



Protection TMDLs in Kansas

Dane Boring | June 22, 2023

My Predecessors' Shoes



- [Presentation in 2018](#)
- Fits mold well of protection-based goals
- Original example was asked for by local stakeholders
- Issues observed during high runoff event even though not enough occurrences to warrant 303(d) listing

Where are we going?

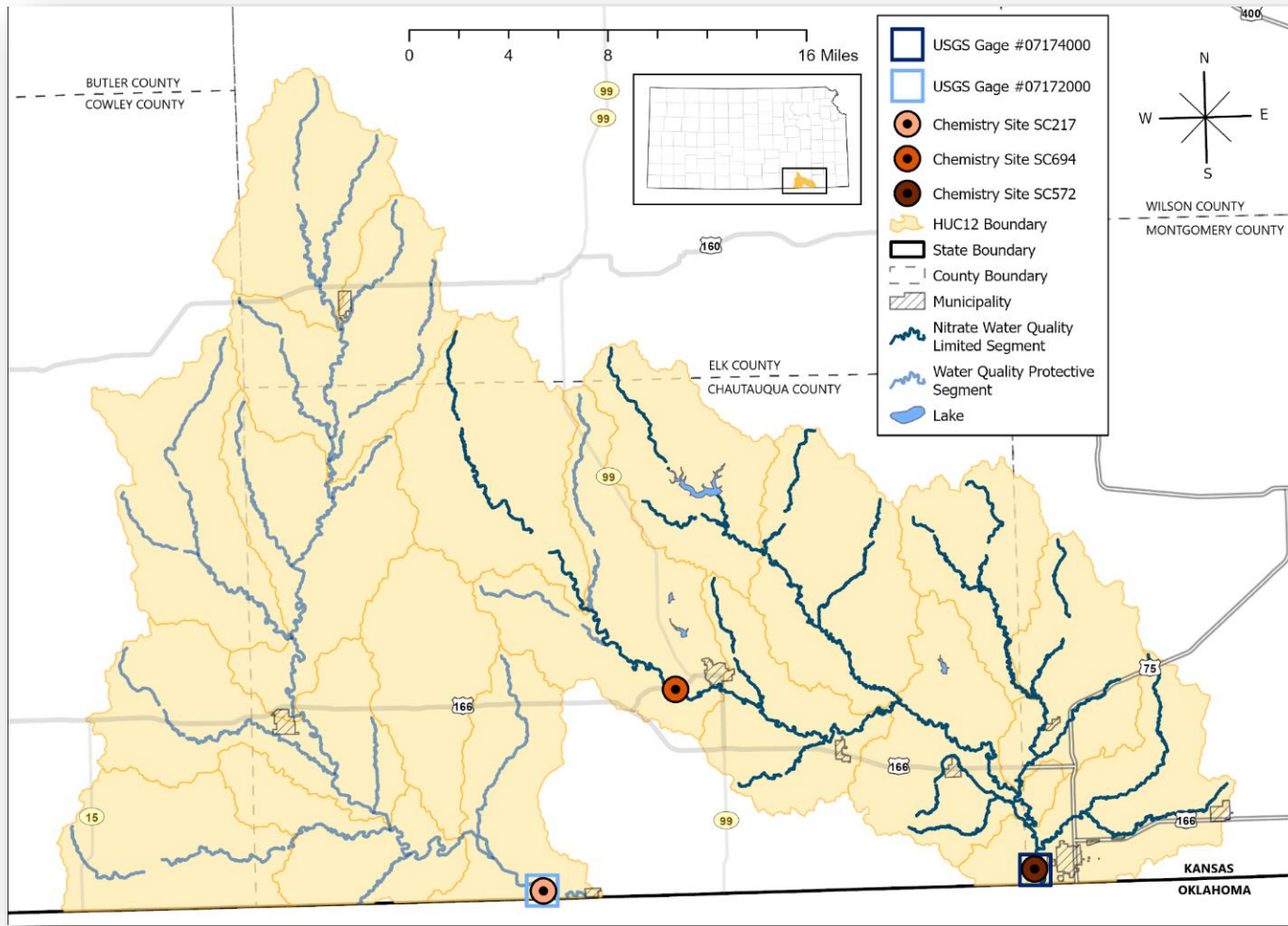


- Vision 1.0 metrics were 100% achieved before I took the reigns
- Vision 2.0 discussions have been broad:
 - Continue TP TMDLs not under Vision 1.0
 - Go to Biological Metrics (MMI)?
 - Redo dated TMDLs?
 - Trash TMDL?
- Priority Metrics through 2024 include TP TMDLs not under Vision 1.0, also trying a hybrid restorative **and** protective TMDL

