Winter Meter Reading
How To Estimate

Estimating readings can be a very complicated task. Especially the reconciling when meter reading begins again in spring. Water Solutions Pro and Pro Plus offer two choices when it becomes necessary to quit reading meters due to weather related issues.

Recommended Estimating – All versions

Our recommended approach (though not perfect) is to adjust the rate table for effected customers removing any usage or overage fees. This means that during the months of estimated readings, each customer will receive only a minimum bill. During data entry the customers meter reading will not change from period to period until the first non-estimated meter reading is entered. In other words, during the estimated period you will enter the same reading as before resulting in a 0 water use. Once readings commence, adjust the water rate tables Usage Over amounts equal to an amount times the number of estimated readings plus the current month. The rate per 100 units does not change.

Example:

A customer uses 4000 units per month during the estimated period. Each month you would enter the same meter reading as the previous month. This is an important step because it preserves the beginning reading for when the Estimated time ends. This customer will receive a bill of $25.00 per estimated billing.

Four months go by and billing will commence in the current month. The water rate table needs to be modified to increase each of the Usage Over levels to an amount that is 5 times the normal usage allowed for each rate tier. Example; November, December, January and February were estimated and its now time for the March billing so the Usage over levels would be (4 months estimated + Current month) = 5.

The billing process should proceed as normal.

Normal Rate
Basic Rate = 25.00
Usage over 4000 = .18/100 units

Estimated Rate Remains the same
Basic Rate = $25.00
Usage over 4000 = .18/100 units
Except you will enter the same reading as the previous month.

First Non Estimate Rates (assuming 4 months of estimated readings + Current month)
Basic Rate = $25.00
Usage over 20000 = .18/100 units (Usage Over Adjusted to 4000 units X 5 months (4 months estimated + current month) or 20000. Enter your reading as normal.

In the example; after the March billing you would need to reset the billing Usage Over back to your normal rates for April

This method allows the customer to be charged appropriately for excessive or tiered water usage with out overcharging the customer.

Alternative Estimating Method

Water Solutions Pro - All versions Water Solutions Pro Plus Version 3.27 build 1.58 or lower

This version is able to approximate customer's water usage by looking at their average of averages. This sounds weird but here is an example of how it works: July a new customer uses 10,000 gal. His average is now 5000 gal (10000/2). August the customer uses an additional 10000 gal and his average is now 7500 gal ((5000+10000)/2). September the customer uses 8000 gal and his average is now 7750 (7500+8000)/2. In

October the customer uses 4000 gal and his average is now 5875 gal (7750+4000/2). You should notice that the estimated or average use is lagging behind the actual customer's use but responds fairly fast.

To use this method double click in the current reading box within the Enter Readings form and the program will automatically calculate the appropriate reading and display it in the field. Caution should be exercised to keep the number of estimated readings evenly divided between estimated months. Example start estimating in November and end in March. This way as the customer's usage decreases during the first portion and then begins to increase during the latter estimated months would tend to balance.

The customer's first bill may show a negative usage or a rather large usage. If either occurs you will need to look at the readings and determine if a credit or some other adjustment might be due the customer.

Water Solutions Pro Plus 3.27 – 6.00 build 1.59 or newer

This version attempts to estimate the customer's intended usage based on a customized model of water usage. We have discovered that seasonal changes in water usage typically vary 42% from seasonal highs. Low readings tend not to change from November through February. Using this as a base we have implemented a method where we can estimate a customer's current usage based on their last usage and the time of the year. The estimating factors can be customized to your particular water district. The ability to adjust your anticipated customer usage table has now been added to the TOOLS->PPROGRAM SETUP->METERS->USAGE FACTORS form. Here is where you may enter usage factors to determine what the next anticipated customer use will be based on. Your customer's next anticipated use will be determined by these factors and their last months overall usage. You are encouraged to change the number to best represent your geographical climate in your area.

The best way to use this feature is to look back at your last year Detail Reports and use the actual total customer usage to determine the appropriate factors for your system. Example: To find the January-February factor, locate your February and January Detail Reports. Divide your February total water consumption by January's total water consumption. Place the result into the table. E.g. February 360125 gal / January 359000 = 1.003 or round to the nearest hundredth 1.00 and place this number in the January-Feb Factor Box. Or, August 750000 gal / July 615000 gal = 1.22 then place this number in the July-August factor box. Last Example, November 310000 gal / December 280000 gal = .903 place this number in the Nov->Dec Factor Box. If a customer uses 7000 gal in November the program would estimate his December usage as 6321.

To use this method of estimating double click in the current reading box of the Enter Readings form or by clicking on tools and use the Estimate Readings Feature to estimate all customers. As with the version above you may need to adjust the customer's account manually if large discrepancies are found during the first billing after a long period of estimating.

Remember that estimating a customer's bill is not a desirable practice. It may introduce situations where depending on the method used where the water district may miss out on some revenue or a consumer may receive a larger than normal billing. In either of the methods used to estimate bills any benefit typically favors will the consumer but not always.

It is ultimately your responsibility to determine which method best suits your district and it is your responsibility to ensure your customers are properly billed.