



October 21st, 2025

Davidson Creek

Watershed Protection Plan Development

TEXAS A&M
AGRI LIFE

TEXAS STATE
Soil & Water
CONSERVATION BOARD


Texas Water
Resources Institute
make every drop count

Funding provided by the Texas State Soil and Water Conservation Board through the State Nonpoint Source Grant Program

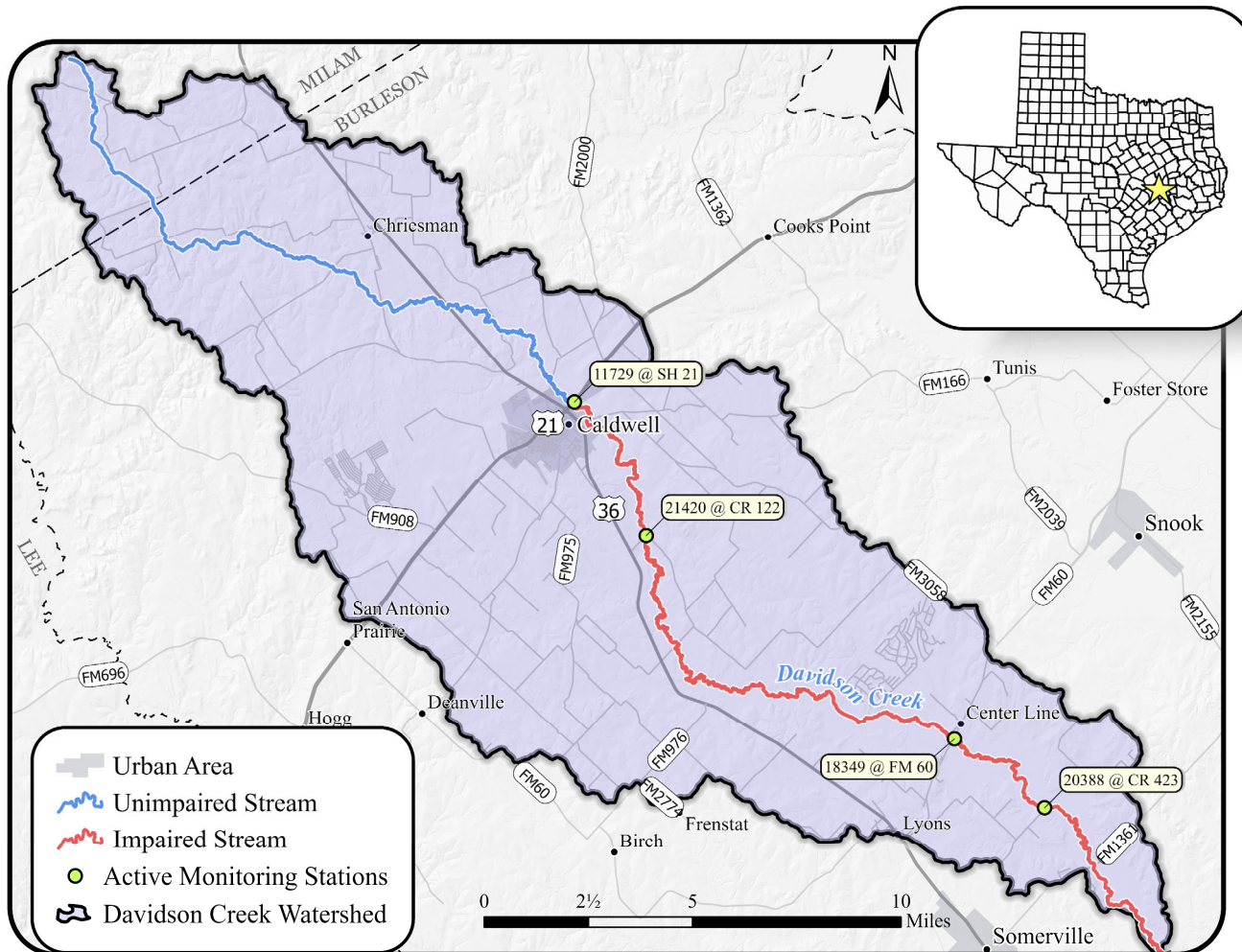
Meeting Agenda

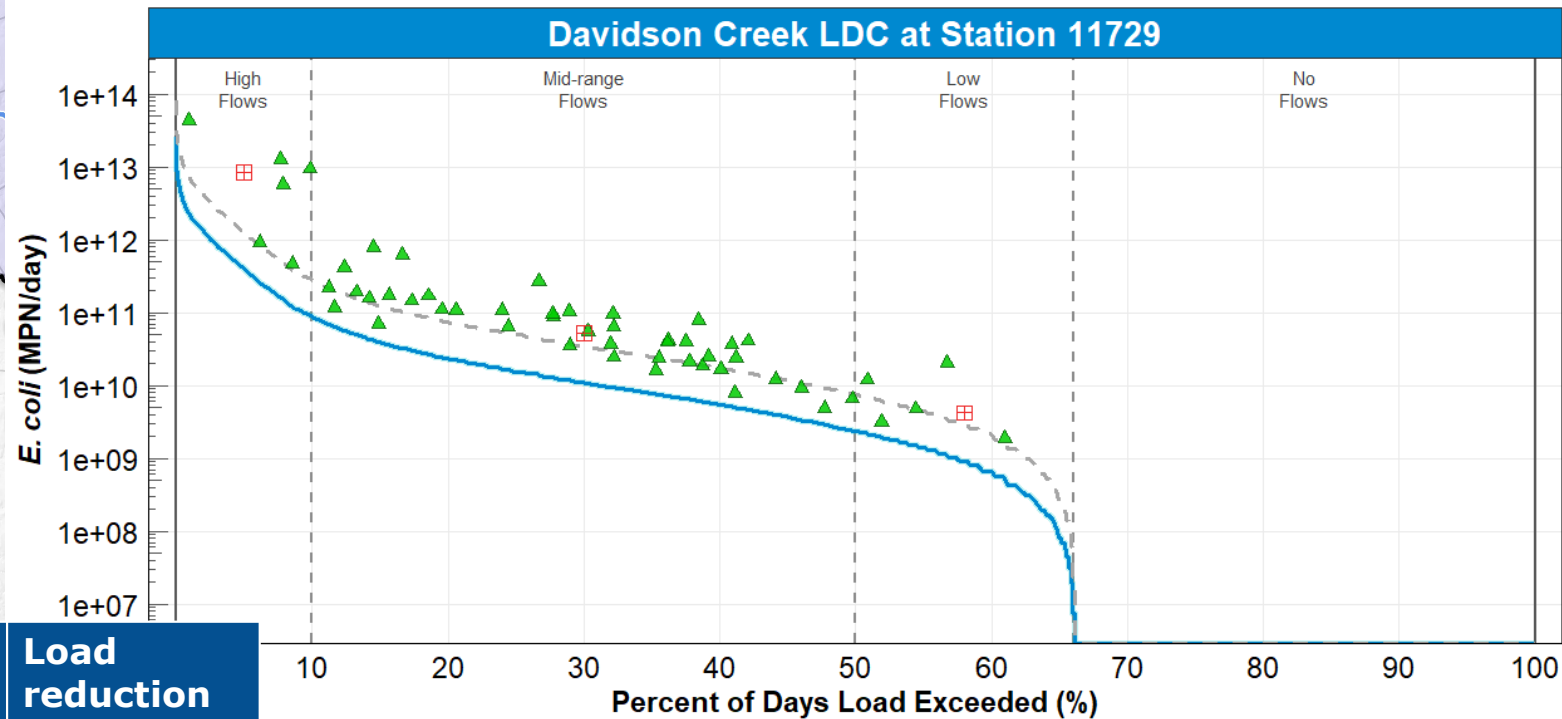
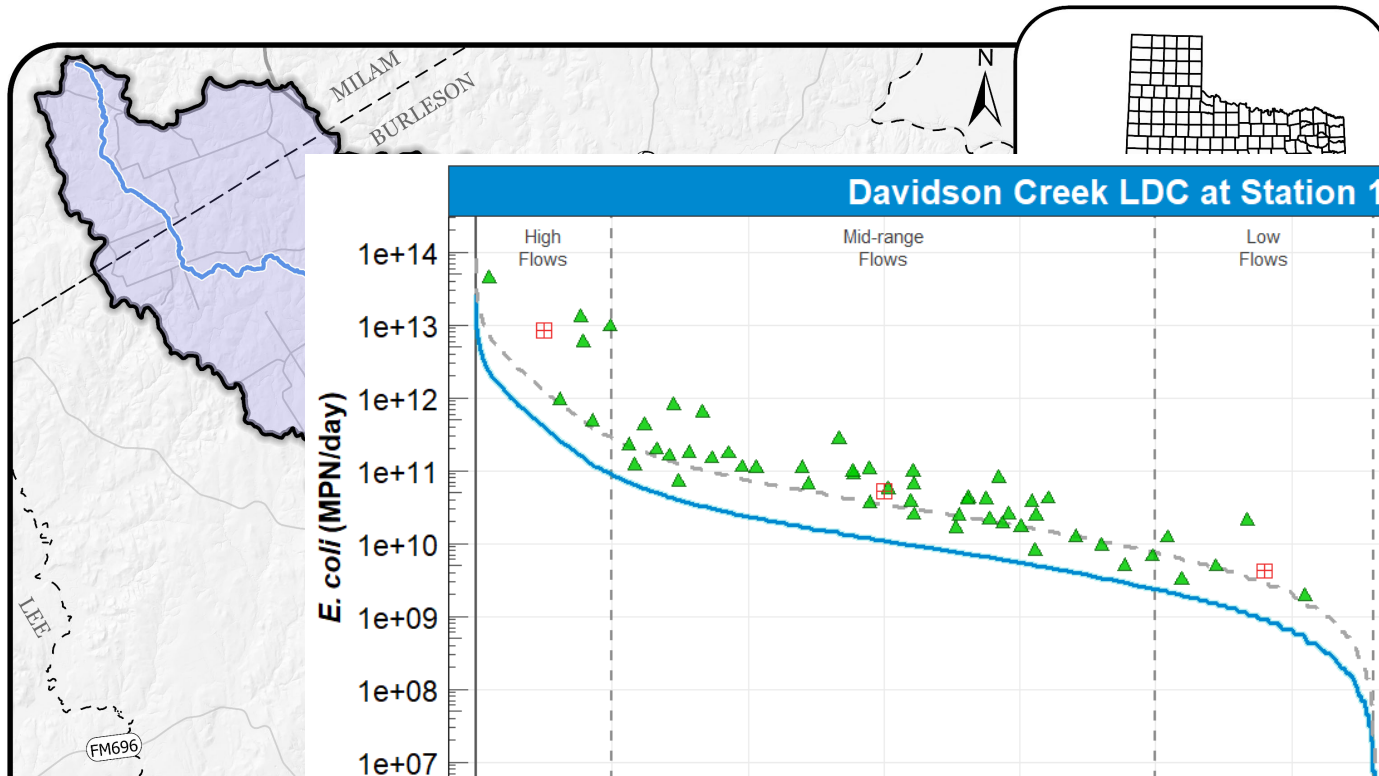
- Welcome and Overview
- Quick summary of Meeting #4
 - Water Quality and LDCs
- SELECT Analysis
- Best Management Practices
- Panel
- Questions and Next Steps

