

CAP'S VALUABLE INFRASTRUCTURE

The \$4 billion Central Arizona Project (CAP) system is an engineering marvel stretching 336 miles, lifting water more than 2,900 feet in elevation over the course of the system. This requires 14 pumping plants, one hydroelectric pump/generating plant, the Lake Pleasant storage reservoir and 39 radial gate structures to control the flow of water. CAP's delivery of Colorado River water has generated more than \$2 trillion of Arizona's gross state product since the first water deliveries in 1985.



For six weeks this fall, CAP will be performing large-scale preventive maintenance on a portion of this infrastructure, the Salt River Siphon, located at about the half way point in the CAP system.



WHAT WORK WILL BE DONE TO THE SIPHON?

Beginning October 30, CAP will partially empty the Salt River Siphon of water and a portion of the canal will be dry in order to partially recoat the inside of the siphon. A strong coating protects against corrosion and erosion, which helps ensure reliability of water deliveries for CAP's customers. Coating repairs were last done in 2001.



HOW DOES THIS WORK IMPACT WATER DELIVERIES?

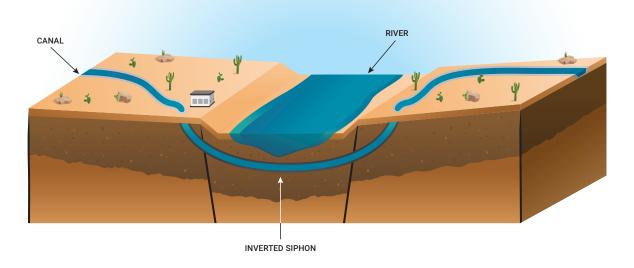
CAP has been working with customers for the past several years to prepare for this planned maintenance to ensure they receive the water they need during the outage. The project lasts about six weeks and water will flow back into that portion of the canal beginning December 11.





WHAT IS THE SALT RIVER SIPHON?

The Salt River Siphon is a part of the CAP infrastructure system that runs under the Salt River before the canal carries water into Pinal and Pima counties. CAP has 10 siphons that carry Colorado River water under natural drainage ways that include the Agua Fria, New River, Salt, Gila, and Santa Cruz Rivers. The siphons allow for natural floodwaters to travel unimpeded and protects the CAP system from damage that may have occurred if constructed at ground level.



HOW DOES A SIPHON WORK?

Gravity and slope propel the water under the Salt River and momentum carries it back to the surface, before flowing to the Salt Gila Pumping Plant. From the lowest point of the siphon to the outlet, there is a 240' lift in elevation.

LOCATION



Through coordinated operation, the CAP-SRP interconnect facility allows CAP water users to receive their CAP water via the SRP delivery system.

BY THE NUMBERS



Original siphon placed in 1977, replaced in 1995



21-foot internal diameter steel pipe



8,700 feet long, which is ~1.6 miles, the length of the Brooklyn Bridge



Steel thickness of .645-1.225 inches, depending on the elevation



Approximately 75% of all CAP water deliveries travel through this siphon



Top of the siphon is 30 feet below the riverbed to ensure it is protected from any surface level flooding.



