

## **Executive Summary of Critical Issues**

### **Topic – Colorado River Water Quality**

#### Last Updated

August 1, 2007

#### CAP Position

The water quality in the Lower Colorado River is quite good. The river and lakes are used for full body contact recreation, fishing, and riparian habitat. The water is used to irrigate over 1.0 million acres of cropland and is treated for use as municipal and domestic water supply for over 25 million people.

#### Summary of Issue:

From time to time, there are news reports about the quality of Colorado River water. Issues raised relate to perchlorate, nitrates, and a uranium mine tailings pile near Moab, UT. Management of salinity in the river is an ongoing program. All of these issues are well known and are being addressed. None are a significant problem.

- Perchlorate enters the Colorado River from a former defense industry site along the Las Vegas Wash that flows into Lake Mead near Henderson, NV. Site cleanup has been underway for several years and is effectively reducing the perchlorate levels in the Colorado River. Current levels are less than 2 parts per billion (ppb) below Hoover Dam. Although there is currently no Federal Maximum Contaminant Level set by the EPA, it recently adopted a preliminary drinking water quality standard for perchlorate at 24.5 ppb. The State of Arizona has a Health Based Guidance Level for perchlorate of 14.5 ppb. Perchlorate levels detected in CAP water are at 2 ppb or less.
- Nitrates exist at certain locations in the Lower Colorado River from agricultural return flows and from localized concentrations of septic tank/leach field infiltration into the river. There are no significant Ag return flows upstream of the CAP diversion and local nitrate issues are being addressed by installing sewer systems and other official programs arising from local health concerns. As a result, the nitrate concentration in CAP water is well below the EPA maximum contaminant level.
- Hexavalent chromium (also known as chromium 6) a known carcinogen when inhaled, has been found in groundwater about 60 feet from the Colorado River south of Needles, CA. This location is approximately 45 miles up stream of CAP's Mark Wilmer Pumping Plant. The State of California is requiring Pacific Gas and Electric Company to undertake a clean up of the contamination that is coming from a compressor station. Arizona's Department of Environmental Quality (ADEQ) is also monitoring groundwater in the vicinity as a precaution. Approximately 292 acre-feet of groundwater has been removed and treated to date (July 2006).

- The Moab tailings pile is being addressed. Federal officials have decided to move the pile to a location some 30 miles away from the river. In the interim, it is located outside the normal flood plain and is not contributing to any water quality problems in Lake Powell, Lake Mead, or the Lower Colorado River. Fewer than 4 acre-feet of “pore water” has been removed from the piles, and treated (evaporated), to facilitate moving the piles. Approval of plans and funding will determine when the piles will actually be removed, 2007 at the earliest.
- The salinity level (total dissolved solids) is less than 700 ppm of TDS at the CAP diversion. The Basin states and the U.S. have an ongoing Salinity Control Program in which CAP is actively involved. There are no significant issues. The salinity levels are lower today than 30 years ago.