

Interpreting Flow Values Recorded Via Tucor’s Cycle Manager+

Tucor’s TWI can record flow from up to 10 flow sensors and react separately or collectively to a combination of sensors. This Document will review interpreting flow values recorded with Tucor’s Cycle Manager+.

Values for Water

(Figure 1)

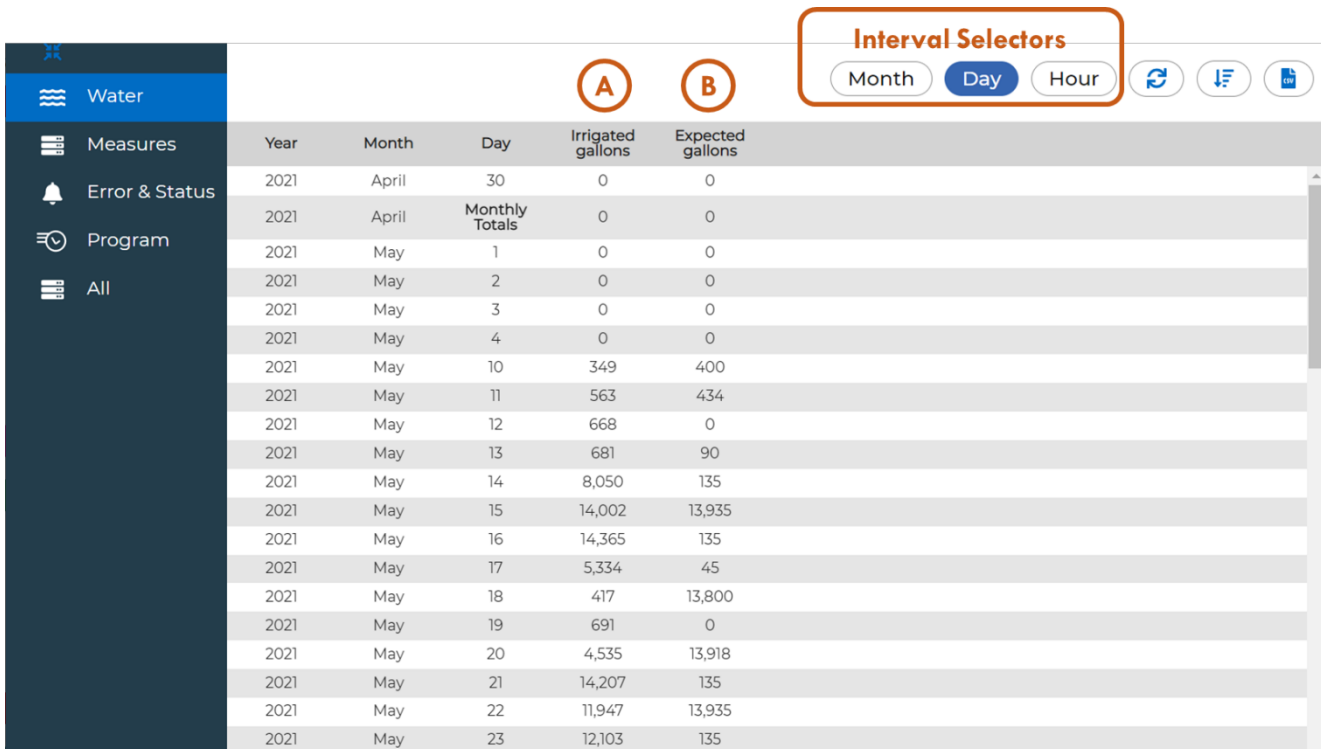


Figure 1

1. **Irrigated Gallons (A)** is the sum of all flow sensors’ unscheduled & scheduled flow in gallons while the TWI in either Manual or Auto mode.
 - a. For a high-frequency pulse meter, Tucor’s sensor decoder counts pulses over a 10 second interval and delivers the value to the controller.
2. **Expected Gallons (B)** is the TWI’s anticipated water usage in gallons. Tucor recommends generating Expected Gallons via a *Learned Flow Program*, which records the real flow of a system at the station level during a set test interval.
3. **Interval Selectors** display Irrigated & Expected Flow in Gallons at Monthly & Daily intervals.

