

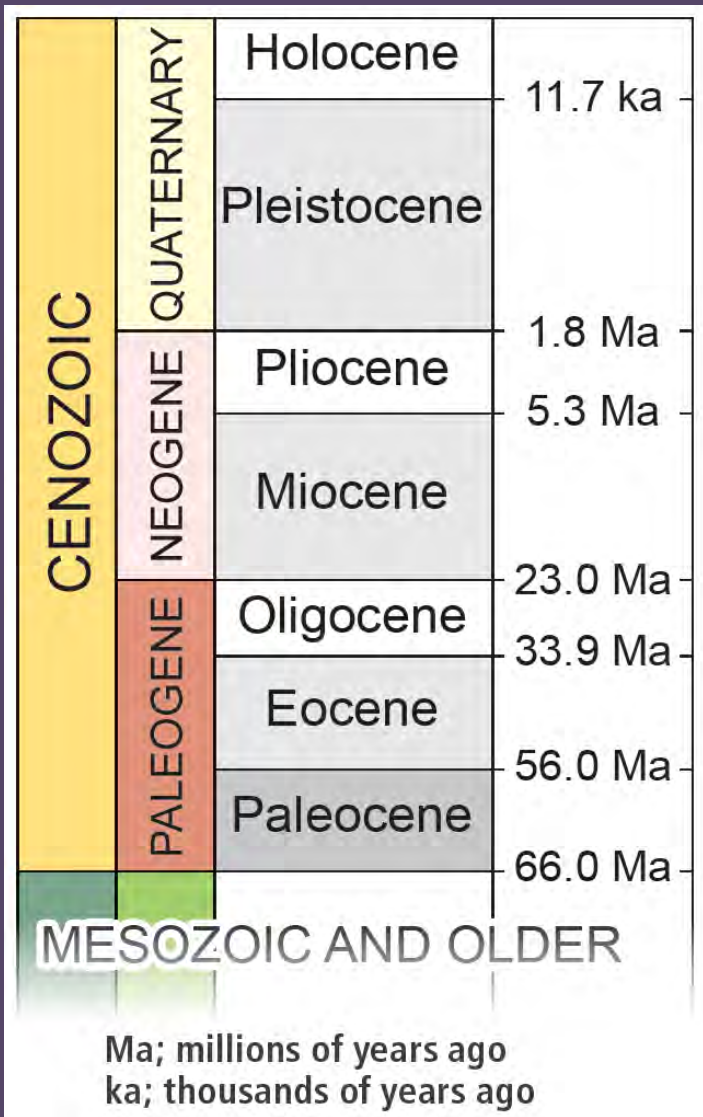
Geology of the Teanaway Community Forest





WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

“The present is the key to the past”



Geologic Time in the Teanaway




Modern (now to ~11 ka)

-  river and stream deposits
-  landslides






Pleistocene (~11 ka to 2.4 Ma)

-  glacial drift and outwash: poorly defined layers of boulders, cobbles, pebbles, sand, and silt; carried down valleys by glaciers
-  glacial lake deposits: well-defined layers of sand, silt, and clay

Miocene (~15.6 Ma)

