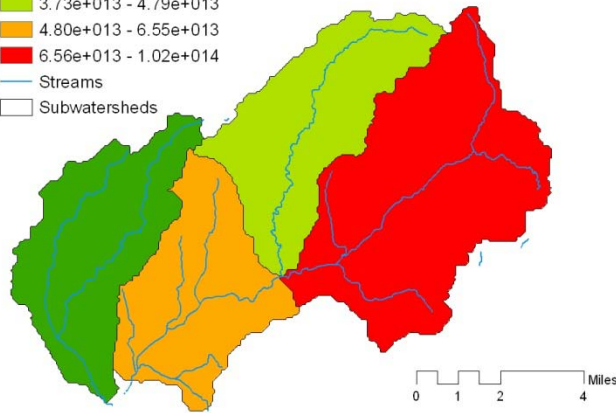
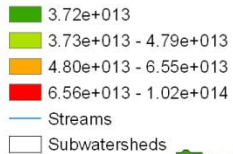


— Streams
□ Subwatersheds

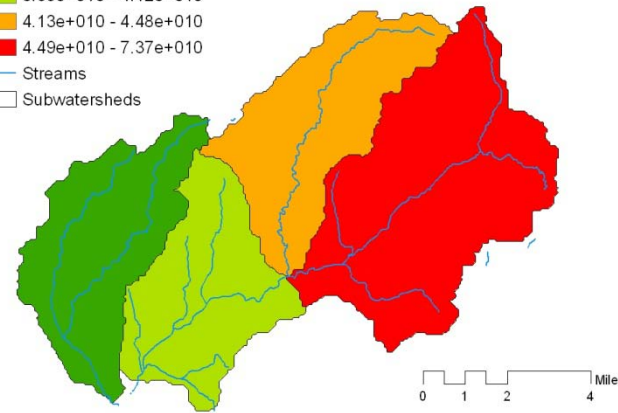
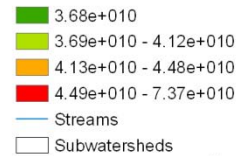


Mud Creek - Potential *E. coli* loads

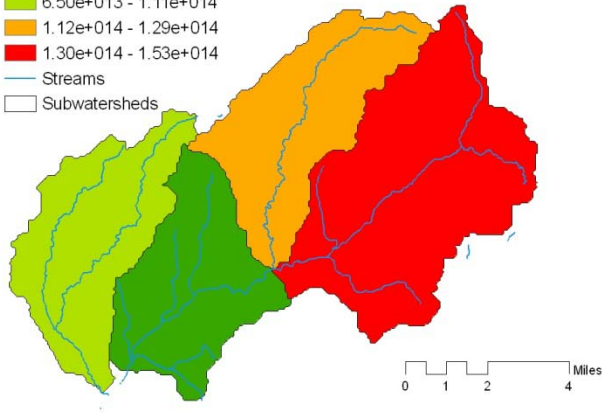
Range Cattle Potential *E. coli* Load
CFU/day



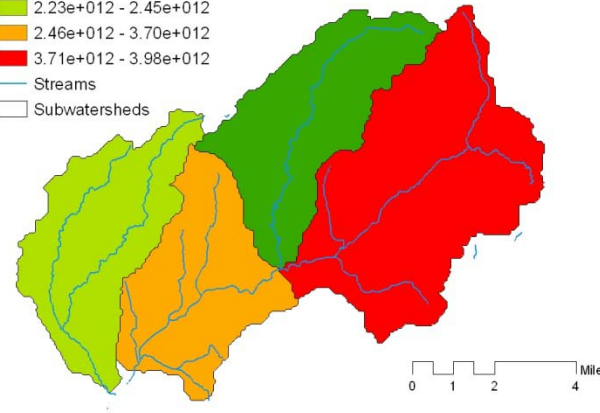
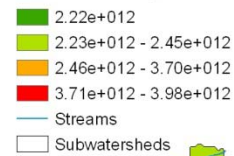
Deer Potential *E. coli* Load



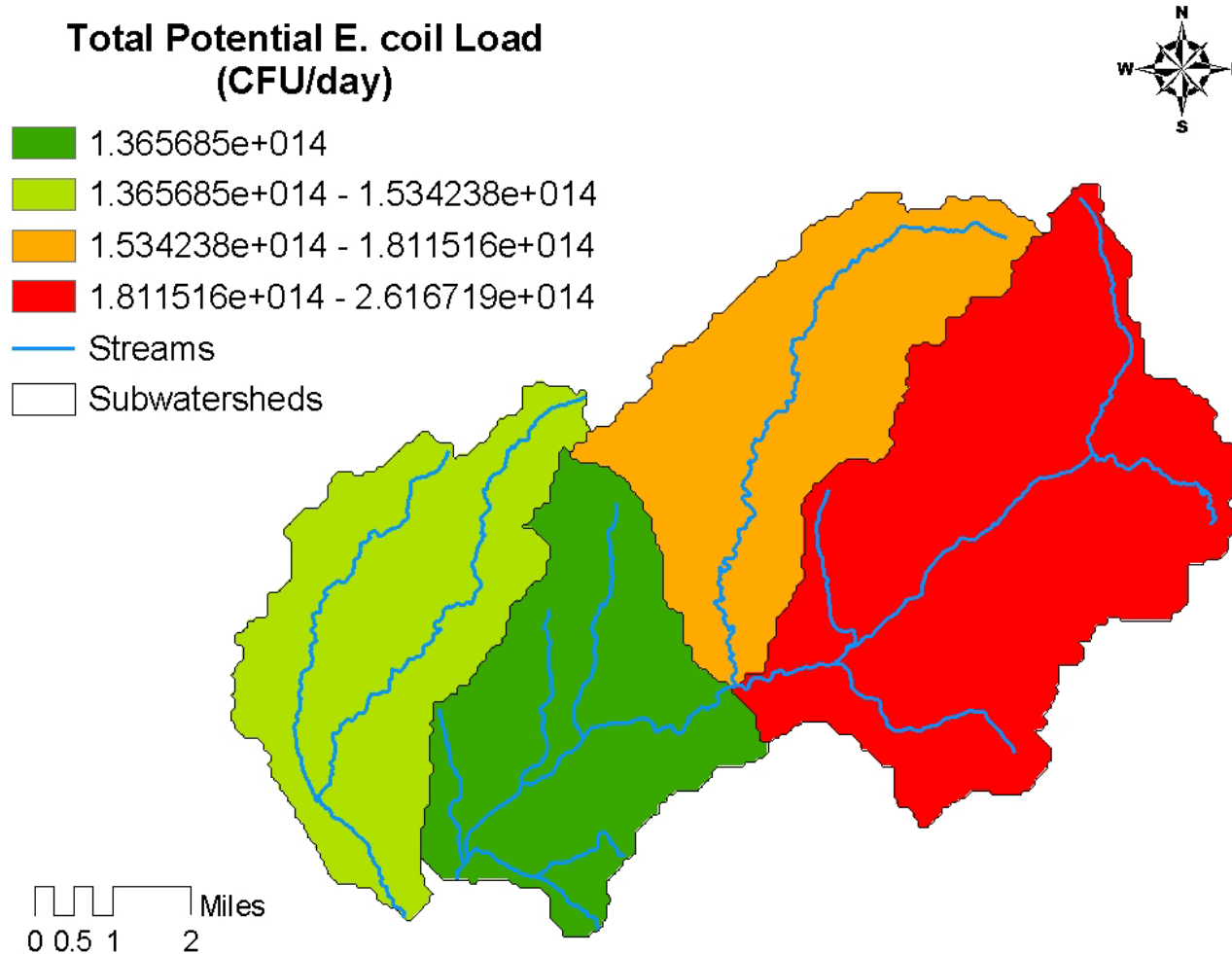
Pasture Cattle Potential *E. coli* Load
CFU/day



