

Farmer & Rancher Disaster Resilience Grant Program

Potential Allowable On-Farm Resilience Strategies/Activities:

Funding from these grants is for on-farm disaster resilience projects and plans. Below is a list of potential allowable activities and related expenses. This list was developed by reviewing the [Beating the Heat: A Statewide Assessment of Drought and Heat Mitigation Practices \(and Needs\) with Oregon Farmers and Ranchers](#) (2023 OSU study), and with input from our Farmer, Rancher and Expert Advisory Committee. This list is not exhaustive and applicants may propose other activities/expenses to increase their resilience to climate related disasters.

Irrigation and Water Efficiency:

- Irrigation improvements to reduce water use (purchasing, installing and maintaining high and medium potential application efficiency (HPAE) systems such as drip, microspray, LEPA, or LESA)
- Improving on-farm water storage (purchasing tanks, digging and/or lining ponds)
- Irrigation ditch revitalization
- Well management and improvement (deepening, updating pumps)
- Solar powered pumps
- Other water efficiency projects (piping, mulching, system automation and remote monitoring, or other irrigation modernization)

Shading and Cooling:

- Shade cloth to protect plants from heat
- Shading structures for plants (greenhouses, high-tunnels, ect)
- Livestock shading
- Opaque plastics and row covers
- On-farm tree planting or other companion planting to increase shade and cooling
- Shade structures for workers
- Fans for livestock
- Refrigerating cool-weather crop starts
- Chemistries and inputs such as anti-desiccants and particle films to protect susceptible fruit from sunburn and heat damage

Soil Health Management:

- Reduced or no tillage (labor or equipment purchases)
- Composting, mulching, or addition of other organic amendments (compost, compost systems, spreaders; biochar, chippers or biochar reactors; aggregating organic debris to distribute to farmers; mulchers or equipment to spread mulch)
- Cover cropping (seed, see equipment purchasing, non chemical termination)
- Rotational grazing (fencing, shade structures, water troughs)

Ecosystem Management:

- Transition or expand silvopasture operation
- Riparian restoration
- Tree planting
- Digging bulges, swales, other on-contour earthworks
- Enhancing ecosystem biodiversity (plant diversity, insect diversity, beaver)

Other Crop Management:

- Planting of drought/heat/climate resilient seeds/varieties. A list is available through [Oregon-based Dry Farming Institute](#)
- Transition to or implementation of dry farming practices
- Adapting planting and harvest times, transitioning to new varieties, and transitioning to new crops, diversification of overall production to avoid late season heat impacts
- Increase season extension infrastructure
- Intercropping
- Frost protection for earlier planting to avoid late season heat
- Purchasing feed for periods when animals are not able to be pastured due to climate impacts

Purchase, Rental, or Refurbishment of Equipment:

This is for equipment that is specifically intended for a purpose which would improve on-farm disaster resilience.

We encourage applicants to review rental programs before applying for funding to purchase no-till seed drills. Here is a [list of soil health equipment available from Soil and Water Conservation Districts in Oregon](#). If applicants are applying for funding to purchase equipment, they must describe disaster resilience benefits of that equipment.

- Implements/equipment to improve soil health or support other resilience activities/strategies (no-till seed drill, flail mower, roller crimpers, manure spreader, and others)
- Livestock trailers for animal evacuation
- Equipment rentals or developing accessible rental program to implement any of the resilience activities/strategies in this section
- Shared equipment or other innovative ideas to reduce equipment costs to implement other resilience activities/strategies

- Emergency milking equipment for evacuated dairy herds

Planning:

- Creating an on-farm disaster plan (heat/smoke policies, evacuation plan)
- Paying a facilitator to guide disaster planning meetings with neighboring farms
- Planning for food or seed distribution during disasters
- Convening farmers and experts in a region to address locally-specific drought and heat-related problems and solutions

Monitoring or Research:

- On-farm trials to promote climate resilience (dry farming, drought, assessing the presence of pollinators in orchards, implementing silvopasture methods, use of tensiometers, cover cropping, and variety trials and heat resistant varieties)
- On-farm soil moisture monitoring (monitoring sensors and equipment)
- Installing and maintaining on-farm weather stations
- Improved information/data on expected water quantity and delivery from irrigation districts
- Evapotranspiration and increased watering for cooling trials
- No-water based fire mitigation strategies
- Data interpretation related to climate resilience
- Technical aspects of irrigation systems, particularly related to installation and maintenance
- Farmer-to-farmer information sharing related to climate resilience

Other potential activities:

- Climate grief (mental health access)
- Other conservation practices to promote climate resilience
- Indigenous practices to promote climate resilience
- Energy use reduction and monitoring (reduced costs for pumping, variable frequency drives)
- Purchasing water