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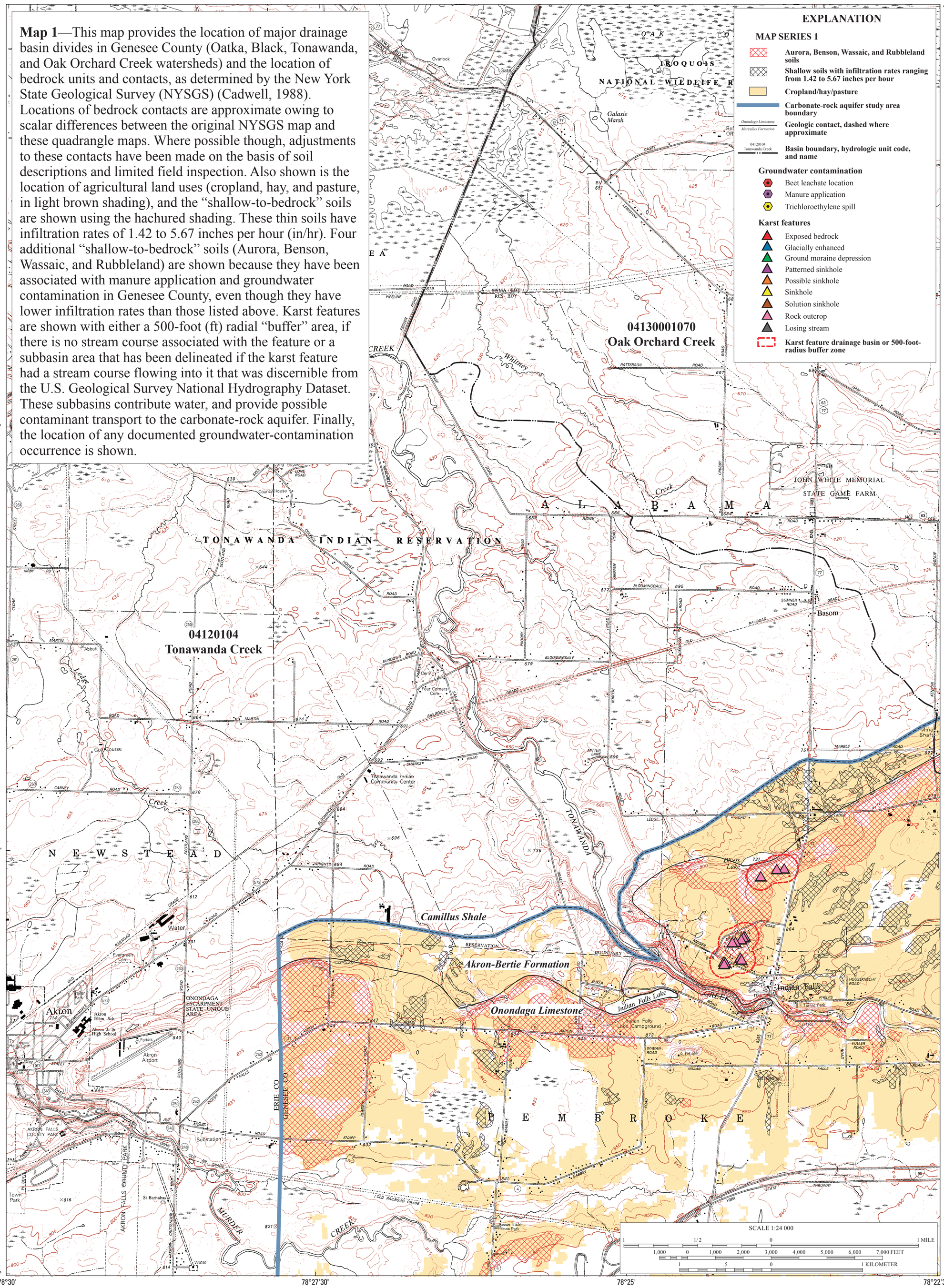
Prepared in cooperation with the
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SCIENTIFIC INVESTIGATIONS MAP 3132
Geology, land use, and contaminant spills,
Akron, Genesee County, NY—PLATE 1, MAP 1
Reddy, J.E., and Kappel, W.M., 2010, hydrogeologic and geospatial data for the assessment of focused recharge to the carbonate-rock aquifer in Genesee County, New York; U.S. Geological Survey, Scientific Investigations Map 3132, 20 plates, 1:24,000 scale.

Map 1—This map provides the location of major drainage basin divides in Genesee County (Oatka, Black, Tonawanda, and Oak Orchard Creek watersheds) and the location of bedrock units and contacts, as determined by the New York State Geological Survey (NYSGS) (Cadwell, 1988). Locations of bedrock contacts are approximate owing to scalar differences between the original NYSGS map and these quadrangle maps. Where possible though, adjustments to these contacts have been made on the basis of soil descriptions and limited field inspection. Also shown is the location of agricultural land uses (cropland, hay, and pasture, in light brown shading), and the "shallow-to-bedrock" soils are shown using the hachured shading. These thin soils have infiltration rates of 1.42 to 5.67 inches per hour (in/hr). Four additional "shallow-to-bedrock" soils (Aurora, Benson, Wassaic, and Rubbleland) are shown because they have been associated with manure application and groundwater contamination in Genesee County, even though they have lower infiltration rates than those listed above. Karst features are shown with either a 500-foot (ft) radial "buffer" area, if there is no stream course associated with the feature or a subbasin area that has been delineated if the karst feature had a stream course flowing into it that was discernible from the U.S. Geological Survey National Hydrography Dataset. These subbasins contribute water, and provide possible contaminant transport to the carbonate-rock aquifer. Finally, the location of any documented groundwater-contamination occurrence is shown.



Base from NYSDOT Mapping and GIS Section, 1998, accessed in 2009 at http://www.nysgis.state.ny.us/gisdata/

Land use from National Land Cover Data 2001, Resolution 1 arc-second (approx. 30m)

Bedrock Geology from New York State Museum, 1:250,000

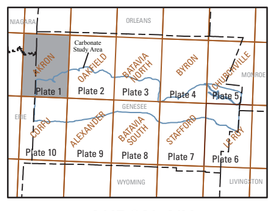
Soils from United States Department of Agriculture, Soil Survey Geographic (SSURGO) Database accessed in 2009 at http://soildatamart.nrcs.usda.gov

State Plane Coordinate System, Zone 3103, North American Datum 1983

Hydrogeologic and Geospatial Data for the Assessment of Focused Recharge to the Carbonate-Rock Aquifer in Genesee County, New York

By
James E. Reddy and William M. Kappel

2010



AKRON, NY