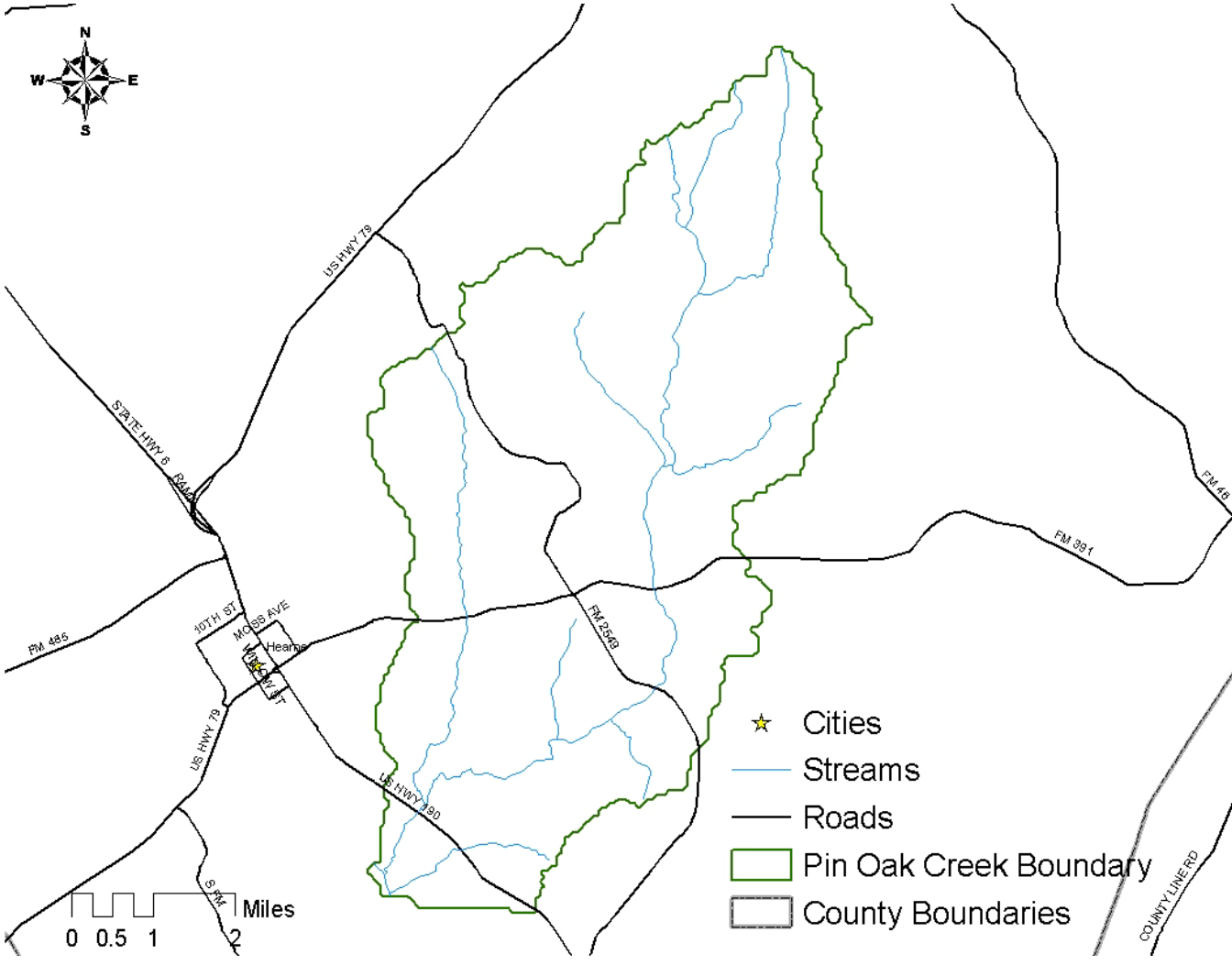
Feral Hog Potential *E. coli* Load
CFU/day



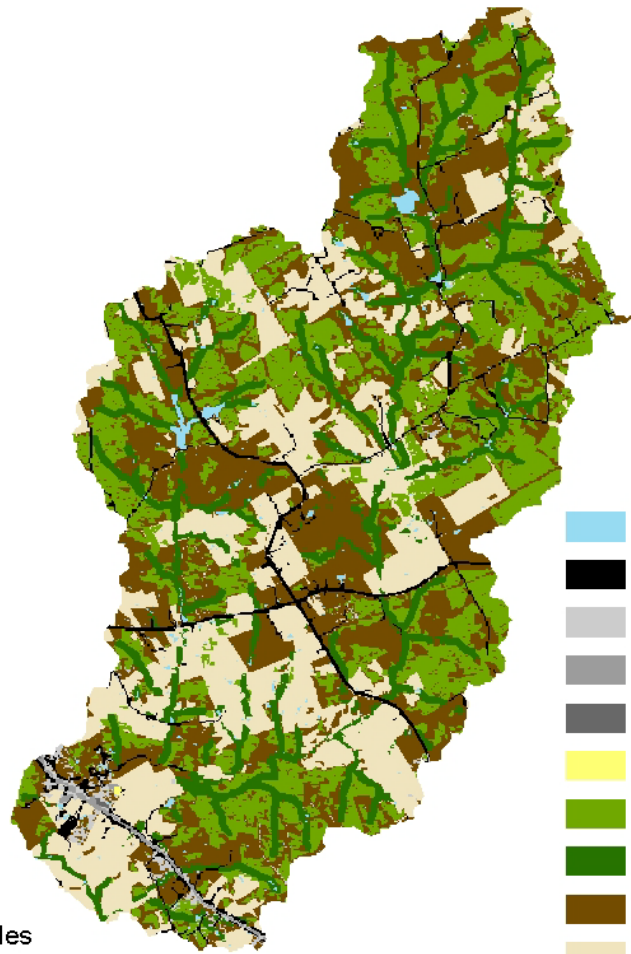
Mud Creek - Total Potential Daily *E. coli* load