Values for Measures

(Figure 2)

Date	Time	Name	Description	Type	Value	Units
09/17/2021	1:00 PM	F1	Newfields Pumphouse	Flow Sensor	31	GPM
09/17/2021	1:00 PM	F2	Canal Pumphouse	Flow Sensor	0	GPM
09/17/2021	2:00 PM	F1	Newfields Pumphouse	Flow Sensor	23	GPM
09/17/2021	2:00 PM	F2	Canal Pumphouse	Flow Sensor	0	GPM
09/17/2021	3:00 PM	F1	Newfields Pumphouse	Flow Sensor	39	GPM
09/17/2021	3:00 PM	F2	Canal Pumphouse	Flow Sensor	0	GPM
09/17/2021	4:00 PM	F1	Newfields Pumphouse	Flow Sensor	31	GPM
09/17/2021	4:00 PM	F2	Canal Pumphouse	Flow Sensor	0	GPM
09/17/2021	5:00 PM	F1	Newfields Pumphouse	Flow Sensor	31	GPM
09/17/2021	5:00 PM	F2	Canal Pumphouse	Flow Sensor	0	GPM
09/17/2021	6:00 PM	F1	Newfields Pumphouse	Flow Sensor	0	GPM
09/17/2021	6:00 PM	F2	Canal Pumphouse	Flow Sensor	0	GPM
09/17/2021	7:00 PM	F1	Newfields Pumphouse	Flow Sensor	31	GPM

Figure 2

1. **Name** (A) refers to a specific sensor's identification as defined by the sensor type in the *Stations & Sensors menu*. You can add up to 10 flow sensors via sensor decoder using Tucor's TWI & sensor decoders (SD-100).
2. **Value** (B) shows value at a chosen interval for the corresponding sensor (possible are continuously, hourly, and daily).
3. **Reporting Interval** (C) is the frequency a given sensor value is recorded in the *Measures* section. This is established in the *Stations & Sensors menu*. For a flow sensor, this value is totaled for a given interval. If "continuously" is selected as the reporting interval, any change in flow value will be recorded. Tucor recommends selecting an hourly interval for this reason.

Values for Program

(Figure 3)

Date	Program	Start Time	Stop Time	Runtime	Water Usage in gallons
09/01/2021	7	6:00 PM	7:01 PM	1h 1m	4,408
09/01/2021	1	10:00 PM	11:37 PM	1h 37m	10,592
09/01/2021	5	12:01 AM	2:03 AM	2h 2m	11,721
09/01/2021	4	1:00 AM	3:10 AM	2h 10m	15,614
09/01/2021	8	3:15 AM	7:06 AM	3h 51m	30,486
09/02/2021	2	6:00 AM	6:30 AM	30m	5,580
09/02/2021	9	7:30 AM	8:31 AM	1h 1m	6,240
09/02/2021	6	1:00 AM	6:09 AM	5h 9m	26,898
09/03/2021	9	7:30 AM	8:31 AM	1h 1m	6,210
09/03/2021	3	10:00 PM	11:00 PM	1h	8,424
09/03/2021	4	1:00 AM	3:10 AM	2h 10m	14,501
09/03/2021	8	3:15 AM	7:06 AM	3h 51m	31,500
09/04/2021	2	6:00 AM	6:30 AM	30m	5,544
09/04/2021	9	7:30 AM	8:31 AM	1h 1m	4,361
09/15/2021	7	6:00 PM	7:01 PM	1h 1m	1,556
09/15/2021	1	10:00 PM	11:37 PM	1h 37m	12,374
09/15/2021	5	12:01 AM	2:03 AM	2h 2m	4,707

Figure 3

1. **Water Usage in Gallons** (A) refers to **Irrigated Gallons** recorded during a given program runtime. Note – running overlapping programs will skew the program-level value.
2. **Interval Selectors** default is program-level (**Overview**). Note: the detailed level requires a firmware upgrade.