

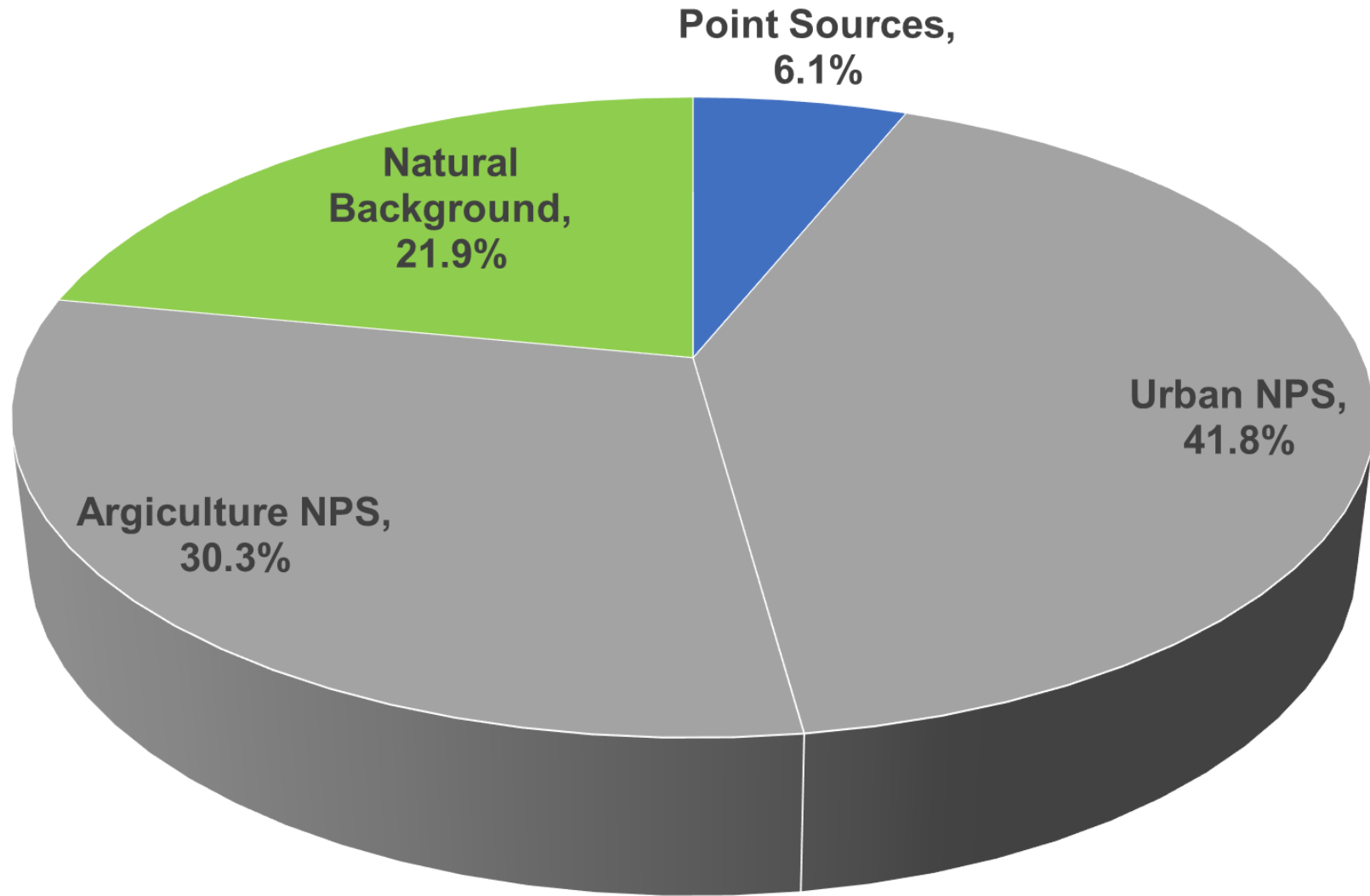
Harpeth River Stakeholder Update

November 29, 2023

Stakeholder Recap

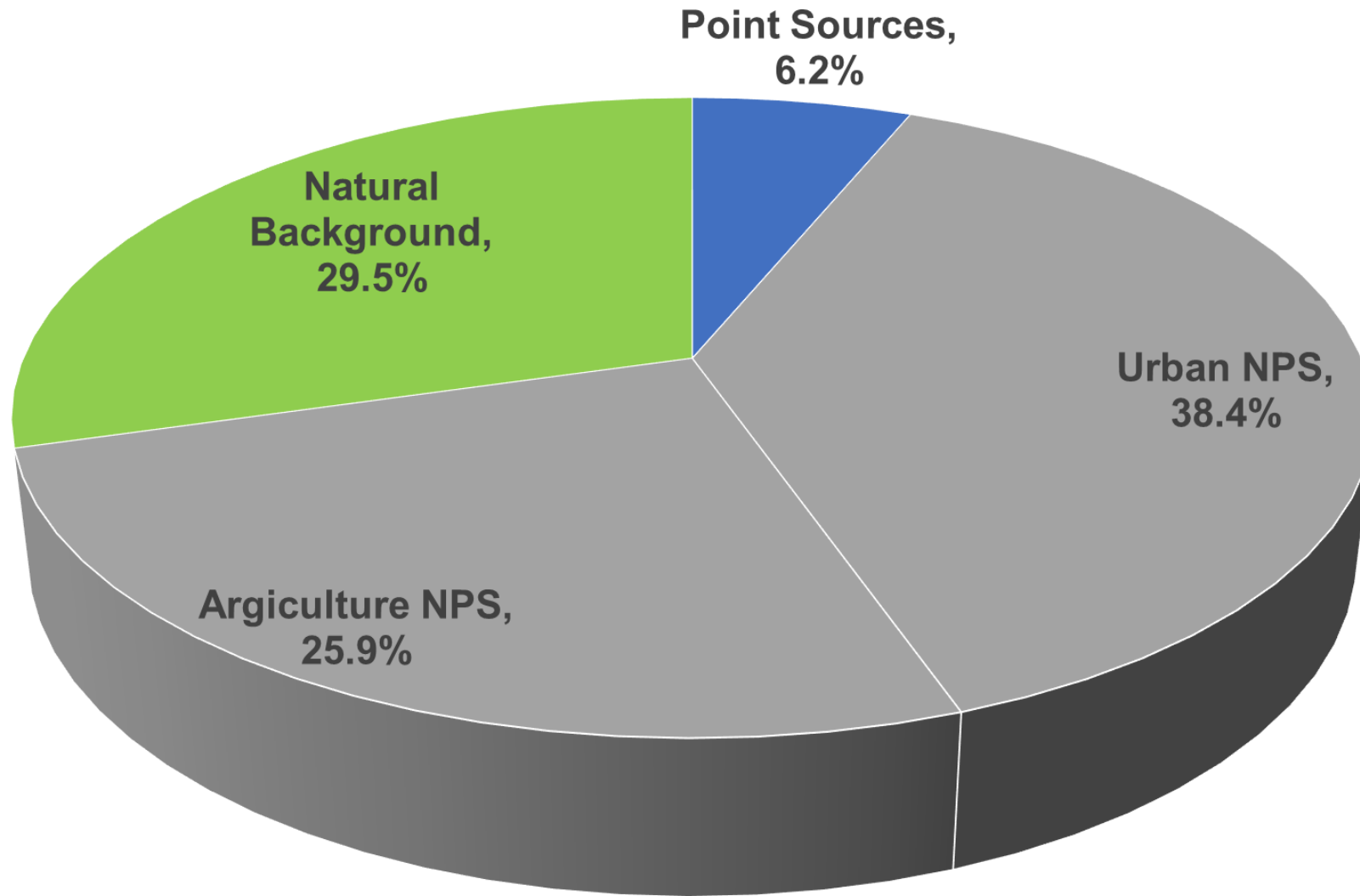
- Narrative nutrient and a minimum dissolved oxygen criteria
- Previous TMDL endpoint discussions by group focused on DO or delta DO?
- Model work by EPA
 - COVID
