

# TECHNICAL NOTES

---

U.S. DEPARTMENT OF AGRICULTURE    STATE OF COLORADO    NATURAL RESOURCES CONSERVATION SERVICE

---

**Water Quality Technical Note No. 8**

**January, 2012**

To: All Colorado Area, Field and SCD Offices

From: Jason W. Peel  
Irrigation Water Management Specialist

## **Calculation of Sodium Adsorption Ratio**

This Technical Note provides a link to information about the correct methodology for calculation of the Sodium Adsorption Ratio (SAR) from laboratory data for both soil and water samples. Correct calculation of the SAR is crucial to ensure that soil amendments are applied only when needed and in the correct amounts to control sodium issues within a given field. In the arid west, gypsum (calcium sulfate) is often present in the soil in sufficient quantities to make additional amendment of the soil unnecessary. Additional information can be found at: <http://www.coopext.colostate.edu/TRA/PLANTS/sar.html>. This site includes information on conversion of units into milliequivalents, and a web-based calculator application to assist with SAR calculation.

If you have any questions, or need additional information, contact Jason Peel, Irrigation Water Management Specialist, at (720) 544-2817 or [jason.peel@co.usda.gov](mailto:jason.peel@co.usda.gov).