

Estimated weekly crop water use for field crops in Michigan (in/week)				
Week of August 12 - 18				
Crop	Growth stage	Constantine	Entrican	Hart
Corn	VT	1.25	1.16	1.22
	Silk, Blister, Dough, Begin dent	1.25	1.16	1.22
	Full dent	1.14	1.06	1.11
Soybeans	R2 Full bloom	1.25	1.16	1.22
	R3 and R4 Begin pod/Full pod	1.25	1.16	1.22
	R5 and R6 Begin seed/Full seed	1.25	1.16	1.22
	R7 Begin Mature	1.14	1.06	1.11

Peak water use continues for both soybeans and corn, making it essential to optimize irrigation efficiency and productivity. Irrigators should aim to apply enough water to meet five to six days' worth of crop needs per irrigation application. This week, daily crop water use is estimated at 0.17 to 0.20 inches, however it may vary across regions, agronomic practices and soil. For soybeans affected by white mold, larger irrigation applications are recommended to reduce continuous canopy moisture. If your soybeans are nearing the R7 stage, water needs will decrease, and under Michigan's weather conditions, additional irrigation may not be necessary to reach R8 stage. Keep an eye on crop water use, weather forecasts, and leave room for potential rainfall. As corn advances to the full dent stage, reduced transpiring leaf area and lower solar radiation will significantly decrease water requirements, though irrigation might be necessary. It's essential to continue monitoring soil moisture levels and water use until the crop reaches physiological maturity.

The table above presents estimated crop water use for various field crops across three locations in Michigan. This data helps irrigation management decisions by showcasing potential crop evapotranspiration, calculated based on reference evapotranspiration and crop coefficients for each crop growth stage. It is crucial to note that crop water use values vary across regions due to differences in weather conditions, growth stages, agronomic practices and soil properties.

When using these values for irrigation scheduling, be mindful that they assume all applied irrigation water will be utilized by the plants without any loss. Additionally, these values do not account for any precipitation that may occur during the week of calculation. For more tools and information on irrigation scheduling tools, please refer to: [Irrigation Scheduling Tools](#).

Reference evapotranspiration data was obtained from Enviroweather, which also offers a model for determining potential crop evapotranspiration. To access this tool, visit [Enviroweather](#), click on "Crops," select your crop and use the potential evapotranspiration tool by choosing your nearest weather station, the latest date of interest and other crop information.