 - EPA staff turnover
 - No impairment shown in model
 - Similar trends seen in improving monitoring data results
- Nonpoint source is the largest contributor to nutrients

LSPC Harpeth River TN Source Distribution



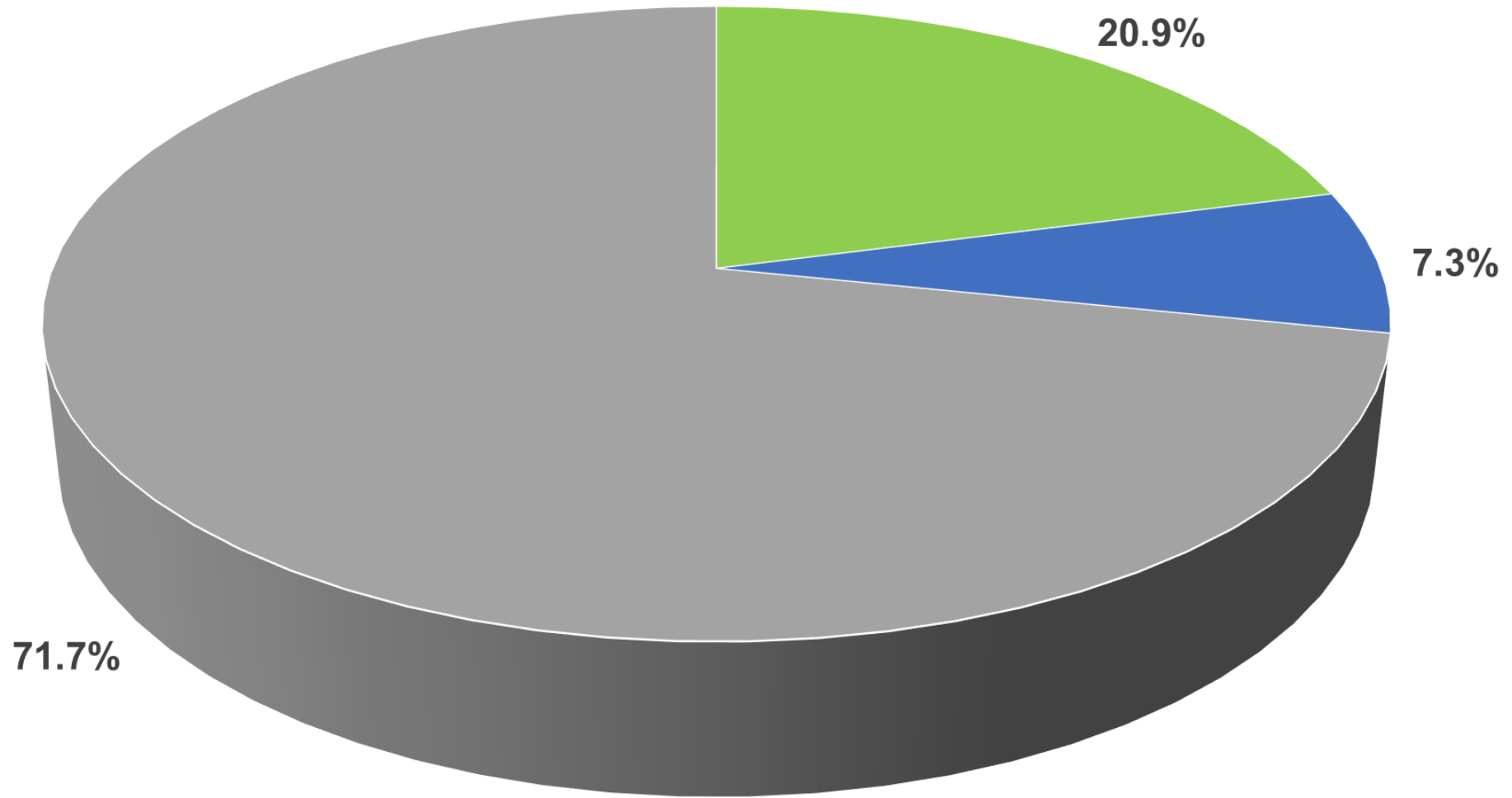
■ Point Sources ■ Urban NPS ■ Agriculture NPS ■ Natural Background

