

Access Threats



Ronda Strauch

UW Civil & Environmental Engineering

Acknowledgements

Alan Hamlet

Regina Rochefort

Chris Lauver

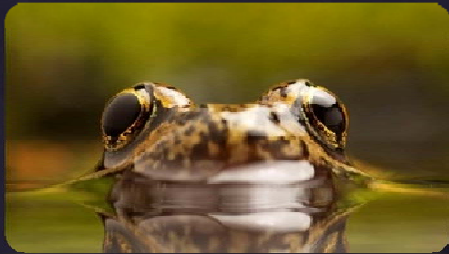
Christopher DeLorto

Ingrid Tohver

Marketa Elsner

Guillaume Mauger

Who am I?

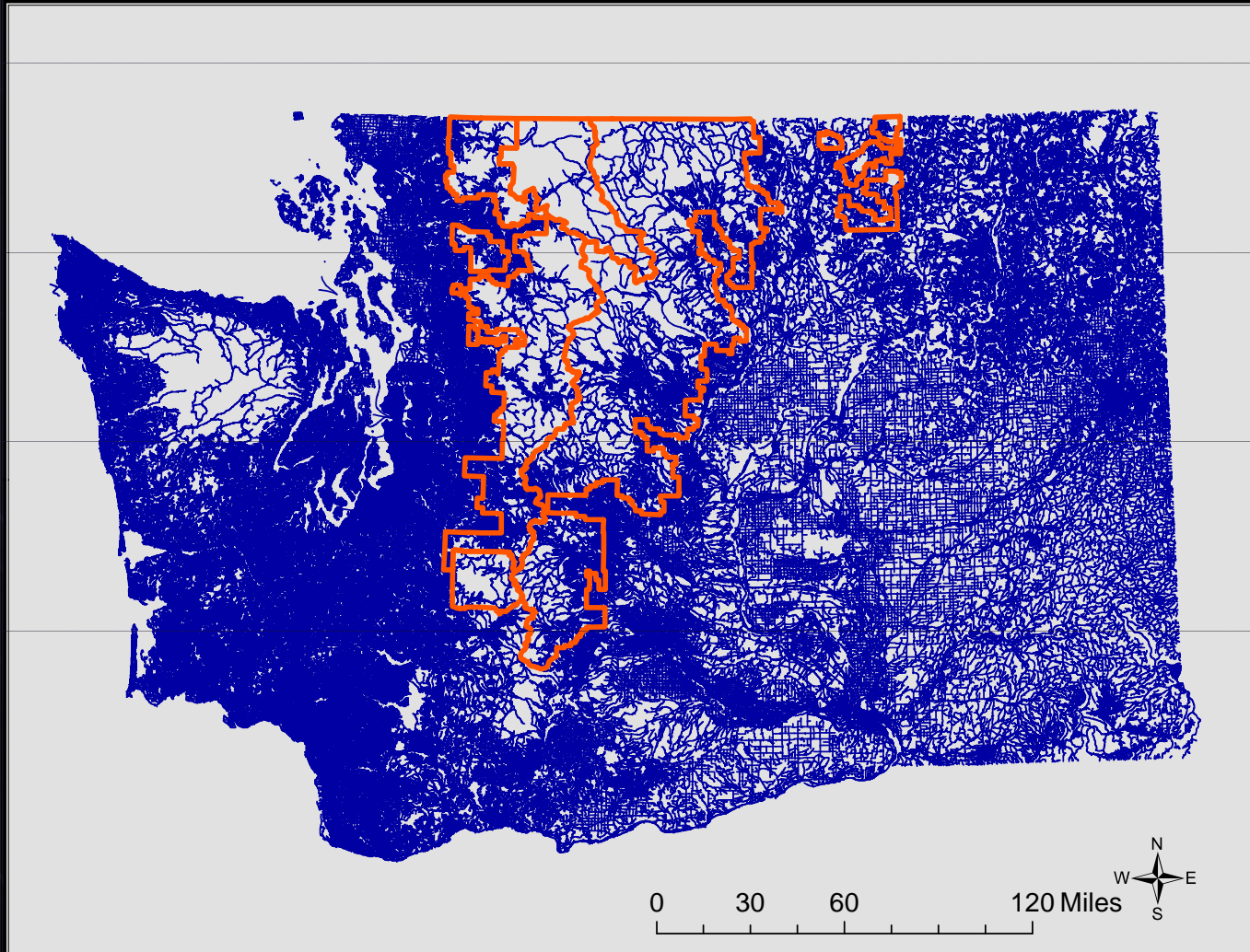


UC DAVIS

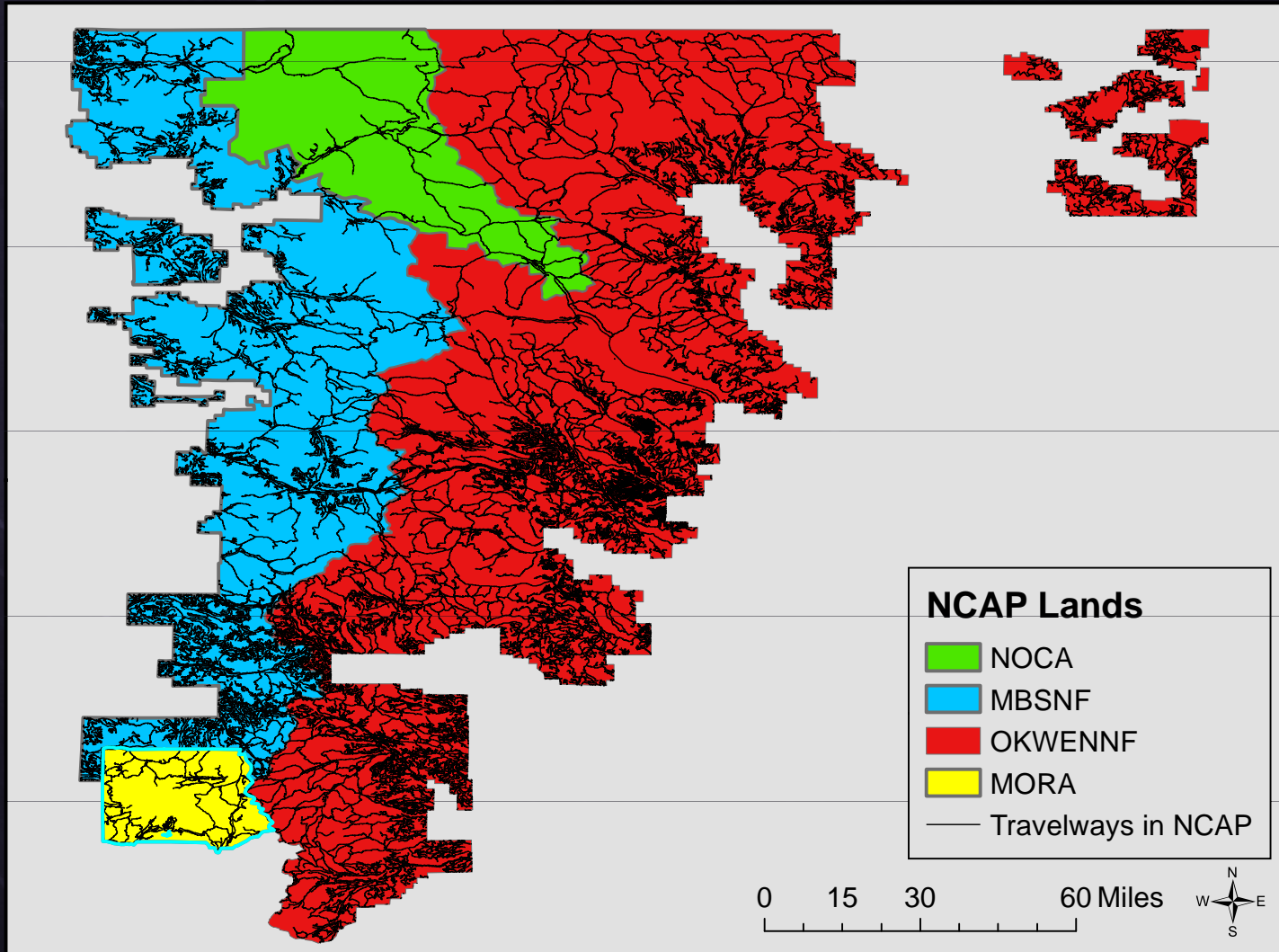


DOT - Roads

Travelways in Washington



