

# Draft Dual(Sub)-Metering Principles For Urban Agriculture

## Urban Agriculture Definition

The City's Planning and Development Services Department will likely be defining Urban Agriculture as:

- A) Non-Profit Community Gardens
- AND
- B) For-Profit Urban Gardens

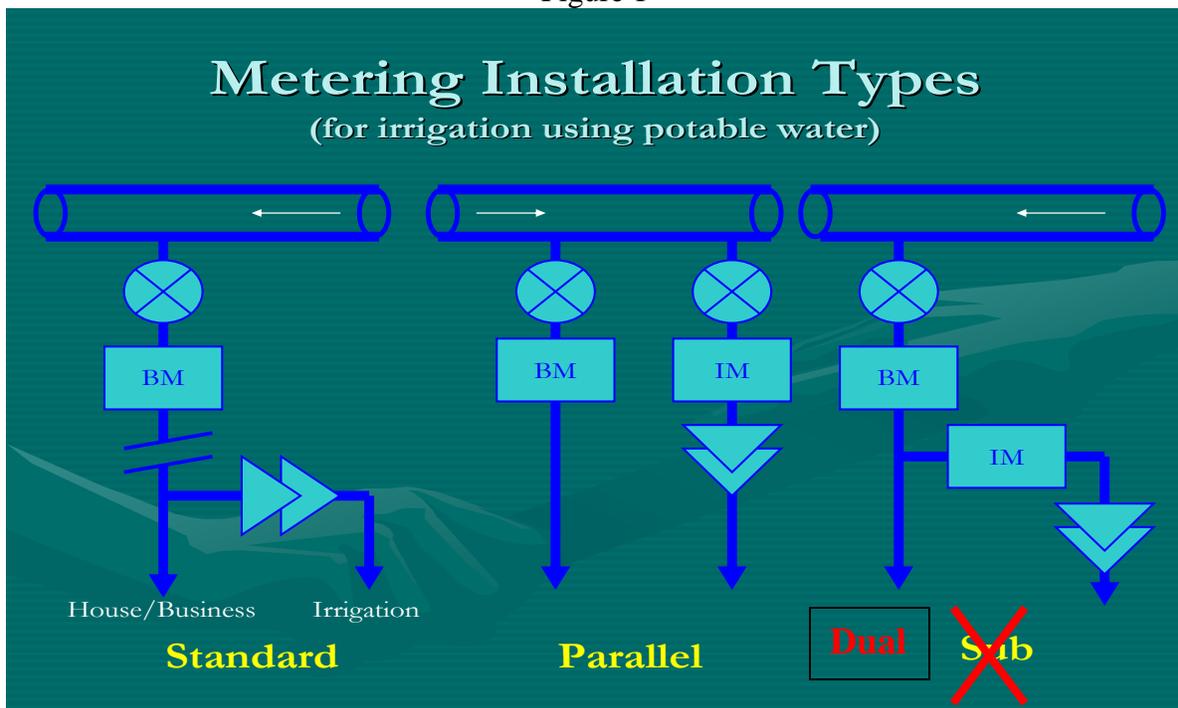
Residential properties will likely be excluded from Urban Agriculture definition, since gardening is a traditional use of residential properties.

## Dual (Sub)-Metering Definition

*A meter installed downstream of the main potable water billing meter, and immediately adjacent to the main billing meter, to accurately record irrigation water use.*

This allows Customers to accurately account for irrigation water use in order to realize wastewater savings (so that customers can ensure that they are not paying wastewater fees associated with the water they use for irrigation).

Figure 1



Dual-Metering as applied to Urban Agriculture Uses (defined by Planning and Development Services) is applicable to only two types of installations, non-profit Community Gardens, and for-profit Urban Farms. These would both be eligible for the commercial water rates from the City of Tucson.

