

A pair of hands is shown from the wrists down, palms facing up, holding a small, vibrant green seedling with three leaves. The hands are positioned over a background of parched, cracked earth, symbolizing drought and the need for assistance. The text 'Drought Assistance' is overlaid in a golden, 3D-style font within a thin orange rectangular border.

# Drought Assistance

USDA's Natural Resources  
Conservation Service

*California*

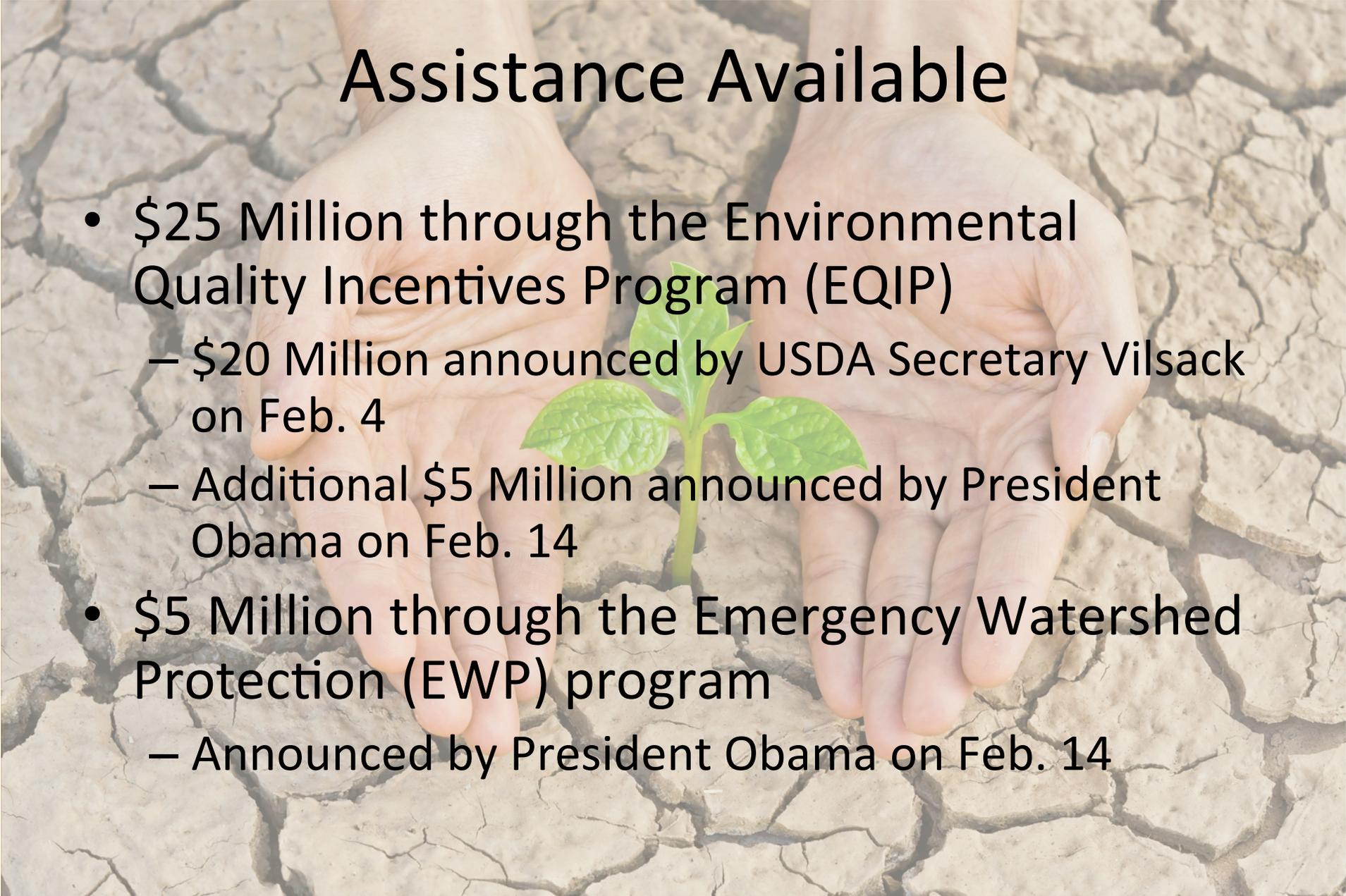


*Photo: Business Insider*



*Photo: Bloomberg News*

The Dust Bowl gave rise to Soil Conservation Service, now Natural Resources Conservation Service (NRCS)

