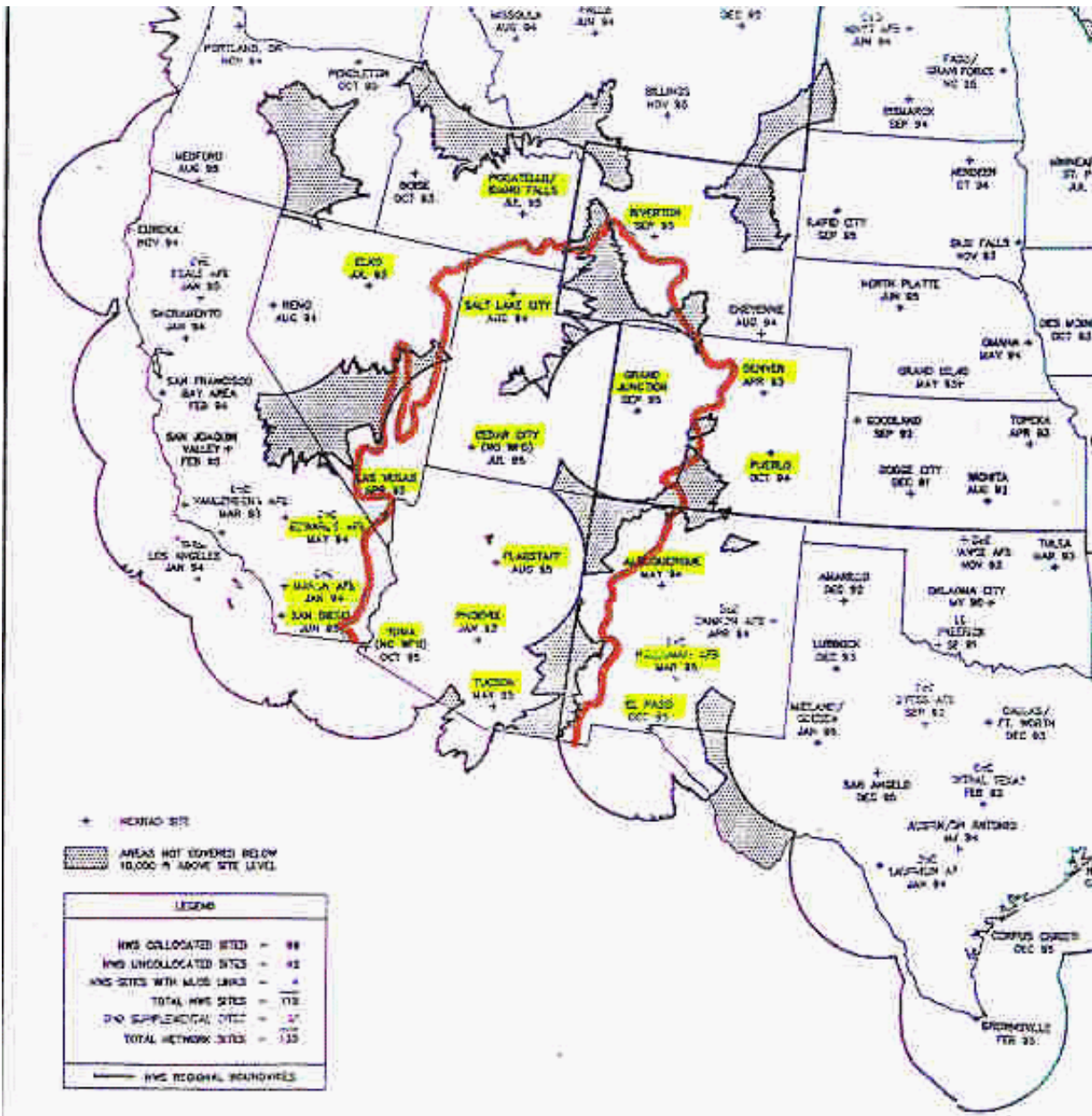


WSR-88D coverage of the Colorado River Basin

by Steve Vasiloff



The Colorado River Basin (CRB) is outlined in orange in Fig. 1. Also shown is the 10,000 ft coverage above WSR-88D sites. Both NWS and DoD sites are included. As many as 18 radars provide partial coverage of the CRB. Yet there are still significant gaps seen on the map. True radar coverage is even less for certain types of weather, i.e., winter-time low-level stratiform precipitation.

Many of the radars highlighted are on the periphery of the CRB. Most of the coverage is provided by 8 radars: Salt Lake City, Grand Junction, Cedar City, Flagstaff, Las Vegas, Phoenix, Tucson and Yuma.

The purpose of such a map is to understand which radars are needed to provide quantitative precipitation (QPE) estimates for hydrological forecasting. One goal is to combine data from all radars involved and input the QPE into various hydrological run-off models in order to forecast river stages. Another goal is

to provide information for total water management as water supply is a critical issue in the arid Southwest.

For an example of an application to stream level forecasting, check out the [Arizona current streamflow map](#) provided by the USGS.