✔ Where to begin

Many Oregon winegrape growers use sustainable management practices to create some of the world's best wines while also protecting the environment. These practices keep the soil on their fields and out of Oregon's waterways, in accordance with state law.

Wildlife habitat conservation

If you are developing vineyards in western Oregon, you likely have oak woodlands and riparian habitats on your property. Both of these habitats are of critical concern in the Willamette Valley and support a diversity of wildlife. Oregon Department of Fish and Wildlife (ODFW) is very willing to conduct a site visit, preferably during your vineyard visioning stage, to help you develop a wildlife conservation strategy that can add value to your property.

Forest Practices Act (FPA)

The FPA requires notification to the Oregon Department of Forestry (ODF) when trees are harvested for any non-forest use, including for vineyard development. Soil erosion must be controlled and Riparian Management Areas must be protected to FPA standards.

Agricultural Water Quality Program

The Oregon Department of Agriculture (ODA) administers the Water Quality Program. ODA requires vineyard developers and operators to control erosion and prevent pollution of local waterways. In many cases trees and shrubs are required along streams to provide shade and bank stability.

✔ How to prepare

Proper preparation can save you significant time and money. The best strategy for preventing erosion, sedimentation and water pollution is to develop an integrated system of practices.

Prevent erosion: know how much rain will land and where it will drain

When planning a vineyard, it is critical to be aware of the timing, amount, and frequency of precipitation events. Precipitation varies throughout the Willamette Valley, mostly occurring as rain from November through April. Elevation and slope exposure are the most important determinants of precipitation totals.

Rainfall data in the McMinnville area from November through April reveal an average of 41.5 days with hourly precipitation exceeding 0.20 inches. Expected 25-year, 24-hour precipitation events in the Mid-Willamette Valley can range from five inches to seven inches. Events like these on unvegetated hillsides will result in excessive and costly erosion, and potential law violations.

The message? Plan for events of intense precipitation.

Knowledge of soil types in Oregon's wine country is also critical for designing effective erosion control measures, particularly when those soils are exposed or disturbed during vineyard development.

✔ Management practices

When designing a vineyard layout that minimizes erosion and protects streams, consider these management ideas.

- Construct roads to specified engineering standards. Include culverts, rocked or grassed roads, and grassed or lined drainage ways.
- Create stream set backs that filter soil and nutrients in overland flow.
- Install straw mulch contour strips, wattles and bales.
- Establish a cover crop between rows and on uncropped areas.
- Create properly sized sediment basins and other water control structures.
- Prepare soil pits to evaluate the permeability characteristics of the soil.
- Deep ripping is often unnecessary in Oregon. If the need is clear, rip no deeper than 36 inches, and rip cross-slope and not up and down slope.
- Install drainage tile if evaluations indicate that excessive water accumulates in the soil profile.
- Implement soil erosion prevention practices by October 1.

1961-1990 rainfall: Monthly means and 24-hour extremes

Average Polk County rainfall (as recorded in Dallas)

	Monthly mean	Extreme 24-hour rainfall event
OCT	3.33	2.32
NOV	7.56	4.00
DEC	9.15	4.32
JAN	7.83	3.91
FEB	6.17	3.05
MAR	5.68	2.19
APR	2.71	1.59
MAY	2.01	2.20
ANNUAL	49.13	

✔ What are the benefits

A healthy and stable vineyard is not only more economical and efficient, it enhances the value of your grapes and the wine made from them.

- Save money
- Keep soil in place
- Maintain Oregon's "green" reputation.

Improve your marketability

Good management practices can help you meet certification standards. Some examples of Oregon certification include the following:

- Low Input Viticulture & Enology, Inc. (LIVE) and Salmon Safe provide standards dedicated to restoring and maintaining healthy watersheds. To obtain LIVE and Salmon Safe certification, vineyards must utilize farming practices that limit impacts on the agro-ecosystem.
- Food Alliance certified farmers and ranchers meet strict standards in the areas of pesticide reduction, soil and water conservation, wildlife habitat conservation and safe and fair working conditions.

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Web: http://oregon.gov/ODA/NRD

Additional resources

- Oregon Wine Board _____ 503-581-2262
- LIVE _____ 503-584-7274
- Food Alliance _____ 503-493-1066
- Salmon Safe _____ 503-232-3750
- Oregon Department of Fish and Wildlife
  - Corvallis _____ 541-757-4186 x 226
  - Central Point _____ 541-826-8774
  - Roseburg _____ 541-440-3353
  - Sauvie Island _____ 503-621-3488

✔ Where to go for help

Technical assistance on water quality protection is only a phone call away. Your local **Soil and Water Conservation District** (SWCD) and **USDA Natural Resources Conservation Service** (NRCS) are great places to start.

- Yamhill _____ 503-472-1474 x 118
- Polk _____ 503-623-5534
- Marion _____ 503-391-9927
- Tualatin _____ 503-648-3174 x 4
- Benton _____ 541-753-7208
- Douglas _____ 541-957-5061
- Lane County _____ 541-465-6436
- Jackson _____ 541-734-3143

Oregon Department of Agriculture advises on the applicable water quality program elements and rules, suggest options for management strategies and put you in contact with other resources. _____ 503-986-4700

Oregon State University (OSU) **Extension** in viticulture provides academic and on-the-ground help in vineyard development and management. _____ 541-737-1411

Oregon Department of Forestry regulates tree cutting and removal and works with ODA in vineyard establishment matters. __ 541-757-4186

Web resources

NRCS Oregon

- http://www.or.nrcs.usda.gov

County specific **precipitation information** is available from the Oregon Climate Service.

- http://www.ocs.orst.edu/county_climate

Soil maps and surveys for Oregon can be obtained from the NRCS Web site

- http://www.or.nrcs.usda.gov/technical/soil

Agricultural water quality management area **plans and rules**

- http://oregon.gov/ODA/NRD/water_agplans.shtml

Developing your Oregon vineyard...

- ✔ Where to begin
- ✔ How to prepare
- ✔ Management practices
- ✔ What are the benefits
- ✔ Where to go for help

Oregon Department of Agriculture