

Irrigation update and crop water use

Recent rainfall has helped maintain good soil moisture and the weather conditions are keeping crop water use below normal. Estimated crop water use for **corn** and **soybeans** remains low, under 40 inches per week across the three locations.

Wheat is currently at peak crop water demand during flowering. Although recent rainfall has supported its water needs, continued monitoring is important to avoid potential stress or disease.

With temperatures expected to rise next week, 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 19 - May 25 | | | | |
| Crop | Growth stage | Constantine | Entrican | Hart |
| Corn | VE | 0.07 | 0.06 | 0.06 |
| | V2 | 0.14 | 0.12 | 0.13 |
| | V4 | 0.14 | 0.12 | 0.13 |
| Soybeans | VC Cotyledon | 0.14 | 0.12 | 0.13 |
| | V1 1st Node | 0.21 | 0.18 | 0.19 |
| | V2 2nd Node | 0.35 | 0.30 | 0.32 |
| Wheat | Leaf elongation | 0.62 | 0.53 | 0.39 |
| | Jointing | 0.71 | 0.61 | 0.45 |
| | Boot / Heading / Flowering / Grain fill | 0.76 | 0.65 | 0.48 |

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.