APPENDIX A
FIGURES AND MAPS

Watershed Characterization

Figure A-1. Location of the Blackfoot River Watershed

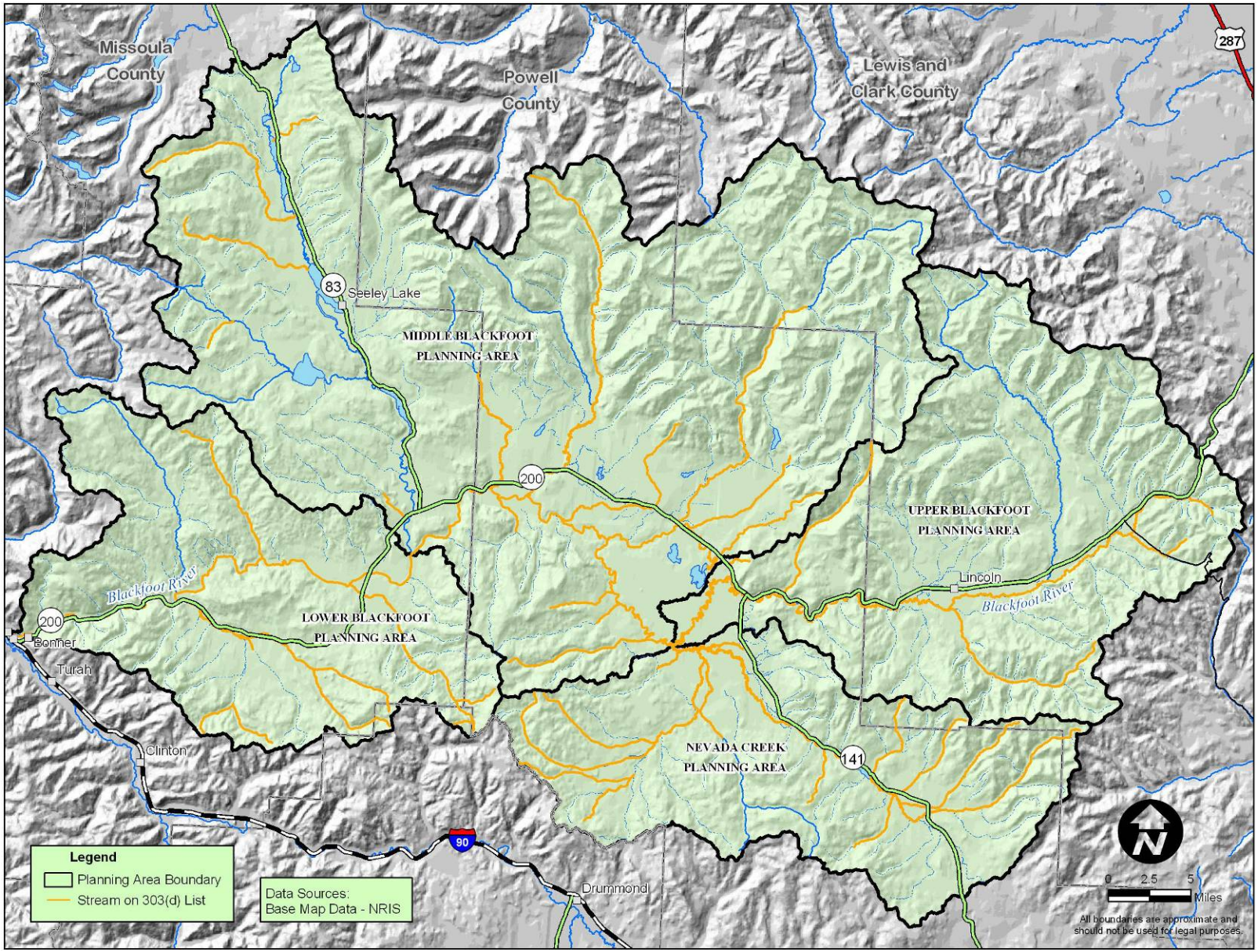

Figure A-2. TMDL Planning Areas in the Blackfoot River Watershed

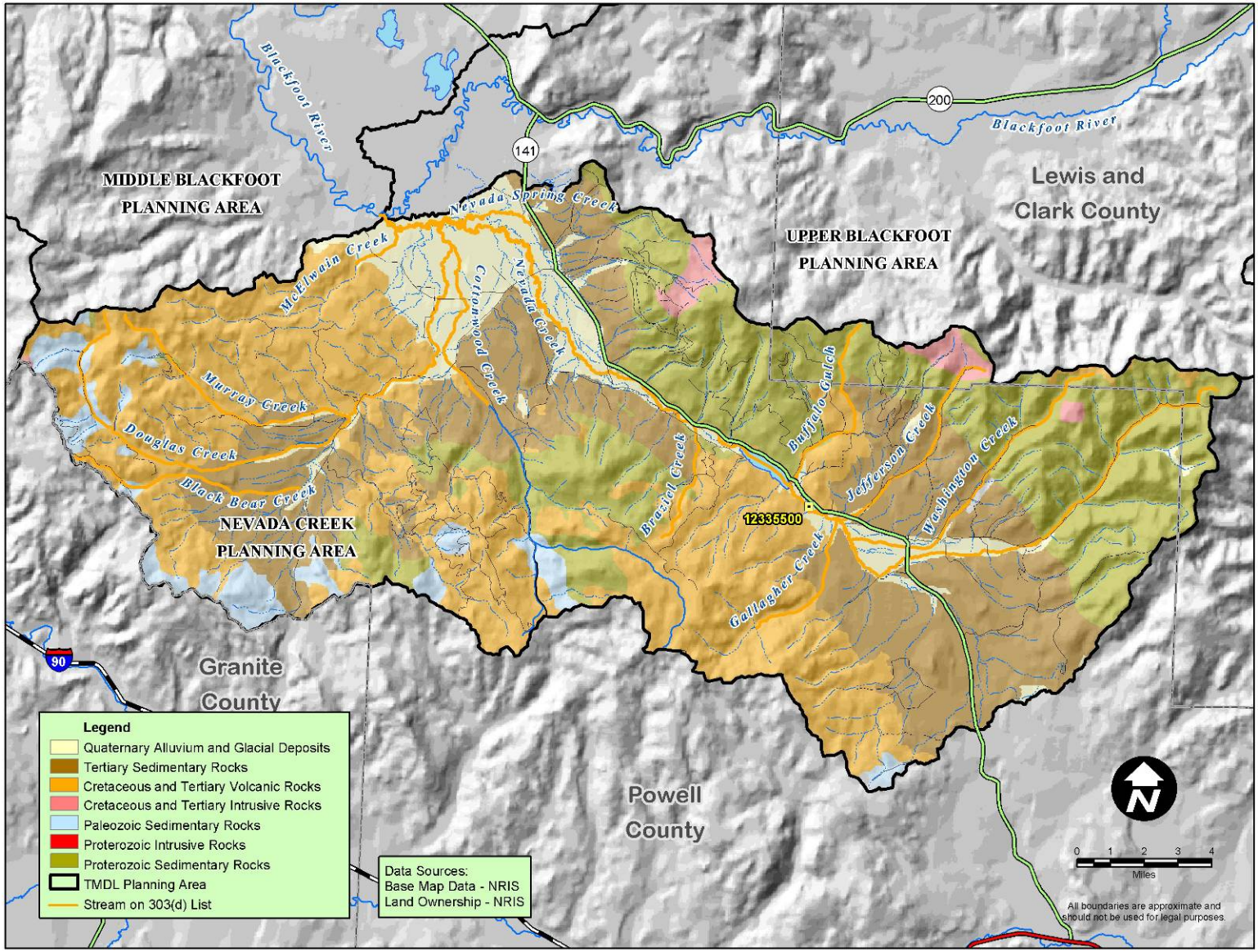

Figure A-3. Geology of the Nevada Creek Planning Area

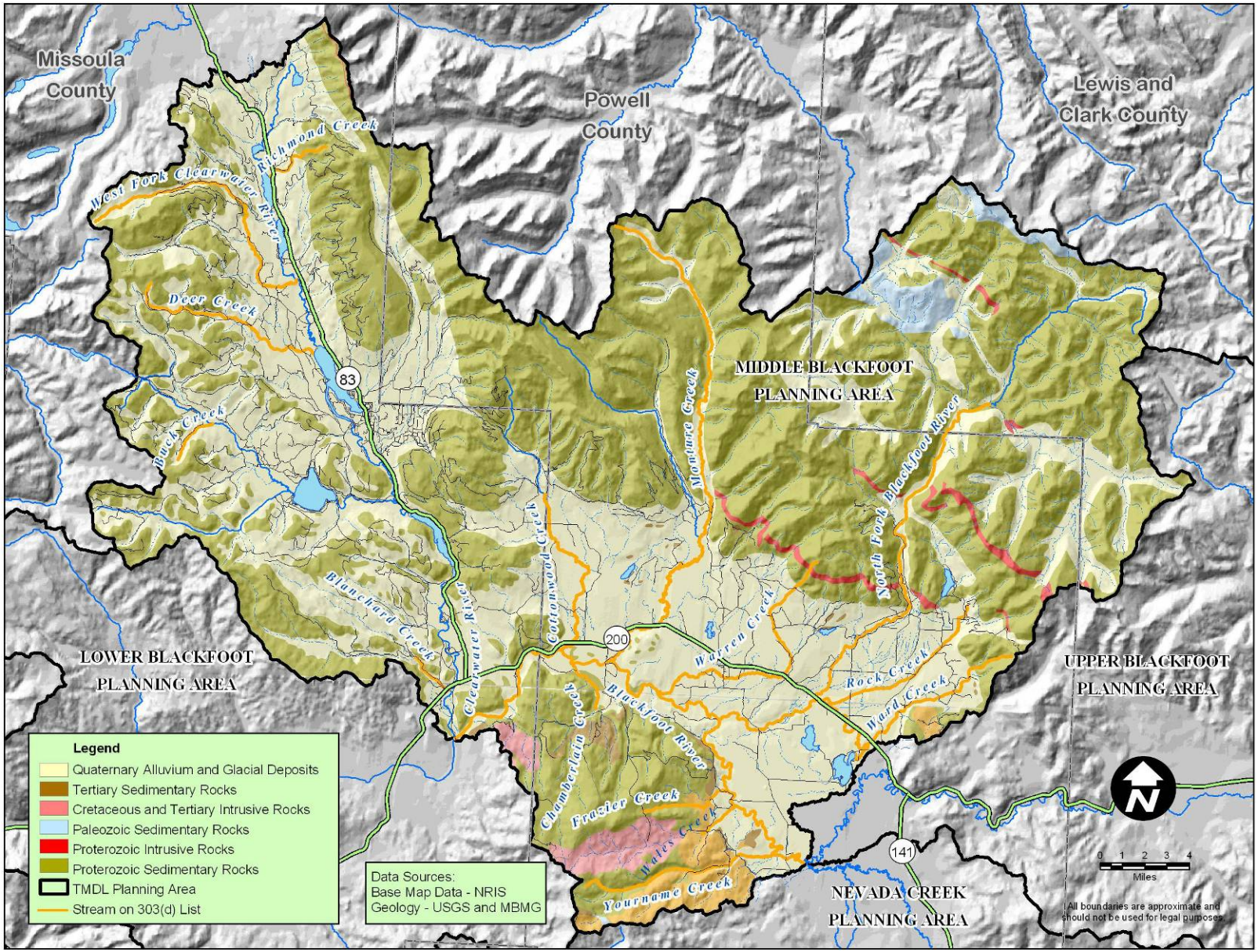

Figure A-4. Geology of the Middle Blackfoot Planning Area

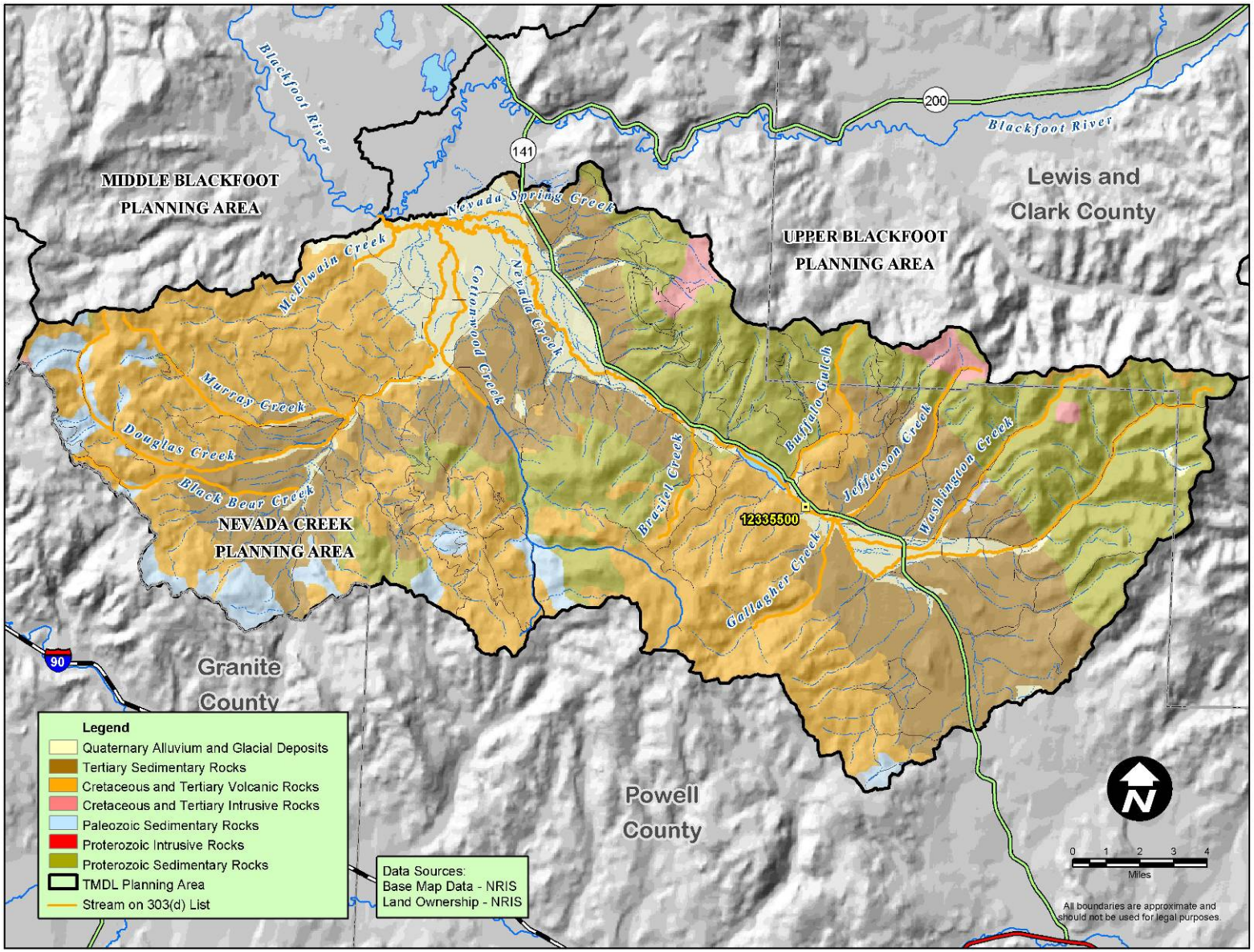

Figure A-5. Soils in the Nevada Creek planning area

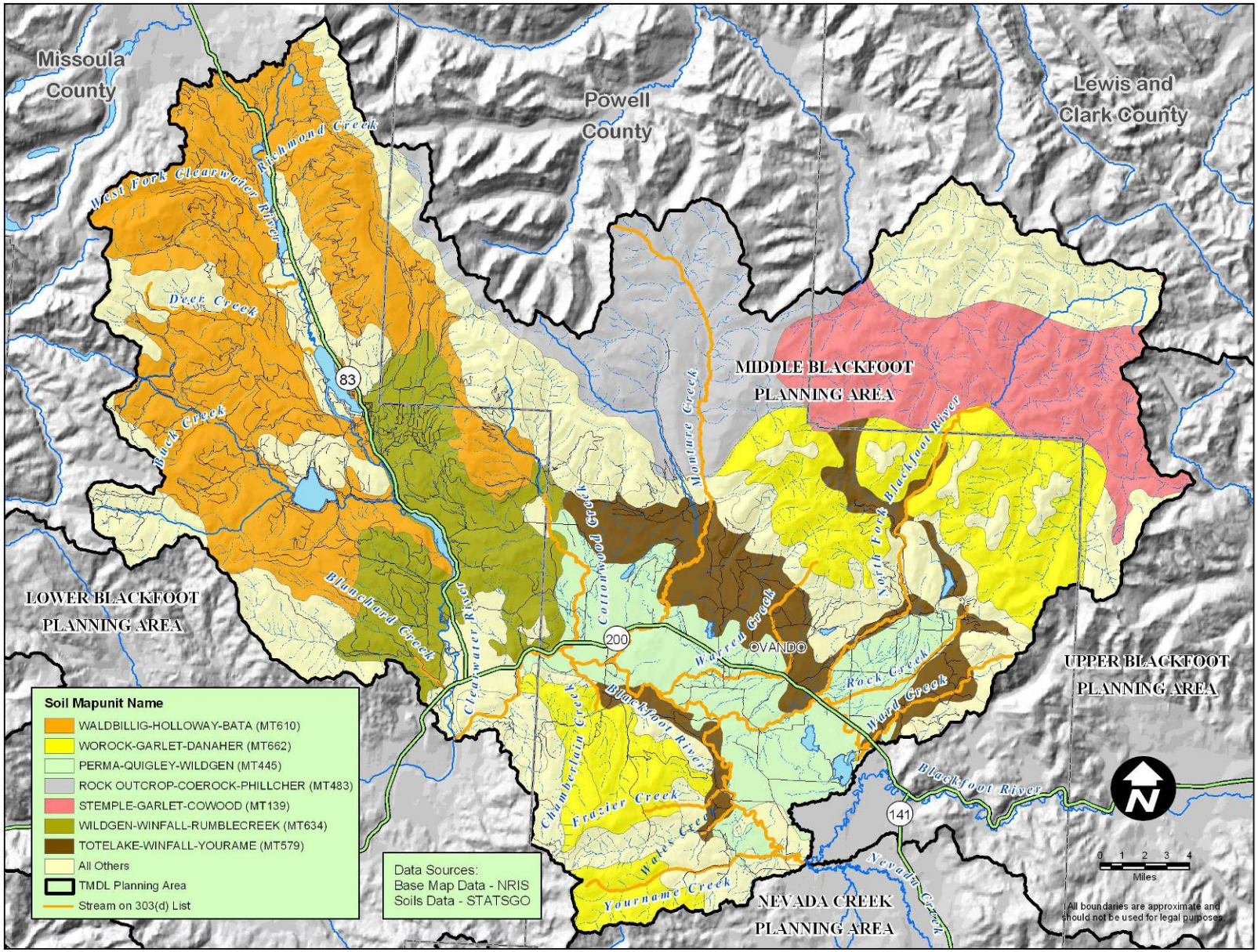

Figure A-6. Soils in the Middle Blackfoot Planning Area

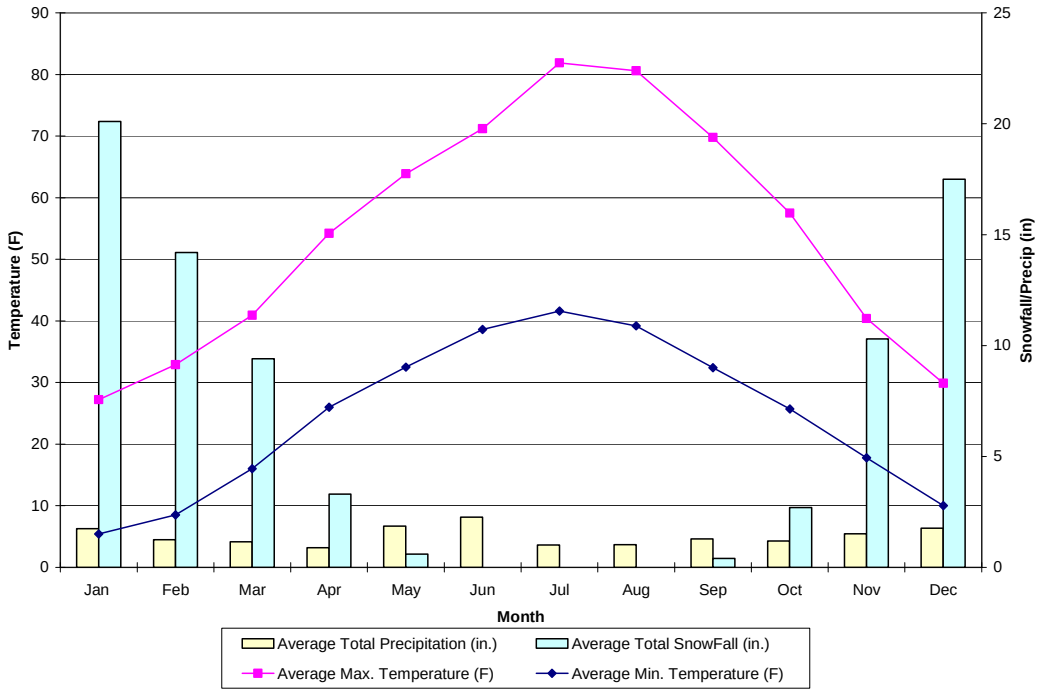

Figure A-7. Average Total Precipitation, Total Snowfall, Average Maximum Temperature and Minimum Temperature at NOAA Ovando Station #246302

