

# Water-Saving Strategies and Activities



## Water-Saving Strategies and Activities

Water-saving strategies guide development of activities that an irrigation district (or similar entity) may carry out to enable use of less water in the production and marketing of agricultural commodities in face of water shortages and drought pressure.

Water-saving strategies can include:

1. Reducing losses during water storage or delivery,
2. Reducing losses during water distribution on the farm or ranch,
3. Reducing losses of water in the field during crop production.

### Strategy # 1: Reduce losses during water storage or delivery

#### How will this strategy help producers?

Carrying out district level water storage or delivery improvements will help producers respond to the impacts of reduced off-site water deliveries on agricultural commodity production.

#### What is the need for this strategy?

Reduced deliveries of off-site water can occur because of diminished water supply, increased water losses, or changes in agreements, laws, or regulations related to making limited water supply available to all users of water from the same source.

#### How can it be implemented?

The irrigation district leverages new resources made available by this program for activities which reduce water storage or conveyance losses and enable continued production of agricultural commodities under reduced deliveries of surface water.

Activities include:

- ◆ Lining or piping water delivery canal mains or laterals
- ◆ Improving water turnouts and headgates or other water delivery infrastructure
- ◆ Upgrading pumps or other equipment and associated water management facilities
- ◆ Covering canals to reduce losses from evaporation
- ◆ Installing district-level automation/telemetry/data acquisition systems
- ◆ Installing storm water harvesting catchment basins for replacing reductions in off-site deliveries of water or to recharge groundwater supplies
- ◆ Restoring riparian areas, wetlands, or other natural recharge areas to protect groundwater

### Strategy # 2: Reduce losses during water distribution on farms and ranches

#### How will this strategy help producers?

Carrying out farm or ranch level improvements to water distribution will help producers respond to impacts of reduced off-site water deliveries on agricultural commodity production.

#### What is the need for this strategy?

Reduced deliveries of off-site water can occur because of diminished water supply, increased water losses, or changes in agreements, laws, or regulations related to making limited water supply available to all users of water from the same source.

## For More Information

To learn more about Water-Saving Strategies and Activities for the WSC Program, go to: [fsa.usda.gov](https://fsa.usda.gov).

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### How can it be implemented?

The producer leverages new resources made available by this program for activities to continue production of agricultural commodities under reduced deliveries of surface water.

Examples include:

- ◆ Installing a new low pressure drip irrigation system on a sprinkler or to replace a flood irrigation system,
- ◆ Modernizing farm or ranch level irrigation reservoirs and conveyance infrastructure,
- ◆ Lining farm or ranch level ditches or replacing them with pipes,
- ◆ Constructing a new tailwater or other wastewater recovery system for reuse in irrigation,
- ◆ Installing water harvesting catchment basins to collect storm water for replacing reductions in off-site water deliveries or to recharge groundwater, or
- ◆ Restoring riparian areas, wetlands, or other natural recharge areas to protect groundwater.

## Strategy # 3: Reduce losses of water in the field during crop production

### How will this strategy help producers?

Carrying out soil, water, and nutrient management activities to reduce losses of water in the field during crop production will help producers sustain crop productivity, build resilience to drought impacts on irrigated crops, and create or expand agricultural commodity production and product markets based on water savings.

### What is the need for this strategy?

Inadequate soil moisture, inefficient irrigation, soil quality limitations, poor nutrient management, and other field level issues can prevent economical crop production and disruptions in commodity market supplies in face of water shortages and drought pressure.

### How can it be implemented?

The producer carries out management activities needed to create new or expand production of agricultural commodities and markets based on water savings.

Examples include:

1. Shifts to less water-demanding or drought tolerant crop, variety, or rotation,
2. Shifts management practices to improve water infiltration and other soil health properties or to lower evaporation or other water losses,
3. Adds living snow fences to spread drifted snow on cropland and benefit soil moisture,
4. Manages harvest heights and timing to protect soil moisture, or
5. Converts to dry-land crop or pasture systems.