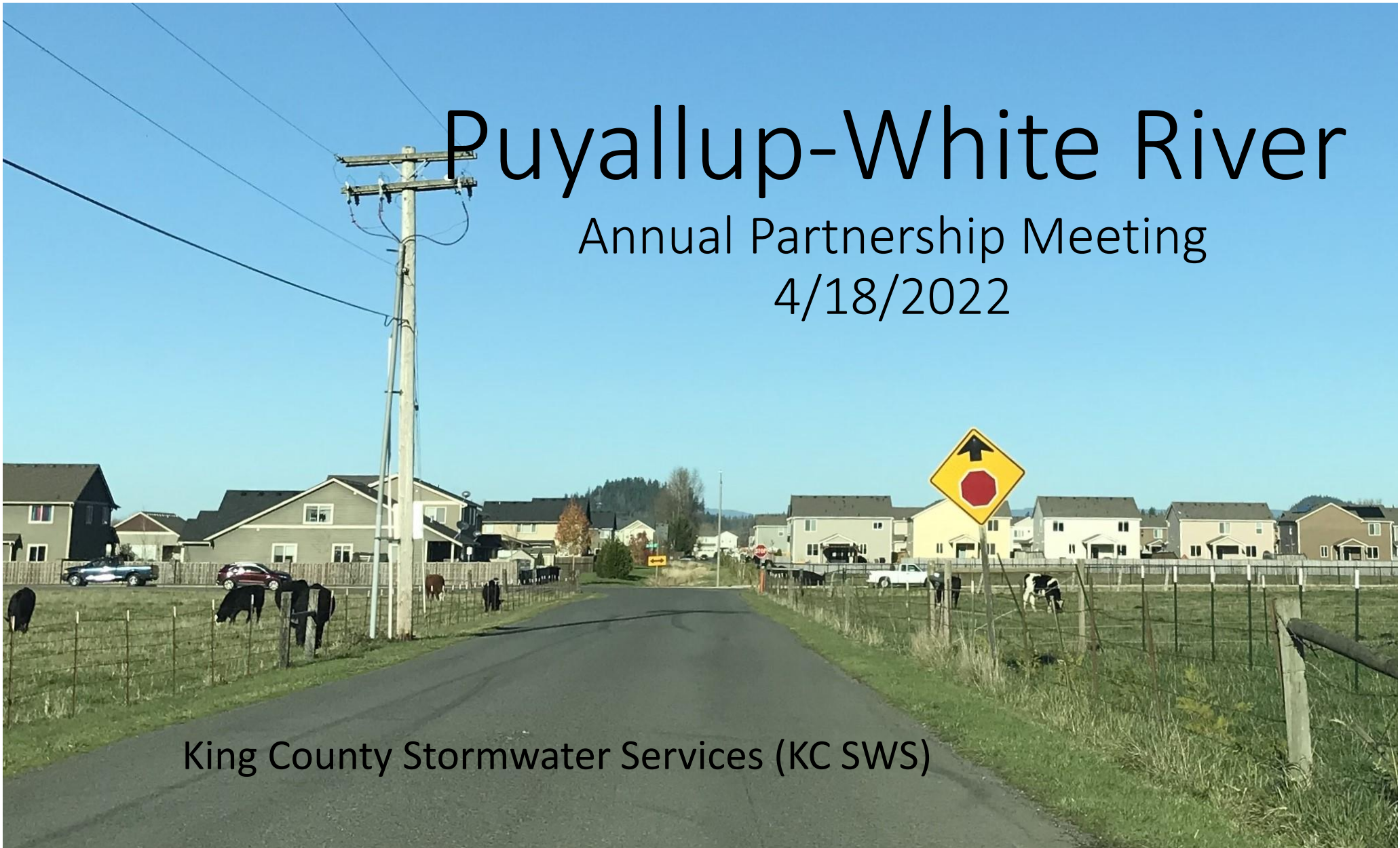
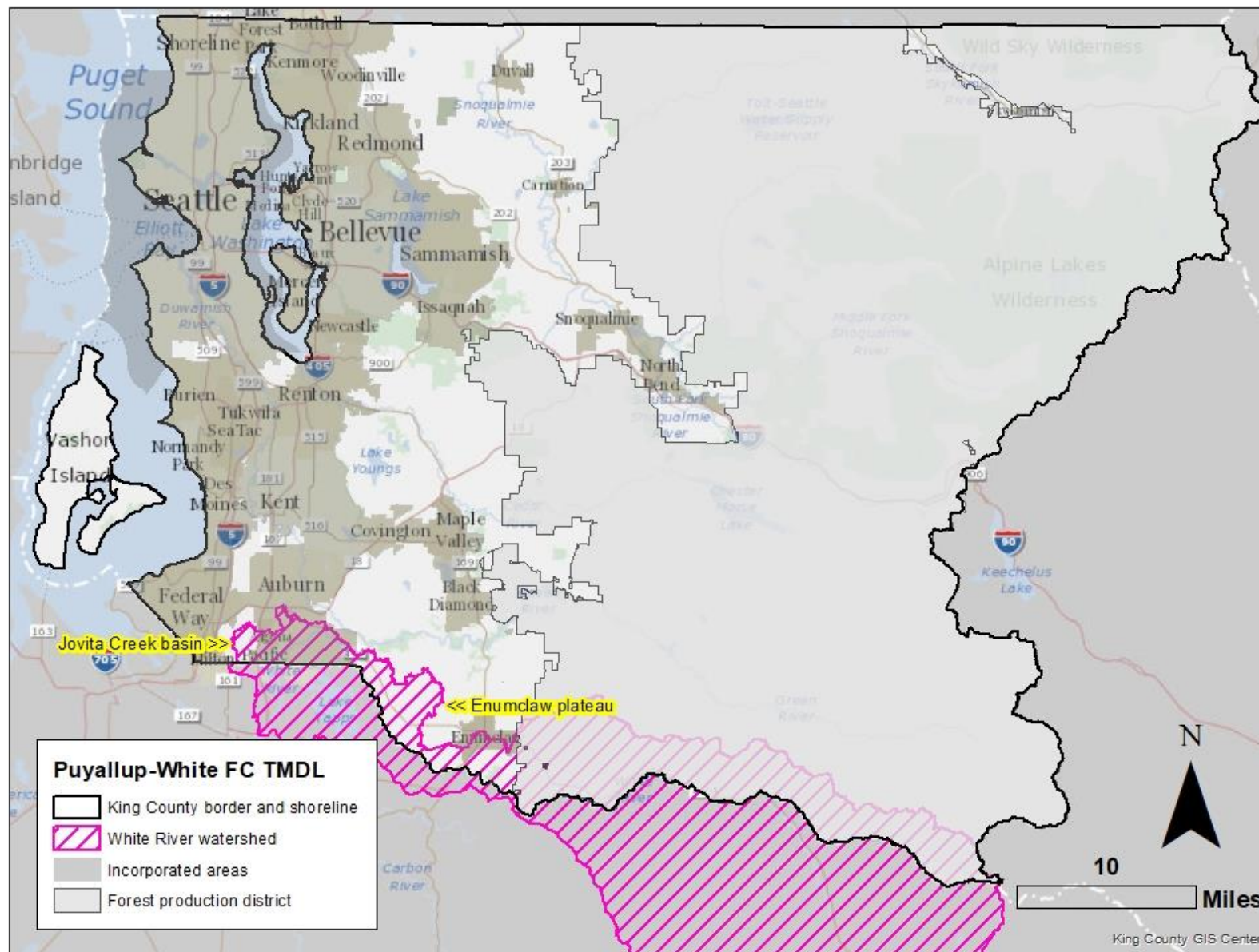