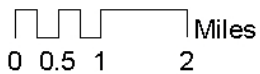
Pin Oak Creek



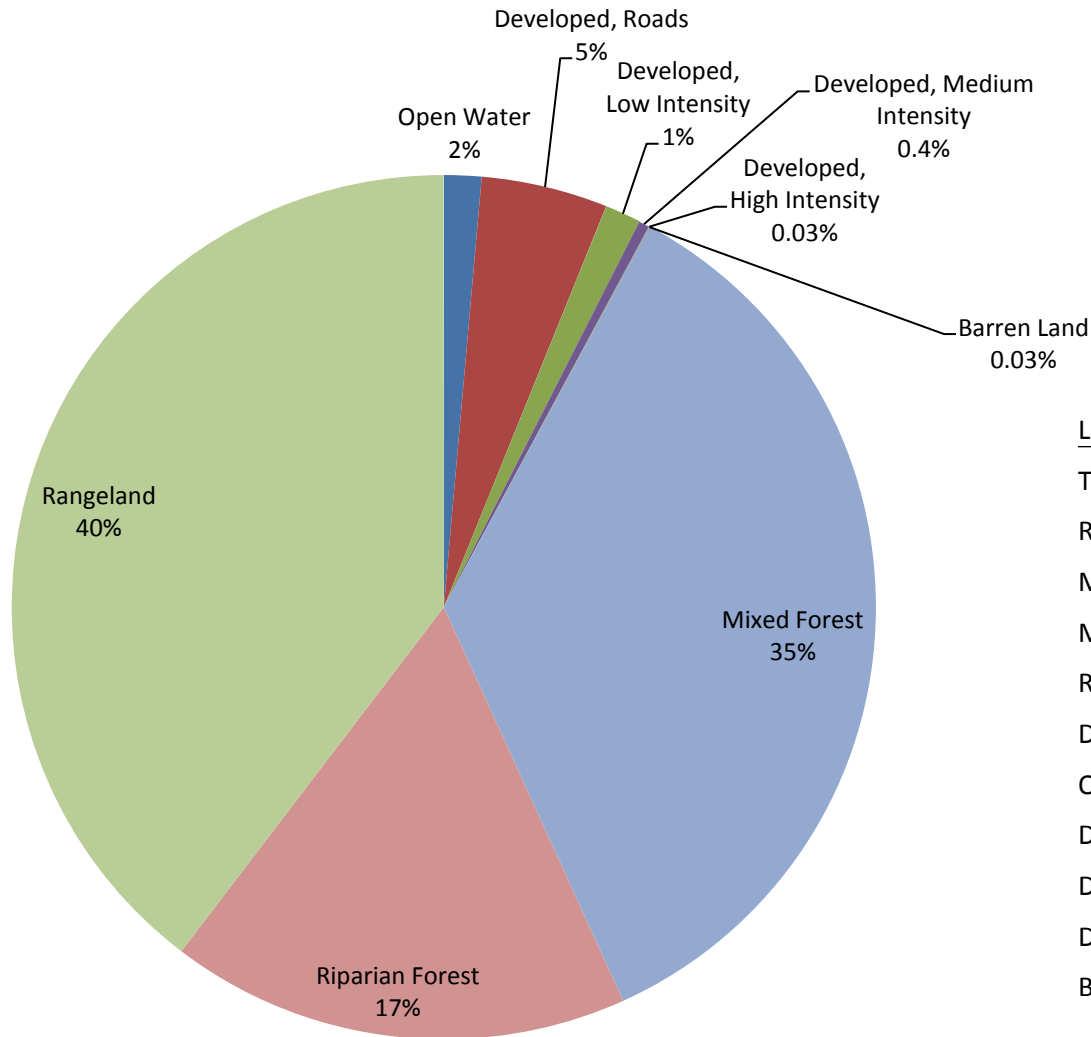
Pin Oak Creek – Land Use



- Open Water
- Developed, Road
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, High Intensity
- Barren
- Mixed Forest
- Riparian Forest
- Rangeland
- Managed Pasture

