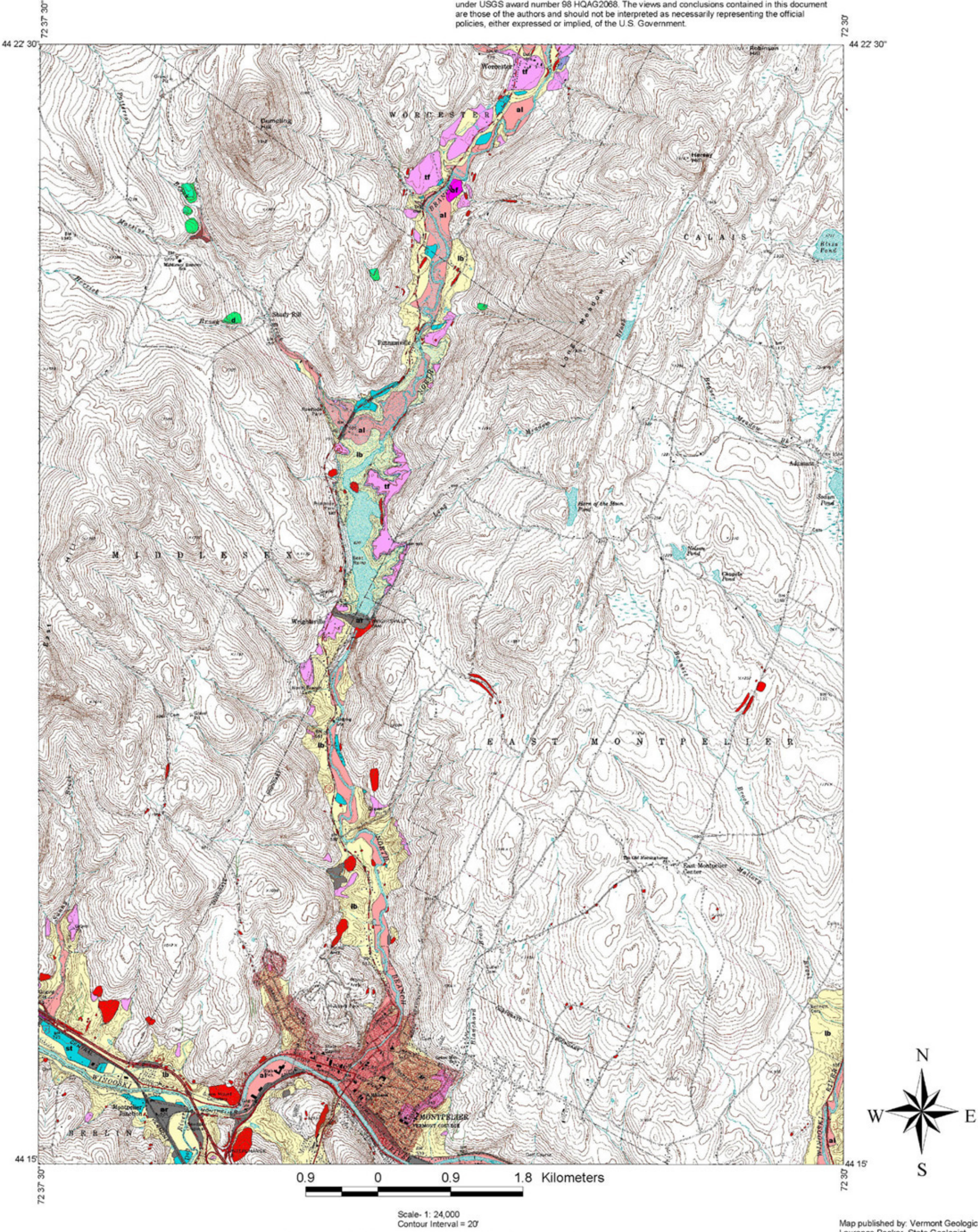


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Scale- 1: 24,000  
Contour Interval = 20'

**Surficial Geologic Map of the Montpelier Quadrangle, Vermont**  
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**Surficial Materials**

- af- Alluvial Fan Deposits, poorly-sorted pebble gravel with cobbles, pebble gravel, pebbly coarse sand; formed by modern streams on alluvial fans.
  - al- Alluvium, moderately well-sorted pebble gravel, sand, silt, and clay in fining-upward sequences formed by lateral migration of modern stream channels and flooding of adjacent flood plains.
  - ar- Artificial Fill, a variety of recycled surficial and bedrock materials deposited by man in the form of embankments under roads, railroads, and buildings.
  - d- Deltaic Deposits, poorly to moderately-sorted interbedded pebble gravel, sand, silt, and minor clay, flat beds and beds that dip up to 30 degrees are interpreted as topset and foreset beds, respectively, of deltas built by streams flowing directly into Glacial Lake Winooski.
  - ots- topset beds on deltaic deposits.
  - lb- Lake Bottom Deposits, interbedded coarse to fine sand, silt, and clay; thin alternate layers of silt and clay are interpreted to be varves that formed as summer and winter layers, respectively, in a glacial lake.
  - ovc- Older Lake Bottom Deposits. Interbedded silt and clay resemble varves and are overlain by glacial till; interpreted to be proglacial lake bottom deposits that were overridden by the advancing ice sheet.
  - s- Swamp Deposits, peat and organic muck in wetlands and beaver ponds.
  - st- Stream Terrace Deposits, similar to alluvium consisting of pebble gravel, sand, silt, and clay; formed in older stream channels and flood plains now elevated above modern flood plains.
  - t- Glacial Till, poorly-sorted, heterogeneous mixture of boulders, cobbles, pebbles, sand, silt, and clay; deposited directly from glacial ice.
  - tf- Terrace/Fan Deposits, poorly-sorted to moderately well-sorted cobble gravel, pebble gravel, pebbly sand, sand, silt, and clay deposited by streams as alluvial fans and broad aprons directly on bottom deposits of Glacial Lake Winooski.
- bedrock exposure      striation on bedrock