

## **APPENDIX A – TABLE OF WATERBODY IMPAIRMENTS AND PROJECT AREA DESCRIPTION MAPS**

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**Table A-1. Status of Waterbody Impairments in the Kootenai-Fisher TMDL Project Area based on the 2012 Integrated Report**

| <b>Waterbody &amp; Location Description</b>   | <b>Waterbody ID</b> | <b>Impairment Cause</b>                                | <b>TMDL Pollutant Category</b>   | <b>Impairment Cause Status<sup>1</sup></b>                                   |
|---|---------------------|--|----------------------------------|--|
| <b>BIG CHERRY CREEK,</b><br>Snowshoe Creek to mouth<br>(Libby Creek)                      | MT76D002_050        | Alteration in streamside or littoral vegetative covers | Not Applicable;<br>Non-Pollutant | Addressed within document ( <b>Sections 9 and 10</b> ); not linked to a TMDL |
|   |                     | Physical substrate habitat alterations                 | Not Applicable;<br>Non-Pollutant | Addressed within document ( <b>Sections 9 and 10</b> ); not linked to a TMDL |
|   |                     | Zinc   | Metals                           | Zinc TMDL contained in this document   |
| <b>BRISTOW CREEK,</b><br>headwaters to mouth at Lake Kooconusa                            | MT76D002_110        | Nitrogen (Total)                                       | Nutrients                        | Not impaired based on updated assessment                                     |
|   |                     | Sedimentation / Siltation                              | Sediment                         | Not impaired based on updated assessment                                     |
| <b>CRIPPLE HORSE CREEK,</b><br>Headwaters to mouth (Lake Kooconusa)                       | MT76D002_100        | Low flow alterations                                   | Not Applicable;<br>Non-Pollutant | Not yet addressed  |
|   |                     | Physical substrate habitat alterations                 | Not Applicable;<br>Non-Pollutant | Addressed within document ( <b>Sections 9 and 10</b> ); not linked to a TMDL |
| <b>DRY CREEK,</b><br>1 mile upstream from State Highway 56 to mouth (Lake Creek)          | MT76D002_020        | Other flow regime alterations                          | Not Applicable;<br>Non-Pollutant | Not yet addressed  |
|   |                     | Physical substrate habitat alterations                 | Not Applicable;<br>Non-Pollutant | Addressed within document ( <b>Sections 9 and 10</b> ); not linked to a TMDL |
| <b>FISHER RIVER,</b><br>Silver Butte / Pleasant Valley junction to mouth (Kootenai River) | MT76C001_010        | High Flow Regime                                       | Not Applicable;<br>Non-Pollutant | Not yet addressed  |
|   |                     | Lead   | Metals                           | Not impaired based on updated assessment                                     |
| <b>KEELER CREEK,</b><br>Headwaters to Lake Creek  | MT76D002_030        | Low flow alterations                                   | Not Applicable;<br>Non-Pollutant | Not yet addressed  |
|   |                     | Physical substrate habitat alterations                 | Not Applicable;<br>Non-Pollutant | Addressed within document ( <b>Sections 9 and 10</b> ); not linked to a TMDL |
| <b>KOOTENAI RIVER,</b><br>Libby Dam to Yaak River   | MT76D001_010        | Other flow regime alterations                          | Not Applicable;<br>Non-Pollutant | Not yet addressed  |
|   |                     | Temperature, water                                     | Temperature                      | To be completed in a future project  |
| <b>KOOTENAI RIVER,</b><br>Confluence with Yaak River to Idaho border                      | MT76A001_010        | Other flow regime alterations                          | Not Applicable;<br>Non-Pollutant | Not yet addressed  |
|   |                     | Temperature, water                                     | Temperature                      | To be completed in a future project  |

**Table A-1. Status of Waterbody Impairments in the Kootenai-Fisher TMDL Project Area based on the 2012 Integrated Report**

| Waterbody & Location Description   | Waterbody ID | Impairment Cause                                       | TMDL Pollutant Category       | Impairment Cause Status <sup>1</sup>   |
|--|--------------|--|-------------------------------|--|
| <b>LAKE CREEK,</b><br>Bull Lake outlet to mouth<br>(Kootenai River)          | MT76D002_070 | Cadmium  | Metals                        | Not impaired based on updated assessment                                     |
|  |              | Copper   | Metals                        | Copper TMDL contained in this document                                       |
|  |              | Lead   | Metals                        | Lead TMDL contained in this document   |
|  |              | Mercury in water column                                | Metals                        | Not impaired based on updated assessment                                     |
|  |              | Nitrate/Nitrite (Nitrite + Nitrate as N)               | Nutrients                     | NO <sub>2</sub> + NO <sub>3</sub> TMDL contained in this document            |
|  |              | Sedimentation / Siltation                              | Sediment                      | Sediment TMDL contained in this document                                     |
|  |              | Zinc   | Metals                        | Not impaired based on updated assessment                                     |
| <b>LAKE KOOCANUSA</b>  | MT76D003_010 | Other flow regime alterations                          | Not Applicable; Non-Pollutant | Not yet addressed  |
|  |              | Selenium   | Metals                        | To be completed in a future project  |
| <b>LIBBY CREEK,</b><br>from 1 mile above Howard<br>Creek to Highway 2 bridge | MT76D002_061 | Alteration in streamside or littoral vegetative covers | Not Applicable; Non-Pollutant | Addressed within document ( <b>Sections 9 and 10</b> ); not linked to a TMDL |
|  |              | Mercury  | Metals                        | Not impaired based on updated assessment                                     |
|  |              | Physical substrate habitat alterations                 | Not Applicable; Non-Pollutant | Addressed within document ( <b>Sections 9 and 10</b> ); not linked to a TMDL |
| <b>LIBBY CREEK,</b><br>Highway 2 bridge to mouth<br>(Kootenai River)         | MT76D002_062 | Physical substrate habitat alterations                 | Not Applicable; Non-Pollutant | Addressed by sediment TMDL contained in this document                        |
|  |              | Sedimentation / Siltation                              | Sediment                      | Sediment TMDL contained in this document                                     |
| <b>QUARTZ CREEK,</b><br>Headwaters to confluence with<br>Kootenai River      | MT76D002_090 | Physical substrate habitat alterations                 | Not Applicable; Non-Pollutant | Not impaired based on updated assessment                                     |
|  |              | Sedimentation / Siltation                              | Sediment                      | Not impaired based on updated assessment                                     |

**Table A-1. Status of Waterbody Impairments in the Kootenai-Fisher TMDL Project Area based on the 2012 Integrated Report**

| Waterbody & Location Description  | Waterbody ID | Impairment Cause                                       | TMDL Pollutant Category       | Impairment Cause Status <sup>1</sup>   |
|---|--------------|--|-------------------------------|--|
| <b>RAVEN CREEK,</b><br>Headwaters to mouth (Pleasant Valley Fisher River)         | MT76C001_030 | Alteration in streamside or littoral vegetative covers | Not Applicable; Non-Pollutant | Addressed by sediment TMDL contained in this document                        |
|   |              | Chlorophyll- <i>a</i>                                  | Not Applicable; Non-Pollutant | Addressed by TP TMDL contained in this document                              |
|   |              | Nitrate/Nitrite (Nitrite + Nitrate as N)               | Nutrients                     | Not impaired based on updated assessment                                     |
|   |              | Nitrogen (Total)                                       | Nutrients                     | Not impaired based on updated assessment                                     |
|   |              | Phosphorus (Total)                                     | Nutrients                     | TP TMDL contained in this document   |
|   |              | Sedimentation / Siltation                              | Sediment                      | Sediment TMDL contained in this document                                     |
| <b>SNOWSHOE CREEK,</b><br>Cabinet Wilderness boundary to mouth (Big Cherry Creek) | MT76D002_040 | Alteration in streamside or littoral vegetative covers | Not Applicable; Non-Pollutant | Addressed within document ( <b>Sections 9 and 10</b> ); not linked to a TMDL |
|   |              | Cadmium  | Metals                        | Cadmium TMDL contained in this document                                      |
|   |              | Zinc   | Metals                        | Zinc TMDL contained in this document   |
| <b>STANLEY CREEK,<sup>2</sup></b><br>Headwaters to confluence with Fairway Creek  | MT76D002_010 | Copper   | Metals                        | Copper TMDL contained in this document                                       |
|   |              | Nutrient / Eutrophication Biological Indicators        | Nutrients                     | Impairment cause removed and replaced by NO <sub>2</sub> + NO <sub>3</sub>   |
| <b>WOLF CREEK,</b><br>Headwaters to mouth (Fisher River)                          | MT76C001_020 | Alteration in streamside or littoral vegetative covers | Not Applicable; Non-Pollutant | Addressed by sediment TMDL contained in this document                        |
|   |              | Sedimentation / Siltation                              | Sediment                      | Sediment TMDL contained in this document                                     |
|   |              | Temperature, water                                     | Temperature                   | Temperature TMDL contained in this document                                  |

<sup>1</sup> TN = Total Nitrogen, TP = Total Phosphorus, NO<sub>2</sub>+NO<sub>3</sub> = Nitrite + Nitrate<sup>2</sup> The Stanley Creek waterbody segment is being extended to the confluence of Lake Creek and the location description will be changed in the “2014 Water Quality Integrated Report” to read: Stanley Creek, headwaters to mouth (Lake Creek)