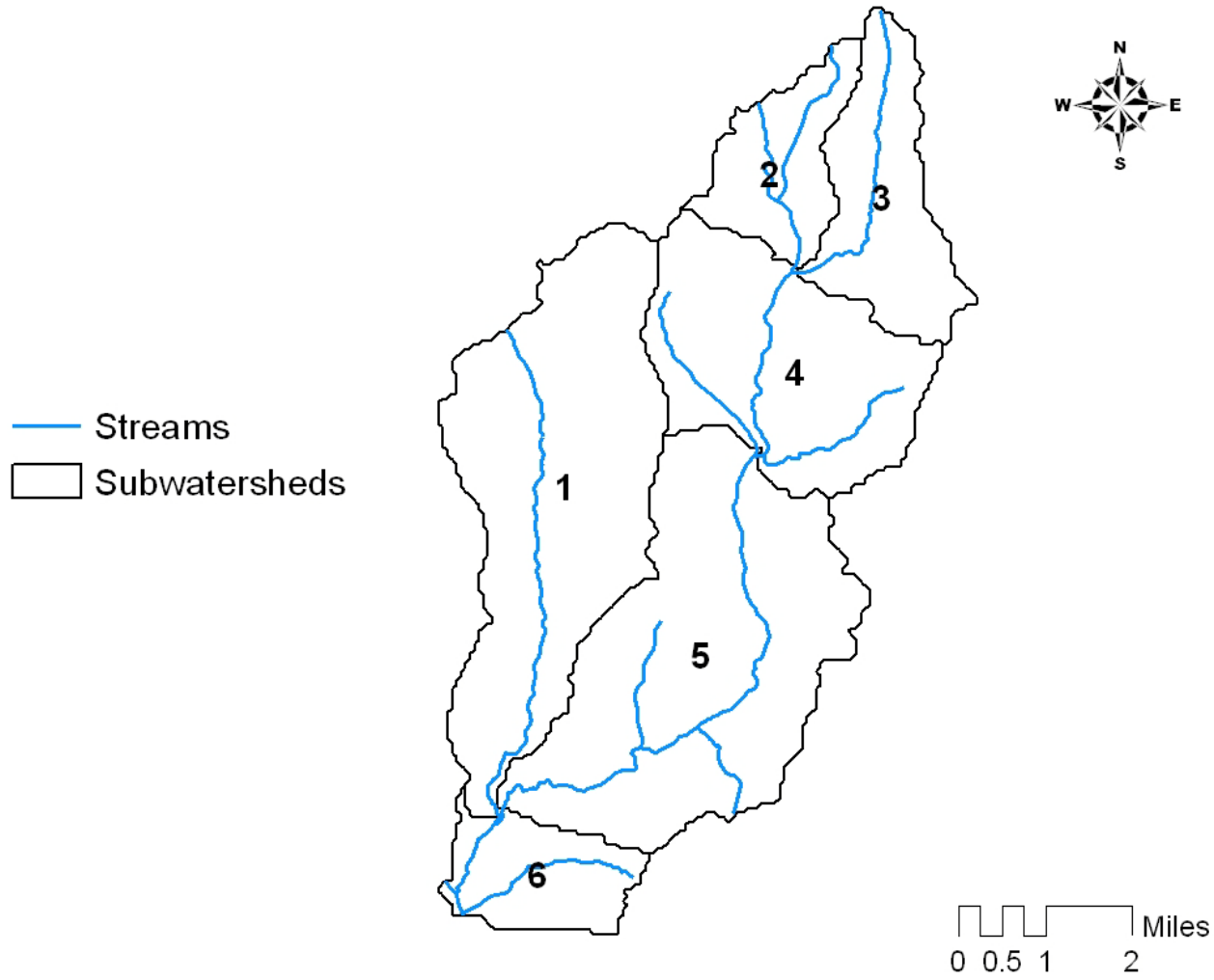


Pin Oak Creek – Land Use Percentage

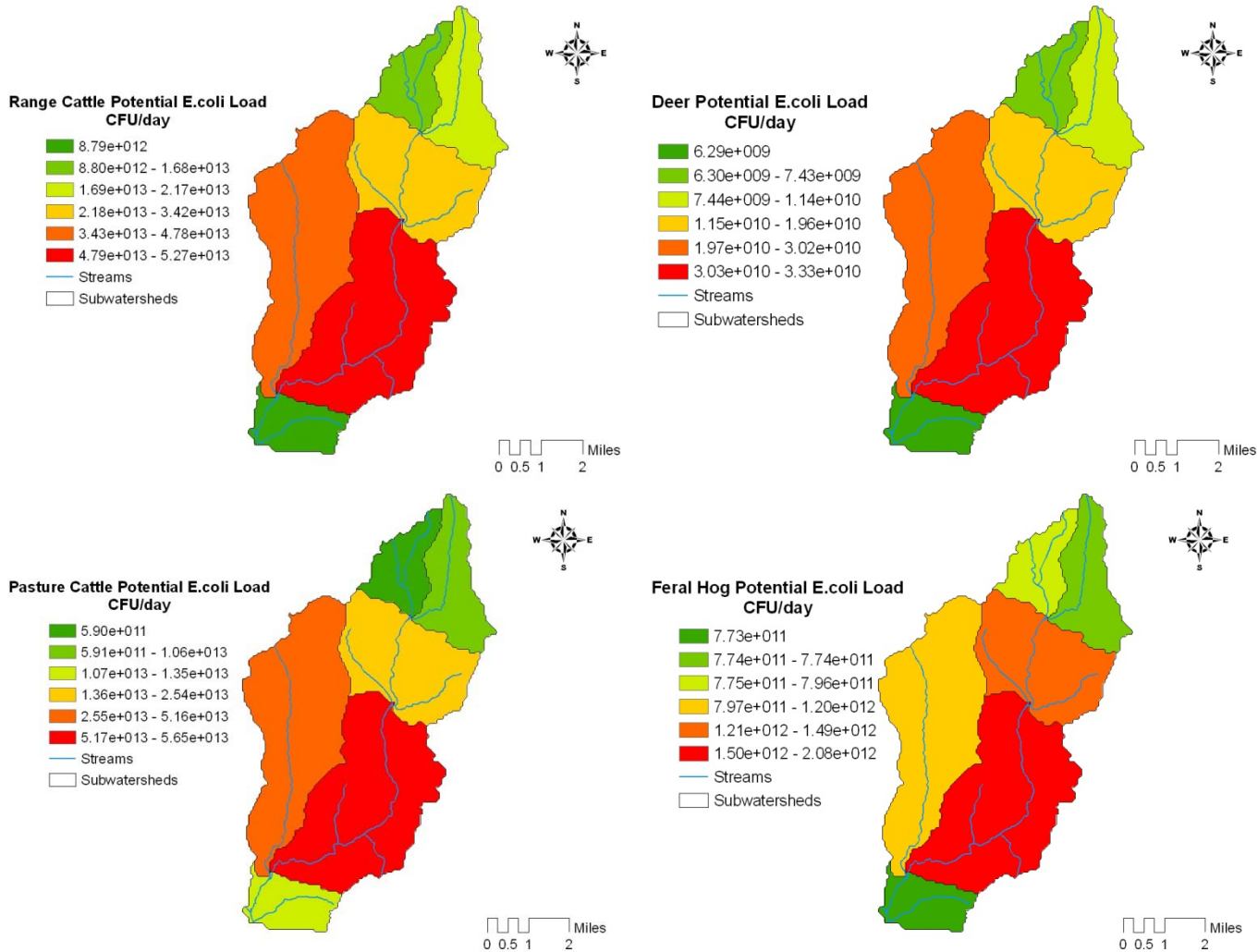


Land Use	Area (ac)
Total	27736
Rangeland	8360
Mixed Forest	7441
Managed Pasture	6644
Riparian Forest	3620
Developed, Roads	998
Open Water	295
Developed, Low Intensity	283
Developed, Medium Intensity	82
Developed, High Intensity	6
Barren Land	6

Pin Oak Creek - Subwatersheds

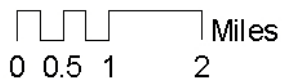
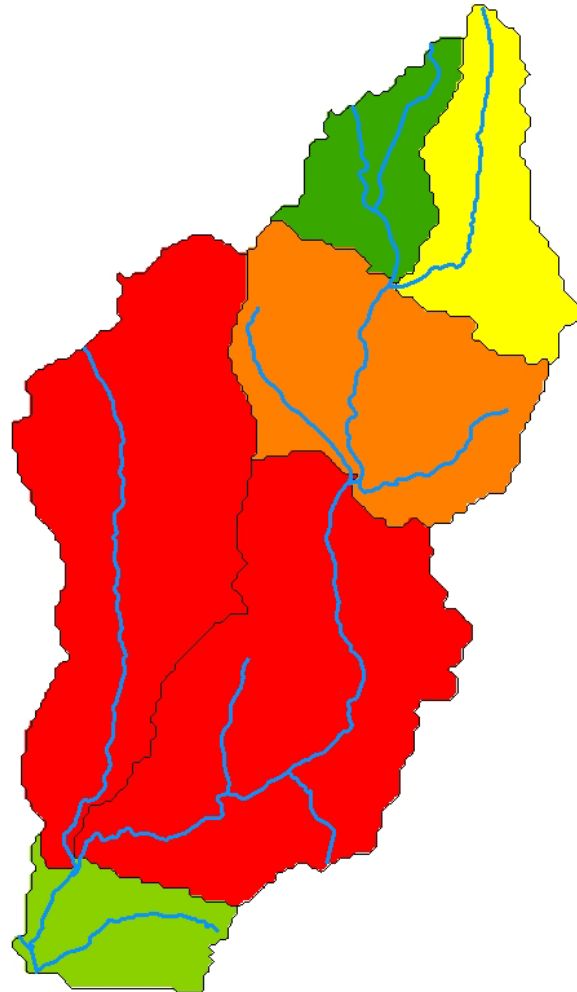
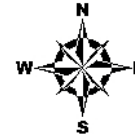
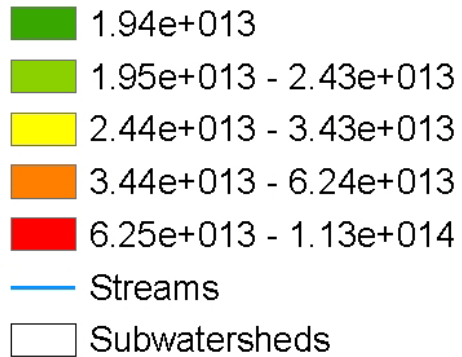