Hybrid Rationale (protection + preemptive)

- KDHE writes TMDLs by the watershed, previous TMDLs have included segments not listed as impaired within a TMDL watershed before
- If we require TP reductions from facilities in impaired watersheds only, is it fair for non-impaired watersheds? Should we wait until there is a TP impairment?
- What happens if downstream entities adopt numeric nutrient criteria?
- No ATTAINS credit for non-impaired segments

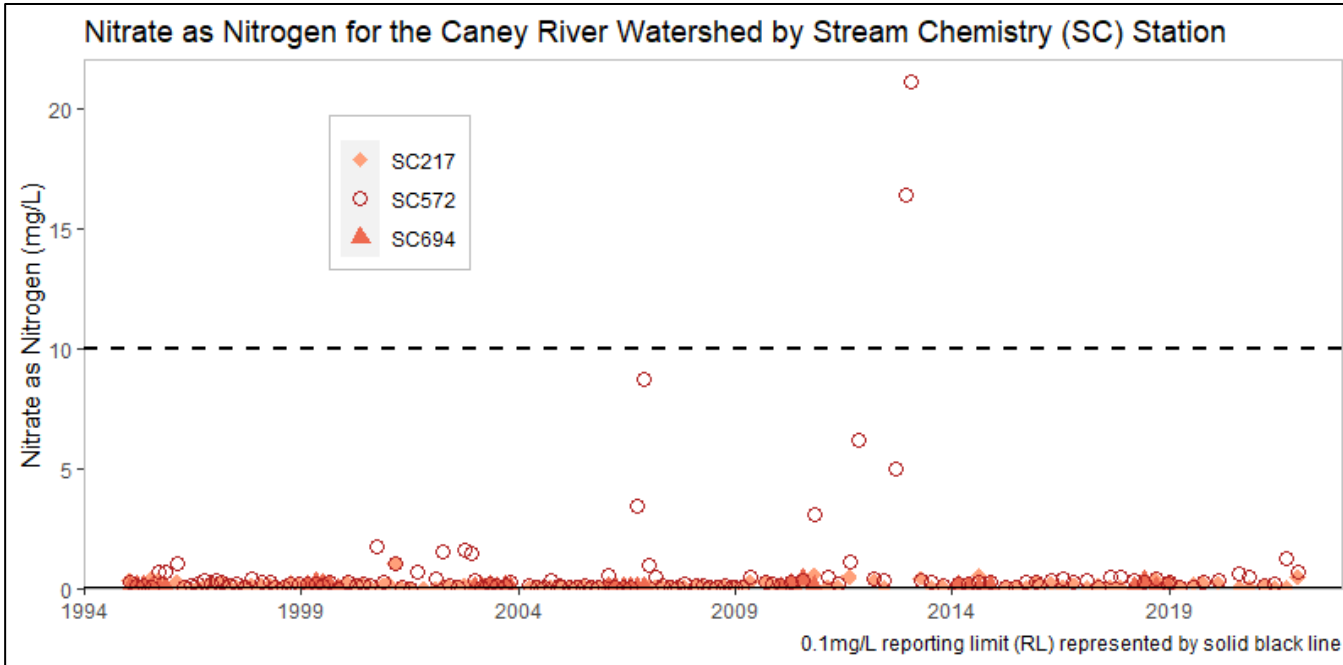




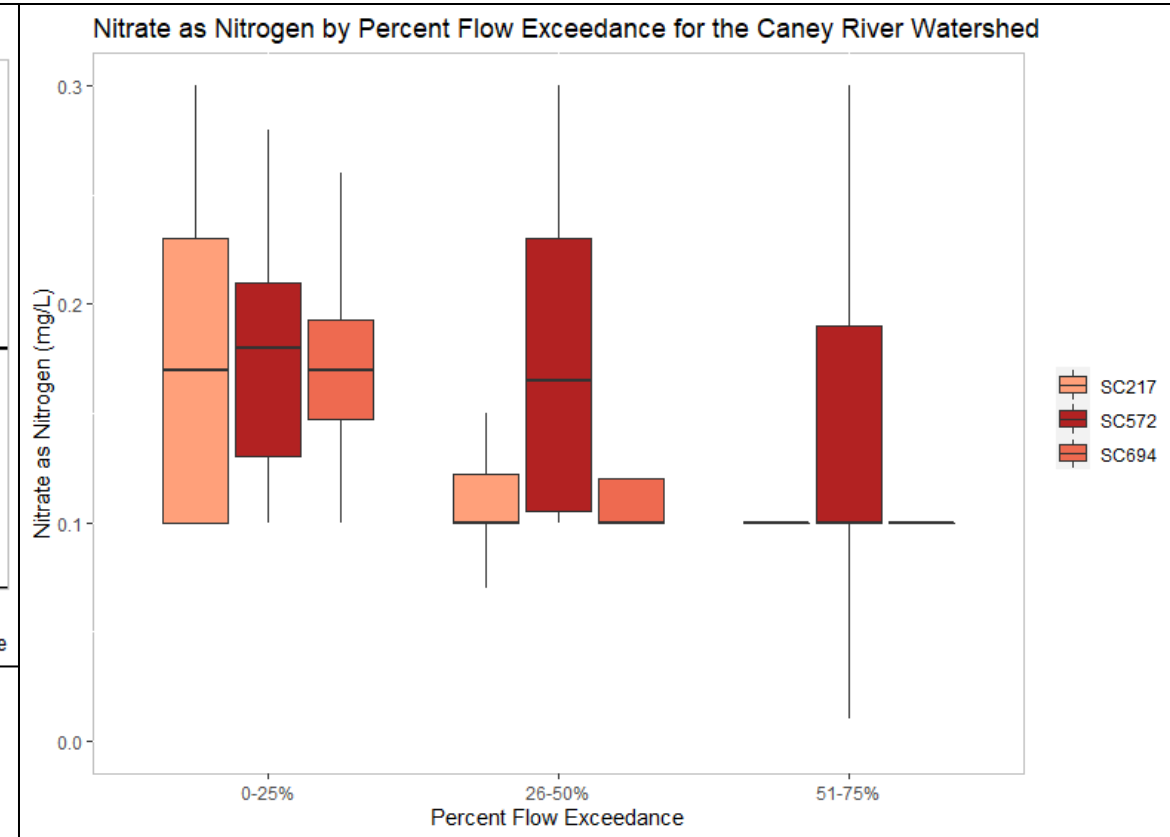
Caney River TMDL

- **All that follows are preliminary results**
- TMDL for TP and Nitrate
- No impairments for TP on 303(d) list
- Several segments with Nitrate listing

