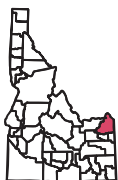
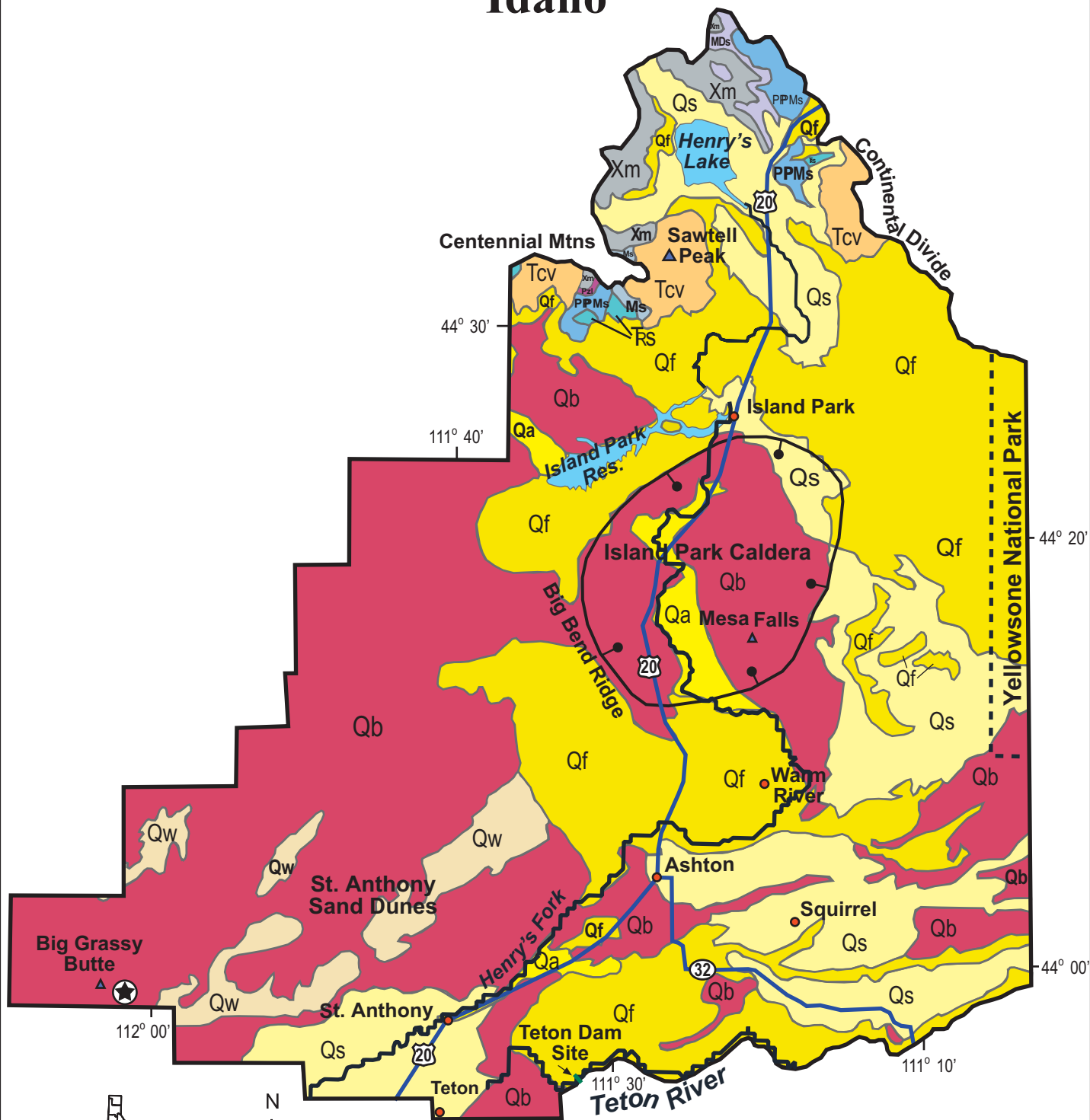


Fremont County, Idaho



1:500,000

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<http://www.isu.edu/departments/geology/>

Fremont County

Fremont County occupies the northeast corner of the Snake River Plain and includes the western fringe of Yellowstone National Park. It is mainly underlain by volcanic rocks associated with the Snake River Plain and Yellowstone hot spot system. Quaternary sediments overlies these volcanic rocks and allow irrigated farming. The windblown St. Anthony sand dunes contain sand blown northeastward from now-dry lakes to the southwest on the Snake River Plain.

The Island Park area forms the central part of Fremont County, and consists of the subsided Island Park Caldera, that erupted about 1.2 million years ago to form the Mesa Falls tuff, and then subsided since its underpinnings were withdrawn. As one drives north on the Ashton grade, one ascends the wall of the caldera.

The Centennial Mountains, on the north edge of Fremont County, on the border with Montana, form the Continental divide. These mountains contain Paleoproterozoic gneiss basement, overlain by Cambrian through Triassic sedimentary rocks. These Paleozoic rocks are similar to those of the Teton Mountains, and much thinner than those of the Beaverhead Range to the west.















On the southeast edge of Fremont County, south of Ashton, flows the Teton River, cut in a steep canyon through 2 million year old Huckleberry Ridge rhyolite welded tuff. It was here, in 1975, that the newly build Teton Dam broke, causing death and destruction downstream toward Newdale, Teton and Rexburg.

P.K. Link,

Description of Units for Idaho County Geologic Maps

Qs	Quaternary surficial cover, including colluvium, fluvial, alluvial fan, lake, and windblown deposits. Included fluveolian cover on Snake River Plain, (Snake River Group).
Qw	Quaternary windblown deposits; sand dunes and loess.
Qf	Pleistocene silicic volcanic rocks; rhyolite lava and ash-flow tuff (includes Yellowstone Group).
Qb	Pleistocene basalt lava, 2 million to 12,000 years old, flows have some vegetation and surface weathering.
Tcv	Eocene Challis Volcanic Group, volcanics and volcanoclastics; Older andesitic lavas, intermediate age dacite lava and tuff and younger rhyolite flows and tuffs; 51 to 44 Ma. (Includes Potato Hill and Kamiah volcanics of northern Idaho).
Rs	Triassic sedimentary rocks.
PPMs	Permian and Carboniferous sedimentary rocks (Snaky Canyon Formation).
Ms	Mississippian sedimentary rocks.
MDs	Mississippian and Devonian sedimentary rocks.
Xm	Paleoproterozoic gneiss in the Centennial Mountains.

Symbols

 <p>Geologic unit contacts with unit designation.</p>  <p>Normal fault: certain; dashed where approximately located; dotted where concealed.</p>  <p>Thrust fault: certain; dashed where approximately located; dotted where concealed.</p>  <p>Detachment fault: certain; dashed where approximately located; dotted where concealed.</p>  <p>Anticline: trace of axial plane: large arrow indicates direction of plunge.</p>  <p>Syncline: trace of axial plane: large arrow indicates direction of plunge.</p>	 <p>Overturned anticline: trace of axial plane.</p>  <p>Overturned syncline: trace of axial plane.</p>  <p>Location of ISU Rockwalk rock from each county.</p>  <p>Cities</p>  <p>Feature location</p> <p>Roads</p>  <p>15 Interstate Route</p>  <p>95 U.S. Route</p>  <p>1 State route</p>
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