Puyallup-White River

Annual Partnership Meeting
4/18/2022

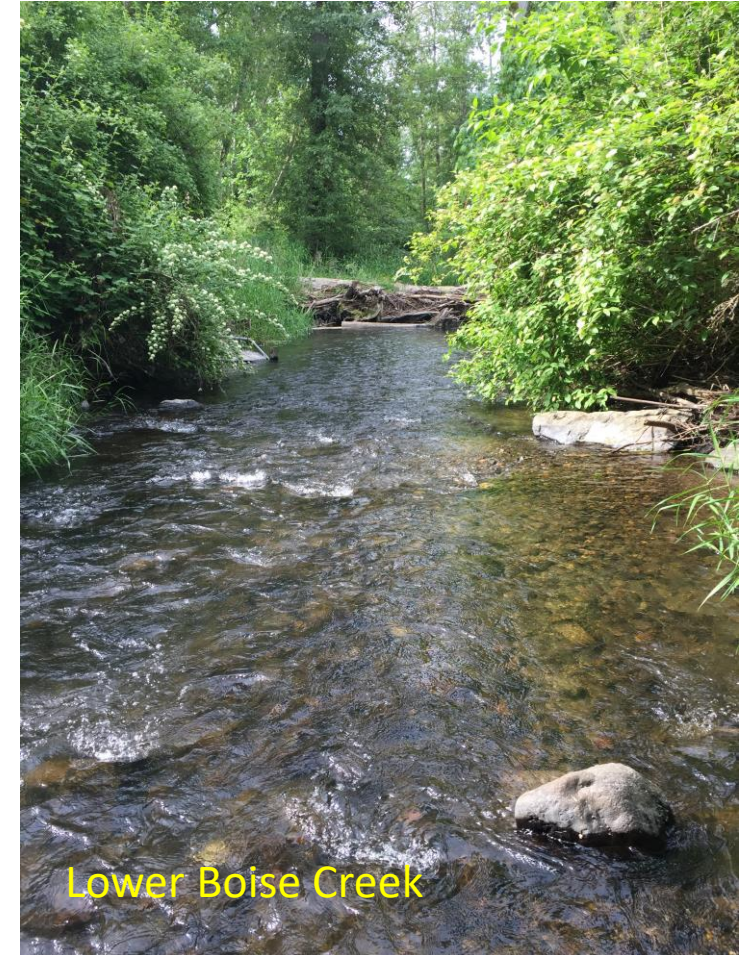
King County Stormwater Services (KC SWS)





King County on the plateau (White River)

- Environmental monitoring – Boise Creek
 - Ambient monthly multi-parameter – mouth
 - Macroinvertebrates – three sites
- Stream restoration
 - Four sites on mainstem of Boise Creek
- Parks (Pinnacle Creek, Foothills trail)
- Ag outreach/support
- *NPDES permit requirements*



2019-2024 Municipal NPDES permit

King County's legal requirements in Puyallup-White River watershed

- When conducting IDDE-related field screening under S5.C.9 of the Phase I Permit, **King County shall screen for bacteria sources in any MS4 sub-basins which discharge to surface waters in the TMDL area.** Implement the schedules and activities identified in S5.C.9 of the Phase I Permit for response to any illicit discharges found.
- King County shall **inspect commercial animal handling areas and commercial composting facilities to ensure implementation of source control BMPs for bacteria.** Commercial animal handling areas are associated with **Standard Industrial Code (SIC) 074 and 075** and include veterinary and pet care/boarding services, animal slaughtering, and support activities for animal production. Facilities where the degradation and transformation of organic solid waste takes place under controlled conditions designed to promote aerobic decomposition are considered composting facilities (definition in accordance with Chapter 173-350 WAC). Implement an ongoing inspection program to re-inspect facilities or areas with bacteria source control problems at least every three years.

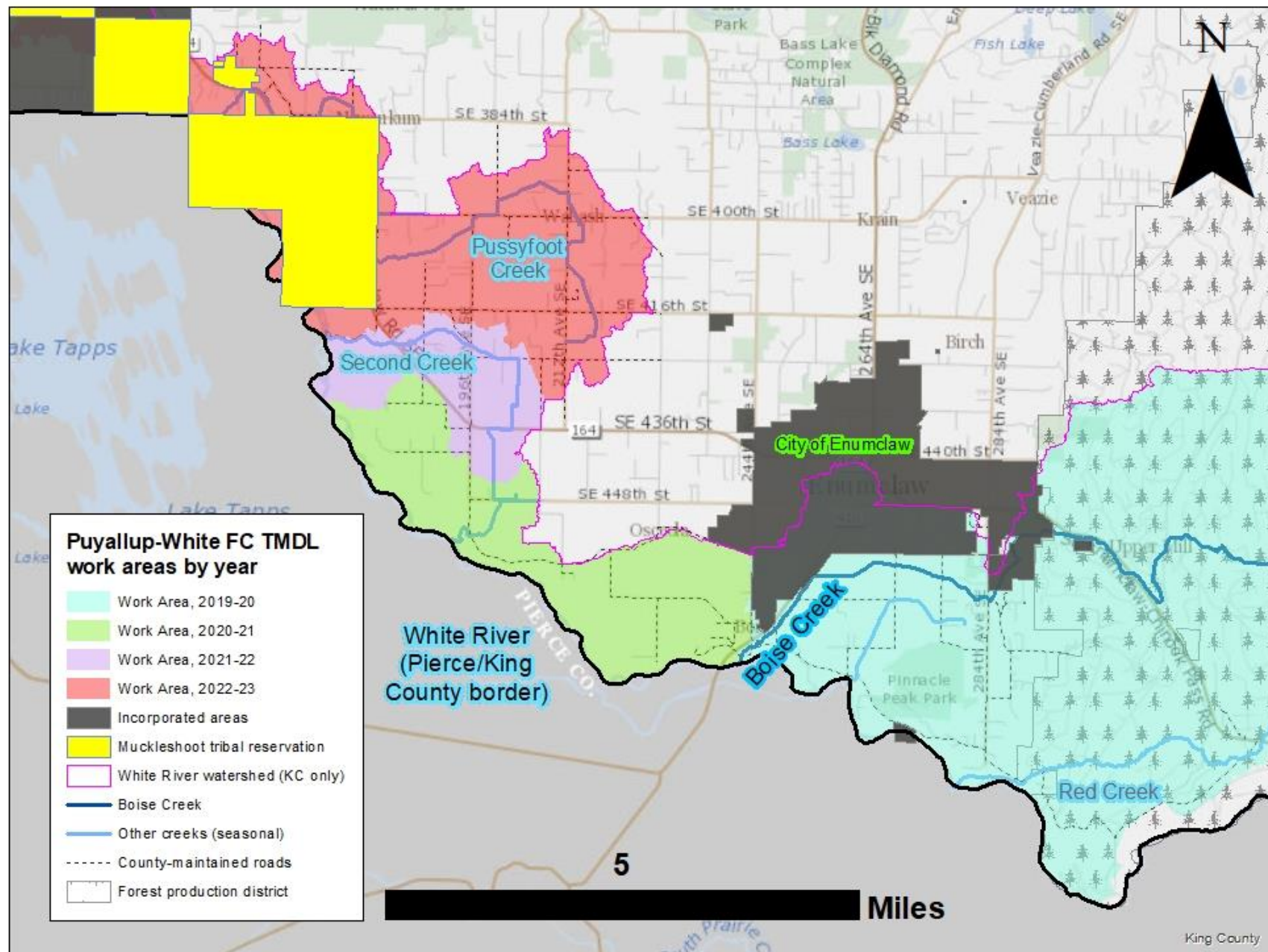
Commercial inspections (KC SWS)

