

### How does the program work?

Applications for AWEP are ranked according to resource conservation benefit. Producers whose applications are selected enter into individual contracts with the NRCS. Services provided include conservation planning and technical design, as well as financial assistance for project implementation.

### How do AWEP payments work?

Total project implementation costs are shared with the landowner, with the amount of the AWEP payment depending on the specific practice.

### Am I eligible?

Agricultural producers and landowners with irrigated cropland in the watersheds listed on the front panel are potentially eligible for the Central Coast AWEP initiative. Contact your local NRCS or FSA office for more information on maximum payment and income limitations.



## For more information or to apply for AWEP, contact:

NRCS

65 S. Main St. Ste., 106  
Templeton, CA 93465  
805.434.0396 ext. 3

Upper Salinas-Las Tablas RCD

65 S. Main St. Ste., 107  
Templeton, CA 93465  
805.434.0396 ext. 5

Coastal San Luis RCD

805.772.5623

### Central Coast Irrigation and Nutrient Management Program

## Assistance for Agricultural Landowners and Operators

Supported by the USDA Agricultural Water Enhancement Program (AWEP)

New financial assistance for voluntary, confidential implementation of practices to improve irrigation and nutrient management on your farm.

Available for growers in the Pajaro River, Salinas River, Santa Maria River, and Coastal San Luis watersheds!



### Central Coast AWEP Project Partners:



Central Coast  
Resource Conservation &  
Development Council



RESOURCE  
CONSERVATION DISTRICT

#### Resource Conservation District Partners:

Cachuma RCD  
Coastal San Luis RCD  
RCD of Monterey County  
RCD of Santa Cruz County  
Upper Salinas-Las Tablas RCD



NATIONAL MARINE  
SANCTUARIES  
MONTEREY BAY



**AWQA**  
Agriculture Water Quality Alliance

#### Program goals:

- Improve water quality through reduced runoff and leaching of nutrients
- Conserve surface and groundwater through efficient irrigation water usage
- Provide yield and cost benefits through efficient input management

USDA is an equal opportunity provider and employer.



## What is the Agricultural Water Enhancement Program (AWEP)?

The Agricultural Water Enhancement Program (AWEP) is a voluntary conservation initiative that provides financial and technical assistance to agricultural producers to implement activities on agricultural land for the purposes of conserving surface and ground water and improving water quality. As part of the NRCS Environmental Quality Incentives Program (EQIP), AWEP operates through contracts with producers to plan and implement conservation practices in project areas established through partnership agreements.

Nationwide, the USDA has selected 63 projects, including California's Central Coast Irrigation and Nutrient Management Initiative, to work with the NRCS toward mutual agricultural water enhancement goals.

AWEP is a **non-regulatory** program. Participation is entirely voluntary and confidential.



## What is the Central Coast Irrigation and Nutrient Management AWEP?

Resource Conservation Districts located on California's Central Coast have partnered with several regional Technical Service Providers to work closely with the USDA-NRCS in assisting you, the landowner or operator, with:

Conservation Cover  
Residue Management  
Cover Crops  
Sediment Basins  
Field Borders  
Riparian Cover  
Filter Strips  
Grass Waterways  
Irrigation Water Conveyance  
Irrigation Storage Reservoirs  
Micro Irrigation Systems  
Sprinkler Irrigation Systems  
Irrigation Tailwater Recovery  
Irrigation Water Management  
PAM  
Irrigation Land Leveling  
Precision Land Forming  
Land Smoothing  
Lined Waterways  
Mulching  
Pond Sealing or Lining  
Pumping Plants  
Irrigation Regulating Reservoirs  
Structure for Water Control  
Nutrient Management  
Pest Management  
Salinity and Sodic Management  
Underground Outlets  
Waste Treatment  
Water Harvesting Catchments

## Why irrigation and nutrient management?

This project aims to conserve the California Central Coast's limited water supply and improve the quality of agricultural runoff. Project goals include restoring beneficial uses of local waterways and protecting unique marine and aquatic resources, such as the Monterey Bay National Marine Sanctuary, the Morro Bay National Estuary, and the Guadalupe Dunes. This project will assist willing growers in improving the efficiency of their operation, leading to water savings and water quality improvement. Additionally, this project aims to provide yield and cost benefits through efficient input management.



## What makes this program unique?

This program is unique in that it addresses water quality and quantity issues on a regional scale, and it brings together a broad suite of partners in collaboration with landowners and operators. The selection of this partnership for AWEP funding reflects the strength and value of collaboration on the Central Coast.

