Roaring Fork Salinization Reasoning:

Specific conductance and total dissolved solids have been the focus of several studies in the watershed because they are a robust measure of the dissolved solids content. In a literature review to evaluate the effect of deicers in Colorado, USGS and Roaring Fork Conservancy data were analyzed to look at trends in chloride, specific conductance, and streamflow. A non-linear relationship was observed between chloride and specific conductance, while a linear relationship was found between streamflow and both chloride and specific conductance (Fischel, 2001). Specific conductance, salinity, temperature and pH were monitored at 112 study sites during October 1997 to establish a relationship between the geology of the Carbondale area with increases in salinity observed in streams during base flow conditions (Kirkham et al., 1999). This study was based, in part, on a groundwater contribution study of the Upper Colorado River Basin Roaring Fork Watershed Plan Phase I State of the Roaring Fork Watershed Report Sponsor: Ruedi Water & Power Authority Lead Consultant: Roaring Fork Conservancy Chapter 3, Section 2, Page 5 that used dissolved-solids concentrations and streamflow to determine the salt load that the Roaring Fork is contributing to the Colorado River (Warner et al., 1985).

Salinization is a huge issue in the Upper Colorado River Basin.

A literature review of studies done in the Roaring Fork River revealed that the last study to examine the salinity of the watershed regarding salinity of the watershed was in

The damage due to salinity in the Colo- rado River Basin alone, for example, has been estimated to be between $500 and $750 million per year and could exceed $1 billion per year if the salinity in the Imperial Dam increased from 700 to 900 mg l1 (US Department of the Interior, 2003).

Questions?

Does salinization increase farther down the watershed?

Has salinization increased over the course of time?