Pin Oak Creek - Potential *E. coli* loads

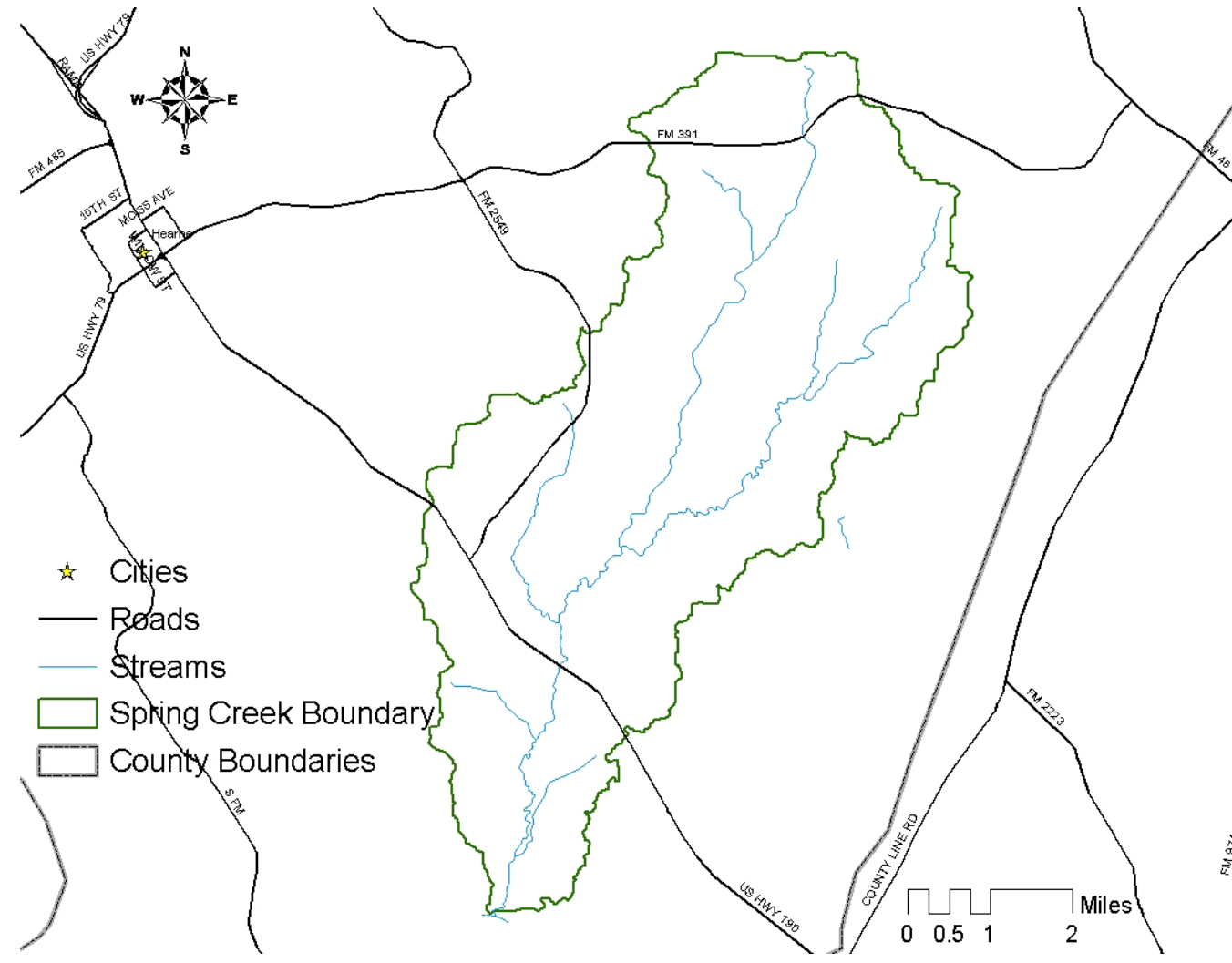


Pin Oak Creek - Total Potential Daily *E. coli* load

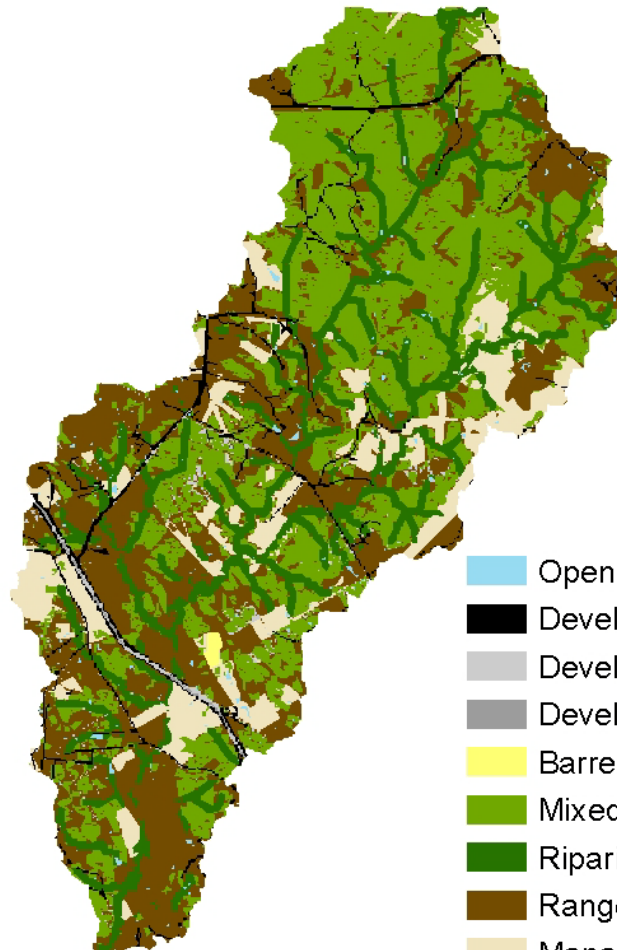
Total Potential *E. coli* Load (CFU/day)



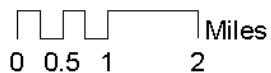
Spring Creek



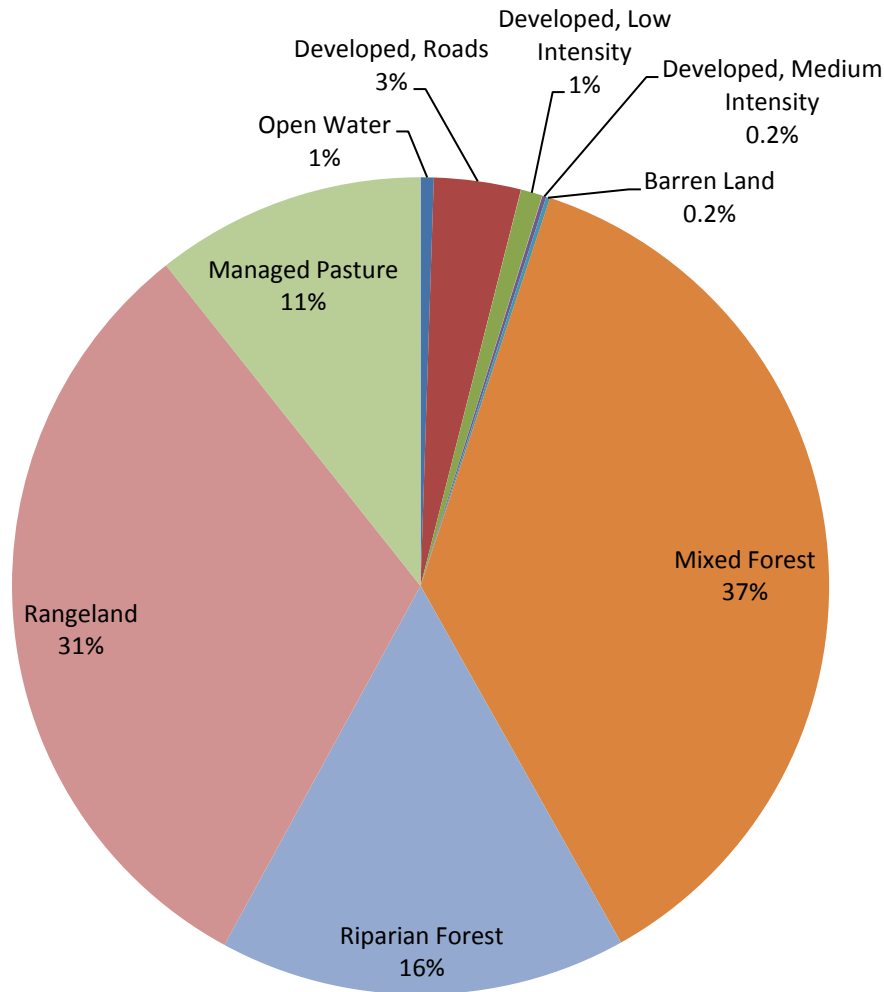
Spring Creek – Land Use



- Open Water
- Developed, Road
- Developed, Low Intensity
- Developed, Medium Intensity
- Barren
- Mixed Forest
- Riparian Forest
- Rangeland
- Managed Pasture

