

## **What are buffer zones and why does my farm need them?**

*Buffer zones are important components of a farm's organic system plan. Buffer zones are put in place to make sure that prohibited substances do not contaminate organic crops.*

### **What is a buffer zone?**

7 CFR 205.2

According to the USDA organic regulations, a buffer zone is “an area located between a certified production operation or portion of a production operation and an adjacent land area that is not maintained under organic management. A buffer zone must be sufficient in size or other features (e.g., windbreaks or a diversion ditch) to prevent contact by prohibited substances applied to adjacent land areas.”

### **Why do I need a buffer zone around my organic farm?**

Simply put, a buffer zone is needed to protect organic crops from contaminants that may be used on adjacent properties.

### **What are the land requirements for my buffer zones?**

7 CFR 205.202, Section C states:

“Any field or farm parcel from which harvested crops are intended to be sold, labeled, or represented as organic, must:

...(c) Have distinct, defined boundaries and buffer zones such as runoff diversions to prevent the unintended application of a prohibited substance to the crop or contact with a prohibited substance applied to adjoining land that is not under organic management.”

### **How do I know what the size of my buffer zones should be?**

The organic standards do not specify how wide a buffer zone should be but state that the buffer zone be adequate to prevent the unintended application of a prohibited substance to organic crops. Check with a certifying agent for specific guidance on how wide the buffer zones should be. Many certifying agents use 50 feet as a common starting buffer width between organically managed crops and potential sources of contamination.

### **Are there any circumstances in which a buffer zone may not be necessary, reduced, or increased in size, from my proposed or existing buffer zone?**

Yes, it is important to realize that no matter what the starting buffer is, the buffer may be reduced or eliminated, or even increased, based upon an evaluation of the buffer during the inspection process. “One size fits all” does not apply to buffers.

**The size of a buffer zone may be reduced or eliminated for the following reasons:**

1. The abutting land is clearly unmanaged pasture, field, or lawn.

2. A physical barrier such as a solid fence, hedgerow, or tall annual crop exists between the non-organic and organic growing areas.
3. The only pesticides, herbicides, or fungicides used on the non-organically managed land are allowed under the organic standards and there is no reason to expect movement of fertilizers in surface water from field to field.
4. Prohibited pesticides, herbicides, fungicides or fertilizers that are used on the non-organically managed fields are applied in such a manner as to produce minimal risk of drift. Examples include a soil-applied granular pesticide, a granular incorporated herbicide or pesticide, or a soil applied pesticide drench or liquid herbicide that is applied with large volumes of water and a nozzle design that produces large droplet size.
5. Prohibited pesticides, herbicides, fungicides, or fertilizers are applied at a time of the season when the organic crop is either not in the ground or has no marketable above ground parts present. The application is made with careful attention to weather conditions and equipment design so as to minimize the risk of drift.

**The size of a buffer zone may be increased for the following reasons:**

1. Prohibited pesticides, herbicides, fungicides or fertilizers that are used on the non-organically managed fields are applied in such a manner as to produce substantial risk of drift.
2. If the organic farm is downwind from the non-organic farm (risks from contamination are increased).
3. If water drains from the non-organic fields into the organic fields.
4. If there is aerial spraying with fine particulate nozzles.

**Do my buffer zone plans need to be addressed in my farm's organic system plan?**

Yes. Since the requirement to maintain buffer zones is part of the organic standards, buffer zones must be a component of a farm's organic system plan. Buffer zones will be checked at the organic inspection, and failure to maintain or establish buffer zones may be a reason for an operation to be denied certification. When writing an organic system plan, careful attention must be paid to how both airborne and waterborne contaminants may affect buffer zones.

**Are both airborne contaminants and waterborne contaminants a concern with regards to buffer zones?**

Yes, buffer zones to prevent both air and waterborne contaminants must be established. It is extremely important to consider the potential for spray drift, other sources of airborne contamination, and the drainage patterns of a farm. Contamination from these sources may be reason to deny certification.

To avoid the possibility of pesticide or herbicide drift onto organic fields, organic growing areas must be situated far enough from non-organically managed land and unmanaged land to prevent aerial drift and contamination from runoff.

### **What are examples of “non-organically managed land” and “unmanaged land”?**

Non-organically managed land may include, but is not limited to: farm land, lawn, playgrounds, power lines fields, nurseries, golf courses, and pastures. Unmanaged land may include, but is not limited to pasture, lawn, and fields.

### **Can I grow crops in the buffer zone or should I leave the buffer zone untouched?**

Crops may be grown in a buffer zone but they may not be sold or represented as organic. Certifying agents may do pesticide residue testing at any point to verify that buffer zones are adequate.

Grass, permanent trees or shrubs may also be grown in the buffer zone, which can create a habitat for birds, wildlife, and beneficial insects. Significant height in a buffer could offer the added benefit of protecting fields and organic crops from contamination by aerial pesticides.

### **I operate an organic farm with intact and approved buffer zones. What should I do if someone is now developing a conventional farm next door?**

7 CFR 205.400(f)(1-2)

If there are applications of a prohibited substance on an adjacent property, than it is the responsibility of the certified farmer to immediately notify their certifying agent of the application, including drift, of a prohibited substance to any field, production unit, site, facility, livestock, or product that is part of an adjacent operation. Such notification may have an effect on the size of the buffer zone.

If there is no immediate danger of drift from prohibited substances than you may notify your certifying agent when you submit your annual organic system plan update.

### **Should I be concerned or am I responsible for reporting a change in my buffer zone if the farmer down the street has changed his spraying practices but the property does not adjoin mine?**

If the drift of contaminants may affect your certified organic fields or crops, you should alert your certifying agent.

## For Further Reading & Questions

The full text of the [USDA organic regulations](#) can be found online at the U.S. Government Publishing Office (GPO) website in the Electronic Code of Federal Regulations (e-CFR).

Specifically, these regulatory sections may be helpful to those with questions about buffer zones:

<a href="#">7 CFR 205.2</a>	Definition of a buffer zone
<a href="#">7 CFR 205.202(c)</a>	Land Requirements
<a href="#">7 CFR 205.400(f)(1-2)</a>	General Requirements for Certification

For general information about the USDA's National Organic Program (NOP), visit [www.ams.usda.gov/nop](http://www.ams.usda.gov/nop).

Further questions may be directed to your certifying agency.

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