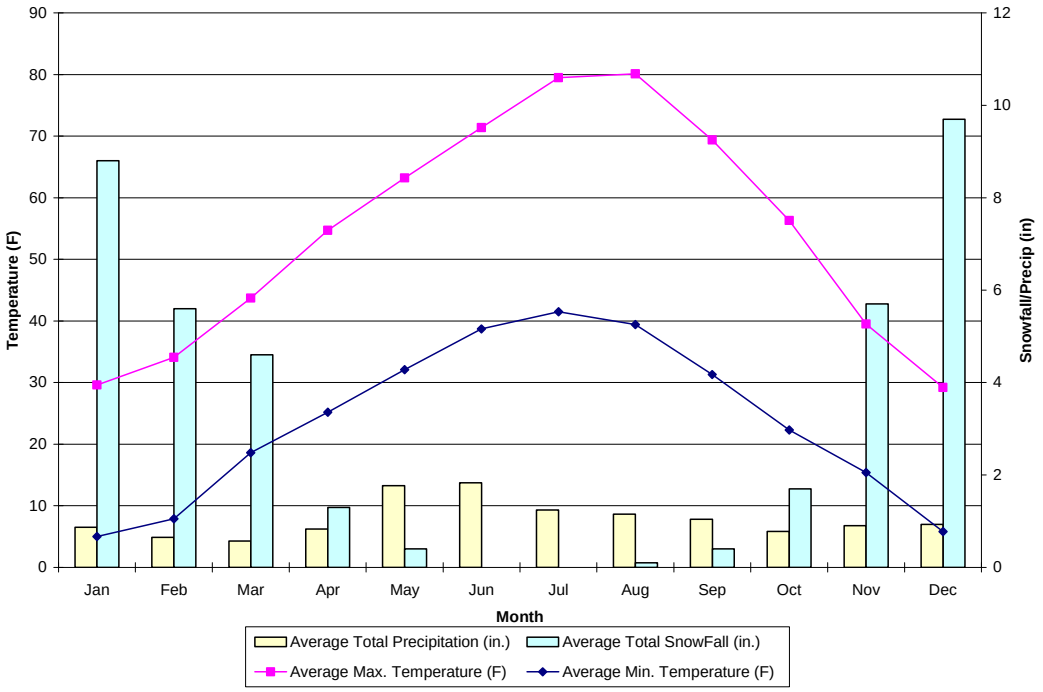

Figure A-8. Average Total Precipitation, Total Snowfall, Average Maximum Temperature and Minimum Temperature at NOAA Ovando 9 SSE Station #246304

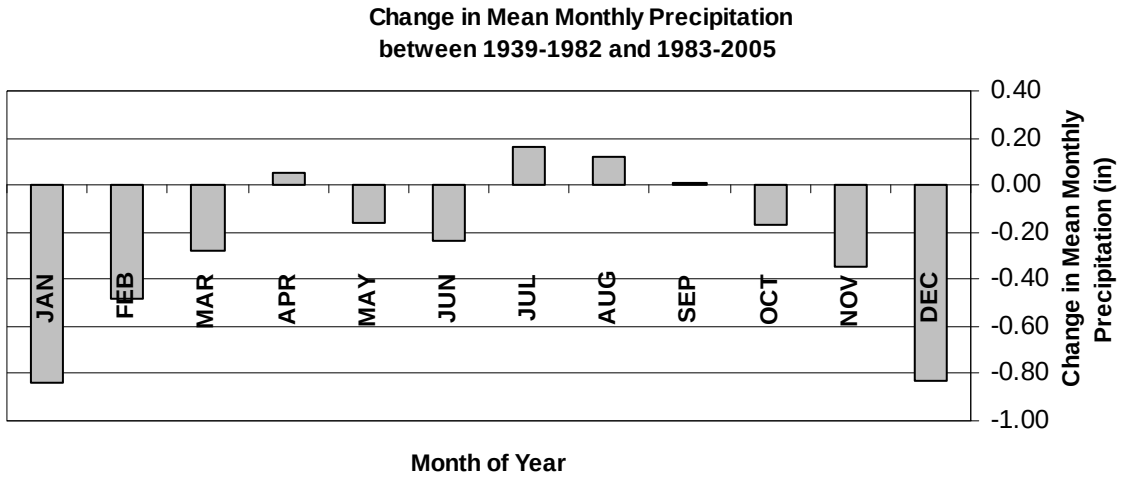

Figure A-9. Change in Mean Monthly Precipitation (Inches) From 1939-1982 and 1983-2005 Recorded at the Ovando Climate Stations

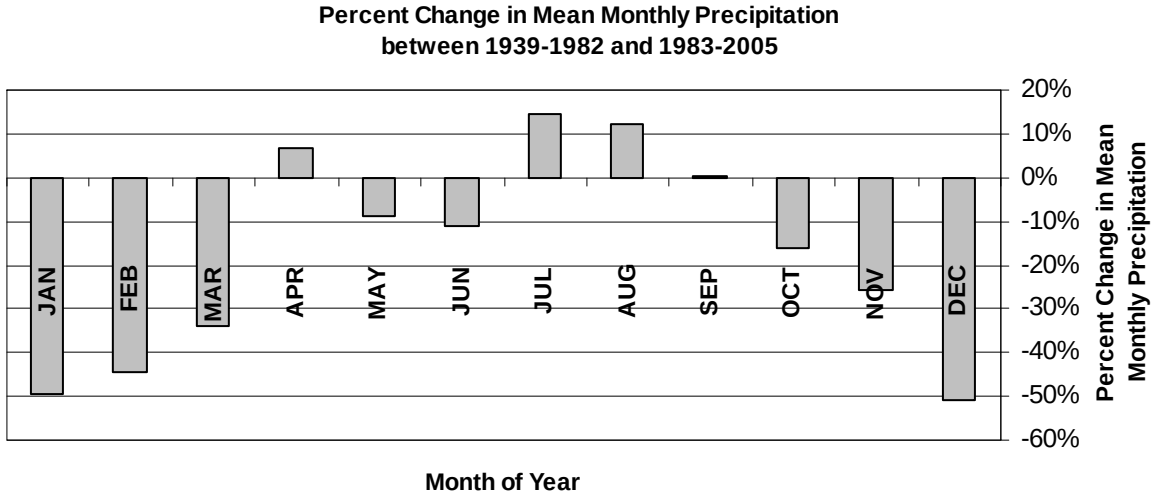

Figure A-10. Percent Change in Mean Monthly Precipitation (Inches) From 1939-1982 and 1983-2005 Recorded at the Ovando Climate Stations

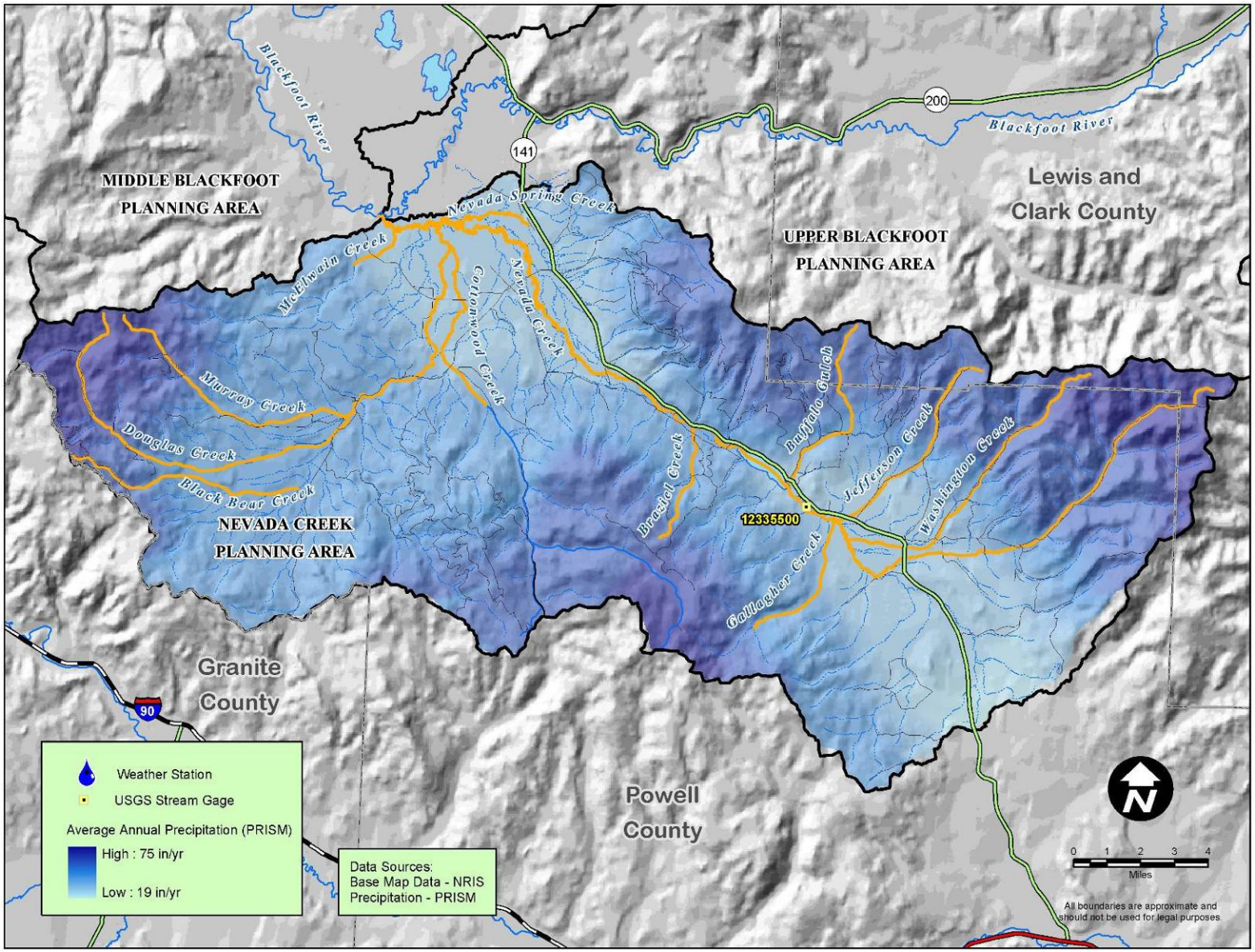

Figure A-11. Precipitation in the Nevada Creek Planning Area (PRISM data)

