Montana Geology/Nutrition Guidelines

Image: "The Arrival" © 2001 Stev H. Ominski & Brian Swaren.

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Montana Nutrition Guidelines by Rock Type

- First ‘nutrition-geology’ guidelines were developed in 2001 for north Idaho using then-available digital geology
- Similar guidelines were created for Washington state in 2004
- North Idaho version will be revised when newest digital geology (including Potlatch and Headquarters quadrangles) is released

Montana Digital Geology

State Map Program - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://www.mbmg.mtech.edu/stmap.htm

State Geologic Mapping Program

MBMG science & service

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Quadrangle Maps—*1:100,000 and 1:250,000 scale*

For more information contact:
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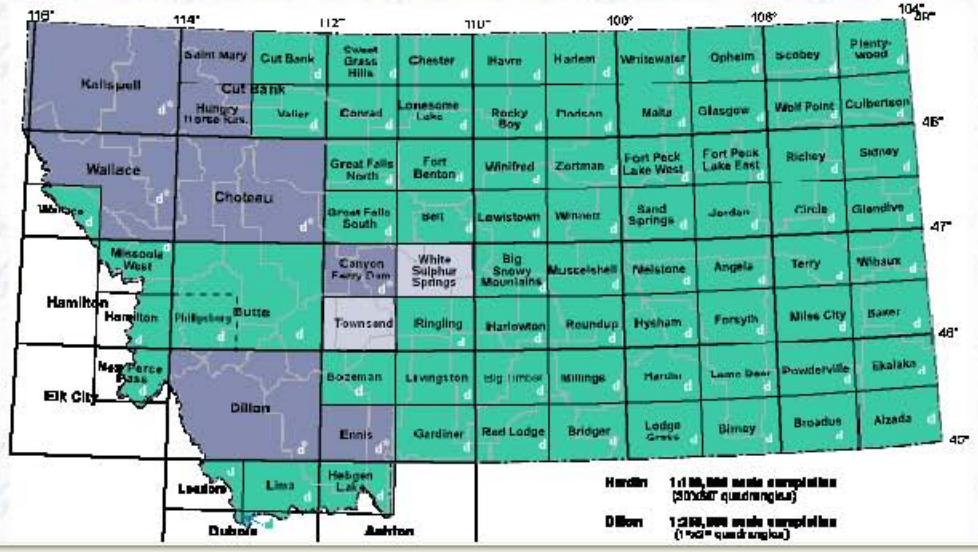
Large-scale maps
EDMAP
Special Area Maps

Click within the map to find the report for that area.
* *d on map=digital coverage*

NOW AVAILABLE: Downloadable PDF Files of quadrangles shown.
Just click on the map area to view the PDF.
Don't have Acrobat Reader? Download it for free.



IFTNC Guidelines

- IFTNC Code: Minor editing on geologic map units
- IFTNC Description: Brief description of map unit
- IFTNC Lithology: Lithology descriptor used to subcategorize rock units across maps
- IFTNC Category: Broad category
- IFTNC Evaluation: Good/Bad/Other

Categorize Rock Units

- IFTNC Broad Categories
  - Extrusive/basaltic rocks
  - Intrusive/granitic rocks
  - Mixed rocks and sedimentary rocks
  - Metamorphic rocks

Extrusive/basaltic rocks

- Subcategory A: Basalt
- Subcategory B: Other extrusive rocks
  - Rhyolite, dacite, andesite, dikes and sills

Intrusive/granitic Rocks

- Subcategory A Felsic intrusive rocks
  - Anorthosite, granite, granodiorite, monzodiorite, monzogranite, monzonite, quartz, quartz diorite, quartz monzonite, syenite, tonalite
- Subcategory B Mafic and ultramafic intrusive rocks
  - Dikes and sills, diorite/gabbro, pyroxenite/ultramafic

