



State of North Dakota

Office of the State Engineer

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Telemetry Requirements and Industrial Water Depot Policies

Prior to the withdrawal of water, telemetry systems must be installed and communicating with the Office of the State Engineer's database.

The telemetry system must be capable of reporting at least one meter reading per day to the web services hosted by the Office of the State Engineer, whether pumping is occurring or not.

Only one telemetry system is required for each water depot, provided there is a "master meter" which monitors all of the water use at a water depot. If multiple systems are pumping water from the approved point(s) of diversion and are not connected to each other, a telemetry system is required on each system. If a water depot has both groundwater and surface water sources, a separate meter and telemetry system is required for each water source. The telemetry is calibrated to work with the water meter, therefore, the telemetry system must remain attached to the meter. In the case of a temporary water permit, once a water meter and telemetry system are installed, the meter and telemetry must remain in place until the water permit expires, the system is no longer in use, or the depot is permanently closed by the permit holder. The permit holder shall notify the Office of the State Engineer within three days if a meter and/or telemetry system are replaced or removed.

The electronic delivery of real-time data shall be through a SOAP (Simple Object Access Protocol) service. After a telemetry system has been installed and SOAP Credentials have been issued, an initial weekly meter report must be completed for the first 7 days of pumping. Daily entries of water use should be entered onto the report for 7 days. After the 7th day, a copy of the report shall be submitted to the Office of the State Engineer via mail or email. Monthly meter reports will also be required as stated in the conditions of the water permit. The monthly and weekly meter reports are to be completed by taking visual readings of the meter and documenting the values on the respective reports. These reports provide the necessary information for calibrating the telemetry system and are an important aspect of keeping a permit holder in compliance. A depot login and password will be issued when requesting SOAP Credentials.

We recognize there could be technical failures with telemetry systems from time to time that are beyond the control of the depot owner or manager. Reporting water use remains the responsibility of the permit holder even during times when the telemetry is not operating properly. In the event of a telemetry failure, the Office of the State Engineer should be notified immediately and daily meter readings should be collected and reported to our office until the telemetry is back online. Keeping our office informed through the duration of this process will be taken into consideration when evaluating if your project is in compliance with the telemetry condition of your water permit.

Listed below are the vendors and companies that provide telemetry services that meet the reporting requirements outlined by the State Engineer. This list will be periodically updated as more vendors are able to meet State Engineer's requirements.

Flowpoint Systems:

Jakub Zielinski - 877-655-5585

Fusion Integrated Technologies:

Steve Clayton - 701-258-8899

Information Data Technologies (IDT):

Agri-Industries - 701-572-0767

SoloTek LLC - 701-934-5159

Steve Uban - 605-878-3345

McCrometer:

Mon-Kota Irrigation - 701-844-5300

Joseph Harker - 307-677-6492

Micro-Comm:

Chris Cote - 913-390-4500

Preferred Controls:

Peter Desautel - 701-839-0181

Well Head Automation:

TJ Halverson - 701-641-8631

Most of these vendors maintain websites that can be used by the depot owner/manager to verify meter readings. If you prefer to work with a system that is not listed above, prior approval is required by the Office of the State Engineer.

The web service specifications are available at:

<http://www.swc.nd.gov/SWCTelemetrySOAPSpec.html>

SOAP Credentials from the State can be requested online using the following link:

http://www.swc.nd.gov/reg_approp/waterpermits/meter_request.html

The telemetry pilot study report can be found at the following link.

http://www.swc.nd.gov/pdfs/telemetry_study_report.pdf

An updated version of this document and the telemetry vendor list will be maintained at the following link: http://www.swc.nd.gov/pdfs/telemetry_requirements.pdf

If you have any questions regarding these matters, please contact Chris Colby at 701-328-2754, or by e-mail at depotreporting@nd.gov