

# Close-up of Kame & Kettle Topography within Donner Trust Lands, Southeastern New York State

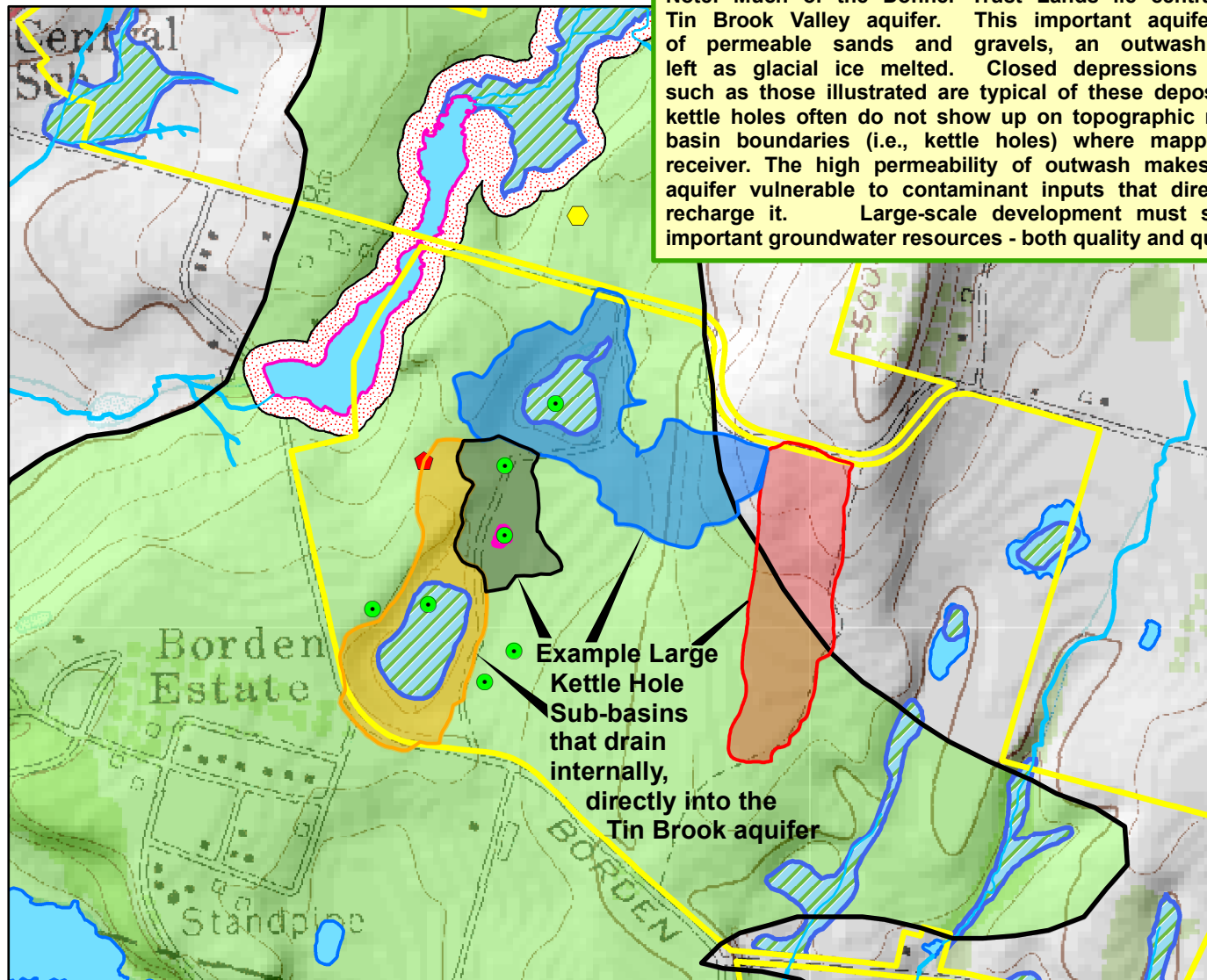


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Data Sources:  
Geologic & Hydrologic Interpretation:  
HydroQuest, Inc.  
Project Boundaries:  
Engineering Properties  
DRGs: USGS/NYSDEC  
DEMs: USGS/NYSDEC  
Projection: UTM (meters)  
Datum: NAD27, Zone 18  
Digitizing & Cartography:  
HydroQuest Sept. 2007  
Prepared For: Friends of Borden Home Farm

Note: Much of the Donner Trust Lands lie central and over the Tin Brook Valley aquifer. This important aquifer is comprised of permeable sands and gravels, an outwash kame deposit left as glacial ice melted. Closed depressions or kettle holes such as those illustrated are typical of these deposits. Small kettle holes often do not show up on topographic maps. Four sub-basin boundaries (i.e., kettle holes) were mapped with a GPS receiver. The high permeability of outwash makes the underlying aquifer vulnerable to contaminant inputs that directly infiltrate or recharge it. Large-scale development must strive to protect important groundwater resources - both quality and quantity.



## Legend

- ~ Tin Brook Aquifer
- Donner Trust Parcels
- Example Sub-basin 1
- Example Sub-basin 2
- Example Sub-basin 3
- Example Sub-basin 4
- Example Kettle Holes
- Donner Piezometer
- Proposed Well Site
- Streams
- The Hatch
- Ponds
- Intermittent Ponding
- Mapped Project Wetlands
- 100 Ft NYSDEC Buffer