Many Oregon wine grape 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 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.

Where to begin
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.

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

• Construct roads to specified engineering standards. Include culverts, rock- ing 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.

Management practices
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.

What are the benefits

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

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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: 541-463-6436
- 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.
    - https://www.oce.orst.edu/county_climate
  - Soil maps and surveys for Oregon can be obtained from the NRCS Web site
    - http://www.or.nrs.usda.gov/technical/soil
- Agricultural water quality management area plans and rules

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503-986-4700
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 begin ✔
How to prepare ✔
Management practices ✔
What are the benefits ✔
Where to go for help ✔