Geologic maps as an aid to site type classification

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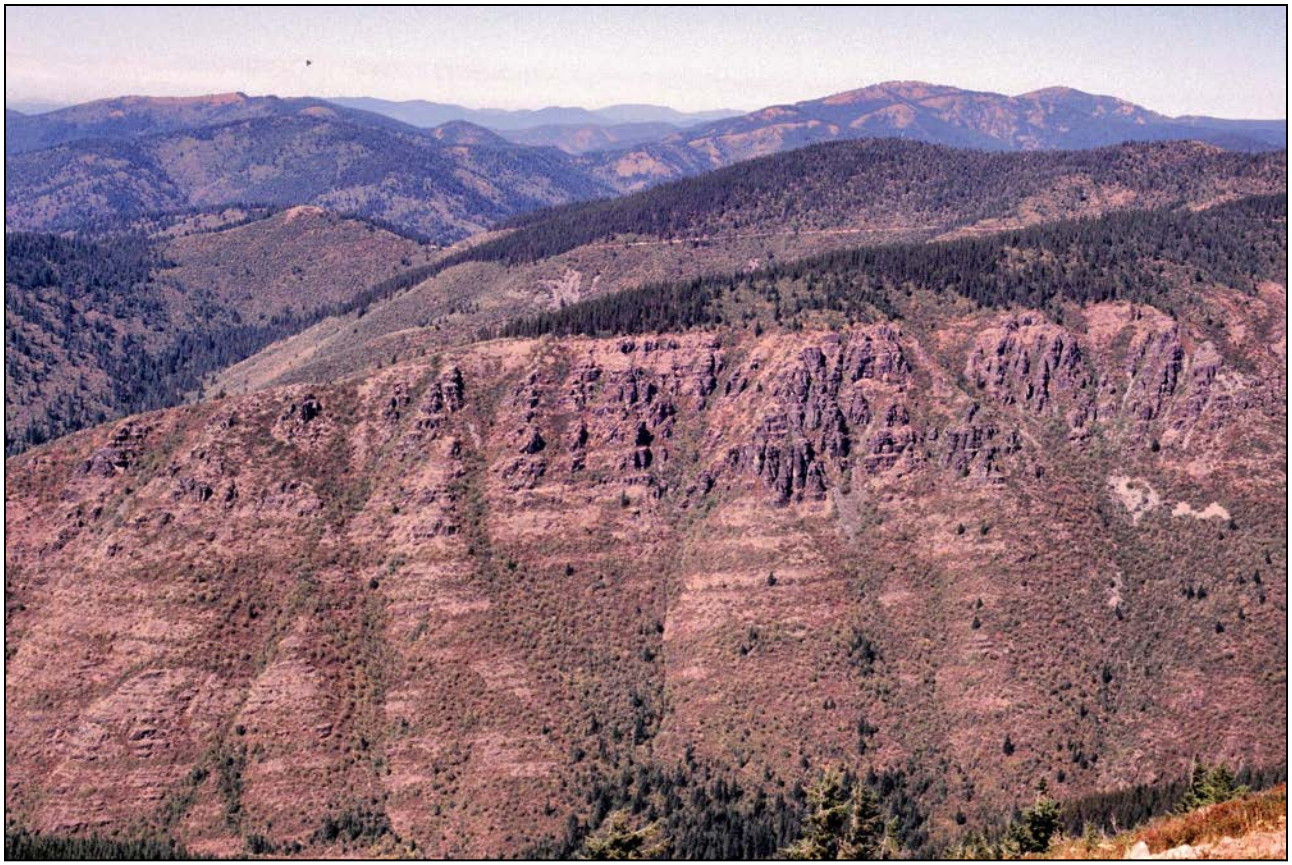
Site type is the interaction of topography, soil parent material, and climate on vegetation communities



