



# WATER USE BY ETHANOL COMPARED TO OTHER INDUSTRIES

A 100 million gallon ethanol plant uses about 1 million gallons of water per day. This is:

- Less than 5% of the daily water required by a municipality of 180,000 (NCGA).
- Equivalent to the daily water required for more than two standard-size golf courses (St. Petersburg Times).

Producing one gallon of ethanol only takes 4 gallons of water. In comparison (*from USGS/USEPA*):

- It takes 1,851 gallons of water to refine a 42 gallon barrel of crude oil.
- It takes 1,500 gallons of water to process one barrel of beer.
- It takes 9.3 gallons of water to process one can of fruit or vegetables.
- It takes 62,600 gallons to produce a ton of steel.
- It takes 39,090 gallons to manufacture a new car, including tires.
- It takes 28,100 gallons to process a ton of beet sugar into processed sugar.
- It takes 1,500 gallons to process a barrel of beer.
- It takes 24 gallons of water to produce one pound of plastic.
- It takes 101 gallons of water to produce one pound of cotton.
- It takes 300 million gallons to produce a single day's supply of U.S. newsprint.
- It takes 150 gallons to produce the average size Sunday newspaper.
- It takes 2 gallons of water every time you brush your teeth.

Estimates on water requirements for oil production vary widely.

- USGS estimates 1,851 gallons of water are required to extract, transport and refine a barrel of oil (lifecycle).
  - NREL estimates 65 to 90 gallons of water required per barrel of oil.
  - ICM estimates that the water requirement for a gallon of gasoline is about 8 gallons of water, which is double the requirement of ethanol (4 gallons).
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