Project Title: C-06-07 : Potential for Natural Brine for Anti-Icing/De-Icing
PIN: R020.77.881
Responsible Unit: Delivery Division, Region 3
Project Manager: Burnes, Pauline

Project Goal:
To test the viability and develop protocols for using a natural brine from the Onondaga Creek valley-fill aquifer for winter highway maintenance. A pilot project between the City of Syracuse, Onondaga County, and New York State DOT’s to utilize this natural brine to improve wintertime highway safety while saving diminishing governmental funds through use of a local salt (brine) resource.

Actions Proposed:
Utilize the local brine resource by drilling a deep well into the Onondaga valley-fill aquifer, withdraw water and test the utility of using (possibly enhancing) a 40 to 60 percent saturated brine for winter highway de-icing. Develop protocols for implementing use of natural brine as substitute for purchased liquid de-icers for widespread use where feasible.

Anticipated Work Products and Accomplishments:
A ‘proof of concept’ test of the natural brine, and establishing a regional brine utilization network in the greater Syracuse area. The brine would be used on local, county, state and interstate roadways, and possibly used as an anti-icing agent on raised sections of Interstates 81 and 690 in the Syracuse area, as well as Interstate 90.

Proposed Budget: $185,500