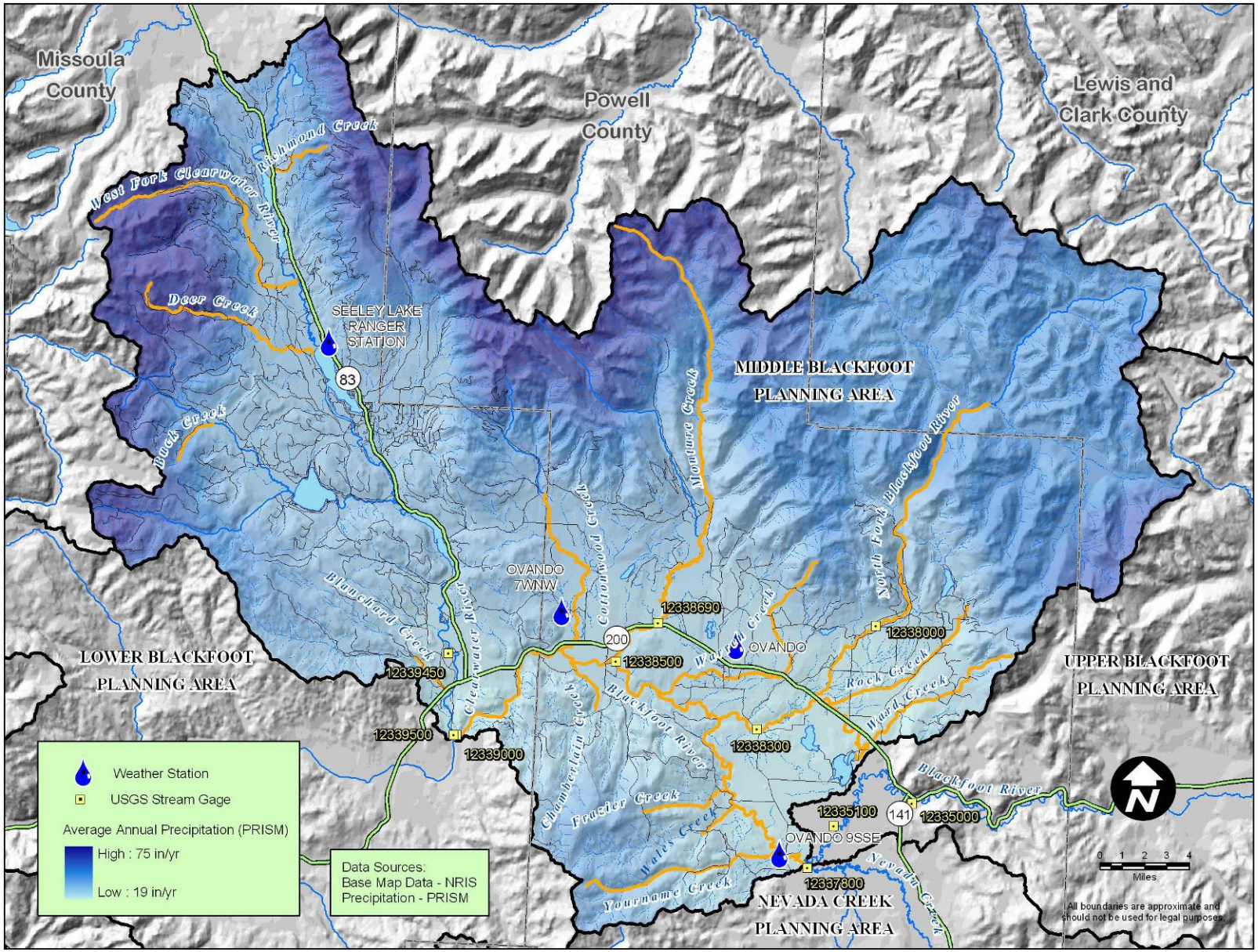

Figure A-12. Precipitation in the Middle Blackfoot Planning Area (PRISM data)

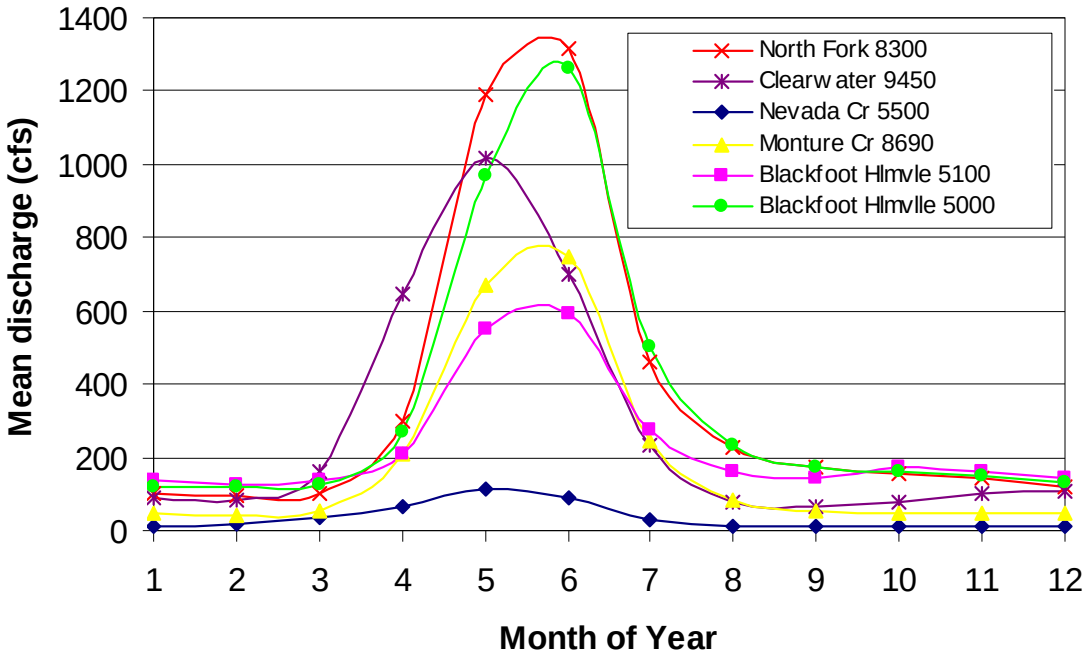

Figure A-13. Mean Monthly Discharge, Blackfoot River and Tributaries

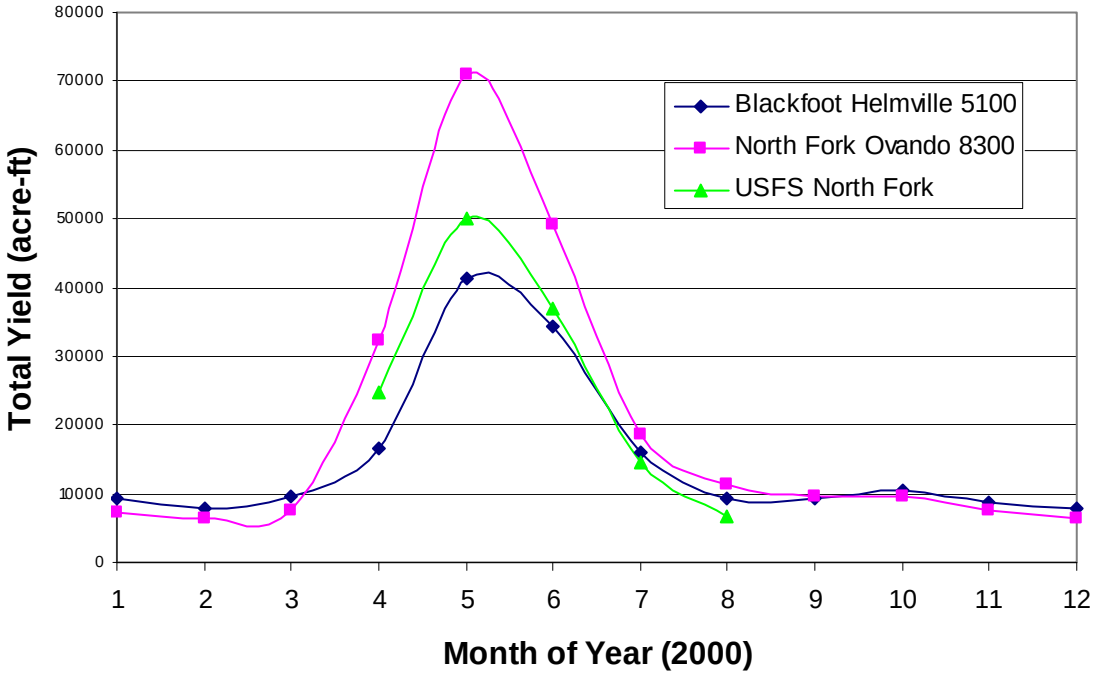

Figure A-14. Monthly Yield for the North Fork and Mainstem Blackfoot River, 2000

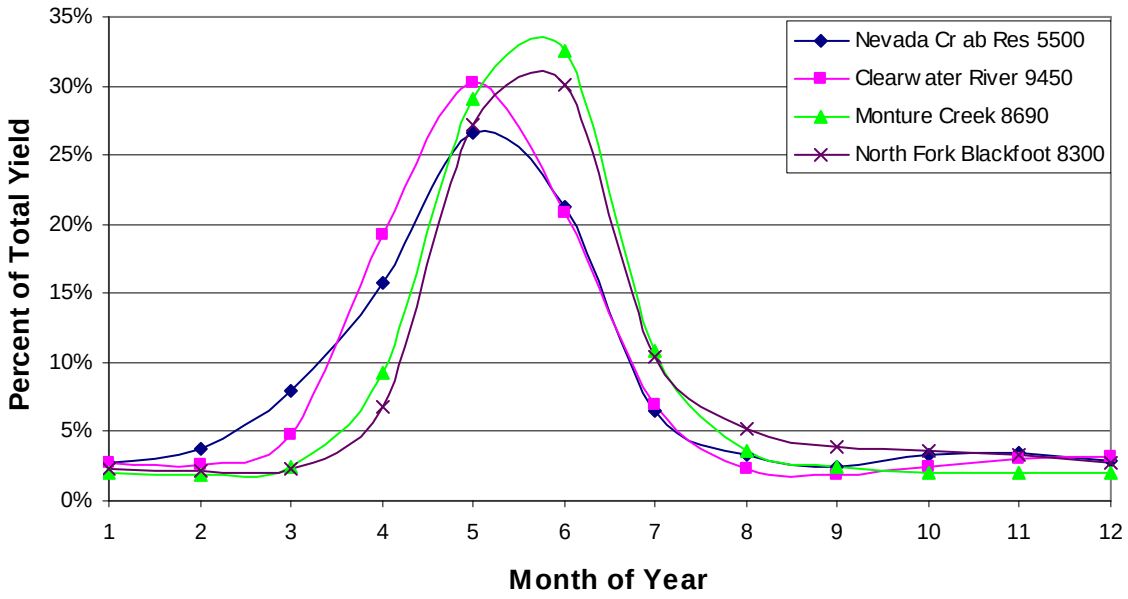

Figure A-15. Percent of Total Annual Water Yield by Month, for Major Blackfoot River Tributaries

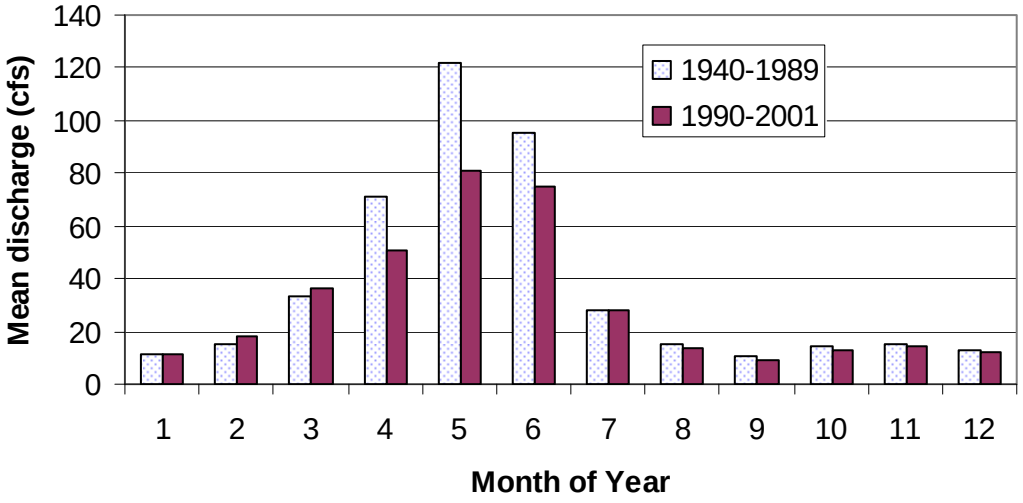

Figure A-16. Mean Monthly Discharge, Nevada Creek Above Nevada Lake (USGS Gage 12335500)

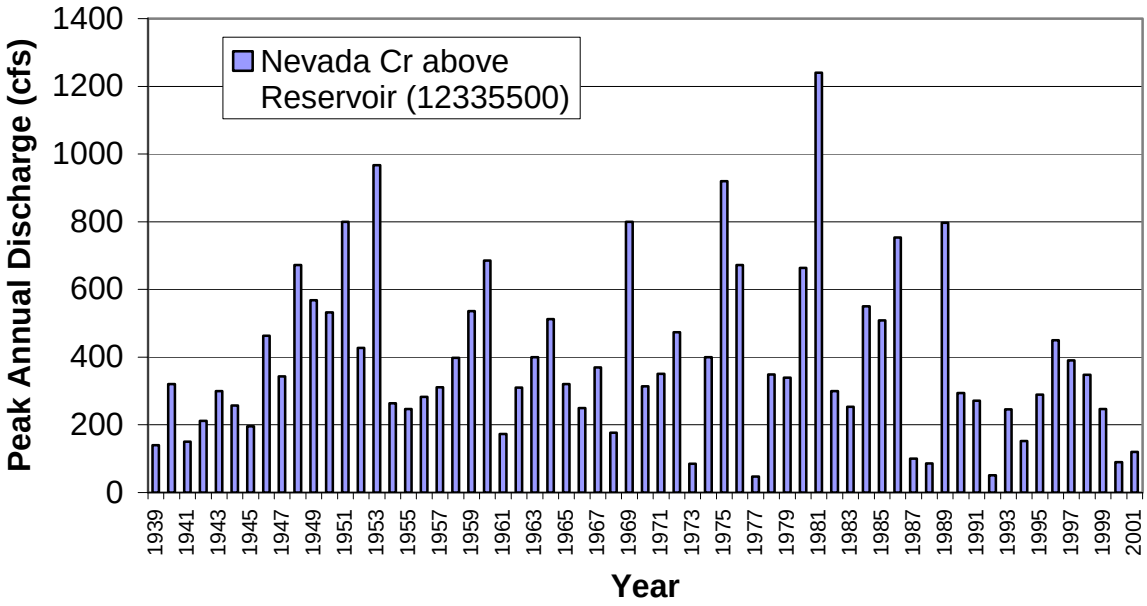

Figure A-17. Annual Peak Flows, Nevada Creek above the Reservoir (12335500)

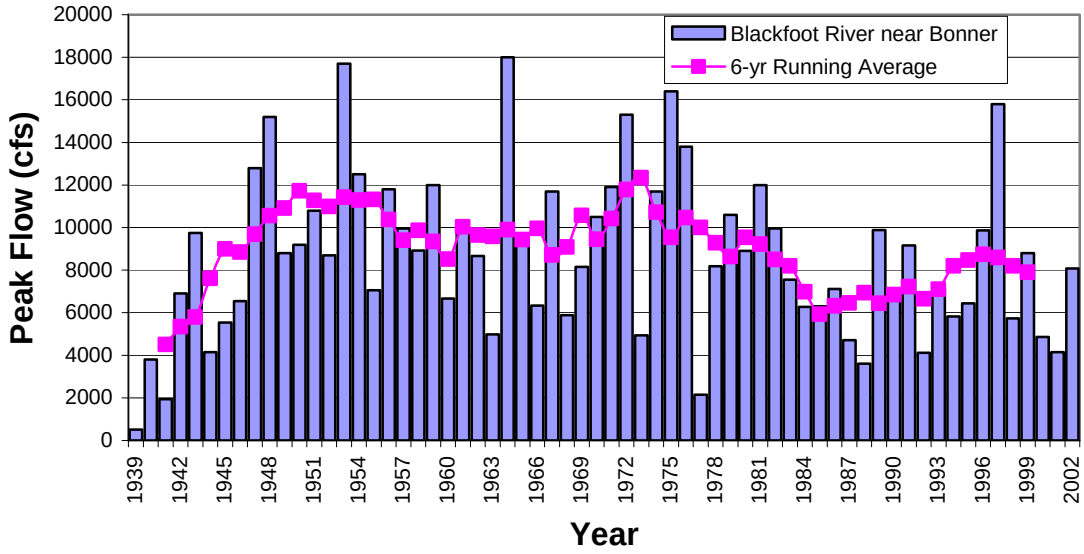

Figure A-18. Annual Peak Discharge, Blackfoot River near Bonner (12340000)