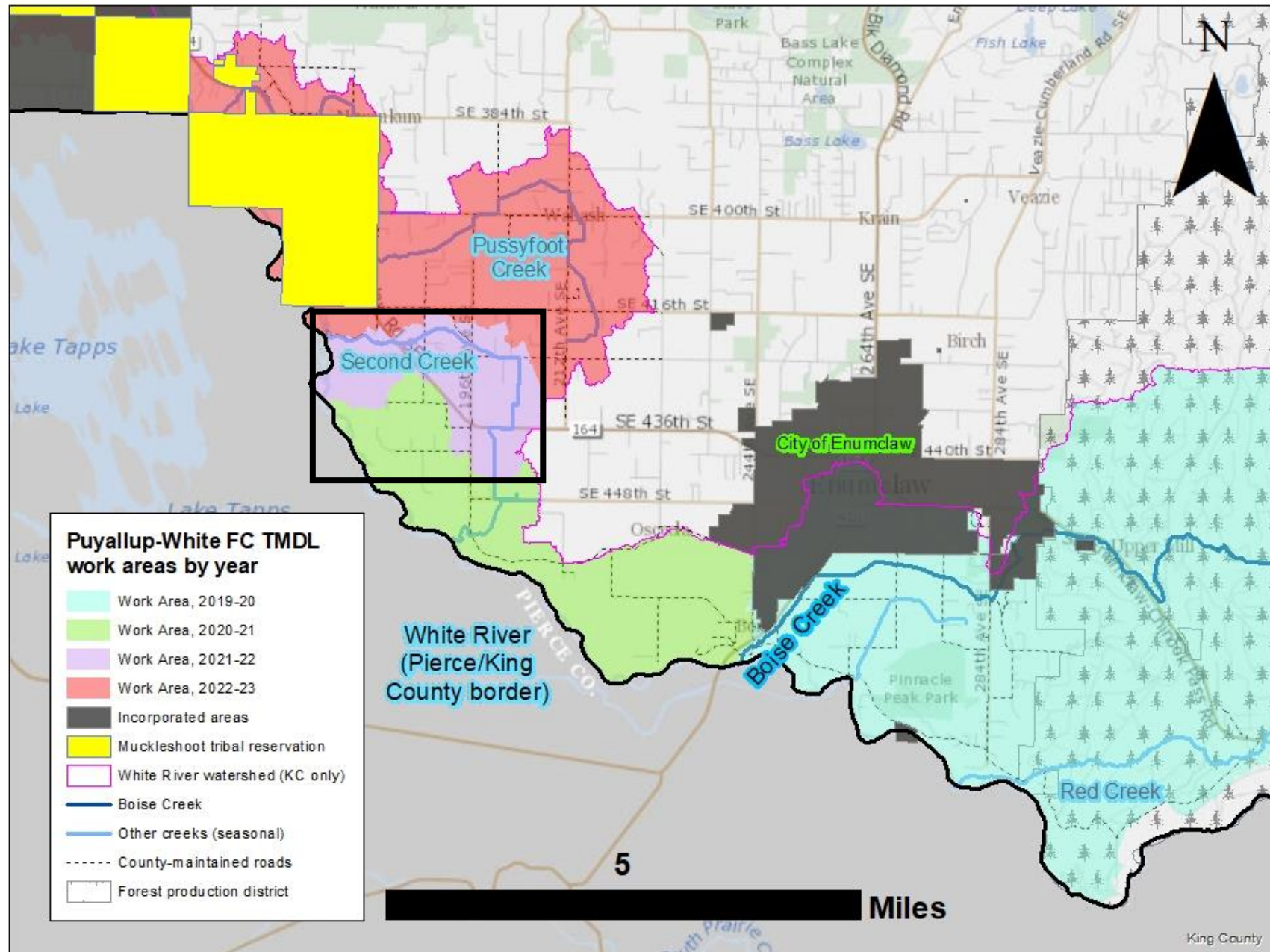
Ensure implementation of source control BMPs for bacteria

- Business license search and field reconnaissance
- Animal handling, SIC 074 and 075
 - Horse boarders/equestrian farms, alpaca farms, dog boarding ✓ SWS
 - Dairy/beef/heifer/grazing operations – not included ❌
 - Hobby farms – not included ❌
- Composting facilities
 - Rainier Biogas: in Green River watershed; anaerobic ❌
 - One other facility known – code enforcement ?
- Currently updating business inventory

