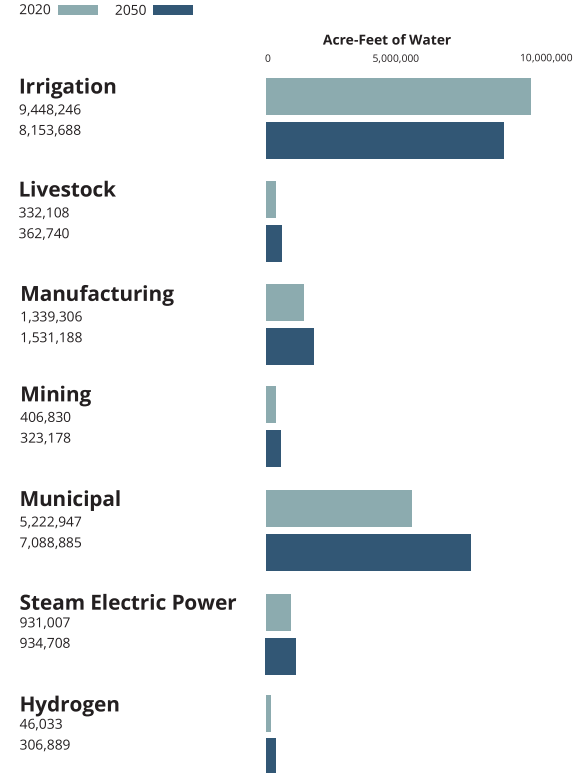


Hydrogen is the most abundant element in the universe. Unlike an energy source that exists in its natural state, hydrogen needs to be produced. Hydrogen can be produced from a variety of sources and processes, such as reforming natural gas or splitting water molecules by using electricity from renewable sources like wind and solar.

- Water consumption in hydrogen production is minimal.
- Hydrogen production can utilize a variety of water sources; however, the technology uses highly purified water, which makes some water sources cost prohibitive to meet the necessary quality.

## Water Usage by Industry



1 acre foot is equal to 325,851 gallons of water

Source: Texas Water Development Board

## Water Facts

### Did you Know?

- Dependent on the design & process, the typical range for water consumed at a 200 MW electrolyzer hydrogen facility is between 500 ac-ft to 1200 ac-ft per year.
- Water sourced for hydrogen production has come from a variety of sources. This includes municipal, surface water, tertiary treated recycled water, and groundwater.
- For many planned hydrogen production developments across the state, approximately 20-35% of the water use can be reused for operations or other applications such as off-site agriculture, municipal landscaping, and more. The U.S. uses approximately 400 billion gallons of water per day.
- The average American uses approximately 30,000 gallons of H<sub>2</sub>O per year.

The Texas Hydrogen Alliance is the only Texas based trade alliance focused on growing the Texas Hydrogen industry. The Texas Hydrogen Alliance crafts strategic relationships with policy decision makers and regulators. Utilizing our members' expertise, network, and assets, the Texas Hydrogen Alliance is leading Texas's energy expansion by bridging today's energy with tomorrow's.



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