



MID – Working to Meet Your Irrigation Needs

Irrigation Scheduling, On-Demand and Time-of-Use Operations at Merced Irrigation District

In July 2020, the Merced Irrigation District (MID) adopted the Water Resources Management Plan (WRMP), a long-range business and infrastructure plan that provides long-term guidance to help optimize MID's water rights, facilities, operations and support finances. The WRMP was developed over several years with significant input from growers and community stakeholders at a host of workshops and outreach efforts. Growers continue to rapidly transition from predominantly large-flow flood irrigation to low-flow pressure systems. MID is striving to prepare to meet the growers' changing irrigation needs, both in terms of flow and timing. This will require modernization and major capital investment in the District's entire water delivery system, including:

- Construction of approximately 12 new local water regulating reservoirs disbursed throughout the District's water delivery system.
- Canal automation, and improved water control along the major canals that feed into other parts of the water delivery system laterals, sub-laterals, pipelines and grower turn outs.
- Improved flow measurement at key points.

While these canal system modernization projects are being constructed over time, MID will continue to strive to provide flexible irrigation scheduling to growers through its aged existing water conveyance system. It has historically offered on-demand and time-of-use scheduling whenever possible, typically on larger canals and laterals.

However, there has been a rapid expansion of low-flow, frequent irrigation pressure systems throughout the District. Further, there has been increased demand for MID surface water. The combined effect has been an increase for on-demand and time-of-use scheduling, including on smaller laterals, putting a strain on some existing facilities and operations.

For example, drip row crop growers generally request to irrigate 5 to 7 days a week, 8 to 12 hours per day, generally beginning between 6 a.m. and 8 a.m. Irrigation practices for permanent crops are also changing, and those growers generally also desire to irrigate off-peak for several hours, several days a week. Most drip and micro systems are designed for irrigating several days a week for 6 to 8 hours per day. MID operations has been doing their best to accommodate these schedules but it has become increasingly difficult to accommodate all.

In order to provide equitable service to all growers, particularly on smaller laterals, MID operations staff will be performing a scheduling analysis. The analysis will include obtaining grower's desired schedules on a weekly basis, and how best to operate the MID system to meet what schedules we can. Based on this analysis, MID staff will inform growers on impacted laterals what hours growers can run. For example, if a grower wants to run 6 hours per day, the 6 hour irrigation window may be from 6 p.m. to 12 a.m., rather than the requested 6 a.m. to 12 p.m.

MID will continue to improve its facilities to ensure that it can best meet growers' needs, particularly time of use schedules, well into the future. In the meantime, please work with MID's distribution system operators (DSO's) as they begin scheduling growers where necessary.