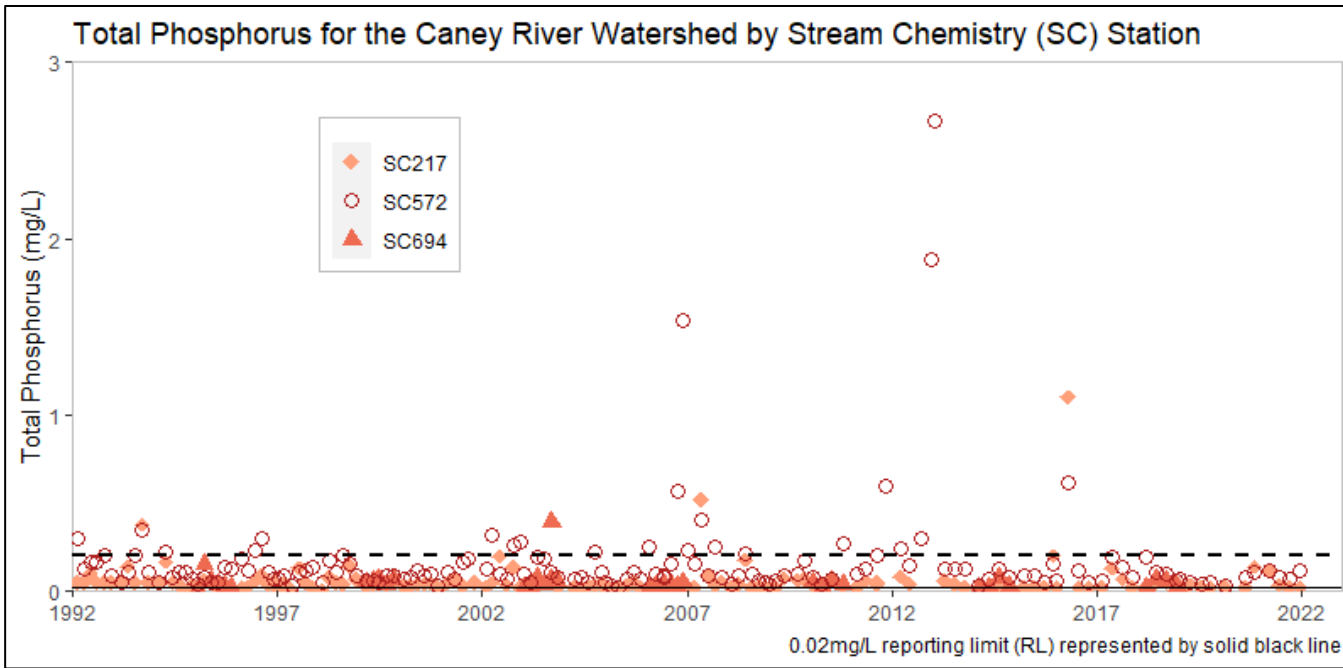
Caney TMDL – Current Conditions



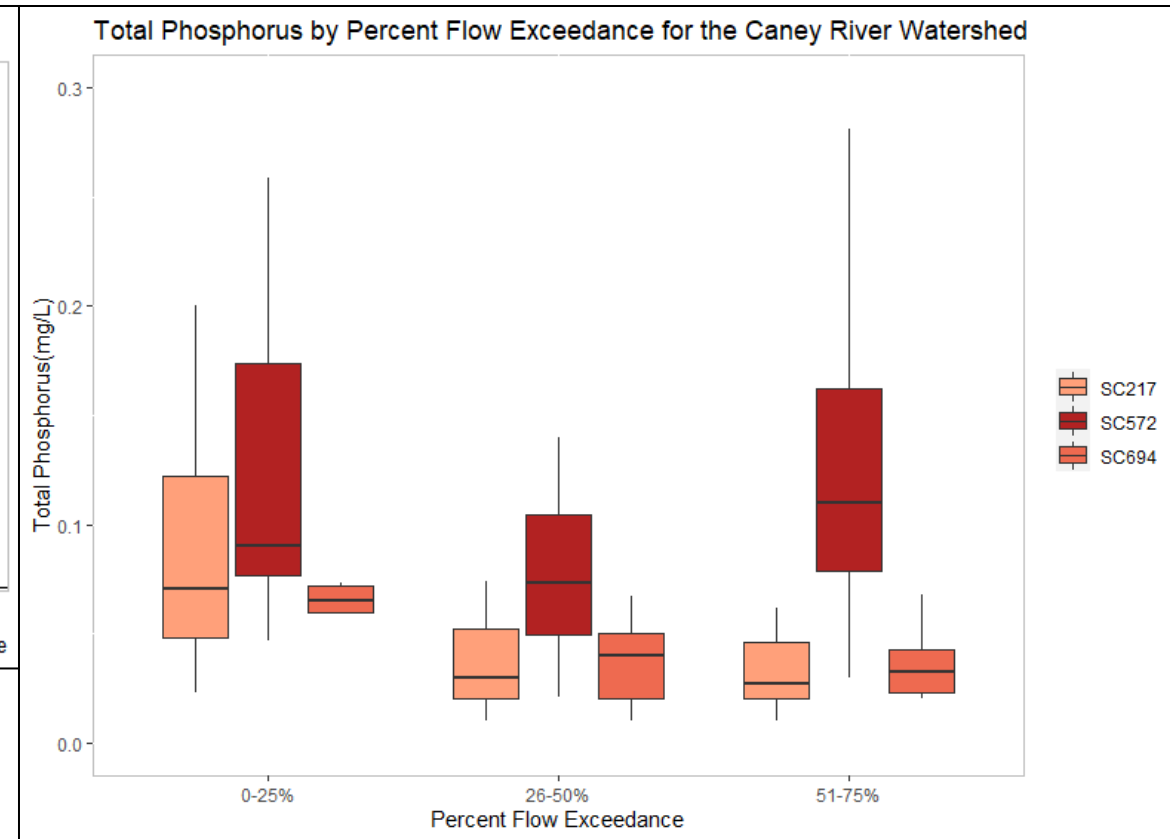
- >1 exceedance in past 10 years = impairment (Domestic Water Supply Use)



