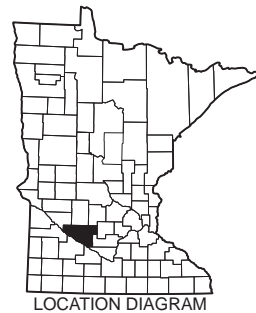


# Geologic Atlas of Renville County, Minnesota

## County Atlas Series C-28

### Part B, Hydrogeology



## Map Figures 1–27

*To accompany these atlas components:*

[Report](#)

[Plate 6, Chemical Hydrogeology](#)

[Plate 7, Hydrogeologic Cross Sections, A–A' through D–D'](#)

[Plate 8, Hydrogeologic Cross Sections, E–E' through I–I'](#)



St. Paul  
2017

### Map Figures

Map Figure 1. Renville County location map

Map Figure 2. Water-table elevation

Map Figure 3. Depth to water table

Map Figure 4. Potentiometric surface of si and sm buried sand aquifers

Map Figure 5. Potentiometric surface of st buried sand aquifer

Map Figure 6. Potentiometric surface of sg buried sand aquifer

Map Figure 7. Potentiometric surface of s2 buried sand aquifer

Map Figure 8. Potentiometric surface of s3 buried sand aquifer

Map Figure 9. Potentiometric surface of s4 buried sand aquifer

Map Figure 10. Potentiometric surface of s5 buried sand aquifer

Map Figure 11. Potentiometric surface of su buried sand aquifer

Map Figure 12. Potentiometric surface of sz buried sand aquifer

Map Figure 13. Arsenic concentration

Map Figure 14. Pollution sensitivity of near-surface materials

Map Figure 15. Pollution sensitivity of si buried sand aquifer

Map Figure 16. Pollution sensitivity of sm buried sand aquifer

Map Figure 17. Pollution sensitivity of st buried sand aquifer

Map Figure 18. Pollution sensitivity of sg buried sand aquifer

Map Figure 19. Pollution sensitivity of s2 buried sand aquifer

Map Figure 20. Pollution sensitivity of s3 buried sand aquifer

Map Figure 21. Pollution sensitivity of s4 buried sand aquifer

Map Figure 22. Pollution sensitivity of s5 buried sand aquifer

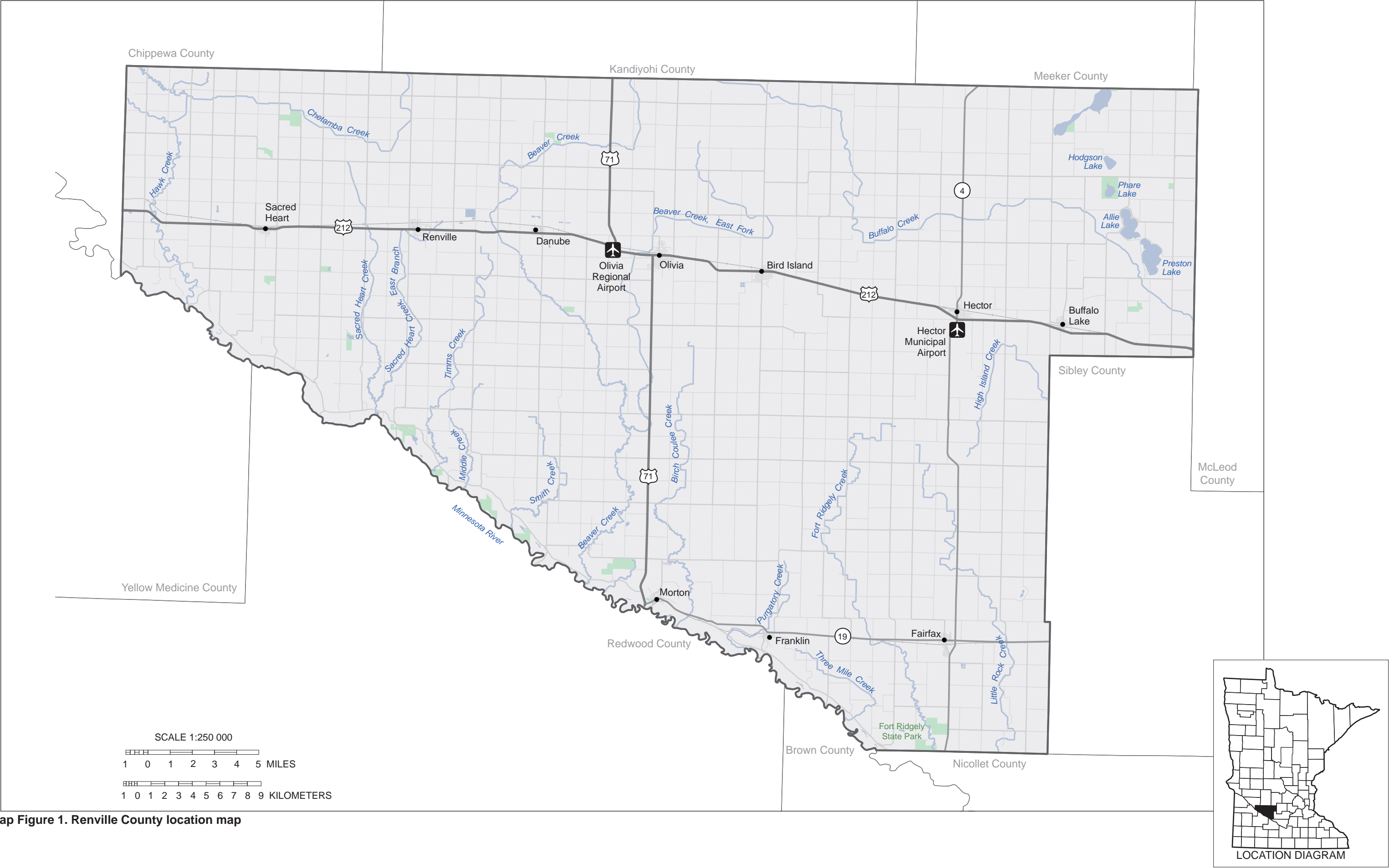
Map Figure 23. Pollution sensitivity of su buried sand aquifer

Map Figure 24. Pollution sensitivity of sz buried sand aquifer

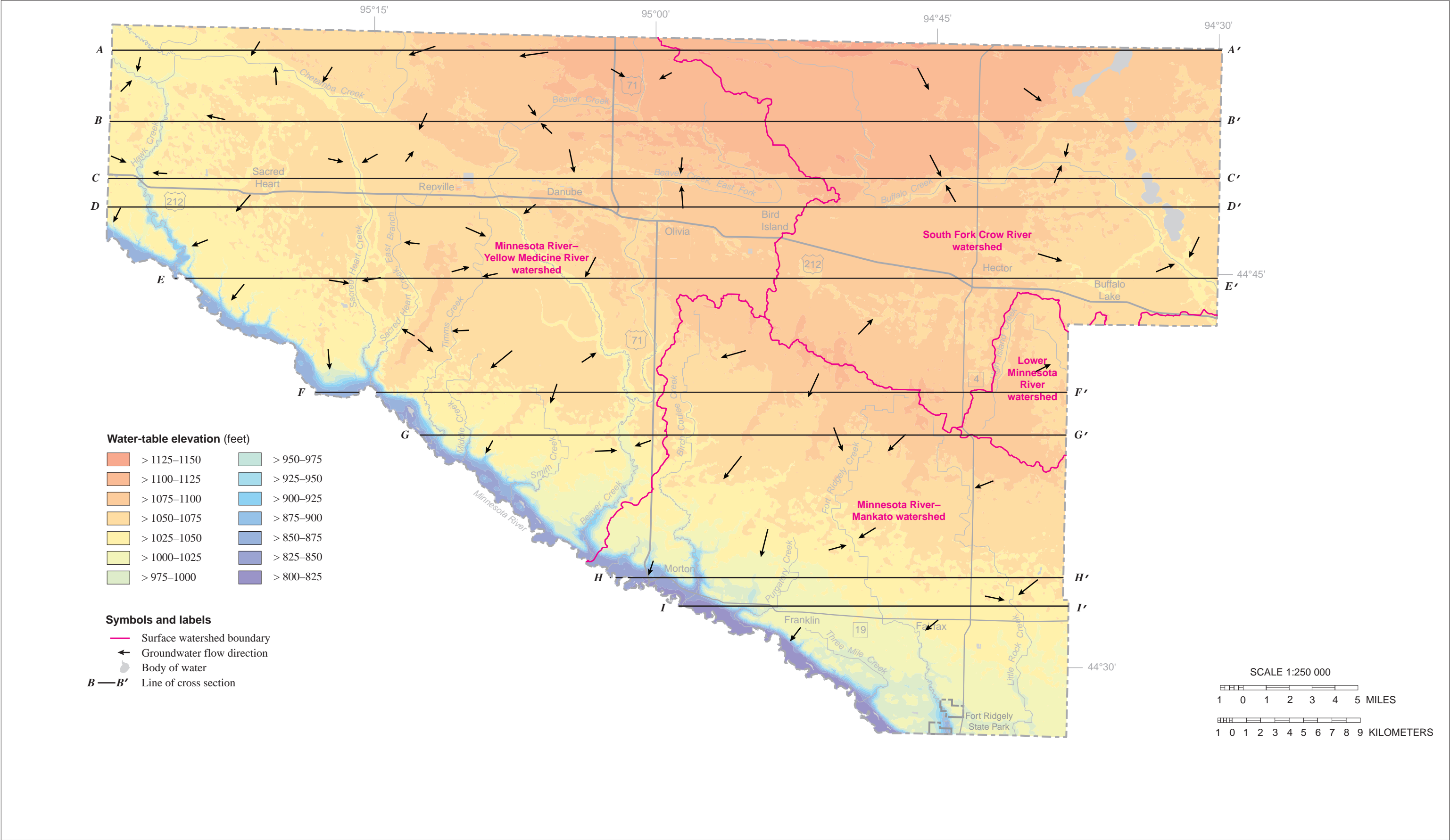
Map Figure 25. Pollution sensitivity of bedrock surface

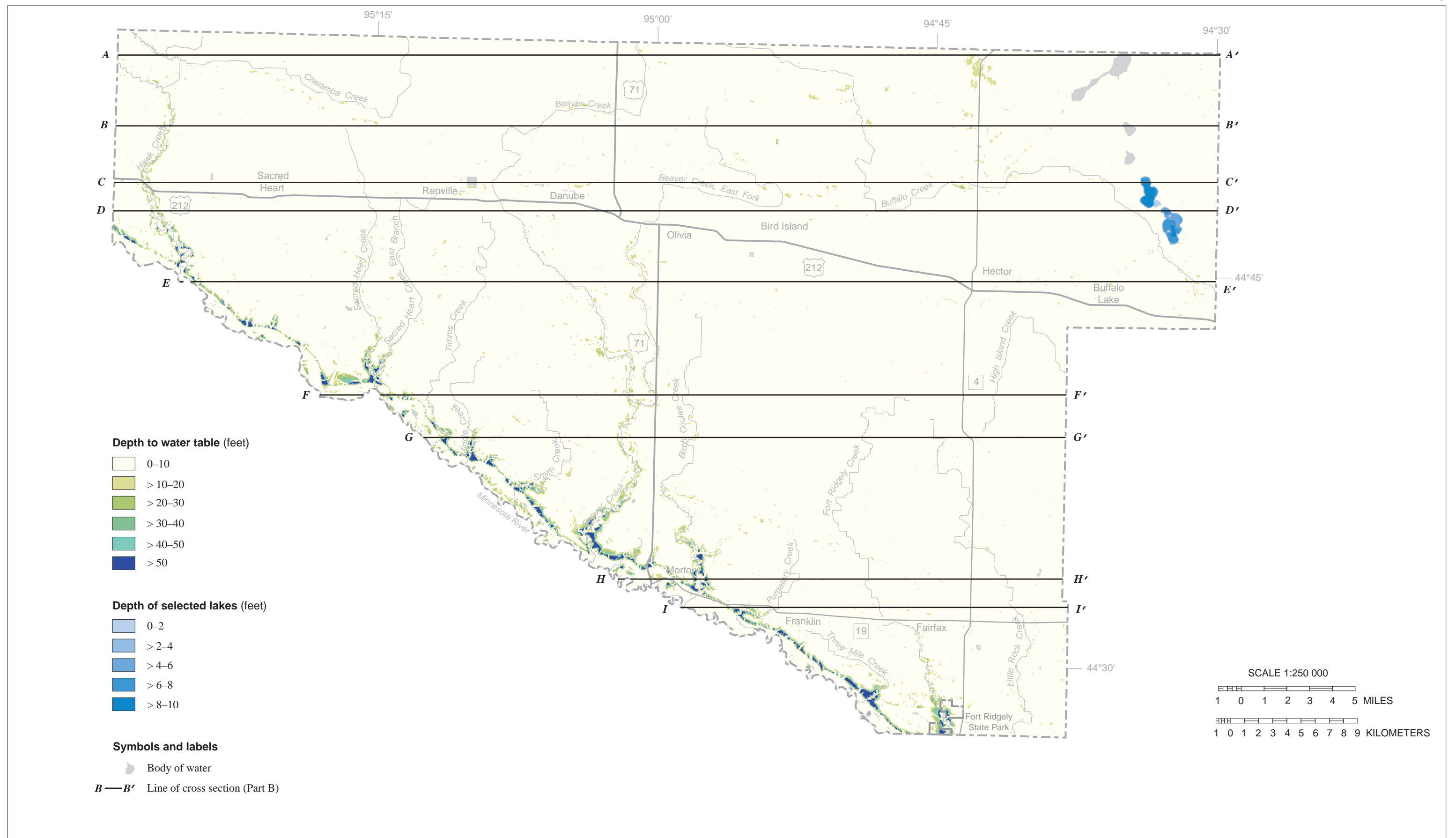
Map Figure 26. Groundwater appropriation by general aquifer type