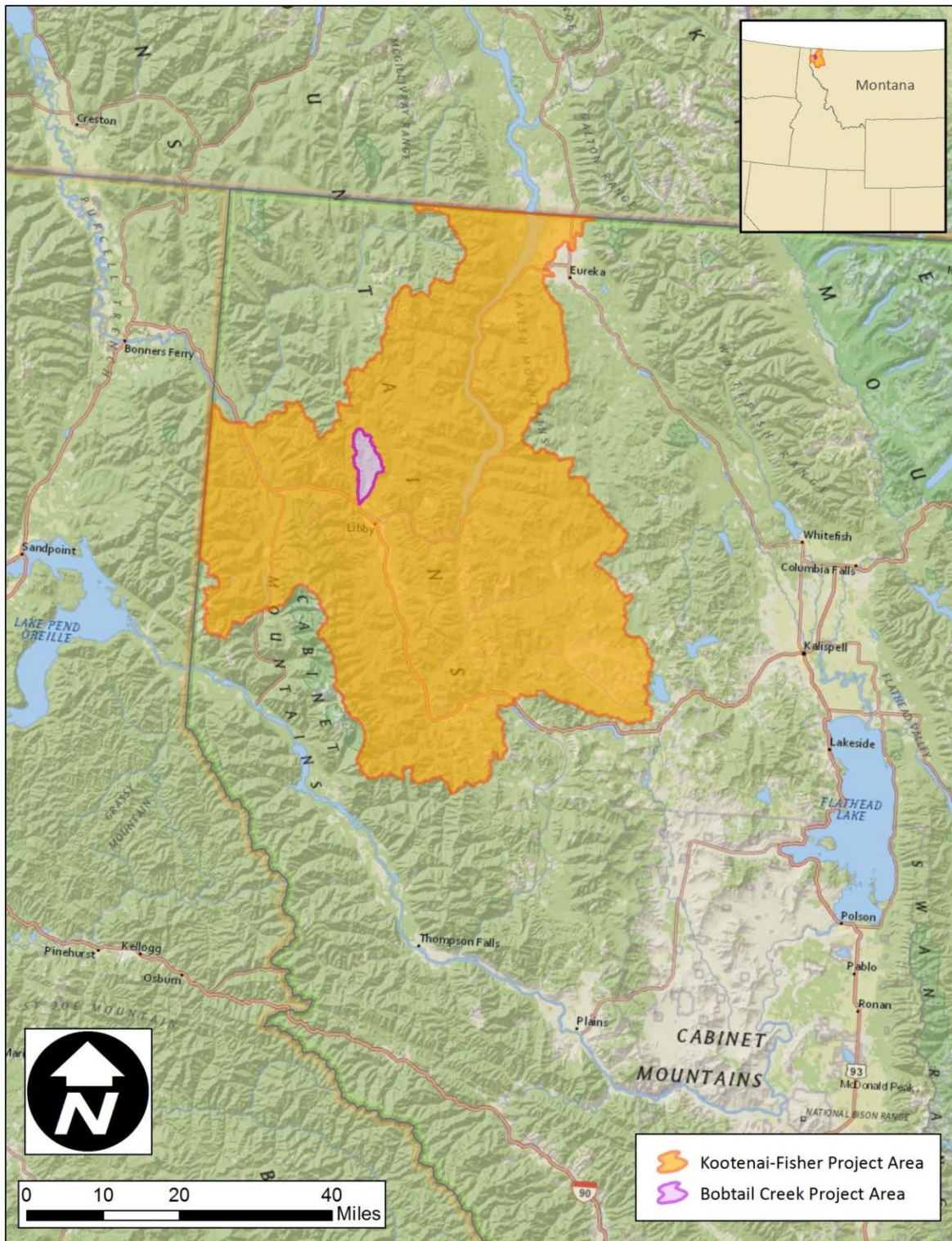


Figure A-1. Location of Kootenai-Fisher Project Area

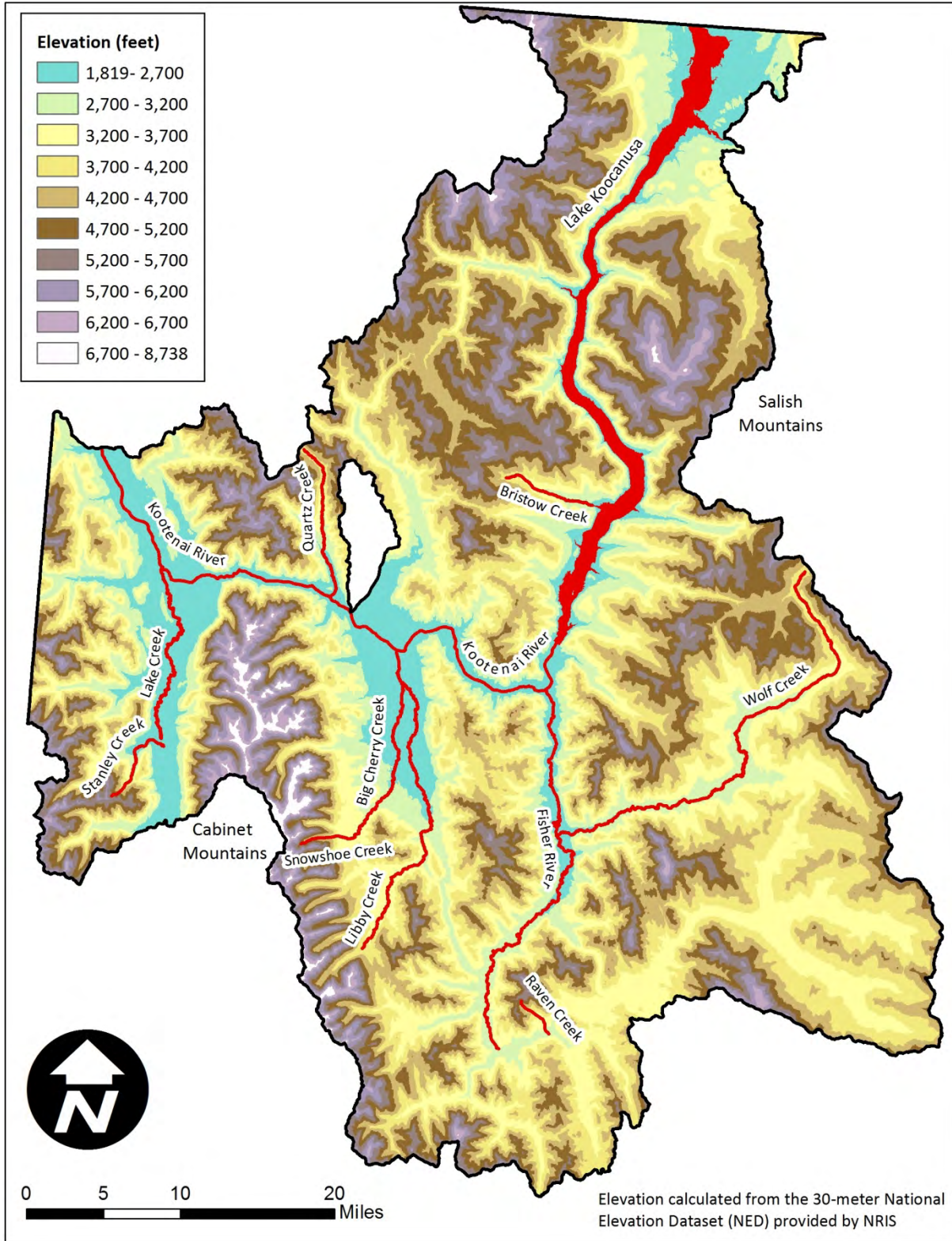


Figure A-2. Elevation of the Kootenai-Fisher Project Area



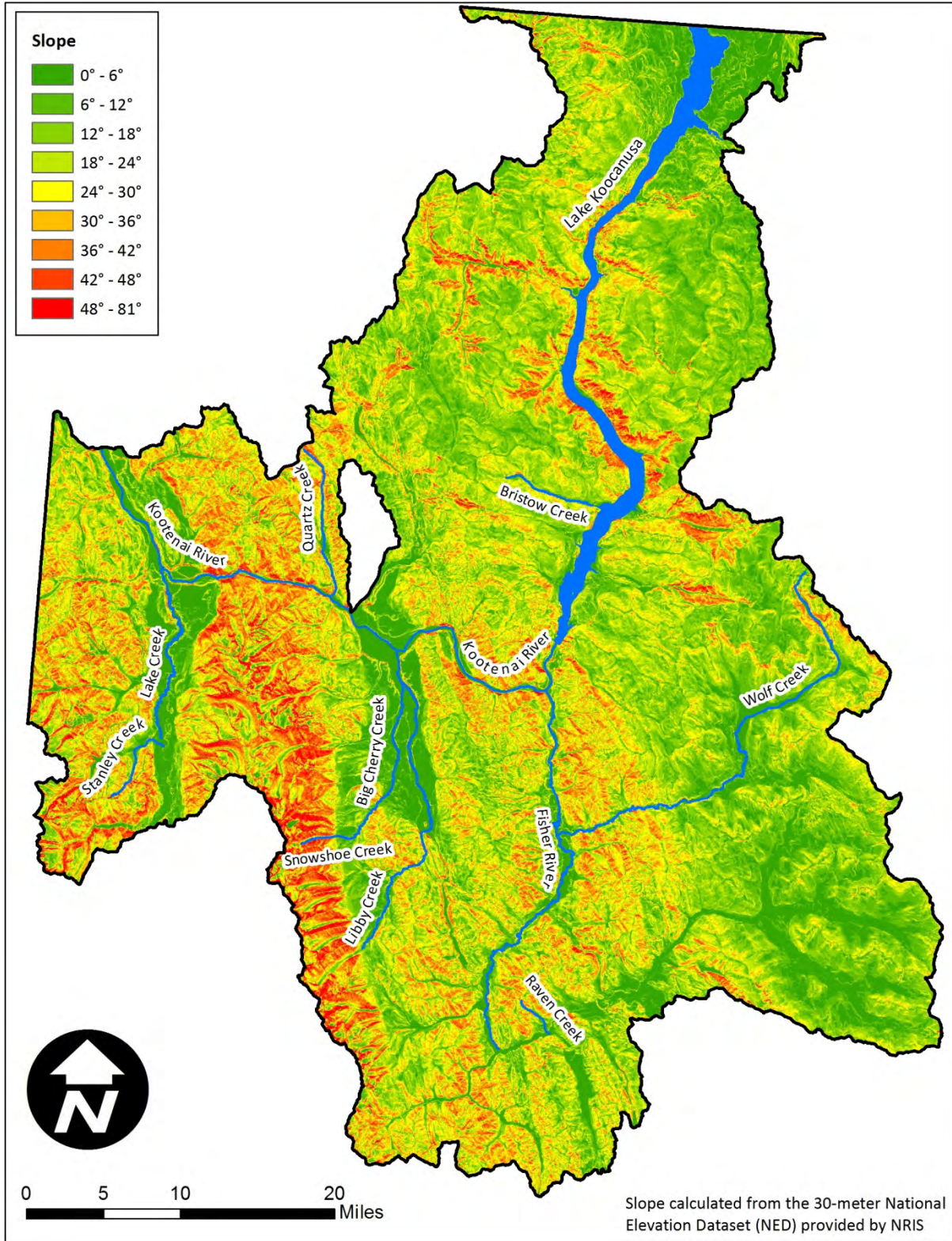


Figure A-3. Topography of the Kootenai-Fisher Project Area