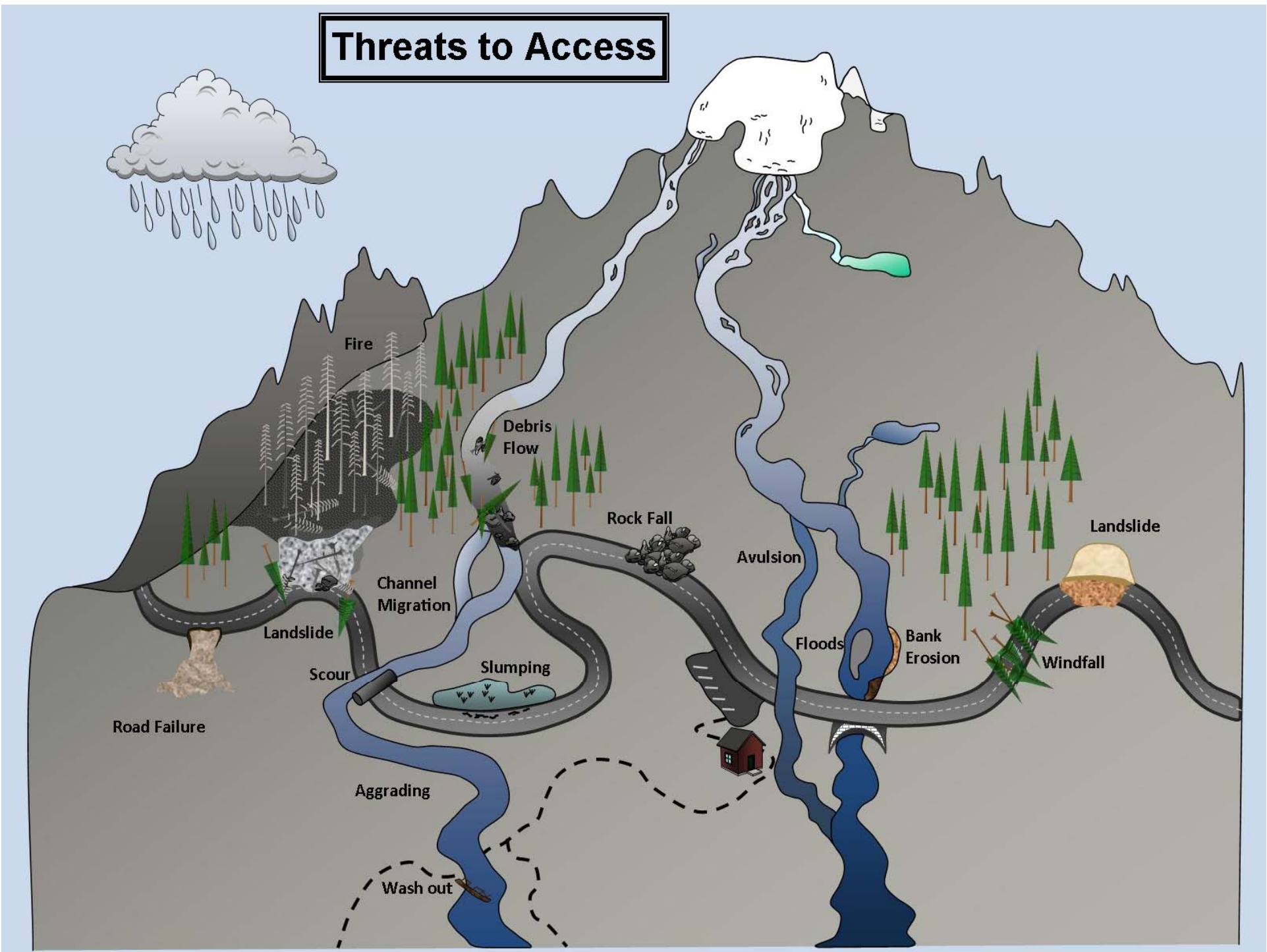
Travelways in NCAP



Access Closed



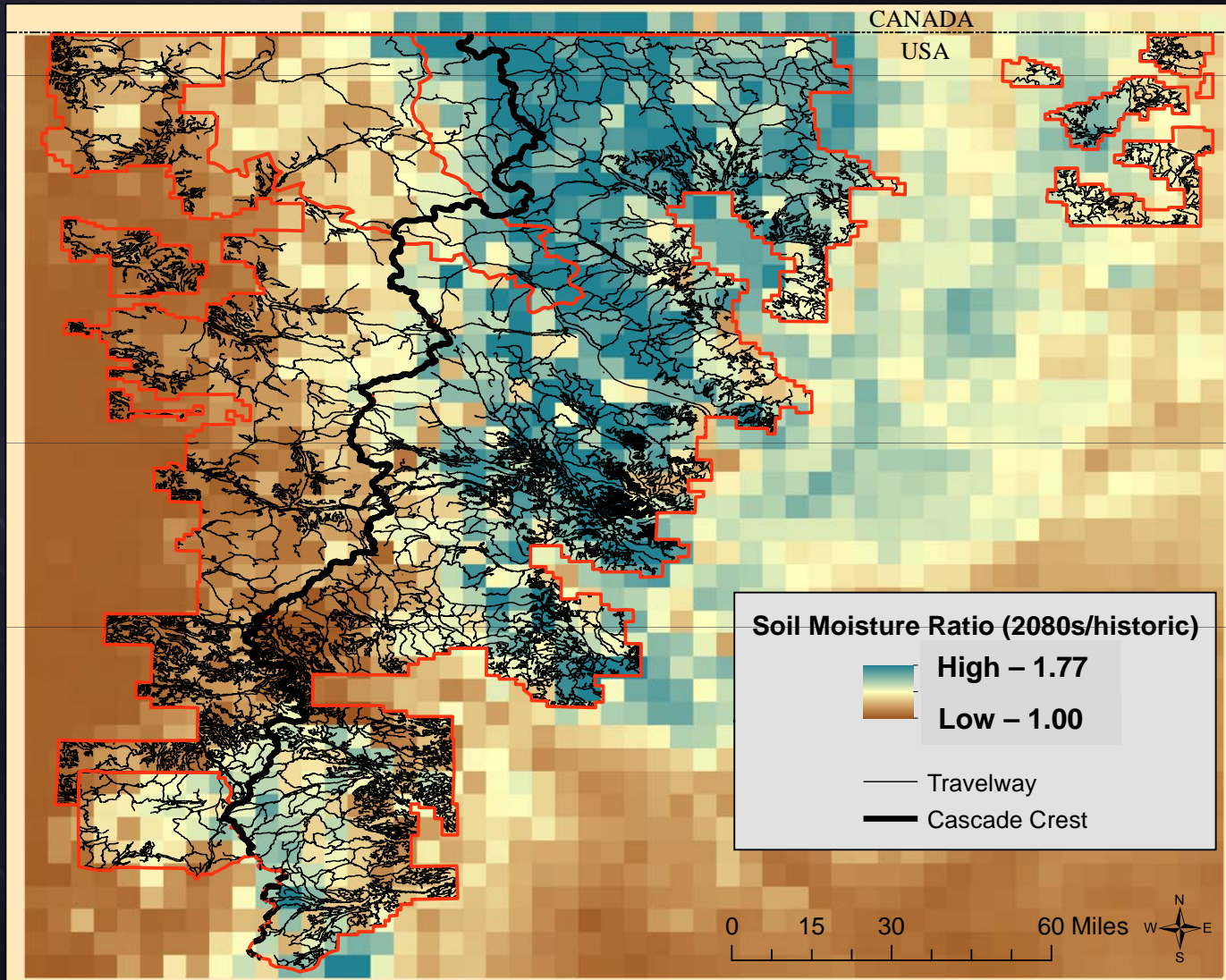
Threats to Access



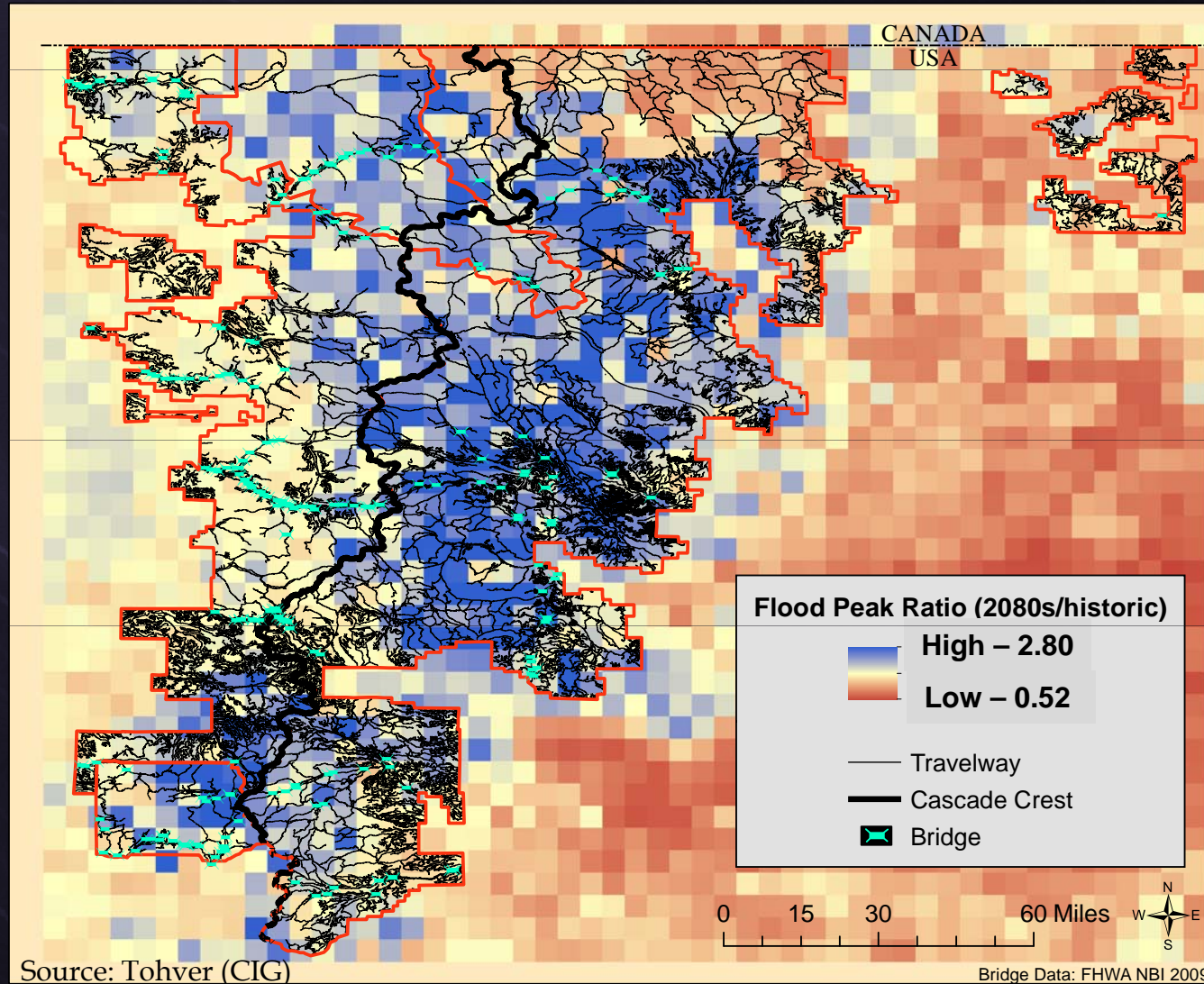
Climate Drivers

- Soil Moisture