North of St. Joe River

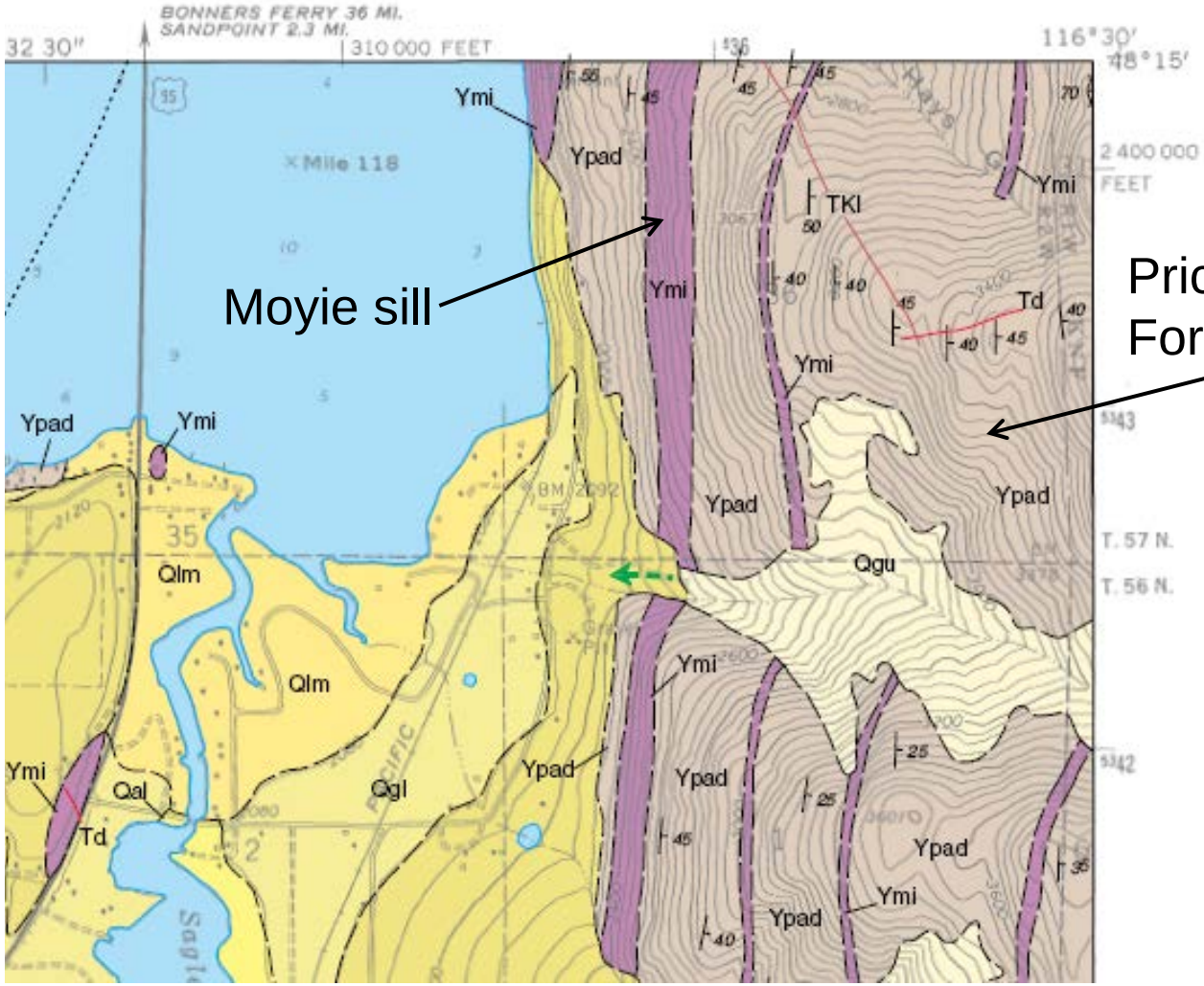
Geologic control—certain layers support tree growth

North of St. Joe River

Geologic control—certain layers don't readily support tree growth (here argillite of Belt Supergroup)

East of Sandpoint

Example of close-up view of a geologic map



Sagle quadrangle southeast of Sandpoint

Widespread north Idaho rock units

Prichard Formation
(Belt Supergroup)

Southeast of Sandpoint

Moyie sill
(igneous intrusion)

Northeast of Bonners Ferry

Weaknesses of geologic maps

- May not be recent coverage (S Idaho)
- Mixed units are not easily characterized
- Loess/ash not always mapped

Strengths of geologic maps

- Strong predictive capability over large areas
- Easily combined with other GIS datasets

Example of homogeneous rock unit (granite)

Northeast of Sandpoint

Easy to predict mineralogic and chemical composition

Example of mixed rock unit (metasedimentary)