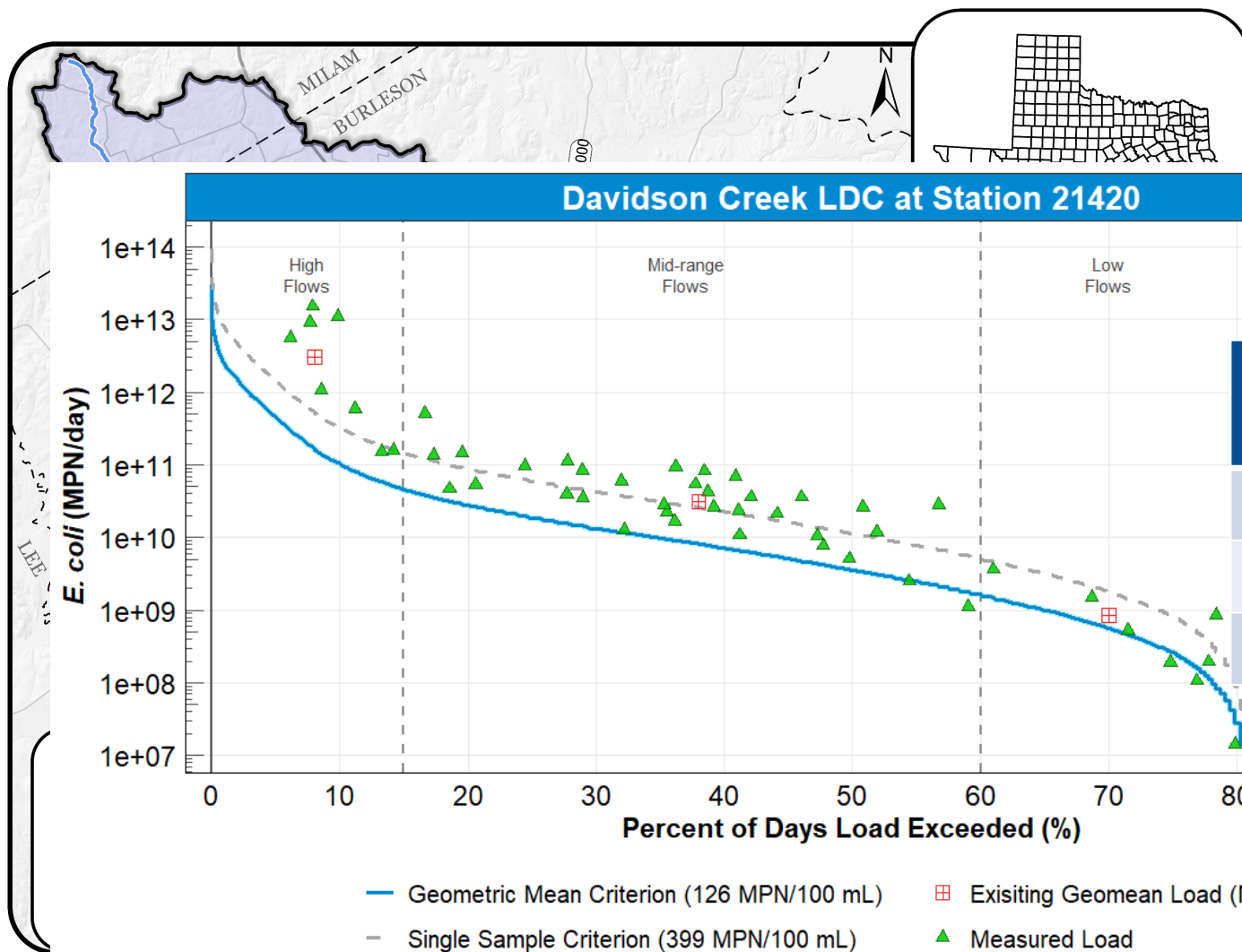
Davidson Creek

Water Quality

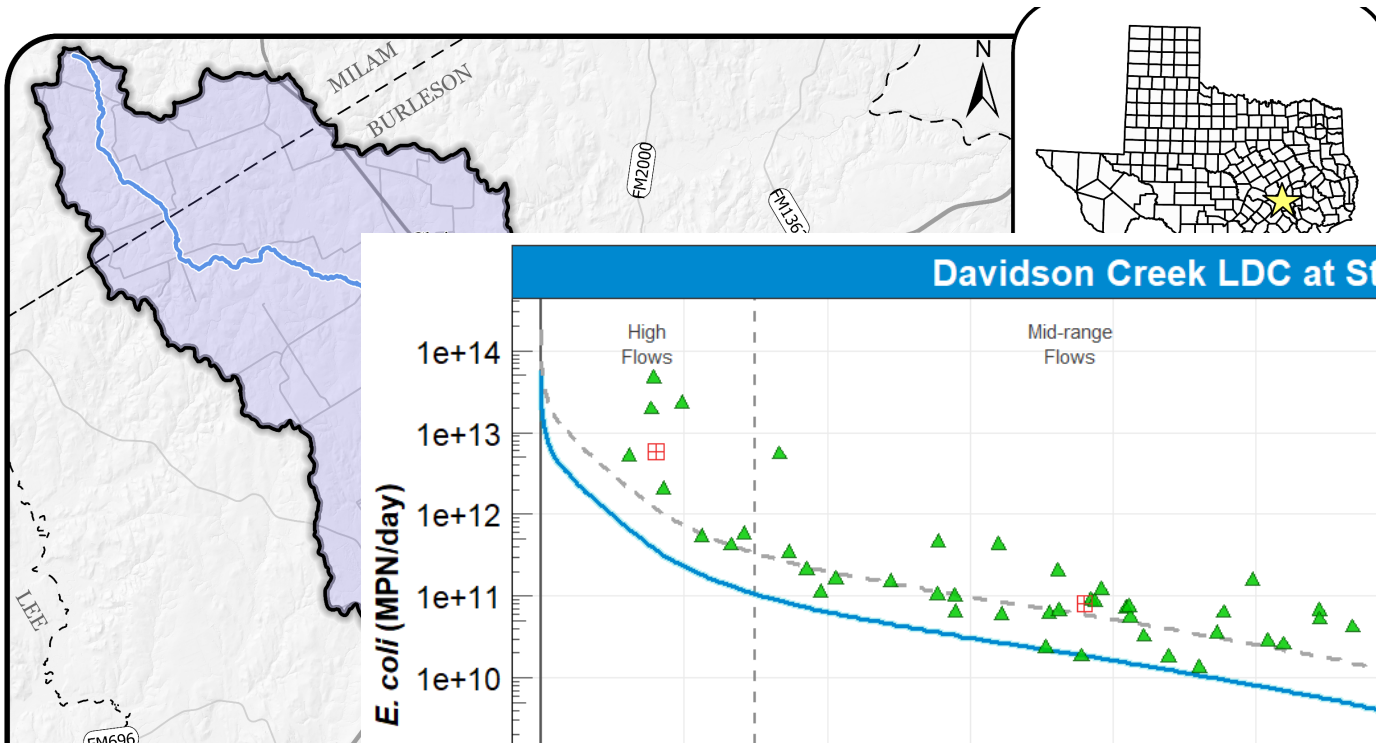
- Elevated bacteria – risk to human health
- Low dissolved oxygen – risk to fish & aquatic life