Improving irrigation and nutrient efficiency on your farm can lead to **cost savings**. These practices benefit your bottom line, *and* the environment.



*Systems efficiency does not always remain constant. It depends more on the system maintenance and management than on age.*

#### FACTORS AFFECTING EFFICIENCY

These 4 factors can cause non-uniformity:

- 1 . Pressure differences.
- 2 . Manufacturing sprinkler variation, plugging and wear.
- 3 . Schedule sprinkler timing systems.
- 4 . Topography, climate, and soil type.



*Evaluation of Farm Irrigation*



*Evaluation of Urban landscapes*



In SLO County  
Contact:

Upper Salinas-Las Tablas RCD  
65 South Main Street, Suite 107  
Templeton, CA 93465  
434-0396 ext. 5

*Coastal San Luis RCD 772.5623*

In Cooperation with:

Cachuma Resource Conservation District 920  
E. Stowell Rd. Santa Maria, CA 93454 805-  
928-9269 phone • 805-928-9644 fax  
[cachumarcd@ca.nacdn.org](mailto:cachumarcd@ca.nacdn.org)

---

## MOBILE WATER LAB PROGRAM IRRIGATION SYSTEMS EVALUATION

---

*Testing the Systems Efficiency*



**Improving Water Quality and  
Conserving This Precious  
Resource**



# SYSTEM EFFICIENCY

The system efficiency depends on two important concepts:

A – The plants receive water when they need it (perfect timing is when the soil in the root zone of the areas that receive the least amount is drying below a chosen minimum moisture content allowable); and in the amount they need it (enough water applied in the root zone which is stored until the next irrigation) – SCHEDULING.

B – Every plant receives, ideally, the same amount of water. Distribution Uniformity of water application – DU.

By improving and obtaining better scheduling (timing and duration) and higher uniform water application, over-irrigation and under-irrigation are minimized, benefiting the following:

- 1 . Potential plant growth and quality improvements of the under-irrigated areas – with higher DU and better timing.
- 2 . Water losses decrease due to less over-irrigation. This is addressed for 3 factors: by having perfect timing, correct duration and with higher DU.
- 3 . Improvement in fertilizers management. Fertilizers, pesticides and other products requirements should be based on the

amount and timing of vegetation needs. They should be efficiently applied with the irrigation water to limit leaching and runoff.

4 . The potential for improved water conservation and surface water quality.

5 . Subsurface water quality is improved by reducing the transport of salts and chemical components (water and chemical losses targeted for the plants) by reducing the irrigation duration and improving the DU.

## IMPORTANT COMPONENTS

Soil: The plants take water from it. The Available Water Holding Capacity (AWHC) is an important characteristic to consider when scheduling.

Water: Reducing pollutants such as fertilizers/pesticides from entering surface and groundwater is necessary in maintaining and enhancing water quality which is a benefit for everyone.

Weather: Local weather conditions will determine the necessity for irrigation.

***Ideally, all these factors should be taken into account when designing the system, establishing irrigation schedules, monitoring and maintaining the system.***

## IMPROVEMENTS

- All irrigation systems should be planned by a certified designer.
- Causes of poor DU's are relatively easy to correct. For drip and microirrigation systems typical problems are uneven pressures, emitter plugging, inadequate system flushing or filtering, and inadequate water treatment.
- Do not over irrigate when incorporating pesticides and fertilizers.
- When scheduling consider: plant type and stage of growth, application rate (average and minimum), soil water holding capacity, leaching fraction and evapotranspiration.
- A source of weather information is the CIMIS network of weather stations located throughout California. The computed rates should be adjusted for each plant type.
- Irrigation evaluations, especially for older systems, should be encouraged.
- Adjust, evaluate and tune-up the scheduling in your landscape system.

## IRRIGATION EVALUATIONS

The Cachuma RCD provides this service for free to farmers and communities located in San Luis Obispo County (in cooperation with the Upper Salinas-Las Tablas RCD and San Luis Coastal RCD).

**For a Free Audit:  
Call 805-928-9269 x106**



# BENEFITS OF THE PROGRAM

The Cachuma Resource Conservation District offers **free** irrigation system evaluations to turf irrigators, evaluating systems individually and making recommendations to improve performance.

Participation in this program is voluntary and all evaluation results are confidential.



