

# **Groundwater Recharge Pilot Program**

September 2023



## Why a pilot program?

NRCS recognized groundwater depletion as a resource concern, and California NRCS developed two interim practice standards for groundwater recharge.

These interim practices must be field tested before being adopted into our Field Office Technical Guide.

Two interim practices are being tested:

- **Groundwater Recharge Basin or** Trench (code 815)- a dedicated, permanent (15 year lifespan) recharge feature
- On-Farm Recharge (code 817)- active farmland flooded on an annual basis for recharge



## How does it work?

Applicants work with NRCS conservationists to develop a conservation plan including the recharge practices and any needed supporting practices.

Supporting practices can include:

- Pipeline
- Land shaping
- Pump
- Ditch
- Water control structures

# How can I participate?

Applications received in Fall of 2023 are for recharge to be completed in Fall-Winter 2024-25.



Fall-Winter 2023 Develop plan for Recharge Basin or On-Farm Recharge with NRCS



**Early 2024 Funding selections** announced



## **Payment Rates**

These are rates from 2023, subject to change:

Basin: \$4,032-\$4,232 per AF storage Trench: \$3.59 per CY excavated

On-Farm Recharge: \$99-\$103 per acre,

Contact your field office for further information:

Fresno Service Center 559-276-7494 Madera Service Center 559-674-4628 Merced Service Center 209-722-4119 Bakersfield Service Center 661-281-2765 559-734-8732 Visalia Service Center

#### Eligibility for 2024

#### Location:

- Madera County
- Fresno County (Fresno Irrigation District only)
- Merced County (Chowchilla Irriga tion District only)
- Tulare County (Tulare Irrigation District or Delano-Earlimart **Irrigation District** only)
- Kern County (Delano-Earlimart **Irrigation District** only)

#### Water access:

- Irrigation District
- Winter flood water, with recharge water rights

#### Project site:

- Site suitabilitysoils and geology
- Nutrient and pest management plans
- Access to well for monitoring

#### Applicant:

- Landowner or leaseholder
- Irrigation District

# Is the pilot program right for you?

- Decide which type of recharge you want to engage in – a recharge basin or trench (815) OR on-farm recharge (817). Read the applicable practice standard thoroughly.
- A recharge basin or trench is a permanent feature. Land will be taken out of production permanently (defined as a minimum of 15 years).
- On-farm recharge (OFR) occurs in tandem with agricultural practices and happens on an annual basis, depending on water availability.
- Water availability: Does your site have access to recharge water from an Irrigation District OR do you have access and water rights to winter flood water?
  - If not, your site will NOT qualify for the program.
- Monitoring: Is there a well (screened to the appropriate aquifer) within ¼ mile from the center of the flooded field or 1,000 feet from the edge of the field that can be used to monitor changes in groundwater that might be associated with recharge on the site?
  - If not, your site will NOT qualify for the program.

- Site suitability for basins: Does your site have sufficient saturated hydraulic conductivity (percolation rates) in the top 5 feet of soil?
- Soil suitability: Will your soils take water fast enough for recharge? Check the ratings using the Soil Agricultural Groundwater Banking Index (SAGBI) tool here:

https://gratviewer.earthgenome.org/

 Hydrogeologic suitability: Does your site have connectivity to the aquifer? Check its rating on the LandIQ Groundwater Recharge Suitability Tool, available here:

https://gratviewer.earthgenome.org/

- Alternative data for hydrogeologic suitability:
  - On-site sub-surface soil investigations (such as deep soil cores, cone penetrometer, or nearby well log data)
  - o Electromagnetic survey
- Nutrient and pest management:
   Records will be reviewed to minimize
   risks to groundwater quality. Former
   manure storage sites will be excluded.



# More fine print...

Projects must meet design and monitoring criteria detailed in one of the following:

Interim Practice Standard 815
Groundwater Recharge Basin and Trench

https://efotg.sc.egov.usda.gov/api/ CPSFile/30312/815\_CA\_ICPS\_Groundwater Recharge Basin or Trench 2020

Interim Practice Standard 817 On-Farm Recharge

https://efotg.sc.egov.usda.gov/api/ CPSFile/30313/817\_CA\_ICPS\_On\_Farm\_ Recharge\_2020 Participants are reimbursed after a contract is awarded and after practices are complete. No reimbursements are made for recharge performed prior to contract award

For Recharge Basin and Trench (815), one-time reimbursements occur after construction is completed according to design standards.

Trenches are designed and paid by cubic yard excavated.

Basins are paid per acre-foot storage capacity.

On farm recharge (OFR) (817) is reimbursed by acres flooded.

OFR can be performed up to 3 years for payment and is paid annually. If water is NOT available in a given year, then payment will NOT be made that year.

California
Natural
Resources
Conservation
Service

nrcs.usda.gov

