Ranges of AWC in Relation to Soil Texture and Organic Matter

Available Water Capacity - Enter the estimated range of available water capacity in centimeters per centimeter, e.g., 0.10-0.15.

a. Use Available Water Capacities below.

b. Reduce available water capacity by rock fragment volume percent and salts using "Guide for Estimating Reduction of AWC Because of Rock Fragments and/or Salts".

Available Water Capacities in Centimeters per Centimeter of Soil [1] [2]			
Soil Texture Classes	**Greater than or equal to 3 percent OM**	**0.5 to 3 percent OM**	**Less than 0.5 percent OM**
Coarse sand and gravel	0.04-0.06	0.03-0.05	0.02-0.04
Sands	0.07-0.09	0.06-0.08	0.05-0.07
Loamy sands	0.10-0.12	0.09-0.11	0.08-0.10
Sandy loams	0.13-0.15	0.12-0.14	0.11-0.13
Fine sandy loams	0.16-0.18	0.15-0.17	0.14-0.16
Loams and very fine sandy loams	0.20-0.22	0.17-0.19	0.17-0.19
Silt loams	0.22-0.24	0.20-0.22	0.20-0.22
Silty clay loams	0.21-0.23	0.18-0.20	0.18-0.20
Sandy clay loams	0.18-0.20	0.16-0.18	0.15-0.17
Clay loams	0.17-0.19	0.15-0.19	0.14-0.16
Silty clays	0.12-0.14	0.11-0.13	0.10-0.12
Clays	0.11-0.13	0.09-0.11	0.08-0.10
Sapric horizons	0.35-0.45		
Hemic horizons	0.45-0.55		
Fibric horizons	0.55-0.65		

[1] Use the column above most applicable for the OM in each layer.

[2] Rule of Thumb: Reduce available water capacity by 75 percent in fragipan layers and below. Use same rule for dense tills.