Map Figure 27. Groundwater appropriation by water use category



Map Figure 1. Renville County location map

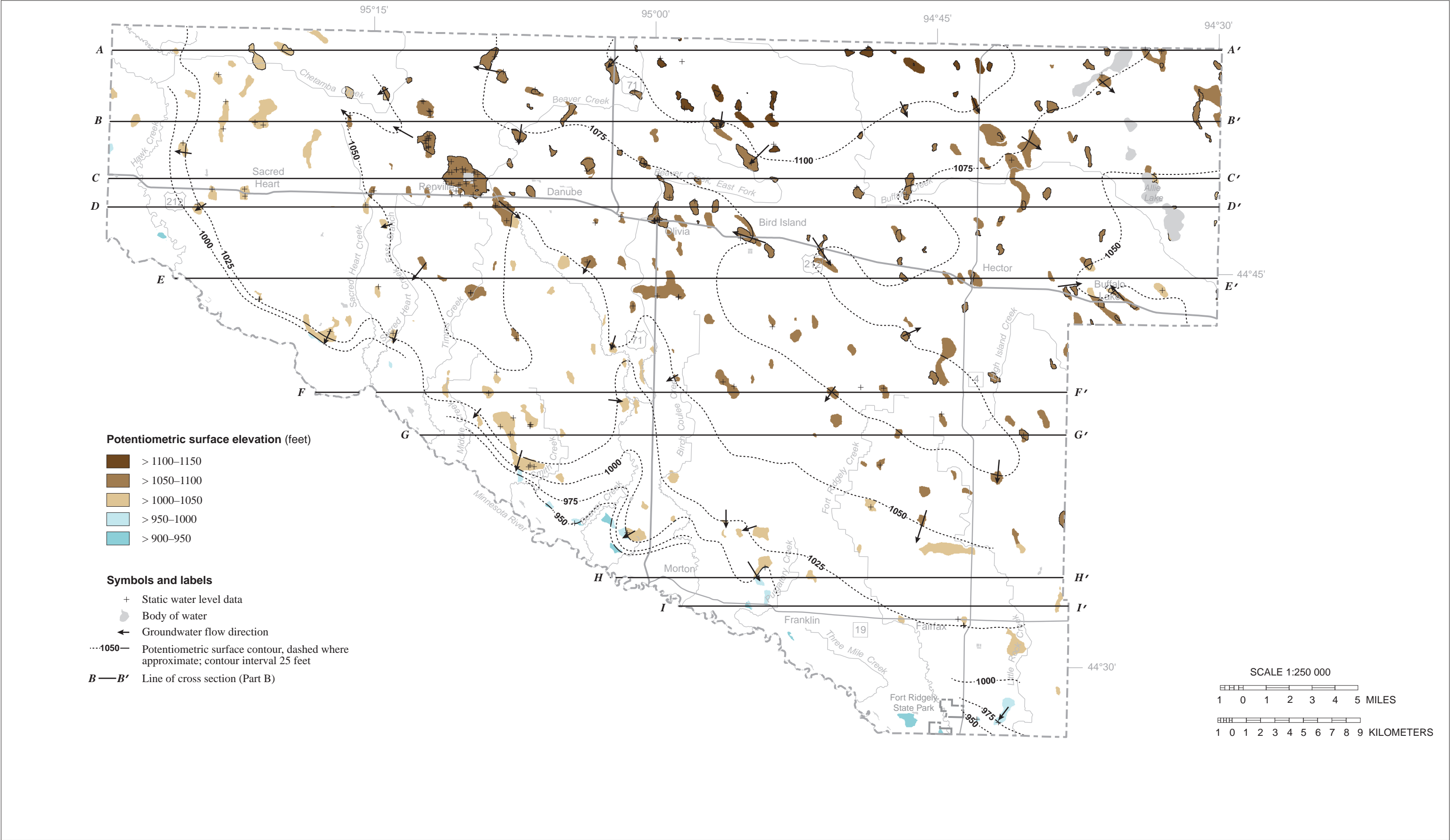




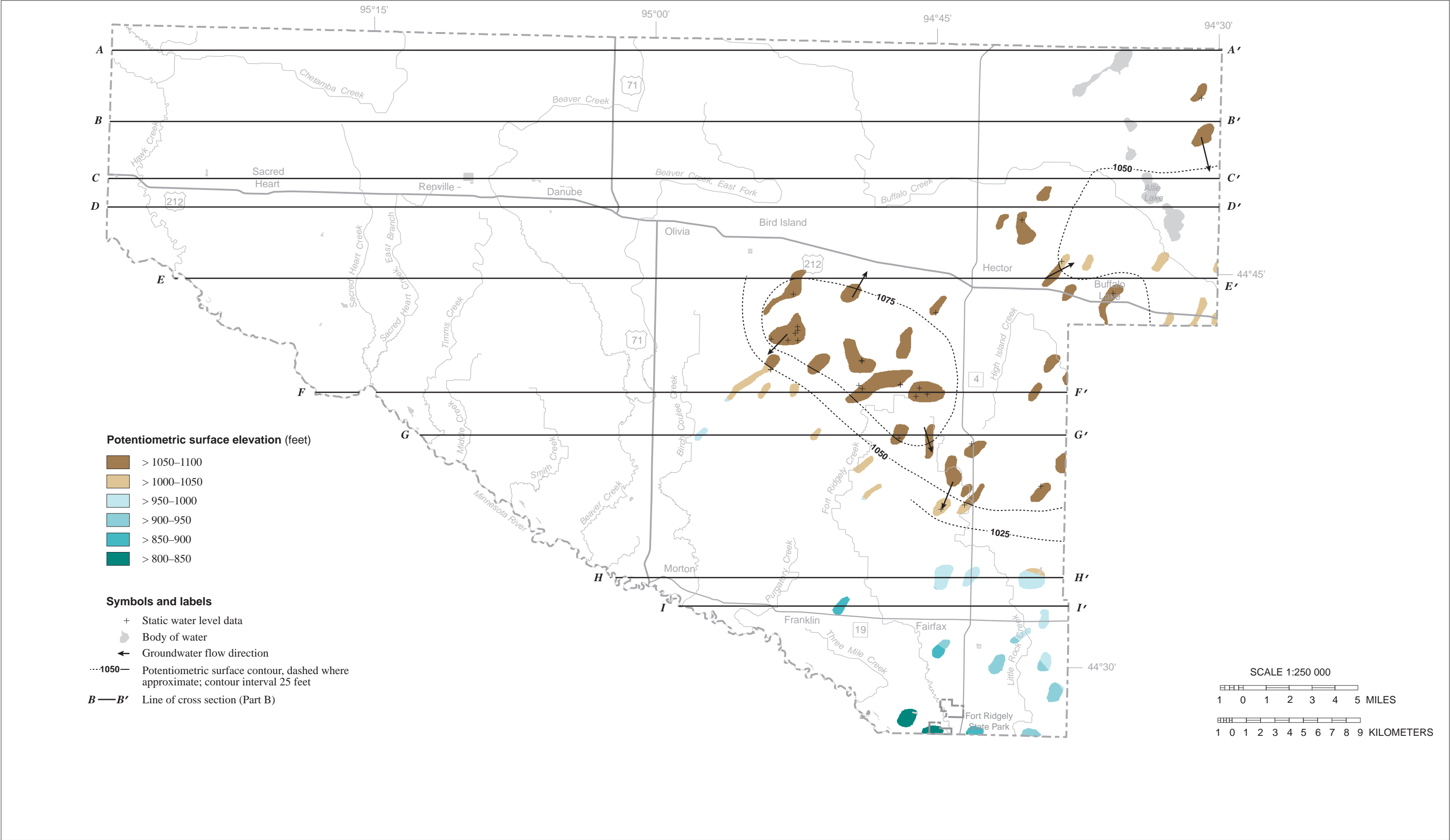
### Map Figure 3. Depth to water table

The water table is within 10 feet of the land surface across the majority of Renville County, with the exception of the Minnesota River valley, its tributary valleys, and some of its large terrace deposits. Map modified from the Minnesota Hydrogeology Atlas HG-03 (Adams, 2016a).