LSPC Harpeth River TP Source Distribution



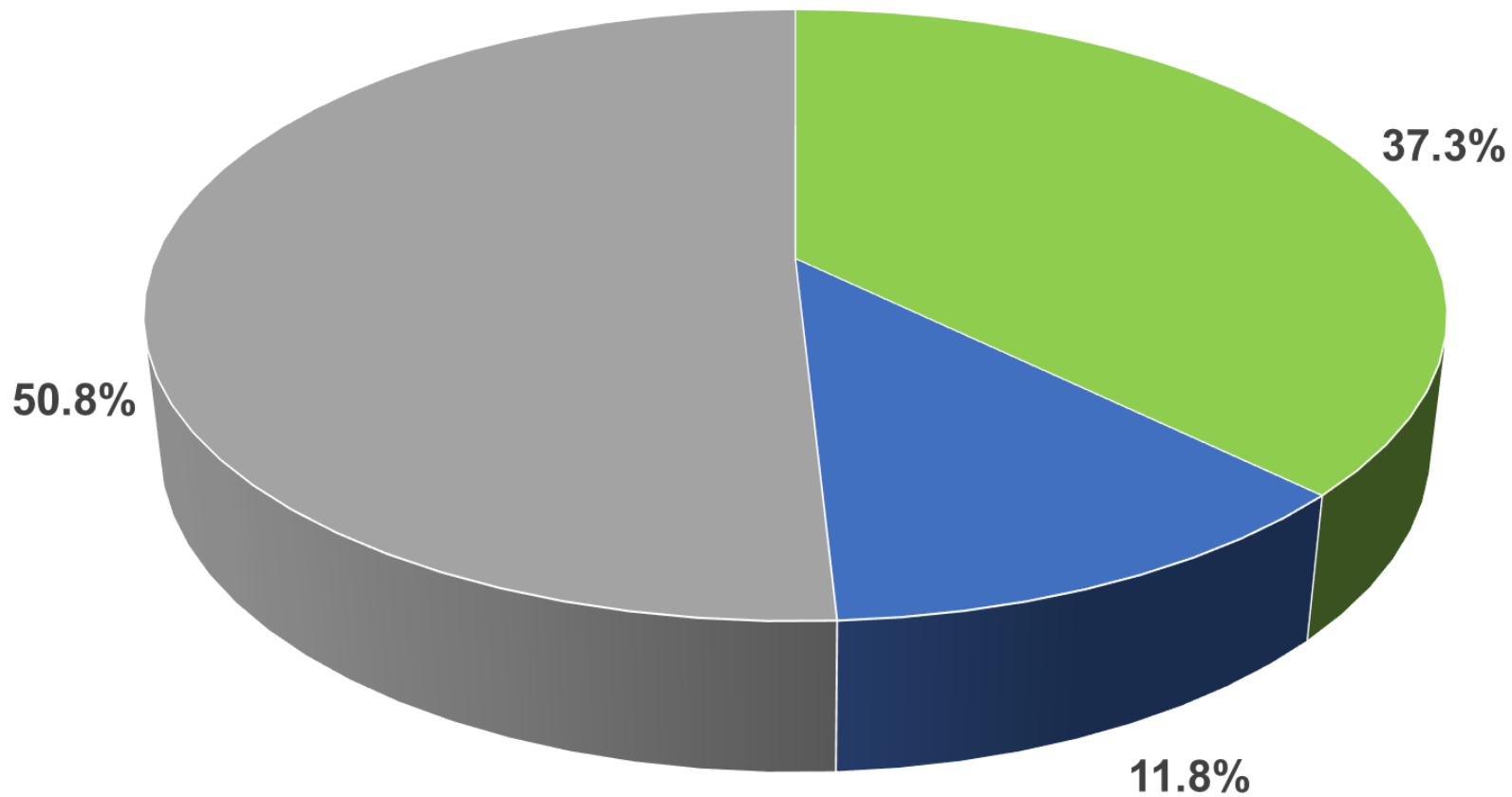
■ Point Sources ■ Urban NPS ■ Agriculture NPS ■ Natural Background

