

Irrigation update and crop water use

Early in the season, water use for **corn** and **soybeans** remains low across all three regions. At the VE stage in corn and the VC cotyledon stage in soybeans, plants are small with limited canopy and root development, resulting in very low water demand, typically less than 0.25 inches per week.

Wheat, on the other hand, is currently at peak water use, requiring over 1.2 inches per week in some areas. Applying the right amount of water at the right time can significantly improve both yield and grain quality. However, if irrigation is needed during flowering, be sure to monitor fields closely for signs of disease. Increased leaf wetness during this stage can raise the risk of foliar diseases such as Fusarium head blight. For more information, refer to [Considerations for irrigating wheat](#).

It's important to continue monitoring local weather and soil conditions to adjust your irrigation strategy as the season progresses. Tools like [Irrigation Scheduling Tools](#), can help estimate crop water needs and decide timing and application.

Estimated weekly crop water use for field crops in Michigan (in/week) Week of May 12 - May 18				
Crop	Growth stage	Constantine	Entrican	Hart
Corn	VE	0.11	0.12	0.11
	V2	0.21	0.23	0.21
Soybeans	VC Cotyledon	0.21	0.23	0.21
	V1 1st Node	0.32	0.35	0.32
Wheat	Jointing	1.09	1.19	1.16
	Boot / Heading / flowering / Grain fill	1.17	1.28	1.24
	Soft Dough	1.06	1.16	1.12

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. 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.