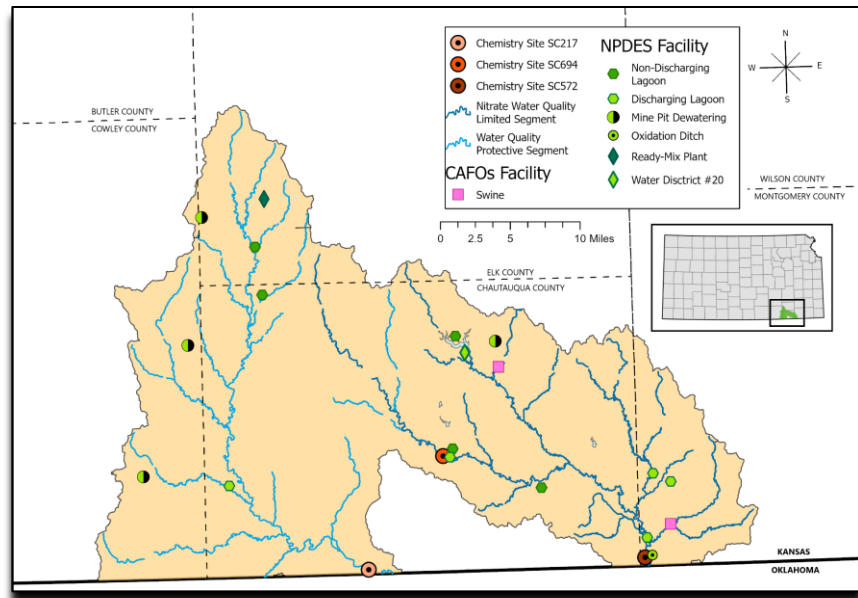
Caney TMDL – Current Conditions



- If median TP is > 0.201 mg/L, impairment (narrative criteria interpretation)