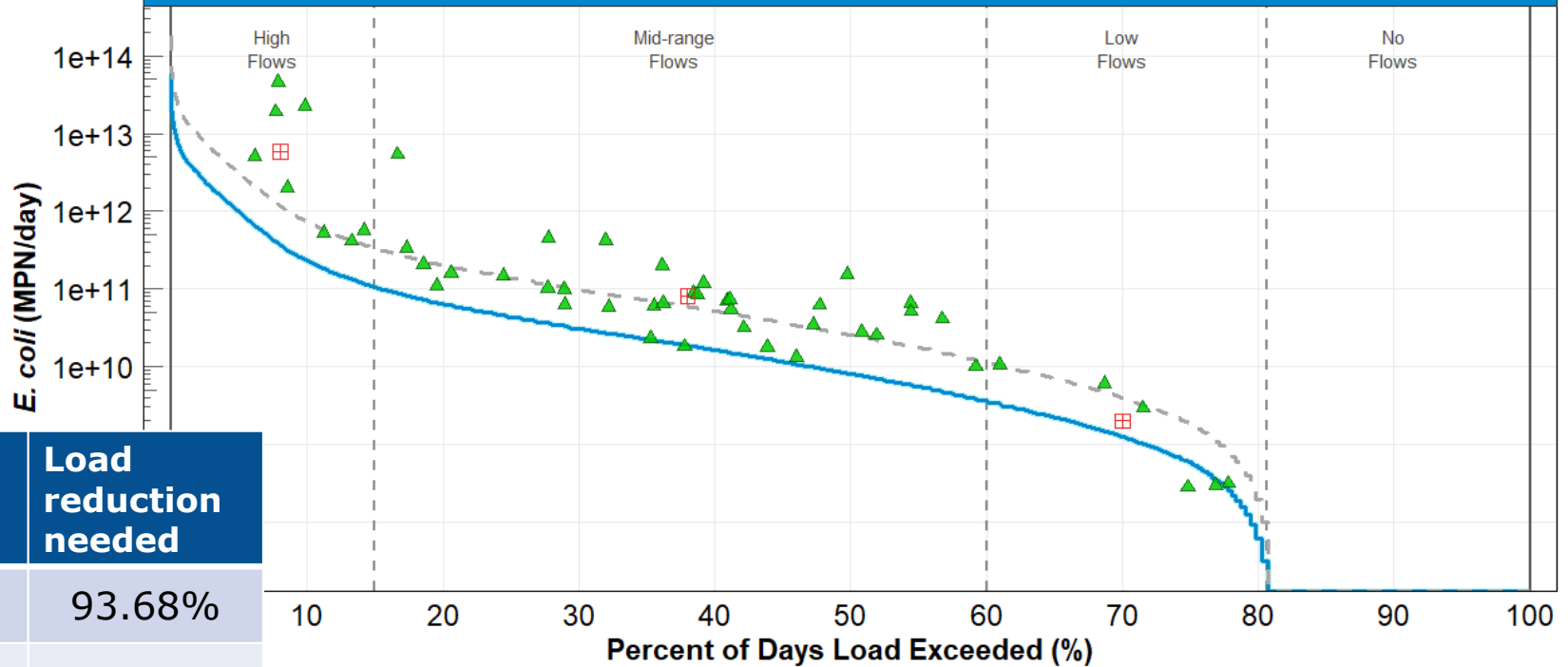




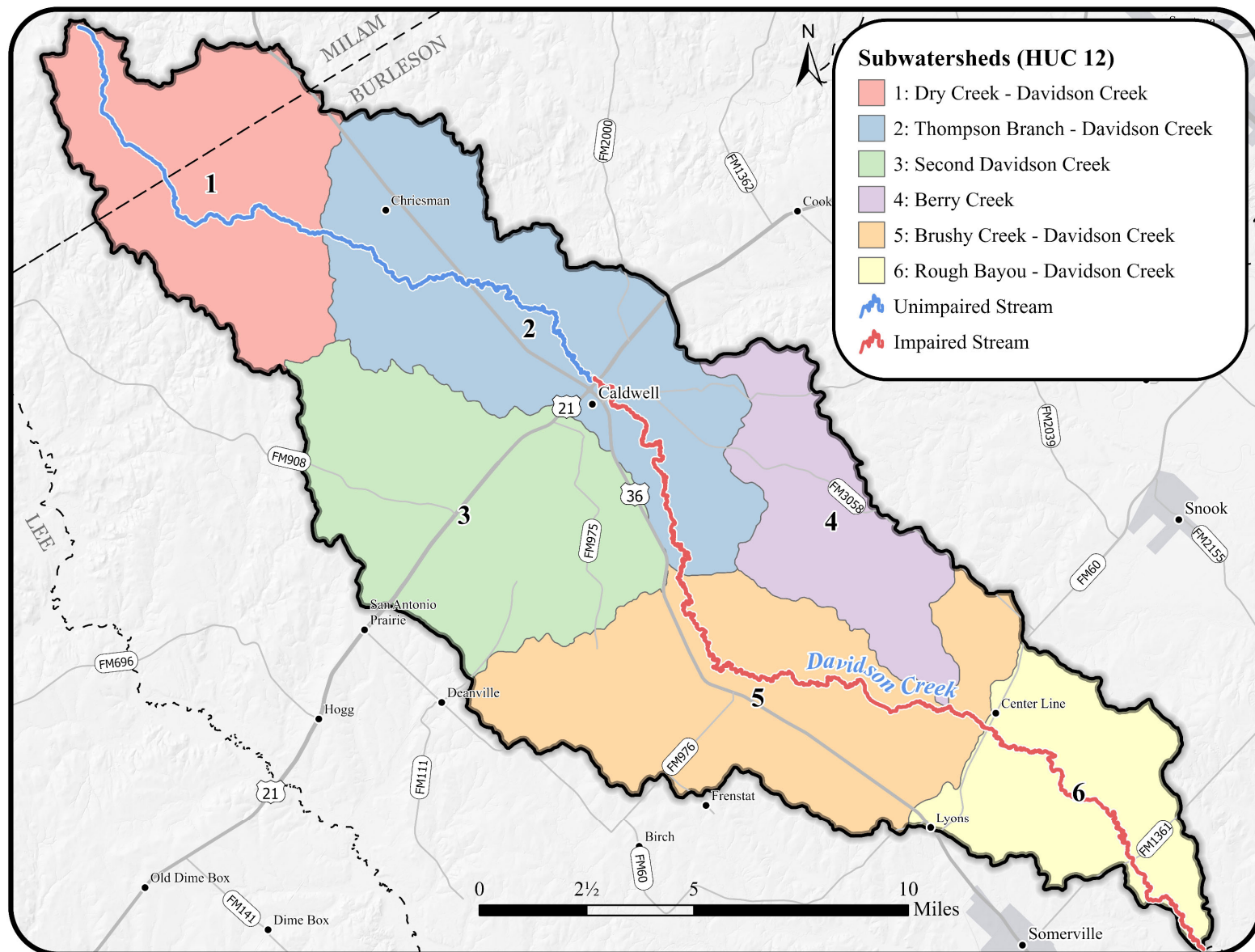
Flow category	Load reduction needed
High Flows	93.68%
Mid-Range Flows	72.77%
Low Flows	35.06%