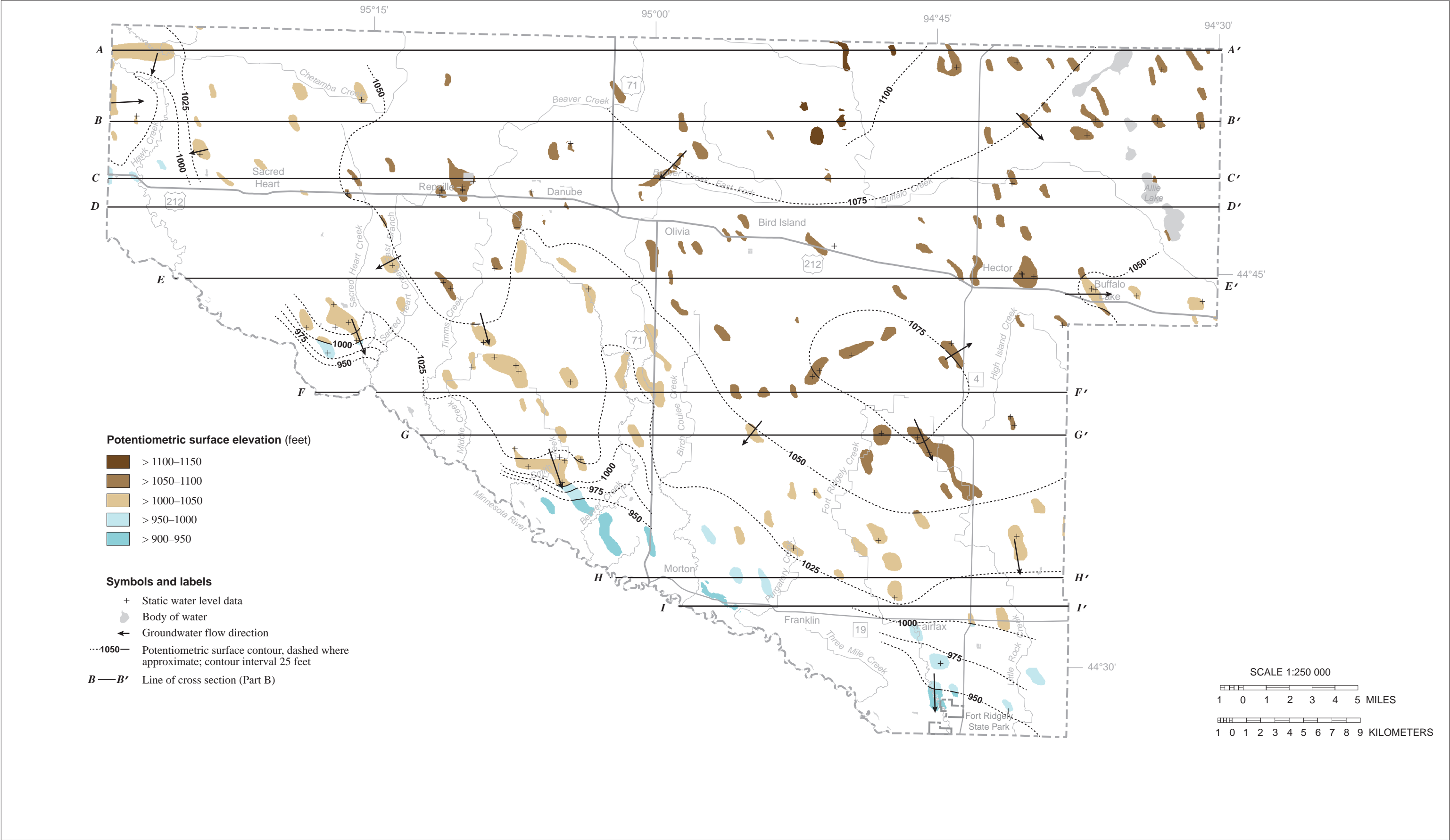




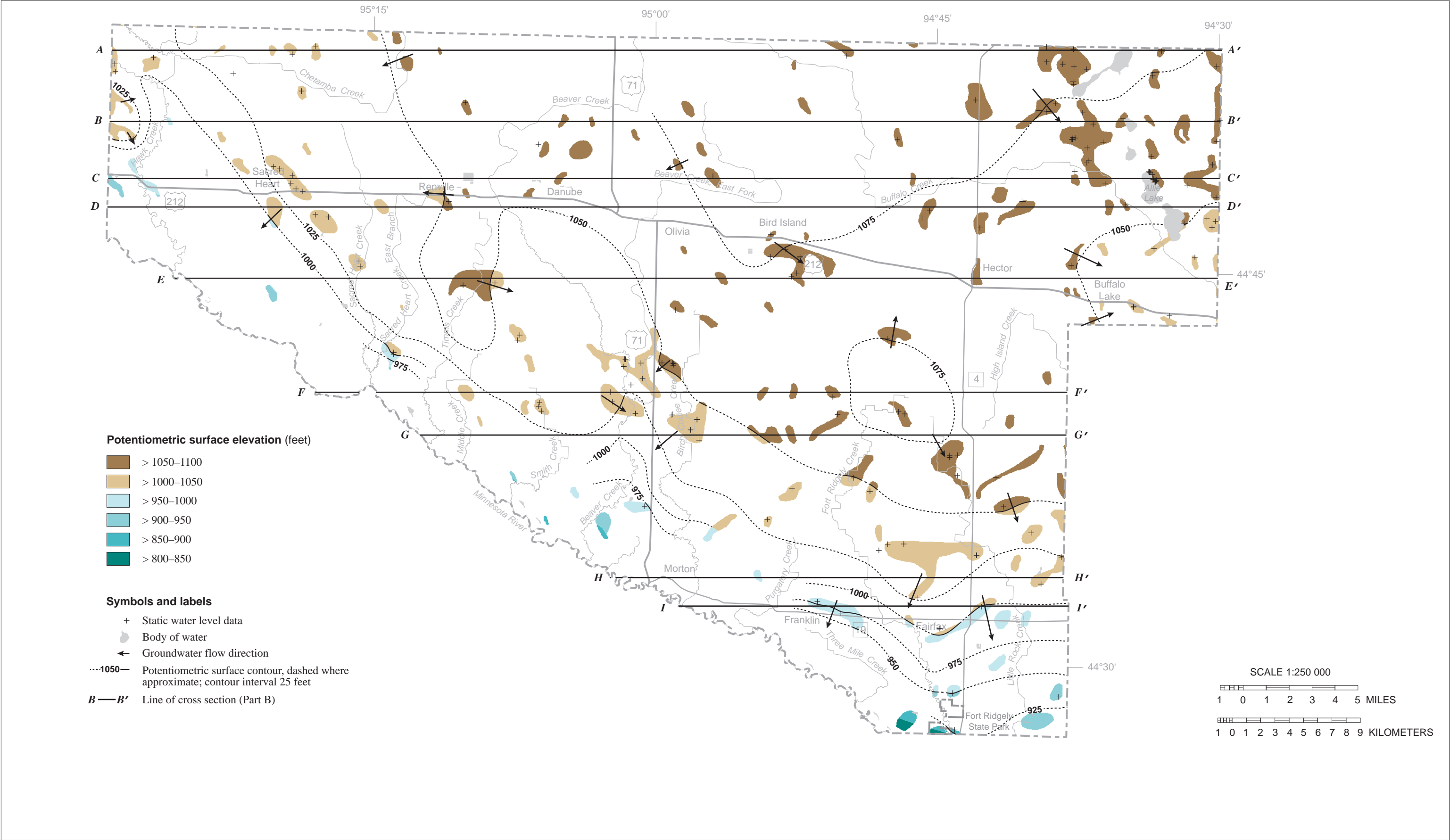
**Map Figure 4. Potentiometric surface of si and sm buried sand aquifers**  
Elevation of the potentiometric surface for the combined si and sm aquifers. The si aquifer sand bodies are outlined in black to distinguish them from the stratigraphically lower sm aquifer units.