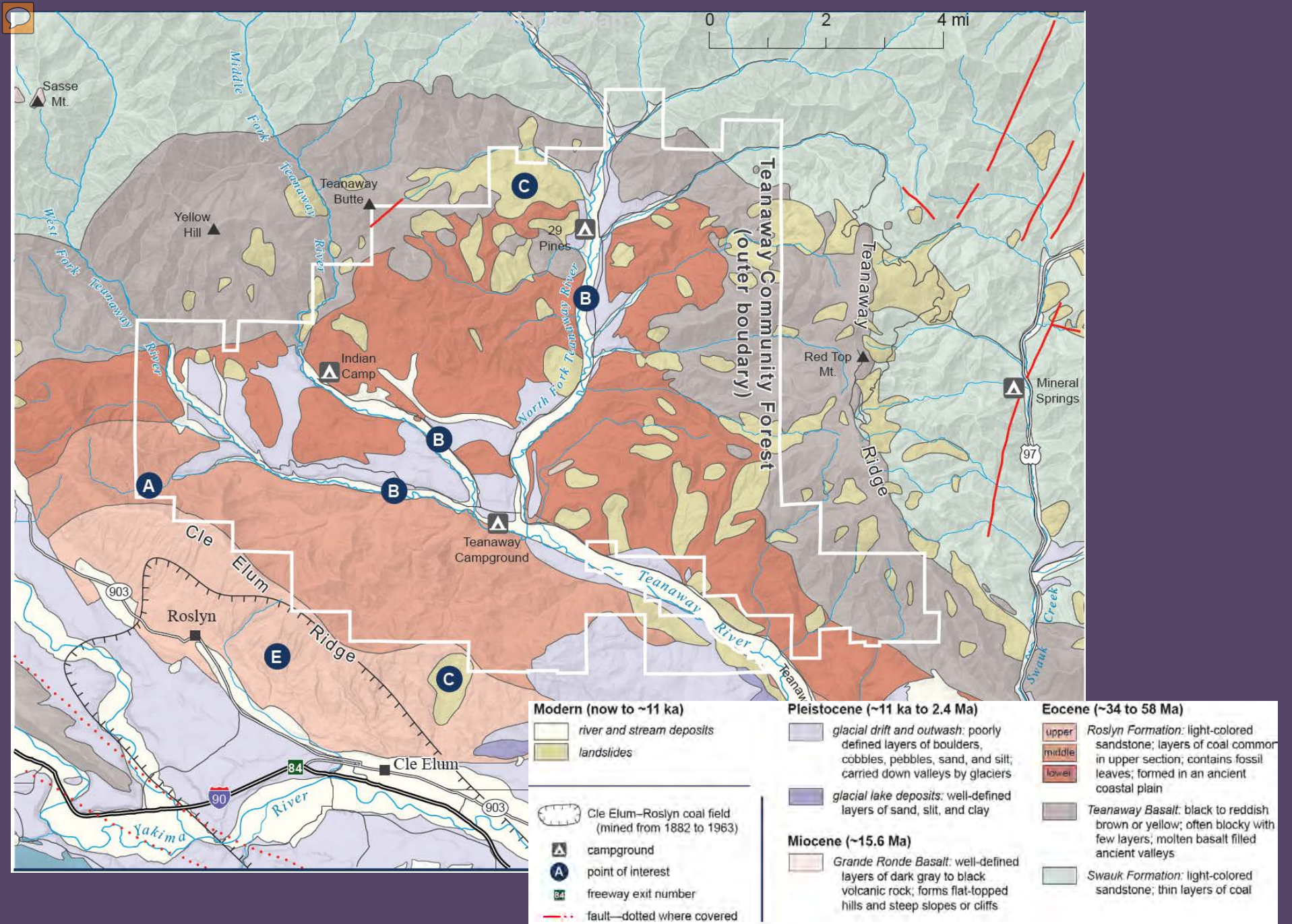
-  Grande Ronde Basalt: well-defined layers of dark gray to black volcanic rock; forms flat-topped hills and steep slopes or cliffs

Eocene (~34 to 58 Ma)

-  upper Roslyn Formation: light-colored sandstone; layers of coal common in upper section; contains fossil leaves; formed in an ancient coastal plain
-  middle
-  lower
-  Teanaway Basalt: black to reddish brown or yellow; often blocky with few layers; molten basalt filled ancient valleys
-  Swauk Formation: light-colored sandstone; thin layers of coal



4 Ga



Roslyn Formation

Eocene (~34 to 58 Ma)

