

BEFORE THE DIVISION OF WATER RIGHTS

<p>In The Matter Of:</p> <p>Utah and Salt Lake Canal Company (attn. Nelson Peterson, President)</p> <p>RESPONDENT</p>	<p>MEASURING DEVICE AND CONTROL STRUCTURE NOTICE</p> <p>SEAA No. 2147</p> <p>WATER RIGHTS: 59-3499, 59-23, 59-30, 59-3517, 59-3518, E33</p> <p>DISTRIBUTION ACCOUNTS: 102375, 102402</p>
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I. AUTHORITY

The Division of Water Rights ("Division") issues this Notice under UTAH CODE ANN. § 73-5-4, and in accordance with UTAH ADMIN. CODE R. 655-15.

U.C.A. § 73-5-4 states in part :

(1) To assist the state engineer or water commissioner in the regulation, distribution, and measurement of water, a person using water in this state, ... shall construct or install and maintain controlling works and a measuring device at:

- (a) each location where water is diverted from a source; and*
- (b) any other location required by the state engineer.*

(2) A person using water in this state shall make the controlling works and measuring device accessible to the state engineer or water commissioner.

(3) The state engineer shall approve the design of:

- (a) the measuring device; and*
- (b) controlling works so that the state engineer or a water commissioner may regulate and lock the works. ...*

(6) If a water user refuses or neglects to construct or install the controlling works or measuring device after 30 days' notice to do so by the state engineer, the state engineer may:

- (a) forbid the use of water until the user complies with the state engineer's requirement; and*
- (b) commence enforcement proceedings authorized by Section 73-2-25.*

SCANNED

II. STATEMENT OF FACTS

1. Respondent diverts surface water from Utah Lake and Jordan River at Turner Dam within the Utah Lake/Jordan River Distribution System operated under the direction of the Water Commissioner appointed by the Utah State Engineer.
2. Respondent diverts water into the Utah and Salt Lake Canal under Water Right 59-3499.
3. Respondent has an agreement with Kennecott to deliver additional water under various Kennecott water rights. Distributing and reporting water deliveries according to the applicable Kennecott water rights is often challenging and requires a basic understanding of the nature of these Kennecott water rights.
4. In 2016, of the 30,959 ac-ft diverted into the canal, 26,953 ac-ft was Utah and Salt Lake Canal water and 15,863 ac-ft was Kennecott water. The sum, 42,821, exceeds delivery by 11,862 ac-ft.
5. In 2017, of the 32,552 ac-ft diverted into the canal, 30,501 ac-ft was Utah and Salt Lake Canal water and 17,553 ac-ft was Kennecott water. The sum, 48,054, exceeds delivery by 15,502 ac-ft.
6. In 2018 the Utah and Salt Lake Canal Company diverted 16,701 ac-ft and Kennecott diverted 19,108 ac-ft. The sum, 35,727 ac-ft, corresponds with reported canal diversions.
7. A reliable measurement at the tail end of the canal enables Respondent and/or others to assist with distributing water, reporting water deliveries, and computing the shared transmission losses. Such measurement enables Respondent and others to make good decisions relating to the quantity of water diverted under each water right. It also helps assign a transmission loss to all canal deliveries based on the actual measured losses.
8. Canal losses (or gains) are significant and represent measured inflow less the sum of water deliveries to individual users.
9. Kennecott does not have a suitable site for a reliable measuring device because the gates at the end of the canal may back up the water. Access at Kennecott is gated and limited to certain times, so it was decided last year that the best location for the measurement station is the existing rectangular section structure located at approximately 8300 West along the canal. This structure is not an approved measuring device, but with the proposed sensor and telemetry, and some preparation work, it has the potential to become an approved measuring device.
10. Kennecott agreed to participate in the new station with funds for the sensor, which costs about \$1000-\$1500 minimum as planned for this station. The Division of Water Rights will also contribute about that same dollar amount in telemetry equipment and provide

installation. The new station will be named by location as “06.02A UTAH & SALT LAKE CANAL (8300 WEST)”. It is not to be construed as Kennecott’s station because there are shareholders between the proposed station and Kennecott, and Kennecott has other water sources in other canals. The site was selected because it is convenient and economical to obtain a measurement, which are important to many.

11. Respondent is generally supportive of an accurate measurement with telemetry to review the water flow remotely. However, Respondent is unwilling to participate in the funding of the proposed method of measurement at this time.
12. During a field inspection held March 18, 2019, significant sediment deposits were observed along the south side of the proposed measurement structure located at approximately 8300 West. Such sediment interferes with an accurate water measurement using the proposed methods.
13. During the inspection, Respondent expressed concerns relating to the sensor snagging or catching debris in the canal, thus increasing the risk of causing a flow obstruction and/or overtopping the canal bank if not promptly cleaned. The proposed sensor attaches to the floor of the structure. It has slim cross section profile (approximately 1 inch high x 3 inches wide within the flow path). If debris catches on the sensor and blocks the signal, it could reduce the accuracy and reliability of the flow measurement. The risk of blockage of flow is very small in comparison to the risk of not measuring the water delivered to Kennecott. Realtime flow records increase canal safety by enabling operators to monitor the flow and the water level remotely. The sensor is designed to enable debris to pass without incident. Sediment could be problematic if it interferes with the sensor, but such interference can be prevented by cleaning the section before irrigation season each year, which is the Respondent’s responsibility.
14. A temporary or permanent foot bridge at the measurement location would enable a safe and accurate calibration check of the new device and is recommended as part of Respondent’s contribution to the measurement.
15. The existing staff gage is helpful for field verification of the water depth recorded by the proposed sensor.
16. If Respondent wishes to install an alternative measuring device at the end of the canal, or if Kennecott prefers to install a measuring device of their own to replace the proposed device, it must be (1) approved by the Division of Water Rights before it is constructed and (2) operational before water is delivered to Kennecott in the Utah and Salt Lake Canal in 2019. It is important that these plans be submitted to the Division of Water Rights as soon as possible if other options are being pursued that meet this measurement requirement.