The following table provides a guide for meter installation types:

**Table 1  
Metering Installation Types  
and  
Applicable Locations**

Water Type	Customer Type	Installation Type			Remarks
		Standard	Parallel	Dual Meter	
Potable	Commercial and Multi-Family	Yes	Yes	No*	* Parallel Meters are used for this application
	Non-Profit Commercial	Yes	Yes	Yes	
	Residential	Yes	Yes	Yes*	*Not eligible for Urban Agriculture
Reclaimed	Commercial and Multi-Family	Yes	Yes	No*	* Reclaimed meters do not have an associated wastewater component and would not benefit from Dual (Sub) Metering
	Non-Profit Commercial	Yes	Yes	No*	
	Residential	Yes	Yes	No*	

**Dual (Sub)-Metering Principles**

The following are principles that can be used toward the process of defining the criteria for installation of Dual Meters, as well as providing a basis for installation standards:

- Dual metering will be optional for any customer who qualifies their land use as a Non-Profit Urban Agriculture Community Garden. Dual Metering will only be considered/allowed for Urban Agricultural Use as defined by the City of Tucson Land Use.

- Dual Metering is not applicable to reclaimed customers, since wastewater fees are not applied to reclaimed customers.
- Where Dual Metering is desired, the main potable billing meter must be sized to handle the total customer uses including domestic, plus irrigation and any other uses. The secondary meter (irrigation meter) must be sized for irrigation uses and could be smaller than the main meter, but never larger. Customers who apply for sub-metering must show that the main billing meter is capable of handling the additional metered flow. Customers may be required to upgrade their main billing meter (and pay the associated fees for that upgrade) or add a parallel meter, if the existing billing meter cannot handle the additional flow imposed by proposed sub-metered irrigation.
- Sites within the Tucson Water Service Area must meet the City of Tucson Land restrictions related to Urban Agriculture in order to qualify for sub-metering, regardless of the location of the site (inside or outside the city limits). Other jurisdictional restrictions on Urban Agriculture may also apply that could limit customer use of sub-metering outside the city limits. *[How does one manage this? Does a customer have to apply both to their jurisdiction and to the City of Tucson? That could create a legal issue.]*
- All dual-meters will be required to have approved backflow assemblies with periodic testing, the same as any other irrigation meter. Similar to parallel meter installation, all dual-metering installations will be subject to cross connection testing associated with backflow.
- If the main billing meter tap was installed prior to the implementation of System Equity Fees and CAP Fees, those fees will be assessed when the dual-meter is installed.

### **Pima County Wastewater Secondary Meter Option**

Pima County allows (1) non-residential customers to install what they term as ‘secondary’ meters. These meters are located downstream of the main water billing meter. They are not installed by Tucson Water, but are installed by a qualified plumber. They are not maintained or read by Tucson Water. Those customers call Pima County to report their secondary meter use. Pima County then makes adjustments to their wastewater bill so that the customer is not charged wastewater fees for the irrigation use. This service is provided to customers at no charge.

Given that Urban Agricultural uses will be defined as non-residential, then all Urban Agricultural customers would qualify for the Pima County secondary meter option regardless of whether or not they are inside or outside the city limits. Since the secondary meter will not result in monthly fees from the Water department (like a dual meter will), customers will

likely choose to utilize the free County Secondary Metering Option, in lieu of dual metering from the water department.

Utilizing the County's Secondary Meter Option in lieu of Dual Meter from Tucson Water will provide the following benefits:

- Differences in land use designation between the City and the County will not be an issue. Urban Agriculture users regardless of their location are able to utilize the secondary meter option.
- Customers are not charged any dual metering fees from the Water Department.
- Customers can install the County's 'secondary' meters anywhere on property. They will not be required to have the meter installed close to the main water billing meter. This will minimize customer irrigation system costs.
- Tucson Water (and its customers) do not have the added costs associated with: 1) Preparing Dual Meter standards documents; 2) Modifications to the billing system to accommodate the dual meter or hiring of additional personnel to manually input data gathered from the Dual Meter; 3) Maintenance of additional Tucson Water meters.

1) Note that we previously indicated that the County is no longer allowing secondary meters. This is not correct. The County is allowing them for non-residential customers.