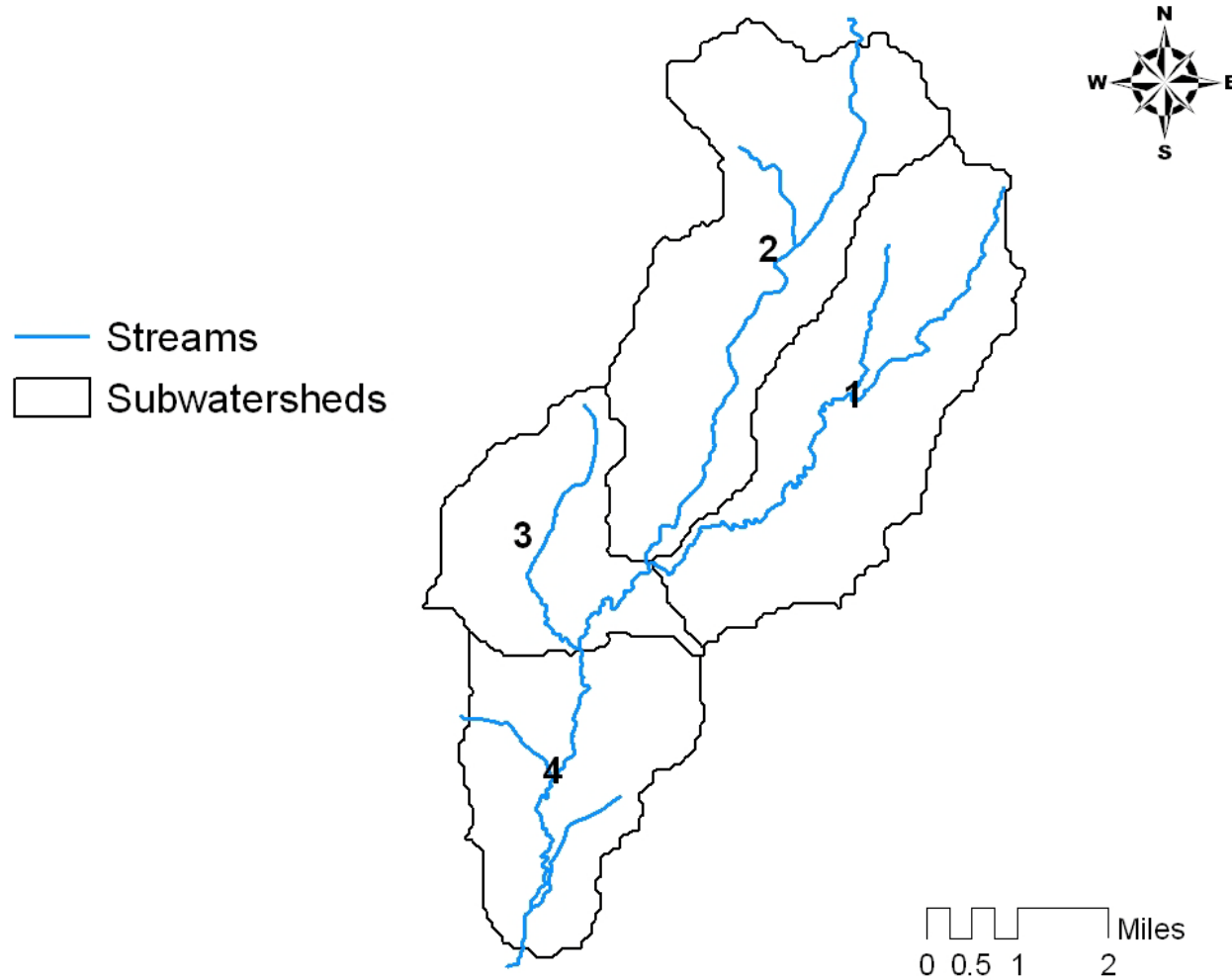


Spring Creek – Land Use Percentage

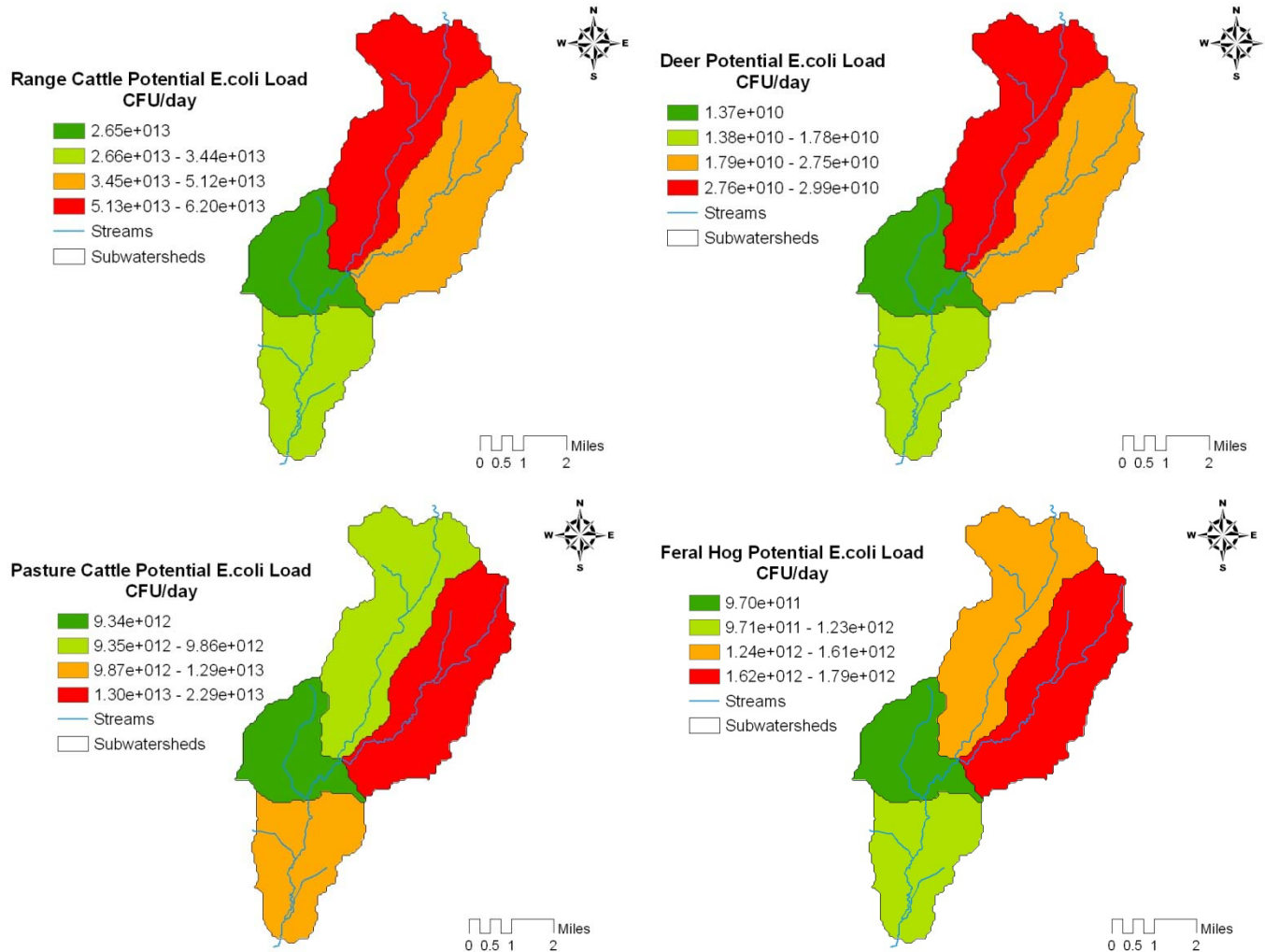


Land Use	Area (ac)
Total	21929
Mixed Forest	8050
Rangeland	6875
Riparian Forest	3535
Managed Pasture	2343
Developed, Roads	754
Developed, Low Intensity	189
Open Water	114
Barren Land	35
Developed, Medium Intensity	34

