


**What is 'Available Water Holding Capacity'?** - Available water holding capacity (AWHC) is a measure of the amount of plant-available water that can be stored in the soil. AWHC is the difference between soil water content at 'field capacity', which is water that doesn't freely drain from the soil, and the water content that is below the soil's permanent wilting point, which is water held so tightly, within very small pores, that it cannot be taken up by plant roots. AWHC is a function of the total pore space of the soil and the distribution of pore sizes, which is determined by the soil texture (sand, silt, clay content), soil organic matter content and external factors such as soil compaction. Here AWHC is estimated using a model developed by the Soil Health Institute<sup>1</sup> and soil organic matter contents from the COMET-Farm tool.

The overall estimate of AWHC for the field is calculated as an area-weighted average of the values for each soil map unit (which can have different soil textures) in the field. Changes from the amounts in the *Baseline Scenario* and user-defined *Project Scenarios* are given as increases (in green) or decreases (in red). Clicking on the accordion button  shows values for AWHC for each different map unit in the field.

<sup>1</sup>[Norris, C.N., M. Bean, S.B. Cappellazzi, M. Cope, K.L.H. Greub, D. Liptzin, E.L. Rieke, P.W. Tracy, C.L.S Morgan, C.W. Honeycutt. 2020. Introducing the North American project to evaluate soil health measurements. \*Agronomy Journal\* 112:3195-3215.](#)