Map Figure 5. Potentiometric surface of st buried sand aquifer

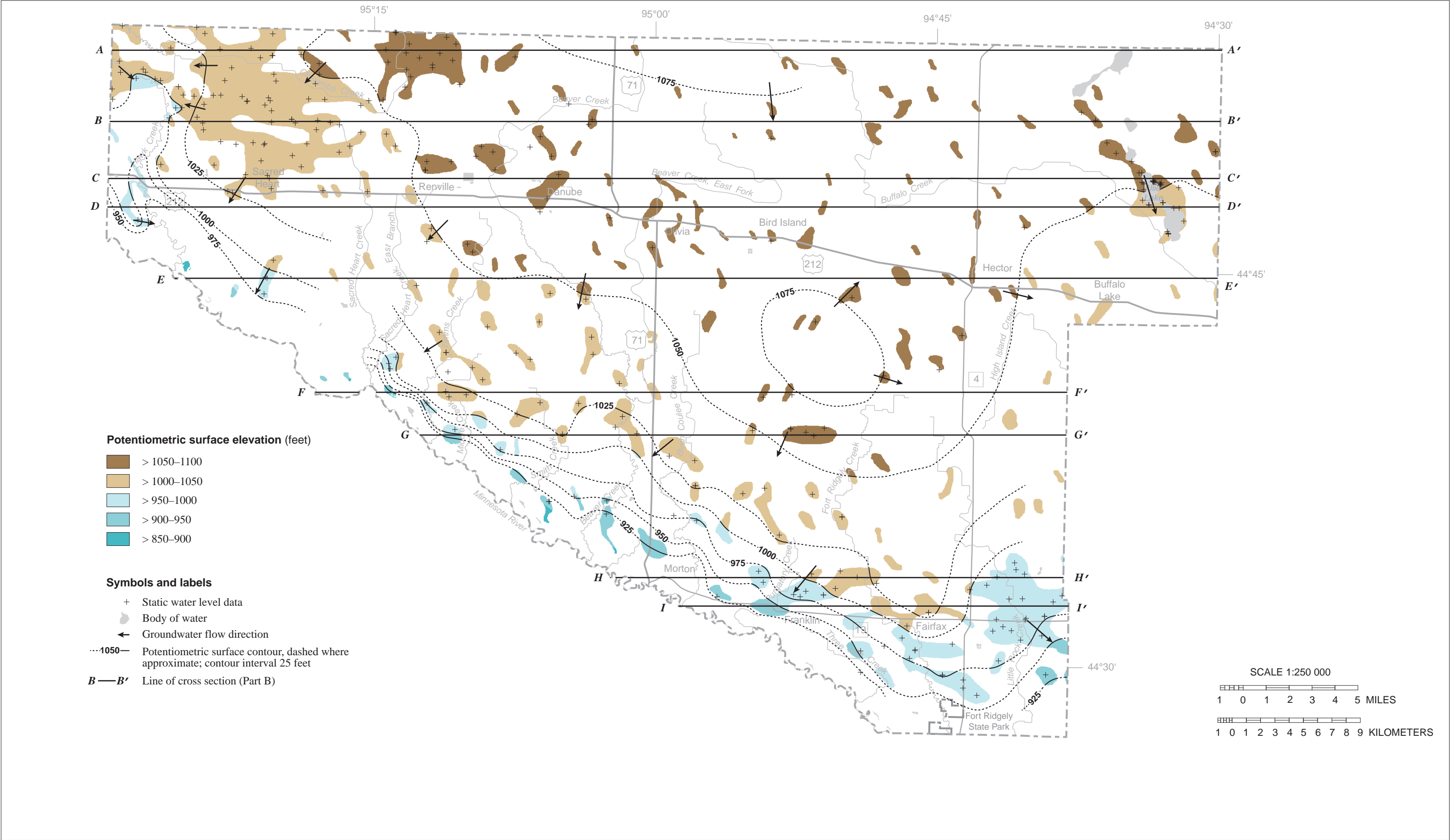


Map Figure 6. Potentiometric surface of sg buried sand aquifer

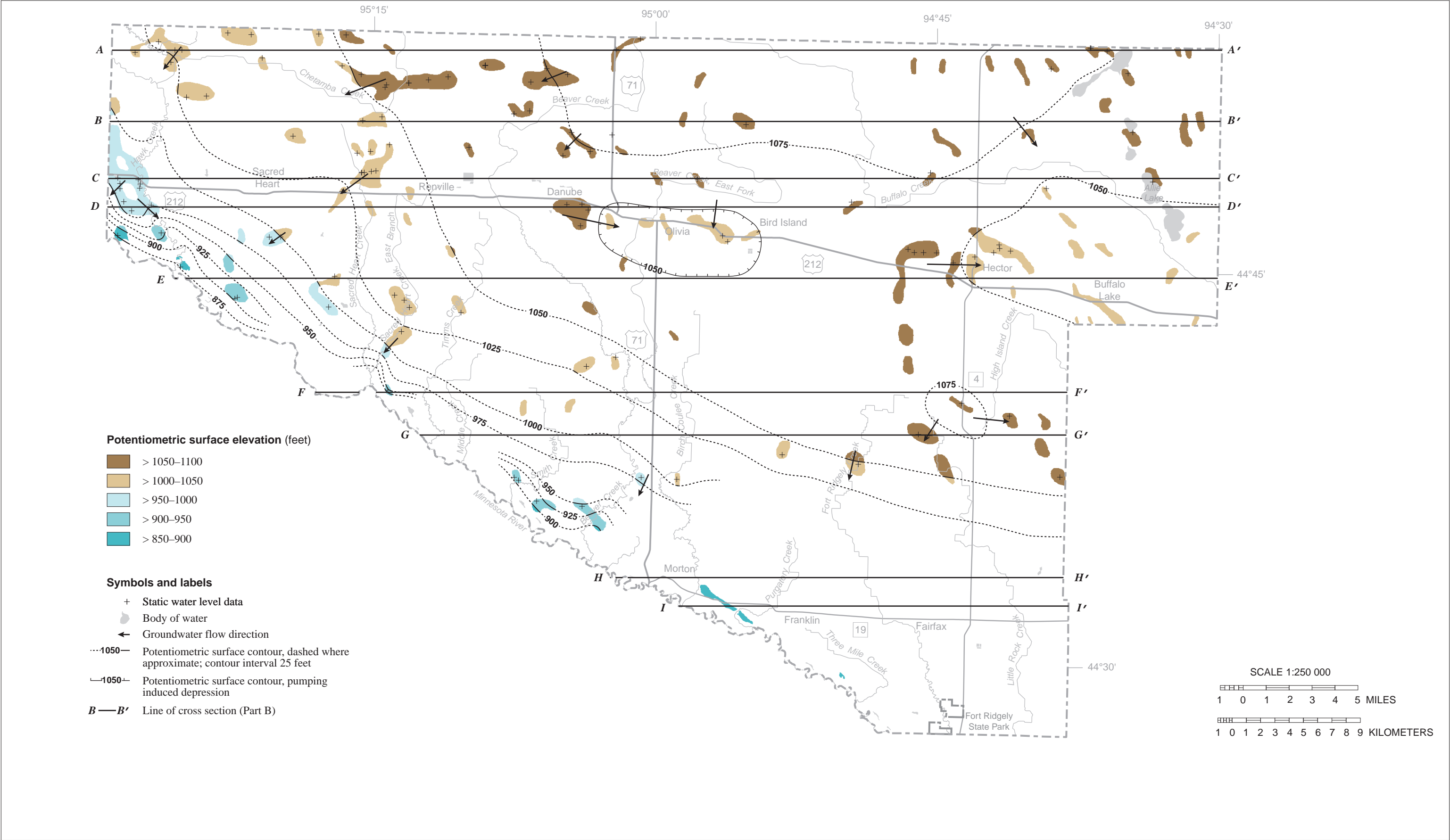


Map Figure 7. Potentiometric surface of s2 buried sand aquifer

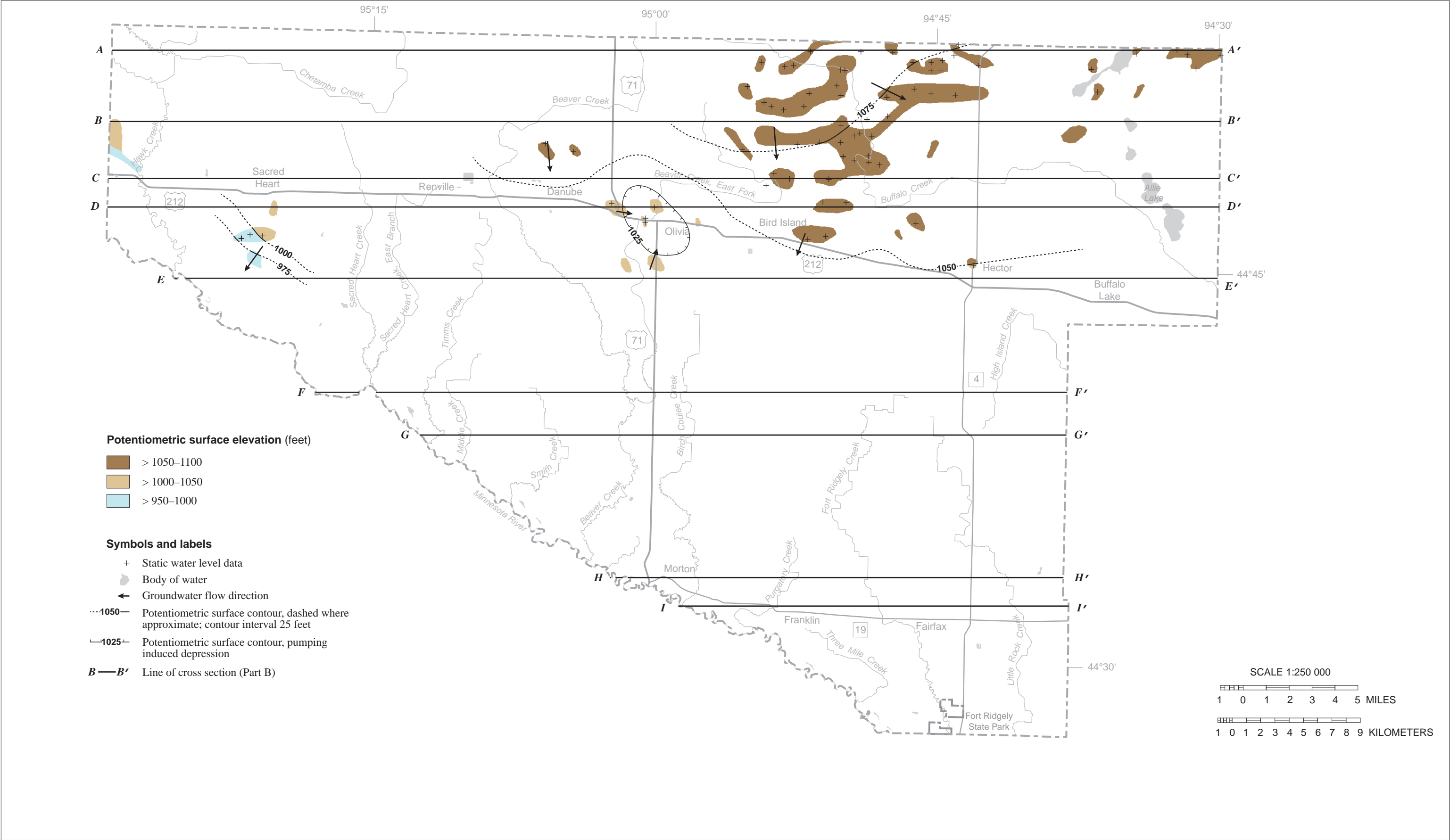




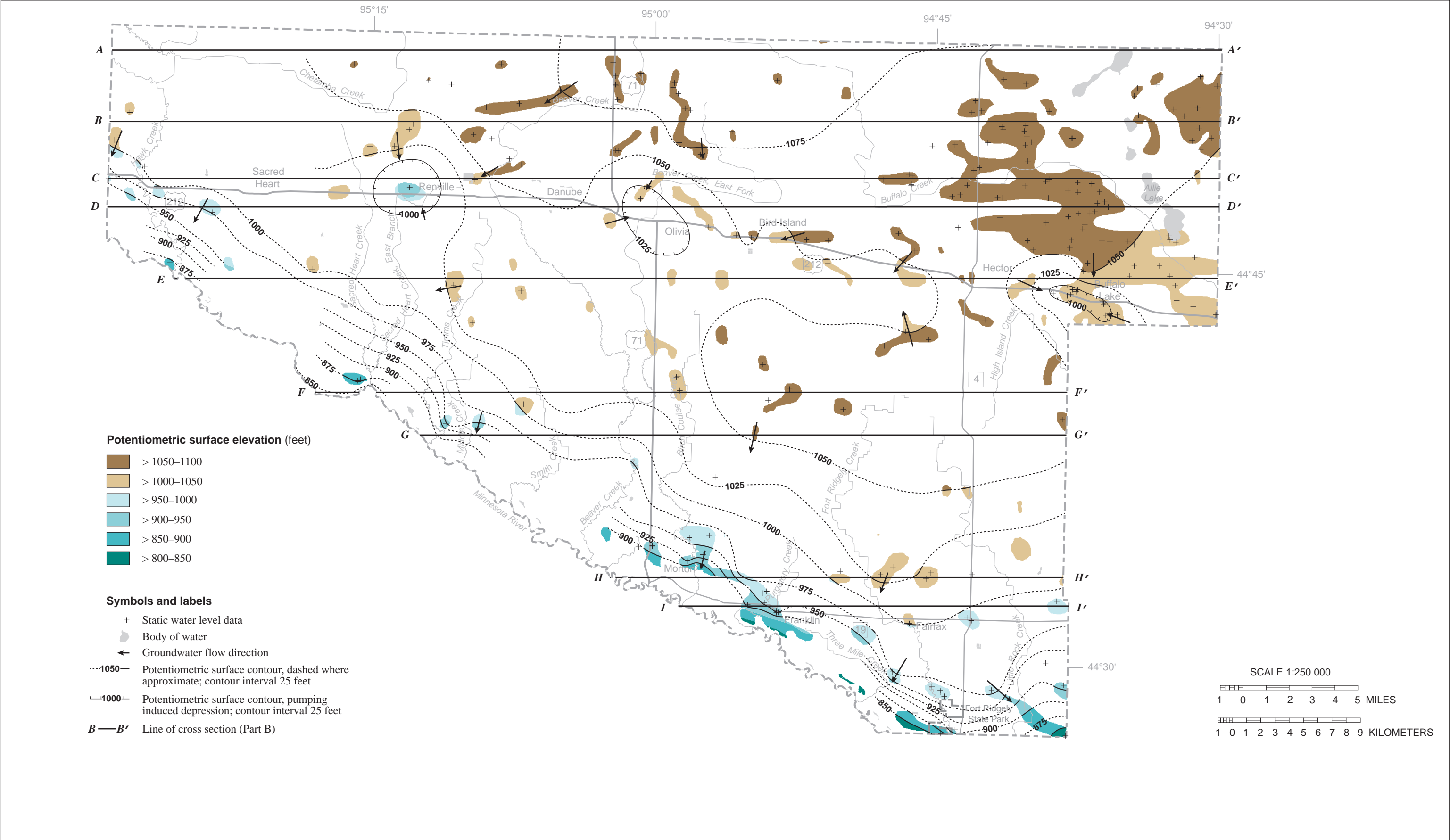
Map Figure 8. Potentiometric surface of s3 buried sand aquifer