N Fork Clearwater River

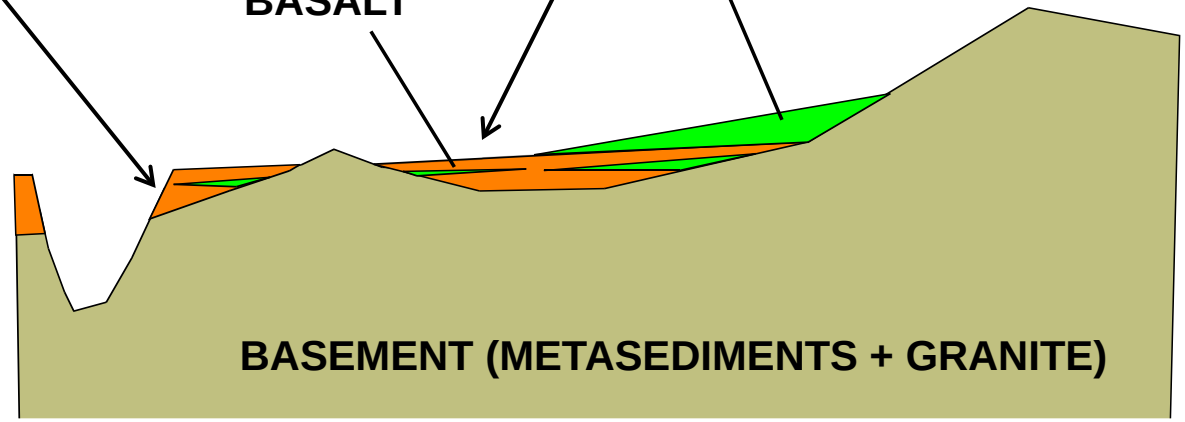
Difficult to predict mineralogic and chemical composition—wide range in silica content, for example

N Fork CDA River

Location relative to modern stream incision also key

Near Juliaetta

Near Weippe



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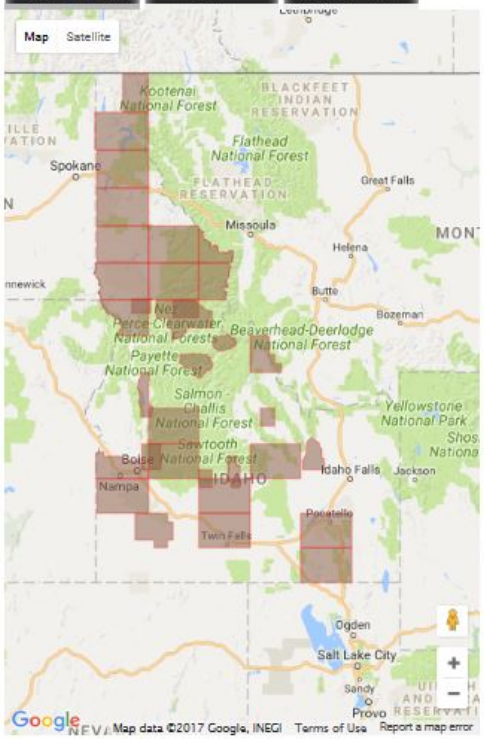

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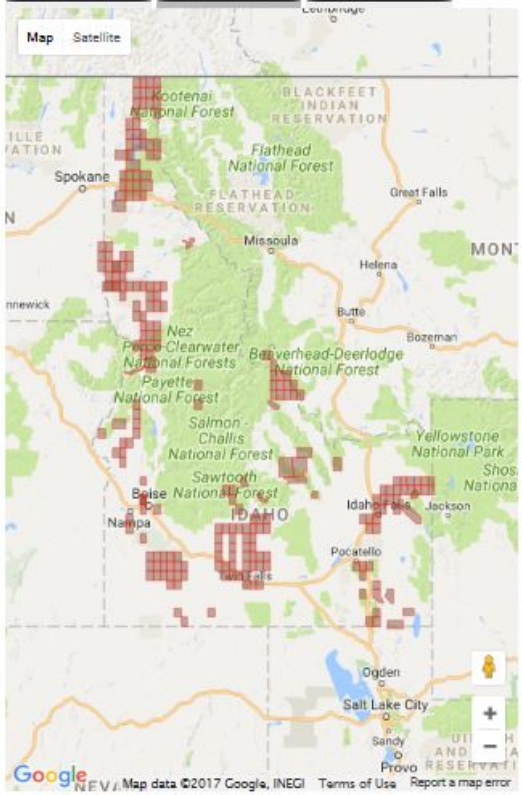

