Help Us Help You With Your Irrigation Water Meter

If you have an agricultural irrigation permit or a Letter of Concurrence (LOC) from the Georgia Department of Natural Resources' Environmental Protection Division (GAEPD), the Georgia Soil and Water Conservation Commission can help you with your agricultural water meter. We are a state agency, and our services are provided at no cost to the farmer.

Before You Install A Meter
Call us and we can provide you with guidelines for proper installation. A meter installed incorrectly can be expensive to fix, but we can help you with no-cost advice to ensure that your meter is installed correctly the first time.

After A Meter Is Installed
GSWCC technicians are available to repair broken McCrometer meters at no charge to you. If your broken meter needs to be replaced, we can replace it with a McCrometer flow meter.

If you are moving your system or planning to move to a new pumping location, contact us so we can update our records. We can assist in moving the meter. Remember, your meter and permit belong to that specific site. If you sell the land serviced by that permitted irrigation system, the meter stays at the permitted pumping site.

Using the Information Obtained from a Meter
If you have questions about reading the water-use recorded by each meter, we can help.

Mobile Irrigation Lab
GSWCC technicians can help you improve the efficiency of your agricultural irrigation system by providing a free uniformity test of your center pivot irrigation system.

Georgia Soil and Water Conservation Commission

Hooks-Hanner Environmental Resource Center
4344 Albany Highway, Dawson, GA 31742
Phone: 229-995-6001 Fax: 229-995-5605
Email afleming@gaswcc.org

Use Your Water Meter as a Management Tool

Your irrigation water meter gives you the information needed to calculate the net application and flow rate for your field.

By recording the beginning reading and end reading on your meter, you can determine the gallons of water applied by your irrigation system. If you time the flow meter, you can also calculate the gallons per minute being produced by your system.

For assistance, or if you have questions about the efficiency of your irrigation system, you can contact your local GSWCC office.

Ending Reading - Beginning Reading = Acre-Inches Applied
Acre-Inches Applied/Acres Irrigated = Gross App. Depth
Gross App. Depth x System Efficiency = Net Application

meters read in acre-inches

Example:
3,706.63 ac in - 3,625.48 ac-in =81.15 AI
81.15 AI/70 acres = 1.16 gross inches applied
1.16 gross inches applied x 0.8 (80 percent) = 0.93

Call Your Local GSWCC Office
Statesboro (912) 681-5241
Dawson (229) 995-6001
Cochran (478) 934-7299

To Calculate a Precise Flow-Rate from an Acre-Inch Meter:
1. Time the flow meter and subtract beginning reading from the end reading for acre-inches (AI)
2. Multiply difference by 27,154 to calculate gallons
3. Divide by minutes timed to calculate gallons per minute (GPM)

Example:
1,500.50-1,500.25 = 0.25 AI
0.25 AI x 27,154 = 6,788.5 gal
6,788.5/10 minutes = 6,78.85 GPM

GSWCC
Georgia Soil & Water Conservation Commission
Metering Program

How to Use Your Water Meter as a Management Tool:

Calculating Net Application & Flow Rate

How do you know if the amount of water you irrigate is sufficient for your crop's water needs?

Source: Bulletin 1296/Reviewed Mar, 2012 "Water Meters as a Water Management Tool on Georgia Farms." UGACES; Gary Hawkins & Kerry Harrison

Water Meter Calculations in Gallons

End Reading - Beginning Reading = Gallons Applied
Gallons Applied/27154 = Acre-Inches (AI)Applied
Acre-Inches Applied/Acres Irrigated = Gross App. Depth
Gross App. Depth x System Efficiency = Net Application

Typical System Efficiency is 80-90%
1 inch of water applied over 1 acre = 1 Acre inch(AI)
1 acre-inch = 27,154 gallons

Meter reading in gallons

Example:

82,545,000 gal - 80,589,100 gal = 1,955,900 gal
1,955,900 gal /27,154 = 72.03 AI
72.03 AI / 75 acres = 0.96 gross inches applied
0.96 gross inches applied x 0.85 (85% efficiency)= 0.82 inches
Net Application = 0.82 inches applied
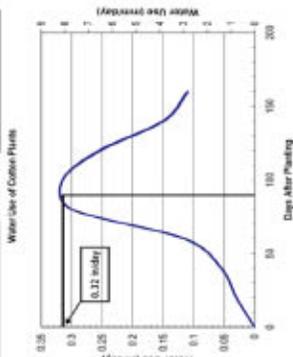
FIND OUT MORE PROGRAM INFORMATION AT   WWW.GASWCC.GEORGIA.GOV