Downsteam Franklin STP WASP TN



■ Background ■ PS (Franklin STP) ■ NPS

Downstream Franklin STP WASP TP



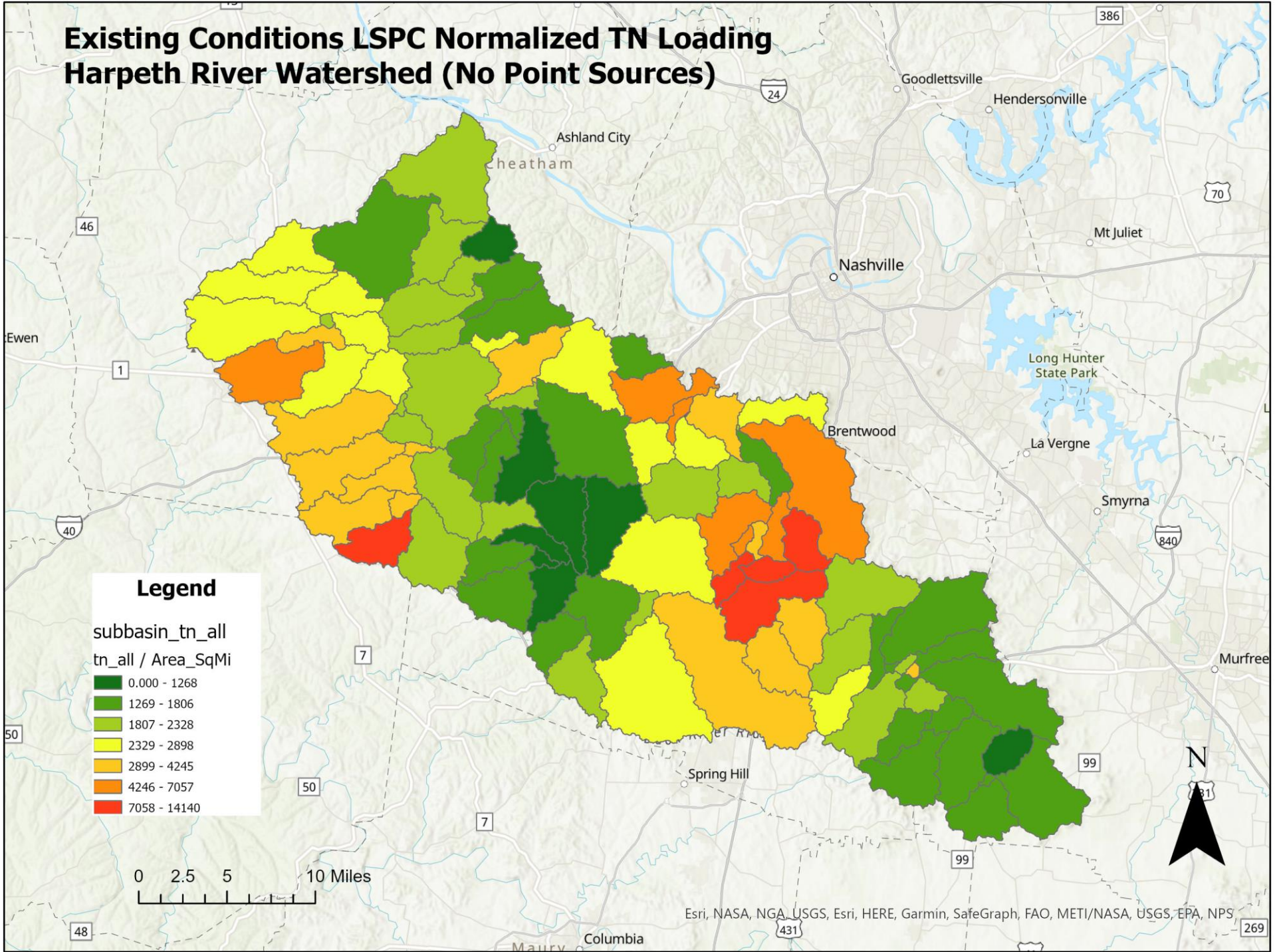
■ Background ■ PS (Franklin STP) ■ NPS

Advance Restoration Plan

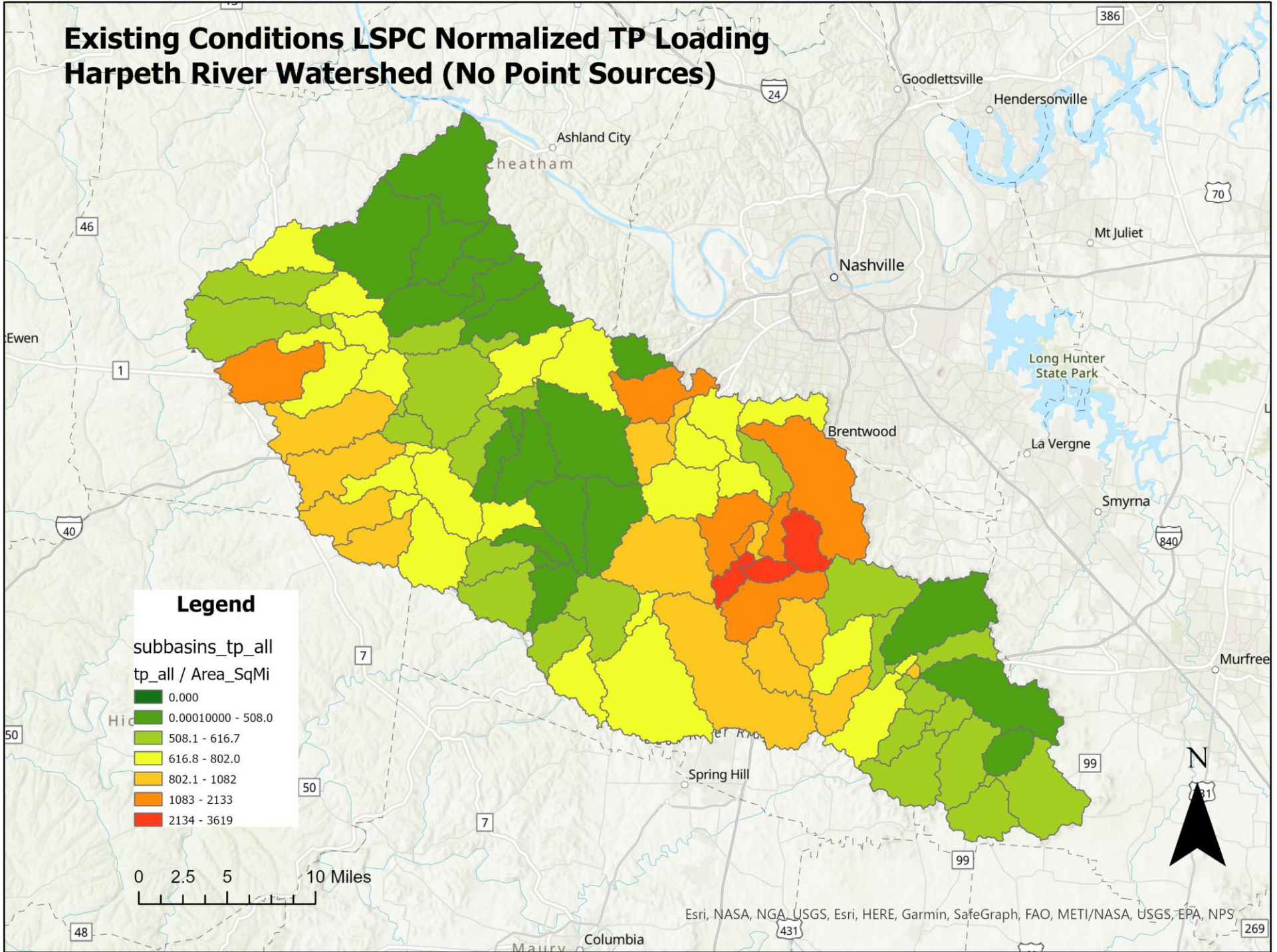
- Advance Restoration Plan (ARP) is a near-term plan, or description of actions, with a schedule and milestones, that is more immediately beneficial or practicable to achieving WQS
- Harpeth Stakeholder Prioritization (pre-ARP)
 - Identify top nonpoint loading areas or areas with greatest potential
 - Coordinate with partners to install BMPs to reduce nutrient loading
 - Continue to collect data (two continuous USGS gages to be installed)
 - Reassess Harpeth River watershed April/May 2024 on normal cycle
 - Point sources will continue to operate in an optimized fashion

