



Oregon
Department
of Agriculture



Soil & Water
Conservation
Districts

Field Borders

Oregon's agricultural industry is actively working to address public concerns over water quality. Agricultural water quality rules, in place throughout the state, provide the nursery industry with a set of expectations regarding its impact on waters of the state. This publication provides nursery producers with information to help achieve water quality standards and comply with water quality rules.

Choosing a practice

Often several different practices may be used to meet a water quality requirement. Having options allows producers the flexibility to select practices that fit well with their growing operation. Some practices are quite inexpensive, compared to the cost of losing soil to the county ditch or nearby stream. One such practice is the installation of field borders.

What is a field border?

A field border is a strip of vegetative cover, usually grass, established around a field perimeter to reduce the sediment load in water leaving the field. Various types of vegetation can be used for field borders depending on the crop being grown, the rotation length, and the producer's management plan.

Why plant a field border?

Sediment caused by soil erosion is a major source of pollution to our state's waterways. Equally important, soil lost through erosion is a valuable resource to the agricultural producer. It is in the best interest of the producer to conserve the growing media while staying out of the local news media!

Soil particles that erode from fields—and the contaminants they often carry—threaten water quality. Borders can slow runoff from fields and capture soil, prevent rill and gully erosion, and keep soil from entering streams. Field borders can also be used to comply with required field setback distances applicable to manure and chemical applications.



Between-row rill erosion

Installation suggestions:

Plant grass species that produce dense foliage to capture eroded soil and that have a deep root system to hold the soil during runoff events.

Allow an adequate distance from the edge of a field for a field border. Some nursery growers recommend a width of two or more traffic lanes, depending on the slope of the field. However, do not use the field border as an access road!

Provide irrigation to newly planted borders if rainfall is not sufficient for germination and establishment.

Consider using species in your border that are tolerant of sediment deposition and chemicals commonly applied to your crop.

Combine tall and short vegetation in the field border to trap more sediment than will be caught in a monoculture field border.



A newly planted border...a good start to a great filter!

Border upkeep:

Here are a few things to think about when planning the upkeep of your conservation practice.

- ❖ Repair damage caused by severe storm events.
- ❖ Remove sediment accumulations at the field border/cropland interface when they reach a depth of six inches or more.
- ❖ When turning farm equipment, shut off sprayers and raise tillage implement to avoid damage to field borders.
- ❖ Field borders should not be used as access roads. Vehicle traffic, especially in the winter, will damage the border and can increase erosion problems.
- ❖ Areas damaged by chemicals, tillage or occasional equipment traffic need to be repaired and reseeded.
- ❖ Control noxious weeds and invasive plants.
- ❖ Fertilize and mow borders to maintain plant vigor.
- ❖ Fill and reseed gullies and rills that develop in the border.
- ❖ Maintain herbaceous vegetation so that it provides at least 80 percent ground cover throughout the year.

Riparian areas

Special consideration should be given to the interface between fields and streams. These areas are considered riparian areas. It is recommended to retain existing trees, shrubs,

and understory vegetation along riparian areas to prevent erosion, trap sediment, and filter runoff. Vegetated riparian areas also provide shade to streams, preventing solar warming of the water. Planting a field border between fields and riparian areas will avoid damage to these sensitive regions.

Where to go for help

Technical assistance is available through your local Soil and Water Conservation District (SWCD), USDA Natural Resources Conservation Service (NRCS), or the Oregon State University Cooperative Extension Service.

Often, grant funds or conservation programs are available to assist producers in financing conservation practices. Contact your local SWCD or NRCS office for more information.

SWCD contact information:

Clackamas County	East Multnomah
503-656-3499	503-222-7645
Marion	Tualatin
503-391-9921	503-681-0953
West Multnomah	
503-238-4775	

ODA 503-986-4770

This publication is brought to you by:

- ❖ Oregon Department of Agriculture
- ❖ East Multnomah Soil and Water Conservation District
- ❖ Clackamas County Soil and Water Conservation District
- ❖ Oregon Association of Nurseries

Source of Information:

- ❖ USDA Natural Resource Conservation Service Field Office Technical Guide

Graphics:

- ❖ Don Richards, Applied Horticultural Consulting Inc. – rills
- ❖ J. Frank Schmidt & Son. Co. – Field border



All publications produced by ODA will be made available in alternate formats when needed

Revised 12/05