H2O4U

ONLINE EDUCATIONAL ACTIVITY

Activity 4 - Cap Tour True and False (6th -12th grades)

Arizona's early business and government leaders dreamt of creating desert oases that would attract both people and prosperity to the state. In order to accomplish their ambitious goals, they understood that abundant and reliable supplies of fresh water would be needed. They set to work developing a plan to build an impressive aqueduct that would stretch some 336 miles. It would be designed to deliver reliable and plentiful supplies of Colorado River water to industry, agriculture and the residents of the most populous central and southern portions of Arizona. Though it required half a century, intense legal wrangling and nearly four billion dollars in construction costs, our forefathers' vision has become reality and continues to benefit millions of Arizonans every day.

Today, Central Arizona Project delivers more than 1.5 million acre-feet of Colorado River water to 57 large wholesale water providers. An acre-foot of water equals about 326,000 gallons, roughly enough water to serve a family of five for one year. About 35% of deliveries are to municipal and industrial users, 25% of the water goes to agriculture, 10% to Indian communities and 30% is banked underground for the future. At any given moment, nearly 8 billion gallons of water are managed by CAP.

In 1996 Central Arizona Project began recharging water in an effort to increase the reliability of long-term water supplies. The recharging process involves systematically flooding a site and allowing water to percolate down through the soil, replenishing underground aquifers. This "recharged" water may then be pumped out and used at a later date. There are a number of issues involved in identifying an appropriate underground storage site and CAP evaluates each site thoroughly before making a selection. CAP tests and confirms that the soil is not contaminated and that it has adequate permeability. In addition, the site's proximity to the canal and the storage capacity of the local aquifer are also considered. CAP operates more than half a dozen underground storage projects which can store more than 300,000 acre feet of surplus water underground per year. These sites are an important component of operations and will provide Arizonans with a water supply they can rely on for years to come.

Circle true or false for each statement.

TRUE **FALSE** The Central Arizona Project aqueduct was designed to deliver water from the Mississippi River to the central and southern portions of Arizona.

TRUE **FALSE** The aqueduct is still being used to deliver water to millions of Arizonans.

TRUE **FALSE** The aqueduct is 336 miles long.

TRUE **FALSE** The aqueduct cost nearly four billion dollars in construction costs.

TRUE **FALSE** CAP delivers Colorado River water to 57 large wholesale water providers.

TRUE **FALSE** CAP manages 13 billion gallons of water at any given moment.

TRUE **FALSE** Approximately 25% of the water goes to agriculture.

TRUE **FALSE** An acre-foot of water equals about 326,000 gallons of water.

TRUE **FALSE** "Recharged" water is stored underground and can be used at a later date.

TRUE **FALSE** CAP can use any area as an underground store site, testing is not necessary.

TRUE **FALSE** CAP has more than thirty underground storage projects.

TRUE **FALSE** Recharging water is important because it will provide Arizonans with water for years to come.