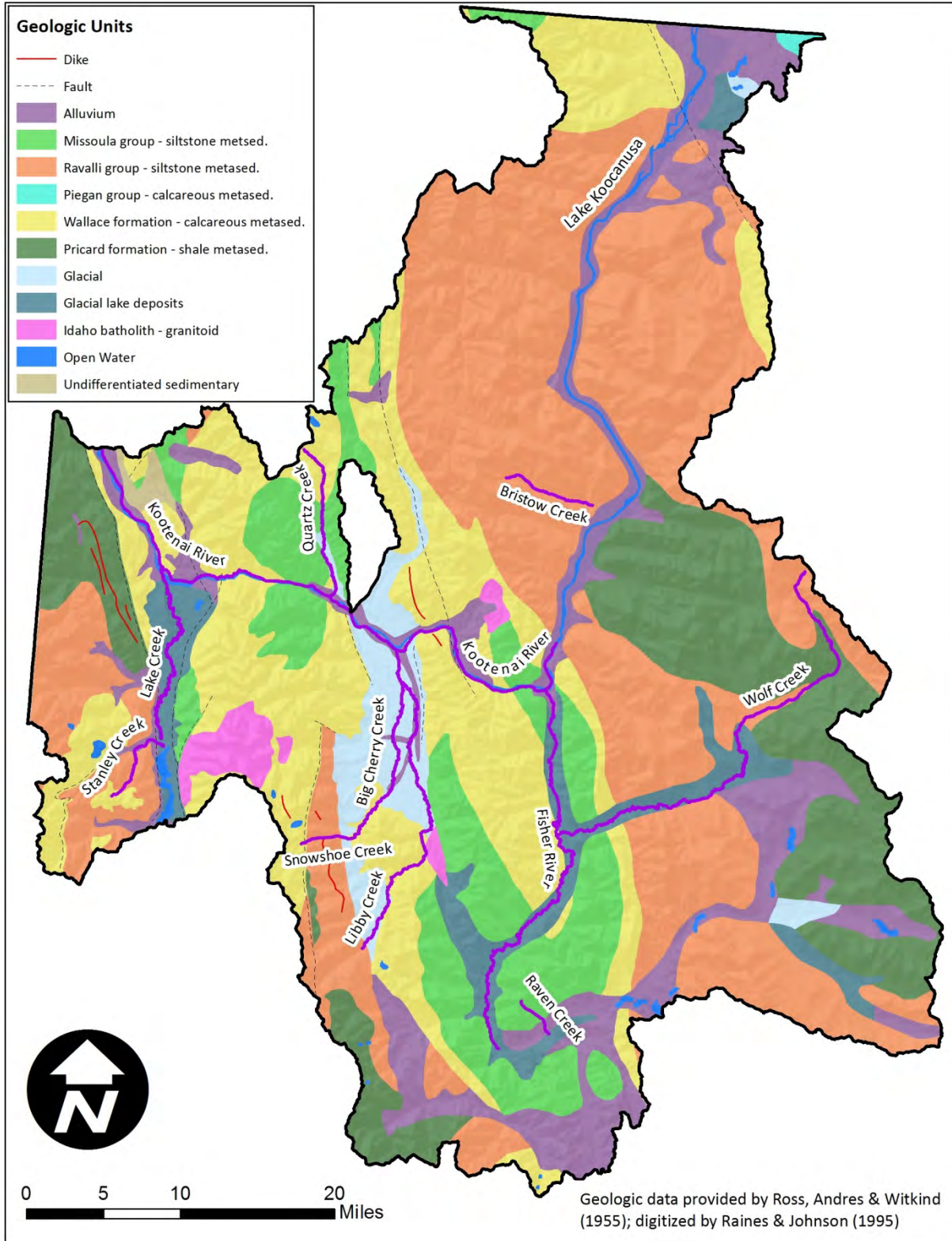


Figure A-4. Geologic units of the Kootenai-Fisher Project Area

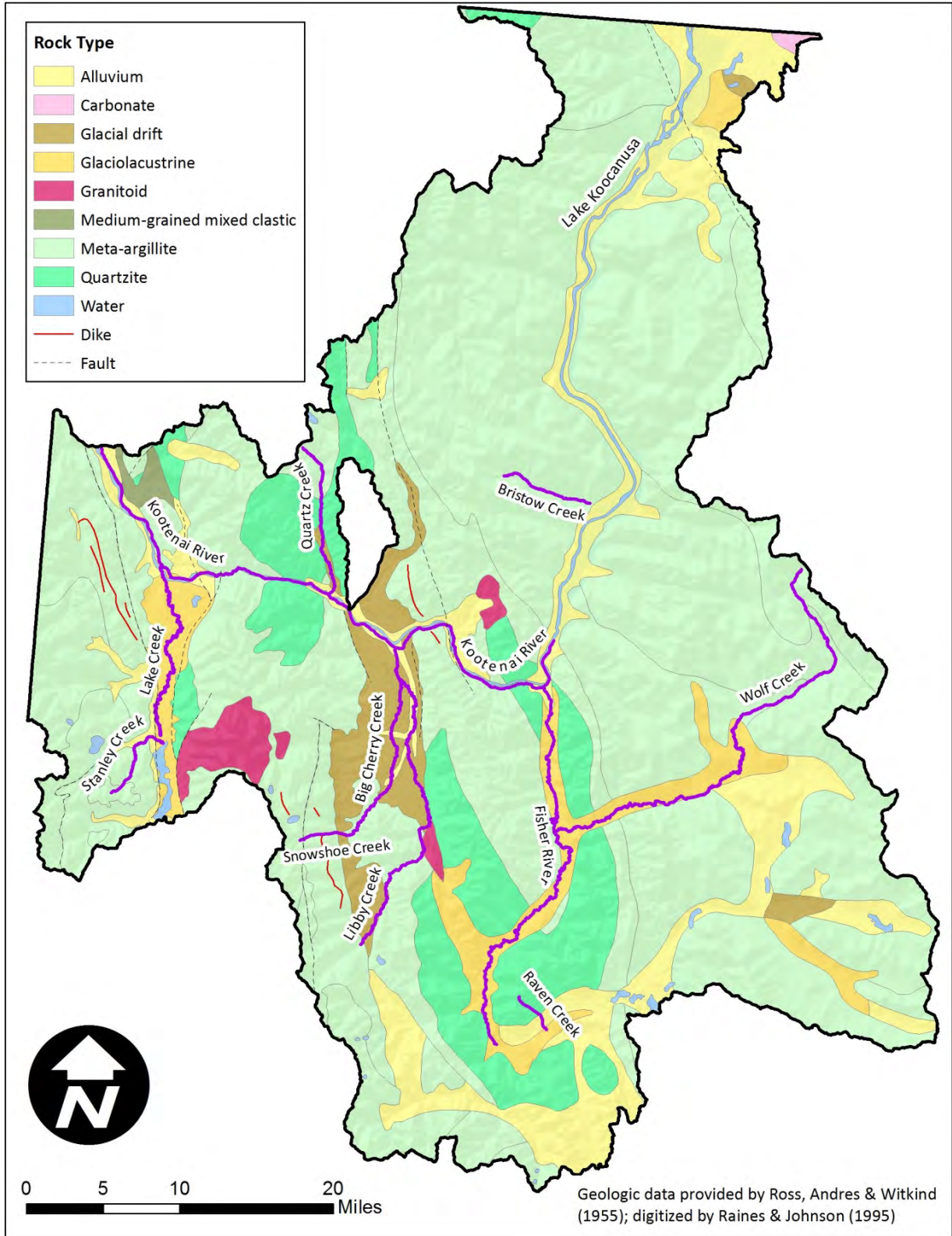


Figure A-5. Geologic rock types of the Kootenai-Fisher Project Area

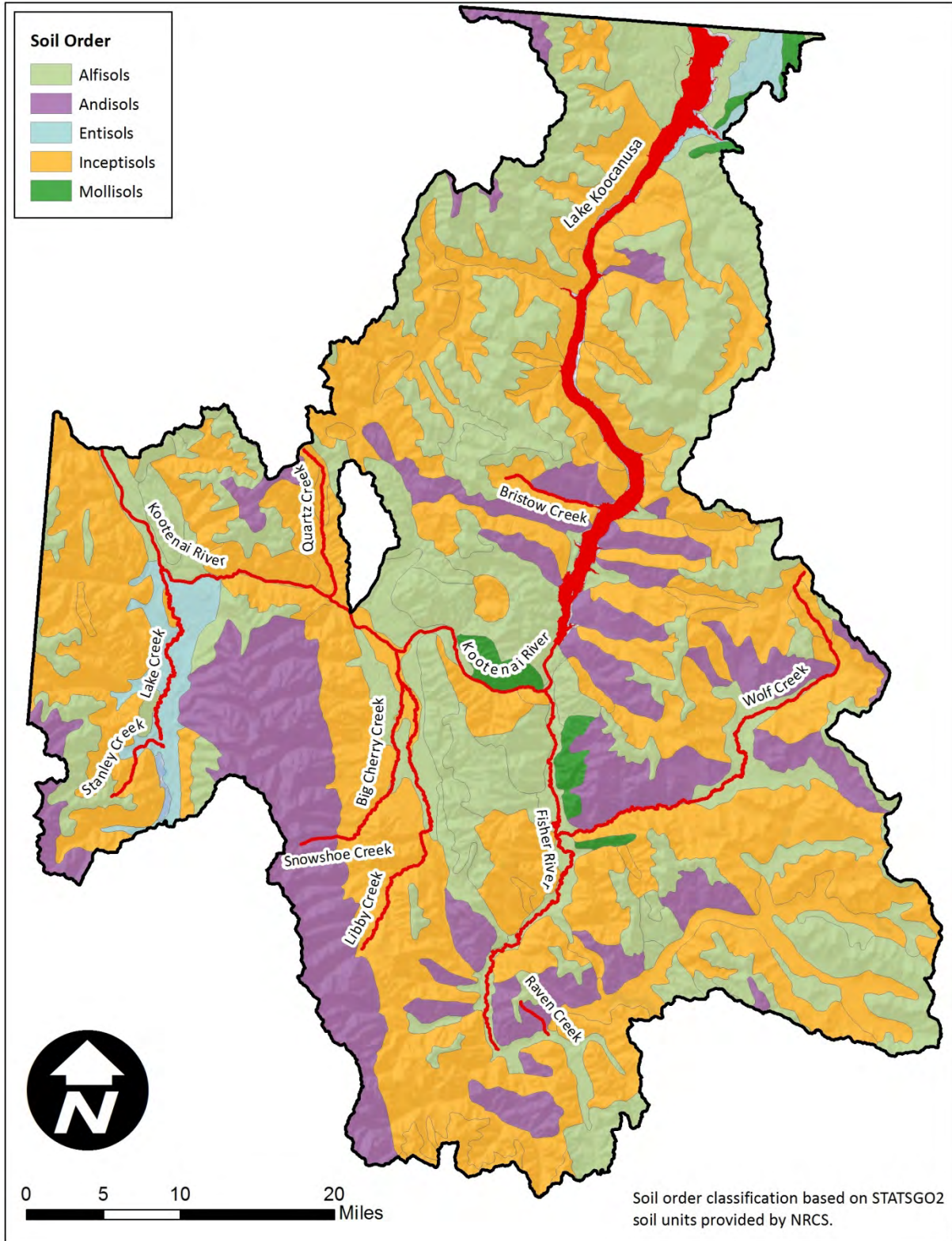


