



Washington State Dept. of Agriculture Organic Food Program

Certification Fact Sheet

Water Quality in Organic Production

1. Purpose

Water quality is a part of the USDA organic regulations, and this guidance provides some examples of practices to protect it. Refer to the **Additional Resources** listed at the end of this document for help selecting the practices best suited to your farm.

2. Background

USDA organic regulations require crops and livestock to be produced in a way that maintains or improves natural resources, including soil and water quality [NOS 205.200].

3. Organic Crop Producers

Plant and animal nutrients must be applied to crops in a way that keeps nutrients and pathogenic organisms out of water [NOS 205.203(d)]. Organic producers use practices to maintain or improve water quality, including, but not limited to:

- ✓ Covered or contained storage for organic fertilizers.
- ✓ Protected wellheads.
- ✓ Backflow prevention devices on fertigation systems.
- ✓ Use of organic fertilizers at rates appropriate for their crops' need, thereby minimizing losses to the environment.
- ✓ Vegetated filter strips, natural areas, and application set backs around waterways.
- ✓ Application of fertilizers at times when weather conditions won't cause runoff.
- ✓ Compost additions, cover cropping, and tillage practices that encourage soil life, build structure, lower erosion, and increase soils' ability to hold water and nutrients.
- ✓ Irrigation practices that promote water efficiency such as soil moisture monitoring and use of low volume irrigation systems, leaving more water for instream flows.

4. Organic Livestock Producers

For farms that also house and pasture organic livestock, manure management is specifically addressed in several sections of the USDA organic regulations:

- ✓ Heavy use areas must be managed in a way that prevents runoff of wastes and contaminated waters to surface water [NOS 205.239(a)(5)].
- ✓ Manure storage, outdoor access areas, and pastures must be managed in a way that does not put soil or water quality at risk [NOS 205.239(e)].



- ✓ A producer's pasture plan must include a description of erosion control and how they protect natural wetlands and riparian areas [NOS 205.240(c)(8)].
- ✓ Animals may be temporarily confined due to inclement weather or risks to soil or water quality [NOS 205.239(b)(1)&(4)].

Many organic livestock farms already have a Washington Nutrient Management Plan, Oregon Confined Animal Feeding Operation Plan, or other conservation plan that covers some or all of their farm. Have this plan available at your organic inspection. If you receive regular water quality inspections, have a copy of your most recent report also. These documents are dual purpose; by explaining the practices you use to protect water quality, they also help show compliance with USDA organic regulations. Common practices include the following:

- ✓ Use of roofing, gutters, downspouts, and conveyance lines to keep clean water away from contaminated areas.
- ✓ Capturing and storing manure-contaminated water and liquid seeped from silage, for later use as fertilizer.
- ✓ Diverting contaminated water to planned filter strip areas.
- ✓ Composting and other means of legal disposal for livestock mortalities.
- ✓ Protecting or restoring streamside vegetation, installing off-channel water, and hardening crossings and water access points to protect banks from erosion.
- ✓ Use of fencing to either restrict livestock access to streams or to establish a designated riparian pasture around the stream where the timing and intensity of grazing can be closely managed.

5. Additional Resources

Conservation Districts

Conservation districts are a source of information and services to help improve and maintain water quality on farms of all sizes. Districts are often able to provide technical assistance, write new conservation plans or extend existing ones to cover new sites and practices. Some districts rent out equipment, maintain manure exchange lists, or sell native plants. Financial assistance is even available for some practices.

Washington Soil Conservation Commission: <http://scc.wa.gov/contacts/conservation-districts/>

Oregon Association of Conservation Districts: <http://oacd.org/conservation-districts/directory>

Natural Resource Conservation Service offices: <http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>

Self Assessment Tools

Washington State University Extension has developed a *Livestock Influenced Water Quality Risk Assessment* that farmers can complete on their own as a first step to explore water quality on their farm. It includes practical examples and photos. <http://animalag.wsu.edu/water%20quality/riskassessw-contacts5105.pdf>.

Utah State University Extension has developed several short self-surveys to assess risk to water quality from a variety of on-farm practices such as fertilizer storage and wellhead protection: <https://extension.usu.edu/waterquality/hm/agriculturewq/riskwater/#surveys>.

The National Organic Program's *Guide for Organic Livestock Producers, Chapter 24* includes manure management questions to consider when developing an organic system plan: <http://www.ams.usda.gov/sites/default/files/media/Guide-OrganicLivestockProducers.pdf>.

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