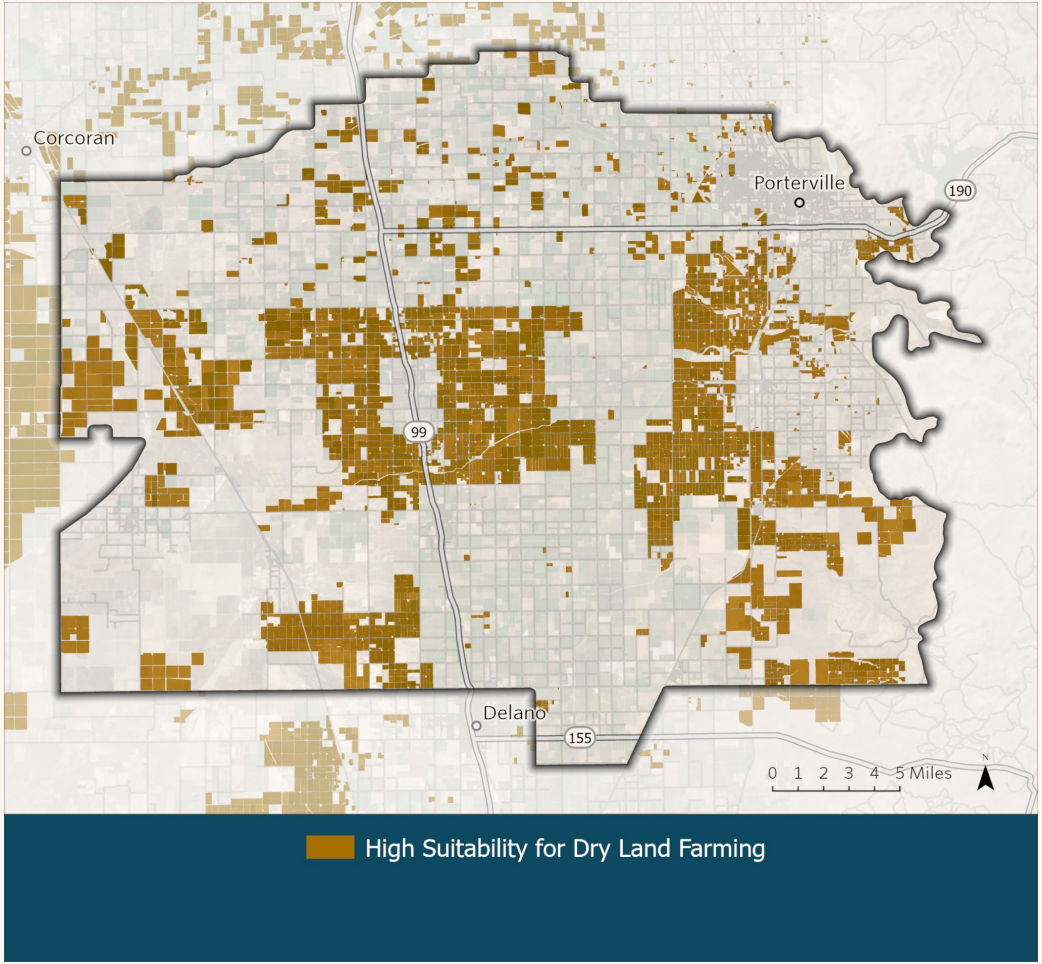
LOW/NO WATER CROPS

Land Repurposing Solutions Seminar

What is Dryland Farming?

Dryland farming, or dry farming means that irrigation isn't used. It's agriculture that relies on soil moisture, ground water, and the occasional rainfall.

Different from Rainfed farming, although both rely on natural moisture rather than irrigation. Rainfed farming happens during the rainy season, while dryland farming happens during the dry season or in arid climates.



Potential Water Benefits

No or low water demand beyond precipitation
Improved or increased ability to absorb and retain ground moisture
Reduced nitrate infiltration

Current and Emerging Crops

- Winter Wheat, Barley
- Winegrapes
- Rosemary
- Sage
- Native Plants & Seed
- Agave

- Sweet Potatoes/Potatoes
- Okra
- Artichokes
- Beans
- Snap beans
- Pole beans
- Black eyed peas

Benefits to the Grower/Landowner

Crops favorable to dryland farming:

- Hardy, often tolerating both high and low temperatures
- Help retain subsoil moisture
- Reduce the need for herbicides use
- Act as soil stabilizers
- Provide profitability and environmental stewardship
- Many crops are in high or increasing demand
- Low production cost
- Both Fallow Land and water-limited crops will use water – but a water limited crop results in a usable output, while a tilled fallow does not.

Dryland Farming Results

- Reduced density
- Smaller yields
- Physically smaller fruits and vegetables
- Improved fruit and vegetable flavor
- Offers a way to recover at least some cost on land
- Can be a relatively high-value use of water – generating as much or more in net returns per acre-foot, if GSA groundwater allocation policies restrict trading or transfers.

Benefits to Other Stakeholders

- Continued need for local labor, job stability
- Improved groundwater sustainability, due to less demand of surface or groundwater
- Improved air quality, reduced dust and promotes carbon reduction
- Reduced herbicide use

Resources to Learn More

- Dryland Farming: What It Is and Why It's Important | Nature Safe Fertilizers
- Exploring the Potential for Water-Limited Agriculture in the San Joaquin Valley - Public Policy Institute of California (ppic.org)
- Low-Water Crops. Water covers nearly three-fourths the… | by QWerks | blog.getqwerks | Medium
- **Rosemary**
  - Rosemary Farming Business Guide For Beginners (roysfarm.com)
  - https://www.asiafarming.com/rosemary-farming-business-plan-a-step-by-step-guide-to-growing-and-selling-profitable-herbs
- **Sage**
  - How to Grow Common Sage for Profit - Commercial Common Sage Production - Wikifarmer
- **Native Plants and Seed**
  - Strengthening the Native Plant Supply for California's Central Valley — Great Valley Seed Company
  - California-Seed-Strategy-Draft-1.pdf (cnps.org)