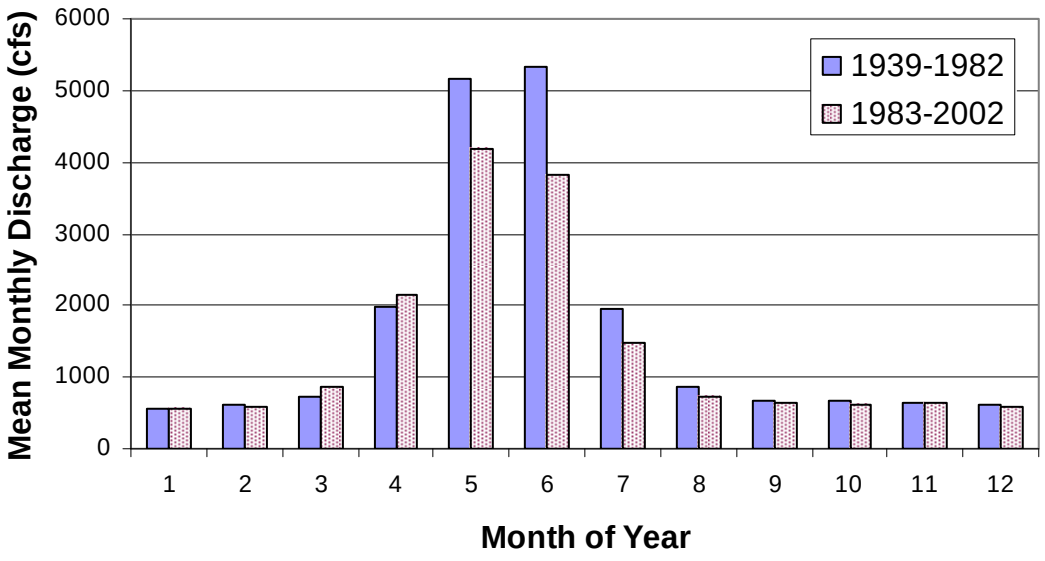

Figure A-19. Mean Monthly Discharge, Blackfoot River near Bonner (1234000), 1939-1982 and 1983-2002

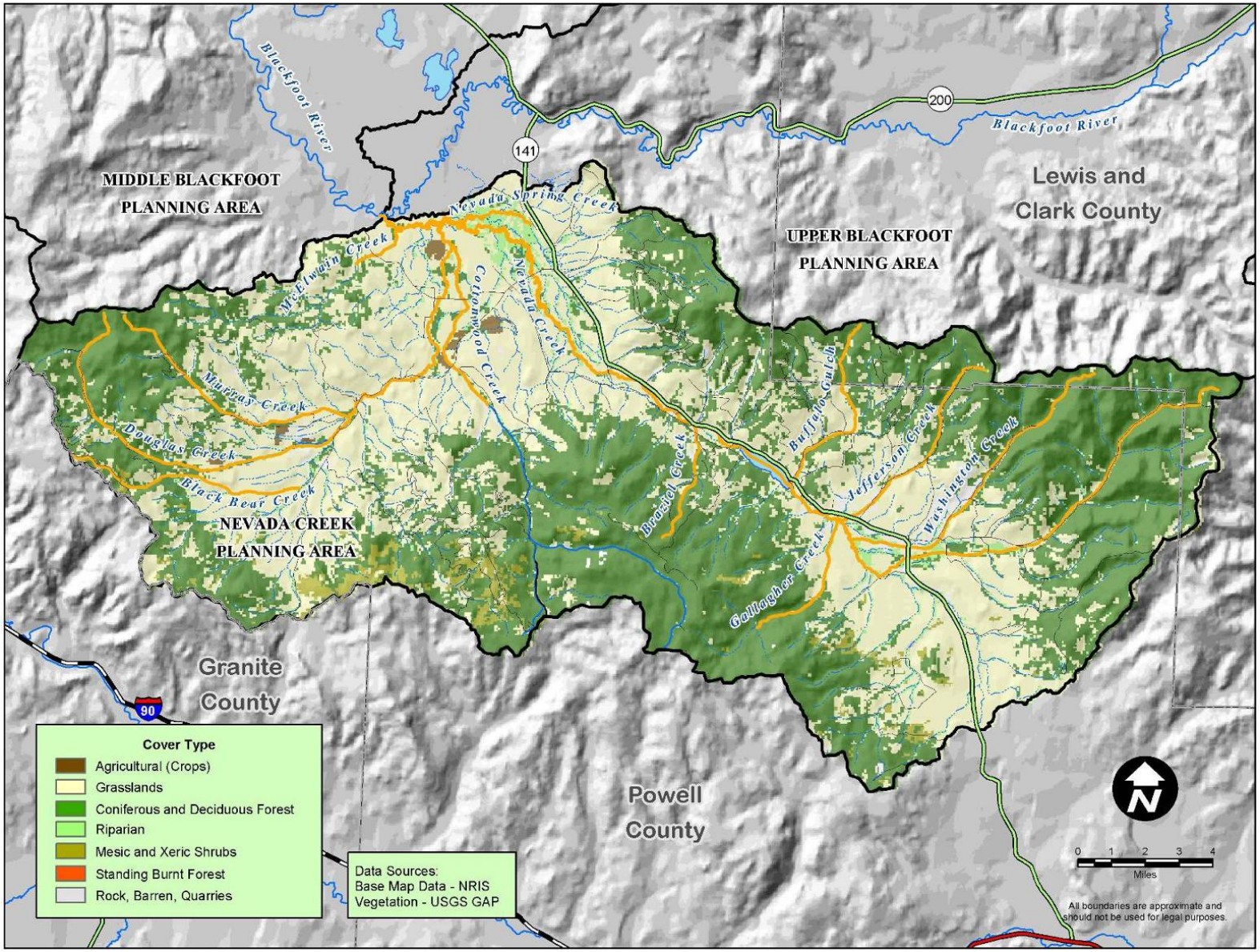

Figure A-20. Major Vegetation Cover Types in the Nevada Creek Planning Area (USGS GAP)

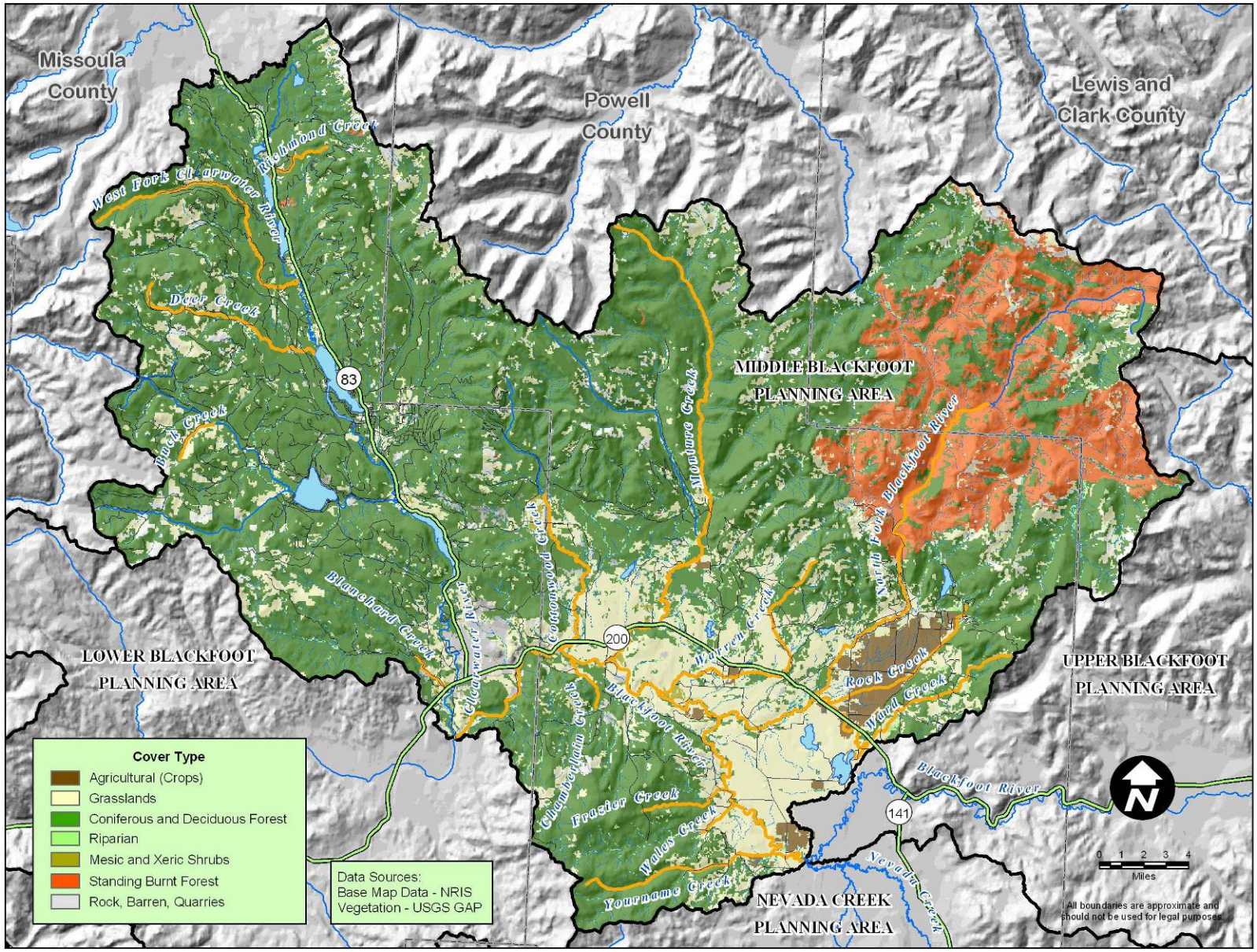

Figure A-21. Major Vegetation Cover Types in the Middle Blackfoot Planning Area (USGS GAP)