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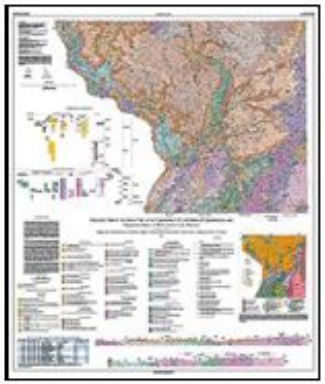
Geologic Maps (GM)

Title: ***Geologic Map of the Idaho Part of the Grangeville 30 x 60 Minute Quadrangle, and Adjoining Areas of Washington and Oregon***

Author(s): John D. Kauffman
Keegan L. Schmidt
Reed S. Lewis
David E. Stewart
Kurt L. Othberg
Dean L. Garwood



Year: 2014

Price: $18.60—Includes 24-page booklet.

Pages: 24

Scale: 1:100,000

Size: 36" x 43"

Publication ID: GM-50

Please indicate preference for folded or rolled.

Print type: This publication is printed once an order has been placed and is not stocked. Expected printing time is 3-4 business days.

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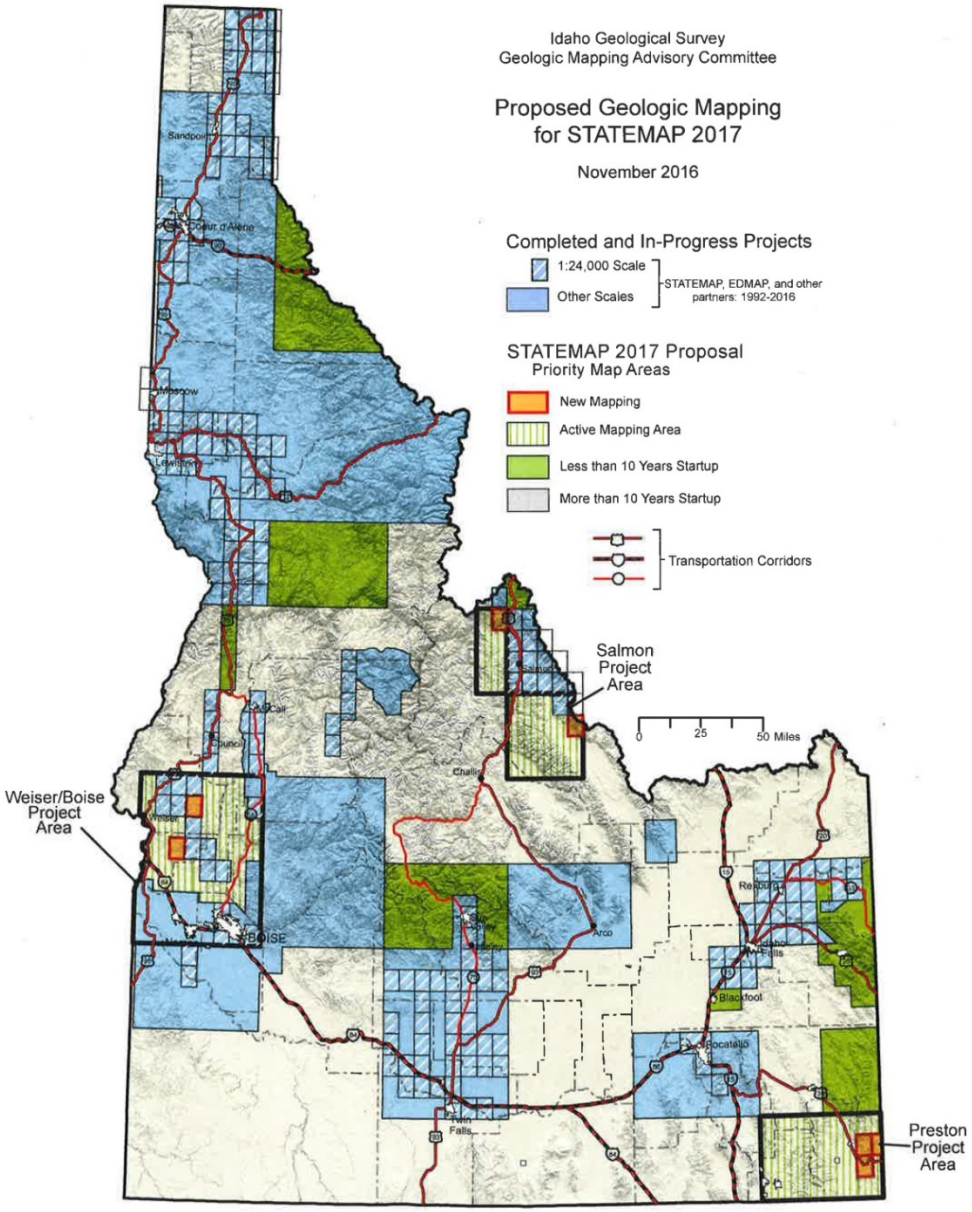