Figure A-6. Soil orders of the Kootenai-Fisher Project Area

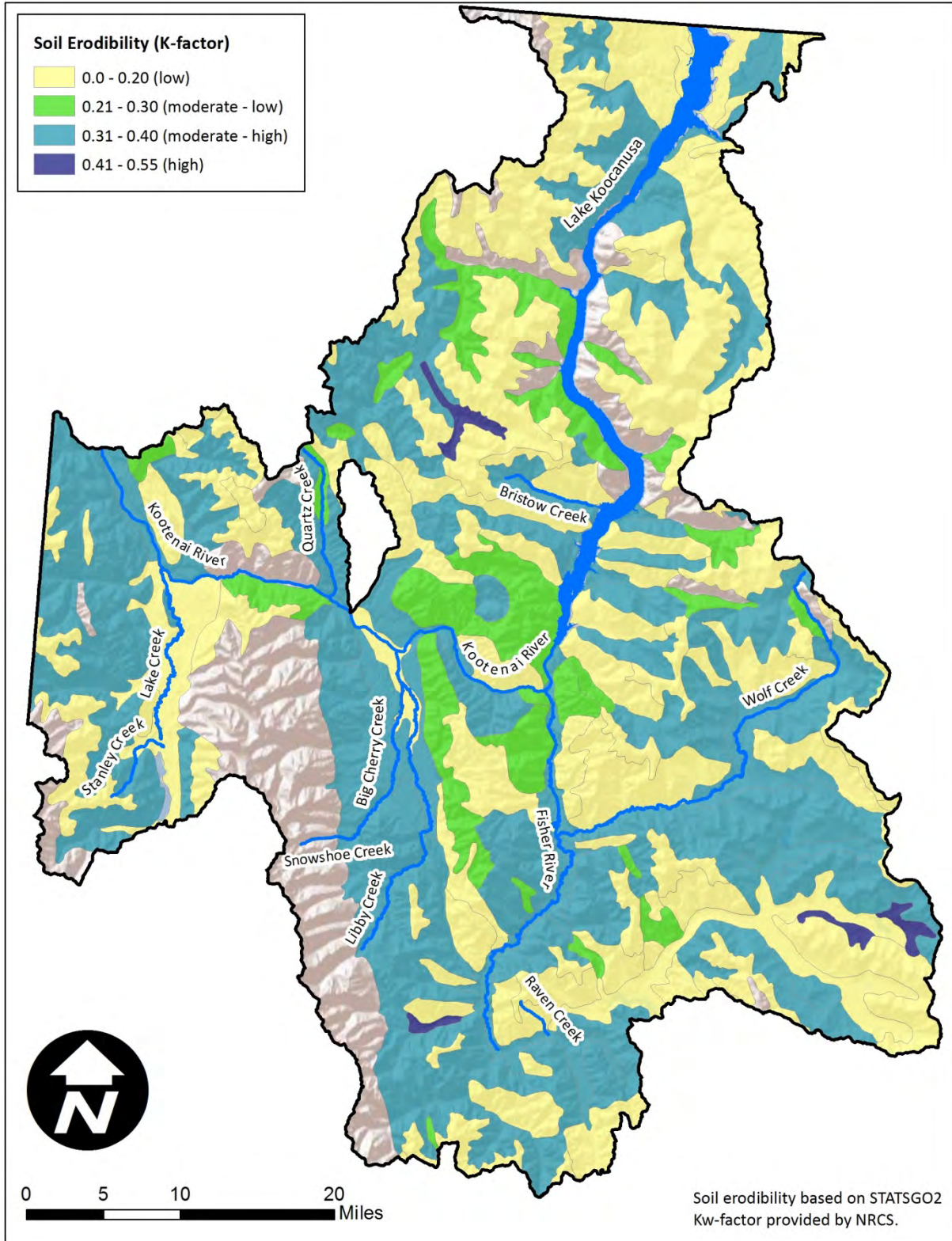


Figure A-7. Soil erodibility values of the Kootenai-Fisher Project Area

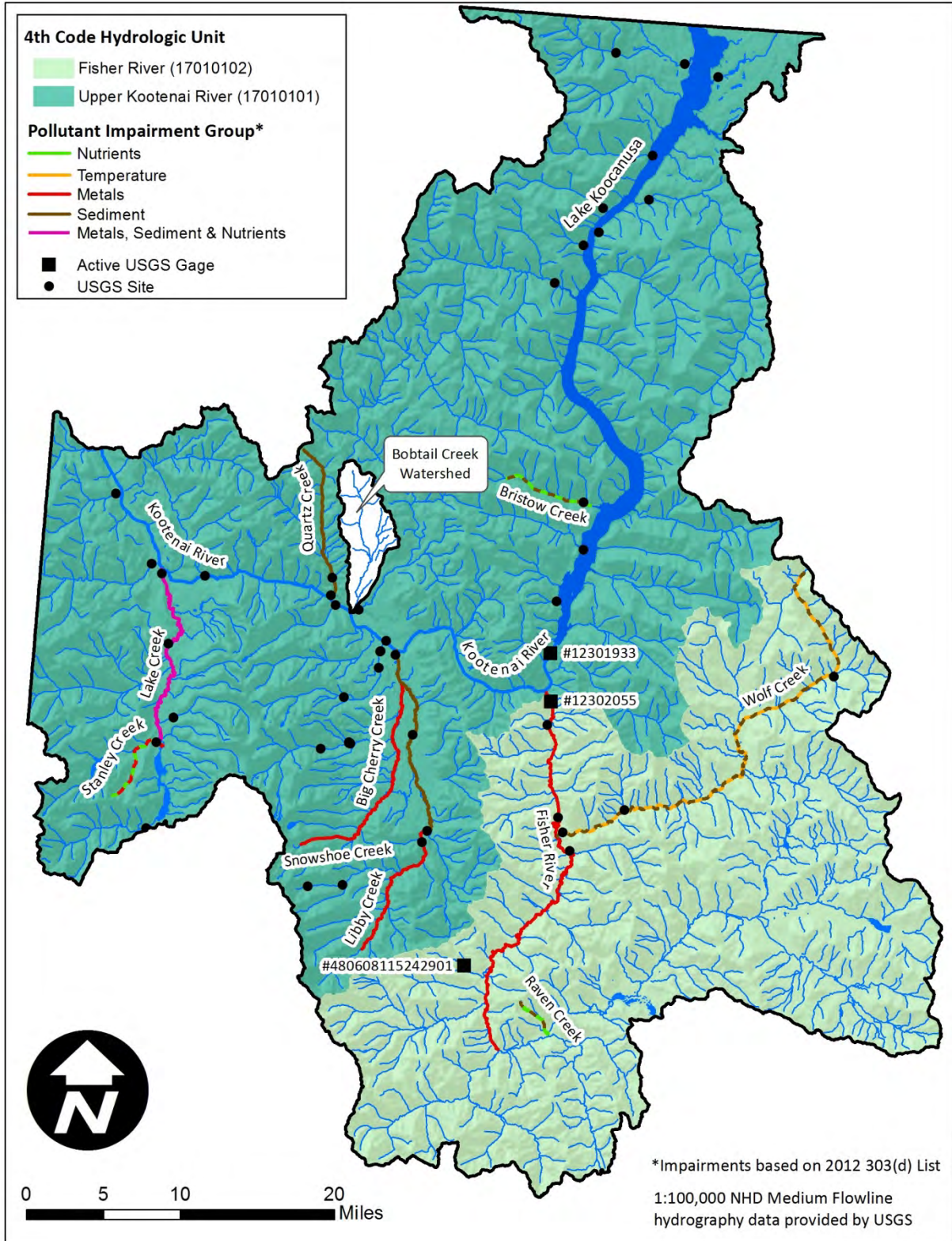


Figure A-8. Surface water hydrography of the Kootenai-Fisher Project Area

