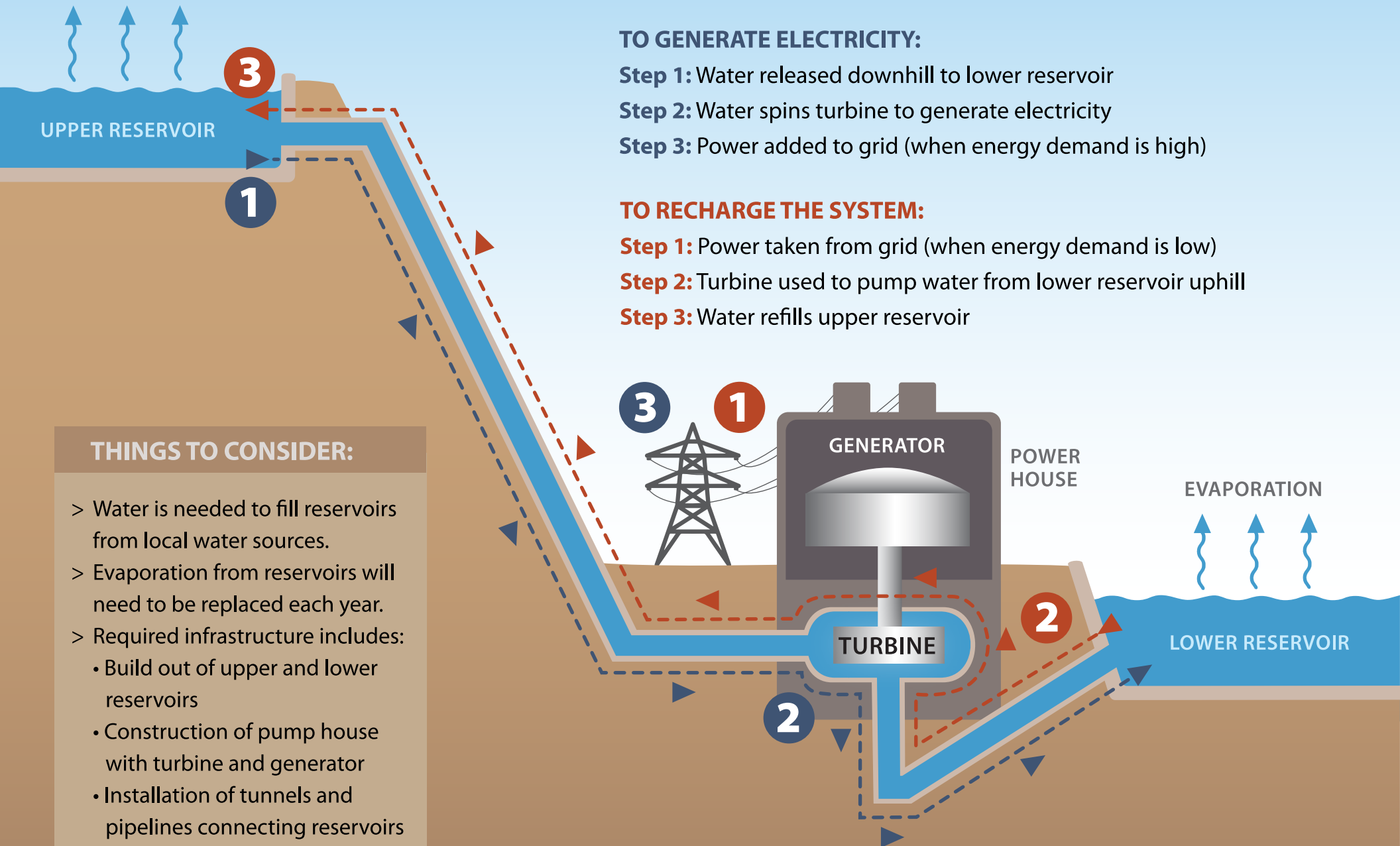


# How Does Pumped Storage Hydropower Work?



## TO GENERATE ELECTRICITY:

- Step 1:** Water released downhill to lower reservoir
- Step 2:** Water spins turbine to generate electricity
- Step 3:** Power added to grid (when energy demand is high)

## TO RECHARGE THE SYSTEM:

- Step 1:** Power taken from grid (when energy demand is low)
- Step 2:** Turbine used to pump water from lower reservoir uphill
- Step 3:** Water refills upper reservoir

## THINGS TO CONSIDER:

- > Water is needed to fill reservoirs from local water sources.
- > Evaporation from reservoirs will need to be replaced each year.
- > Required infrastructure includes:
  - Build out of upper and lower reservoirs
  - Construction of pump house with turbine and generator
  - Installation of tunnels and pipelines connecting reservoirs
  - Access to connect to power substations