Machine Learning as a Tool to Predict Lithium in Brines/An Example from the Smackover Formation of Southern Arkansas: Arkansas Water Resources Center Water Webinar - August 21st

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08/07/2025

The Arkansas Water Resources Center ("AWRC") announced the scheduling of an Arkansas Water Webinar titled:

Machine Learning as a Tool to Predict Lithium in Brines: An Example from the Smackover Formation of Southern Arkansas ("Webinar").

The Webinar will be held from 12:00 to 1:00 PM on Thursday, August 21st.

Presenting the Webinar will be Katherine Knierim, who is a Hydrologist with the US Geological Survey ("USGS"), Lower Mississippi – Gulf Water Science Center, Little Rock, Arkansas.

USGS and the Arkansas Department of Energy and Environment – Office of the State Geologist are stated to have used published and newly collected brine lithium ("Li") concentration data to train a random-forest machine-learning model using geologic, geochemical, and temperature explanatory variables. The Webinar announcement notes that:

…The chemical composition of high salinity groundwater, or brine, is important to understand for quantifying the availability of both water and critical mineral resources.

The study is stated to have predicted brine Li concentrations from the random forest model at approximately 1,000 to 3,000 meters depth across the Smackover Formation ranged from 3 to 420 mg/L.

It is stated to provide an example of using machine learning to predict deep brine chemistry for a critical mineral resource evaluation.

A copy of the Webinar announcement containing registration information can be found here.