



# Minimize the Effects of Drought on Your Irrigated Cropland



The most commonly prescribed practices for protecting irrigated cropland from drought:



### Irrigation System Improvement

Evaluating irrigation systems, improving management of existing systems, replacing poorly performing components or converting to pressurized irrigation systems will improve the uniformity of water application. It takes less water to irrigate when the irrigation is uniform.



### Vegetative Practices & Mulching

Growing certain crops, either interplanted or in sequence with production crops, can increase infiltration and retention of valuable rainfall and reduce evaporation loss from the soil surface. Mulching by covering the soil surface with wood chips, straw, or other plant materials can also reduce water loss to evaporation.



### Irrigation Scheduling

Irrigating at the optimum time and applying the amount the soil can hold minimizes undesirable water loss below the root zone of the crop. Good scheduling or “Irrigation Water Management” will help stretch limited water supplies.



### Residue & Tillage Management

Modifying tillage to retain residues from a previous crop left on the soil surface can help reduce water loss to evaporation.

# USDA-NRCS Drought Assistance

## **Drought Resilience**

*Conservation Assistance to California Farmers, Ranchers, and Forest Landowners*

### **Introduction**

California has seen many droughts. Our goal is to support resilience of agriculture through addressing priority resource concerns with conservation practices. We are working towards science-based, region-specific information and technologies so agricultural and natural resource managers may enable climate-smart decision making and provide assistance to farmers, ranchers, and forest landowners to adapt to climate change and weather variability.

### **Financial & Technical Assistance**

Funding is being made available through USDA's Natural Resources Conservation Service (NRCS) to help drought-impacted farmers and ranchers. NRCS can help with conservation practices that have proven helpful in past droughts.

NRCS professionals can help farmers, ranchers, and forest landowners understand what options exist for their particular water situation, soil type, and ag production goals. Together, we can develop a plan to get through the drought. Funding is available to help farmers and ranchers pay for many of these practices through the Environmental Quality Incentives Program (EQIP). Reimbursement rates typically cover about half the cost of the practice. Additionally, funds may be available for erosion control through the Emergency Watershed Protection (EWP) Program.

### **Three Priorities**

1. Building resiliency through soil health;
2. Protecting drought-impacted crop, range, and forestland;
3. Stretching every drop of irrigation water using improved hardware and management.

### **Save the Soil**

Farmers without access to adequate water to produce a crop may find themselves thrust from a water crisis to a dust crisis. Options for protecting fields vulnerable to wind erosion include cover crops, surface roughening, residue management, converting to crops that use less water, mulching, or other practices.

Some of this critical erosion protection work may also be done through EWP. Working with a local sponsor will facilitate many of the same soil protection practices accomplished through EQIP, but using the accelerated procedures available through EWP's disaster provisions.

### **Conserving land**

Working on cropland, range, or forestland without rain is challenging. For some, managing crops, livestock, or forests, means taking advantage of available grass and protecting areas from overuse. It may be easier with tools such as efficient watering systems, piping, troughs, and fencing. NRCS and the landowner can develop management plans to document the decisions needed to make the best use of resources remaining on the land.

### **Stretching Every Drop**

Farmers who have access to water and want to make every drop count, should develop irrigation water management plans with their NRCS conservationists or other consultants. Assistance to improve irrigation systems is available to help farmers working to produce a crop with a smaller allocation of water.

### **Finding a Conservationist**

NRCS has offices in 55 of California's counties. All are taking drought applications. Locate your office at <http://offices.sc.egov.usda.gov/locator/app?state=CA>.

Updated: May 2021