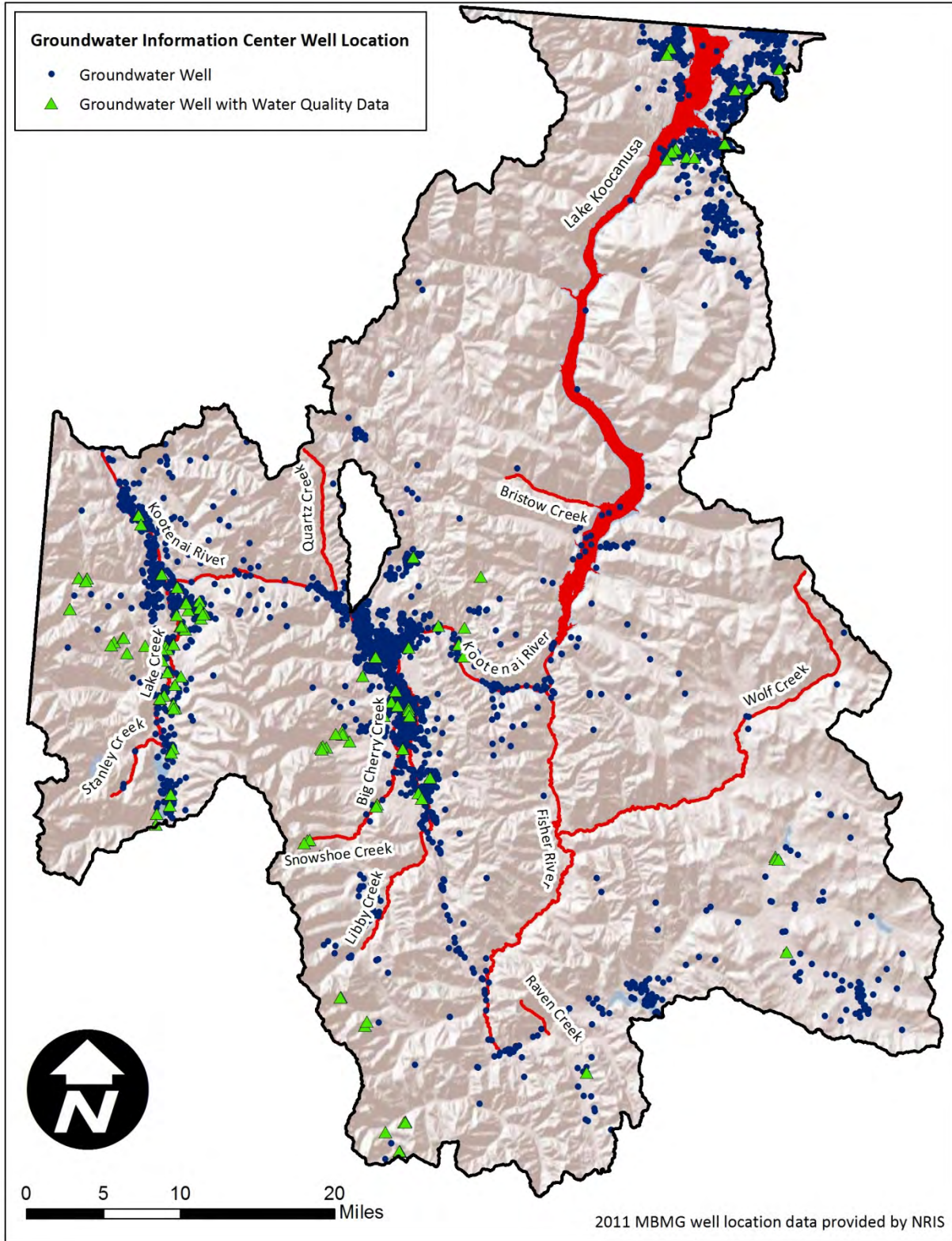


Figure A-9. Groundwater wells in the Kootenai-Fisher Project Area

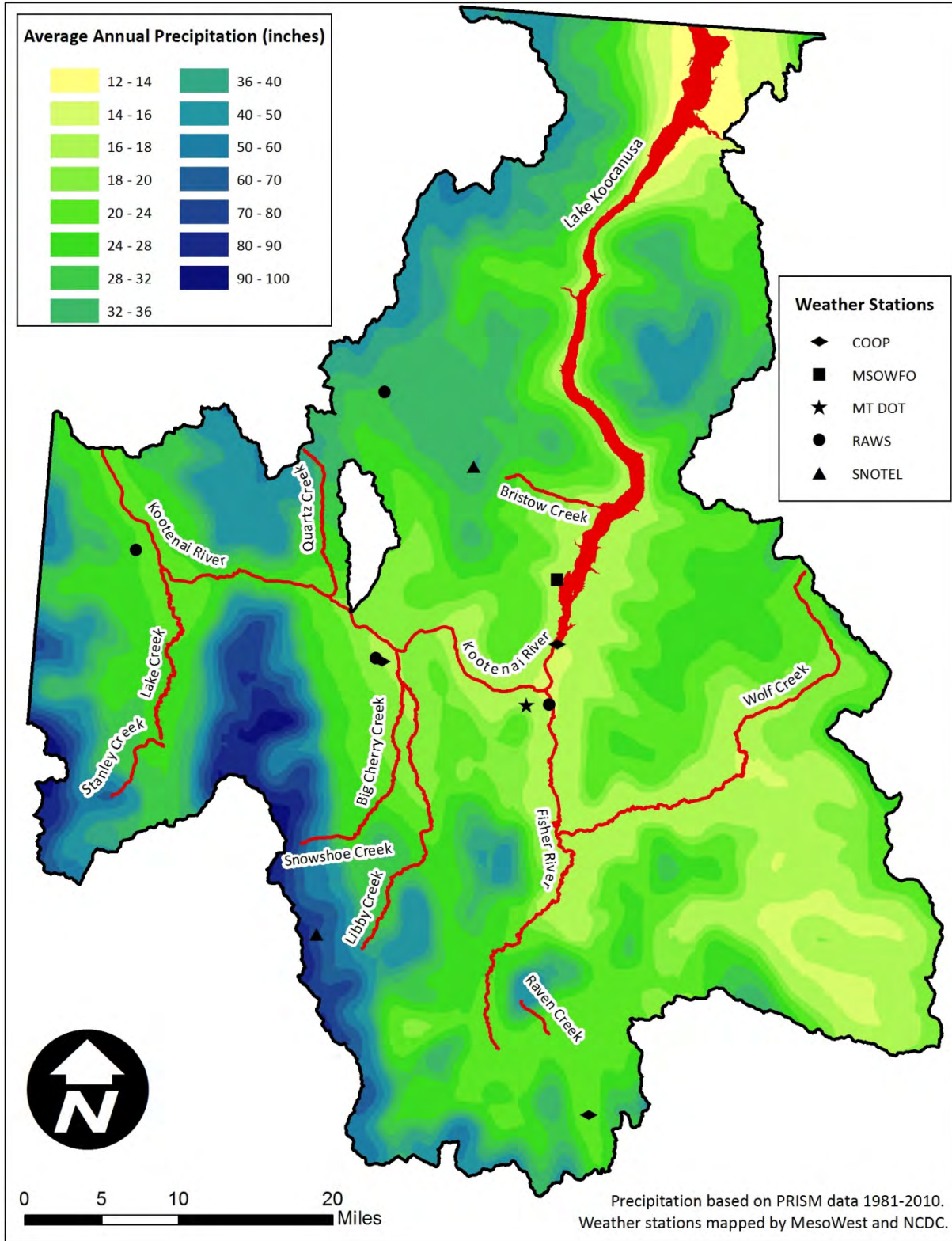


Figure A-10. Precipitation averages in the Kootenai-Fisher Project Area



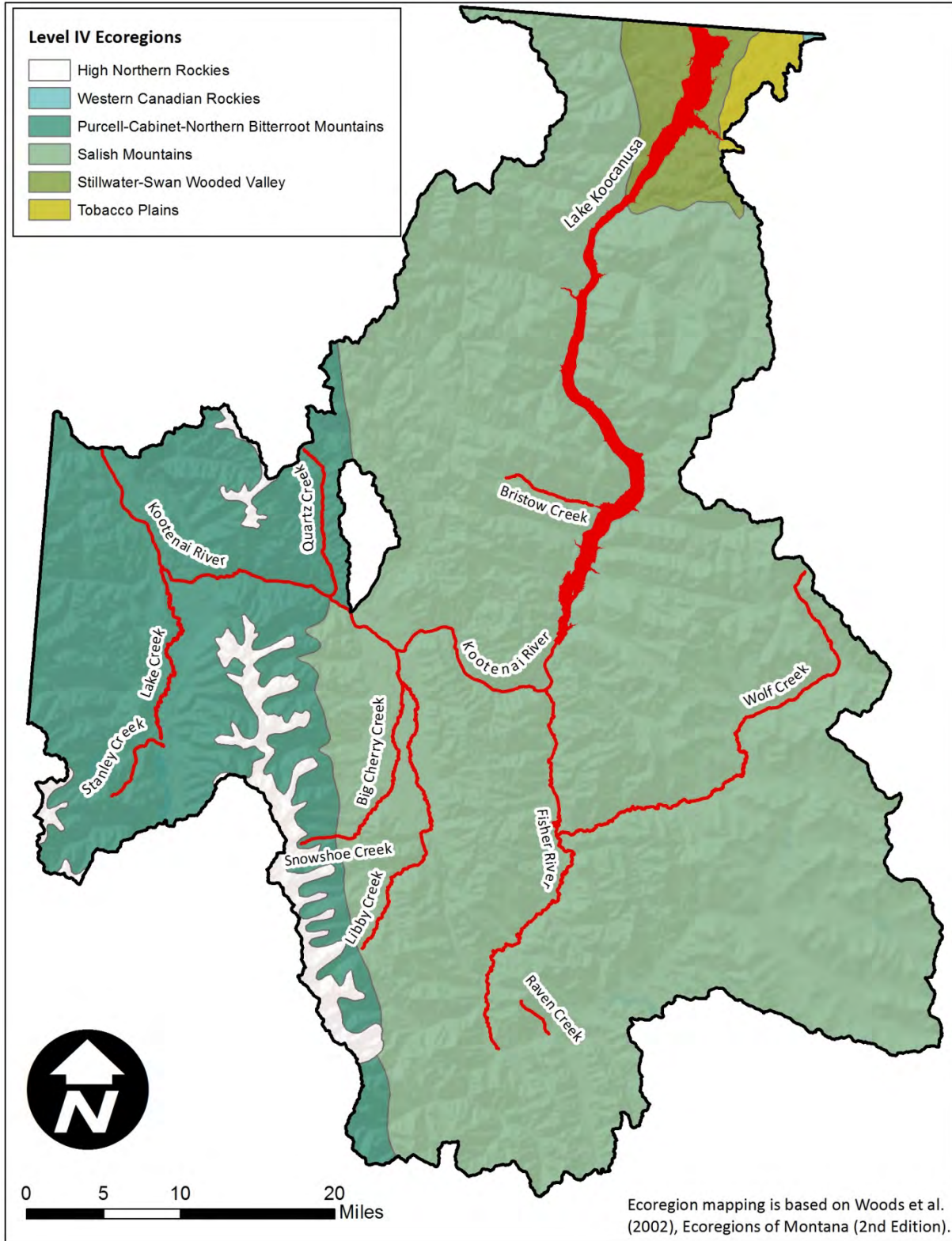