Map Figure 9. Potentiometric surface of s4 buried sand aquifer

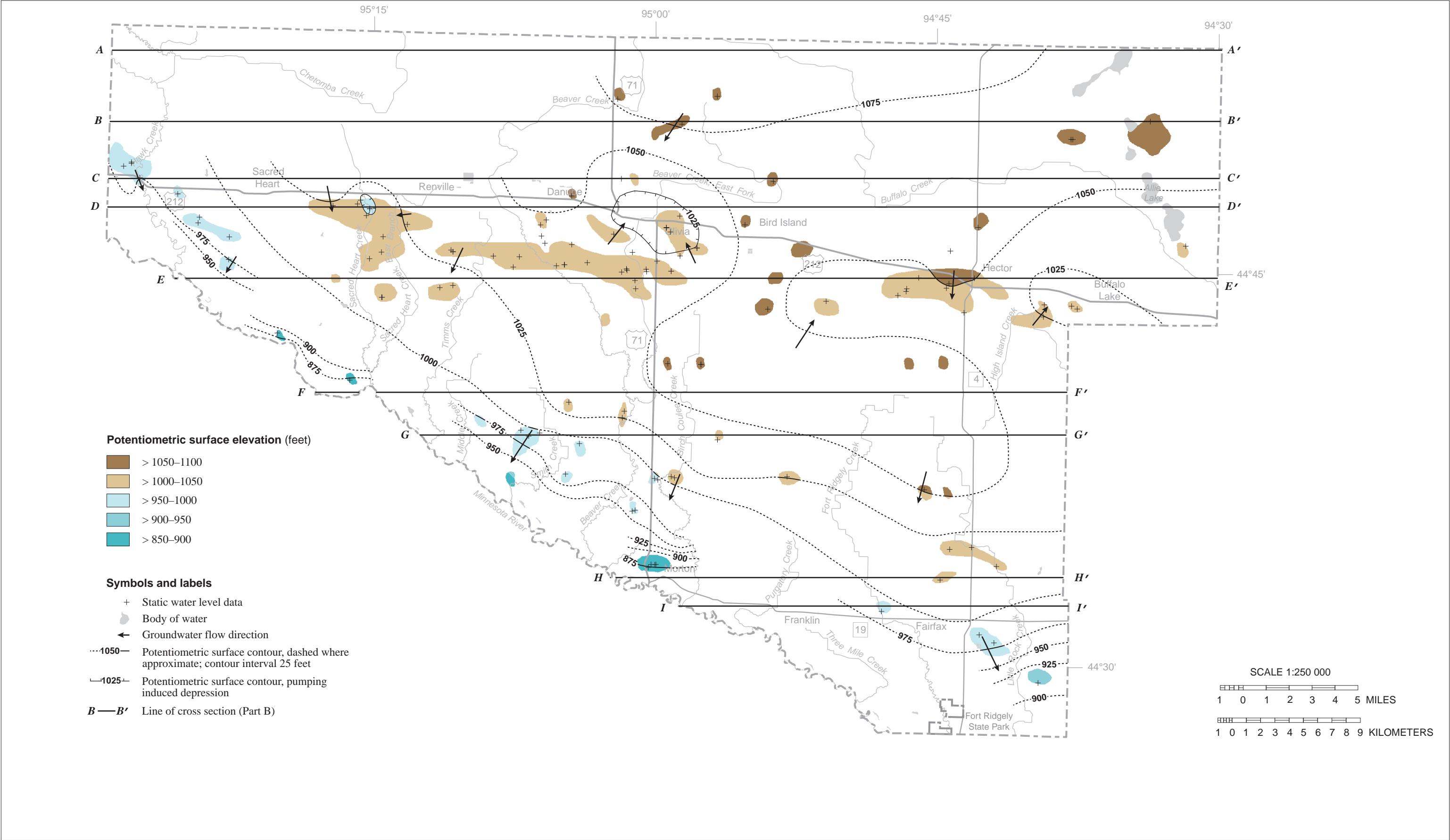


Map Figure 10. Potentiometric surface of s5 buried sand aquifer

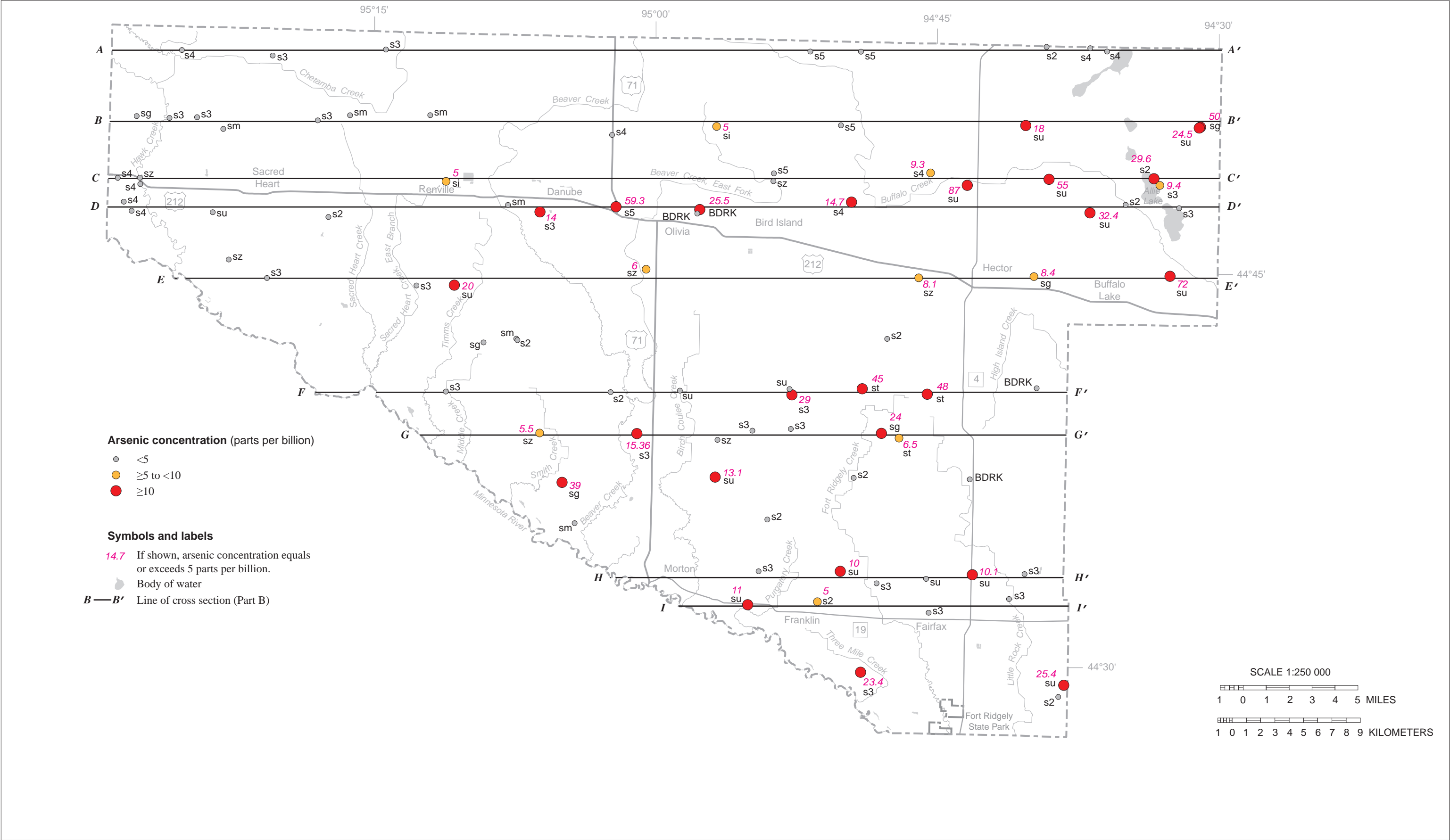


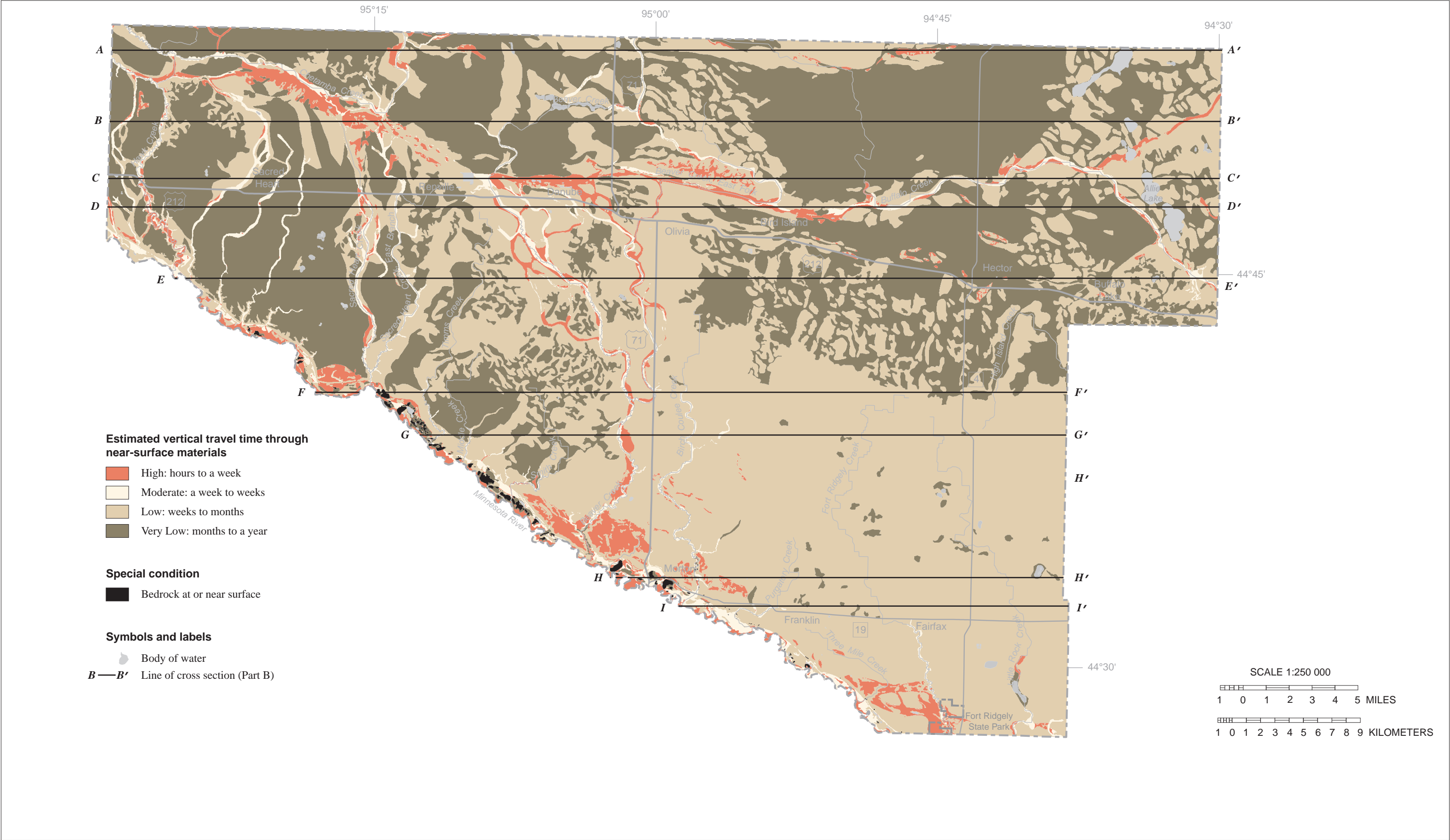
Map Figure 11. Potentiometric surface of su buried sand aquifer



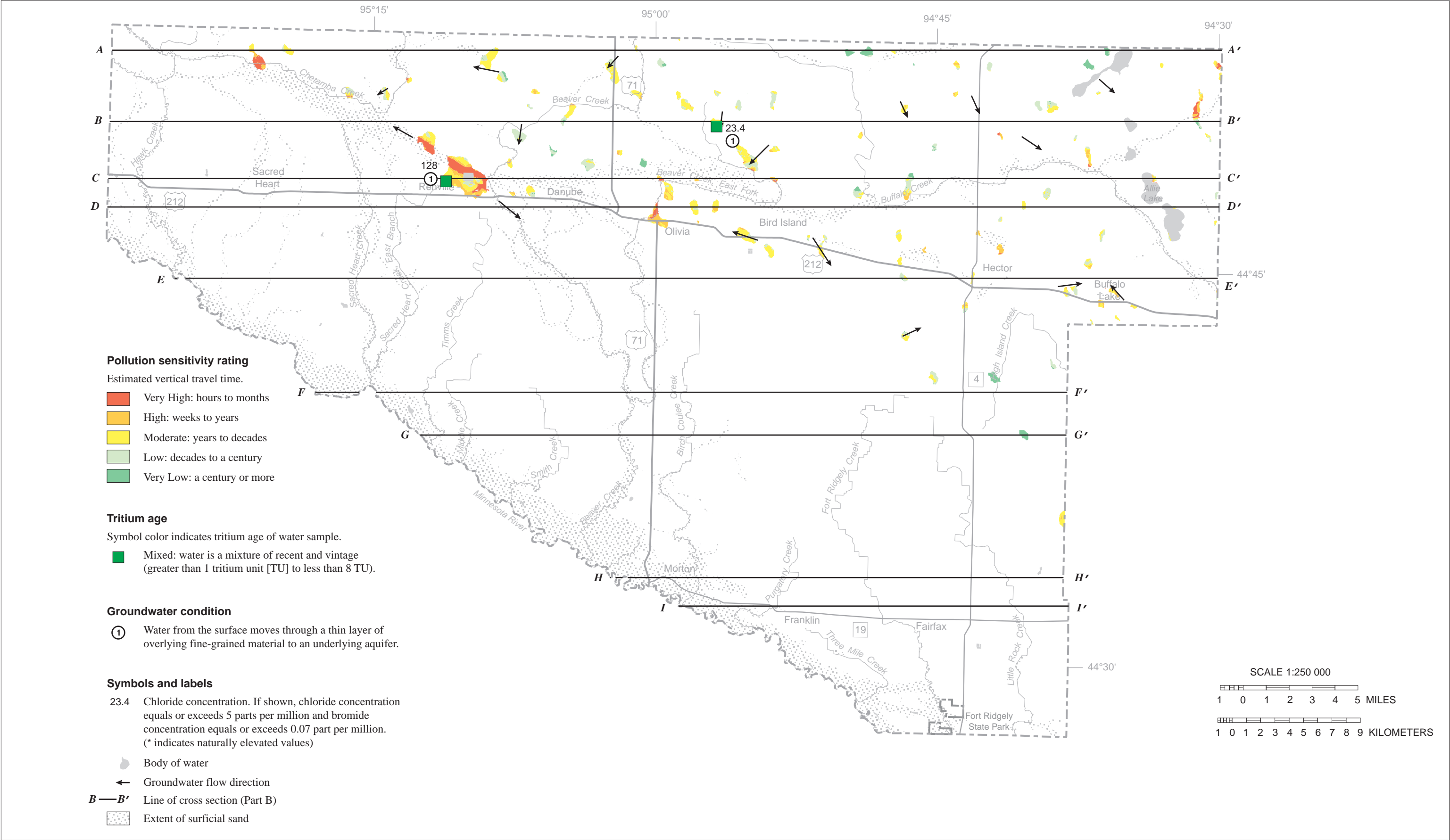


Map Figure 12. Potentiometric surface of sz buried sand aquifer



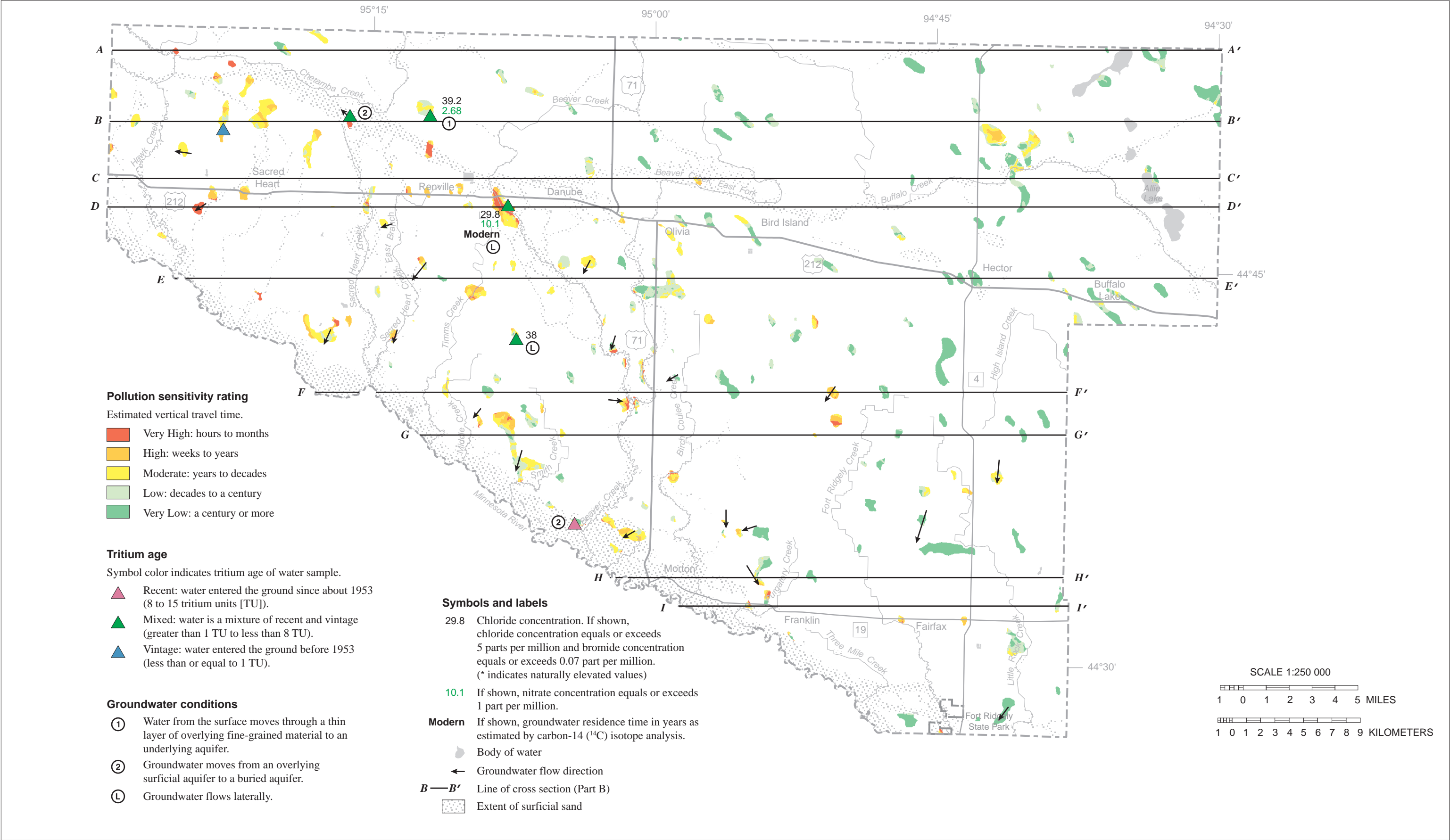


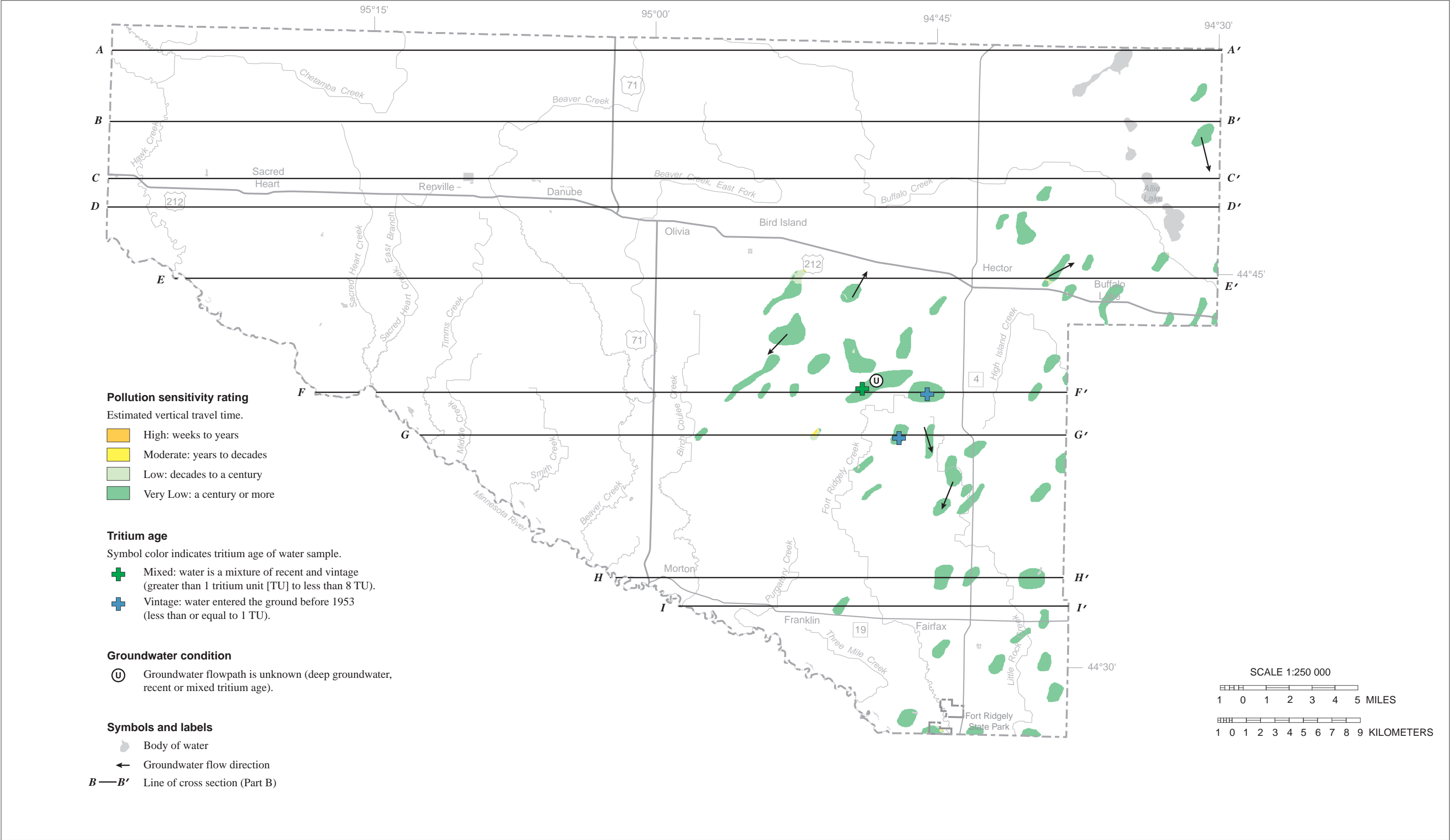
**Map Figure 14. Pollution sensitivity of near-surface materials**  
Very low to low pollution sensitivity ratings are common throughout most of the county. The exception is in river and stream valleys, where the ss surficial sand and gravel deposits are mapped. Map modified from the Minnesota Hydrogeology Atlas HG-02 (Adams, 2016b).