Conveyance screening for bacteria sources

Identify and eliminate illicit discharges to KC's MS4

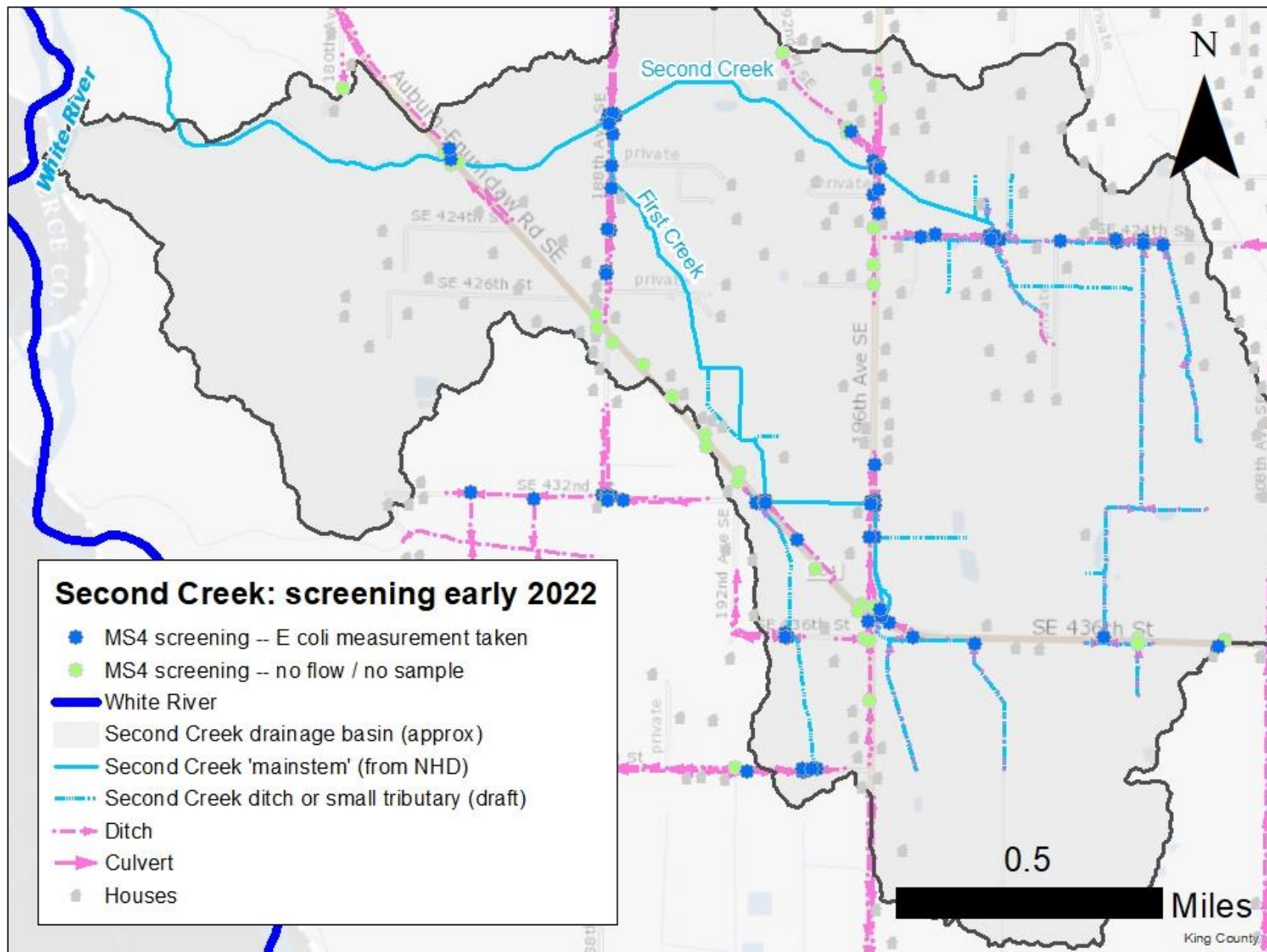


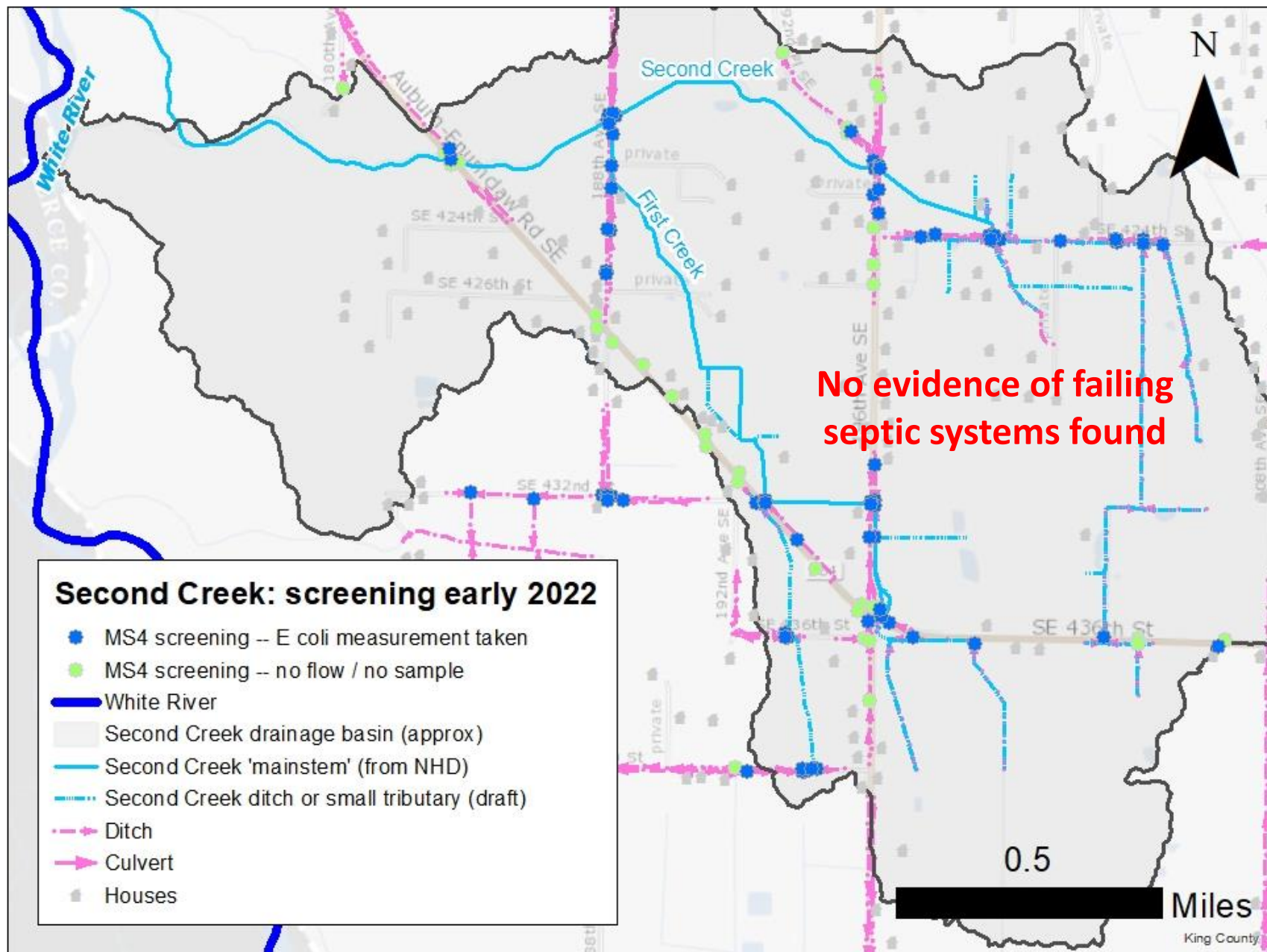


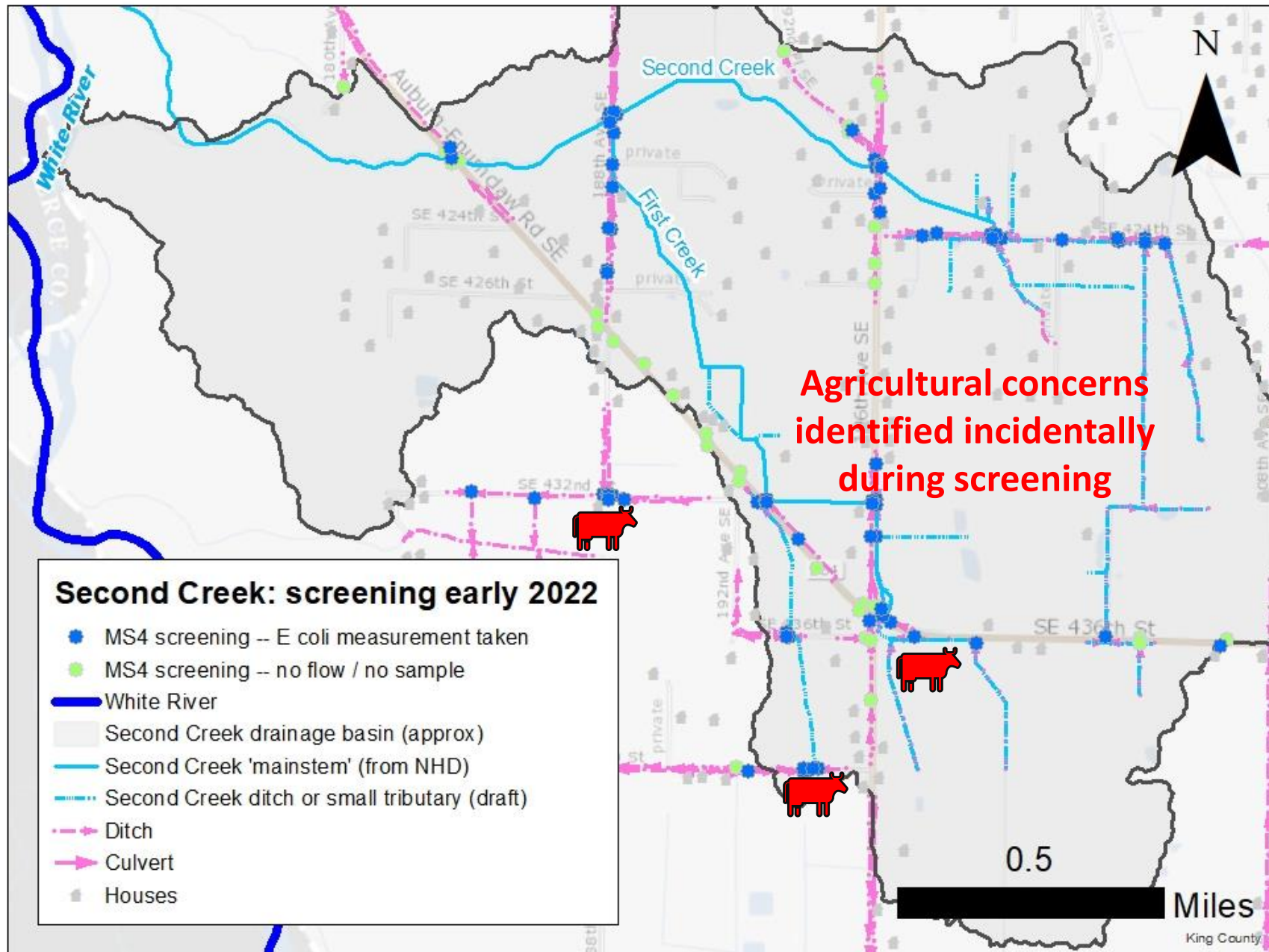
Conveyance screening for bacteria sources

Identify and eliminate illicit discharges to KC's MS4

- Focus on search for failing on-site septic systems
- Wet season, dry weather
- Private pipes and assorted locations in roadside drainage network
- Year 2021-2022 screening: focus on Second Creek
 - 121 sites visited; *E. coli* measurements taken at 84 of these





