



United States Department of Agriculture

Drought 2014
Conservation Assistance to California Farmers & Ranchers

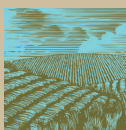
Natural Resources
Conservation Service



Minimize the Effects of Drought on Your Fallowed Land



The most commonly prescribed practices for protecting vulnerable farmland fallowed by the drought:



Tillage & Residue Management

Leaving residues from a previous crop on the soil surface can help reduce wind erosion.



Cover Crops

Planting or maintaining vegetation, living or dead, will slow wind velocity near the soil surface. Low-water using plants like barley are typically used during droughts.



Surface Roughening & Cross Wind Ridges

By disking heavier soils into a rough, cloddy surface the soil can be protected from wind erosion.



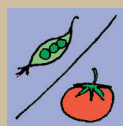
Herbaceous Wind Barriers & Cross Wind Trap Strips

Using rows of plants spaced appropriately throughout a field can intercept and slow surface wind speed.



Mulching

Covering bare soil with wood chips, straw or other plants material can help to hold the soil in place when erosive winds blow.



Conservation Crop Rotation

Switching to crops that require less water can allow a field to remain productive and provide erosion protection.

USDA-NRCS Drought Assistance

Drought 2014

Conservation Assistance to California Farmers & Ranchers

Introduction

California has seen many droughts come and go, but 2014 is creating especially dire conditions for the State's farmers and ranchers. Historic low precipitation in 2013, preceded by below normal precipitation in 2012, left most state reservoirs at between 6% storage in the Southern Sierra to 36% storage in Shasta. On Jan. 17, 2014, Governor Edmund Brown Jr. declared a drought emergency. On Jan. 31, the State Water Project cut water deliveries to all 29 public water agencies to zero for 2014.

Financial & Technical Assistance

\$30 million 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, such as 2009.

NRCS conservationists can help farmers and ranchers understand what options exist for their particular water situation, soil type and production goals and develop a plan to get through the drought. There is \$25 million 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 \$5 million will be made available for erosion control through the Emergency Watershed Protection (EWP) Program.

Three Priorities

1. Protecting soils made vulnerable due to water cut backs.
2. Protecting drought-impacted rangeland.
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 will also be done through the Emergency Watershed Protection (EWP) program. Working with a local sponsor, the EWP program will facilitate many of the same soil protection practices accomplished through EQIP, but using the accelerated procedures available through EWP's disaster provisions.

Conserving Rangeland

Ranching without rain is really tough. For some ranchers managing the livestock to take advantage of available grass while protecting areas from overuse, may be made easier with tools such as livestock watering systems, piping, troughs, and fencing. NRCS and the rancher develop grazing management plans to document the decisions needed to make the best use of what forage remains on the ranch.

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. These projects will be medium or low priority after approving projects needed to protect bare soil.

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: Feb. 19, 2014