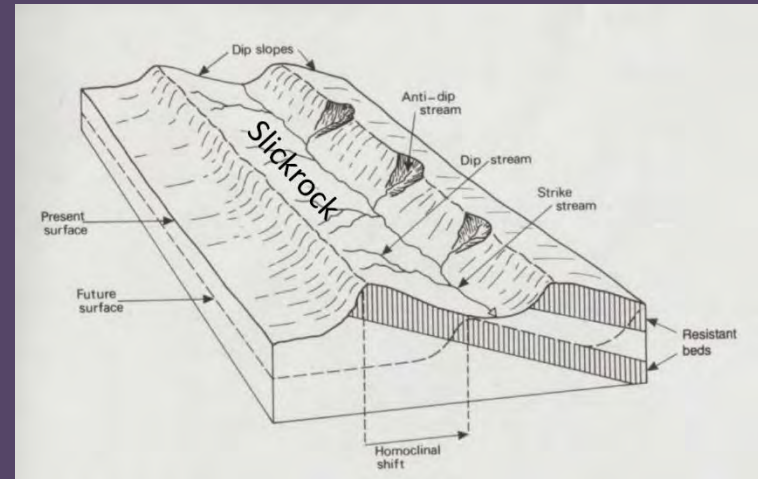
upper Roslyn Formation: light-colored sandstone; layers of coal common in upper section; contains fossil leaves; formed in an ancient coastal plain