Figure A-11. Ecoregions of the Kootenai-Fisher Project Area

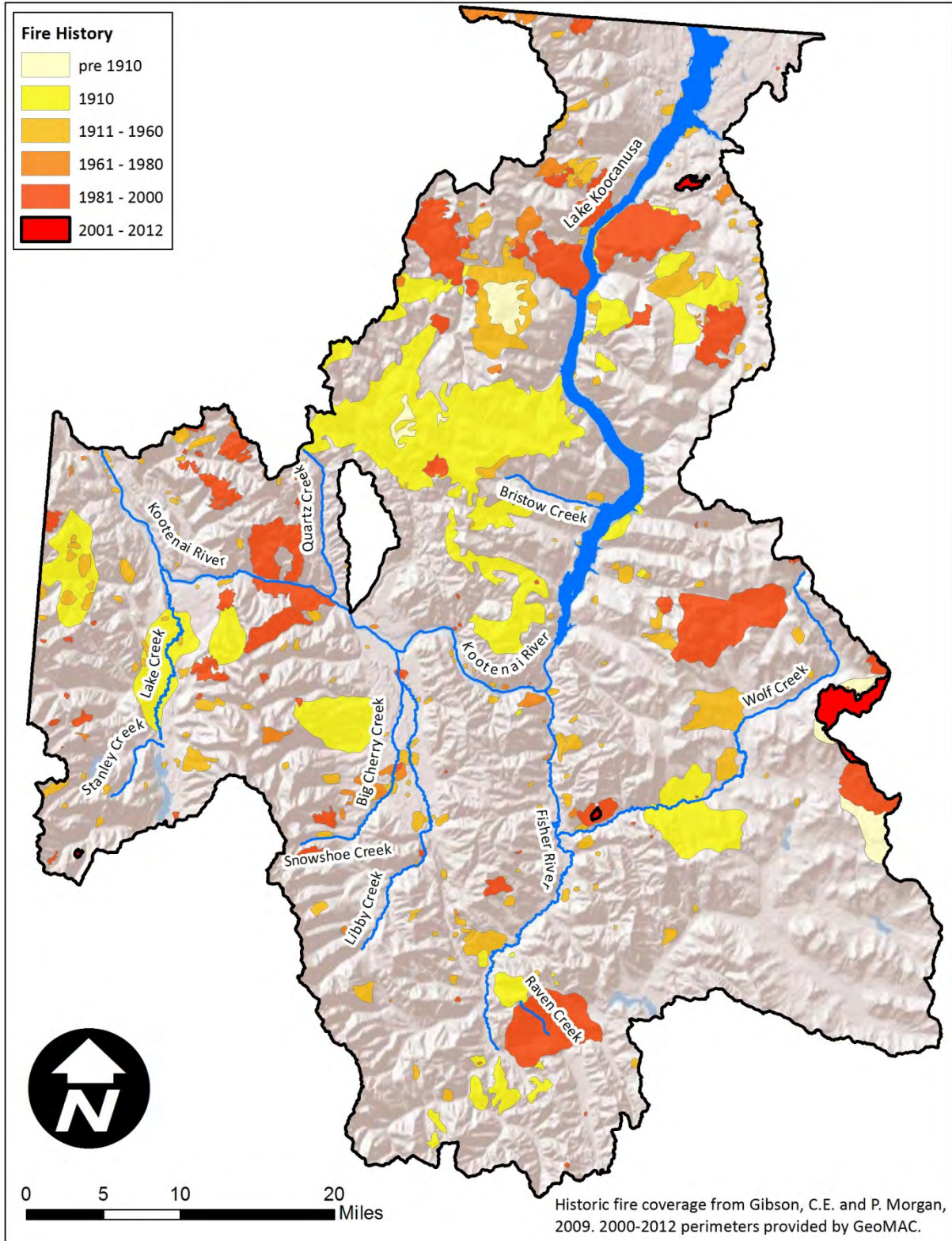


Figure A-12. Fire history of the Kootenai-Fisher Project Area

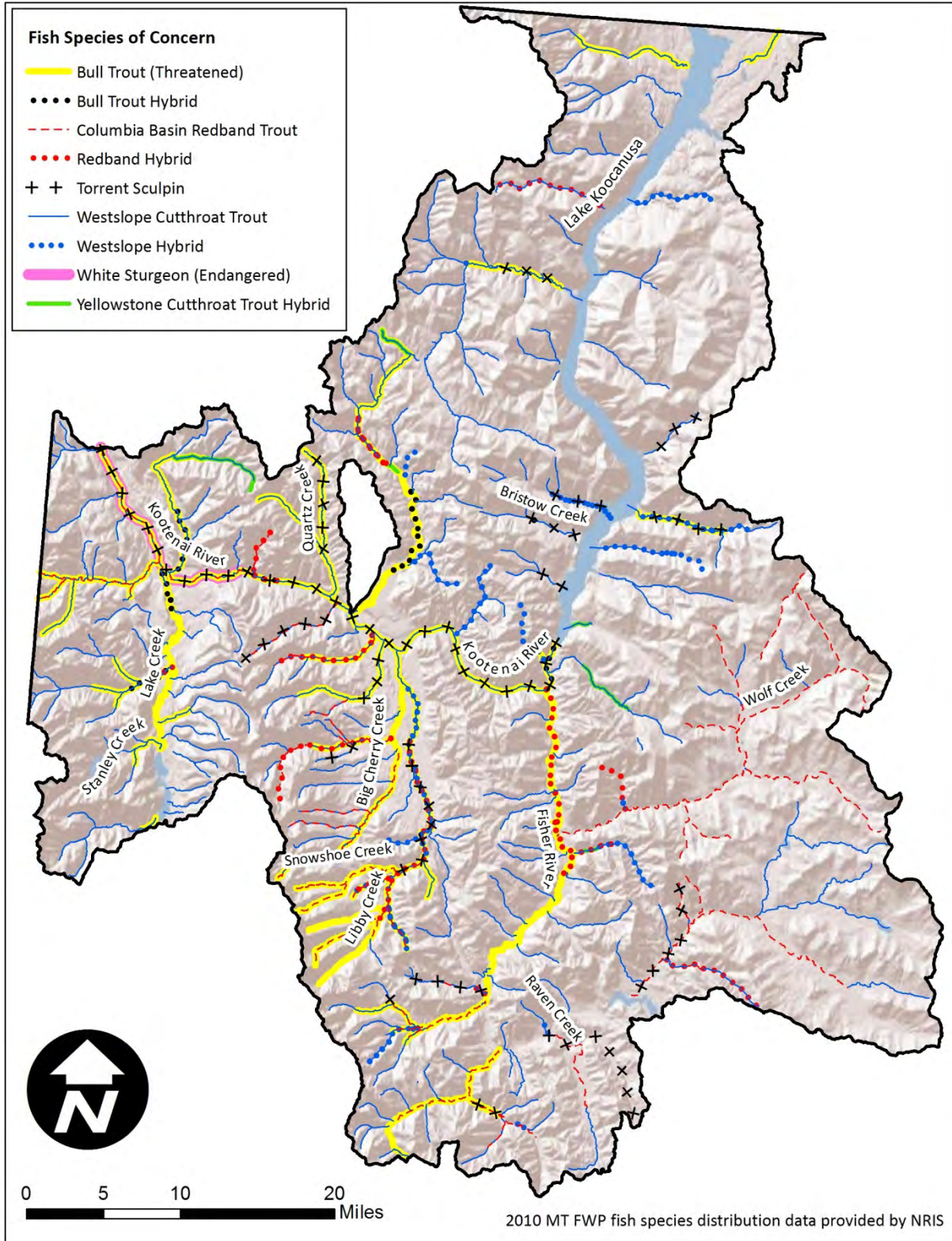


Figure A-13. Fish species of concern in the Kootenai-Fisher Project Area