- Peak Flows
- Snow Cover

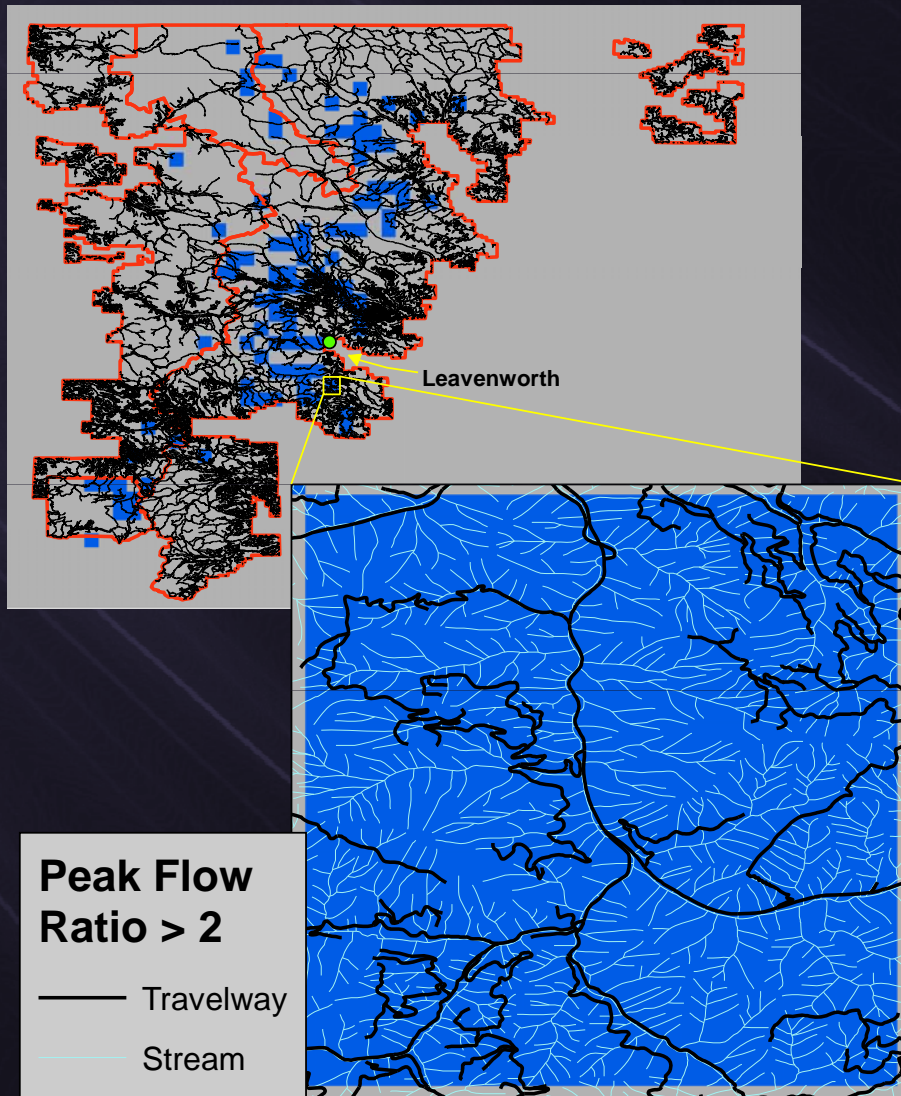
Soil Moisture - February



Peak Flows



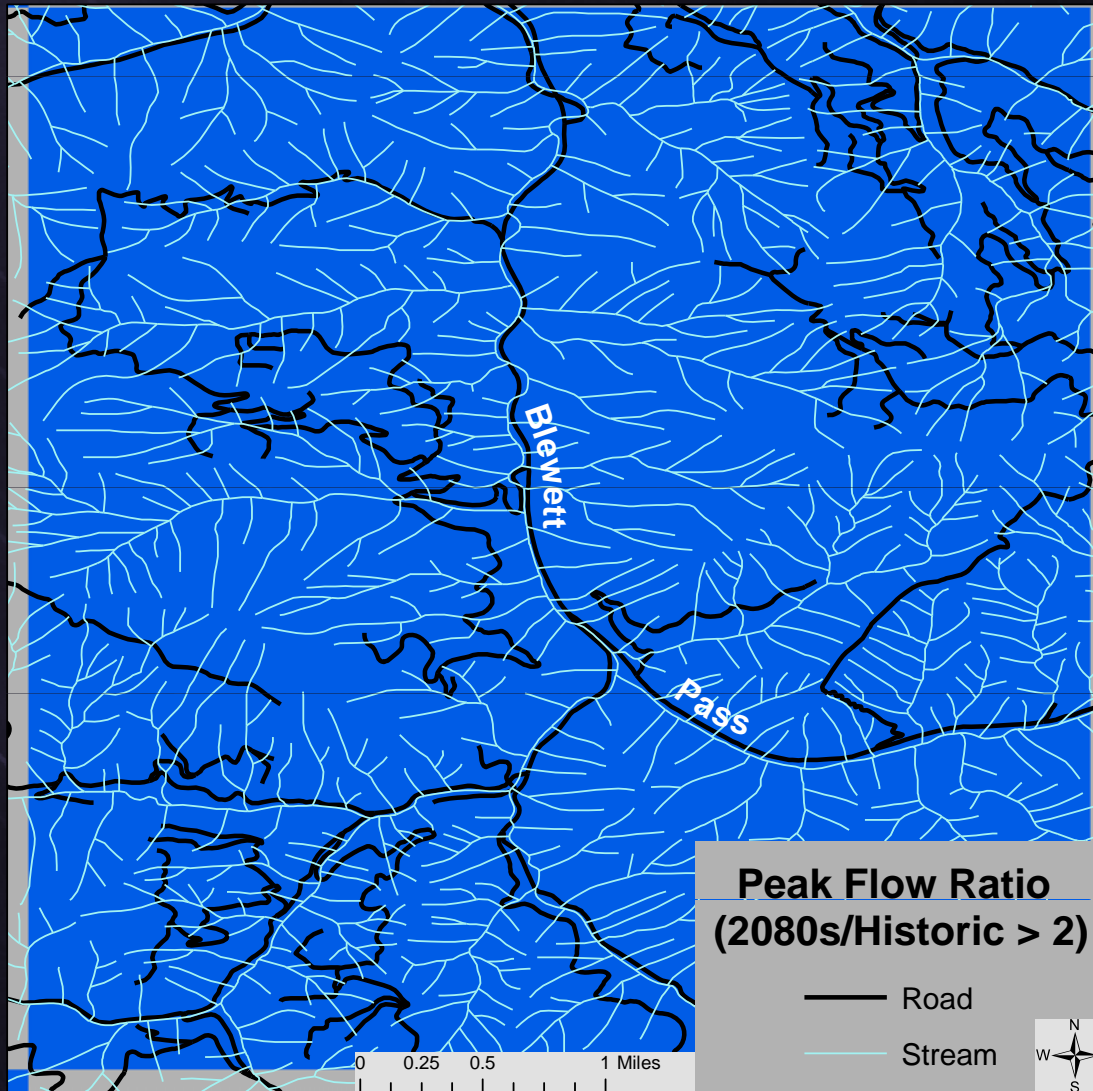
Peak Flows - zoom



Blewett Pass US 97



Peak Flows - zoom

