

- d) Datalogger: An electronic device which receives input from an external sensor and records the data as a time series.
- e) Fertigation: The application of fertilizer through an irrigation system.
- f) Flowmeter: An instrument used to measure, directly or indirectly, the volume of flow per unit time through a pipe.
- g) Flow Sensor: An instrument used to detect the presence or absence of flow through a pipe.
- h) Pressure Sensor: A device used to detect the presence or absence of water pressure in a pipe, or the presence of water pressure above or below an adjustable threshold.
- i) Telemetry: The transmittal of data over distance via radio, wireless modem, telephone, internet network transmission, or satellite radio.
- j) Wireless modem: an electronic device that transmits data via a wireless network service provider to the internet.
- k) Withdrawal: removal or diversion of water from an aquifer or surface water body.

4.0 Elements of Directive

A. System Ownership and Applicability

1. For each agricultural water user electing to implement this Directive, the District shall select the least cost and most effective method of estimating and reporting water use. The District will estimate water use with electrical consumption as a first choice when it is appropriate and applicable.
2. For systems where estimation with electrical consumption is neither appropriate nor applicable, the District will install instrumentation to estimate daily water withdrawal for agricultural use in accordance with paragraphs B, C, and D below. District provision of instrumentation and data acquisition shall terminate on September 30, 2021, unless otherwise extended by the Governing Board. District provision of instrumentation and data acquisition shall be subject to final adoption of each year's budget by the Governing Board.
3. This Directive will apply to wells with an inside diameter eight inches or greater at land surface, and on surface water withdrawals with an outside diameter of six inches or greater, when such withdrawals are part of a new permit, new withdrawals submitted as a permit modification, or renewal of a water use permit.

B. Instrumentation

1. For systems where one withdrawal point supplies a delivery system in which flow rate varies less than 10% during operation, the instrumentation shall consist of a pressure sensor capable of being set to a minimum threshold operating pressure. When the operating pressure is reached, the pressure sensor status will be read by a datalogger which will record the duration of pressure sensor activation. The datalogger will report a time series of event-based operation status once per day.
 - a. For systems meeting the above criteria, a ¼-inch Iron Pipe Size threaded port between the pump outlet and the backflow preventer or check valve should be provided by the user. The access port must provide a clean water pressure source and be upstream of any chemigation or fertigation injection port or any valve that prevents flow of effluent back into the well in systems where reclaimed effluent is applied through the irrigation system.