

Fine sand (Water holding capacity = 1 in/ft)

Soil matric potential (kpa)	Available water ^ (in/ft)	Water Content (% by volume)	Available water (%)	Depletion (in/ft)	Gross depth of irrigation * (in/ft)
0	1	15	100	0	0
<u>20 **</u>	<u>0.7</u>	13	<u>70</u>	<u>0.3</u>	<u>0.4</u>
33	0.45	10	45	0.55	0.7
50	0.3	9	30	0.7	0.9
60	0.3	9	30	0.7	0.9
70	0.2	8	20	0.8	1
80	0	7	0	1	1.3
90	N/A	((AW + 0.8)/12)*100	N/A	N/A	N/A
100	N/A		N/A	N/A	N/A
110	N/A		N/A	N/A	N/A
120	N/A		N/A	N/A	N/A
130	N/A		N/A	N/A	N/A
140	N/A		N/A	N/A	N/A
150	N/A		N/A	N/A	N/A
200	N/A		N/A	N/A	N/A

^ Available water = water holding capacity - depletion

* Gross depth of irrigation = depletion water / irrigation efficiency (for center pivot system = 80%)

** Suggested range of irrigation trigger point calculated based on the 65% of the available water.

Sandy loam (Water holding capacity = 1.4 in/ft)

Soil matric potential (kpa)	Available water ^ (in/ft)	Water Content (% by volume)	% of available water (%)	Depletion (in/ft)	Gross depth of irrigation * (in/ft)
0	1.4	22	100	0	0
20	1.1	19	79	0.3	0.4
<u>33 **</u>	<u>0.9</u>	18	<u>64</u>	<u>0.5</u>	<u>0.6</u>
50	0.7	16	50	0.7	0.9
60	0.6	15	43	0.8	1
70	0.6	15	43	0.8	1
80	0.4	13	29	1	1.3
90	0.2	12	14	1.2	1.5
100	0	10	0	1.4	1.8
110	N/A	((AW + 1.2)/12)*100	N/A	N/A	N/A
120	N/A		N/A	N/A	N/A
130	N/A		N/A	N/A	N/A
140	N/A		N/A	N/A	N/A
150	N/A		N/A	N/A	N/A
200	N/A		N/A	N/A	N/A

Fine Sandy loam (Water holding capacity = 1.8 in/ft)

Soil matric potential (kpa)	Available water ^ (in/ft)	Water Content (% by volume)	% of available wat (%)	Depletion (in/ft)	Gross depth of irrigation * (in/ft)
0	1.8	31	100	0	0
20	1.6	29	89	0.2	0
33	1.25	26	69	0.55	0
<u>50 **</u>	<u>1</u>	<u>24</u>	<u>56</u>	<u>0.8</u>	<u>1.0</u>
60	0.8	23	44	1	1.3
70	0.7	22	39	1.1	1.4
80	0.6	21	33	1.2	1.5
90	0.4	19	22	1.4	1.8
100	0.2	18	11	1.6	2.0
110	N/A		N/A	N/A	N/A
120	N/A		N/A	N/A	N/A
130	N/A		N/A	N/A	N/A
140	N/A		N/A	N/A	N/A
150	N/A		N/A	N/A	N/A
200	N/A		N/A	N/A	N/A

$$((AW + 1.9)/12)100$$

^ Available water = water holding capacity - depletion

* Gross depth of irrigation = depletion water / irrigation efficiency (for center pivot system = 80%)

** Suggested range of irrigation trigger point calculated based on the 65% of the available water.

Silt loam (Water holding capacity = 2 in/ft)

Soil matric potential (kpa)	Available water ^ (in/ft)	Water Content (% by lolume)	Available water (%)	Depletion (in/ft)	Gross depth of irrigation * (in/ft)
0	2	35	100	0	0
20	2	35	100	0	0
33	2	35	100	0	0
50	1.7	33	85	0.3	0.4
60	1.56	31	78	0.44	0.6
70	1.5	31	75	0.5	0.6
<u>80 **</u>	<u>1.4</u>	<u>30</u>	<u>70</u>	<u>0.6</u>	<u>0.8</u>
90	1.3	29	65	0.7	0.9
100	1.2	28	60	0.8	1
110	1.12	28	56	0.88	1
120	1.06	27	53	0.94	1.2
130	1	27	50	1	1.3
140	0.9	26	45	1.1	1.4
150	0.8	25	40	1.2	1.5
200	0.7	24	35	1.3	1.6

$$((AW + 2.2)/12)100$$