Status of geologic mapping by the Idaho Geological Survey

See also:

USGS National Geologic Map Database
https://ngmdb.usgs.gov/

Montana Bureau of Mines and Geology
https://www.mbmg.mtech.edu/

Oregon Department of Geology and Mineral Industries
www.oregongeology.org/

Washington State Division of Geology and Earth Resources
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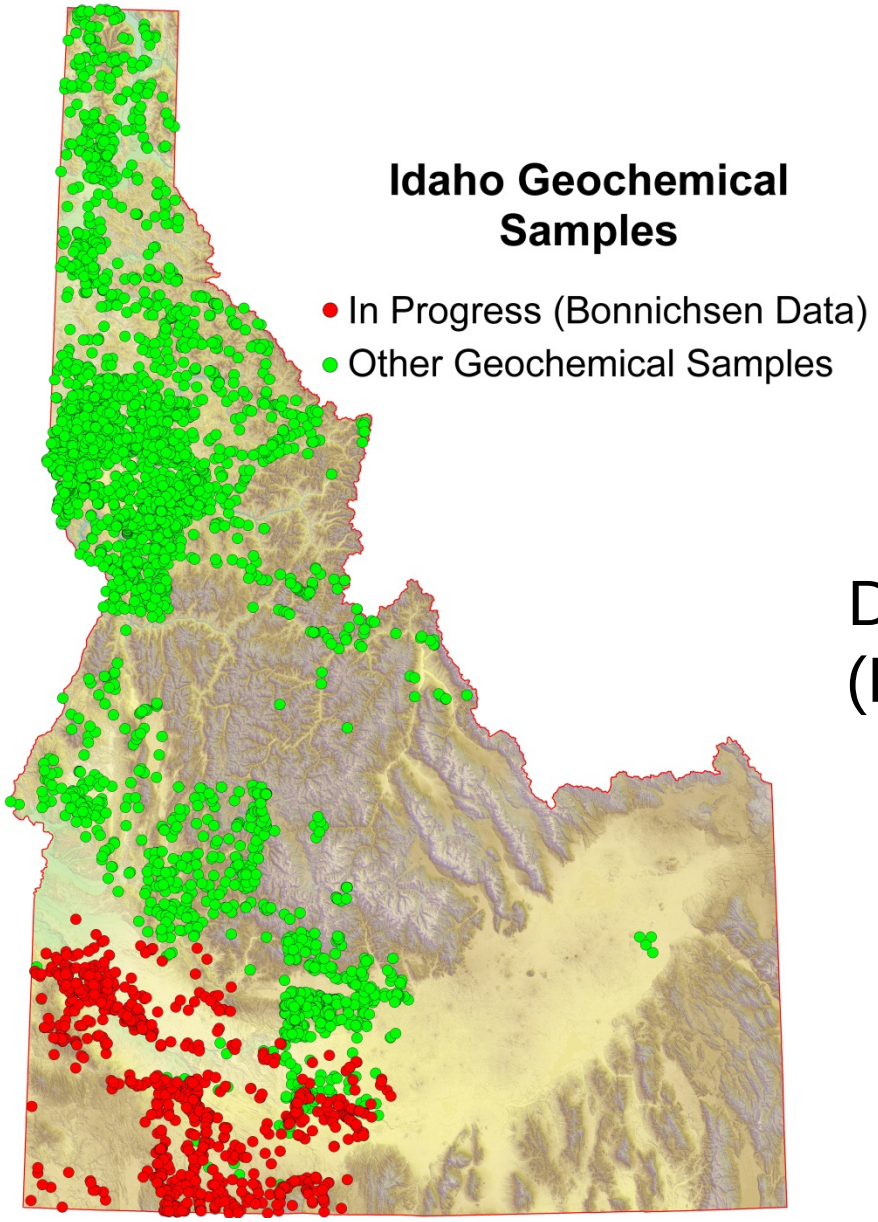