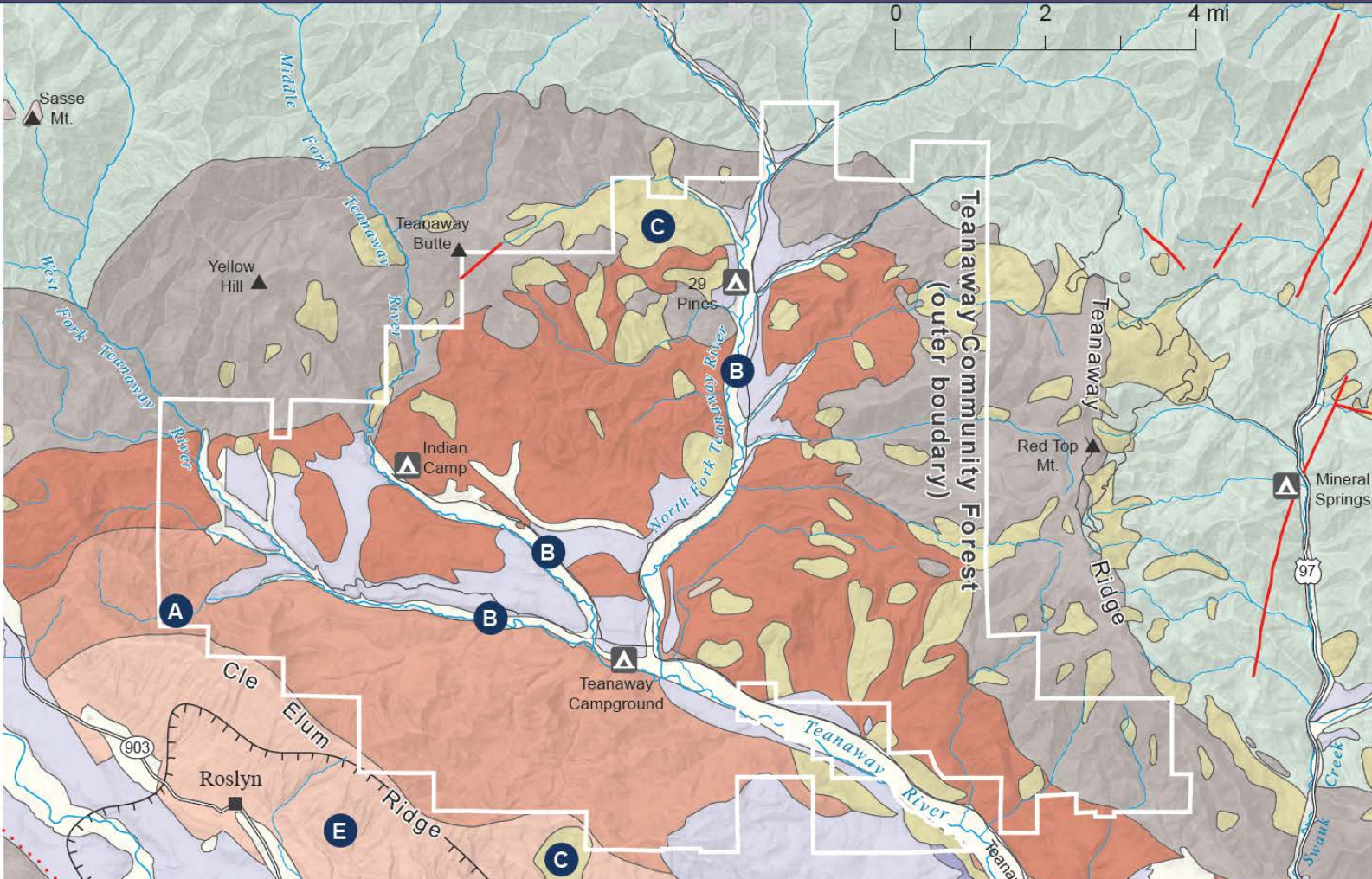
middle

lower

Teanaway Basalt: black to reddish brown or yellow; often blocky with few layers; molten basalt filled ancient valleys

Swauk Formation: light-colored sandstone; thin layers of coal





Modern (now to ~11 ka)

- river and stream deposits
- landslides

 Cle Elum–Roslyn coal field (mined from 1882 to 1963)

- campground
- point of interest
- freeway exit number
- fault—dotted where covered

Pleistocene (~11 ka to 2.4 Ma)

- glacial drift and outwash: poorly defined layers of boulders, cobbles, pebbles, sand, and silt; carried down valleys by glaciers
- glacial lake deposits: well-defined layers of sand, silt, and clay

Miocene (~15.6 Ma)

- Grande Ronde Basalt: well-defined layers of dark gray to black volcanic rock; forms flat-topped hills and steep slopes or cliffs


Eocene (~34 to 56 Ma)


- upper Roslyn Formation: light-colored sandstone; layers of coal common in upper section; contains fossil leaves; formed in an ancient coastal plain
- middle
- lower Teanaway Basalt: black to reddish brown or yellow; often blocky with few layers; molten basalt filled ancient valleys
- Swauk Formation: light-colored sandstone; thin layers of coal