Spring Creek - Subwatersheds

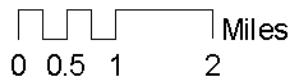
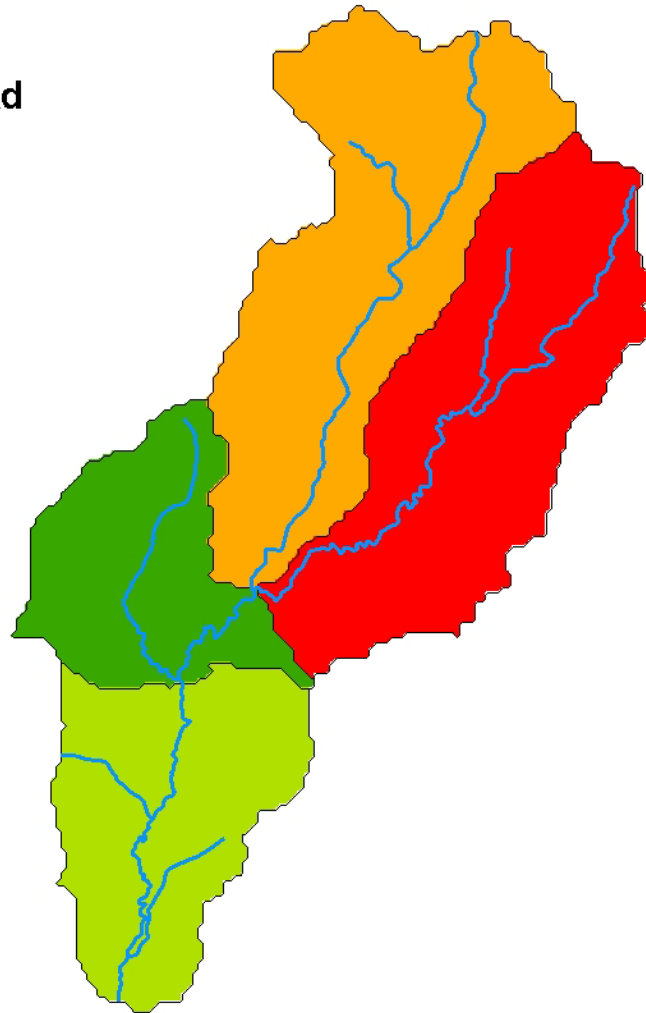
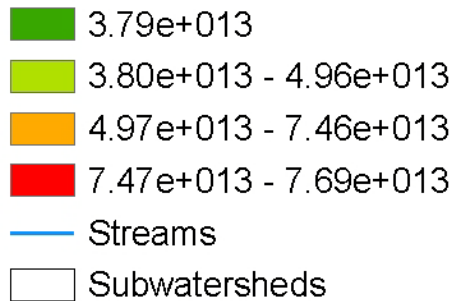


Spring Creek - Potential *E. coli* loads

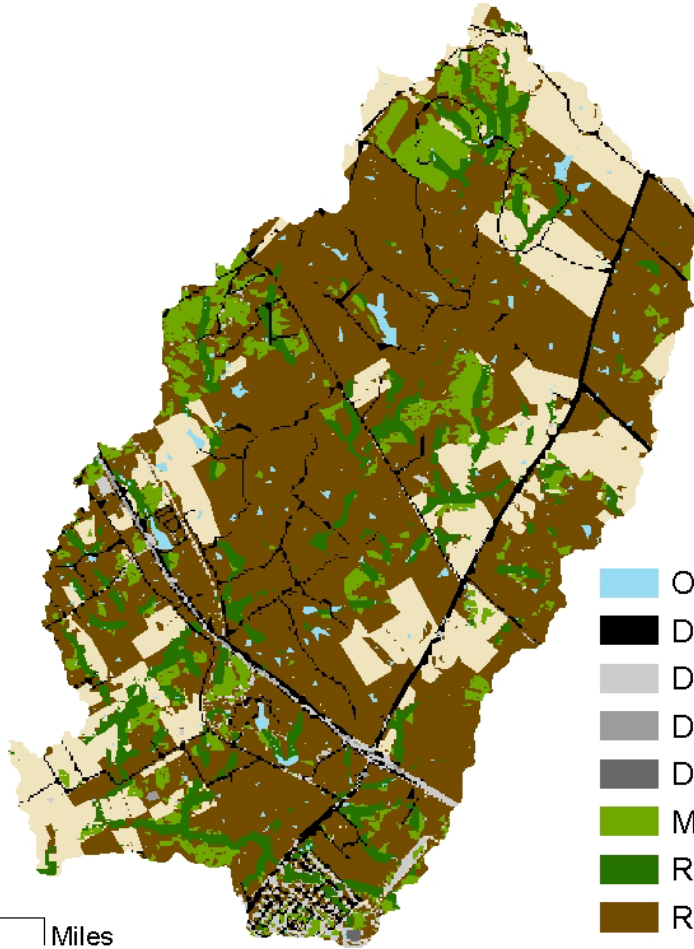


Spring Creek - Total Potential Daily *E. coli* load

Total Potential *E. coli* Load (CFU/day)



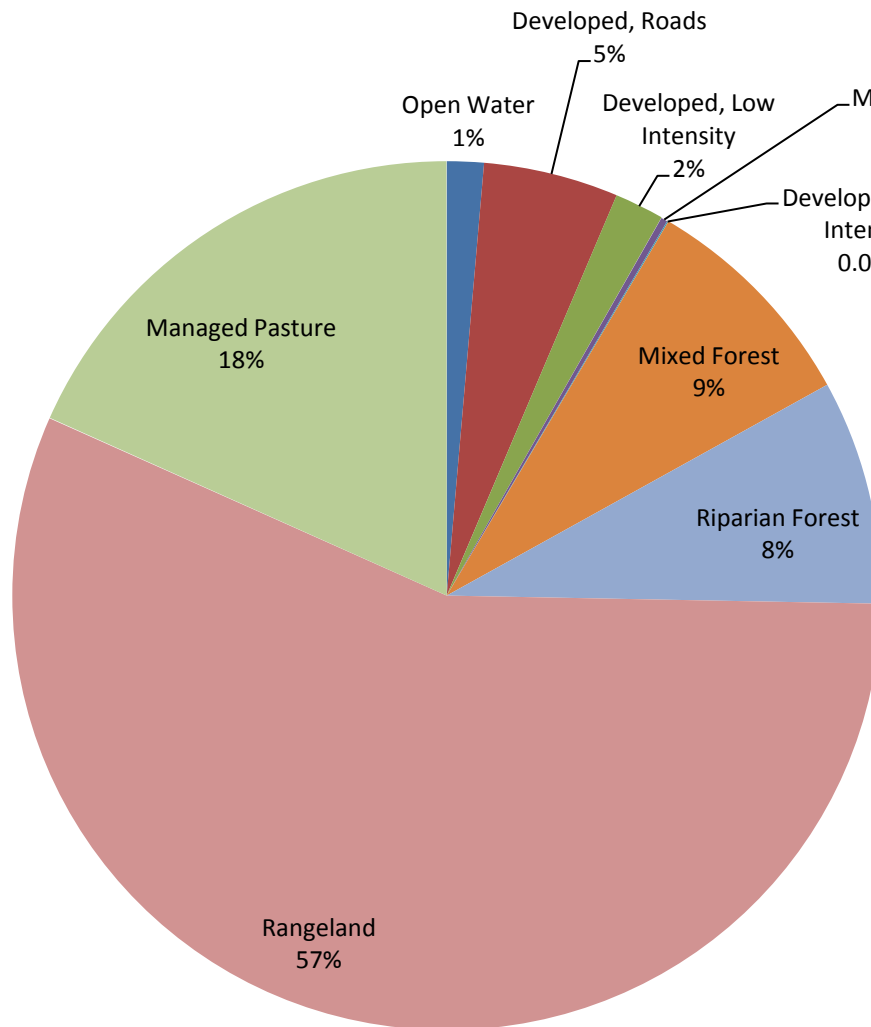
Campbell's Creek – Land Use



- Open Water
- Developed, Road
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, High Intensity
- Mixed Forest
- Riparian Forest
- Rangeland
- Managed Pasture