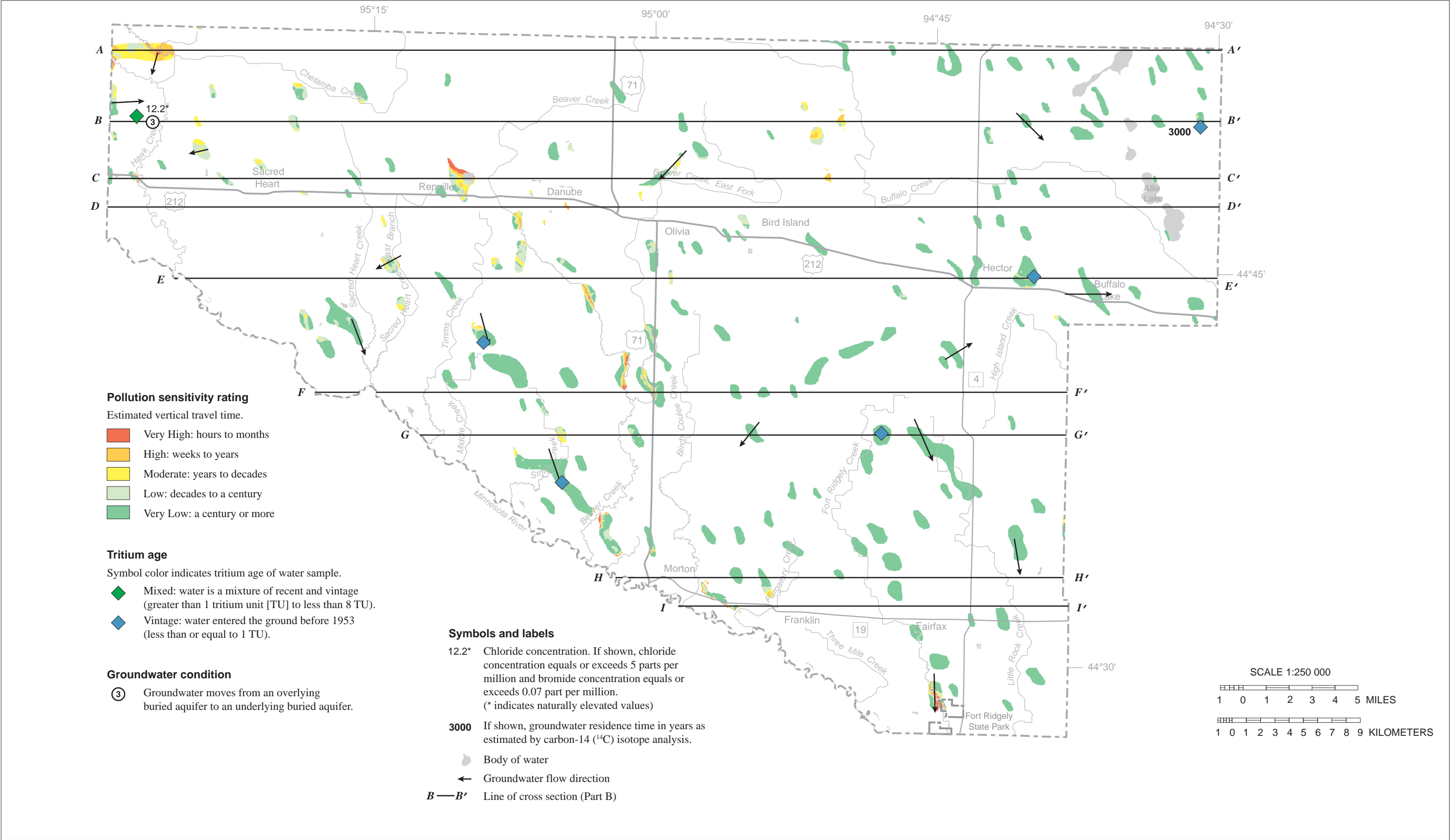


**Map Figure 15. Pollution sensitivity of si buried sand aquifer**  
The si aquifer is generally shallow (average 27 feet) and exhibits low to very high sensitivity.



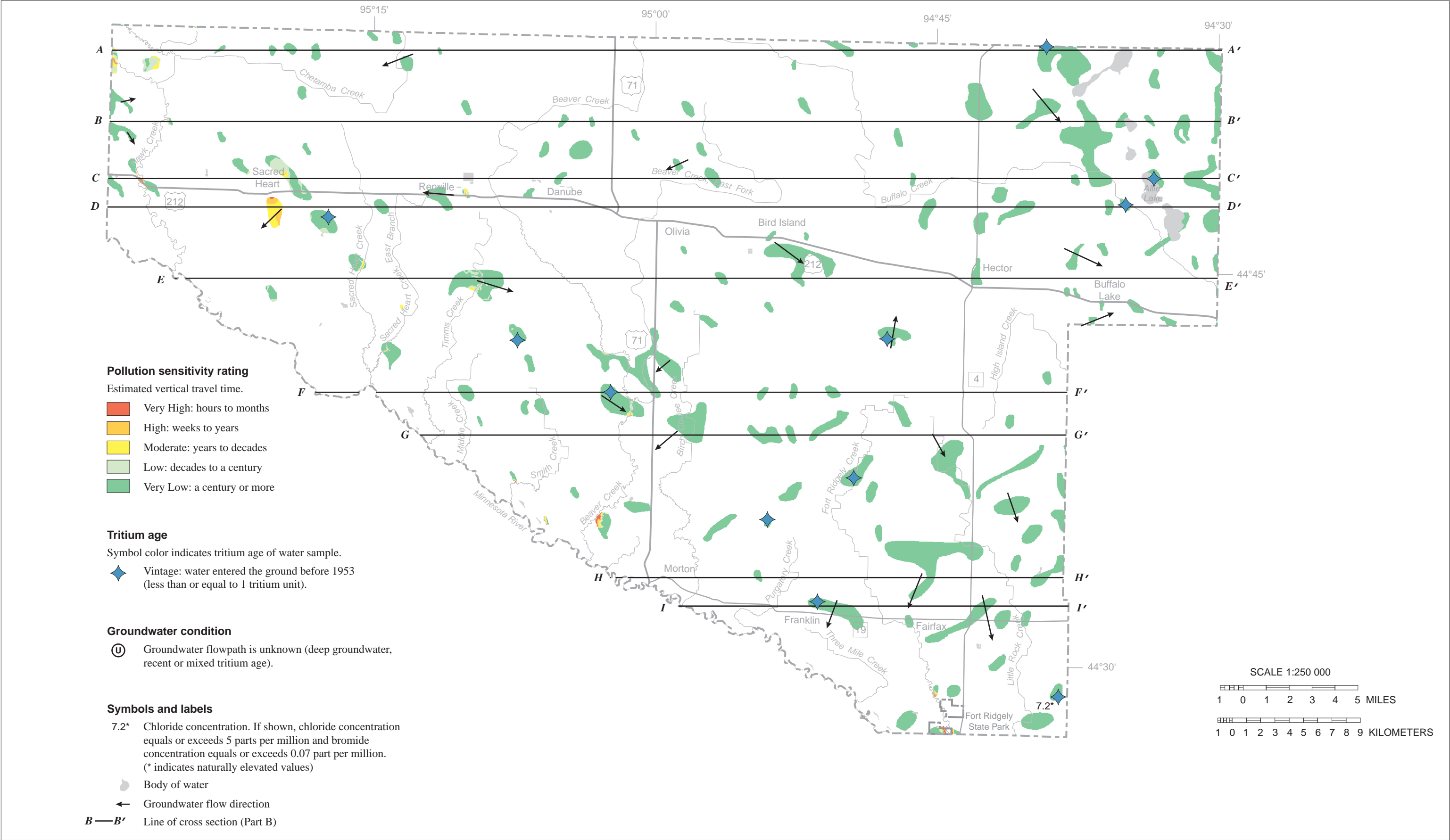






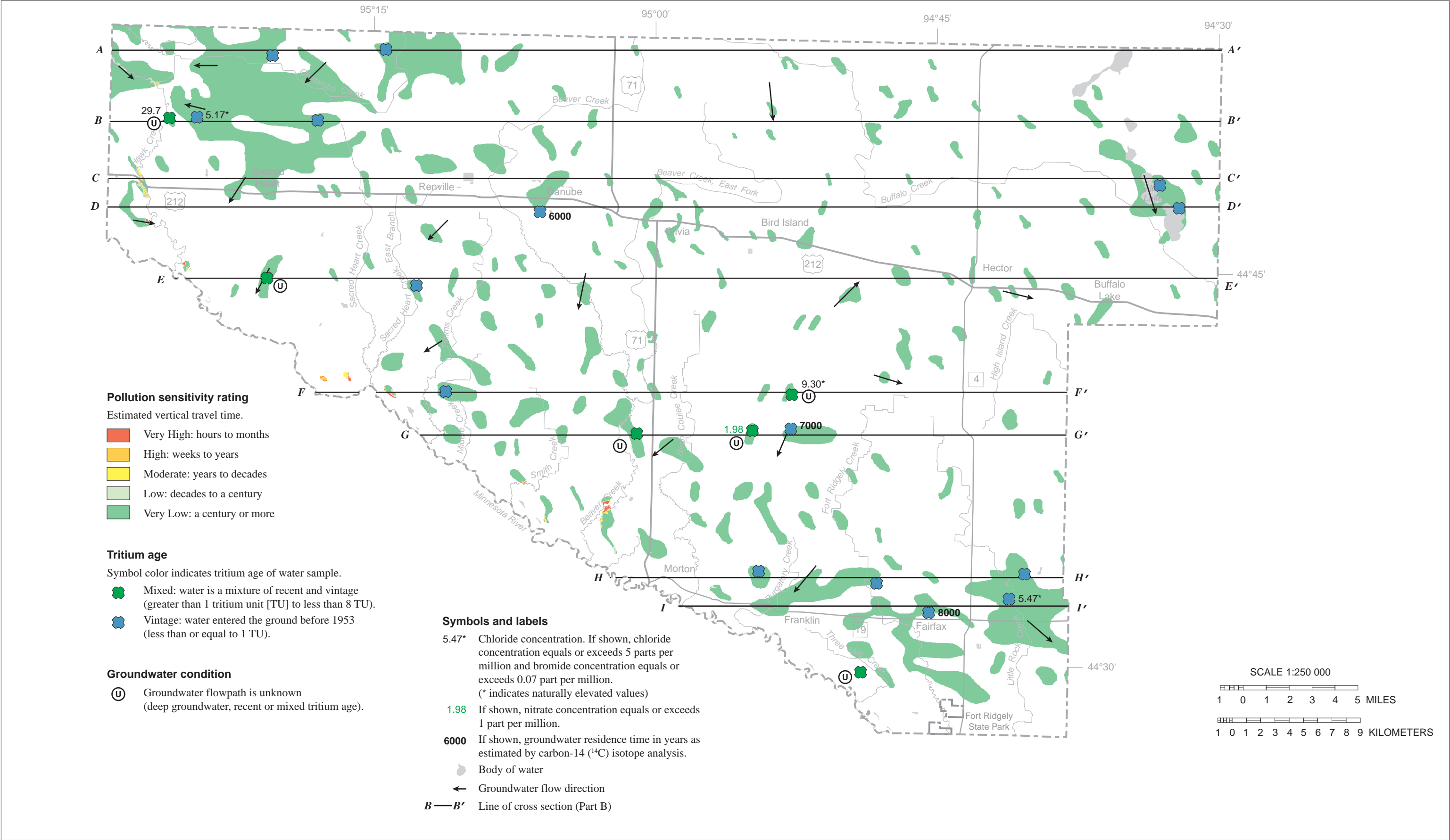
**Map Figure 18. Pollution sensitivity of sg buried sand aquifer**