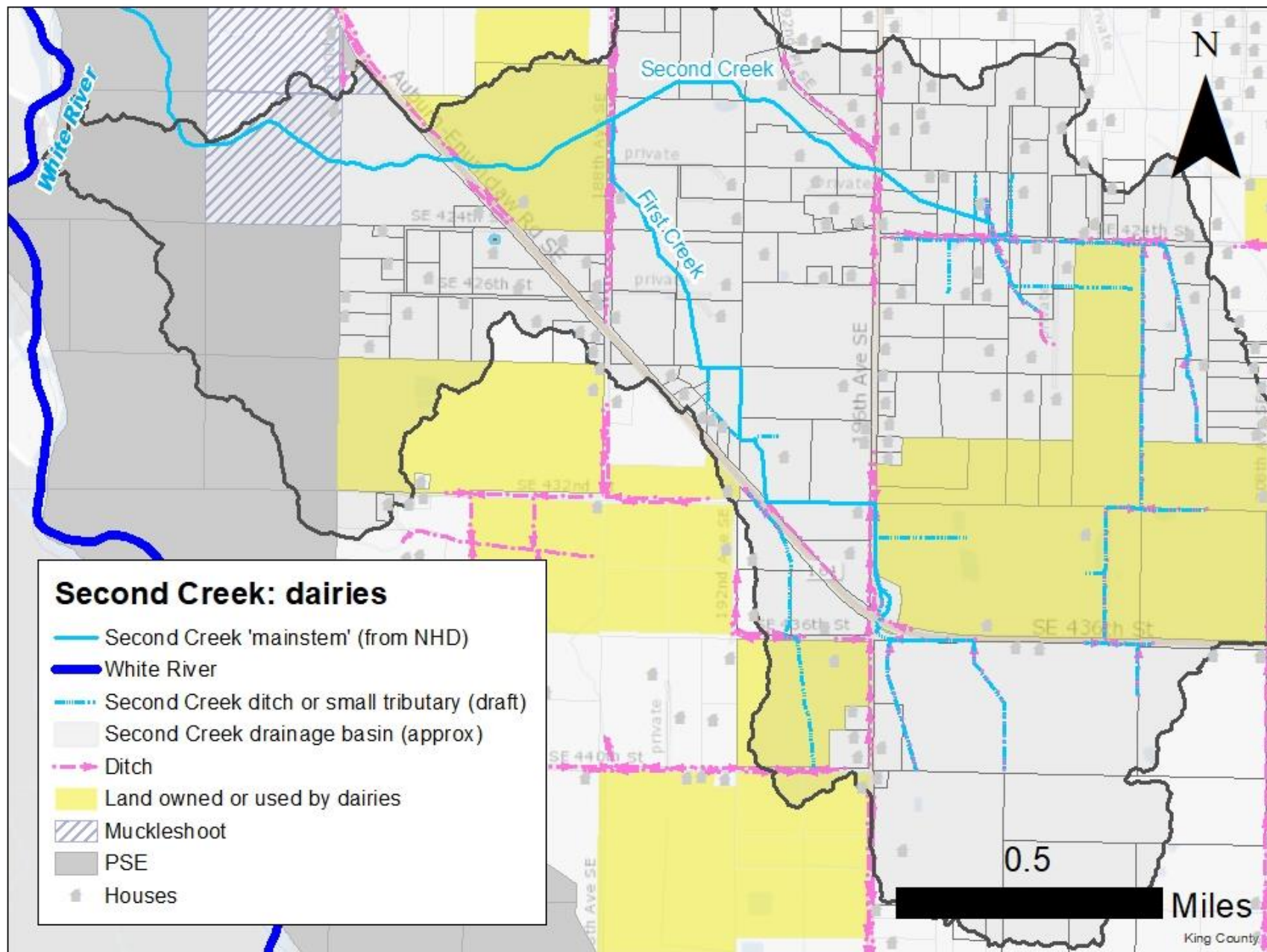


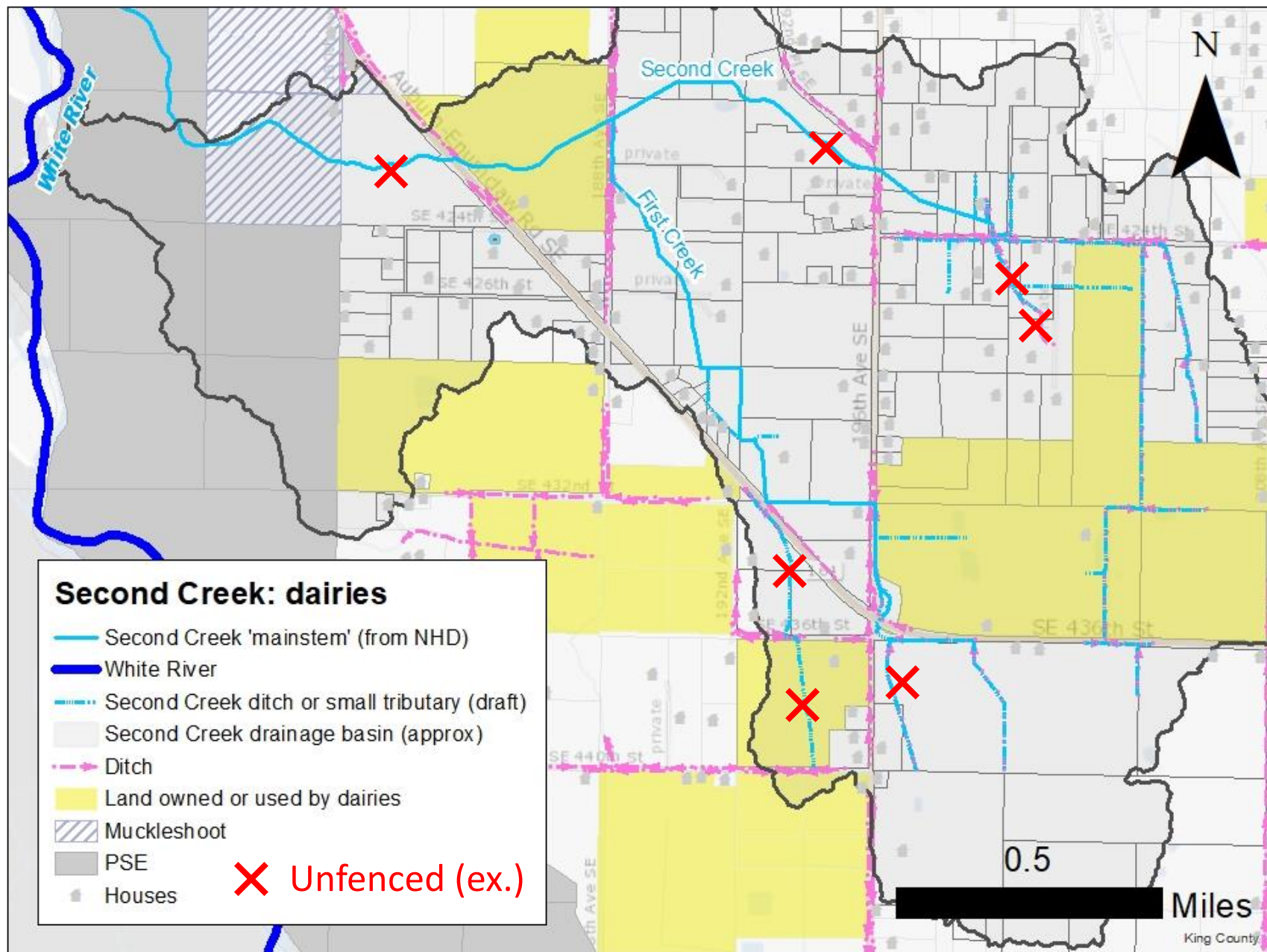
Second Creek

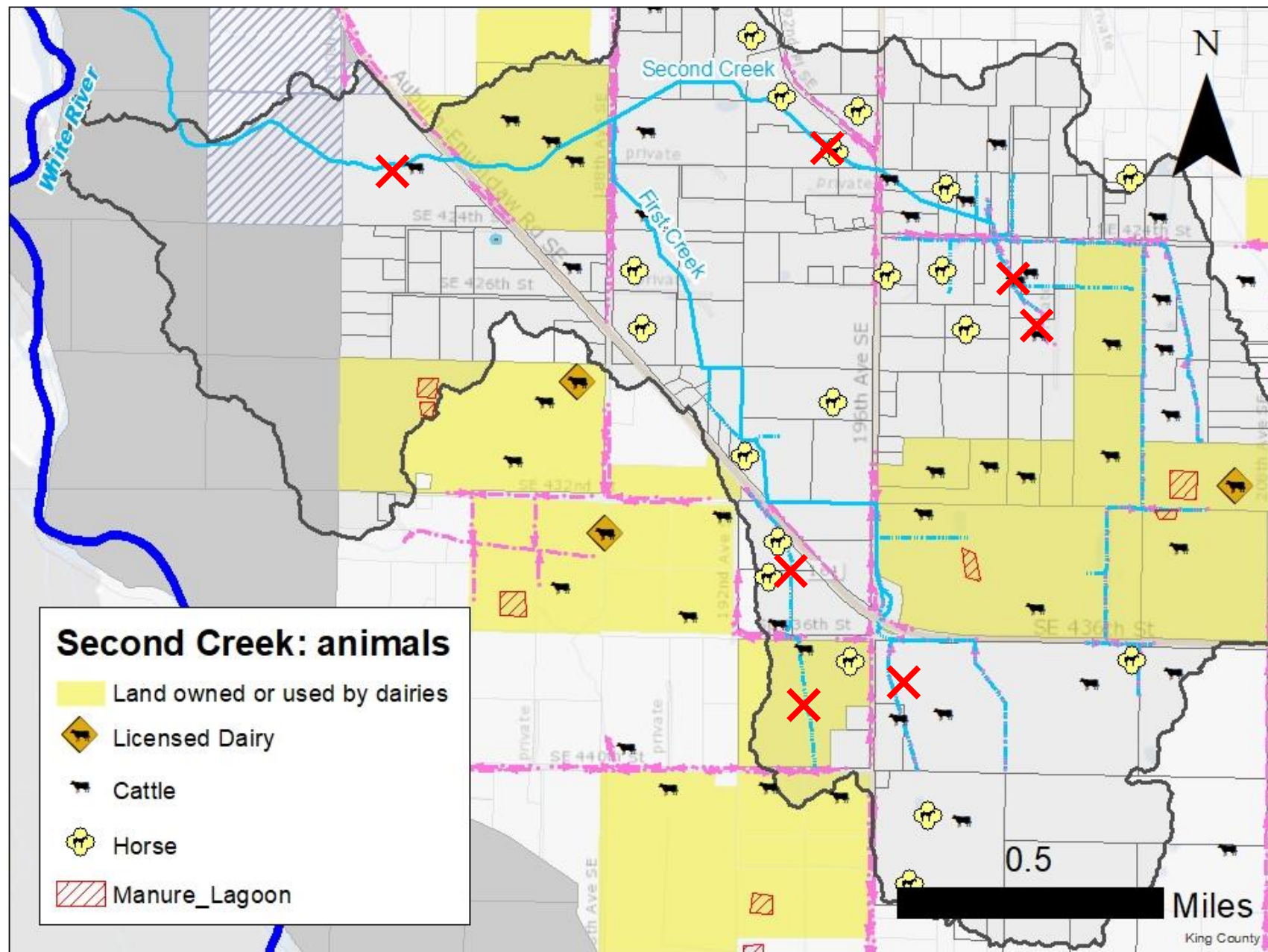
- No evidence of failing septic systems found
- All reaches of Second Creek violate WQ standards for bacteria
 - Hydrologic effects
- Agricultural issues
 - Dairies
 - Lack of fencing
 - Lack of buffers



