Be an Arizona Water Manager!

Throughout history, people living in the desert have understood the importance of water. We've invented ways to store water for use in dry times and to move water from places that have it to places that need it.

Today, Arizona water managers play an important role in our water supply. They measure snowpack in the mountains and rainfall each year to predict the amount of water available. They monitor the amount of water held in reservoirs and aquifers and try to balance the needs of all water users. They even look at how climate change could affect our water supply. With a limited water supply and a growing population, Arizona water managers encourage everyone to conserve water.

Where Does Your Water Come From?

The Central Arizona Project brings water from the Colorado River to farms, American Indian communities, Casa Grande, Phoenix and Tucson.

The Salt River Project manages dams and reservoirs that supply the Phoenix metropolitan area. Many places—like Payson, Flagstaff and Williams—pump groundwater from aquifers.

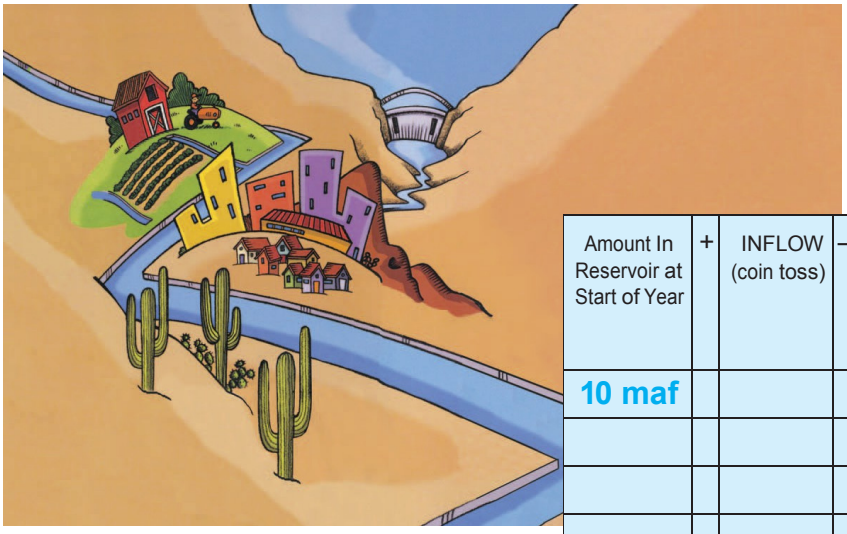
Play the Water Manager Challenge!

Each year, water managers figure out how much water can be stored in reservoirs and how much to release downstream. Their decisions depend on how much rain and snow falls that year to fill the reservoirs.

1. Each player starts with a full reservoir—10 million acre-feet (maf) of water.

2. During each round of the game, you'll flip four coins to find out how much water will enter your reservoir that year (inflow):
   - 0 heads = 0 maf of inflow (drought)
   - 1 head = 2 maf of inflow (below-average precipitation)
   - 2 heads = 5 maf of inflow (average precipitation)
   - 3 heads = 7 maf of inflow (above-average precipitation)
   - 4 heads = 9 maf of inflow (flooding)

3. Based on your toss (inflow), decide how much water you will release from your reservoir that year (any amount between 3–7 maf). Your goal is to keep between 2 maf and 10 maf in your reservoir at all times. Downstream users require at least 3 maf per year to meet their basic needs.



4. Play for at least 8 rounds (8 years). Each round, record the amount of inflow, the amount of water you choose to release, and the amount remaining in your reservoir for the next year. Start each year with the amount left from the year before.

5. If you manage to keep your reservoir from flooding or drying up for 8 years, you deserve thanks from wildlife, families, farmers, towns and many other water users!

Amount In Reservoir at Start of Year	+	INFLOW (coin toss)	–	Amount Released (your choice between 3 and and 7 maf)	=	Amount Left in Reservoir at End of Year (goal: between 2 and 10 maf)
10 maf						

Central Arizona Project is a 336 mile long system of aqueducts, pumping plants, and pipelines which carries Colorado River water into central and southern Arizona.

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