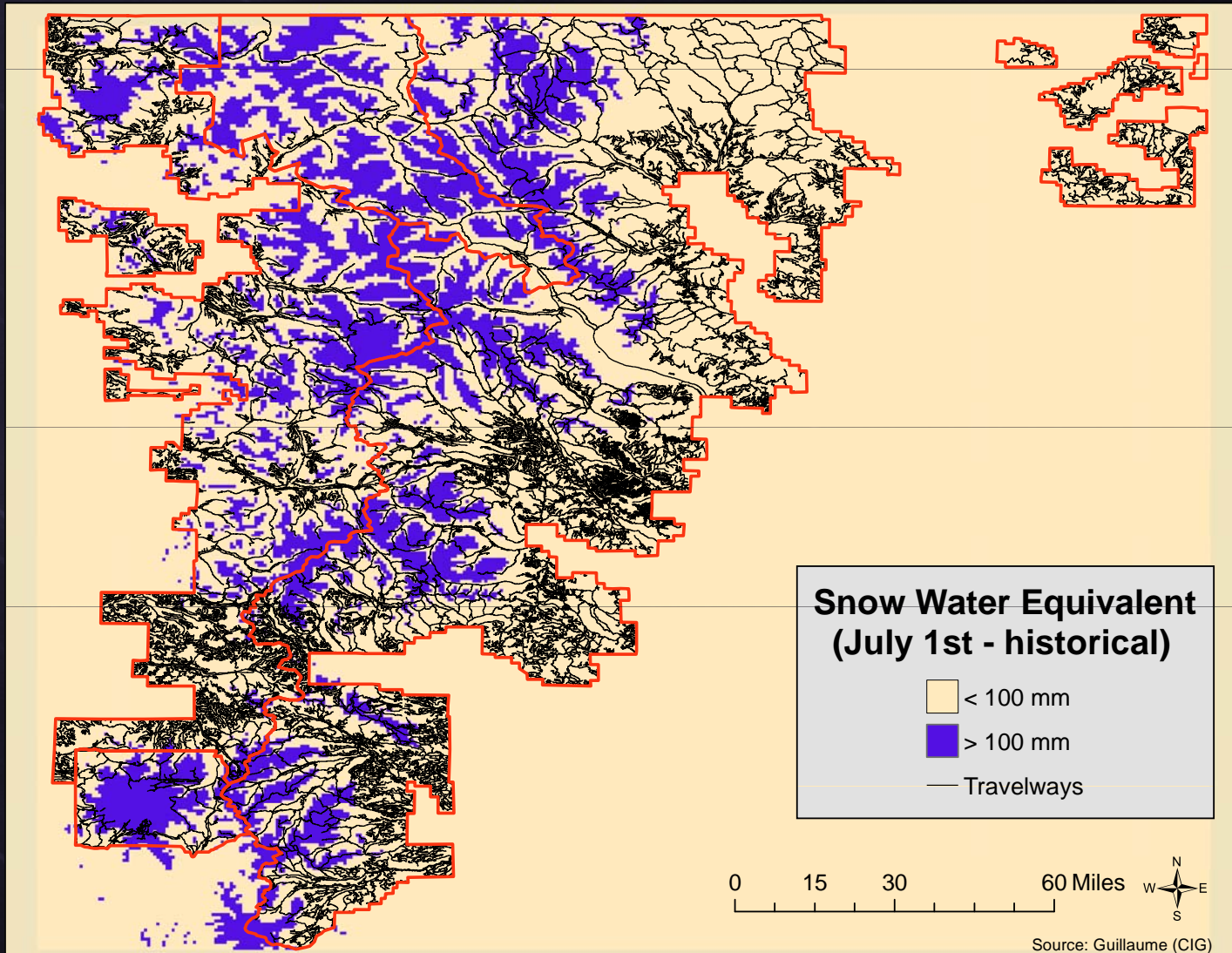


Snow

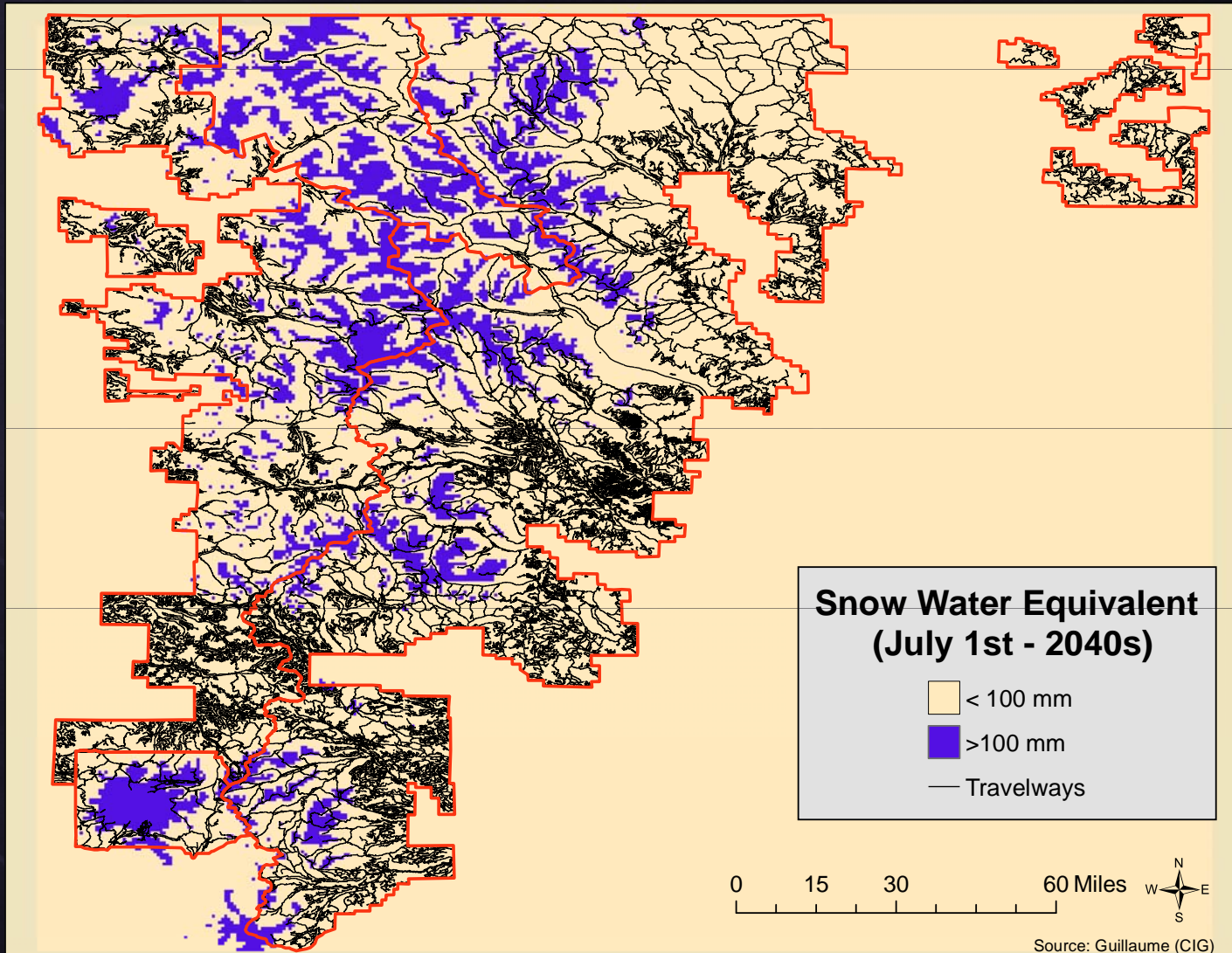


Photo: Alan Hamlet

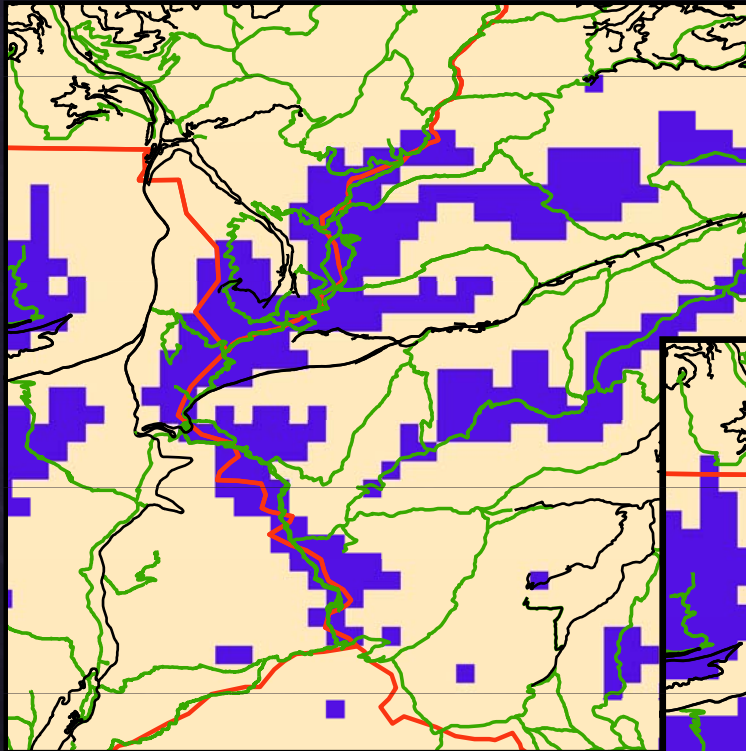
Snow Cover



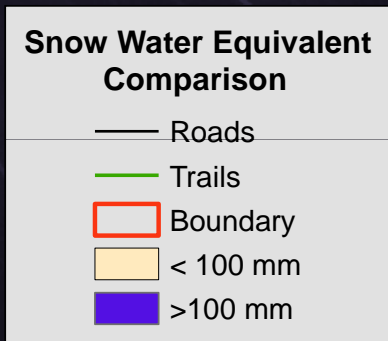
