

Water Transfer within the United States

- States export about 196 billion m³ every year, while importing roughly 191 billion m³. These factors skew demand and water supply
- In general, agricultural North-Central states export virtual water to East and Gulf Coast states.
 - There is less, but still significant transfer from Southwestern states to the West coast, namely California, Arizona, and Nevada
- North Carolina has the 4th largest water footprint, behind California, Florida, and New York
- The Southwestern states are net exporters, despite the relatively drier climate. The East coast states are net water importers, despite a more humid climate, due to a larger, more dense population
- **These results indicate that water transfer does not follow simply flow from humid to arid regions. Instead, water transfer is largely economic, following patterns of comparative advantage. Using specialization, water abundant regions can produce water-intensive goods.**
 - Using economic principles such as comparative advantage and specialization, water-intensive activities can be moved to places with surplus water and transported to places with a water deficit.
 - Producing in cooler, humid climates, where evapotranspiration rates are low, can conserve water. In addition, production can be moved to places that will consume less water.
- Hoekstra and Chapagain found that water consumption was reduced 350 billion m³ due to international trade of wheat, corn, and soybean trade.

Source: Mubako ST and Lant CL. 2013. Agricultural virtual water trade and water footprint of U.S. states. *Ann Assoc Am Geogr* 103(2):385-396.