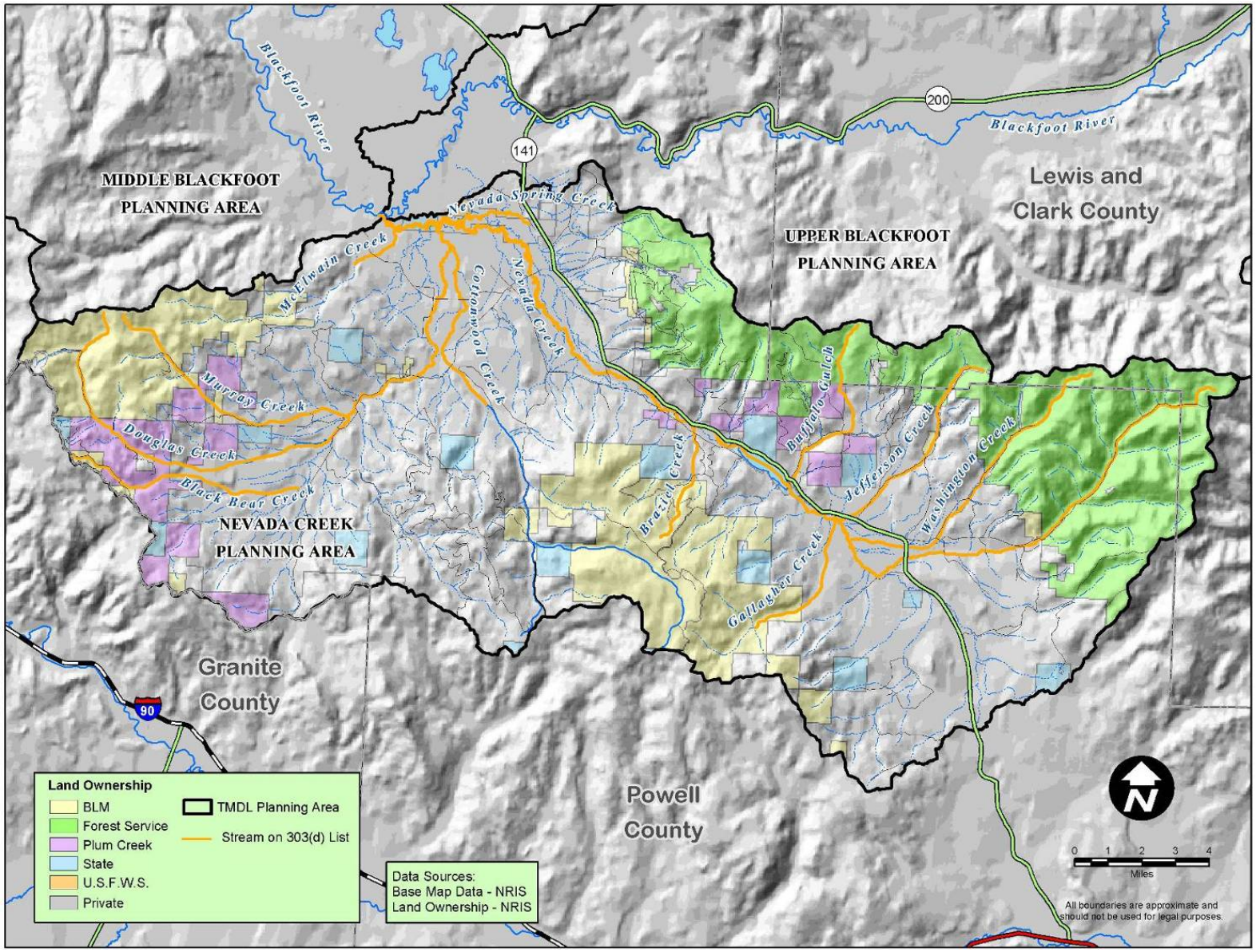

Figure A-22. Land Ownership in the Nevada Creek Planning Area

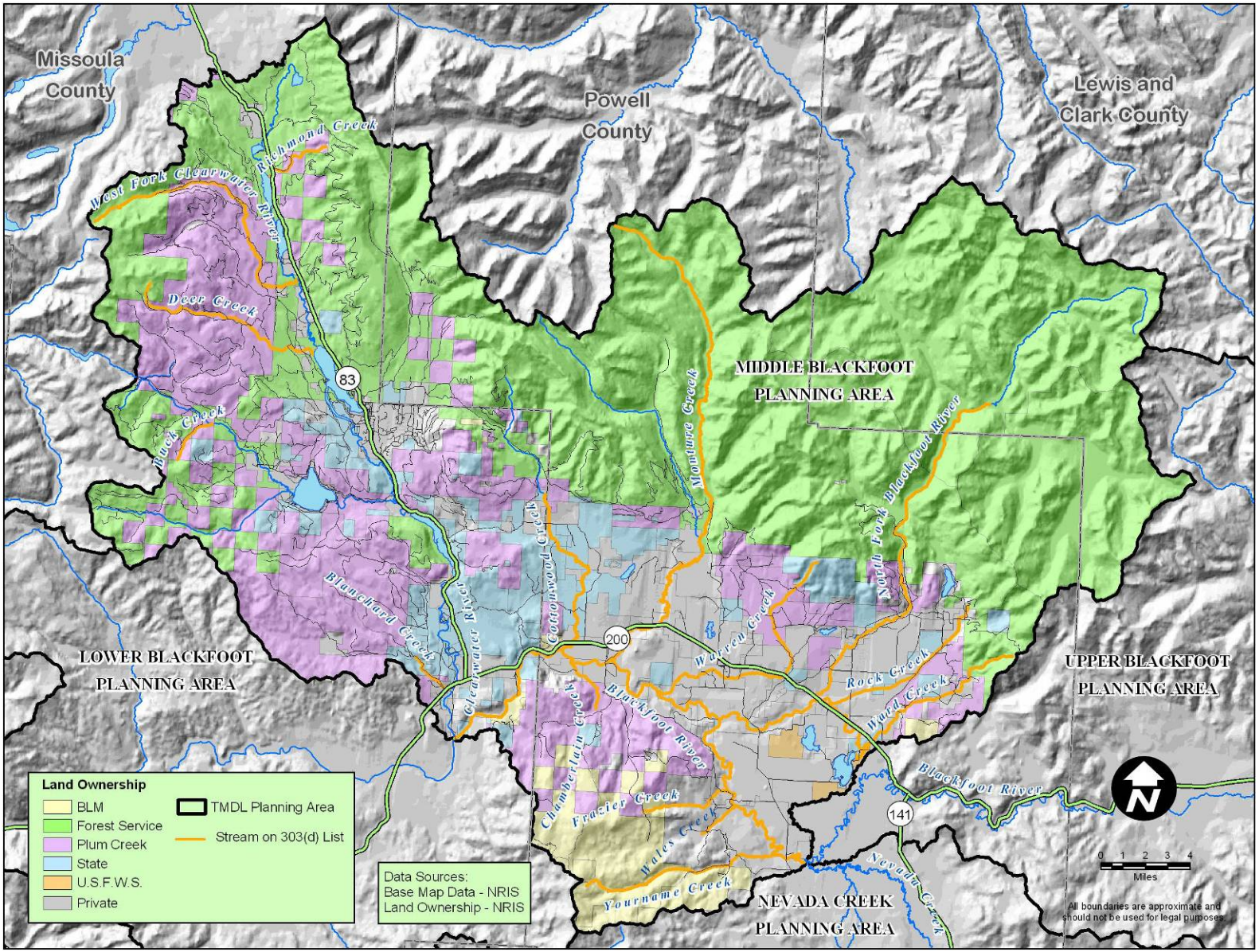

Figure A-23. Land Ownership in the Middle Blackfoot Planning Area

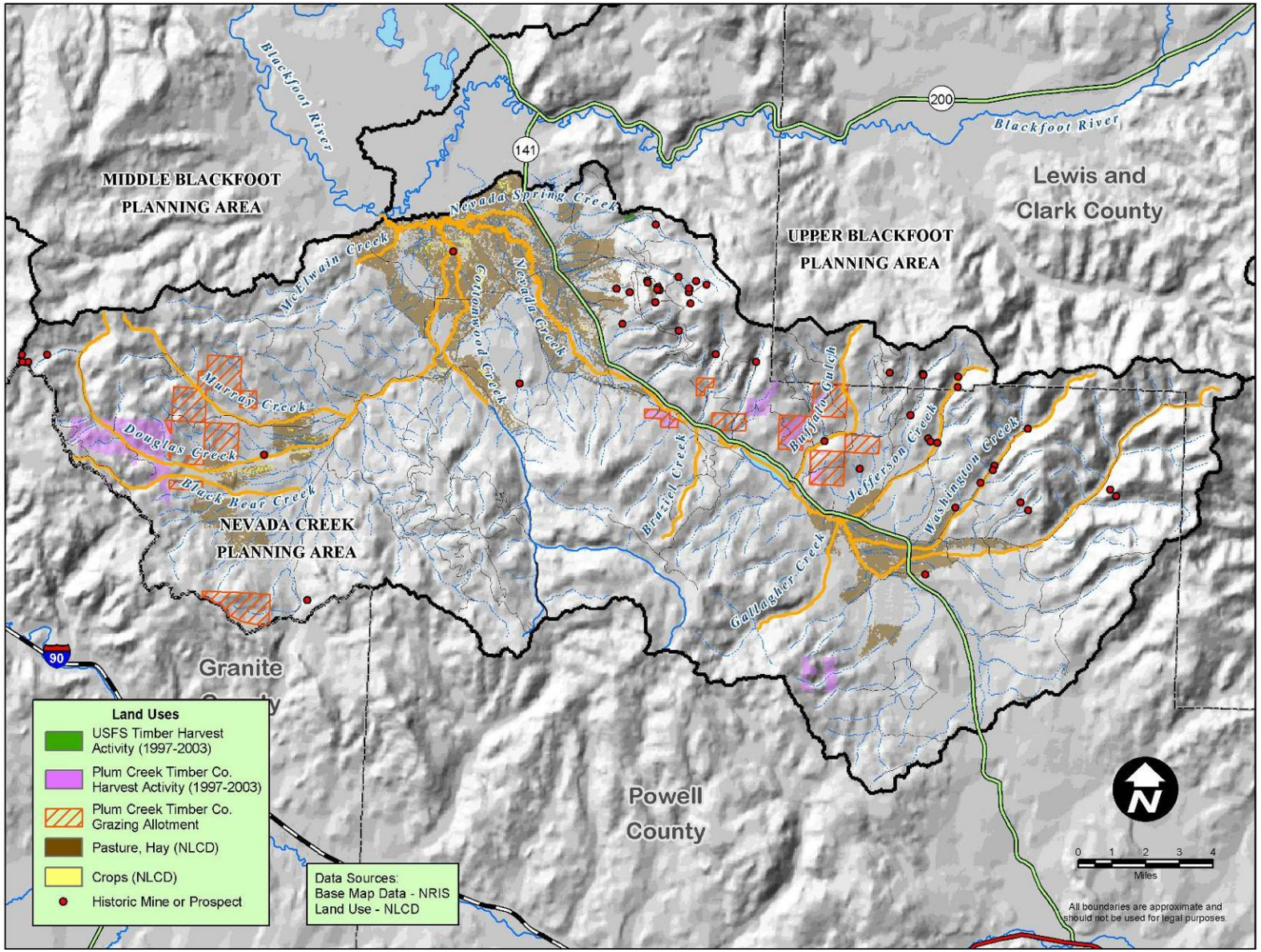

Figure A-24. Land Uses in the Nevada Creek Planning Area

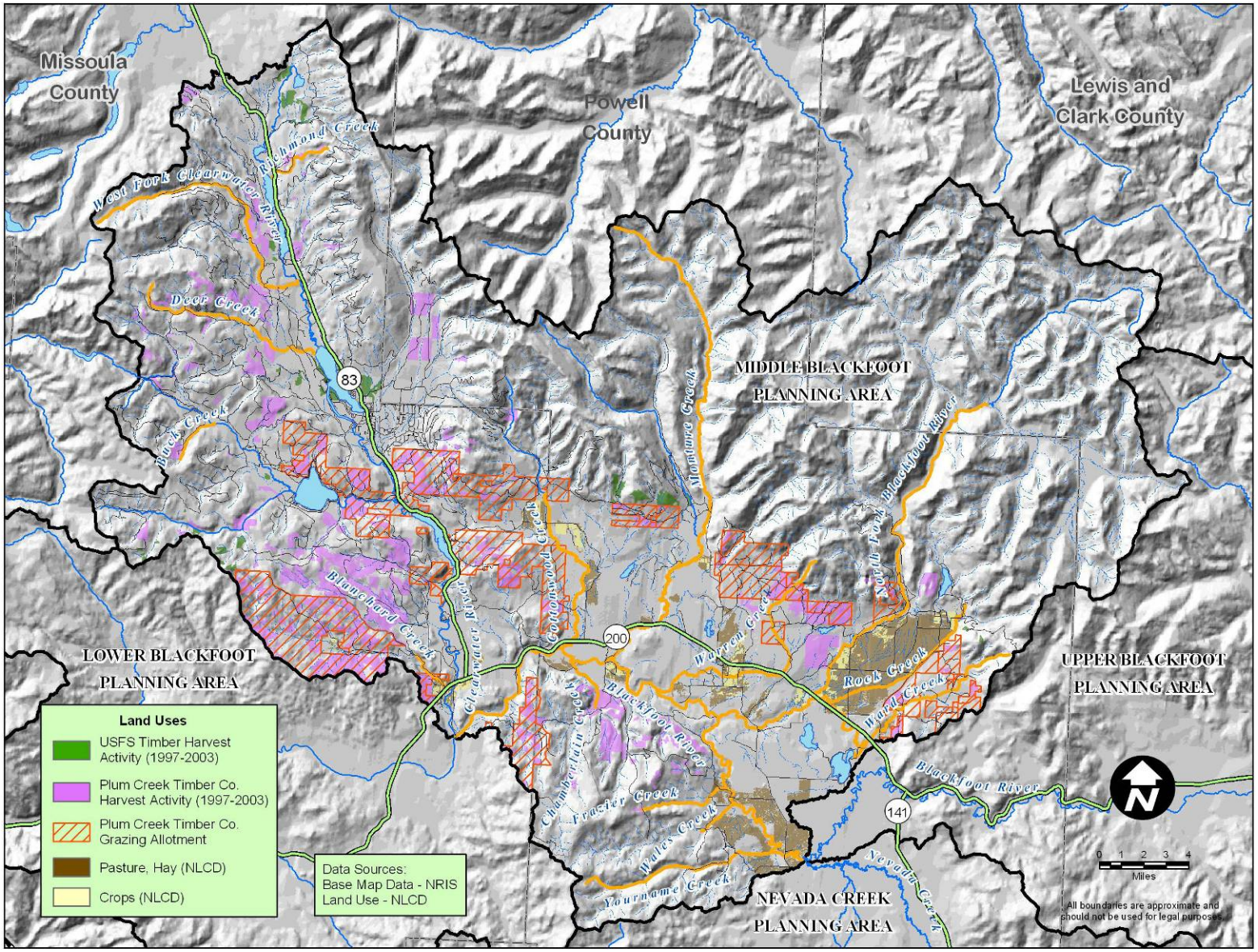

Figure A-25. Land Uses in the Middle Blackfoot Planning Area

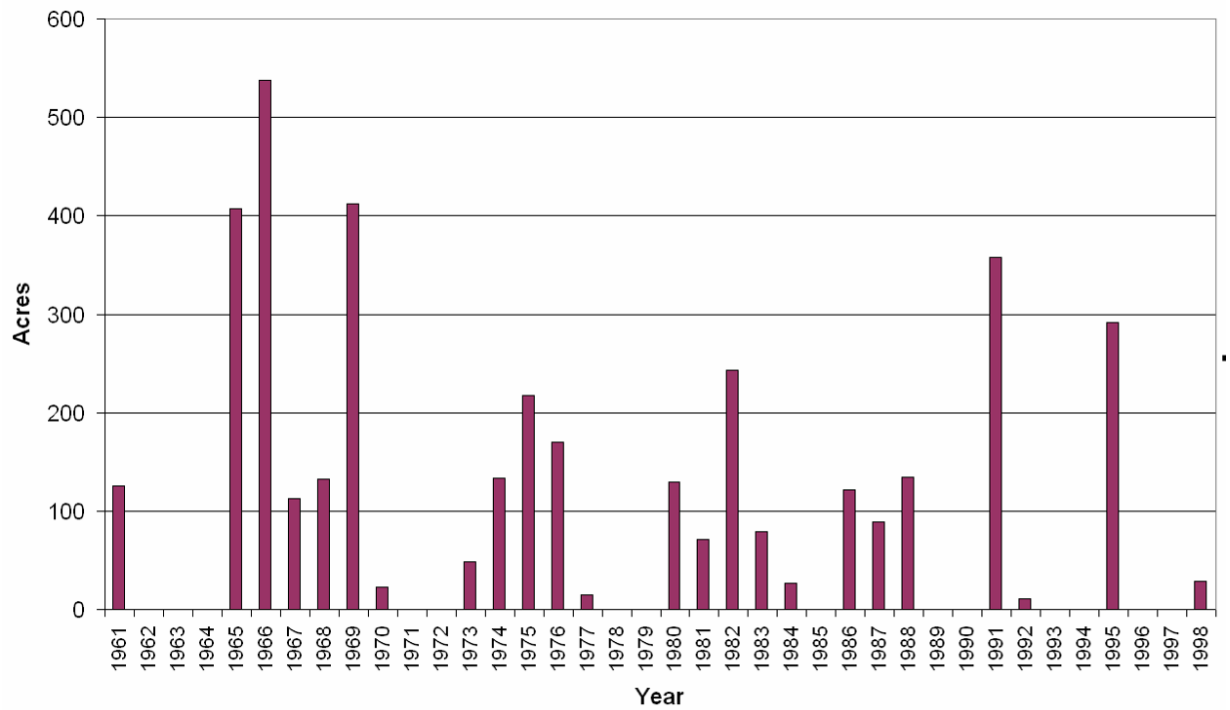

Figure A-26. Helena National Forest Timber Harvest History, Nevada Creek Panning Area

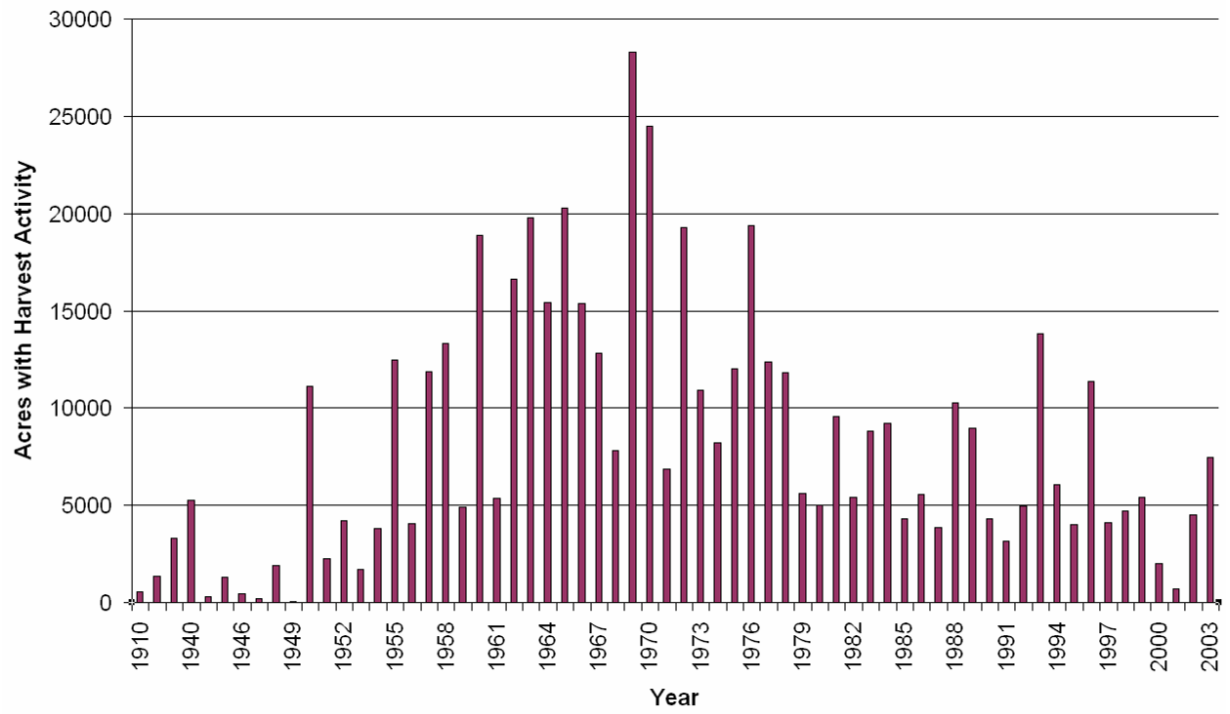

Figure A-27. Lolo National Forest Timber Harvest Activity over Time

Base Parameter and Erosion Inventory

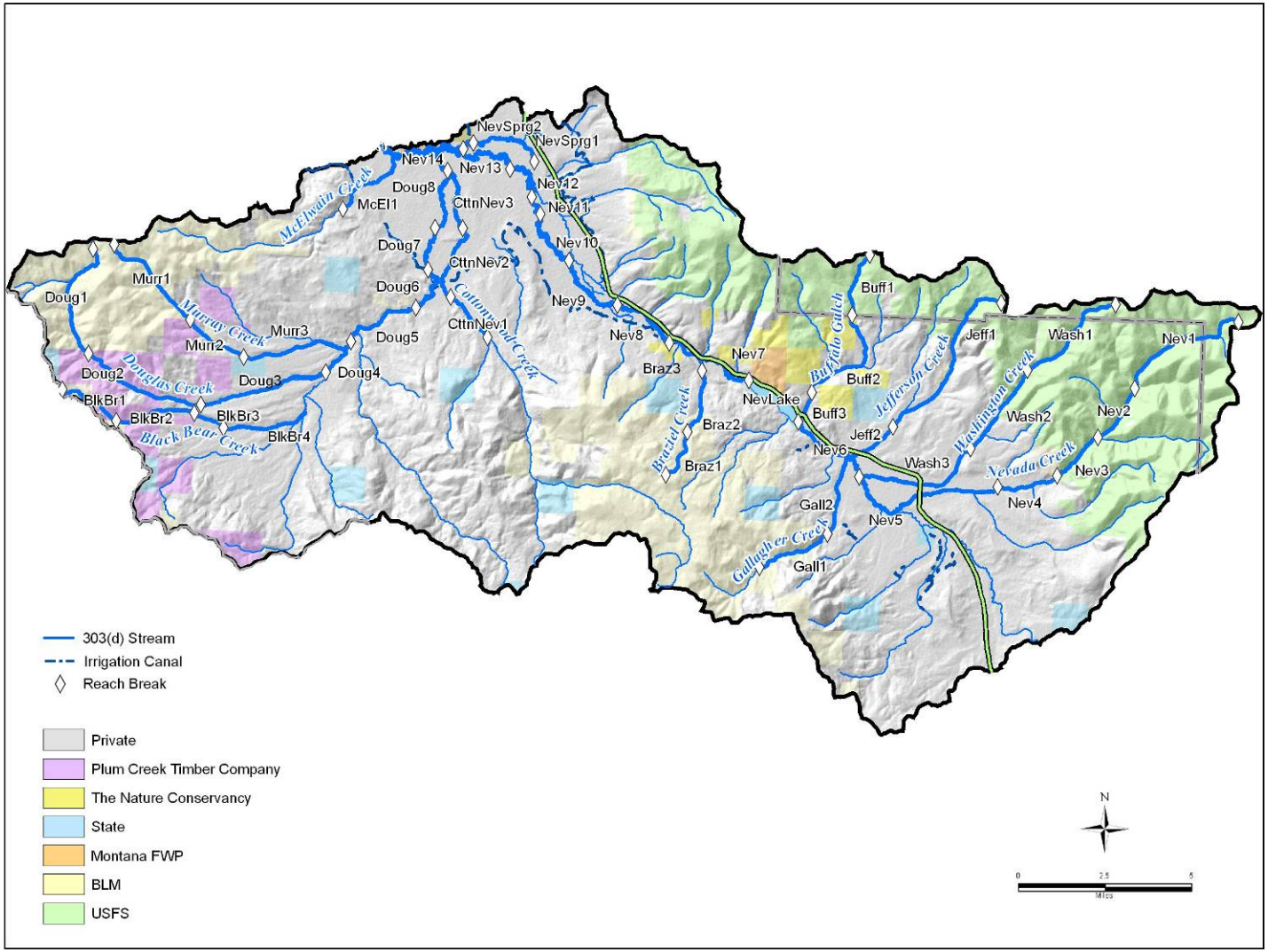

Figure A-28. Stream assessment reaches, Nevada Creek planning area.