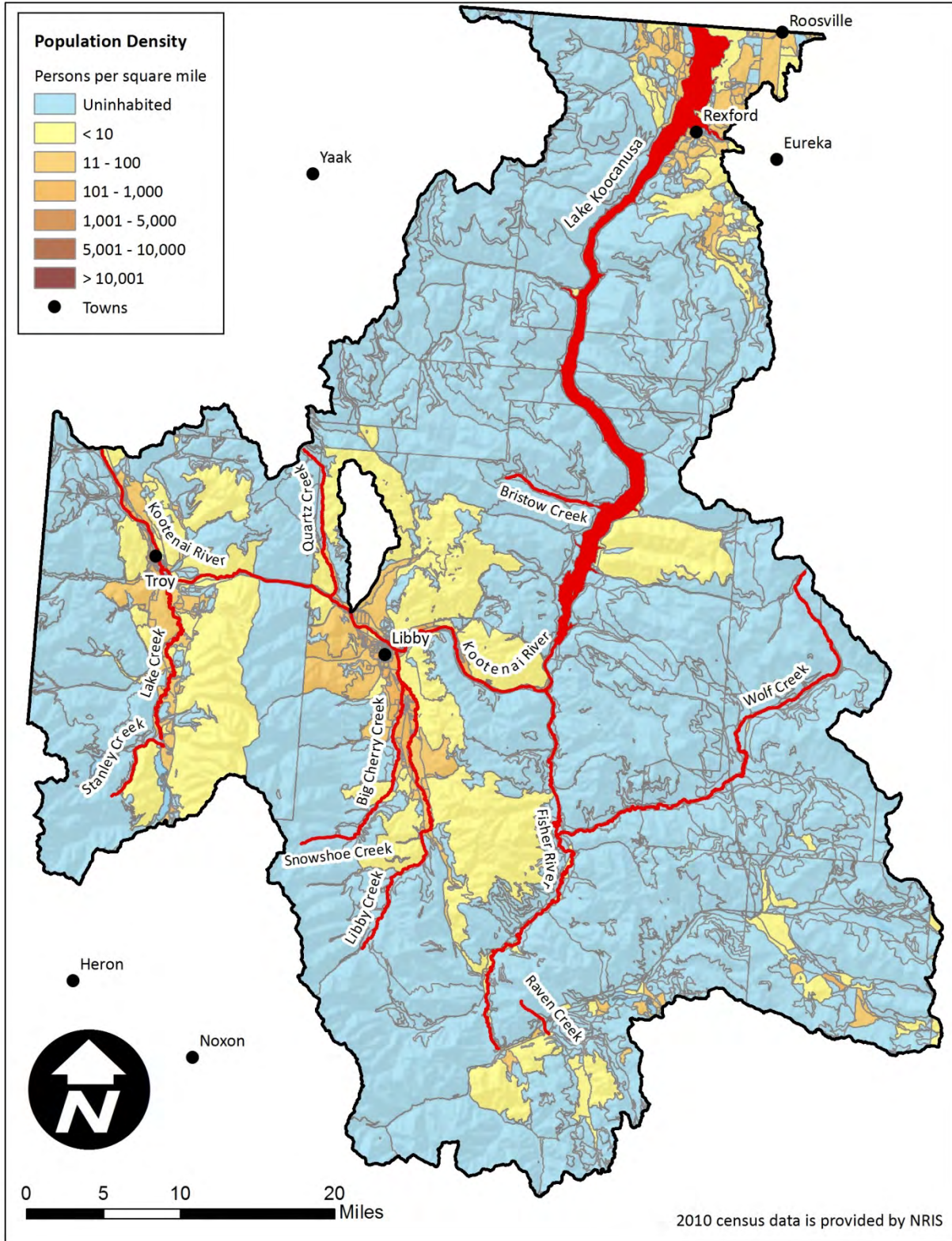


Figure A-14. Population density of the Kootenai-Fisher Project Area

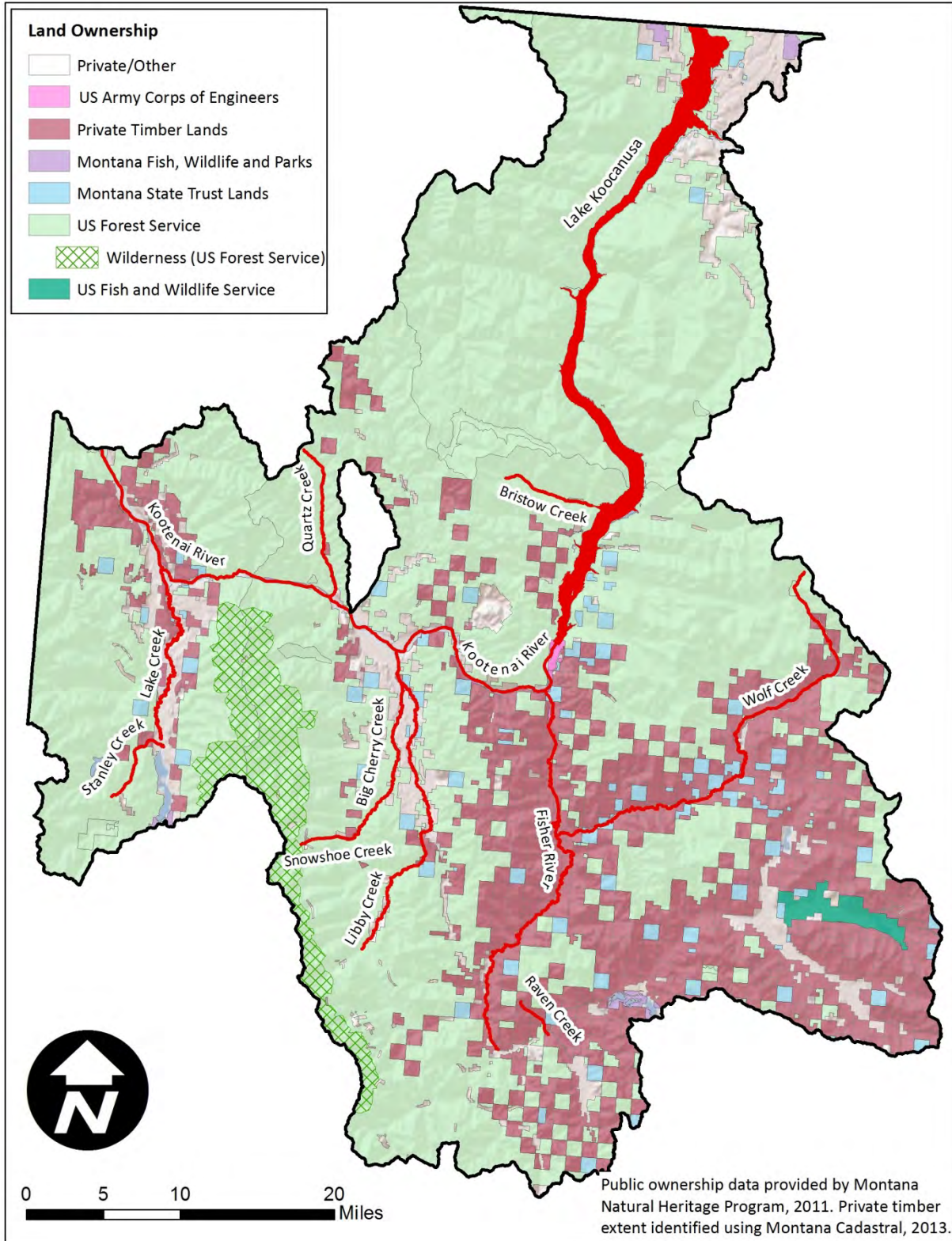


Figure A-15. Land ownership of the Kootenai-Fisher Project Area

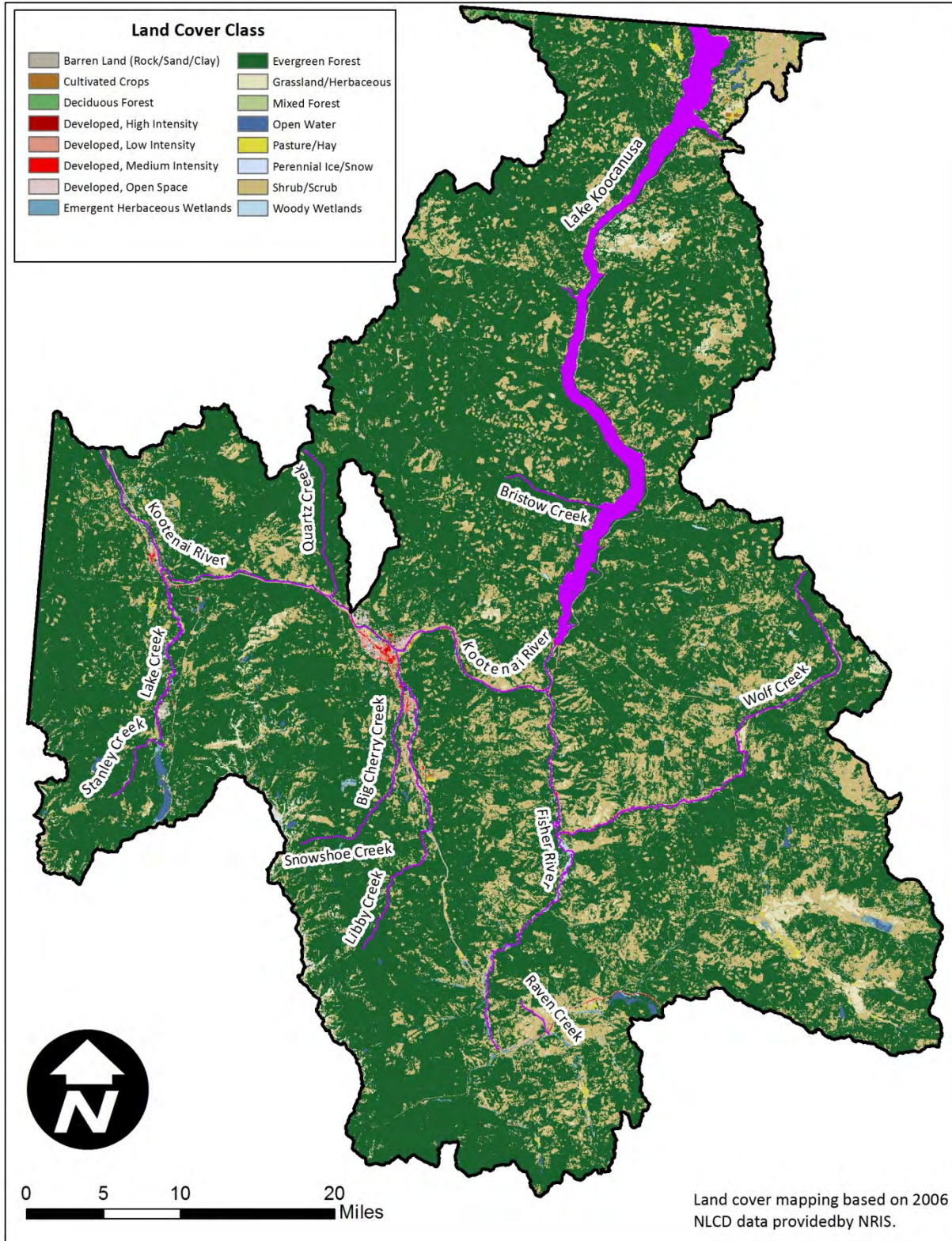


