

APPENDIX A. SOILS AND GEOLOGY

Soils in the Heber Valley watershed are made up of mollisols (90%), alfisols (1%), inceptisols (1%), and nonclassified (8%) soils (NRCS 2022) (Figure A-1). Soils in hydrologic group B have between 10% and 20% clay, 50% to 90% sand, and loamy sand or sandy loam textures. Soils in hydrologic soil group B also have moderately low runoff potential and unimpeded water transmission (NRCS 2007). Soils in hydrologic group C have between 20% and 40% clay; less than 50% sand; and clay loam, silty loam, or sandy loam textures. Soils in hydrologic soil group C also have moderately high runoff potential when the ground is thoroughly wet and somewhat unimpeded water transmission (NRCS 2007).

An evaluation of drillers' logs was completed as part of Phase 1 and Phase 2 investigations of the Wasatch County groundwater study (SWCA 2019, 2020). It was determined that “unconsolidated valley-fill deposits are largely lenticular and discontinuous beds of poorly sorted material that ranges in size from clay to boulders” (SWCA 2019). It was also determined that “[i]n Heber Valley, alluvial-fan deposits from the various tributaries to the Provo River (Lake Creek, Center Creek, Daniels Creek, and Snake Creek) merge with fluvial deposits from the Provo River” and that “the unconsolidated valley-fill deposits of Round Valley (a fault-bounded alluvial valley underlain by upper Paleozoic rocks) are underlain and surrounded by limestone and sandstone of Pennsylvanian and Permian age” (SWCA 2019).

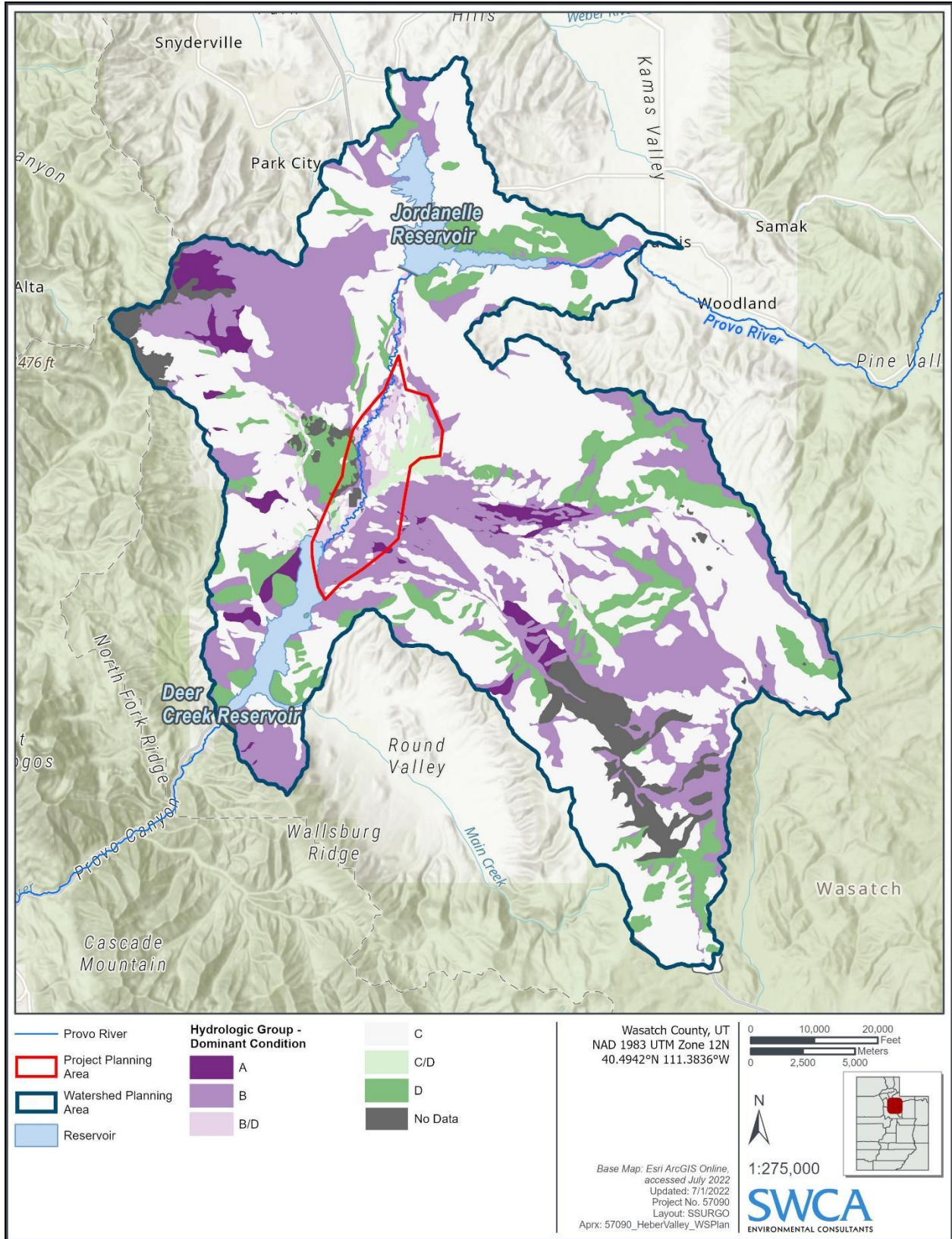


Figure A-1. Soil classifications in the Heber Valley watershed.

LITERATURE CITED

Natural Resources Conservation Service (NRCS). 2007. *Chapter 7: Hydrologic Soil Groups*. Part 630 Hydrology National Engineering Handbook. Available at: <https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>. Accessed April 28, 2022.

———.2022. Web Soil Survey. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed June 7, 2022.

SWCA Environmental Consultants (SWCA). 2019. Review of Background Information Related to Water Quality in Wasatch County, Utah. Prepared for Wasatch County Health Department. Salt Lake City, Utah: SWCA Environmental Consultants.

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