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Estimated weekly crop water use for field crops in Michigan (in/week) Week of July 29 - August 4				
Crop	**Growth stage**	**Constantine**	**Entrican**	**Hart**
Corn	V12	1.00	1.22	1.26
	VT	1.10	1.34	1.39
	Silk, Blister, Dough, Begin Dent	1.10	1.34	1.39
	Full dent	1.00	1.22	1.26
Soybeans	R1 Beginning bloom	1.00	1.22	1.26
	R2 Full bloom	1.10	1.34	1.39
	R3 and R4 Beginning Pod/Full Pod	1.10	1.34	1.39
	R5 Begin seed/Full seed	1.10	1.34	1.39

Corn and soybeans are currently in their early to mid-reproductive stages, making it crucial to meet their water needs. Soybeans are particularly sensitive to water stress during these stages when their water use peaks. Insufficient water during these stages can significantly reduce the number of seeds per pod or seed size, thereby lowering yield potential. Similarly, water stress during corn's tasseling and silking stages can decrease yield. To optimize irrigation efficiency during these critical periods, aim to apply five to six days' worth of crop evapotranspiration, typically between 1 and 1.25 inches, depending on weather conditions. Utilize the water use table provided above as a guide to align your irrigation rate with the crop's water needs, accounting for any rainfall and leaving room for future precipitation events.

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: fact sheet #3 - 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.