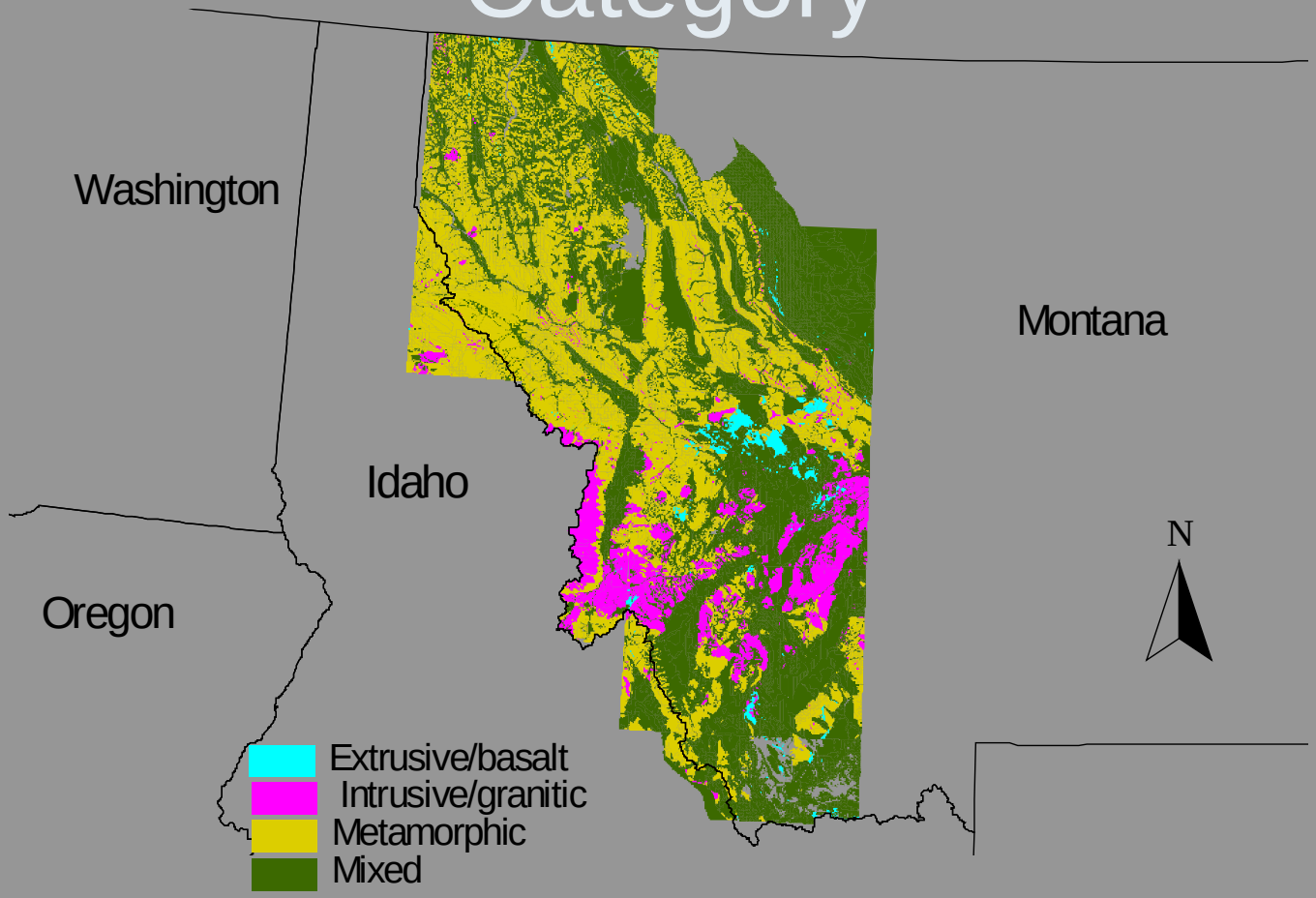
Metamorphic Rocks

- Subcategory A: Non-carbonate metasedimentary rocks
  - Argillite, siltite, quartzite, feldspathic quartzite, schist, gneiss, granite gneiss, amphibolite, mylonite
- Subcategory B: Carbonate and calc-silicate metasedimentary rocks
  - Calc-silicate gneiss, carbonate-bearing metaseds, limestone- and dolomite-dominated metaseds, marble

