

Geomorphology studies

Description

Geomorphology is a discipline that studies both ancient and present-day landscapes and how they evolved. Cultural resources may be part of the geologic strata. Geomorphology is necessary on certain projects to help identify pre-contact and some early historic resources in support compliance with Section 106. Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects their actions have on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such actions. The Section 106 process seeks to accommodate historic preservation concerns with the needs of the federal action through consultation among the agency officials and other parties with an interest in the effects of the action on historic properties, commencing at the early stages of project planning. The goal of geomorphology studies is to identify landforms of a suitable age and environment to contain cultural materials or placing archaeological materials in their sedimentological contexts.

Standards and specifications

May include the following:

- MnDOT's Deep Testing Protocol (2006)
- Soil survey manual, U.S. Department of Department of Agriculture
- MnDOT's Cultural Resource Unit Project and Report Requirements (2017)
- MnDOT Geographic Information System (GIS) Standards (2002)
- MnDOT's Standards for Archaeological and Historic Structures Data (2002)
- Standards for Mapping Landform Sediment Assemblages as described in MnDOT's How to Construct a MnModel Landscape Suitability Model (2000) and Landform Sediment Assemblages in the Upper Mississippi Valley, St. Cloud to St. Paul, for Support of Cultural Resource Investigations (2002)

Typical services

Project deliverables may include the following:

- Geomorphology study in support of cultural resources reviews
- Geomorphology field work
- Reports detailing methodology and results
- GIS data of field results for inclusion in archaeology reports and Hennepin County's GIS database
- Soil boring logs and cross-section diagrams