ARP Thoughts/Feedback

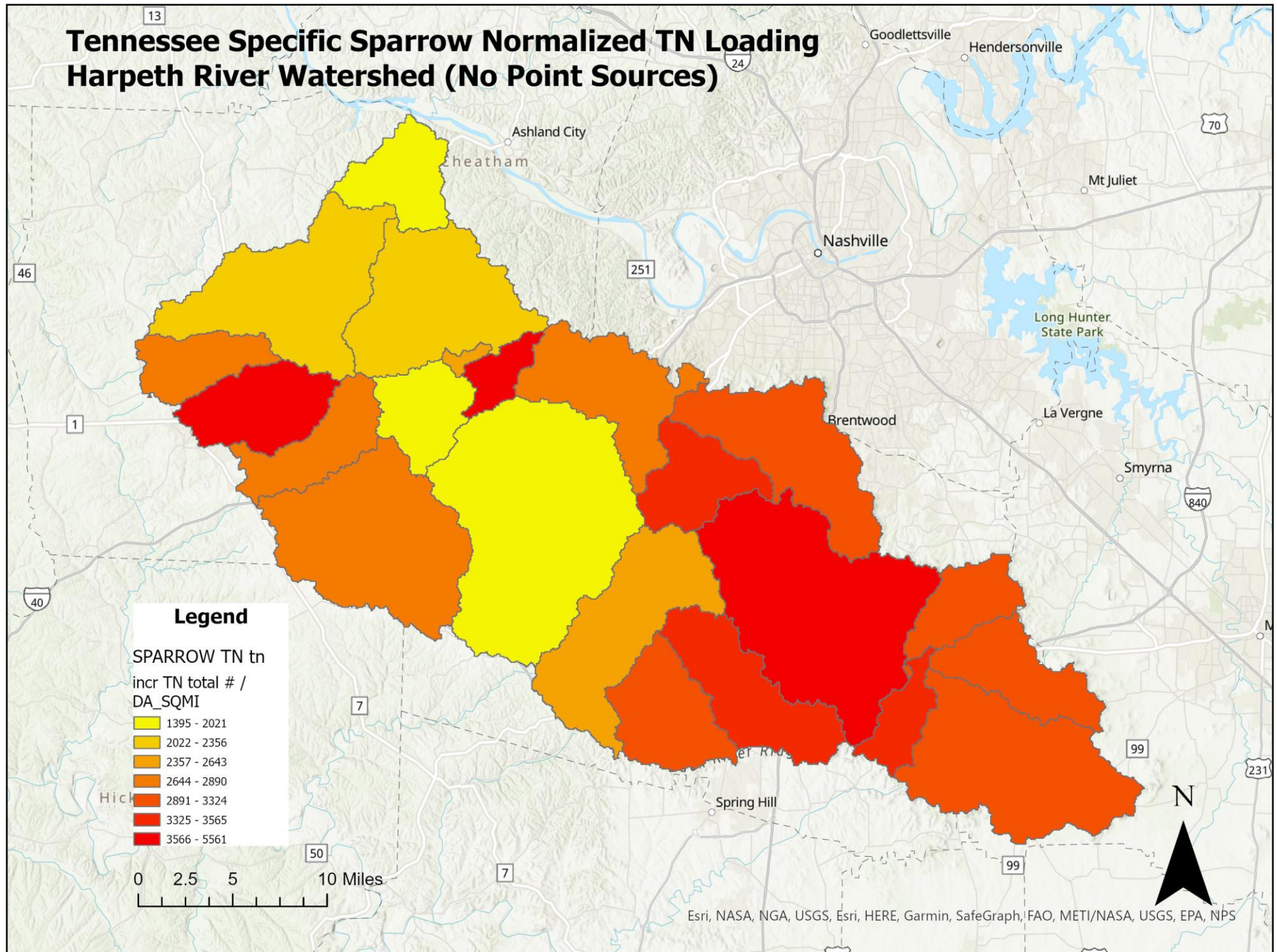
Existing Conditions LSPC Normalized TN Loading Harpeh River Watershed (No Point Sources)



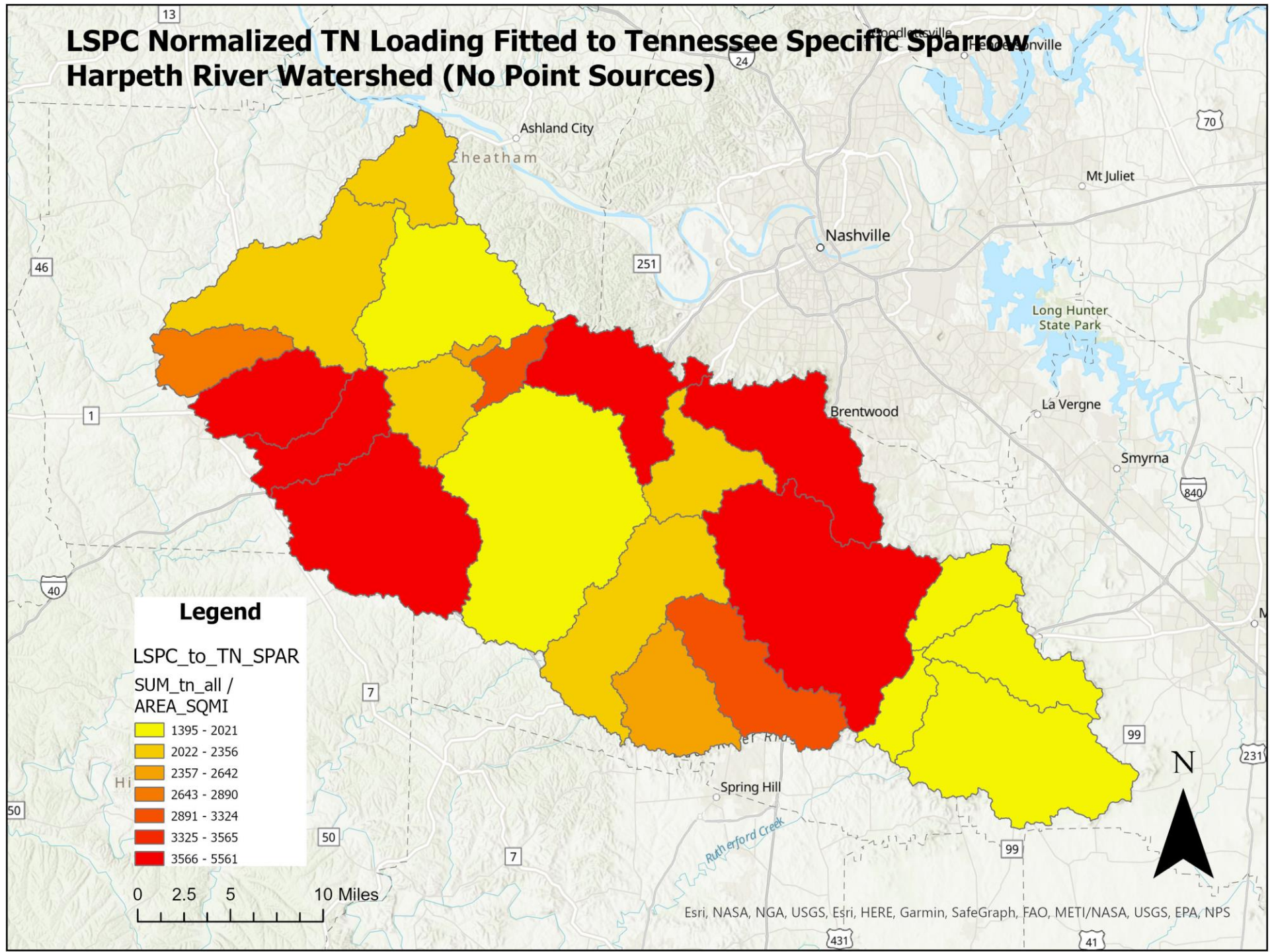
Existing Conditions LSPC Normalized TP Loading Harpeh River Watershed (No Point Sources)