III. ACTIONS REQUIRED

1. Respondent must maintain a reliable measuring device at the tail end of the canal to measure the water delivered to Kennecott throughout each irrigation season while the canal is operating and actively delivering Kennecott water. If Respondent ceases diversions under Kennecott water rights, the downstream measurement is not necessary.
2. The existing plan, as approved and supported by Respondent, Kennecott, and Division of Water Rights, as discussed during the past year, is to install an electronic sensor (depth/velocity sensor) on the bottom of the channel at the rectangular concrete cross section located near 8300 West. The sensor will be funded by Kennecott and the telemetry and installation will be provided by Utah Division of Water Rights. The intention is for this sensor to be operational for the 2019 irrigation season, without any funding provided by Respondent. If Respondent is supportive of this option there is no need to propose other measurement options before delivering Kennecott water in 2019.
3. If Respondent prefers an alternative measuring device to the device mentioned above in item 2, Respondent must notify the Division and submit plans of the alternative measuring device to the Division of Water Rights for review. The plan must be approved and implemented to enable water measurement of Kennecott's process water (not the temporary irrigation water) before process water is delivered to Kennecott in 2019.
4. If the proposed action described in Item 2 above is Respondent's preference for water measurement, it is important that Respondent remove the sediment from the proposed measurement structure prior to water delivery to Kennecott in the Utah and Salt Lake Canal. This removal of sediment will likely become an annual maintenance item for Respondent prior to each irrigation season. Respondent must notify the Division of Water Rights when the sediment is removed, and allow adequate time after sediment removal to install the sensor prior to turning water into this section of the canal each year. If the sensor or the cables to the sensor are damaged by Respondent, Respondent is responsible for repair or replacement costs. The Division of Water Rights recommends the sensor be removed during the winter and will assist as needed.
5. **The above work must be completed on or before Kennecott water is delivered into the Utah and Salt Lake Canal in 2019.**

IV. ADDITIONAL AGENCY ACTION

1. The Respondent is encouraged to diligently attend to the work required by this Notice. If the work is satisfactorily completed in a timely manner, the Division will conclude this agency action.
2. If the work is not satisfactorily completed in a timely manner, the Division may issue an Order forbidding the use of water until the Respondent has complied, or may commence an enforcement action as allowed under Utah Code Ann. § 73-5-4 (6).

3. If an Order forbidding the use of water is issued and is violated by the Respondent, the Division may commence an enforcement action in accordance with Utah Code Ann. § 73-2-25.
4. If determined to be in violation an Order, Respondent may be subject to administrative penalties in accordance with Utah Code Ann. § 73-2-26, including fines not to exceed \$5,000 per day for knowing violations or \$1,000 per day for unknowing violations and replacement of up to 200% of water diverted without right. In addition, Respondent may be liable for expenses incurred by the Division in investigating and stopping the violation.”

V. FURTHER INFORMATION

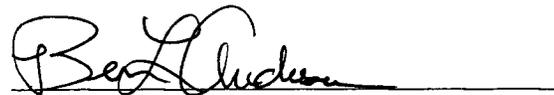
If Respondent has questions concerning this Notice, state laws and rules, or the required and recommended action, please discuss them with:

Ross Hansen
Regional Engineer, Utah Lake/Jordan River
Utah Division of Water Rights
1594 W North Temple Ste 220
Salt Lake City, UT 84114-6300
(801) 538-7240

or

Ben Anderson
Distribution Engineer
Utah Division of Water Rights
1594 W North Temple Ste 220
Salt Lake City, UT 84114-6300
(801) 538-7240

Dated this 21st day of March, 2019



Ben Anderson, P.E.
Distribution Engineer
Utah Division of Water Rights

cc: Ross Hansen, Regional Engineer
John Larsen, Water Commissioner
Ted Balling, Kennecott Utah Copper

CERTIFICATE OF MAILING

I, the undersigned, certify that on this 21st day of March 2019, I mailed a copy of the foregoing Notice by regular U.S. Mail, delivery confirmation receipt requested, to the following:

**Nelson Peterson, President
Utah and Salt Lake Canal Company
PO BOX 1181
West Jordan, UT 84084**

Kelly Horne

Kelly Horne
Division of Water Rights
Field Services Secretary

7002 0510 0002 2228 4294

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Street, Apt. No., or PO Box No. <i>Utah & S L Canal</i>	
City, State, ZIP+4	
PS Form 3800, January 2001	
See Reverse for Instructions	