Mixed Rocks

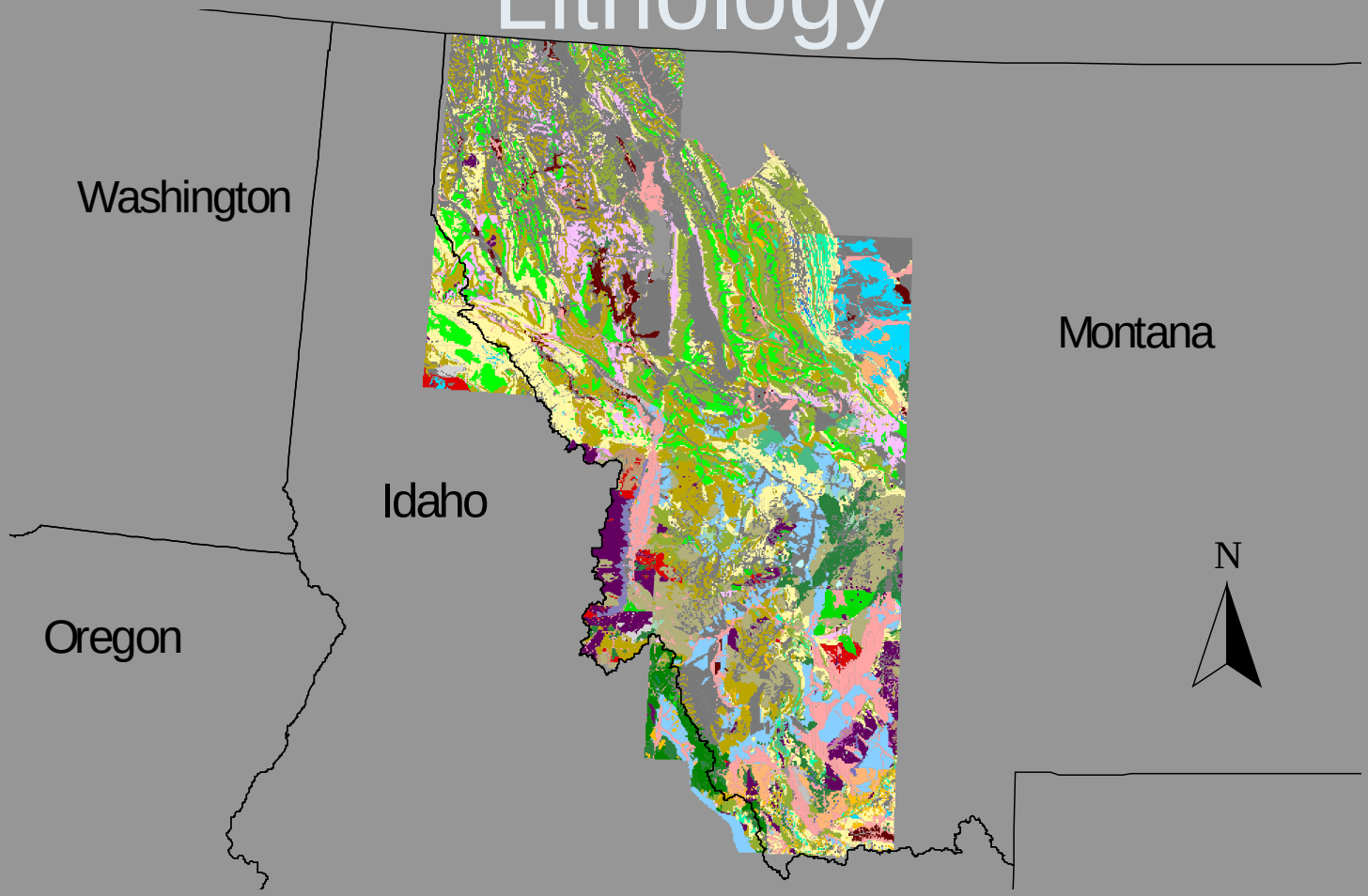
- Subcategory A: Consolidated sedimentary (non-carbonate) rocks
  - Conglomerate, feldspathic sandstone, mudstone, sandstone, siltstone
- Subcategory B: Unconsolidated sedimentary materials
  - Alluvial, glacial, colluvial, lacustrine, gravel and other sedimentary deposits
- Subcategory C: Volcanic deposits
- Subcategory D: Carbonate sedimentary rocks
  - Limestone, dolomite, carbonate-bearing sedimentary rocks
- Subcategory E: Miscellaneous sedimentary units
  - Mine dumps, iron formation, mature soil