A pair of hands is shown from a top-down perspective, gently holding a small, vibrant green seedling with three leaves. The seedling is growing out of a crack in the ground. The surrounding soil is parched and cracked into a network of irregular polygons, symbolizing drought and the need for environmental assistance.

# Assistance Available

- \$25 Million through the Environmental Quality Incentives Program (EQIP)
  - \$20 Million announced by USDA Secretary Vilsack on Feb. 4
  - Additional \$5 Million announced by President Obama on Feb. 14
- \$5 Million through the Emergency Watershed Protection (EWP) program
  - Announced by President Obama on Feb. 14

# Top Priority: Protect Vulnerable Soil



Bakersfield Dust Storm 1977

Photo: Casey Christie, Kern Valley Sun



Cross fencing



Control Access to ranch  
riparian areas



Ranch pond (this one  
hosts red legged frogs)

Water trough  
with gravel apron

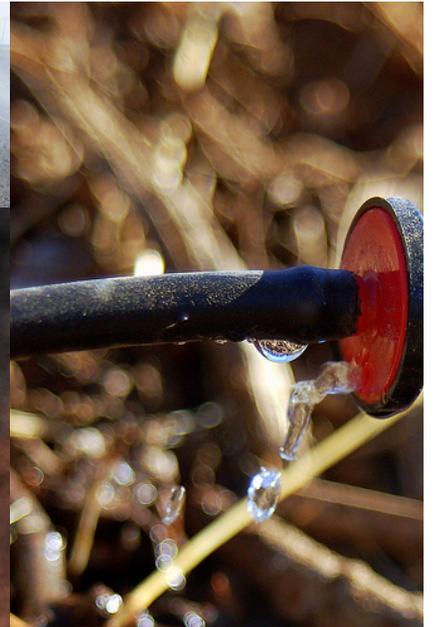


Solar water  
pumps



# Protecting Rangeland





**Stretching Water on Cropland**



United States Department of Agriculture

Drought 2014  
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Natural Resources  
Conservation Service

### Minimize the Effects of Drought on Your Rangeland

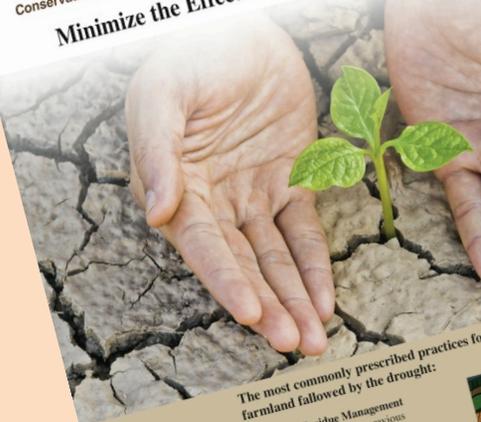


United States Department of Agriculture

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### Minimize the Effects of Drought on Your Followed Land



The most commonly prescribed practices for farmland followed 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.

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Protecting rangeland during a drought means livestock with the capacity of natural resources fragile by lack of water. Following are some recommended by NRCS:



**Access Control**  
Limiting livestock access to sensitive areas helps protect rangeland soils, streams and other natural resources.



**Livestock Water Systems**  
Providing water across the ranch using existing or new sources (livestock wells/springs) makes it possible to distribute livestock according to the capacity of the soils and plants.

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Switching water can allow a more productive and provide erosion protection.



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### 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.



**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.



**Vegetative Practices & Mulching**  
Growing certain crops, either interplanted in 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.



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

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# Outreach