Digital Analytical Data Series (DAD)—whole-rock analyses

Major elements:
Si, Al, K, Na….

Trace elements:
Cu, Zn, Rb, Sr…

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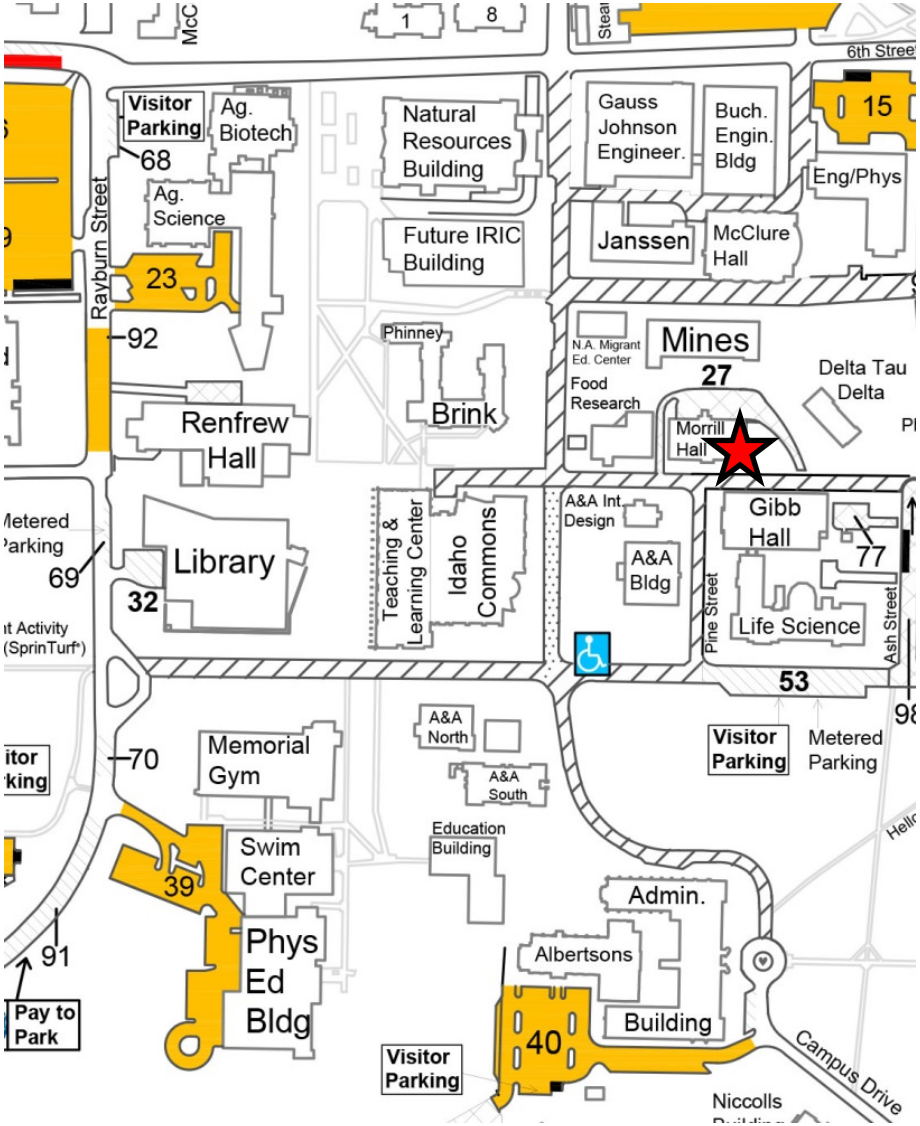

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