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 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.

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**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.