

Prepared in cooperation with the
Onondaga Lake Partnership, a collaborative of Federal, State, and local (Onondaga County and City of Syracuse) agencies
Onondaga County Soil and Water Conservation District
Onondaga Environmental Institute

Hydrogeology of the Tully Valley Mudboil Area, Southern Onondaga County, New York

The Tully Valley's unique hydrogeologic phenomena including mudboils, land-surface subsidence, and landslides have proved to be scientifically challenging. Results of several investigations provide a clearer picture of the complex valley hydrogeology and may guide remedial efforts to reduce mudboil impacts in the Onondaga Creek watershed.

the unconsolidated deposits in the valley-fill aquifer system, identify the source(s) of artesian head driving the mudboils, and monitor the results of mudboil remediation projects.

Problem

The Tully Valley, located in southern Onondaga County has been the source of sediment and brackish water discharge to Onondaga Creek, a tributary to the Seneca and Oswego Rivers and eventually Lake Ontario. Information on the origin of the Tully Valley mudboils, their persistence, and the possible extent of their migration within the Tully Valley is needed to mitigate or remediate (1)

the discharge of turbid water and fine-grained sediment from the mudboils, (2) land-surface subsidence caused by the removal of sediment from below the land surface, and (3) degradation of Onondaga Creek by turbidity, fine-sediment deposition, and chloride loading.

Objectives

To define the glacial stratigraphy and hydraulic-head distribution within

Benefits

Results of the Tully mudboil area study will provide local, regional, state, and federal agencies with hydrogeologic data on the unconsolidated valley-fill deposits in the Tully Valley and what drives mudboil activity in this valley. The study also provides a means to monitor remediation efforts to control mudboil discharges on the local and watershed-level environments.

Tully Mudboil Study Area



Related Publications

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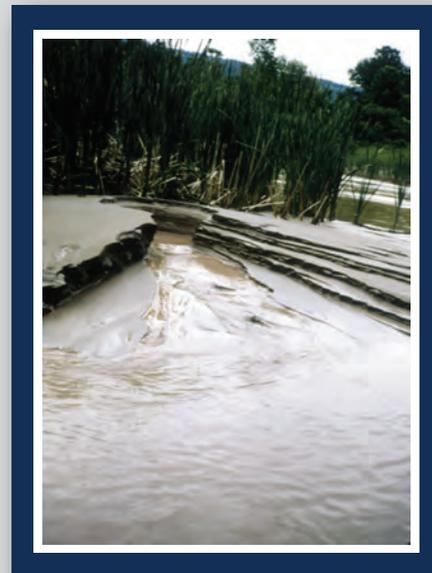
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