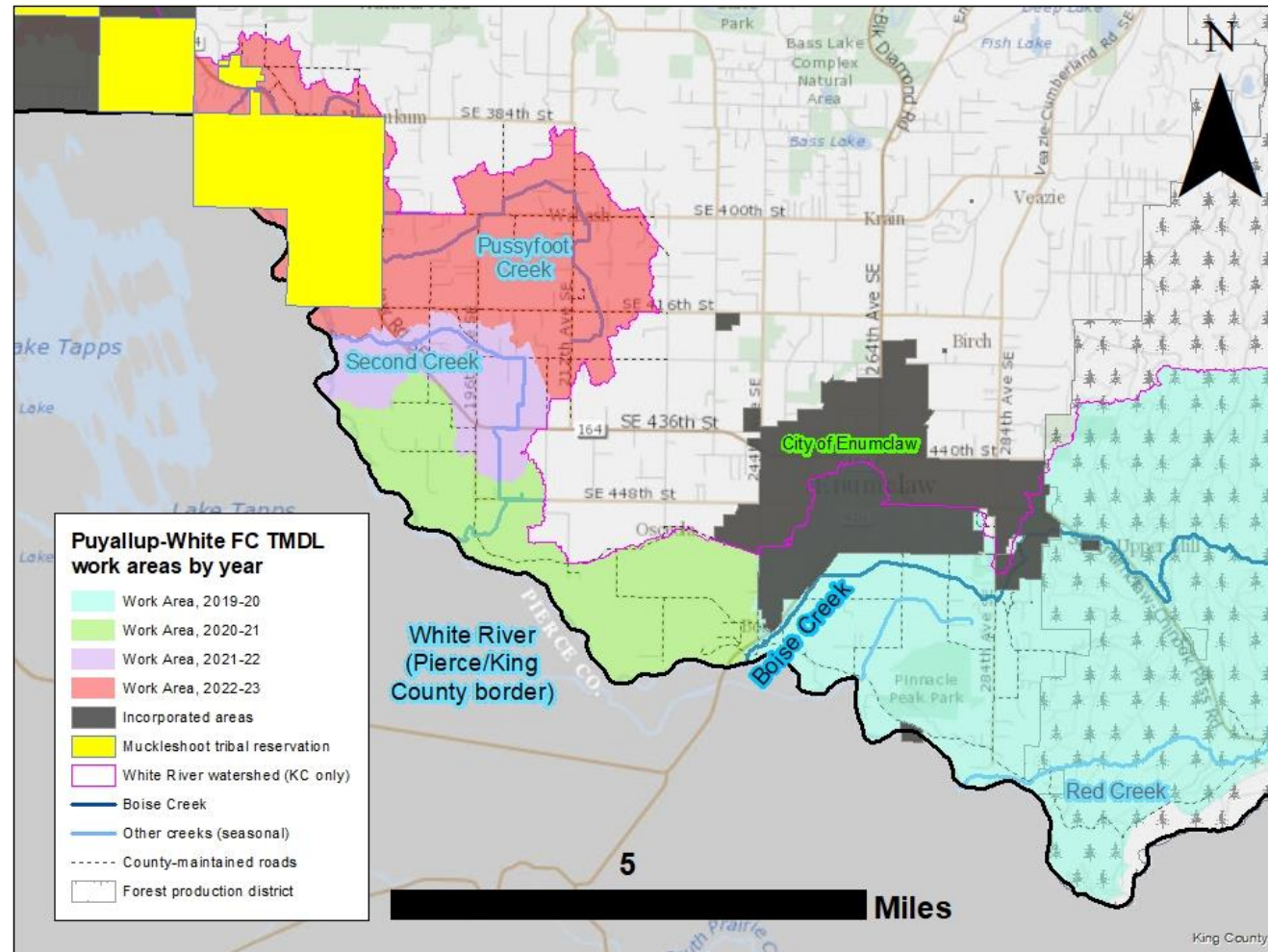
Second Creek @ Hwy 164, 1/6/2022

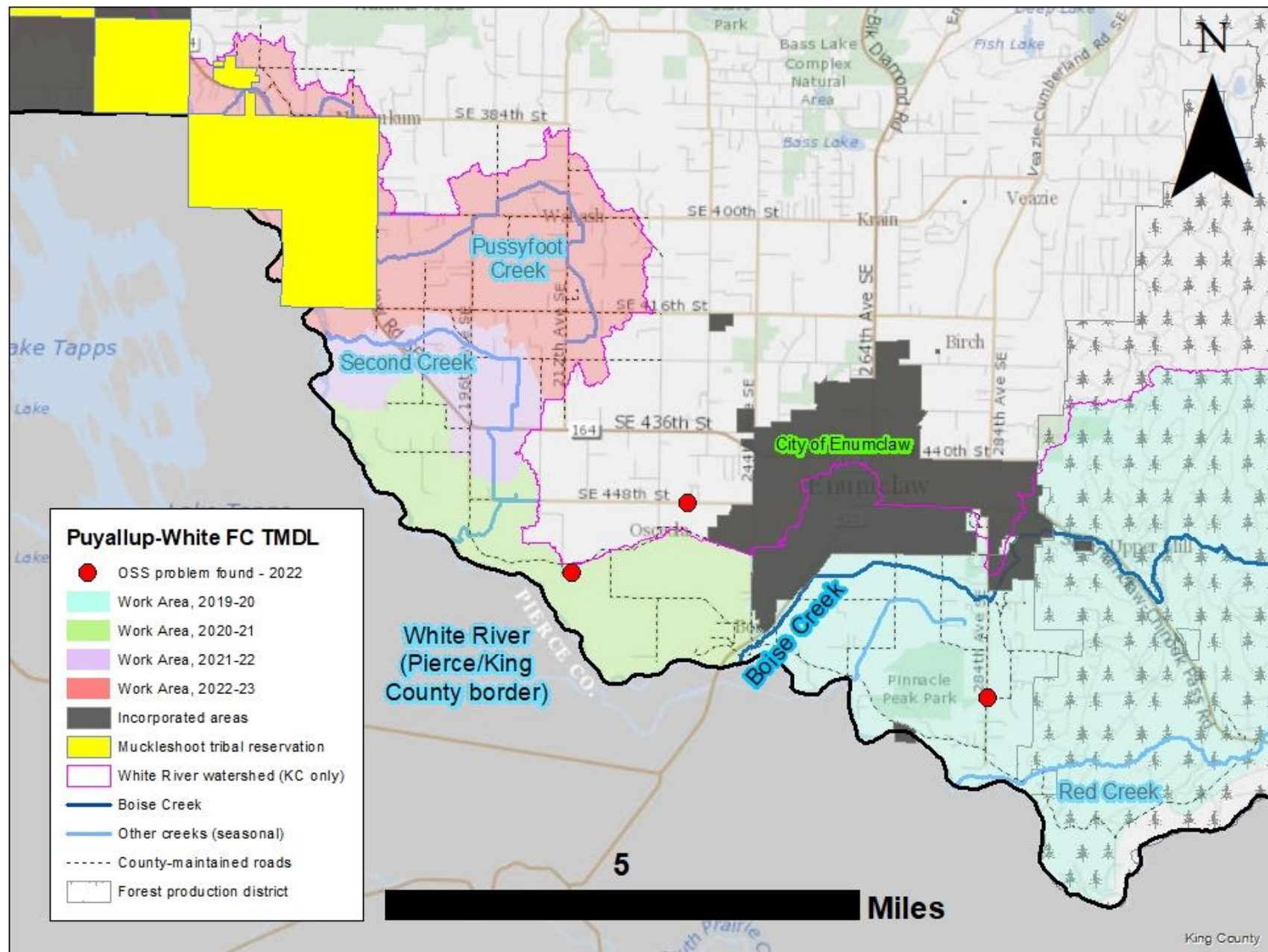






Elsewhere – Septic Systems

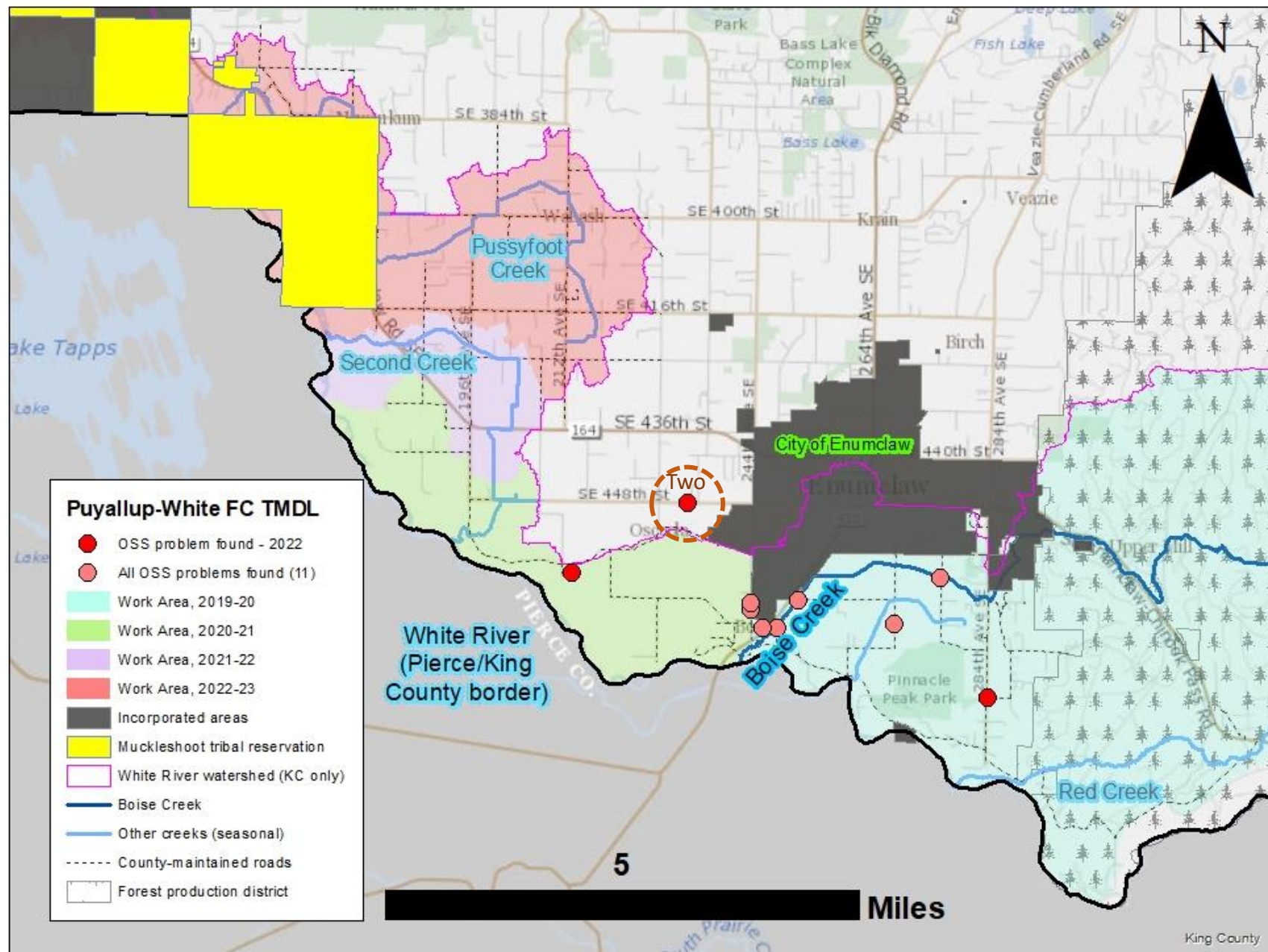




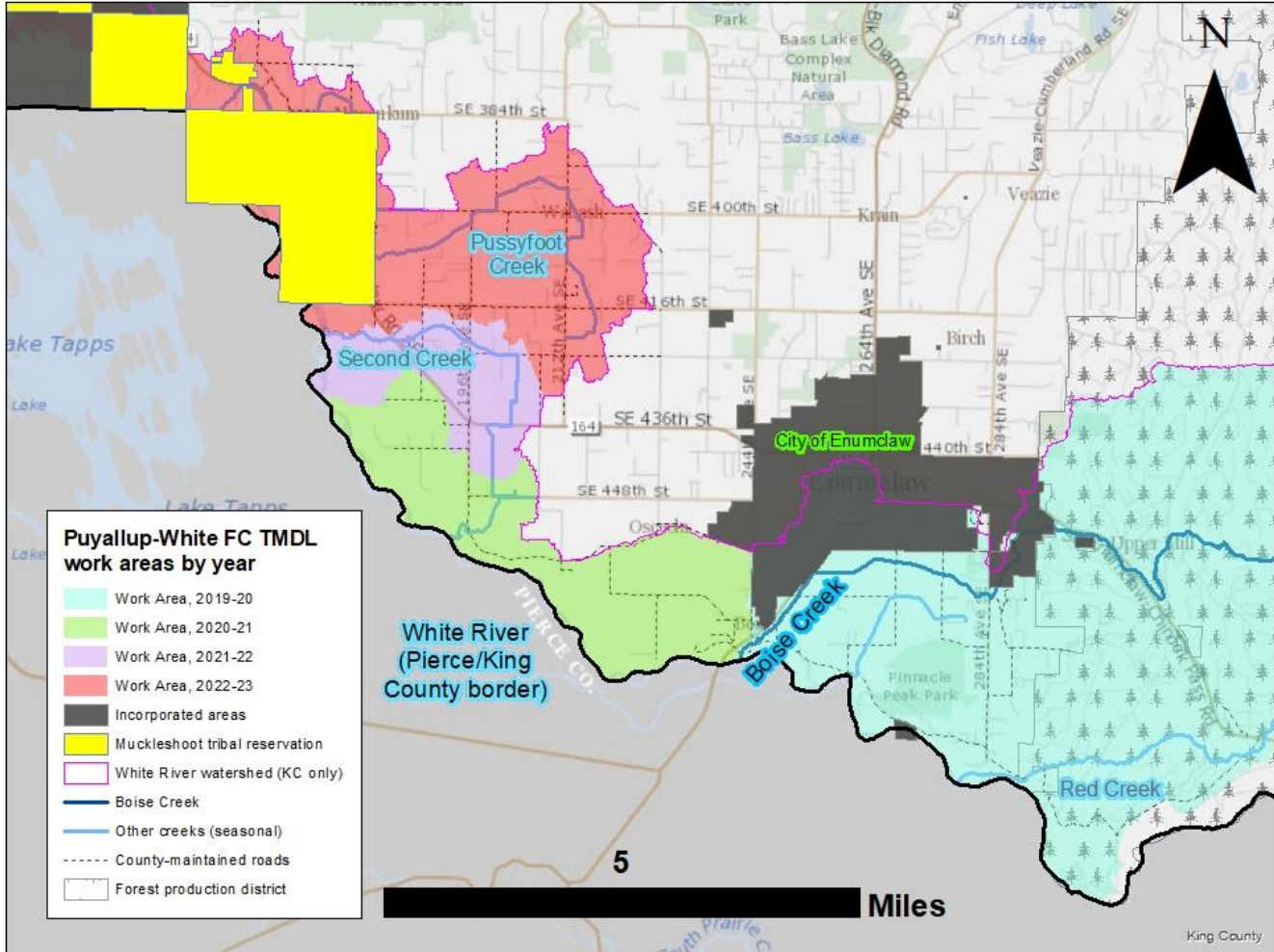