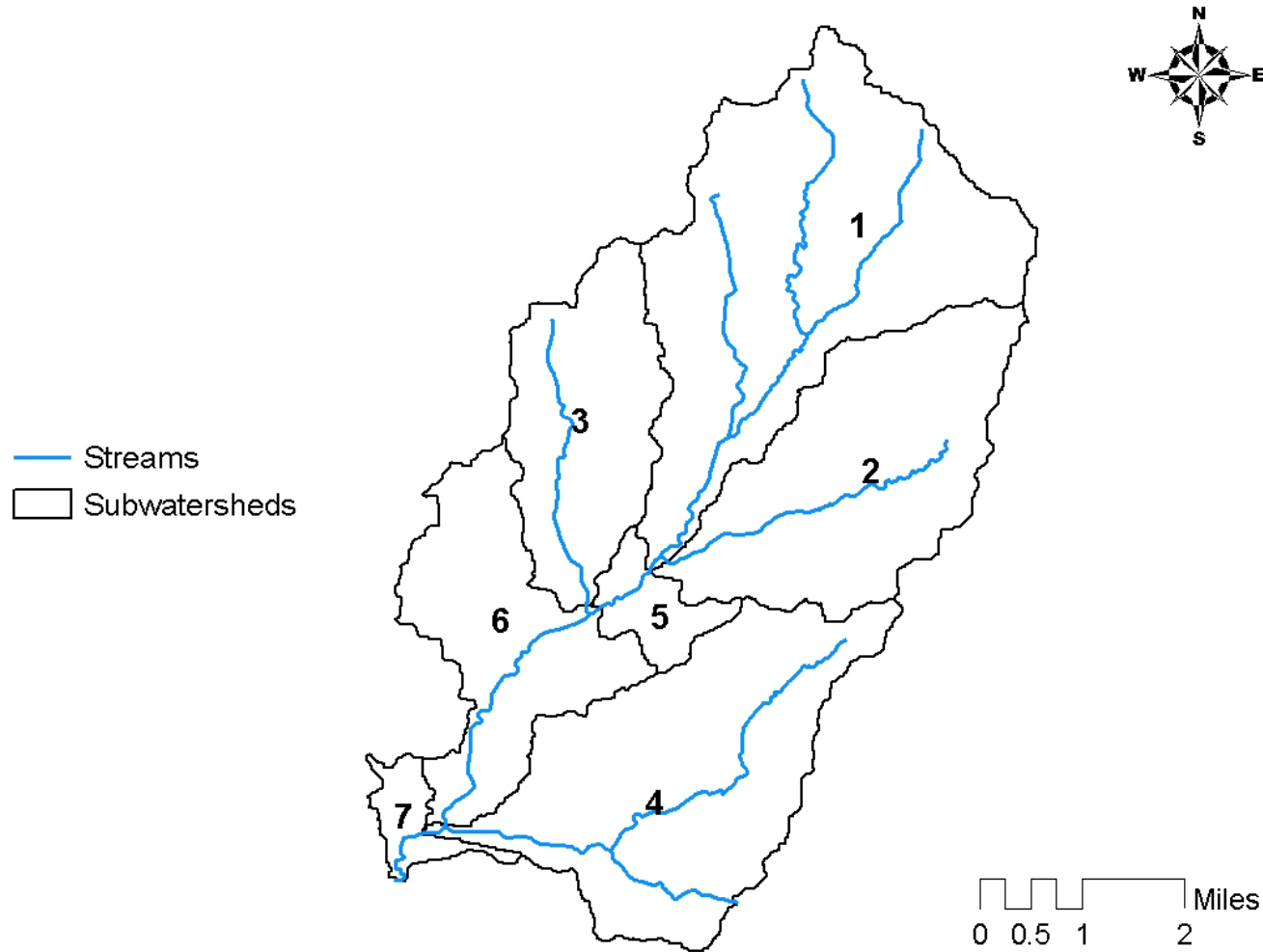
0 0.5 1 2 Miles

Campbell's Creek – Land Use Percentage



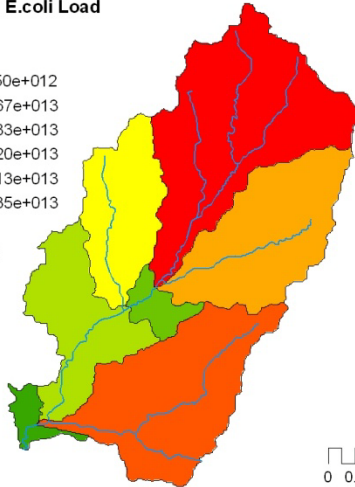
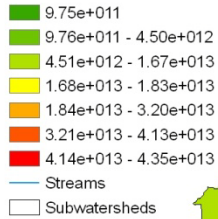
Land Use	Area (ac)
Total	21508
Rangeland	12130
Managed Pasture	3938
Mixed Forest	1815
Riparian Forest	1794
Developed, Roads	1079
Developed, Low Intensity	396
Open Water	295
Developed, Medium Intensity	52
Developed, High Intensity	10

Campbell's Creek - Subwatersheds

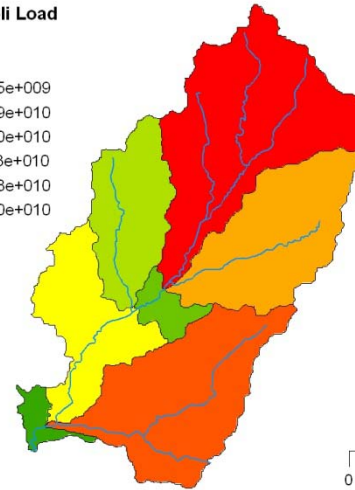
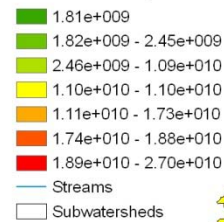


Campbell's Creek - Potential *E. coli* loads

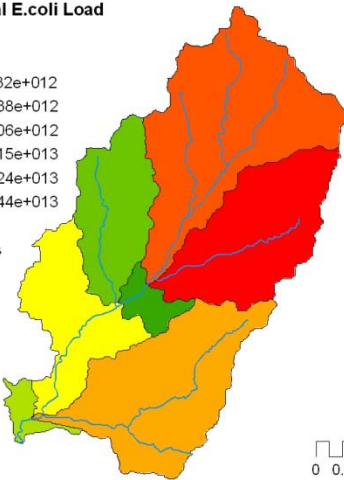
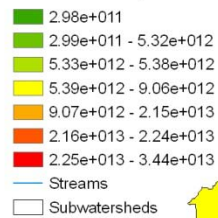
**Range Cattle Potential *E. coli* Load
CFU/day**



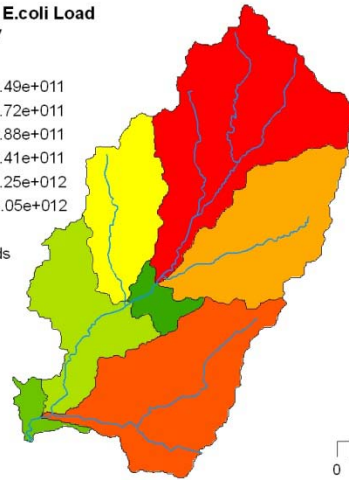
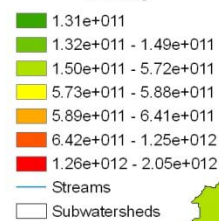
**Deer Potential *E. coli* Load
CFU/day**



**Pasture Cattle Potential *E. coli* Load
CFU/day**



**Feral Hog Potential *E. coli* Load
CFU/day**



Campbell's Creek - Total Potential Daily *E. coli* load

Total Potential *E. coli* Load (CFU/day)

