

Resource Concerns

Inefficient Use of Irrigation Water

Soil

Water

Excess Water

Insufficient Water

Inefficient Moisture Management

Inefficient Use of Irrigation Water

Water Quality Degradation

Air

Plants

Animals

Energy

Insufficient Water - Inefficient Use of Irrigation Water

Irrigation water is not stored, delivered, scheduled and/or applied efficiently. Aquifer or surface water withdrawals threaten sustained availability of ground or surface water. Available irrigation water supplies have been reduced due to aquifer depletion, competition, regulation and/or drought.

What is it?

Inefficient use of irrigation water impacts on- and off-site water quantity and quality. Irrigation systems and water management practices can waste water and negatively affect farm profitability.

Why is it important?

Irrigated agriculture is essential in meeting the nation's food and fiber production needs. Agriculture is the nation's largest water user, accounting for more than 85% of the nation's annual water consumption. Emerging problems that further complicate resource protection and water allocation include: serious long-term drought conditions, critical ground water declines occurring in agricultural production areas, saltwater intrusion into ground water supplies, and competition for water among a multitude of water users, including power generation, drinking water supplies, minimum stream flows, etc.

What can be done about it?

Solutions are available to address many of the competing water resource needs. Choices generally include conservation of the water used, conversion to other crops that utilize less water, and conversion to other sources of water. Conserving water could include improvements in irrigation water use efficiencies, off stream storage of water during periods of excess runoff, water re-use and water recycling, and ground water recharge.

Inefficient Use of Irrigation Water at a Glance

Problems / Indicators - Irrigated crops, plant stress, insufficient water supply	
Causes	Solutions
<ul style="list-style-type: none"> • Open earthen ditches • Irrigation water allowed to run off of fields • Losses due to improper system design, installation, or maintenance 	<ul style="list-style-type: none"> • Line ditches or install pipe; improve water transport systems • Manage applications to reduce runoff; tailwater return systems • Audit system and retrofit or replace where warranted