Montana Geology – IFTNC Category



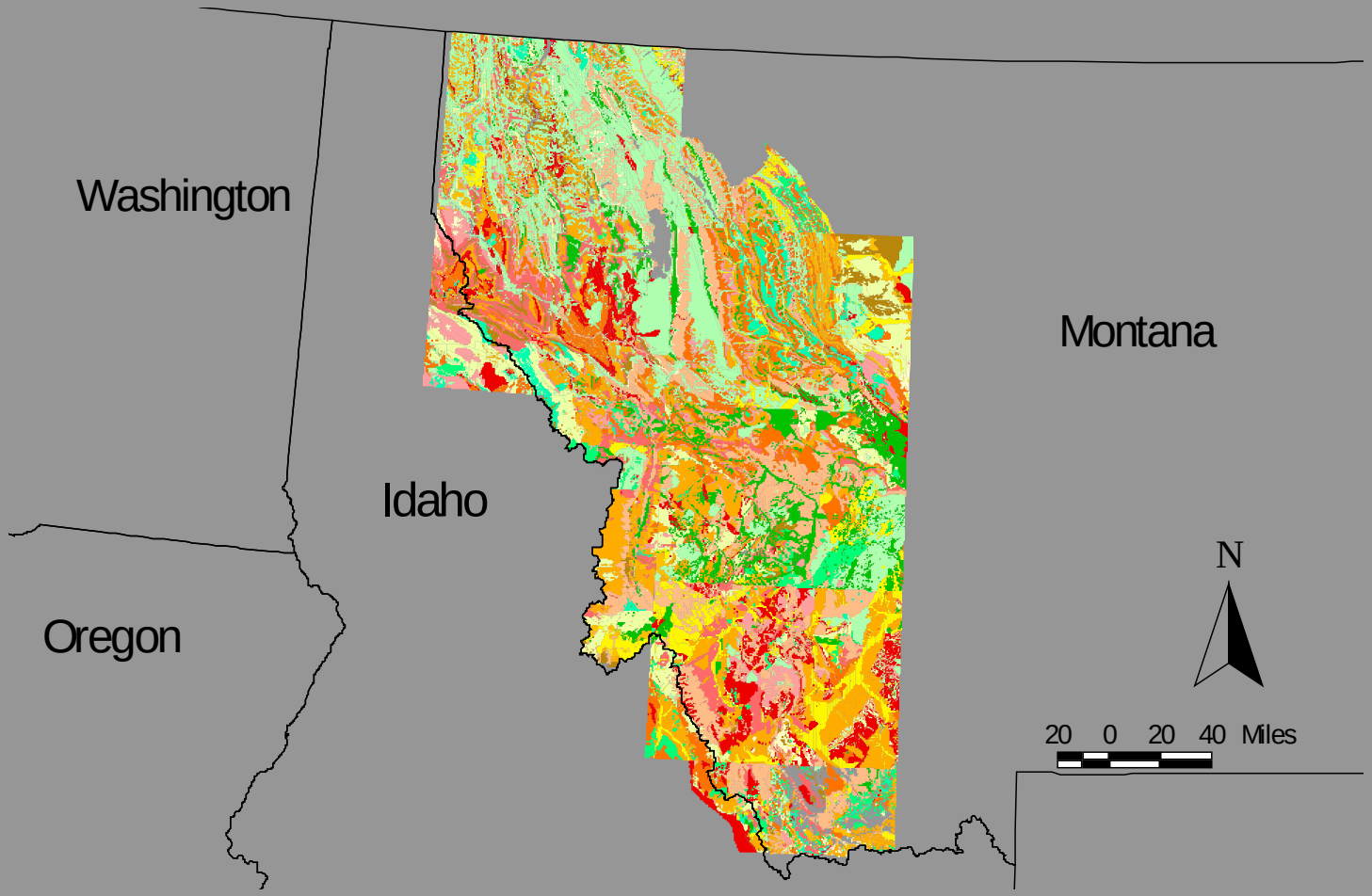
Montana Geology by IFTNC Category

Montana Geology – IFTNC Lithology



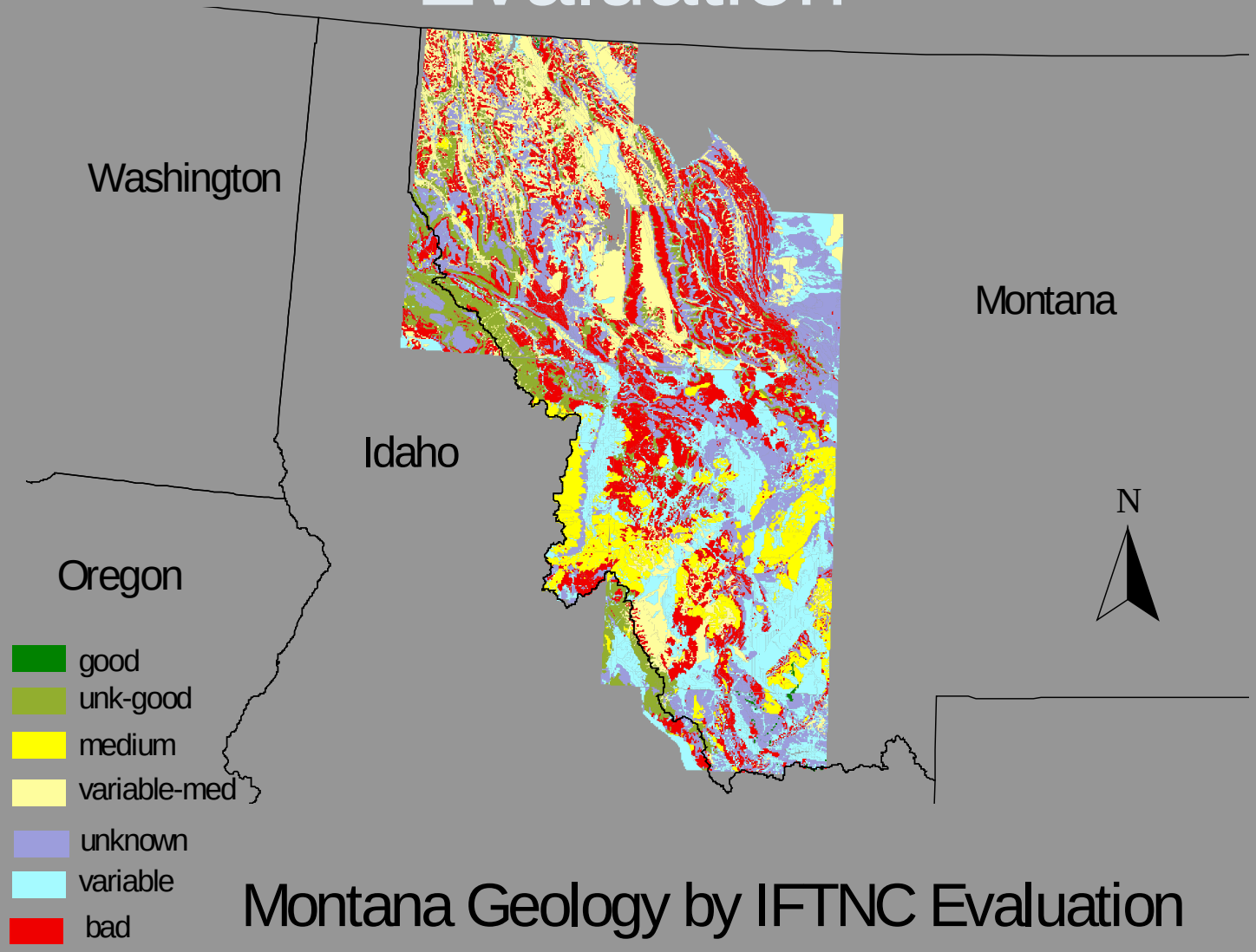
Montana Geology by IFTNC Lithology

Montana Geology – IFTNC Code



Montana Geology by IFTNC Code

Montana Geology – IFTNC Evaluation



Montana Geology by IFTNC Evaluation

Nutrient Management Guidelines

- A nutrient management recommendation is provided for each subcategory
- Includes suggested silvicultural strategies and possible fertilization regimes
- Screening trials are recommended in most cases prior to operational fertilization trials
- Report including dbase files and hard-copy tables will be made available to steering committee members
- Report can be used with hard copy maps as well as with GIS