



GARY R. HERBERT  
Governor

GREG BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Water Rights

KENT L. JONES  
State Engineer/Division Director

October 13, 2009

South Cache Water Users Association  
Attn: Ray Bankhead  
190 East 800 South  
Wellsville, UT 84339

RE: Little Bear River Distribution System, SEAA 1316, Account 100825, WR No. 25-1945

Dear Ray:

This letter is to request a report of the progress and work accomplished thus far in meeting the requirements of the Measuring Device Notice (SEAA 1316) issued to you on July 1, 2009.

Due to the nature of the work involved and the time required to get your flow data reported via our telemetry system, we recommend the new water meter vaults be installed as soon as possible to make the needed progress to finish these meters before the April deadline. The construction of these meter vaults is the responsibility of the individual irrigation or canal companies. The water user association must have the meter vaults completed very soon in order to meet the April deadline for the meters to be installed and functioning. Some of the general specifications that may be helpful are:

- These water meter vaults typically consist of a vertical section of galvanized steel culvert with a custom cutout on the bottom to enable the culvert to extend underneath the pipeline with a minimum of 2 feet clearance on the sides of the pipeline and 1 foot clearance below the pipeline.
- Typically gravel is placed in the bottom of the access vault to improve drainage and help support the culvert so it doesn't rest on the pipeline.
- It would extend above ground about a foot to prevent surface water inflow.
- The culvert meter vaults must have weatherproof covers that are preferably hinged and lockable to provide reasonable access to authorized persons.
- A ladder should be permanently attached to the inside of the meter vaults to enable safe access to the pipeline and meter equipment.
- The culvert should be a minimum of about 5 feet diameter or larger if needed to access the pipeline. The vaults should provide access to the entire pipeline to enable the electronic sensors to be clamped or attached to the outsides of the pipelines.
- The meter vaults should be located where there is not groundwater interference. We recommend the meter vault on the Pump Canal be located

on near the upstream end of the inverted siphon (just upstream of the highest pipeline elevation). The meter for the Wellsville-Mendon Canal could likewise be located somewhat lower (upstream) from the highest elevation of the outlet pipe.

- It is important that the pipelines at these meters should always be completely full of water when the pipeline is in use.
- Water meters should also be located in a straight section of pipe that is ten pipe diameters distance from any bends or fittings or open channel (pipe not flowing full) that could interfere with the flow measurement.

It is important that these meter vaults be constructed in a timely manner to enable the installation of the electronic equipment before the April deadline. After these vaults are constructed, our personnel will then be able to install the meters and telemetry equipment based on the irrigation company reimbursing us for only our costs of purchasing the meters and electronic equipment. The costs to your company are estimated to be about \$2000 per meter (\$1200 for each meter and about \$800 for other electronics). This equipment is necessary to improve the water measurements within the distribution system and to satisfy the state laws and our requirements and the SEAA we issued. It is important that the vaults be constructed soon so work on the meters may be finished on schedule before the deadline.

Please contact me at (801) 538-7469 if you have questions regarding the measuring device order or meter installations and to report your progress in constructing these improvements. You may also contact Will Atkin, Regional Engineer in our Logan Office at (435) 752-8755 if you have questions.

Sincerely,



Ben L. Anderson, P.E.  
Water Rights Distribution Engineer

cc: Will Atkin, Regional Engineer  
Greg Hansen, Commissioner

**SCANNED**