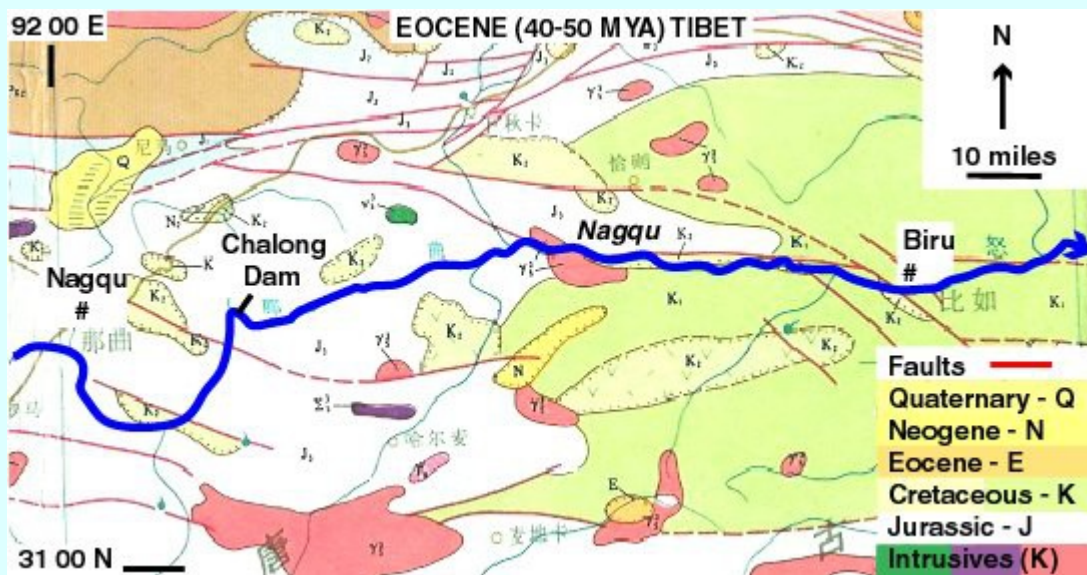


## Geology and Geography of the Salween Headwaters Area

### Geologic Map of the Salween Headwaters Area



Map produced by the Chinese Ministry of Geology and Mineral Resources  
Original scale 1:1,000,000

The Salween in its headwaters region is called the Nagqu by the Tibetans and the Nu Jiang by the Chinese. The headwaters are located in the east central part of the Eocene block of Tibet, near the NW extension of the Ailao Shan Fault. The area is characterized by subhorizontal Mesozoic sedimentary rocks unconformably overlying unmapped Paleozoic or Precambrian crystalline rocks. Faults generally trend E-W or NW. The average elevation is about 16,000 feet, typical of the Tibetan Plateau.

The Jurassic and Cretaceous sediments are typically red clastic rocks. Together, they are well over 1000 feet thick, as seen in the scenic view below (looking southeast). These sediments were deposited on and near a coastal plain prior to the collision of India and China. The underlying crystalline rocks that outcrops further downstream represent an earlier continental collision.



Photo by Phil Wegener Kantor

In the upper river valley, the river bed is filled with glacial gravels and rapids are due to constriction. The gravels form benches along the river and side canyons which are sometimes over a hundred feet thick, as seen in the photo below. As the river gains volume and cuts deeper into the crystalline rocks, gravels have been scoured and bedrock obstacles become more common.



Photo by Travis Winn

For information about the river and the local culture, see

[First Descent](#) by Pete Winn

[By River Through a Wounded Land](#) by Gordon Bare

[First Descent of the Nu River](#) by Phillip Wegener Kantor

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