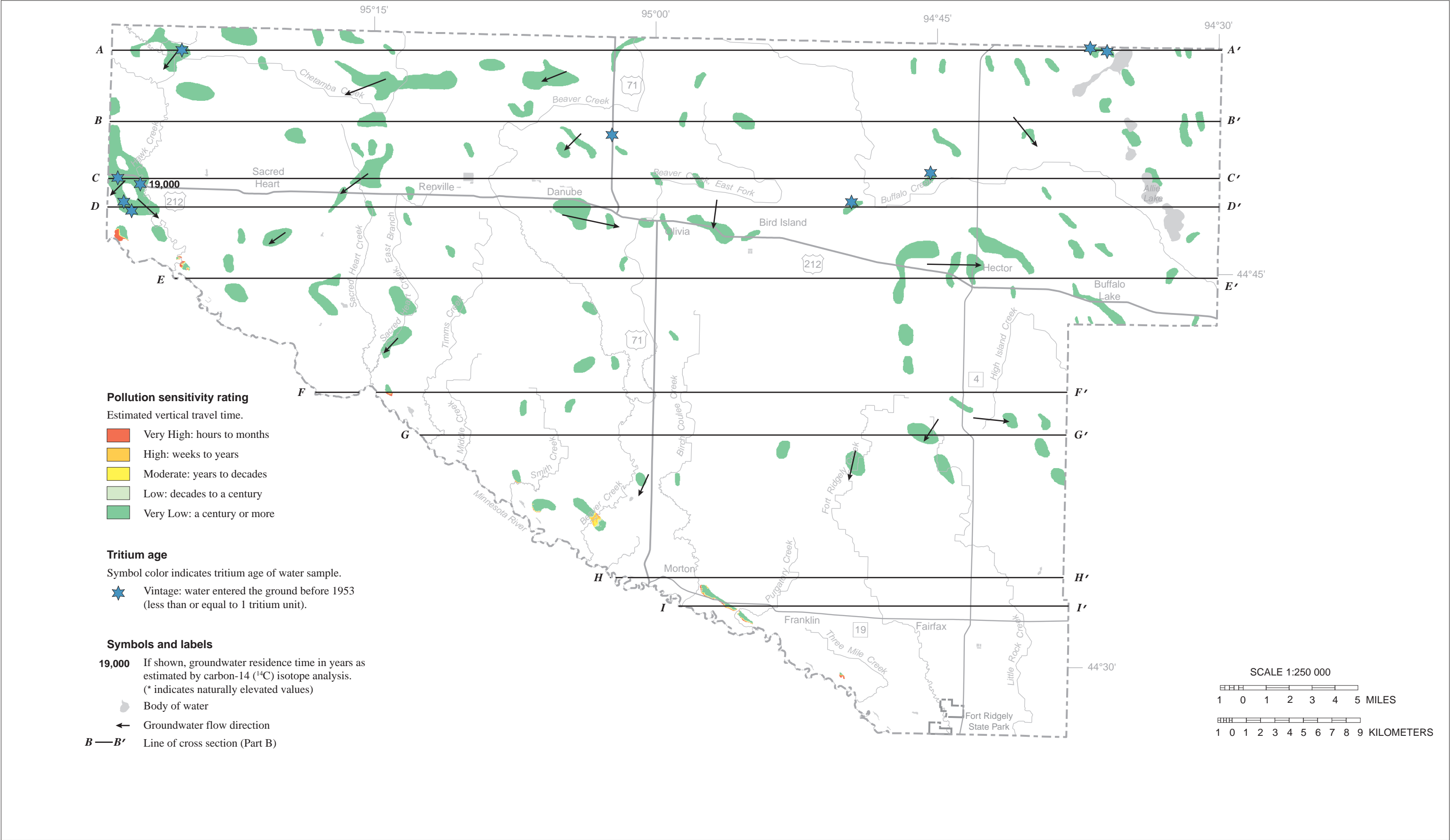
The sg aquifer has a very low pollution sensitivity rating except for shallower occurrences in the north-central and northwestern portions of the county and in river valleys.



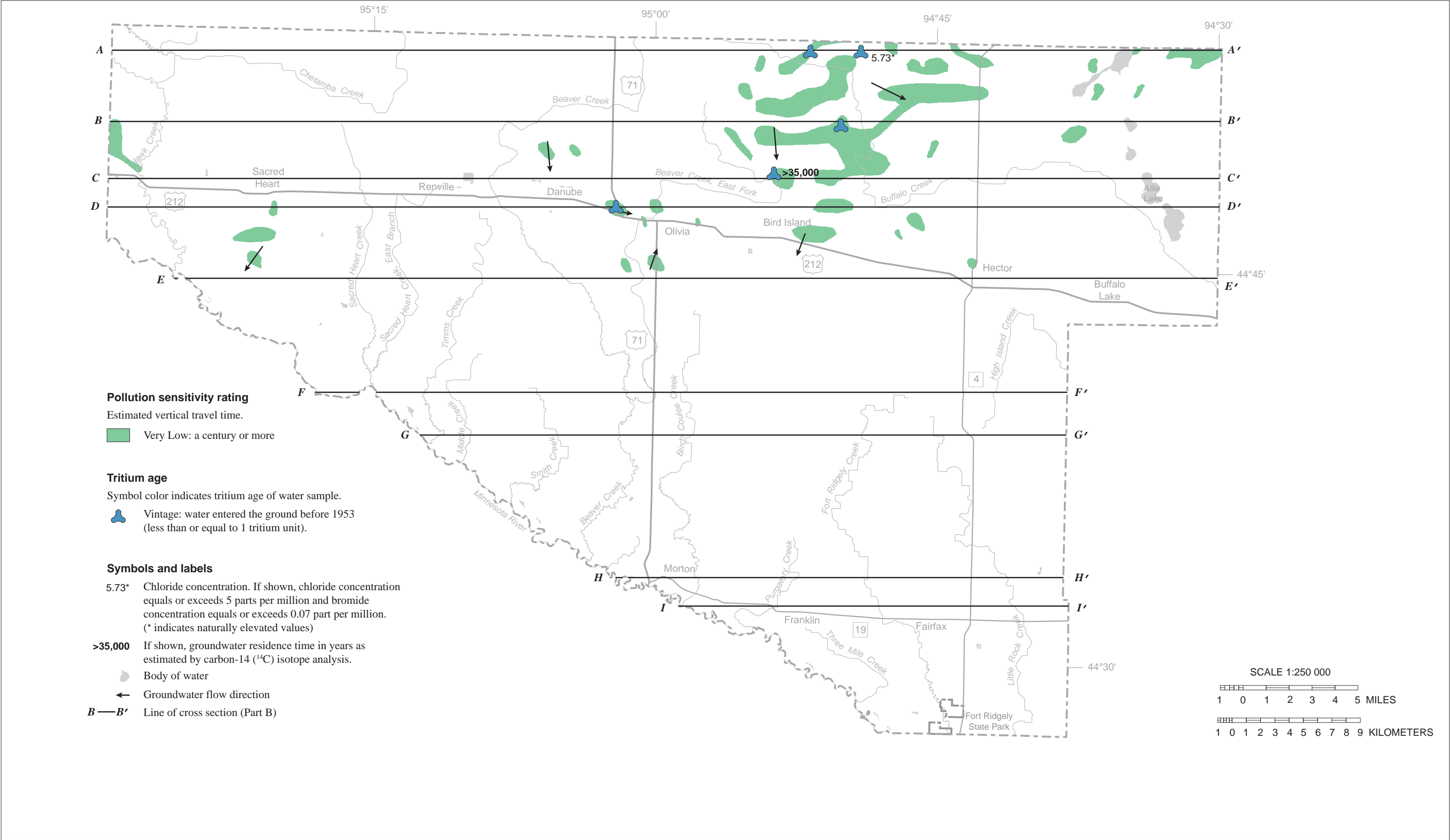
**Map Figure 19. Pollution sensitivity of s2 buried sand aquifer**  
The s2 aquifer has a very low pollution sensitivity rating except for shallower occurrences in the northwest part of the county, and in some river valleys.



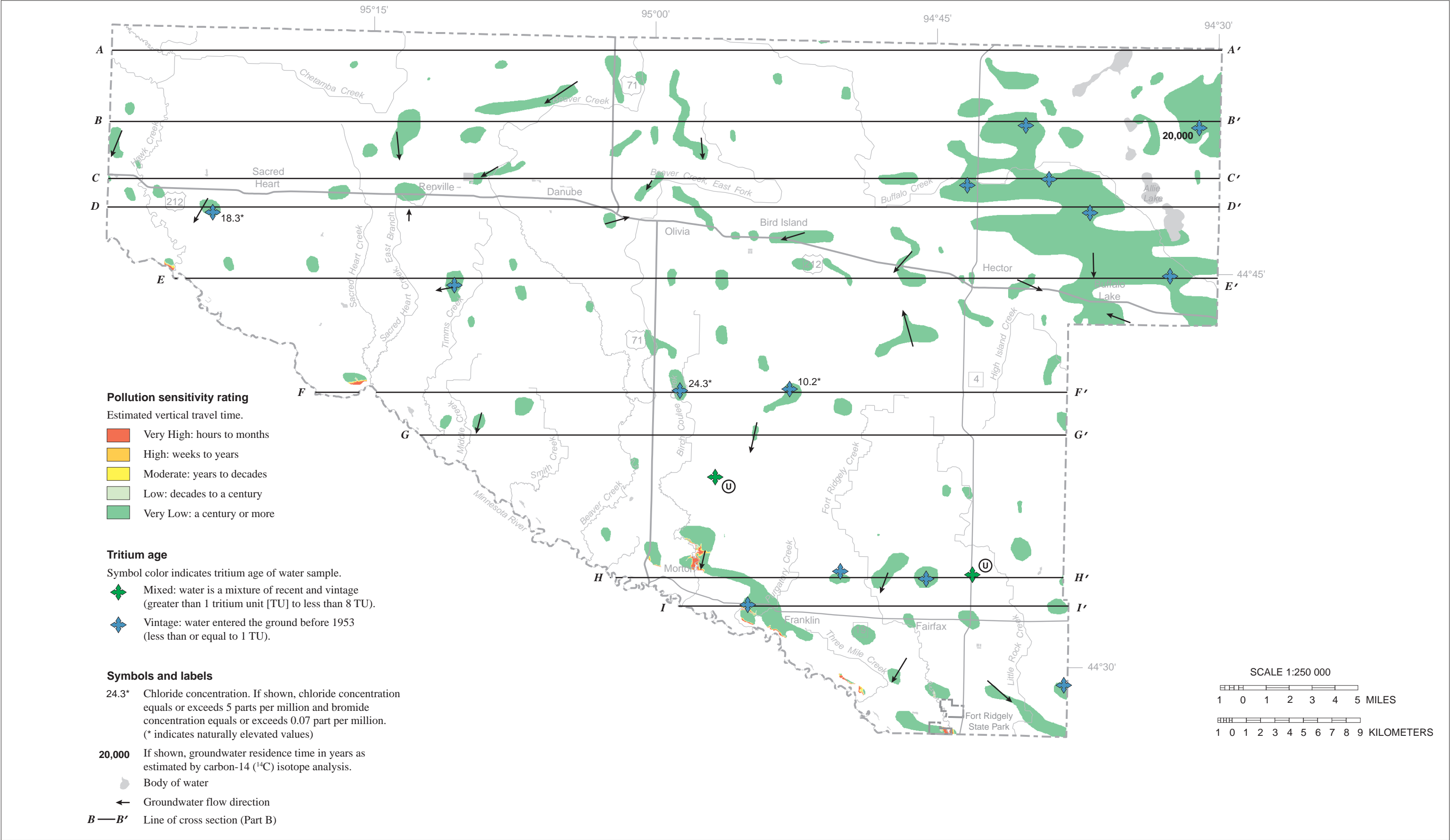


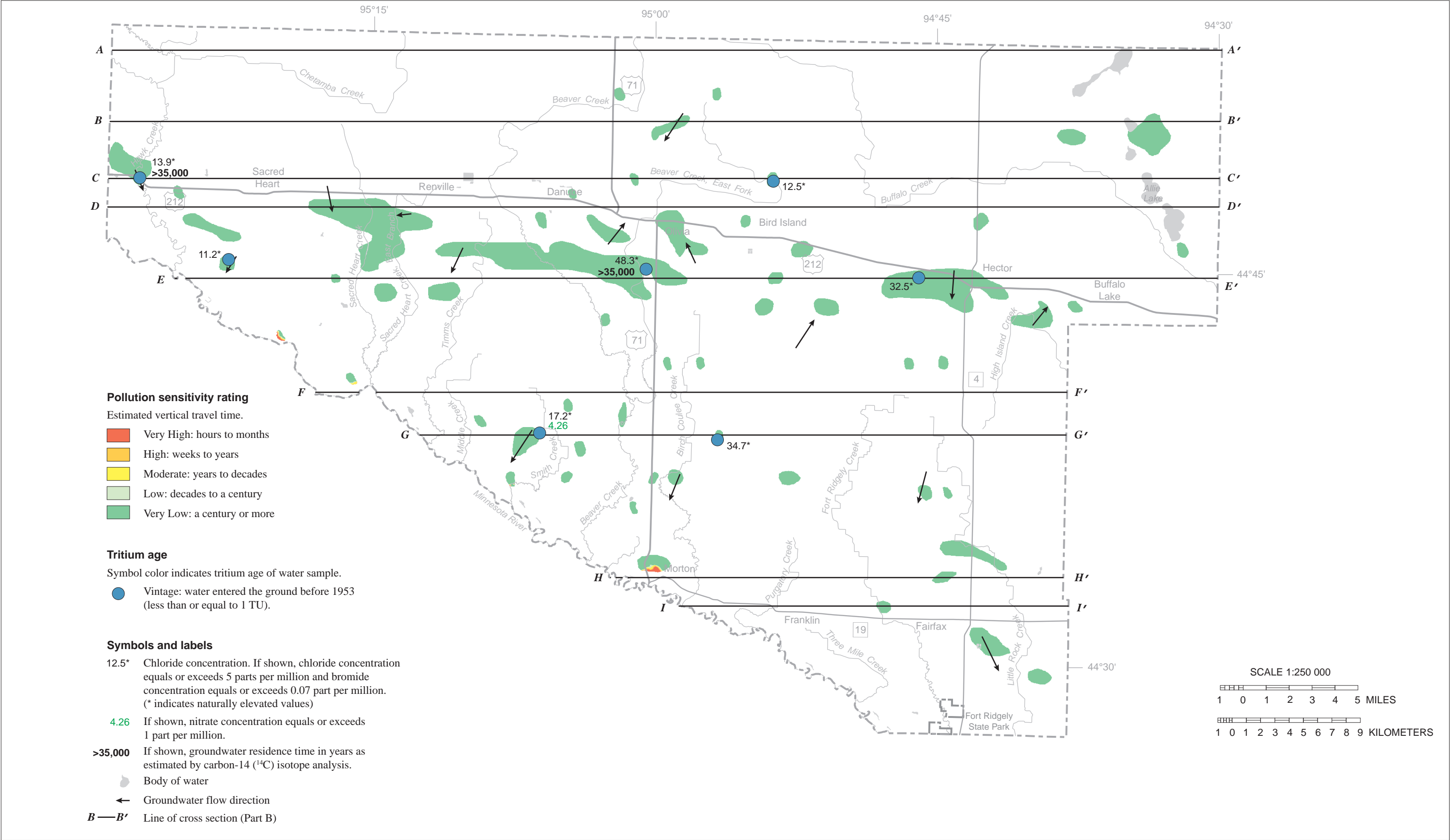


**Map Figure 21. Pollution sensitivity of s4 buried sand aquifer**  
The s4 aquifer has a very low pollution sensitivity rating except for a few locations along the Minnesota River valley and lower portions of its tributaries.