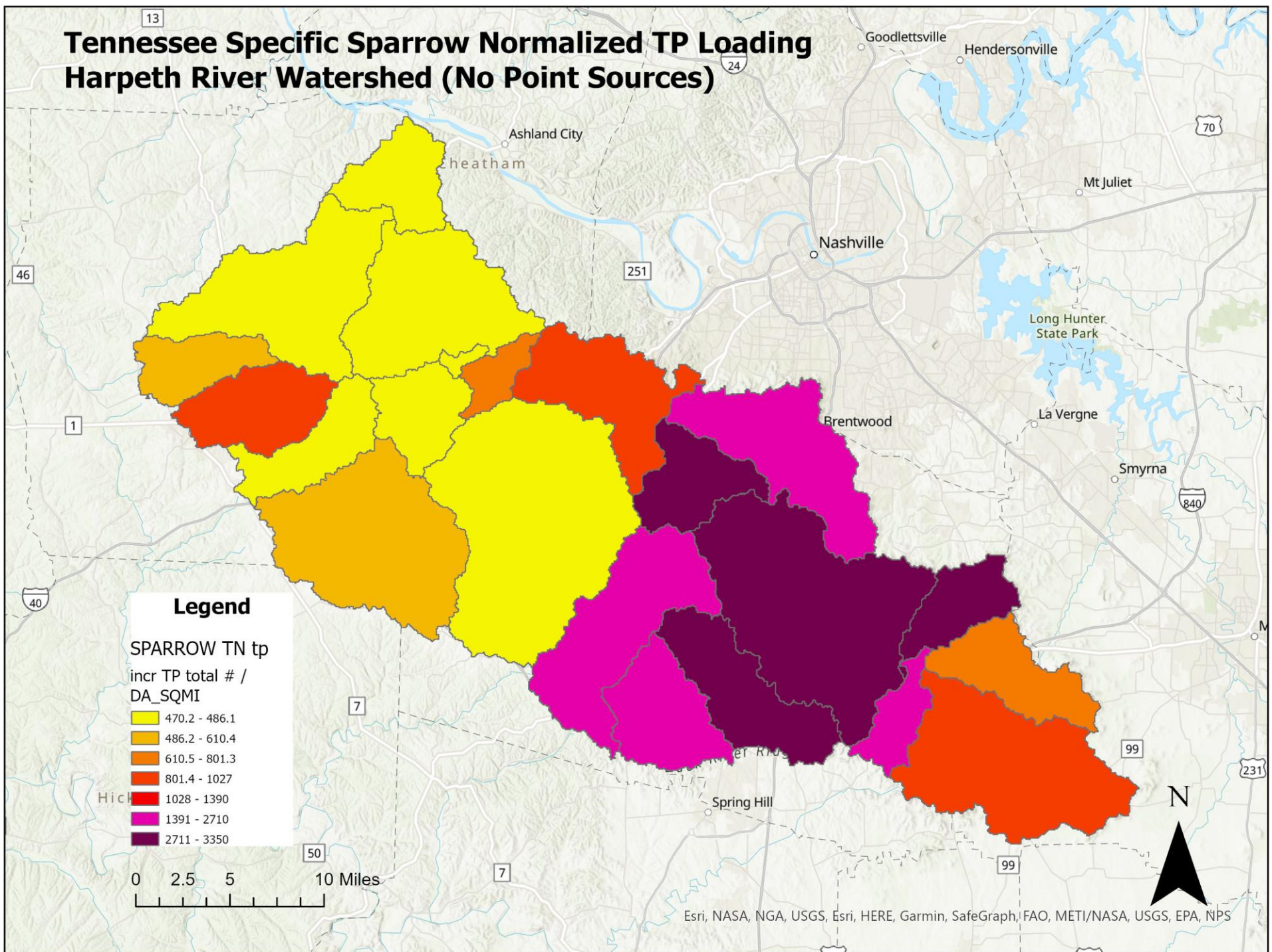
Tennessee Specific Sparrow Normalized TN Loading Harper River Watershed (No Point Sources)



