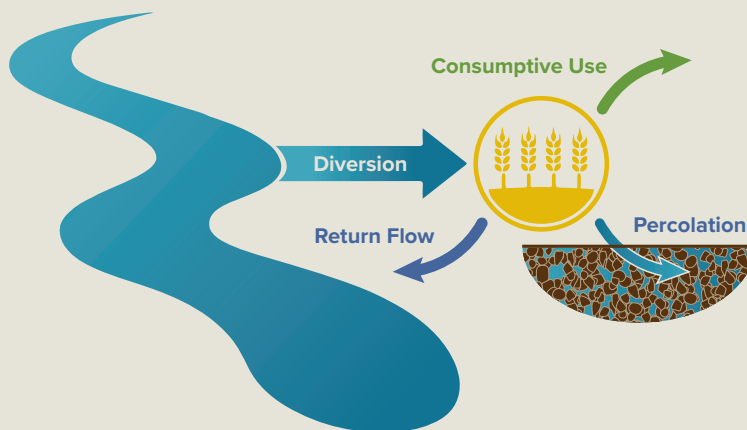


Agricultural water **conservation** means diverting less water from streams or aquifers. Alternatively, water **efficiency** is defined as the amount of water consumed in comparison to the total amount diverted.

- Diversion – When a farmer diverts water from a stream to a field.
- Consumptive Use – Fraction of diverted water used to grow the crop.
- Return flow and percolation – Water not consumed can return to the stream or aquifer.



When efficiency is improved, a higher percentage of water is consumed and less returns.

Takeaway: Improved efficiency reduces the amount of water used to maintain crop yield; but the saved water may be used to grow more. Return flows and percolation may actually decrease. Only if less water is diverted overall is water conserved.

Agricultural Water Efficiency in the United States

Water efficiency of irrigated agriculture in the United States has been improving for decades, yet water use has not decreased.

- Water used per acre has gone down by almost 30%,
- **BUT** acres irrigated have increased by 48%

Efficiency doesn't always lead to water conservation, but with improved farming practices the United States can produce more food with about the same amount of water.