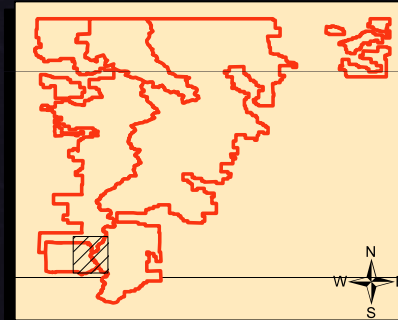
Snow Cover



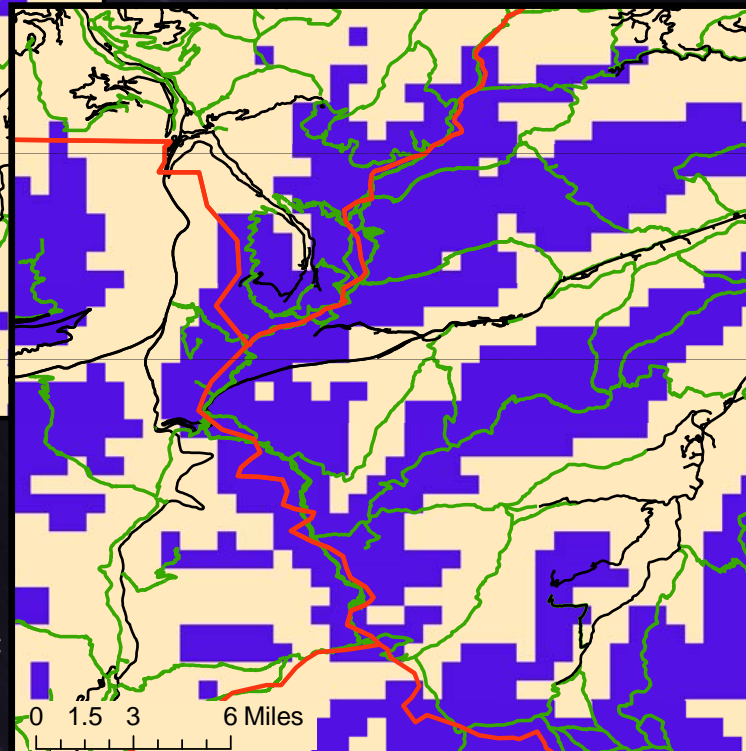
Snow Cover - zoom



2040s



Historic



Source: Guillaume / CIG

Recipe for Risk

- Higher soil moisture
- Higher peak flows
- Higher elevation access



Consequences

- Reduced or expanded operation
- Structural damage
- More or different maintenance
- Ecological damage
- Safety hazards
- \$\$\$