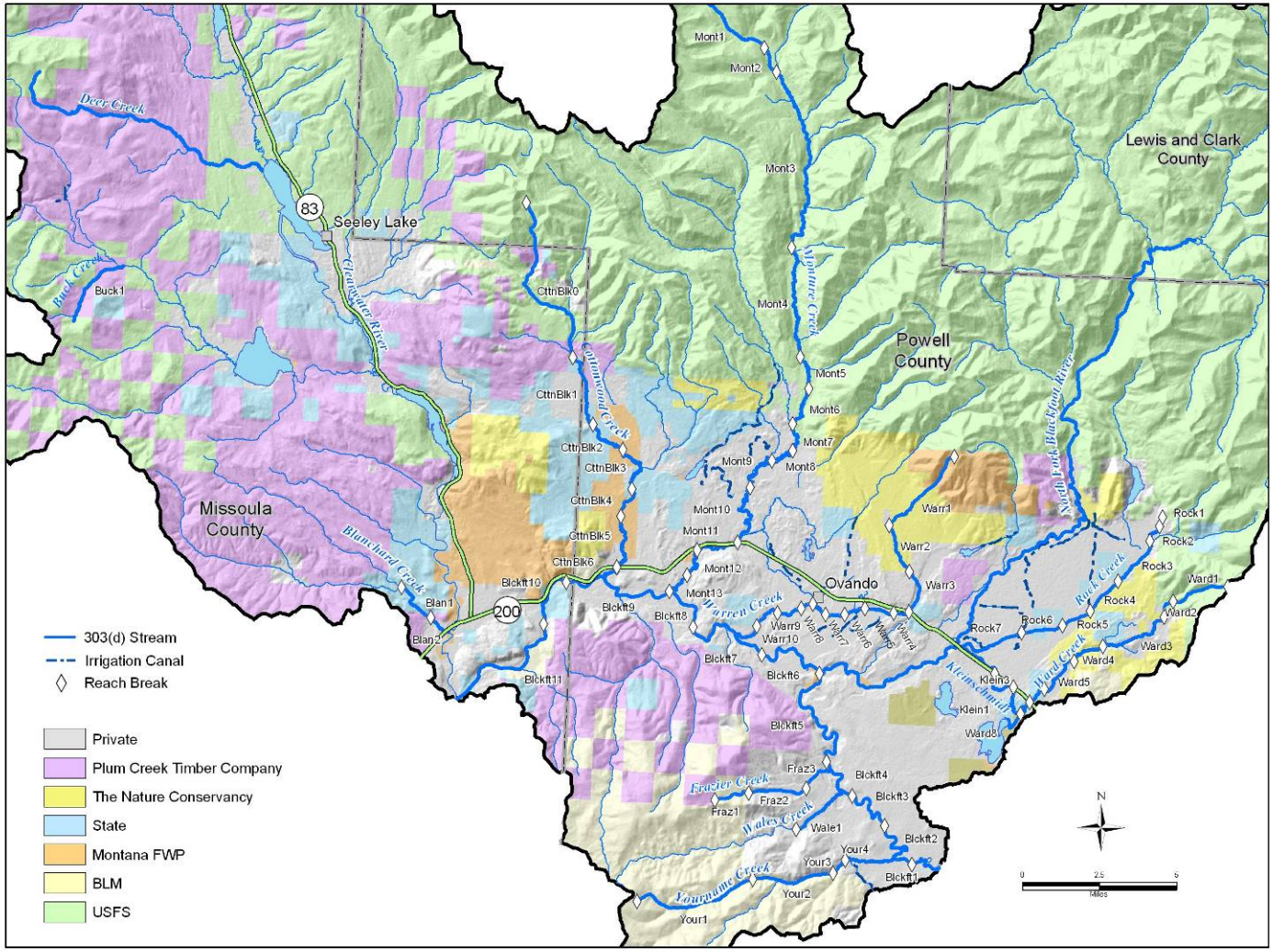

Figure A-29. Stream assessment reaches, middle Blackfoot River planning area.

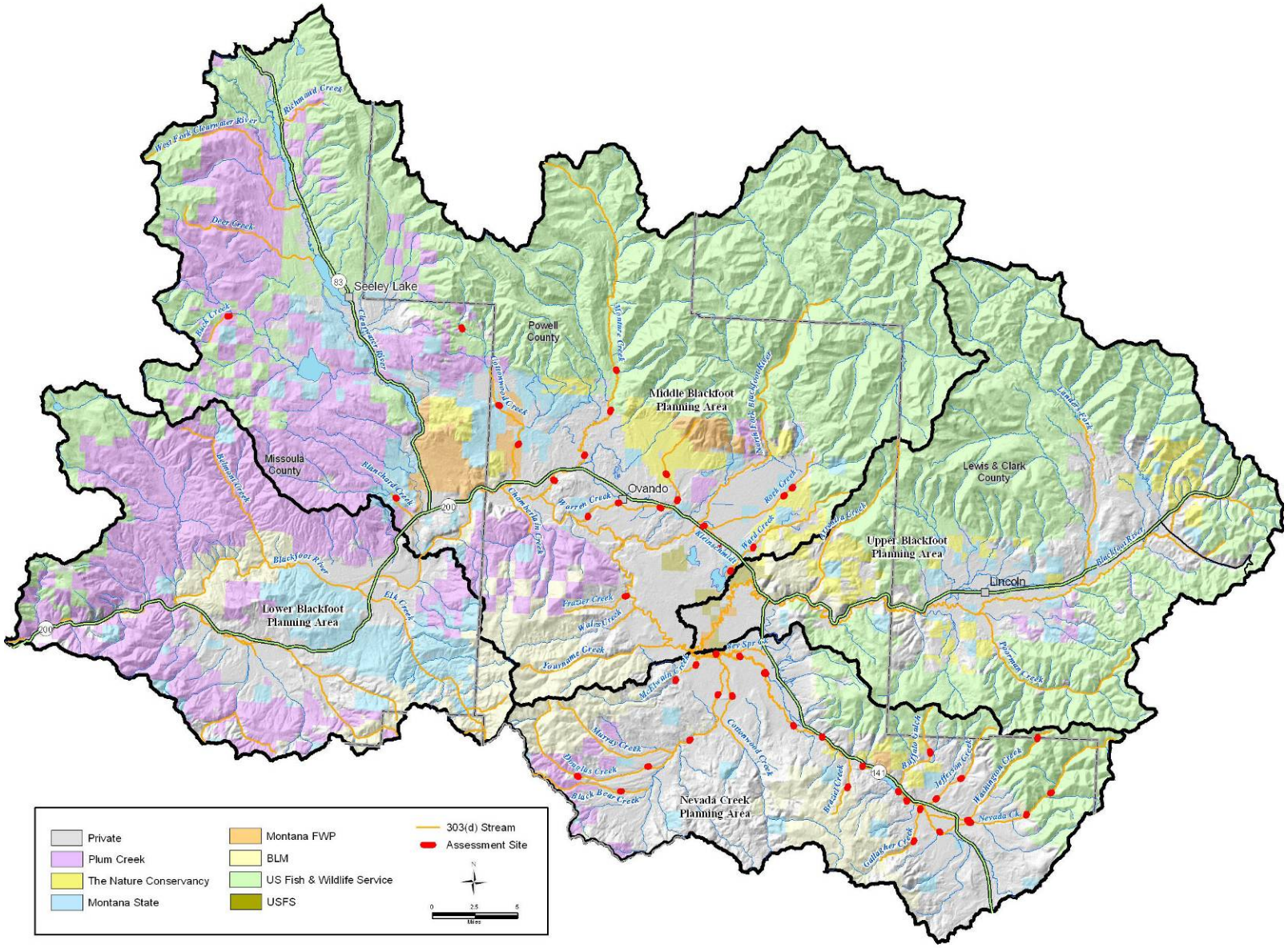

Figure A-30. Assessment Sites in the Nevada Creek and Middle Blackfoot Planning Areas