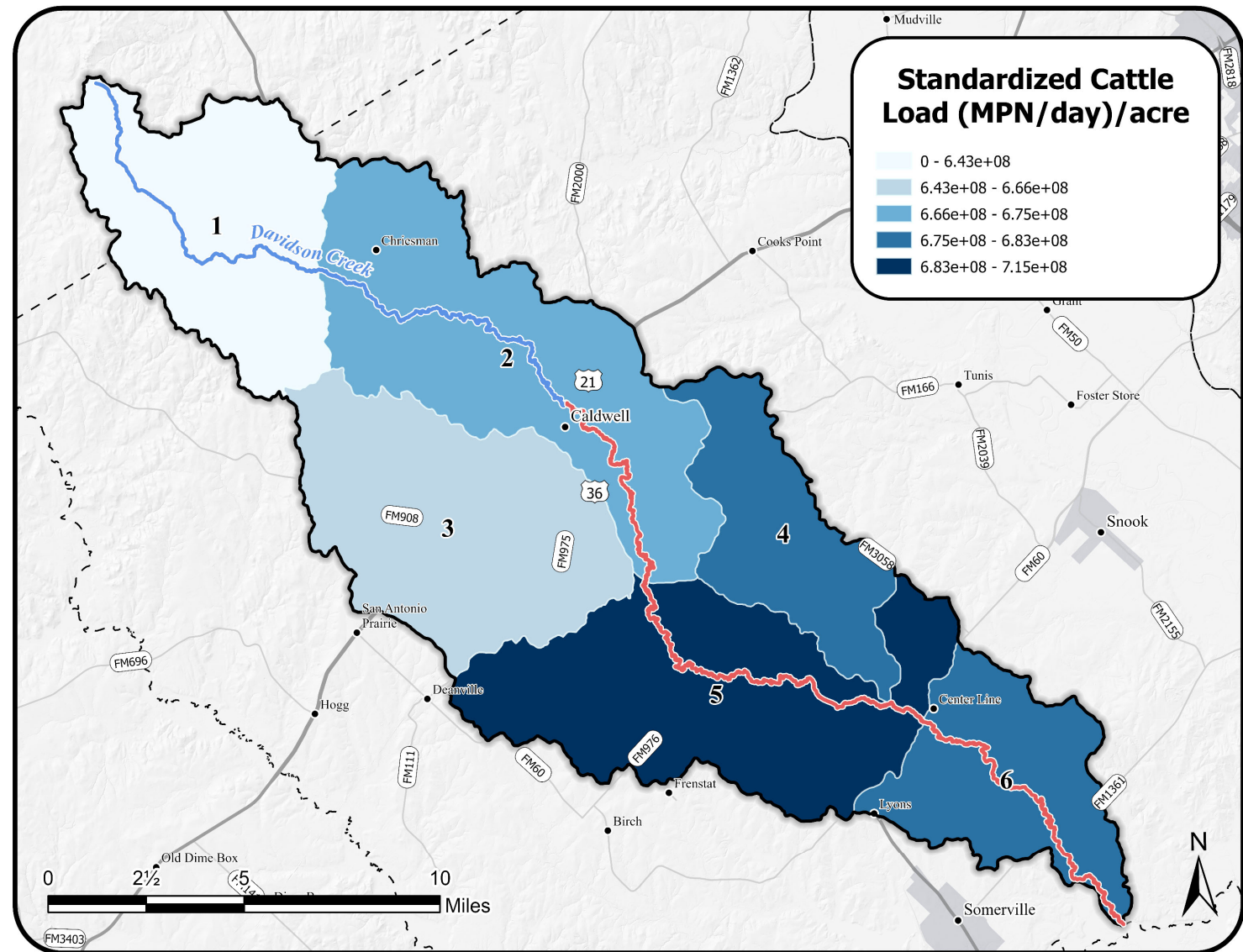
Davidson Creek LDC at Station 18349



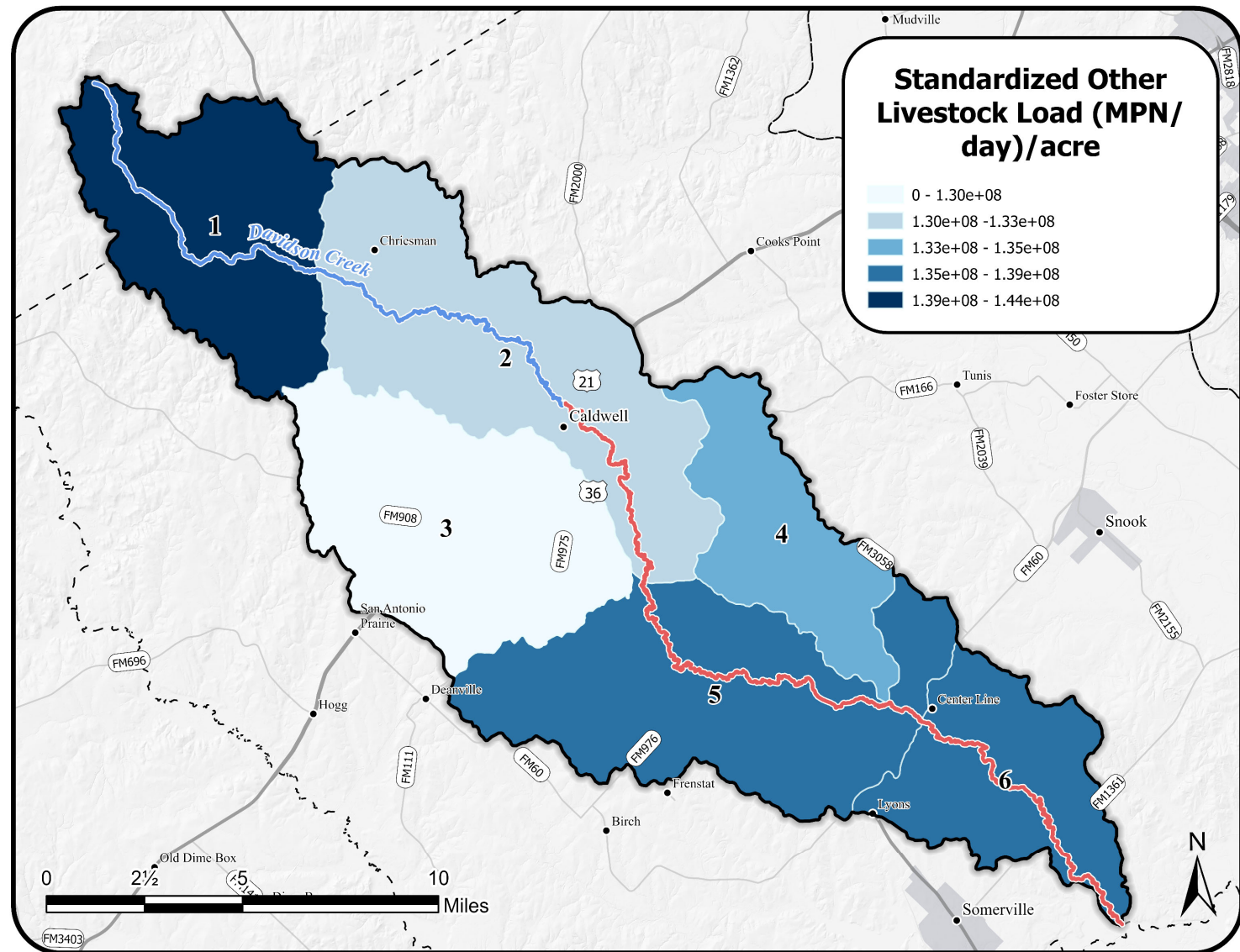
Subwatersheds



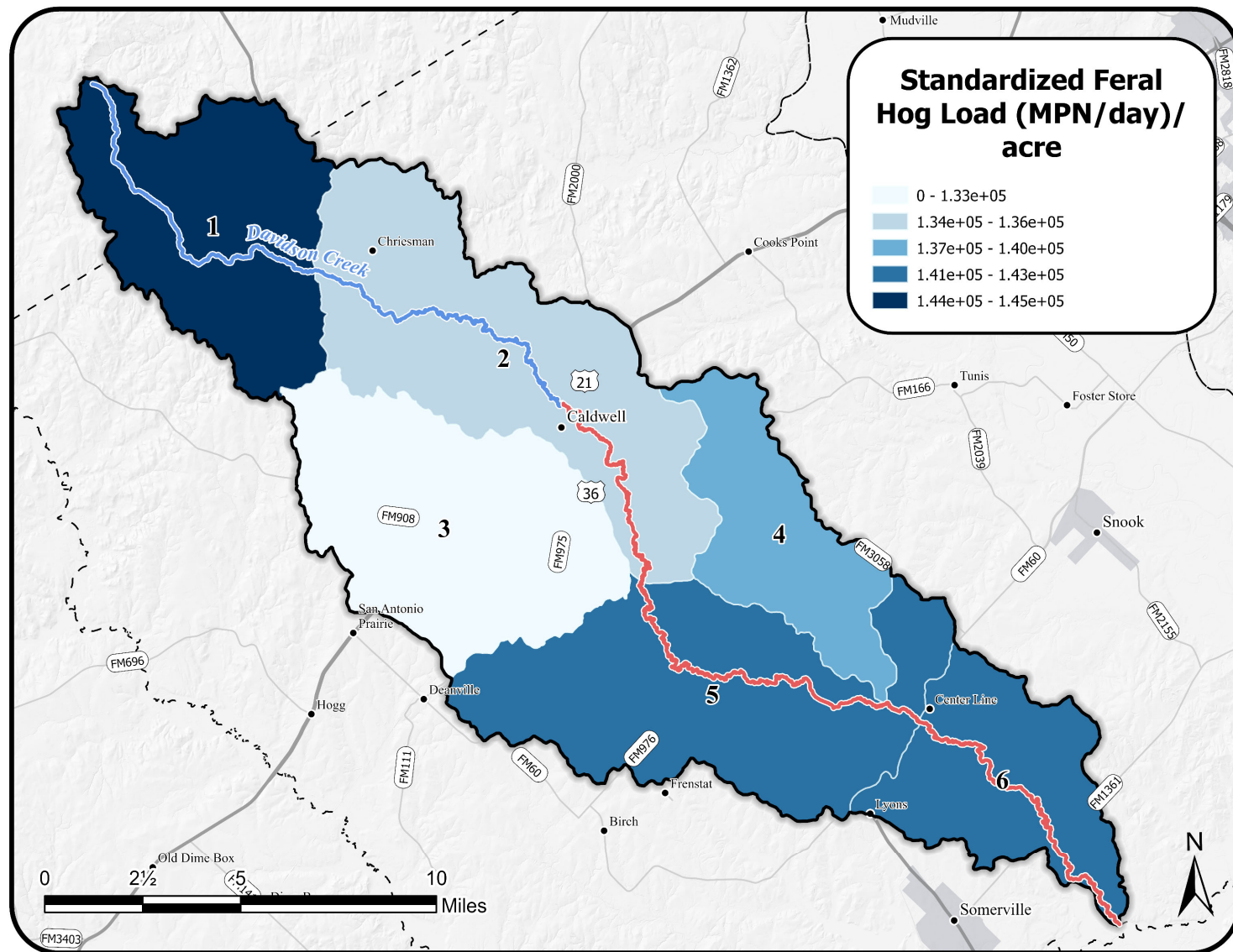
Cattle



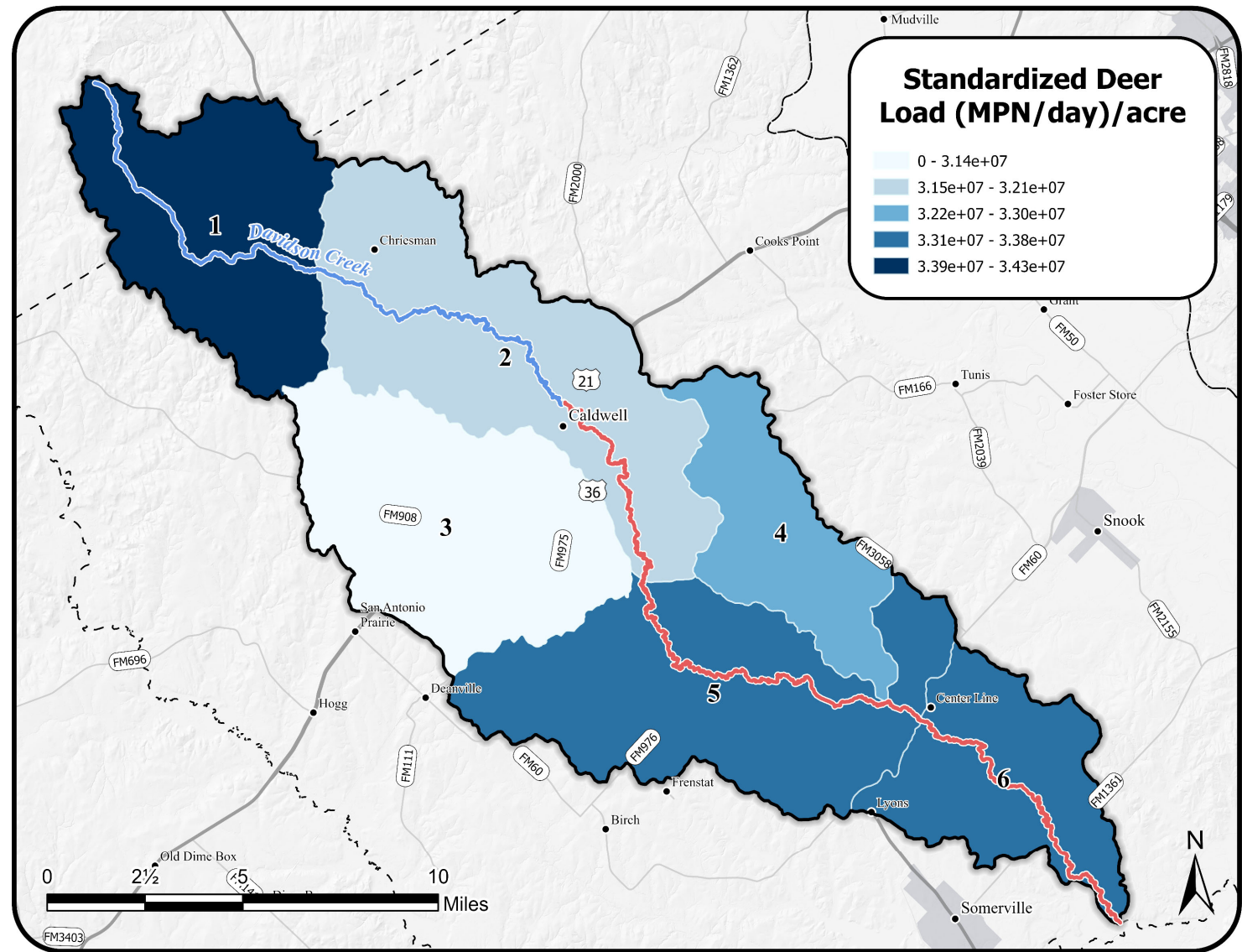
Other Livestock (Goat, Sheep, Horse, Pig/Hog)