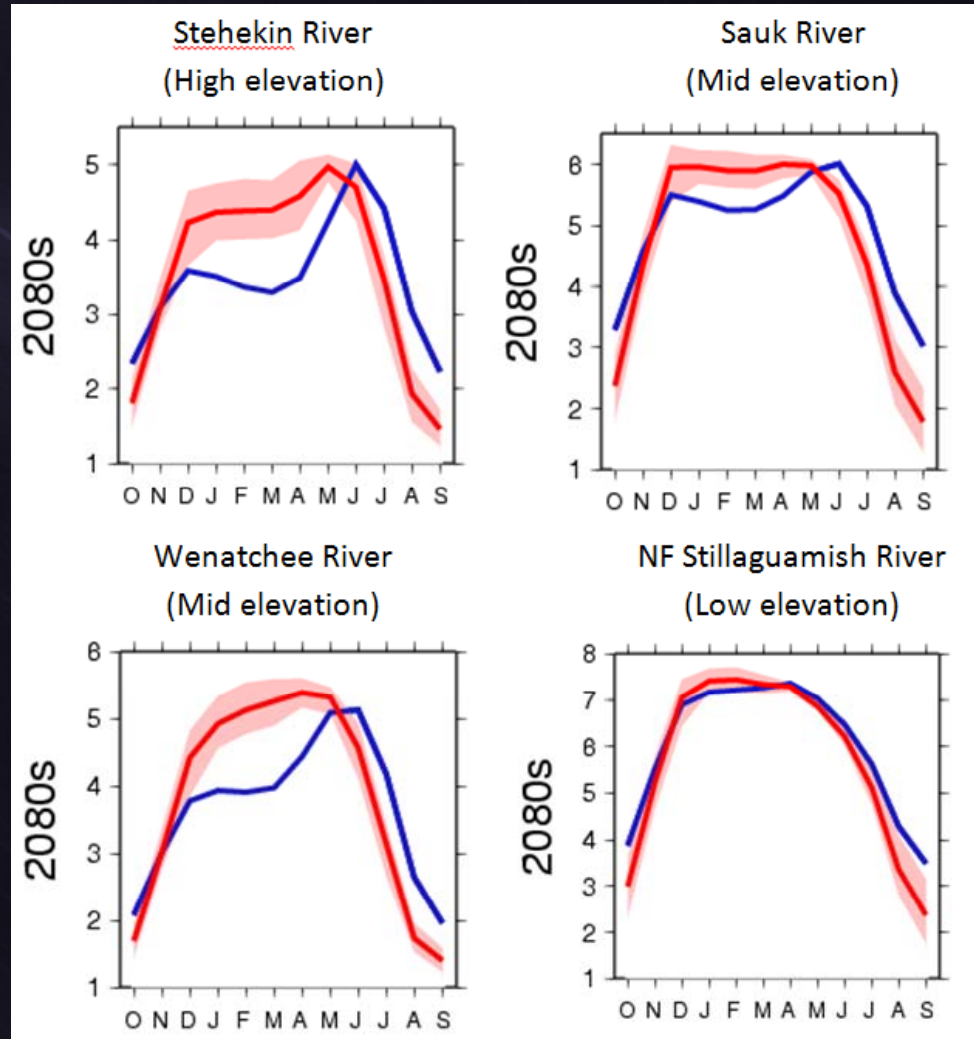
Photo: Steve Ringman

Extra slides

Soil Moisture

- Higher Dec – May
- Greater increase east of crest

Inches

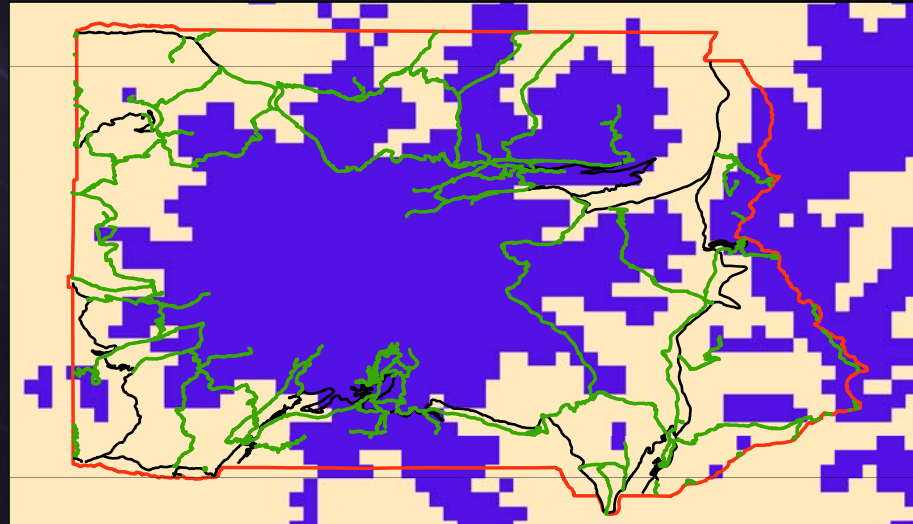


Month

Snow Cover – Mt. Rainier

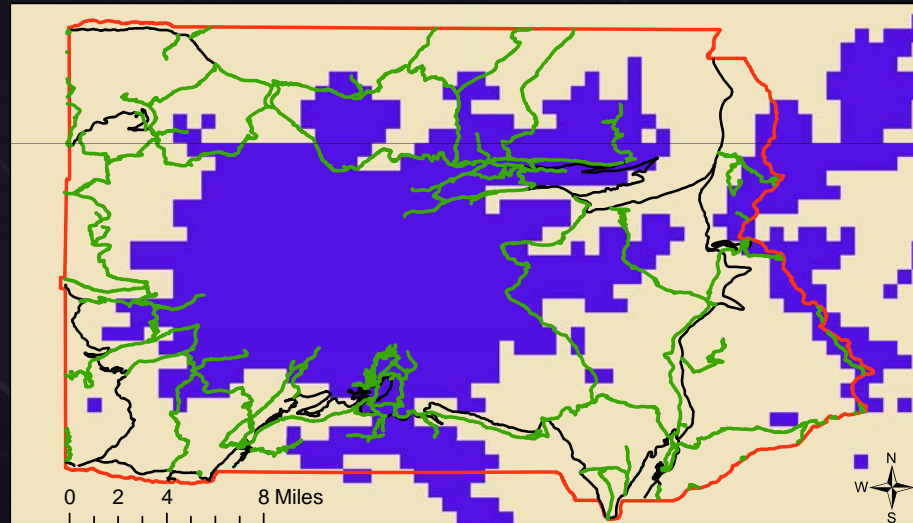
Snow Water Equivalent (July 1st - Historical)

- Trails
- Roads
- Mt. Rainier NP
- < 100 mm
- > 100 mm



Snow Water Equivalent (July 1st - 2040s)

- Trails
- Roads
- Mt. Rainier NP
- < 100 mm
- > 100 mm



Source: Guillaume (CIG)