By applying the proper amount of water, you may be able to:

- *Improve turf quality*
- *Reduce bacterial and fungal diseases*
- *Lower pesticide and fertilizer costs*
- *Reduce water usage and loss*
- *Decrease pollution*
- *Decrease leaching of plant nutrients*
- *Save money by reducing water and energy usage*

*Free, voluntary, confidential evaluation: improve your irrigation efficiency!*

Cachuma Resource  
Conservation District  
USDA Service Center  
920 East Stowell Rd.  
Santa Maria, CA  
93454

# IRRIGATION SYSTEM EVALUATIONS

FOR LARGE LANDSCAPES



*Providing a tool to improve irrigation efficiency in  
Santa Barbara and San Luis Obispo Counties*

Cachuma Resource Conservation District  
Santa Barbara County Water Agency  
US Bureau of Reclamation

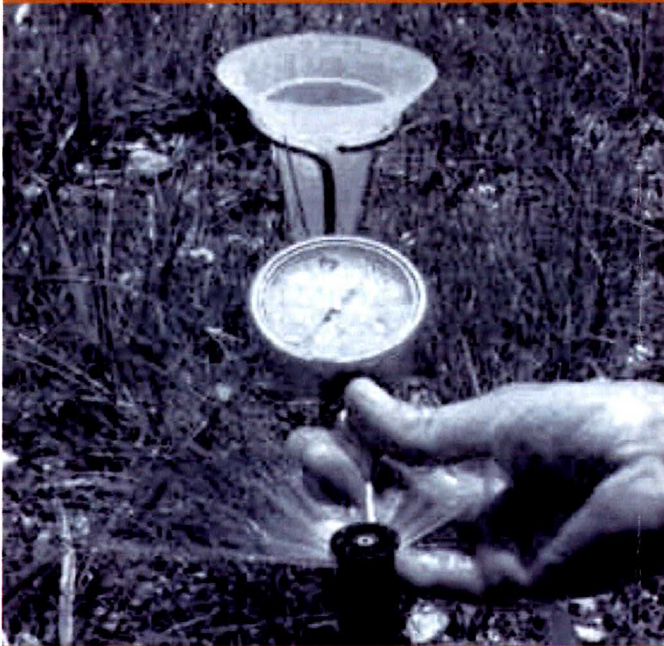


# ABOUT THE PROGRAM



**Free** on-site Mobile Lab services are available to Santa Barbara and San Luis Obispo County growers. Over 800 evaluations have been performed on over 70,000 acres.

To schedule a turf evaluation, call the Cachuma Resource Conservation District at (805) 928-9269, x. 106.



The Mobile Irrigation Lab is staffed by trained professionals from the Cachuma Resource Conservation District (RCD). Irrigation evaluations use standard procedures developed by California Polytechnic State University at San Luis Obispo and the California Department of Water Resources.

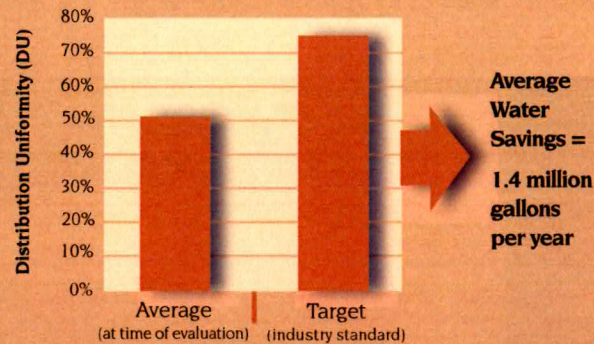
# THE EVALUATION

The Mobile Irrigation Lab comes right to your property. All you need to provide, if possible, is a layout of your irrigation system and information on your irrigation schedule. **We provide:**

- *Distribution Uniformity (DU)*: Sprinkler application rates, pressures, and flow are measured.
- *Sprinkler Inspection*: Proper sizing and operation are evaluated.
- *Soil Survey*: The soil type, depth, and texture are identified to determine water holding capacity.
- *Controller Settings*: Your irrigation schedule is compared to actual water requirements, and seasonal controller settings are recommended.

**You will receive recommendations on system design, operation, and maintenance, including a projection of potential savings that could result from implementing recommendations.**

## IRRIGATION EVALUATION RESULTS



**Average Water Savings = 1.4 million gallons per year**

*Improvements shown indicate implementation of one or more recommendations*

# WHO PARTICIPATES

Any property manager with large areas of turf to irrigate can benefit from a turf irrigation evaluation.

Properties that could benefit from a turf irrigation evaluation include:

- *School playing fields*
- *Parks and open space areas*
- *Homeowners associations*
- *Condominiums*
- *Large commercial landscapes*
- *City and County landscaping*
- *Large residential landscapes*
- *Golf courses*
- *Cemeteries*