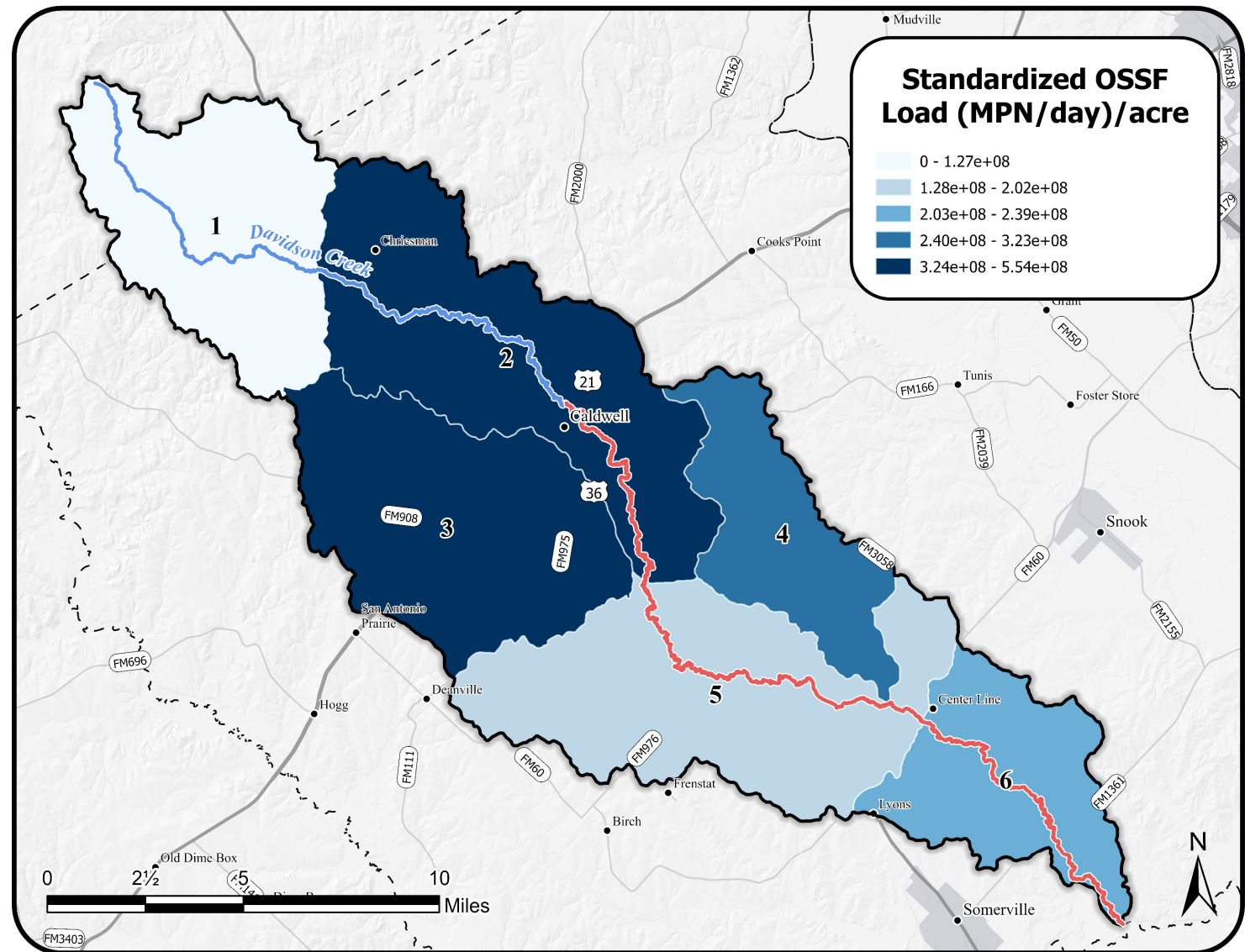
Feral Hog



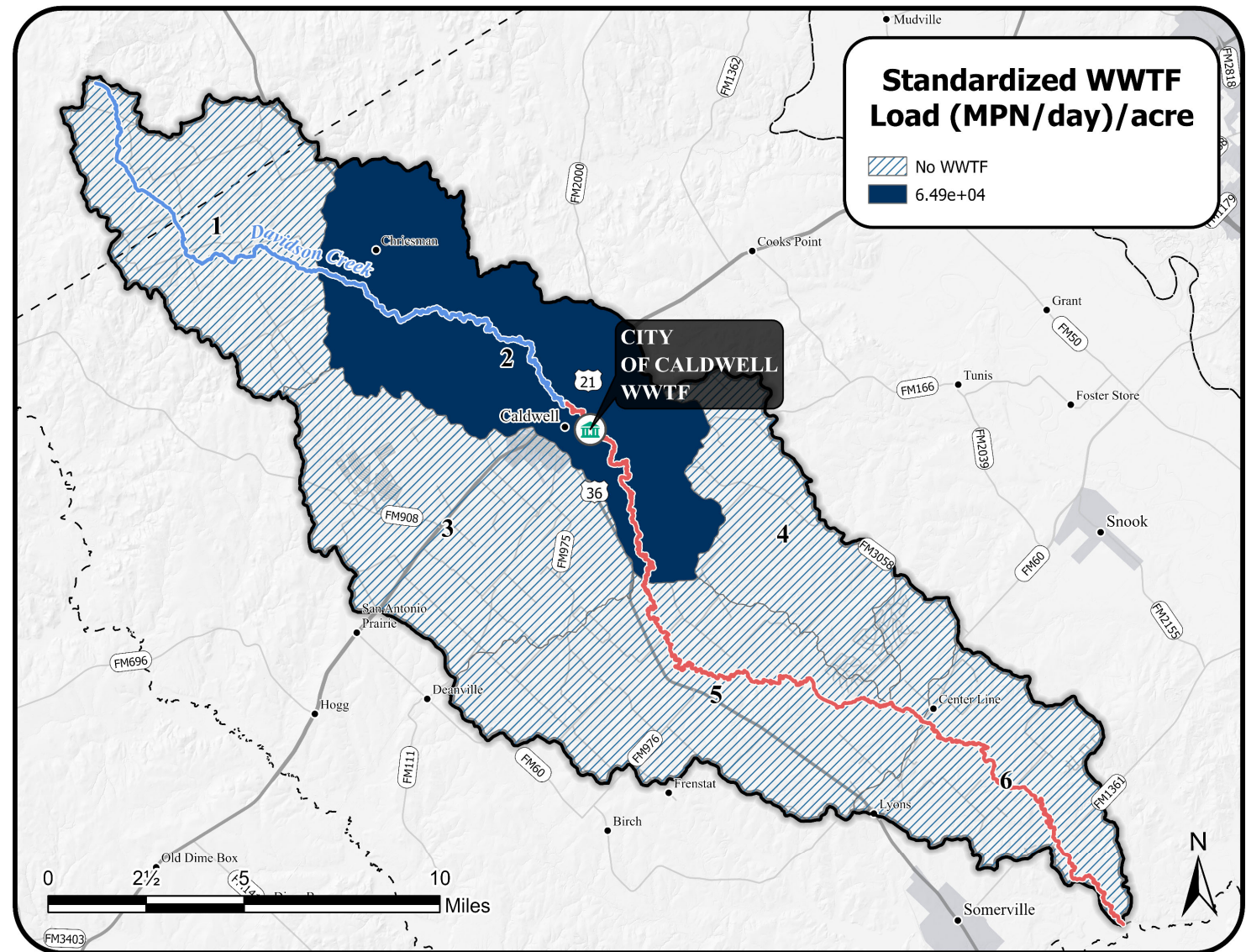
Deer



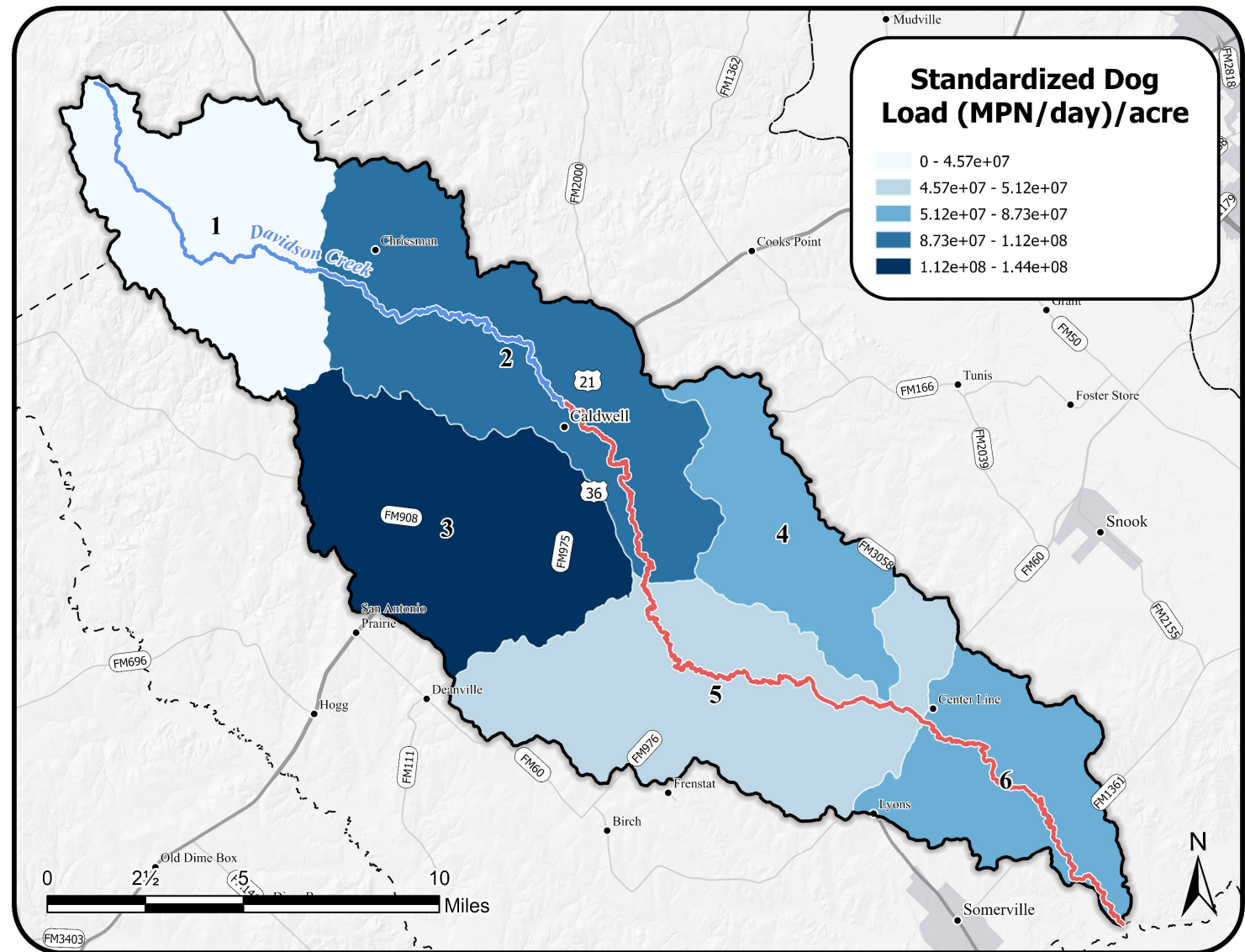
OSSF



WWTF

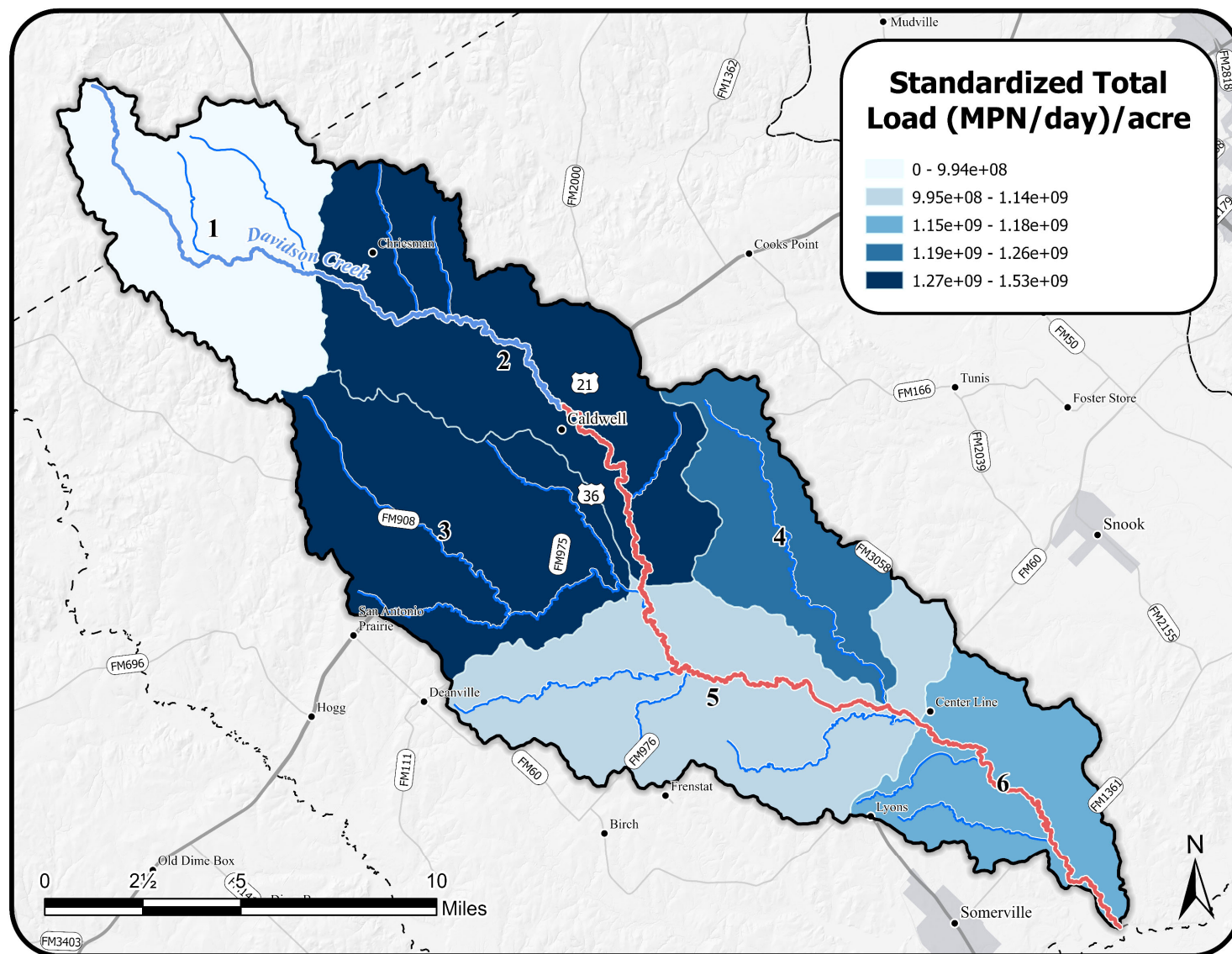


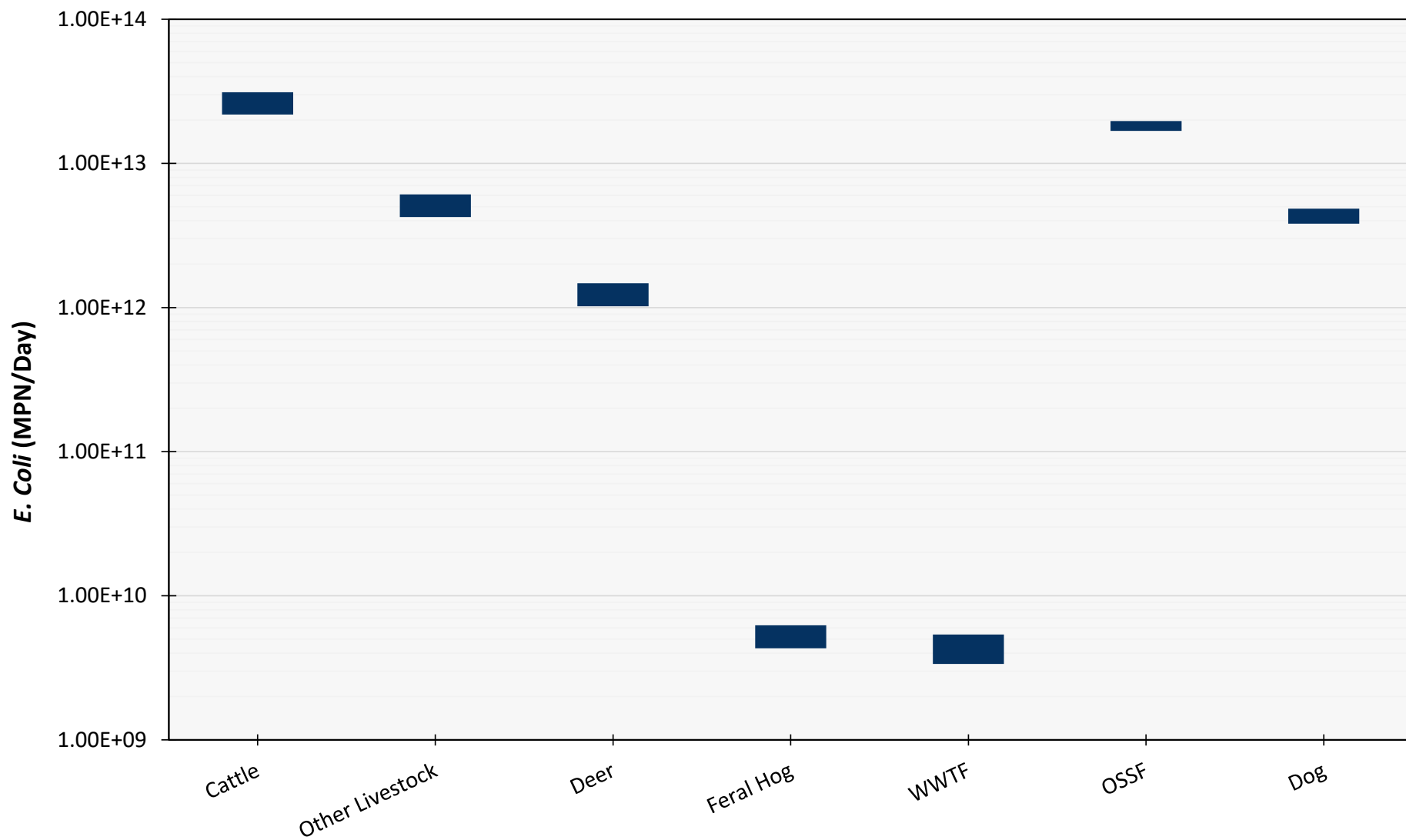
Dog



Total Estimated Load

Critical Source Areas =
Subwatersheds 2 and 3



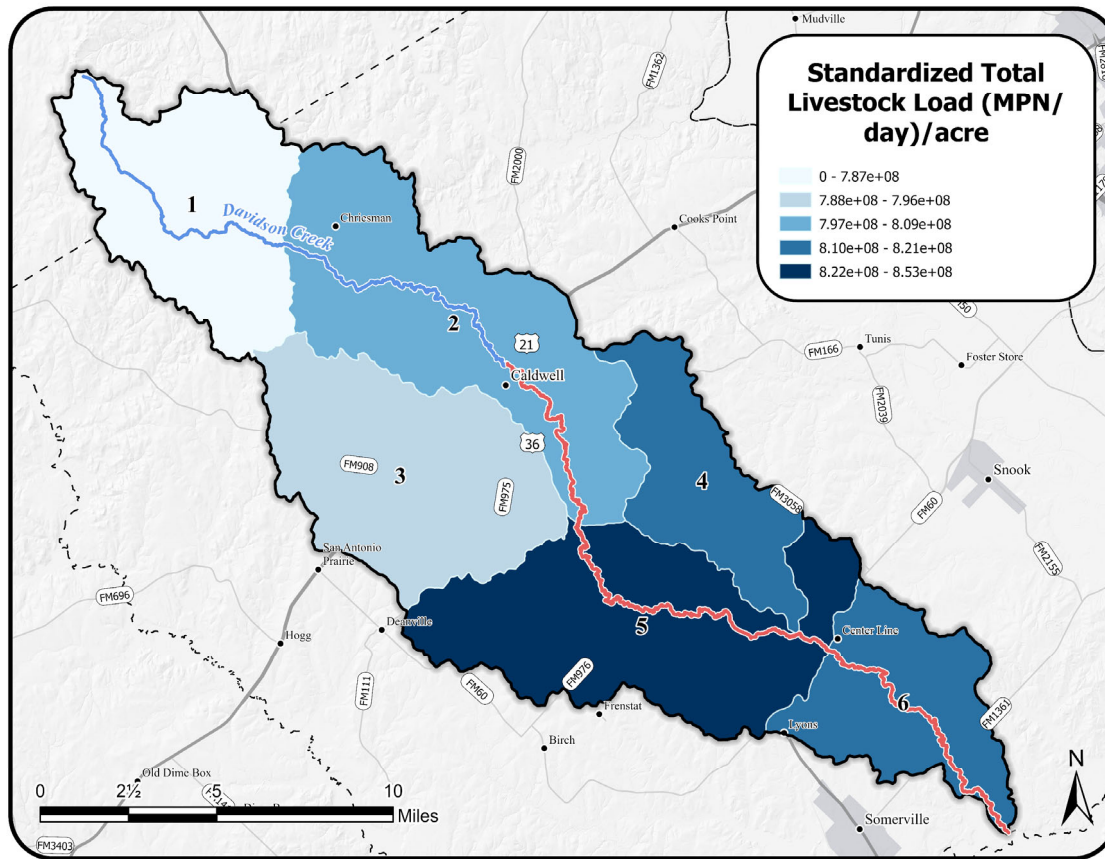


**Management
Measures or
Best
Management
Practices
(BMPs)**