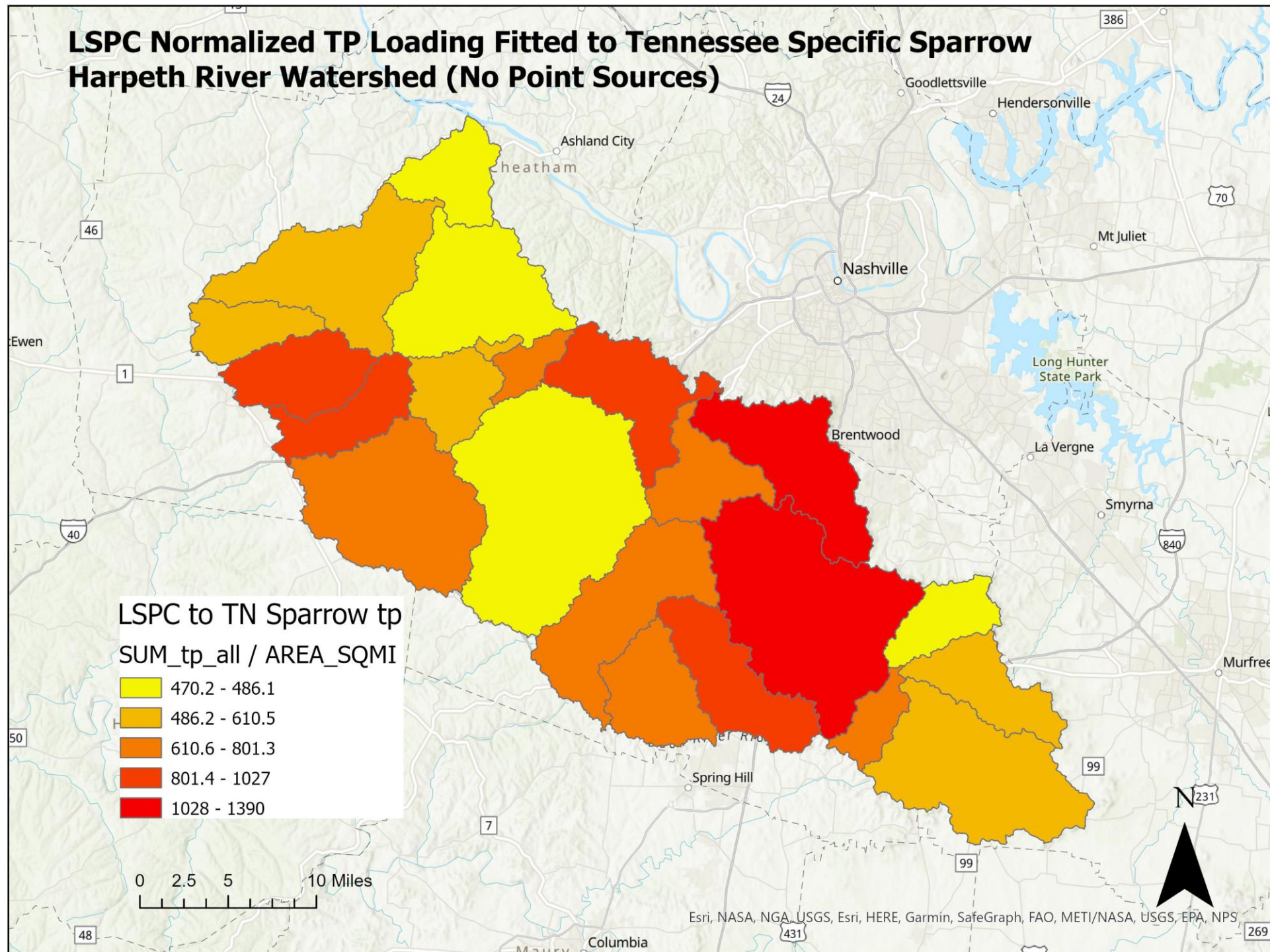
LSPC Normalized TN Loading Fitted to Tennessee Specific Sparrow Harper River Watershed (No Point Sources)



Tennessee Specific Sparrow Normalized TP Loading Harpeh River Watershed (No Point Sources)



LSPC Normalized TP Loading Fitted to Tennessee Specific Sparrow Harpeh River Watershed (No Point Sources)



Richard Cochran

Division of Water Resources
Watershed Planning Unit

(615) 203-1793

Richard.Cochran@tn.gov