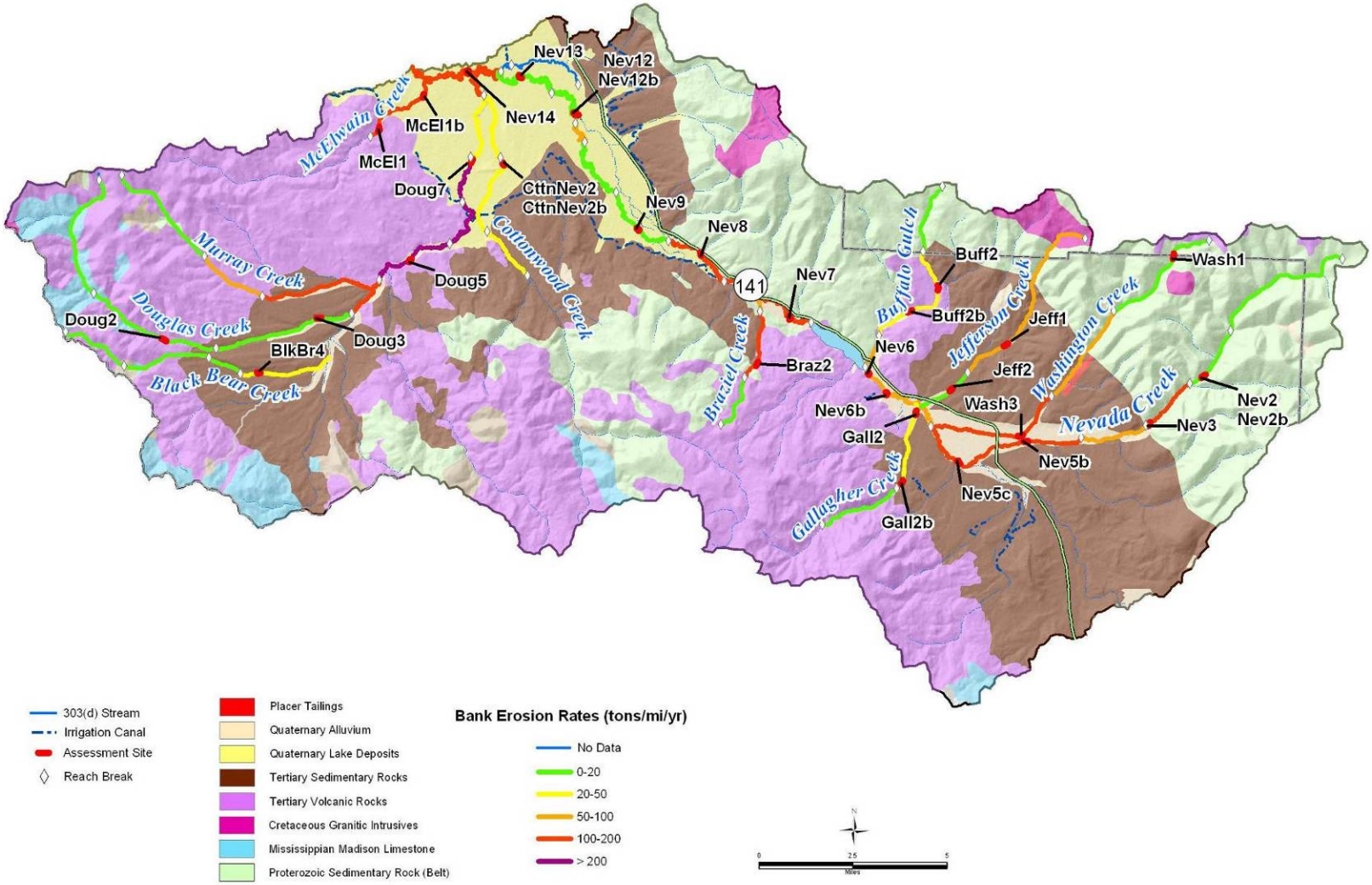

Figure A-31. Bank Erosion Rates by Reach in the Nevada Creek Planning Area

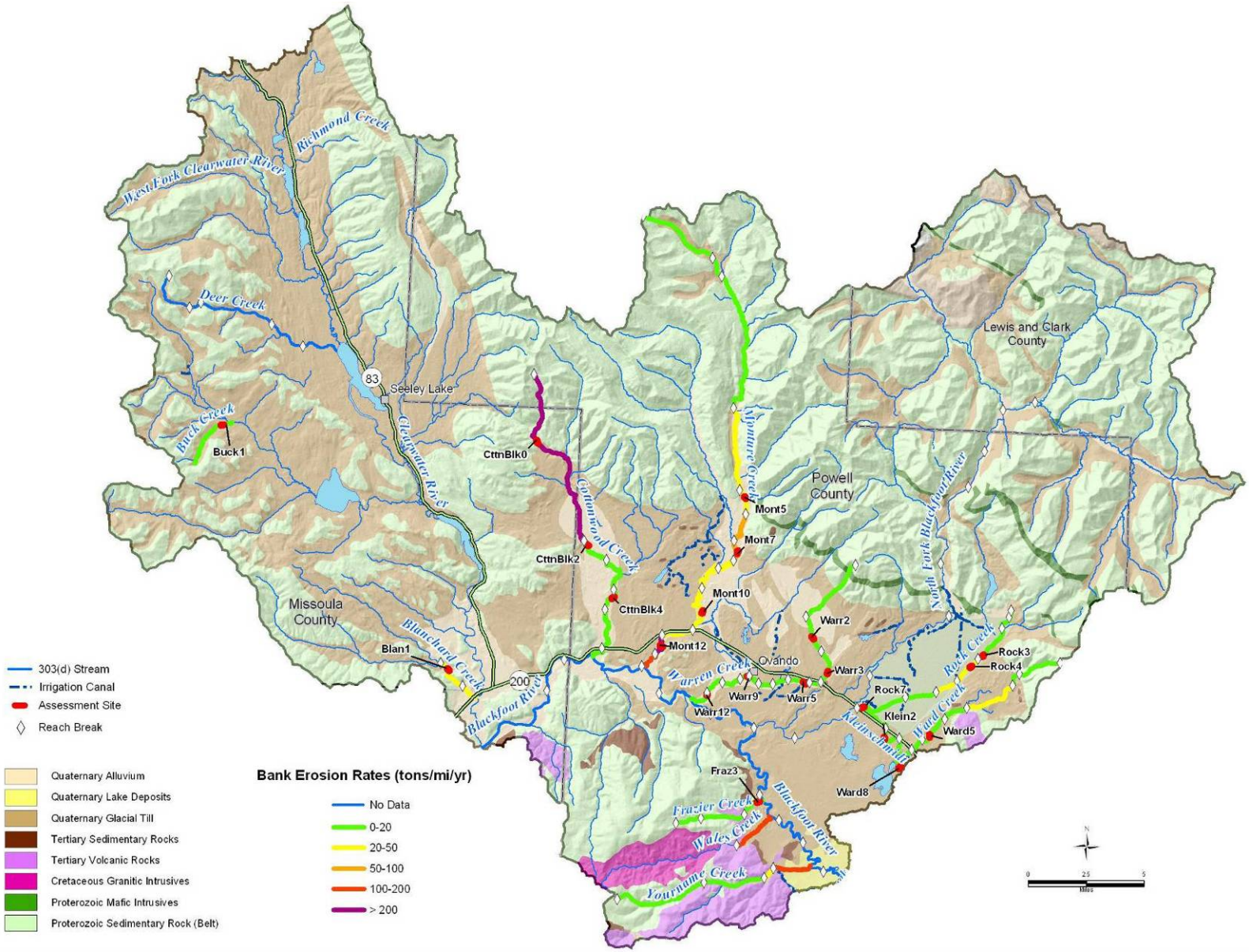

Figure A-32. Bank Erosion Rates by Reach in the Middle Blackfoot Planning Area

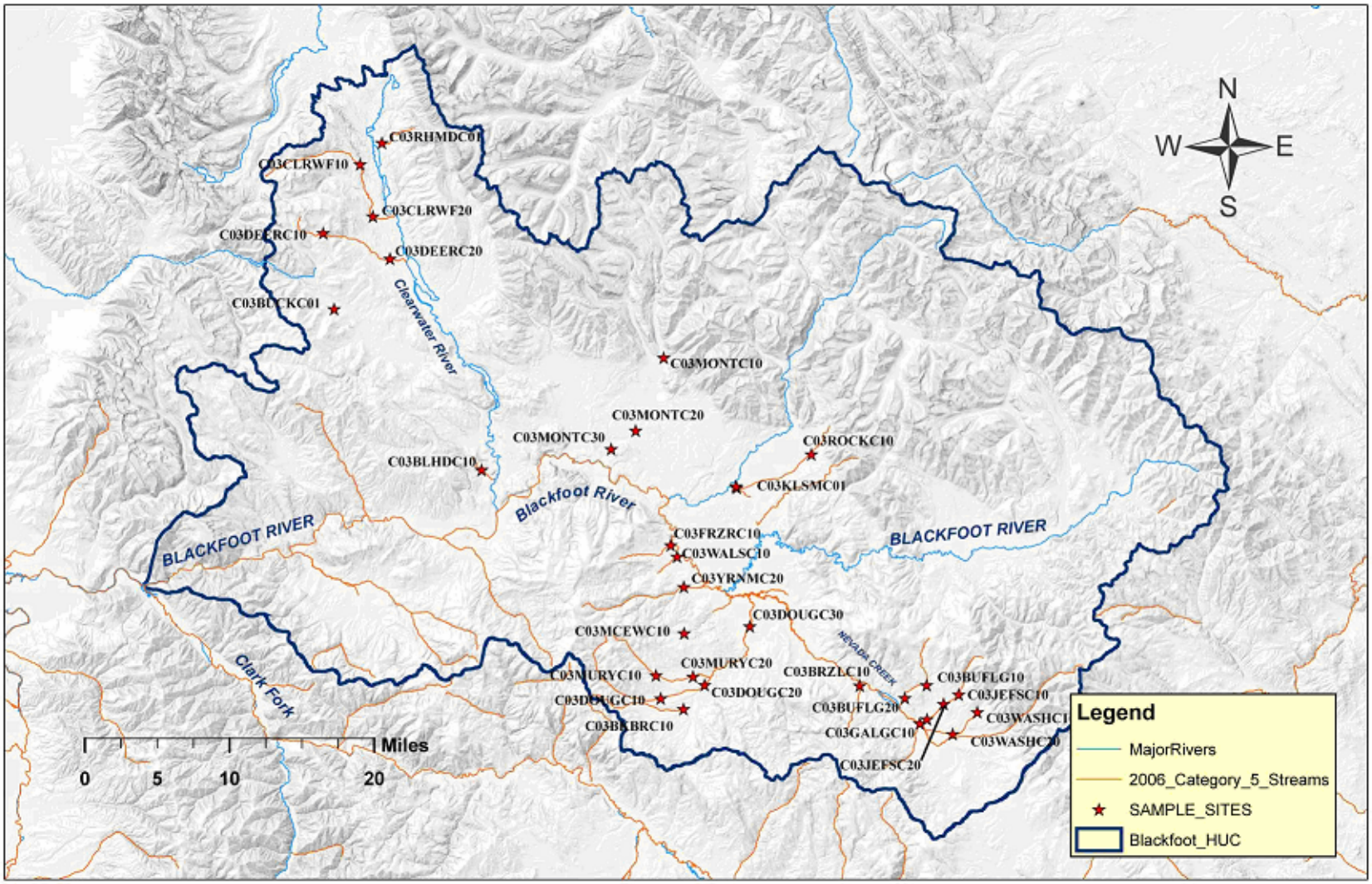

Figure A-33. Nutrient Monitoring Sites, Middle Blackfoot-Nevada Creek TMDL Planning Area

Temperature

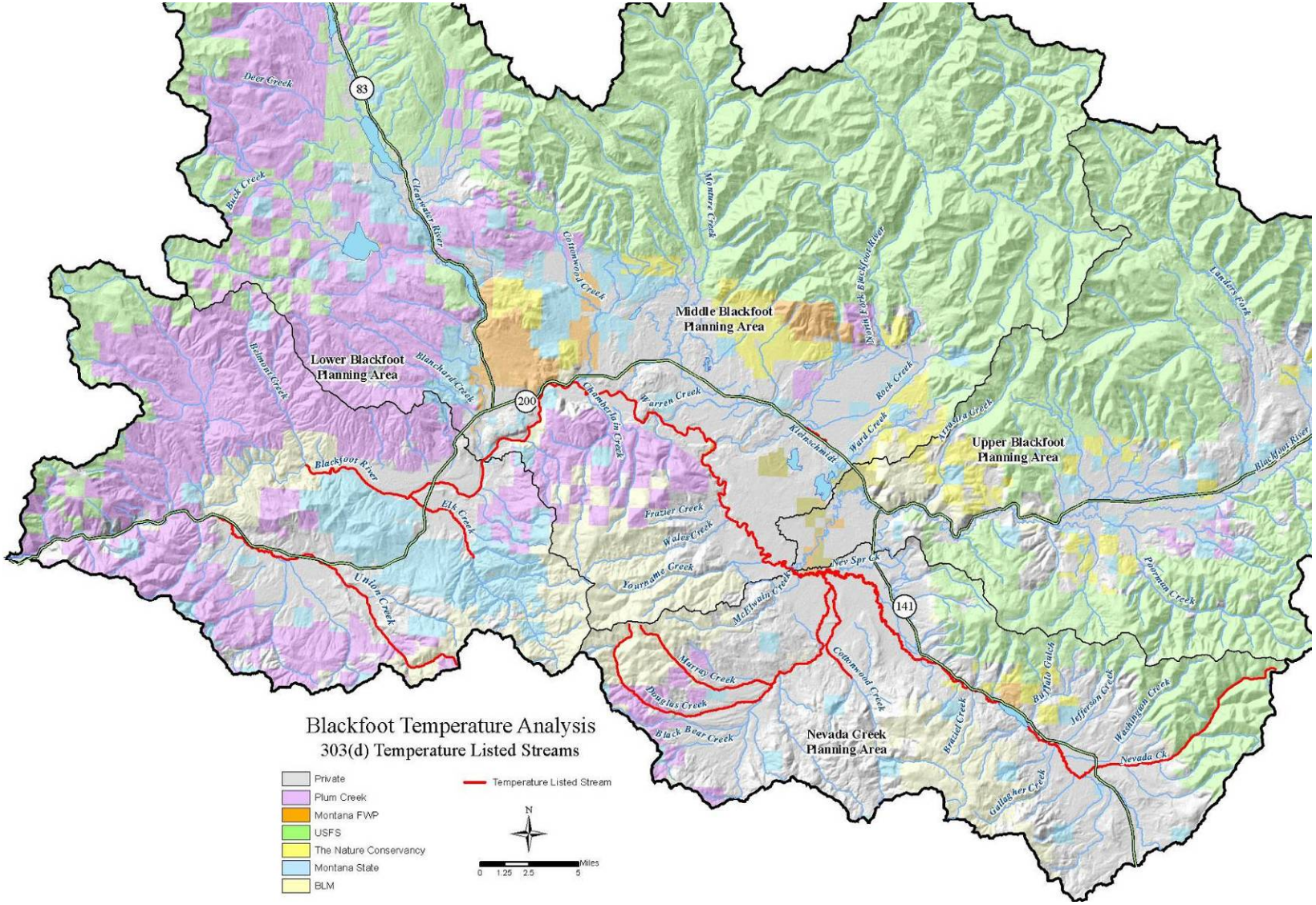

Figure A-34. Streams on the 303(d) List for Temperature in the Nevada Creek and Middle Blackfoot Planning Areas

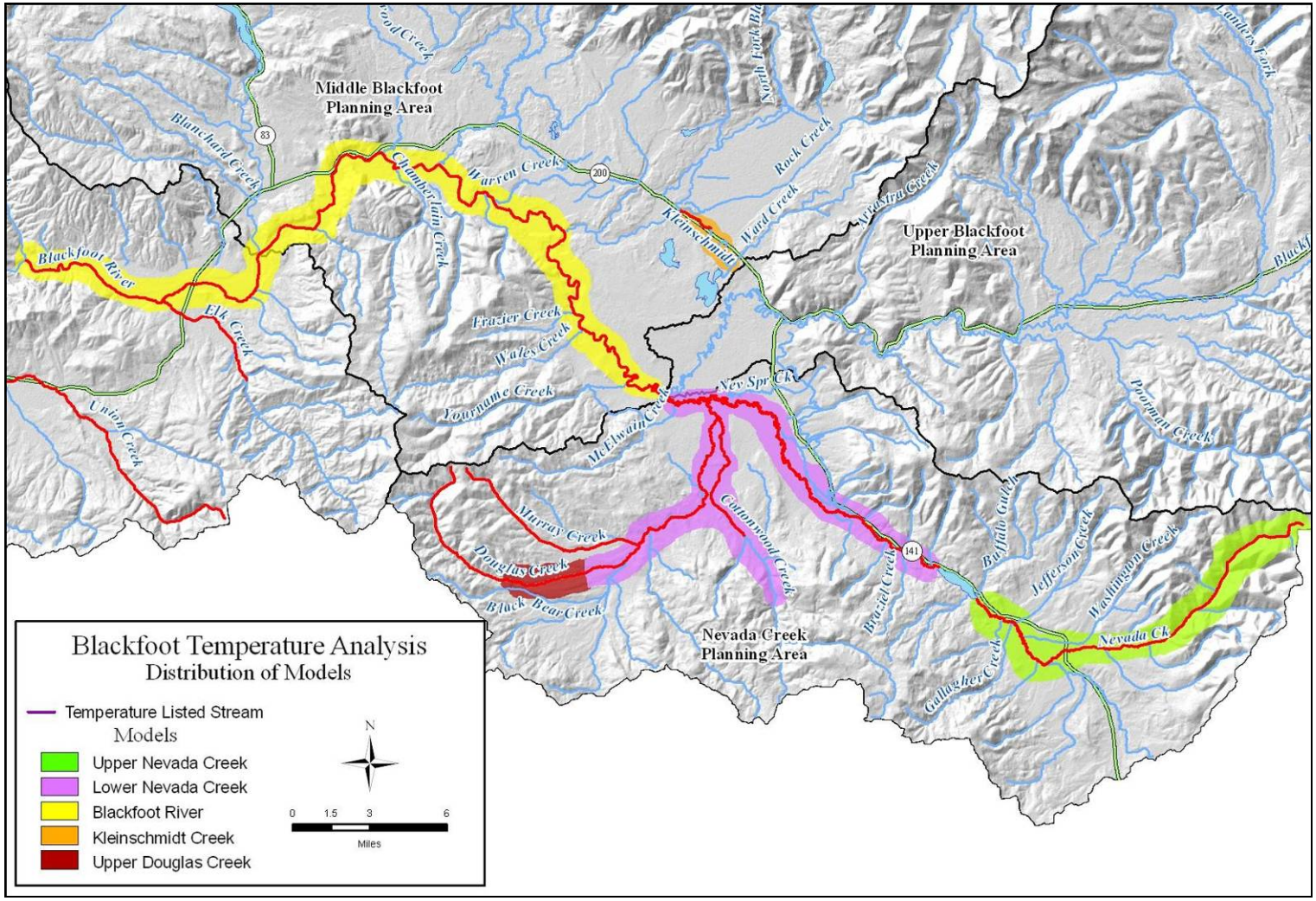

Figure A-35. Extent of SNTEMP Temperature Models Developed for the Nevada Creek and Middle Blackfoot Planning Areas

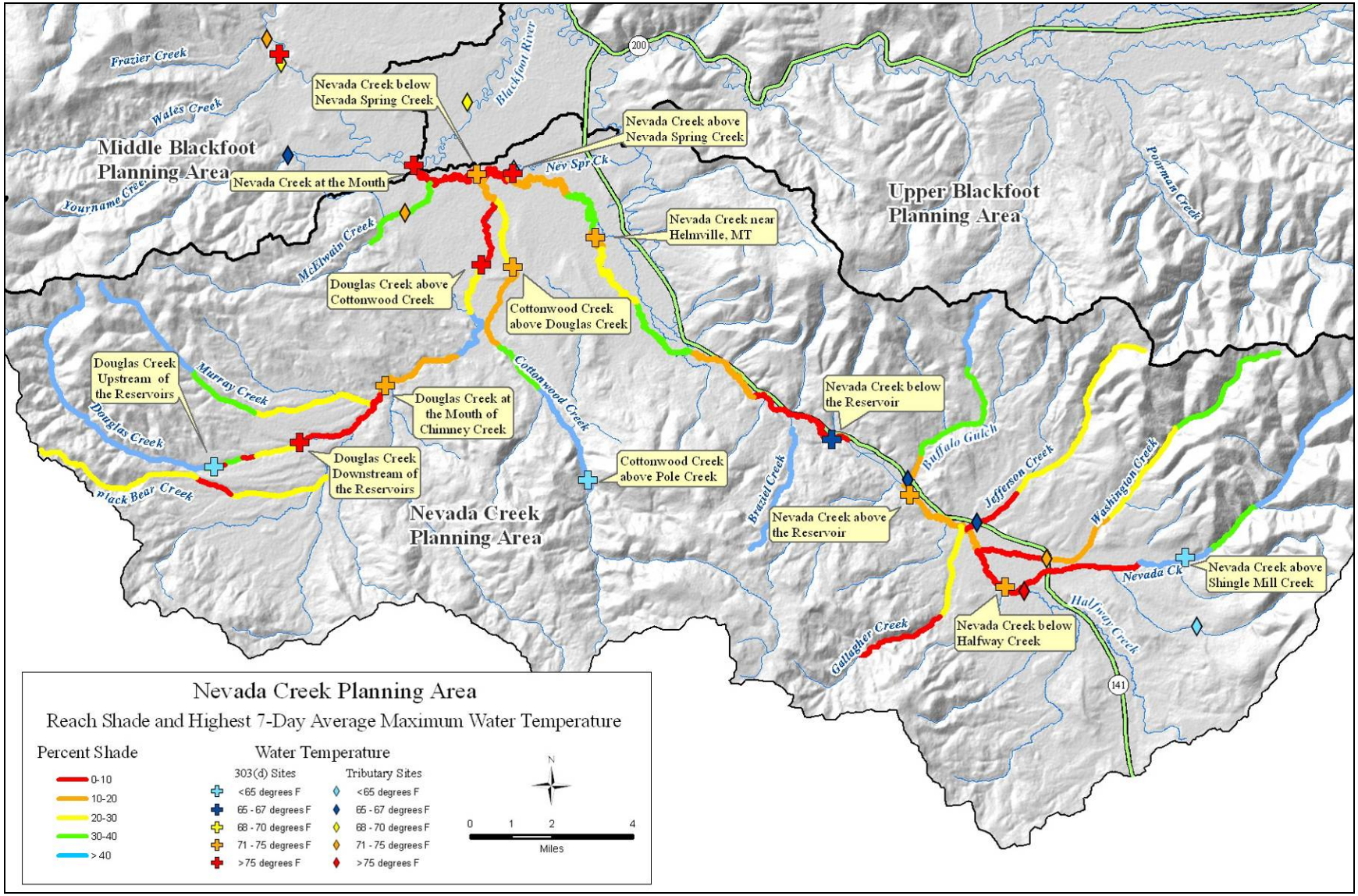

Figure A-36. Reach Shade and Highest 7-day Average Maximum Temperature, Nevada Creek Planning Area