Voluntary actions that directly or indirectly reduce pollutant loads potentially reaching waterbodies

Effective Management measures are both feasible and locally acceptable!

Livestock



- Conservation Plans (CP) and Water Quality Management Plans (WQMPs)

Management Practice	Effectiveness
Exclusionary fencing ¹	62%
Filter strips ²	65%
Prescribed grazing ³	54%
Stream Crossing ⁴	48%
Watering facility ⁵	73%
Average Efficacy	63%

¹ Brenner et al. 1996, Cook 1998, Hagedorn et al. 1999, Line 2002, Line 2003, Lombardo et al. 2000, Meals 2001, Meals 2004, Petersen et al. 2011

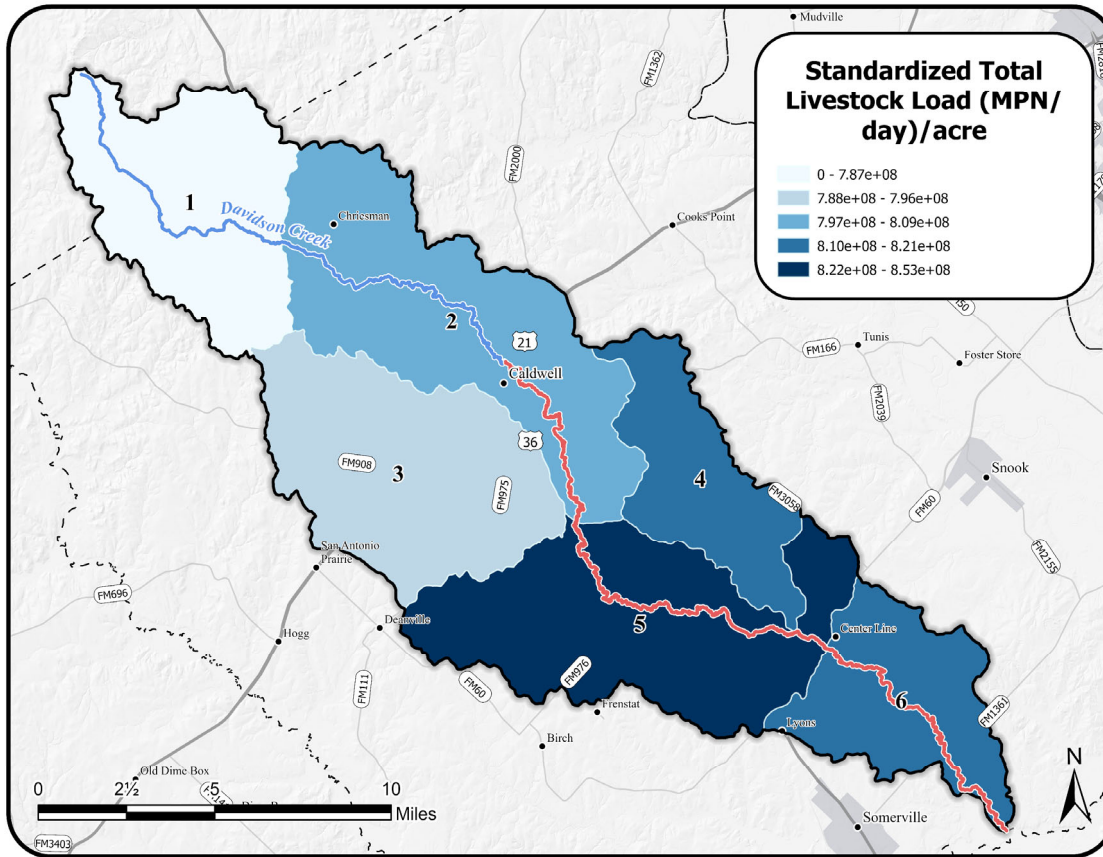
² Cook 1998, Coyne et al. 1995, Fajardo et al. 2001, Goel et al. 2004, Larsen et al. 1994, Lewis et al. 2010, Mankin and Okoren 2003, Roodsari et al. 2005, Stuntebeck and Bannerman 1998, Sullivan et al. 2007, Tate et al. 2006, Young et al. 1980.