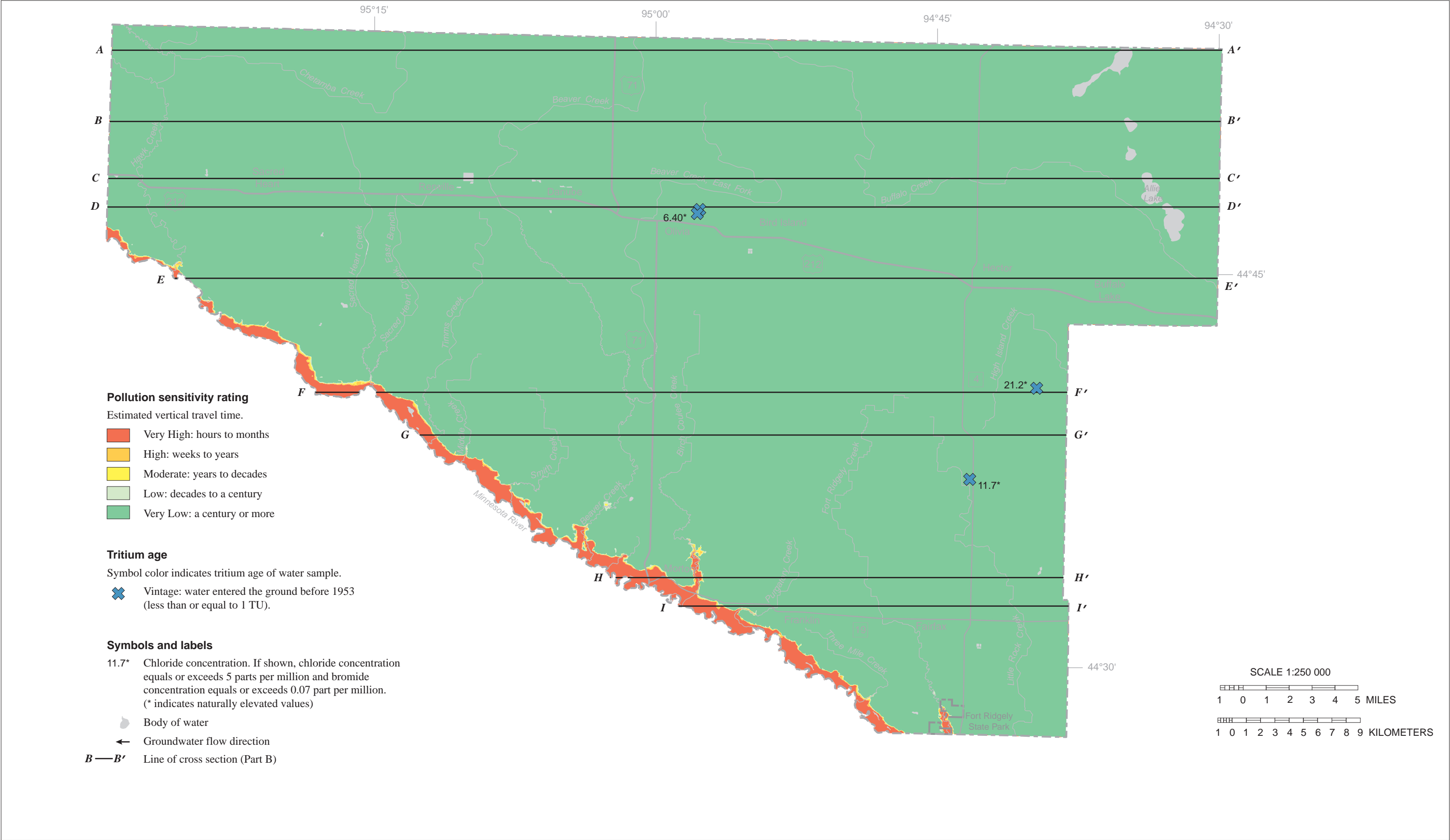
**Map Figure 22. Pollution sensitivity of s5 buried sand aquifer**  
The s5 aquifer generally has a very low pollution sensitivity rating.

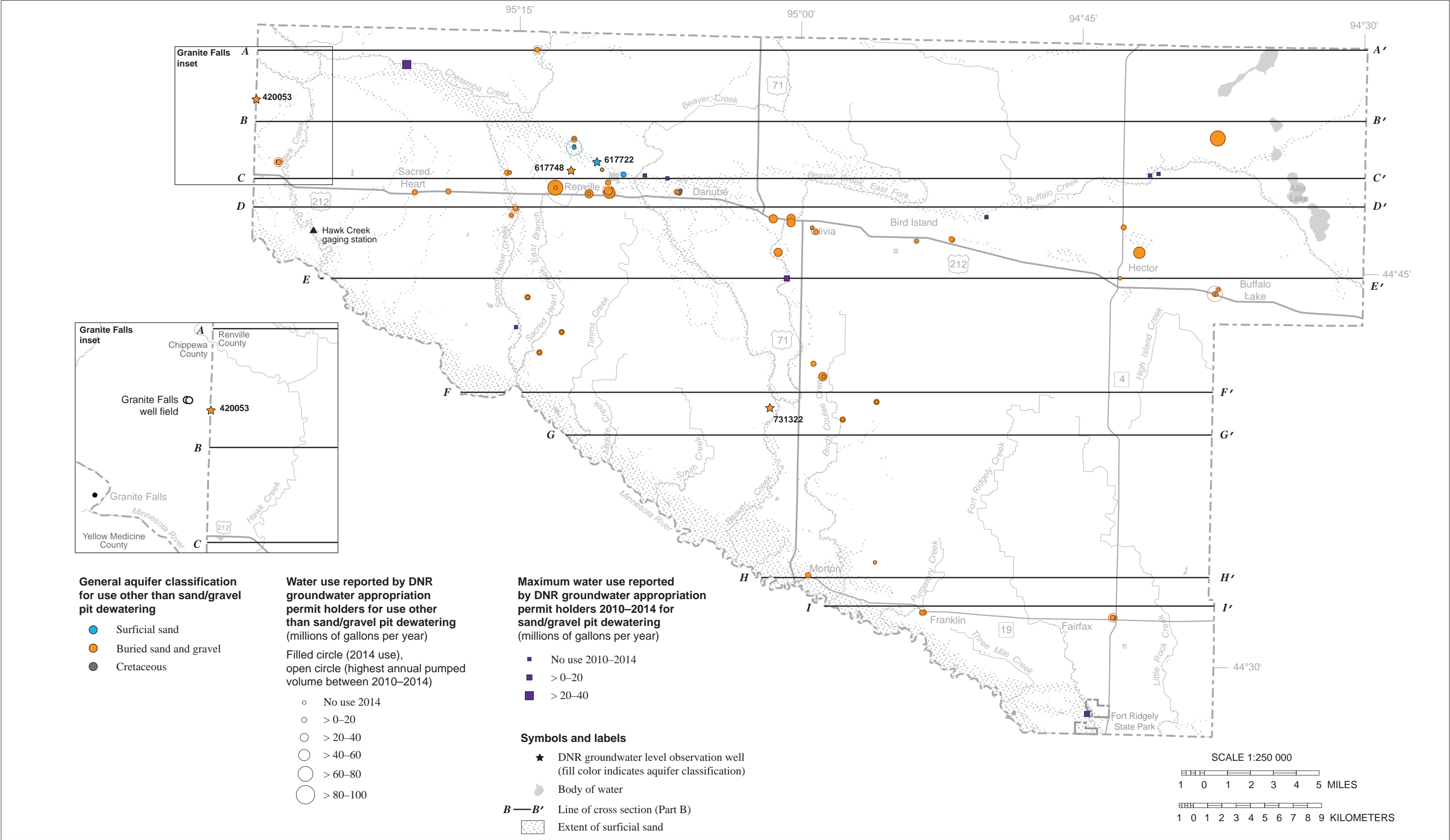


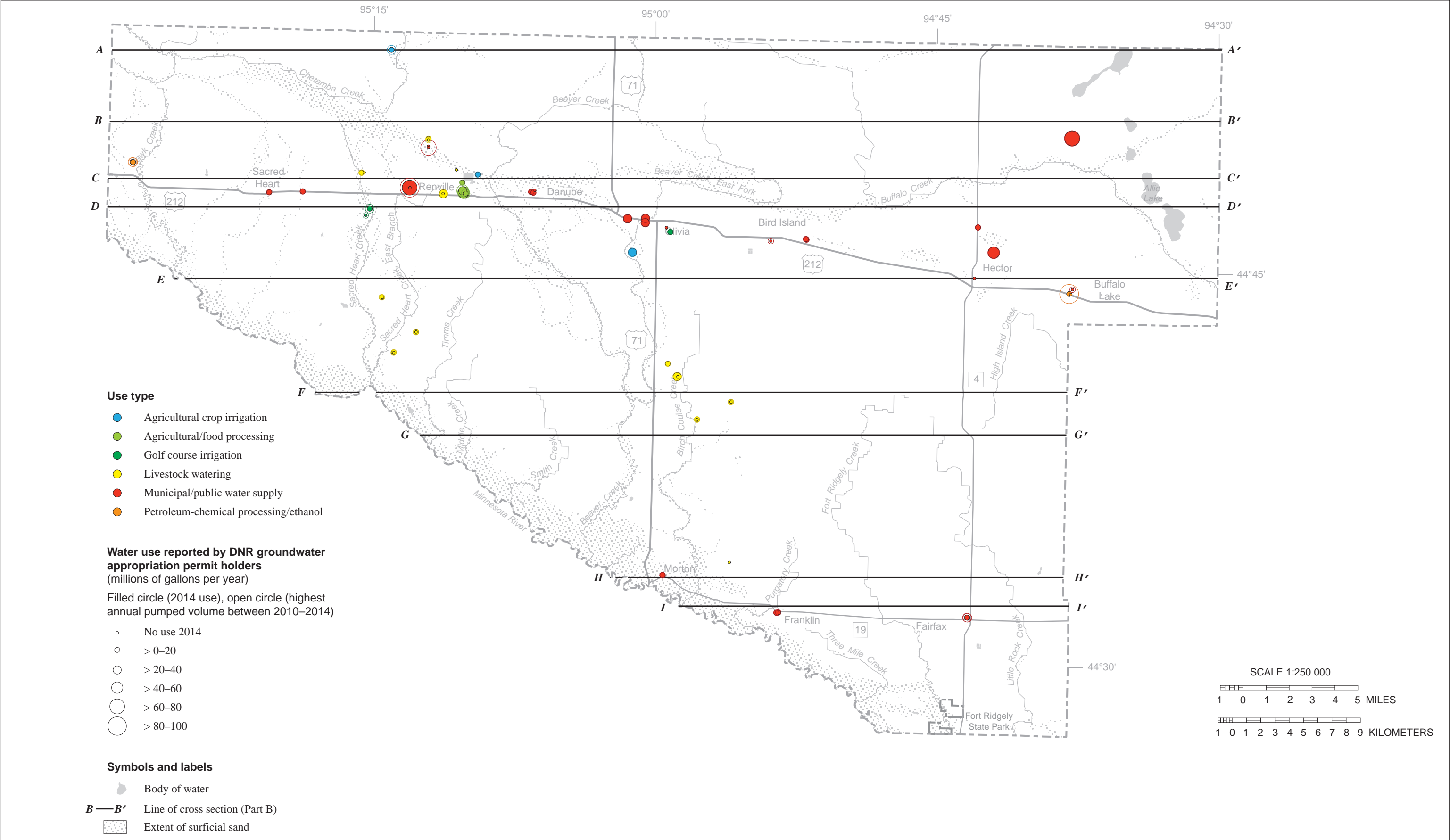


**Map Figure 24. Pollution sensitivity of sz buried sand aquifer**  
The sz aquifer has a very low pollution sensitivity rating except for a few locations along the Minnesota River valley and lower portions of its tributaries.









**Map Figure 27. Groundwater appropriation by water use category**  
The primary use type for the permitted water is municipal/public water supply.

Maps were compiled and generated in a geographic information system. Digital data products are available on the DNR County Geologic Atlas Program [page](#) (mndnr.gov/groundwatermapping).

Maps were prepared from DNR and other publicly available information. Every reasonable effort has been made to ensure the accuracy of the factual data on which the report and map interpretations were based. However, the DNR does not warrant the accuracy, completeness, or any implied uses of these data. Users may wish to verify critical information; sources include both the references here and information on file in the offices of the Minnesota Geological Survey and the DNR. Every effort has been made to ensure the interpretations conform to sound geologic and cartographic principles. These maps should not be used to establish legal title, boundaries, or locations of improvements.

These bases were modified from Minnesota Geological Survey, Renville County Geologic Atlas, Part A, 2013. Universal Transverse Mercator projection, zone 15, North American Datum of 1983. North American Vertical Datum of 1988.



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