

Republican NRDs Exploring New Tools for Better Understanding of Water Use

Did you know that only 5-10% of Nebraska's water use can be traced to irrigation?

The Upper, Middle and Lower Republican Natural Resources Districts recently began a "Water Budget Study" in the Republican Basin; this study is funded in part by the Nebraska Natural Resources Commission's Interrelated Water Management Plan Program Fund.

By definition, a "Water Budget" is a quantification of the inputs, outputs, storage changes and flows of water through a specified watershed. As with all budgets, the water budget should be balanced in an effort to most efficiently and sustainably use our natural resources. The study aims at achieving a better understanding of water balance within the Republican Basin by identifying consumptive use sources (rangeland, dryland acres, cropland acres), collecting historical and existing data to calculate the water budget, and relating that data to economic and environmental factors within the basin.

Water budgeting takes a new perspective in looking at water use; however, it is important to make sure that the inputs are as accurate as possible to ensure an accurate outcome – a relatively small error in input may compound itself into misleading outcome. The Republican Basin study will evaluate water budgets on both an NRD-wide and basin-wide scale. This approach will provide even more local information to further assist in future development and revision of existing individualized management plans for each NRD, as well as look at a big-picture approach in the basin.

Among stated objective in this study is fostering a working relationship across state lines regarding land management practices. A similar study is being considered in Colorado's portion of the Republican Basin.