³ Tate et al. 2004, EPA 2010

⁴ Inamdar et al. 2002, Meals 2001

⁵ Byers et al. 2005, Hagedorn et al. 1999, Sheffield et al. 1997

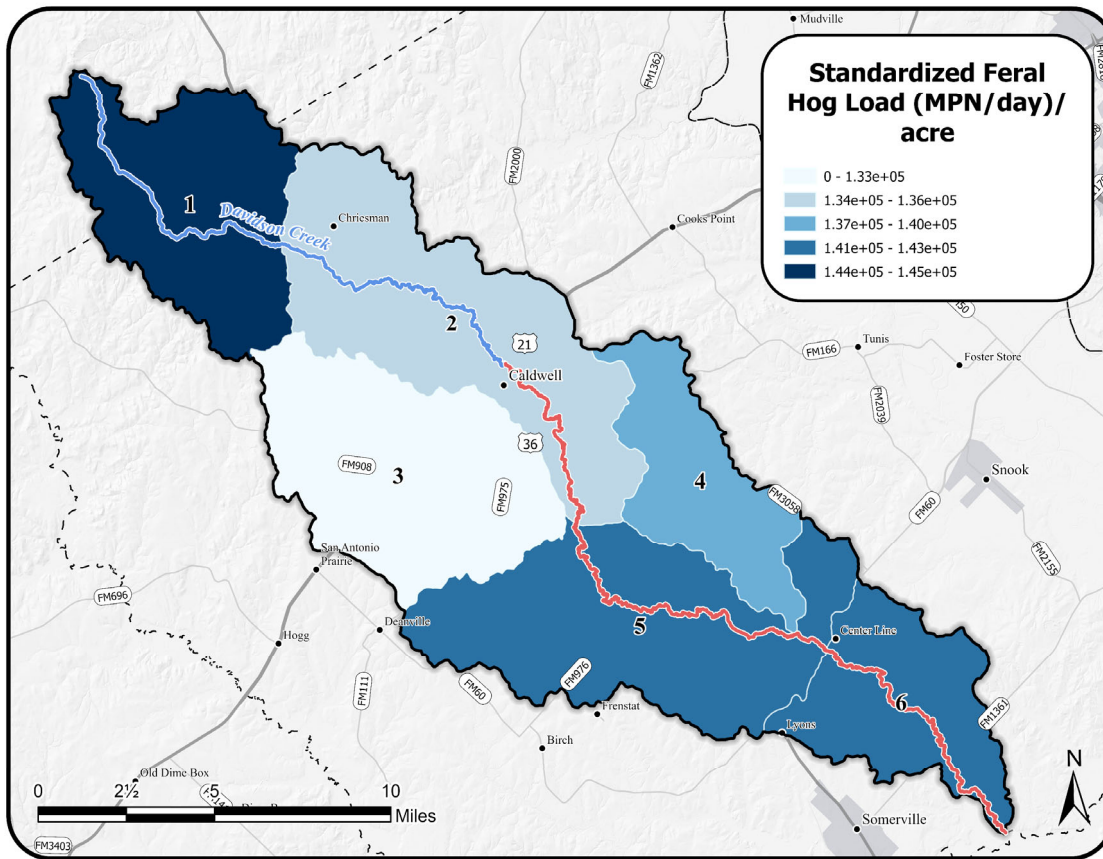
Livestock



- **Educational workshops**

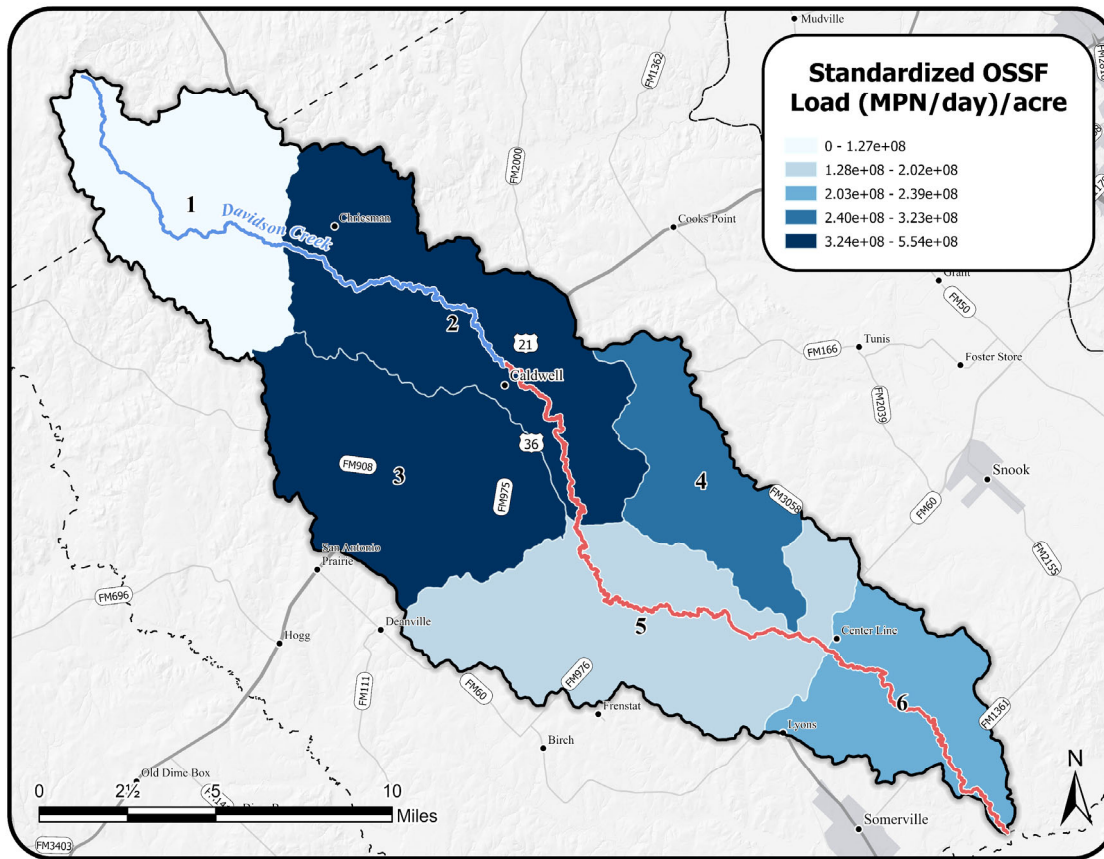
- Grazing management
- Landscape and water resources management
- Nutrient management
- Soil testing campaign

Feral Hog



- Feral hog bounty programs
- Voluntary hog removal
- Feral hog control workshops

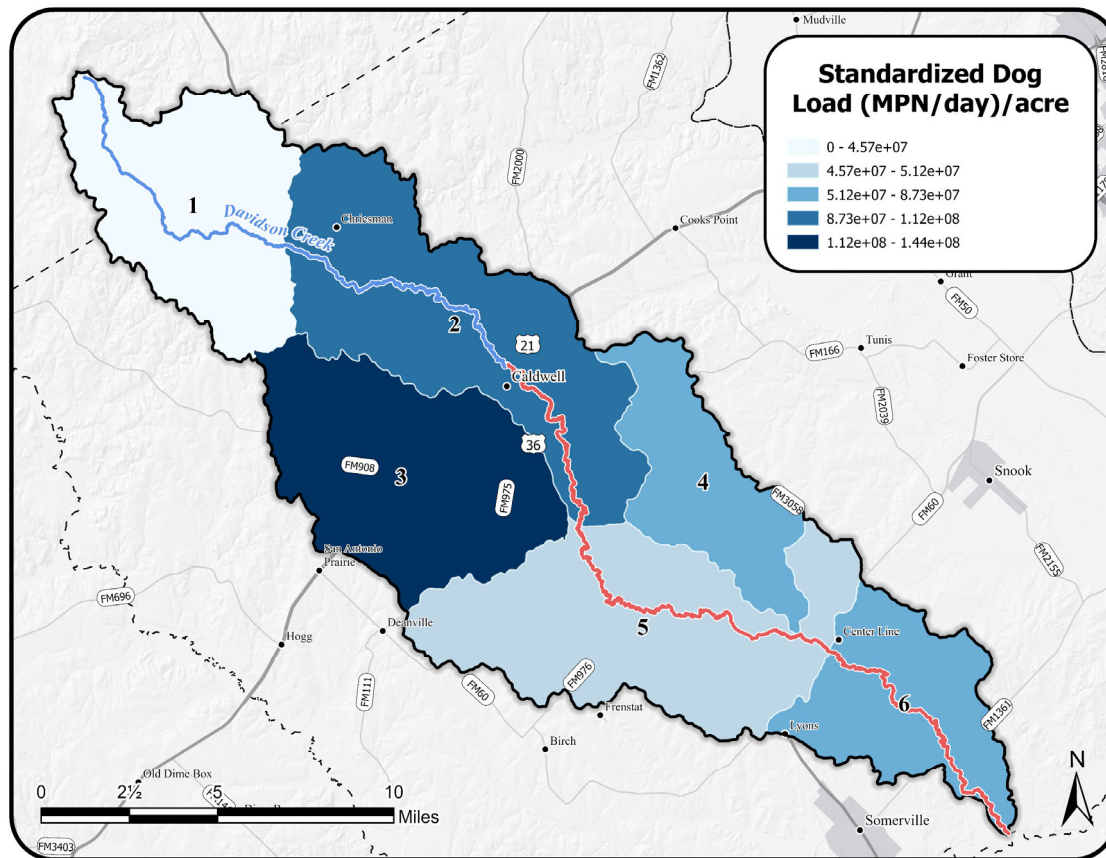
Septic Systems (OSSF)



- **Educational workshops**

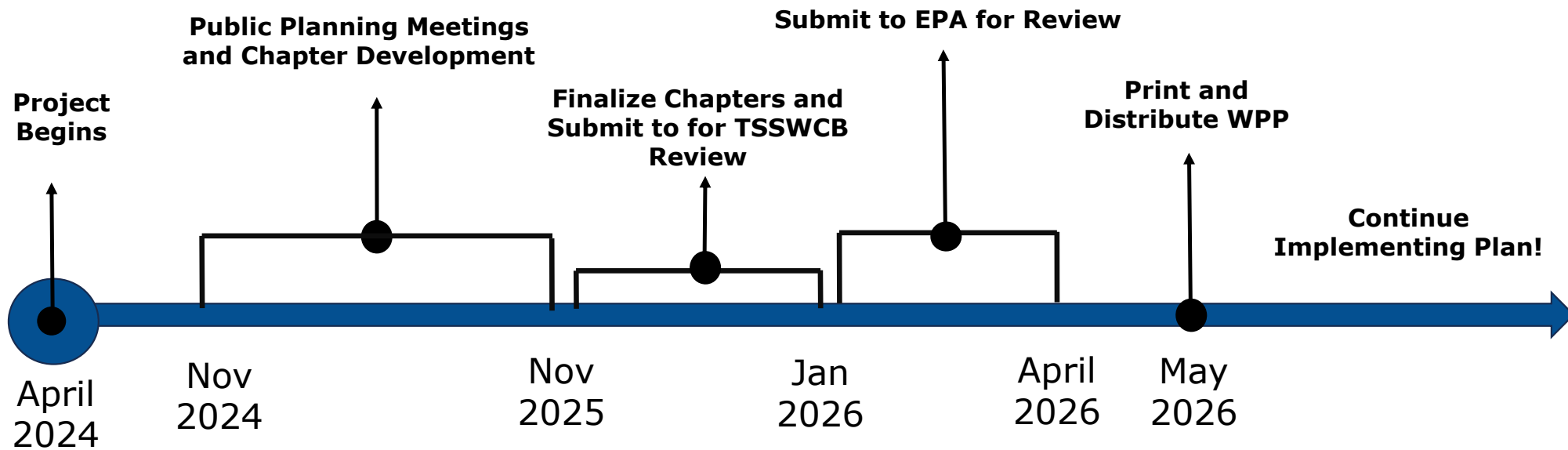
- OSSF operation and maintenance workshop
- OSSF installer and maintenance provider training
- Online homeowner maintenance of aerobic treatment units

Pet Waste (Dogs)



- Behavior changes of dog owners
- Pet waste stations
- Continuation and support of Project SNIP (spay and Neuter Programs)
- Education and outreach
- City Ordinances?

Next Steps



Additional Meetings and Overall Timeline

- ☐ Next Stakeholder Meeting MONDAY November 17
- ☐ Send out and post online meeting reminders and recap of previous meeting
- ☐ Will post chapters 1-4 for review and public comment
- ☐ Water Quality monitoring on Davidson Creek will continue

Questions?

<https://davidson.twri.tamu.edu/>

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