



Measuring water use by electric consumption

Estimating water use from electric consumption

The following steps may be used to calculate water use when the supply pump is served by a stand-alone or “dedicated” meter (when the electrical power is used solely to run the pump).

1. Determine the rate at which electricity is used by the pump.
 - a. Read and note the accumulated kilowatt hours (kWh) of electricity usage on the meter from the digital display or dials. If you are not sure how to do this, see instructions under “How to read an electric meter.”
 - b. Return exactly one hour later and read the meter a second time.
 - c. Subtract the first reading from the second reading to obtain the number of kWh used by the pump in one hour.
2. Read and note the number of kWh of electricity use from the electric company bill. This will vary from month to month.
3. Divide the number of kWh from the bill by the number of kWh used by the pump in one hour to get the number of hours the pump ran during that billing period:

$$\text{kWh from bill} / \text{kWh in one hour} = \text{Hours of pump usage}$$

4. Check and note the flow rate of the pump (gallons per minute or gallons per hour). If the pump flow rate is given in gallons per minute, multiply it by 60 to get gallons per hour. If the pump flow rate is given in gallons per hour, go directly to the next step.
5. Multiply the number of hours of pump usage by the flow rate to get the total volume of water pumped:

$$\text{Hours of pump usage} \times \text{Flow rate} = \text{Total water pumped}$$

How to read an electric meter

Reading a digital electric meter

To read a digital meter, simply read the numbers in the display. The meter below has accumulated 57,428 kilowatt hours.



Reading an analog electric meter

Some interpretation of dial position is needed for reading an analog meter. Each of the five dials represent one digit of the present reading. The dials move both clockwise and counter clockwise. When the hand of one of the dials is between numbers, always use the smaller number. The example meter below has accumulated 57,428 kilowatt hours.



If you cannot tell if a hand is past a number or not, look at the dial to the right. If it has passed zero, then the hand is pointing to the correct number. If the dial to the right has not passed zero, then use the next smaller number. The second digit from the right in the example below is a “1” because the digit to the right has not yet passed zero. The meter reading is 51,219.



How to contact the District

For more information, contact the District at one of our service centers.

District Headquarters

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Access permitting information at

floridaswater.com/permitting.



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