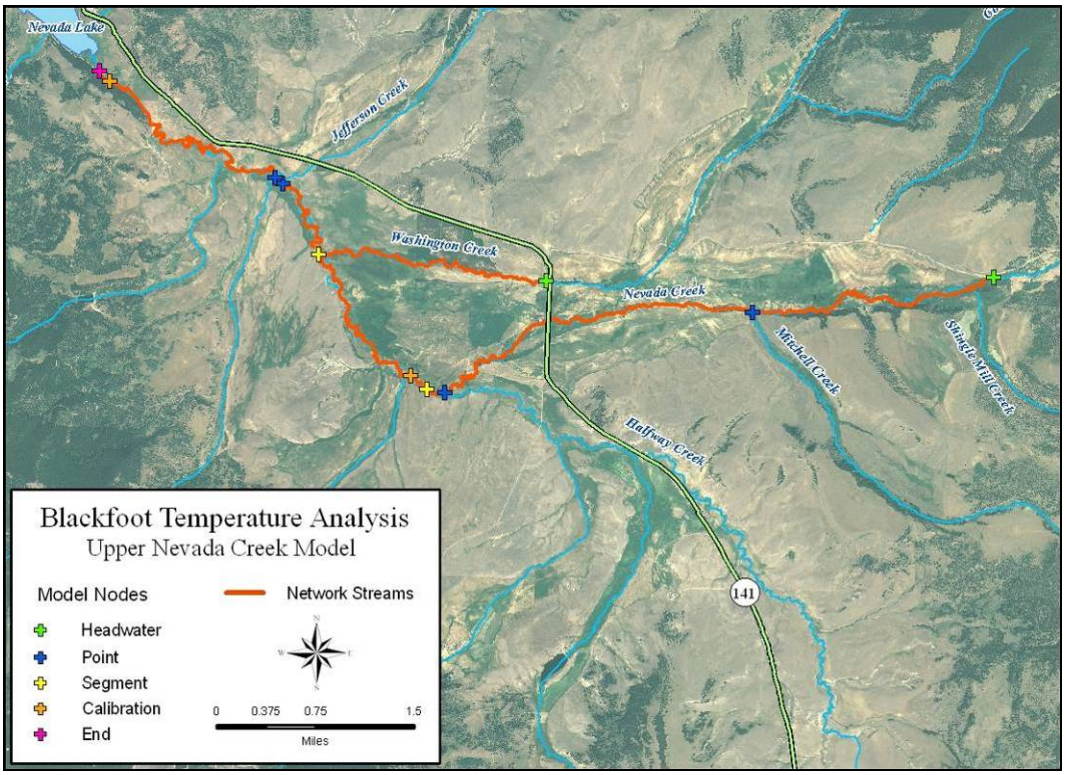

Figure A-37. Construction of the Upper Nevada Creek SNTEMP Model

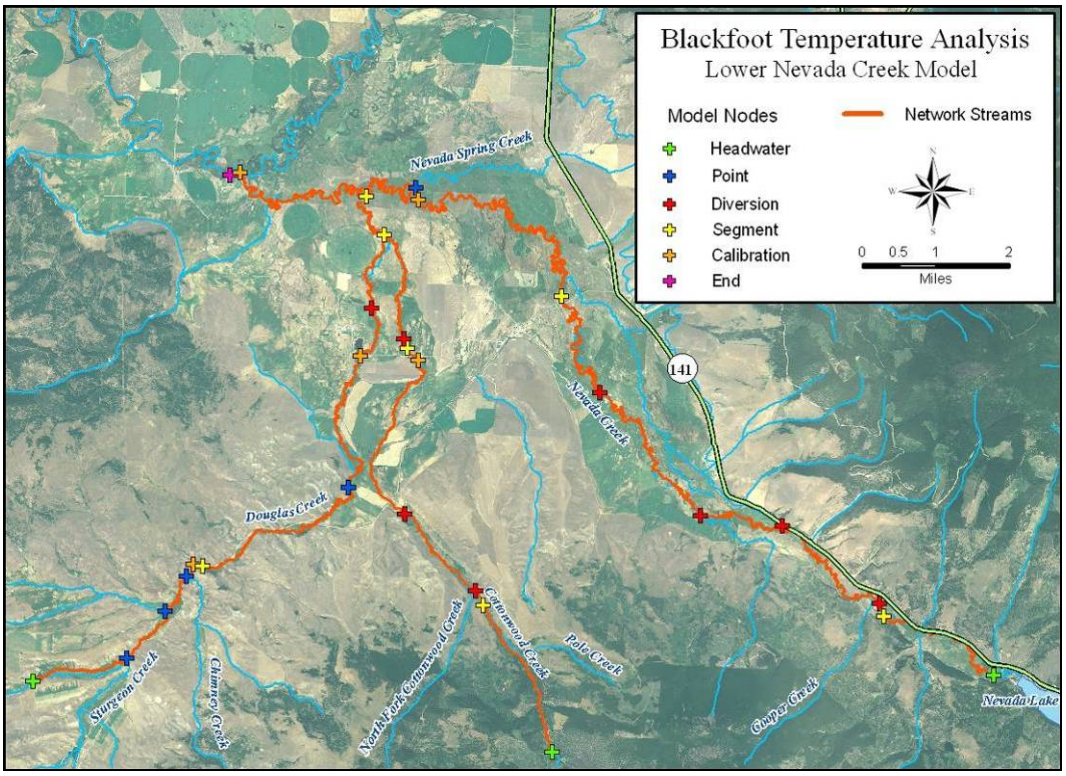

Figure A-38. Construction of the Lower Nevada Creek SNTEMP Model

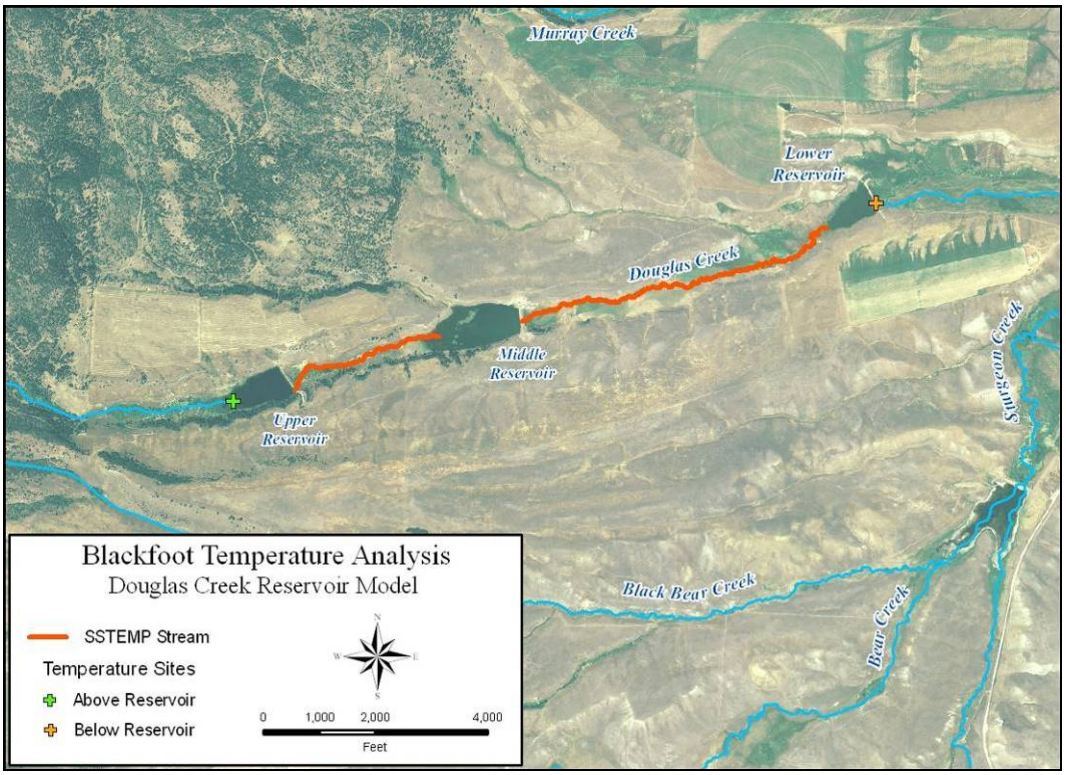

Figure A-39. Construction of the Upper Douglas Creek SNTEMP Model

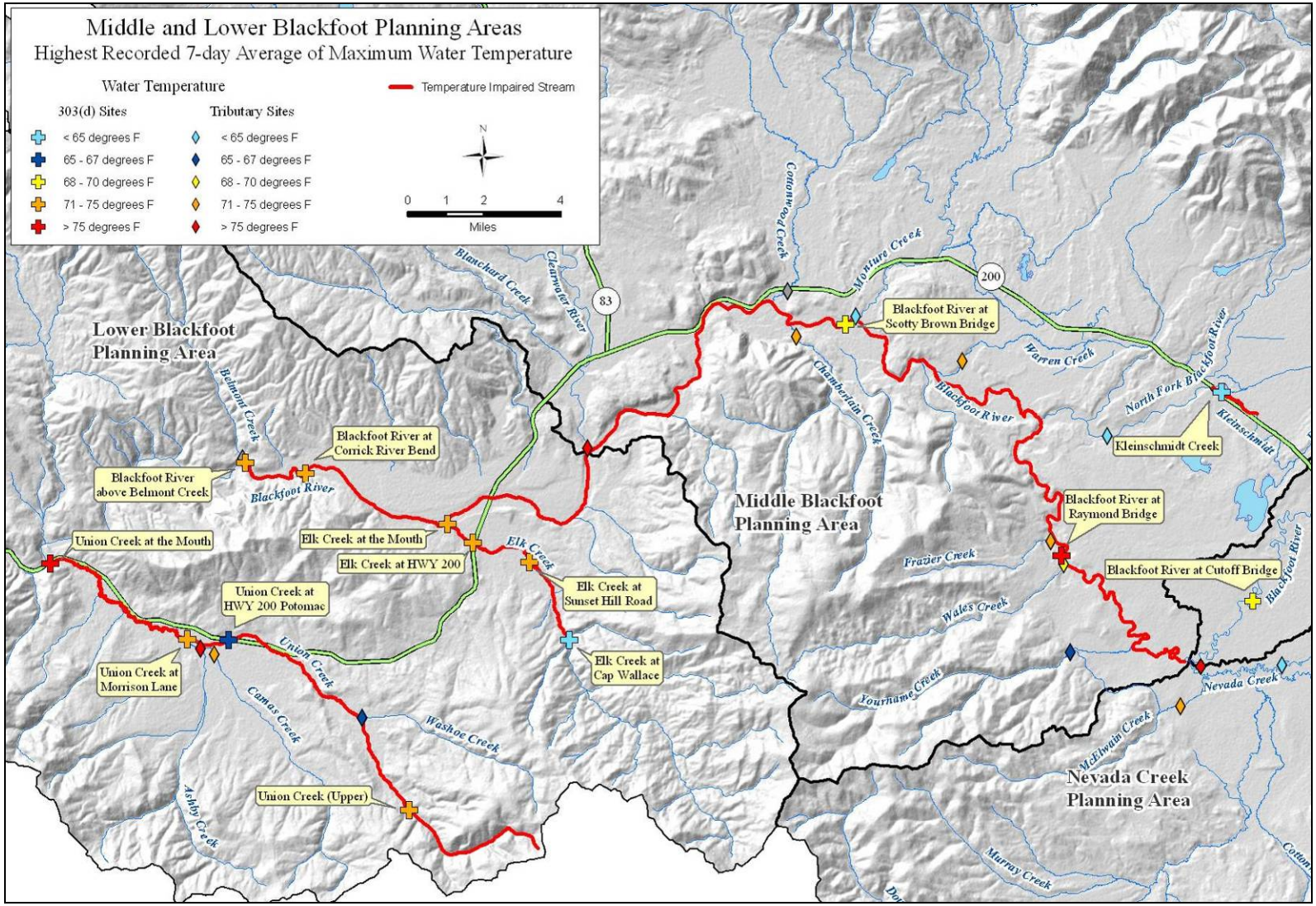

Figure A-40. Highest 7-day Average Maximum Temperature, Middle Blackfoot Planning Area

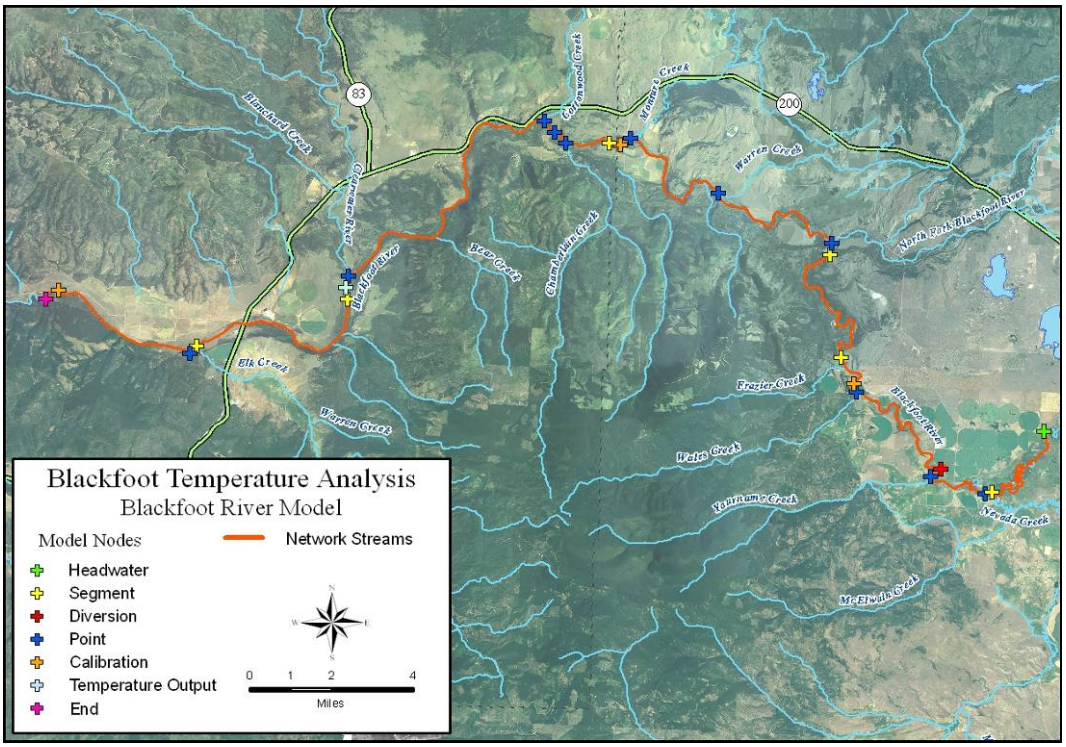

Figure A-41. Construction of the Blackfoot River SNTEMP Temperature Model

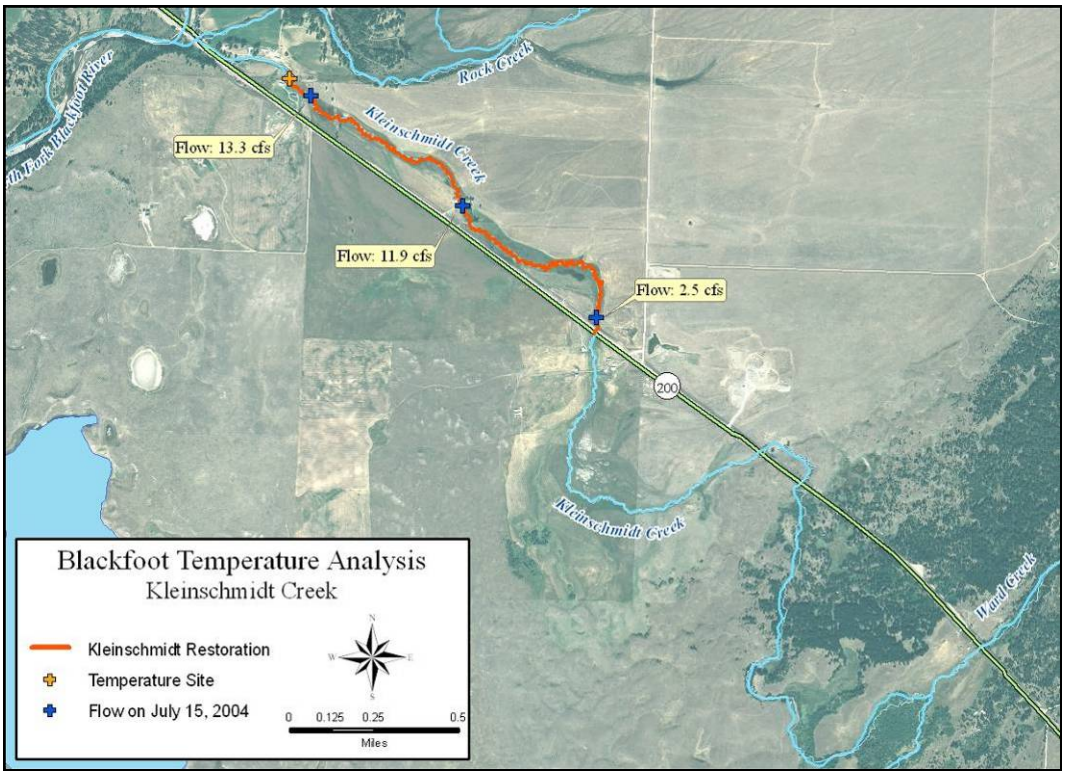

Figure A-42. Construction of the Kleinschmidt Creek SNTEMP Temperature Model