Failing septics found in 2022



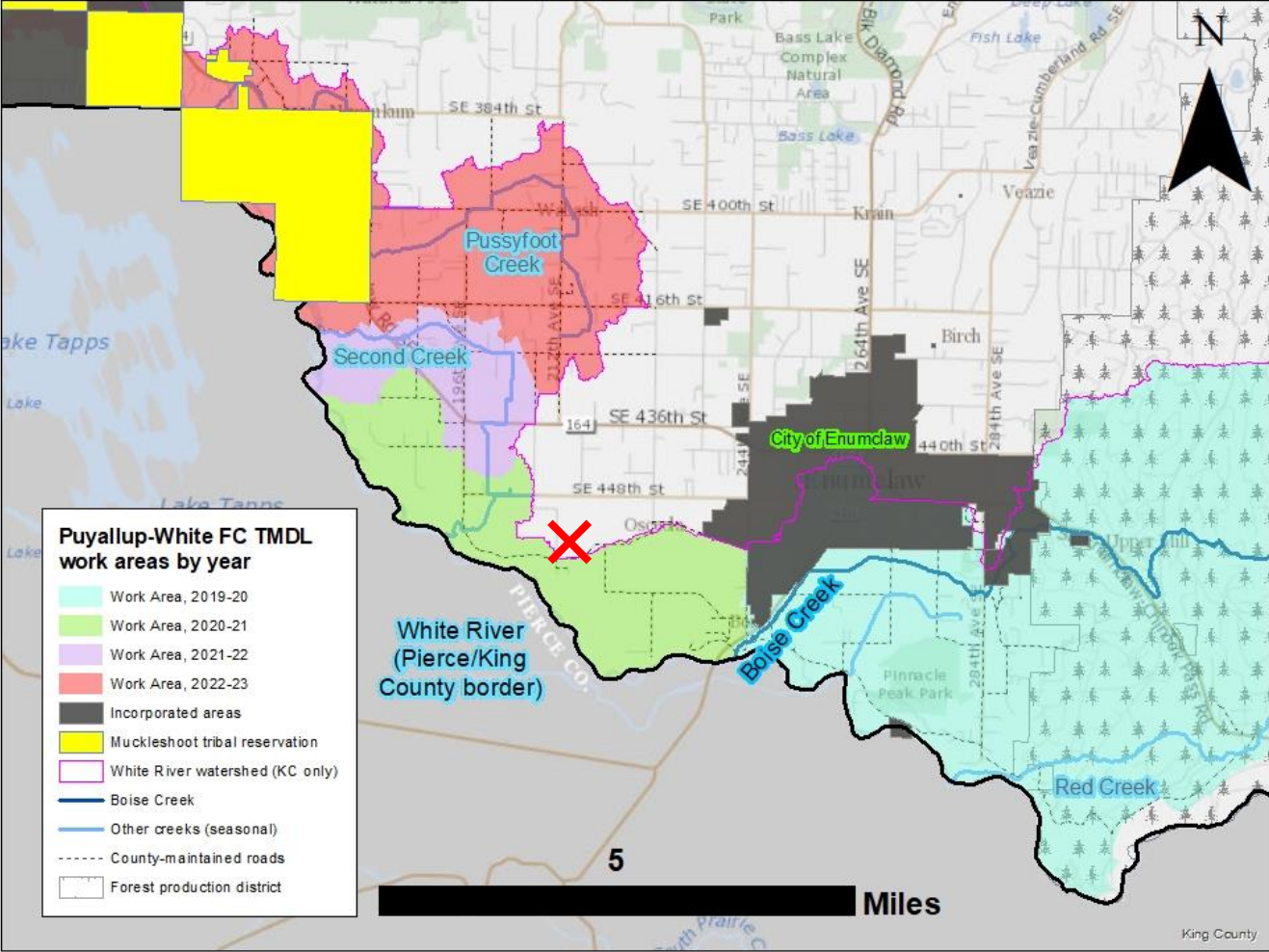
(Seasonal problems – found following up on previously identified locations of concern)



Elsewhere – manure



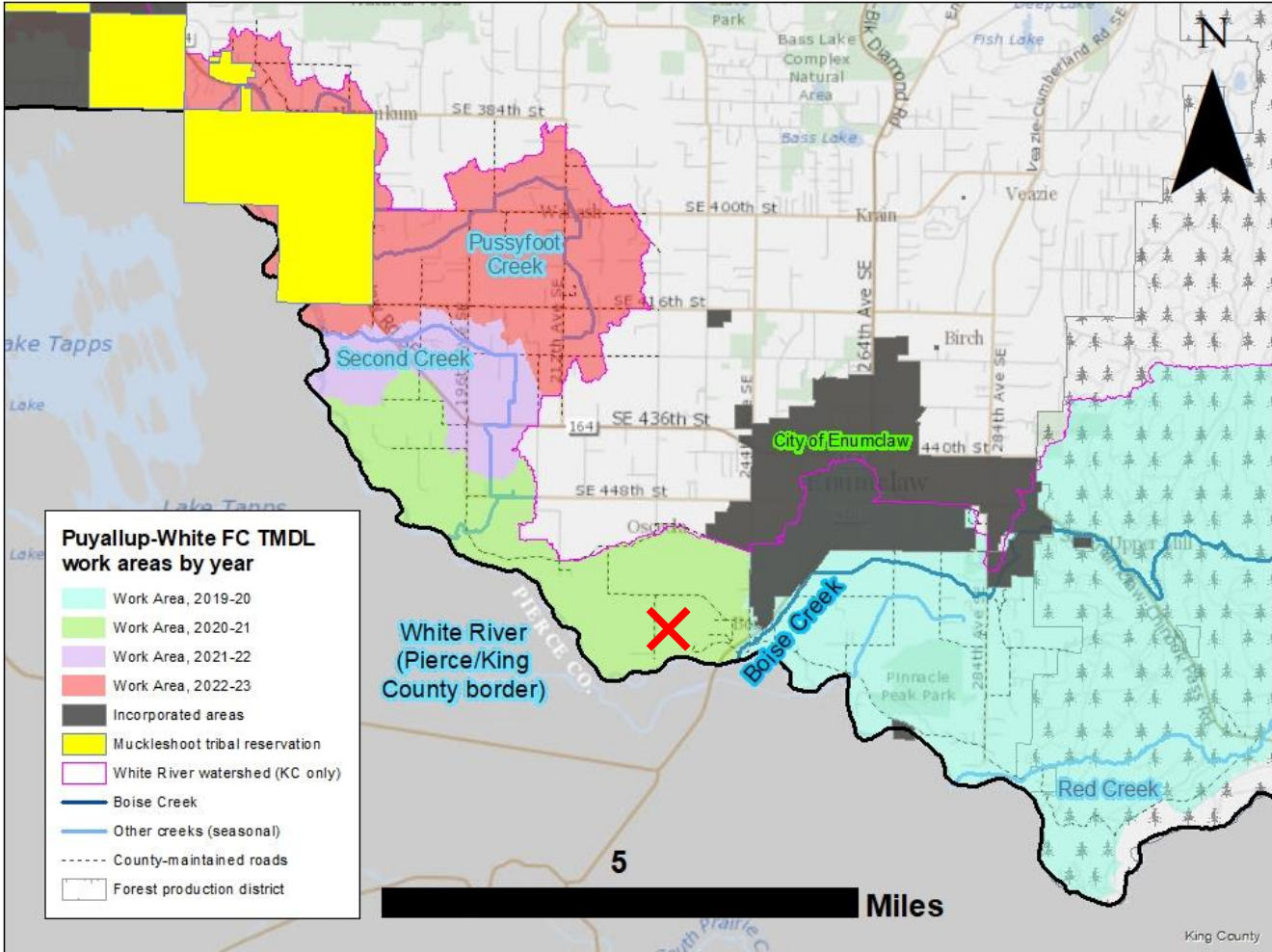
Elsewhere – manure







Elsewhere – manure





Ditch -- downstream



Ditch -- upstream



Acknowledgements

- Meagan Jackson and colleagues (Public Health - Seattle/KC)
- Michael Isensee, WSDA
- Anne Baxter and Casey Vaughn, Ecology
- Eric Palmer, City of Enumclaw

Thank you

