The Need for Irrigation

Recent years have shown irrigation to be critical for economic production of many southwest Michigan crops. Characteristics that make our soils desirable for cultivation also make them drought prone. Recent dry summers have made crop production without irrigation economically risky.

Why Irrigation Scheduling

Efficient water use is important for several reasons. Under irrigation leads to decreased yields, but over irrigation may lead to nutrient run-off or leaching - an economic loss to the producer and potential environmental threat to water sources. Over irrigation can also lead to increased disease problems. Finally, it is simply good stewardship of a valuable resource.

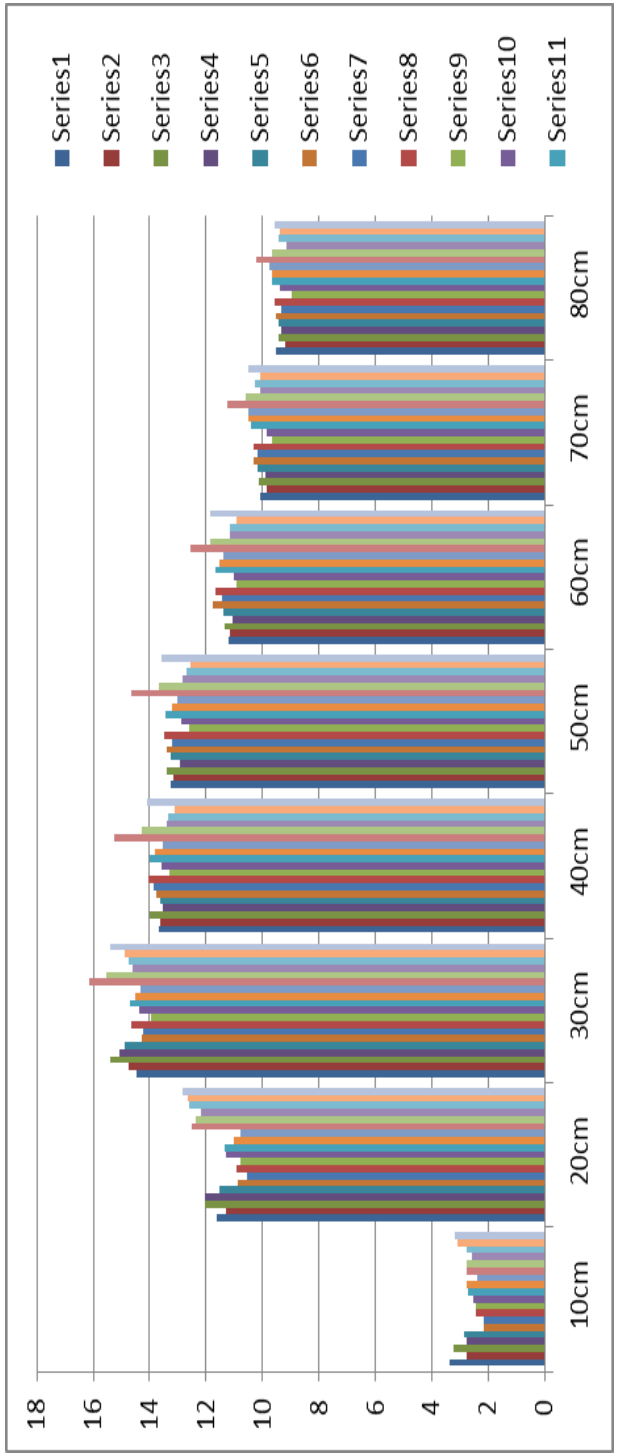
Benefits of Scheduling

By maintaining more uniform soil moisture, irrigation scheduling reduces water use while maintaining yields. The goal is to keep soil moisture between 65 and 100% field capacity. This is accomplished by weekly monitoring, projecting water use and operating the irrigation system to meet weekly or daily needs. To monitor each site a 3' long PVC tube is installed (4" will be above ground) and a moisture probe is slid into the tube and readings taken every 10 cm (4-inches). Access tubes are installed in May or early June

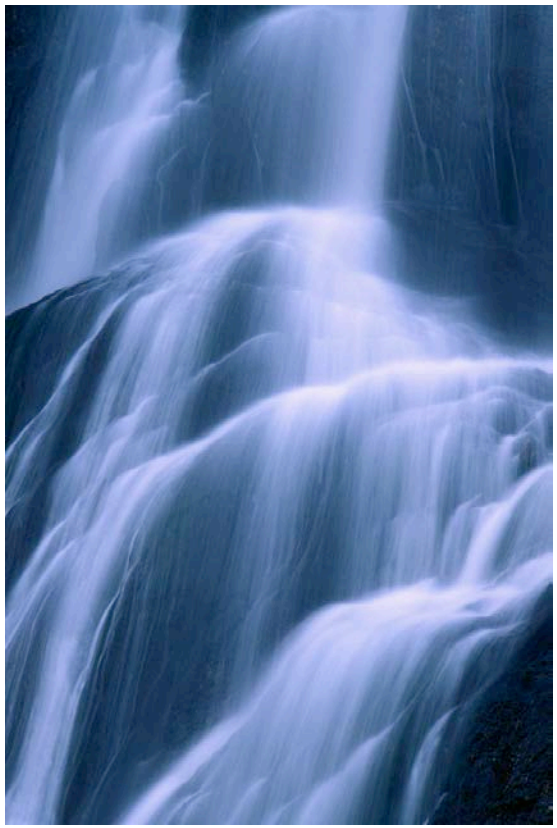
Our Service

Since 2003 Michigan State University has conducted soil moisture monitoring and irrigation scheduling on a limited basis in southwest Michigan. MSU has expanded this service on a pay for service basis to irrigators within the Berrien, Cass and Van Buren County area. The fee varies depending on the length of the crop season. Sites will be monitored on a weekly basis and growers will receive an email or FAX (whichever is most convenient) providing a plot of soil moisture change over time. The graphs help determine irrigation effectiveness and helps growers adjust irrigation length or frequency as needed. The graph to the right is an example, and it shows the 11-week (series), season-long moisture changes at 10 to 80 cm (4 to 32-inch) depths.

If you are interested in participating in this program please fill out the information in this flyer and follow the return instructions. The fee schedule is listed on the other side of this flyer. If you have further questions, or if your crop is not listed on the fee schedule, please contact: Ron Goldy, at 269-944-1477 ext. 207, or e-mail at goldy@anr.msu.edu.



Southwest Michigan Irrigation Network



MICHIGAN STATE
UNIVERSITY
EXTENSION

2015 Fee Schedule

Short Season Crops $85/site

- Beans, Green
- Cucumbers/pickles
- Yellow Squash
- Zucchini

Mid-Season Crops $110/site

- Cantaloupe
- Watermelon
- Pumpkins
- Fall squash
- Sweet corn

Long Season Crops $160/site

- Field Corn
- Peppers
- Soybeans
- Tomatoes

Perennial Crops $160/site

- Apples
- Blueberries
- Brambles
- Cherries
- Christmas Trees
- Grapes
- Nursery Stock
- Peaches/Nectarines

Crops: _____

Number of Sites: _____

Return by April 15 to:

Operation Name: _____

Contact Name: _____

Phone Number: _____

Cell Number: _____ FAX #: _____

E Mail: _____

SWM Irrigation Network
1791 Hillandale Road
Benton Harbor, MI 49022

Do not send any money at this time. You will be billed at a later date.