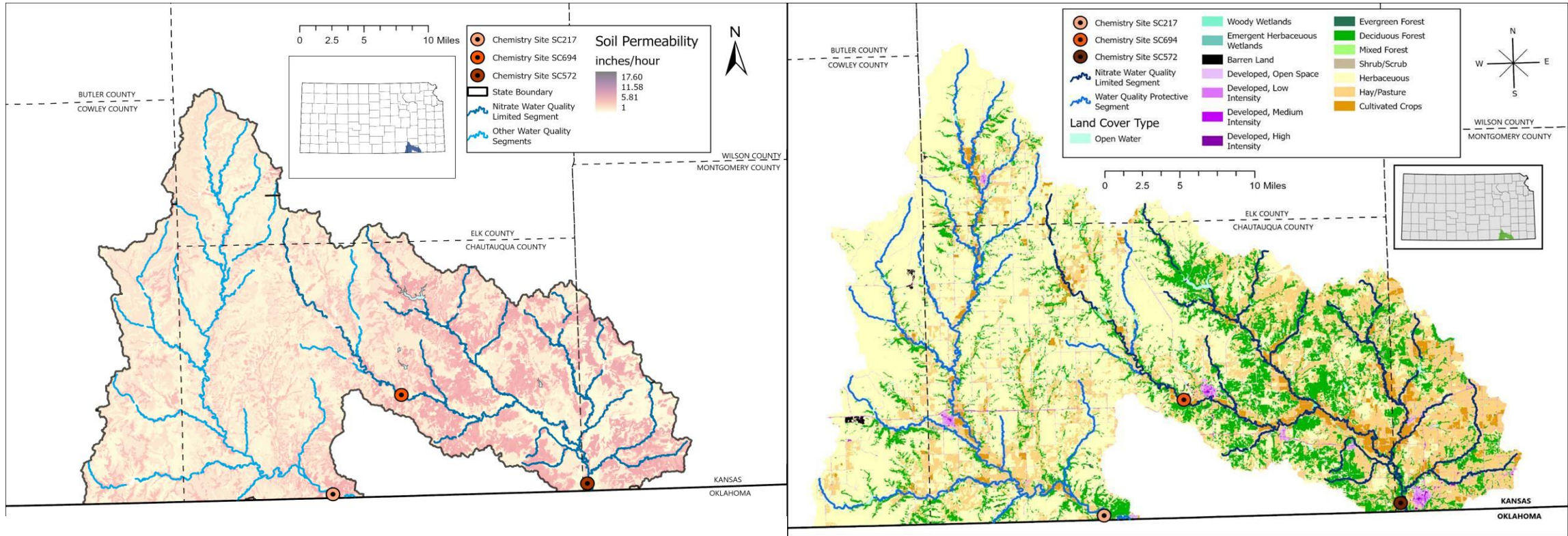
Caney TMDL – NPDES Dischargers



Permittee	Facility Type	Receiving Station	Design Flow (MGD)	Ammonia (mg/L)	TP (mg/L)
City of Caney	Oxidation Ditch	SC572	0.35	(2004-2021) 2.11	(2006-2021) 3.62
Montgomery County	Discharging Lagoon	SC572	0.0116	N/A	N/A
City of Havana	Discharging Lagoon	SC572	0.015	(2004-2021) 0.96	N/A
City of Sedan	Discharging Lagoon	SC694	0.1597	(2004-2021) 0.76	N/A
City of Cedar Vale	Discharging Lagoon	SC217	0.12	(2004-2021) 0.81	N/A

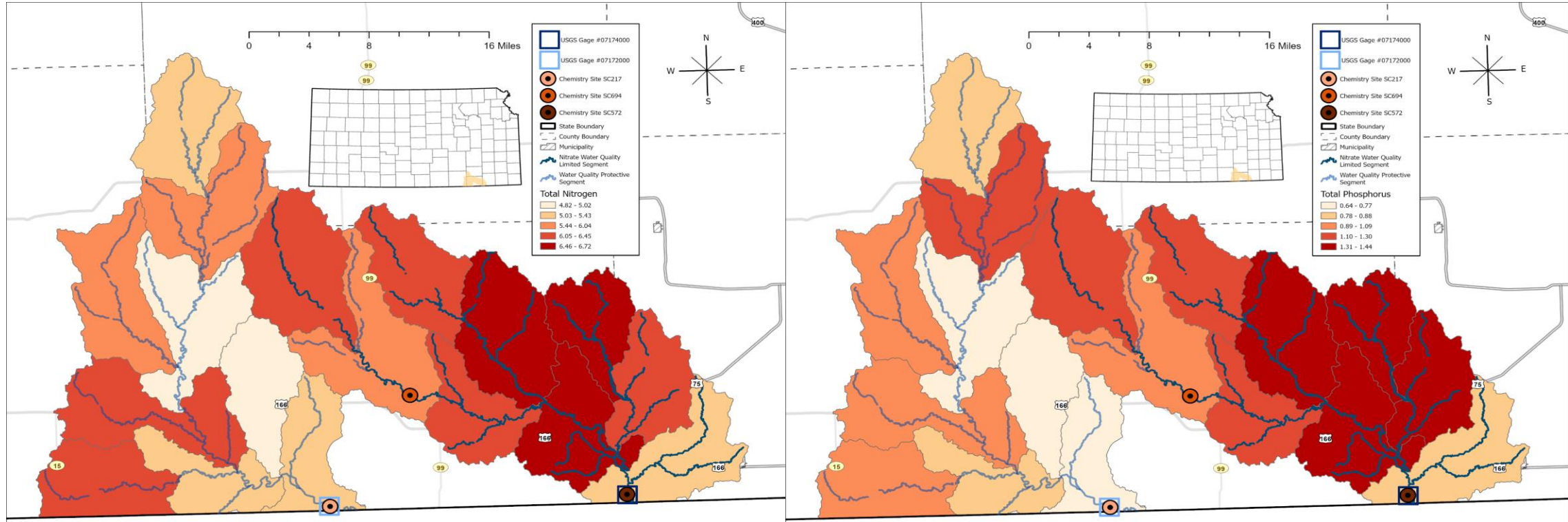
- Caney (city of) is largest municipality in watershed, population ~1,800 and has been ~2,000 or less for the past 30 years

Caney TMDL – Soil Permeability and Land Use



A tale of two watersheds with forested in east and herbaceous west.

Caney TMDL – Modeled Priority Sub-Watersheds



Priority watersheds guide our 319 group's 9-element plans.

Thank you/Questions



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