

Water Manager Game - Student Instructions

Your team will work as water managers to determine how much water can be stored in a reservoir and how much can be released downstream to water users. Your decisions will depend on how much rain and snow fell that year to fill the reservoir.

Your goal is to keep between 2 million acre-feet and 10 million acre-feet in the reservoir at all times. **Million acre-feet** can be shown as **maf.**

- 1. Each team starts with 10 million acre-feet (maf) of water in the reservoir.
- 2. During each round, toss 4 pennies to find out how much water will enter the reservoir that year. This is the inflow. Use this chart to help you:

0 heads	0 maf of inflow
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 inflow, decide how much water you will release from your resevoir that year. You must release between 3maf and 7maf each year. Downstream users need at least 3maf per year to meet their basic needs. Remember that your goal is to keep between 2maf and 10maf in your reservoir all the time.
- 4. Play for at least 8 rounds or years. Each round, record the amount of water you choose to release, and the amount remaining in your reservoir for the next year. Start each round with the amount left from the year before.
- 5. When your game is over, use the data in the Amount Left in Reservoir at the End of Year column to create a BOTG showing the changes in the level of the water from one year to the next.