Teanaway Basalt

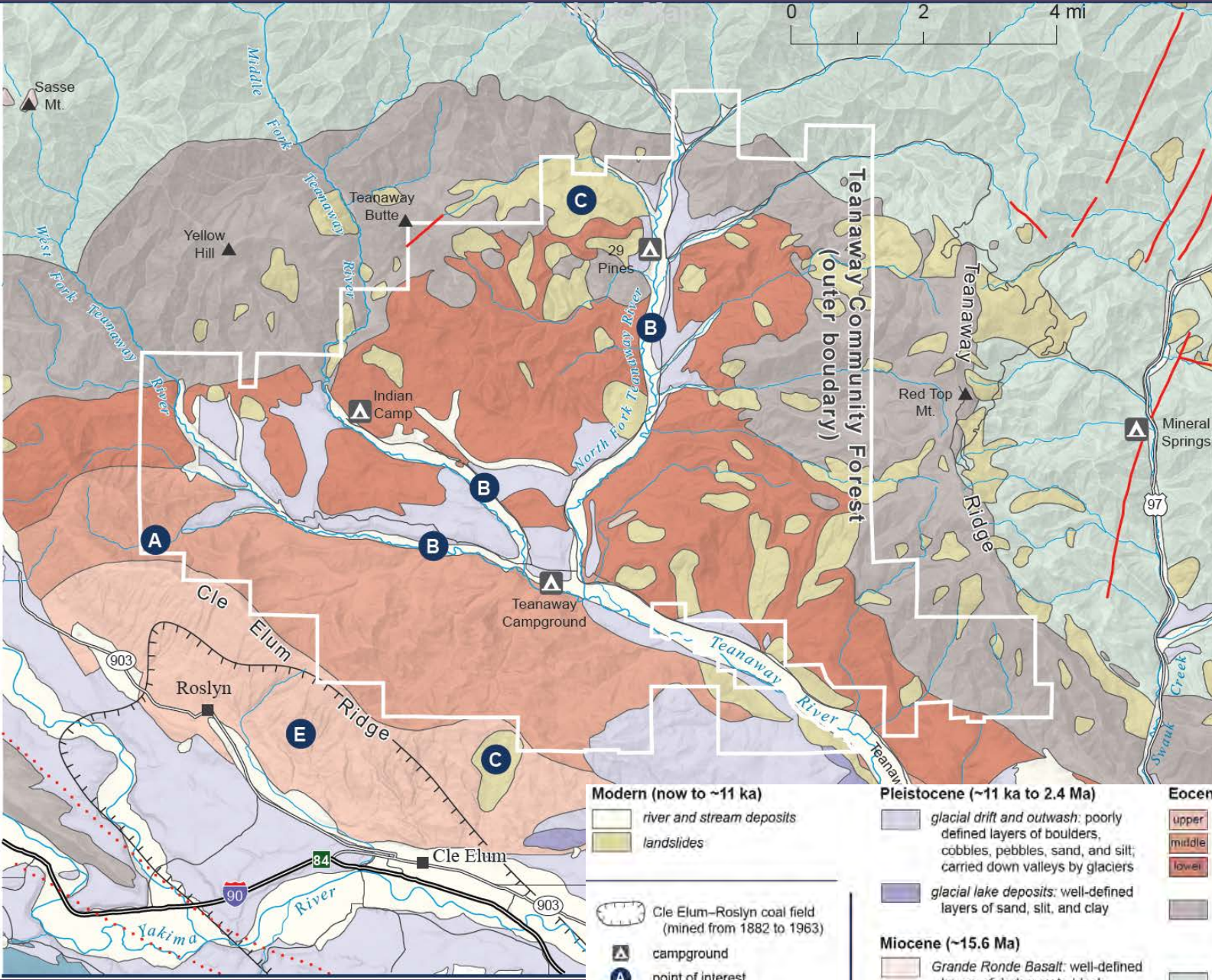
Eocene (~34 to 58 Ma)

- upper *Roslyn Formation*: light-colored sandstone; layers of coal common in upper section; contains fossil
- middle leaves; formed in an ancient coastal plain
- lower

 *Teanaway Basalt*: black to reddish brown or yellow; often blocky with few layers; molten basalt filled ancient valleys

 *Swauk Formation*: light-colored sandstone; thin layers of coal





Modern (now to ~11 ka)

- river and stream deposits
- landslides

- Cle Elum-Roslyn coal field (mined from 1882 to 1963)

- campground
- A point of interest
- 84 freeway exit number
- fault—dotted where covered

Pleistocene (~11 ka to 2.4 Ma)

- glacial drift and outwash: poorly defined layers of boulders, cobbles, pebbles, sand, and silt; carried down valleys by glaciers
- glacial lake deposits: well-defined layers of sand, silt, and clay

Miocene (~15.6 Ma)

- Grande Ronde Basalt: well-defined layers of dark gray to black volcanic rock; forms flat-topped hills and steep slopes or cliffs

Eocene (~34 to 56 Ma)

- upper Roslyn Formation: light-colored sandstone; layers of coal common in upper section; contains fossil leaves; formed in an ancient coastal plain
- middle Teanaway Basalt: black to reddish brown or yellow; often blocky with few layers; molten basalt filled ancient valleys
- lower Swauk Formation: light-colored sandstone; thin layers of coal