Figure A-16. Land cover of the Kootenai-Fisher Project Area

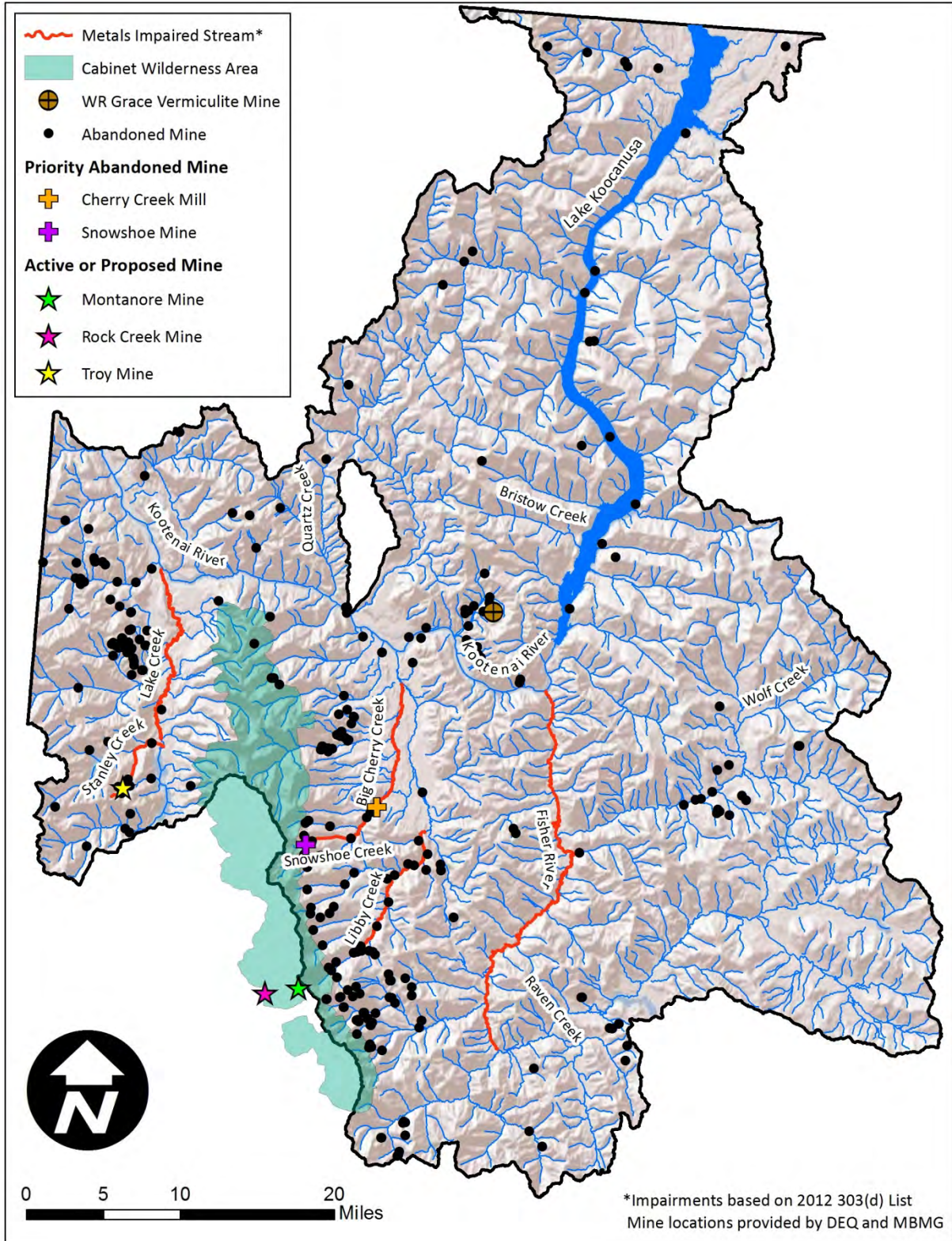


Figure A-17. Mining in the Kootenai-Fisher Project Area

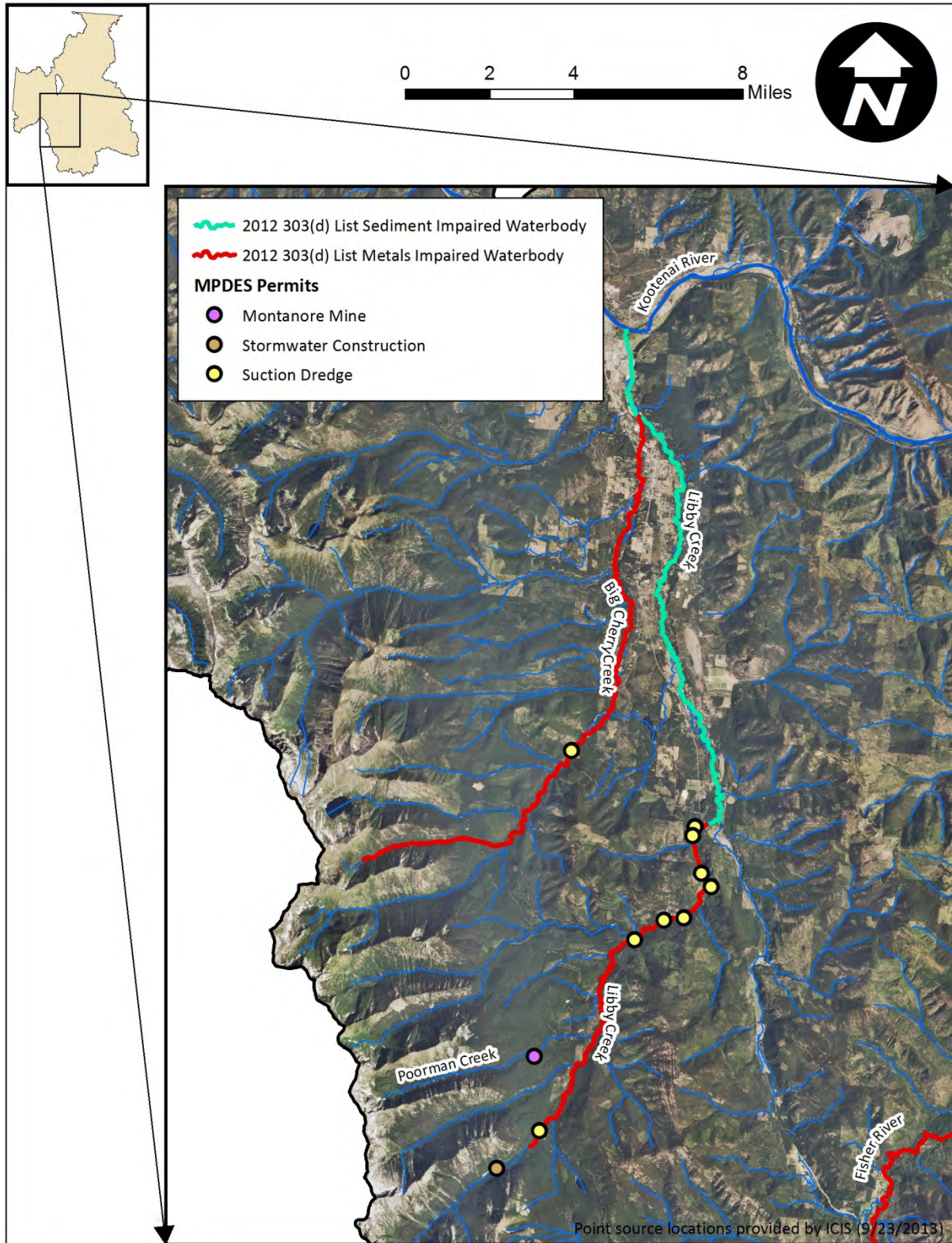


Figure A-18. Permitted point sources discharging to TMDL streams