Glacial History

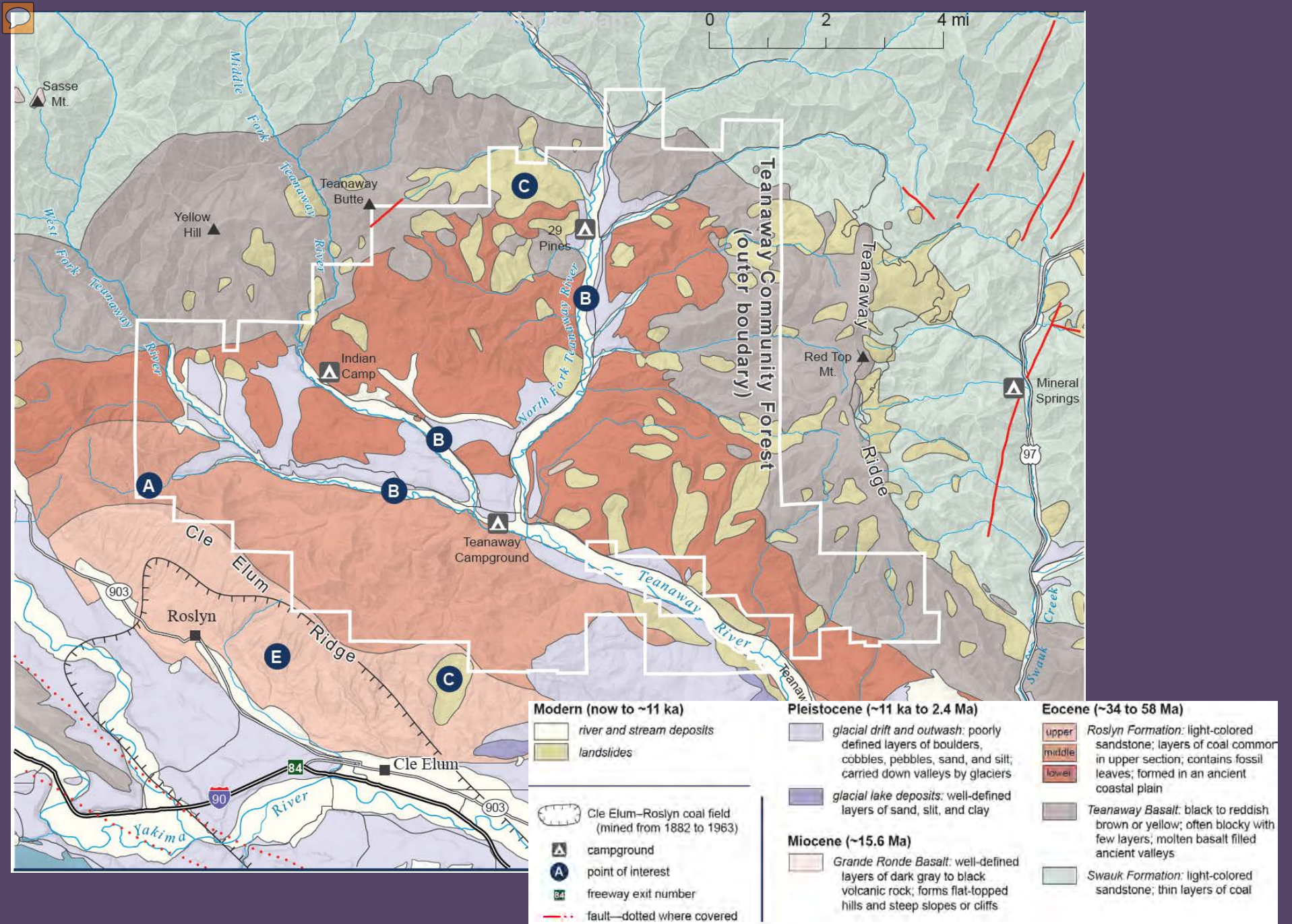


Alpine Glaciation



Glacial Dammed Lakes





Landslides and Erosion

