

Small Farm Food Safety, Fresh Produce, Part 4: Farm Map Activity¹

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Time Required: 8 minutes

Materials for Trainer

- Farm Map Activity

Advance Preparation for Trainer

- Review “*Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables*,” U.S. Dept. of Health and Human Services, Food and Drug Administration, Center for Food Safety and Applied Nutrition, October 1998.
- Preview materials in this section to prepare yourself to facilitate the learning experience.

Materials for participants

- Farm Map Activity worksheet

Objectives

- **Application objective**

Participants will be able to manage the physical characteristics of their farms to minimize microbial contamination hazards.

- **Learning objective**

Participants will be able to identify potential contamination points in a farm operation.

Procedure

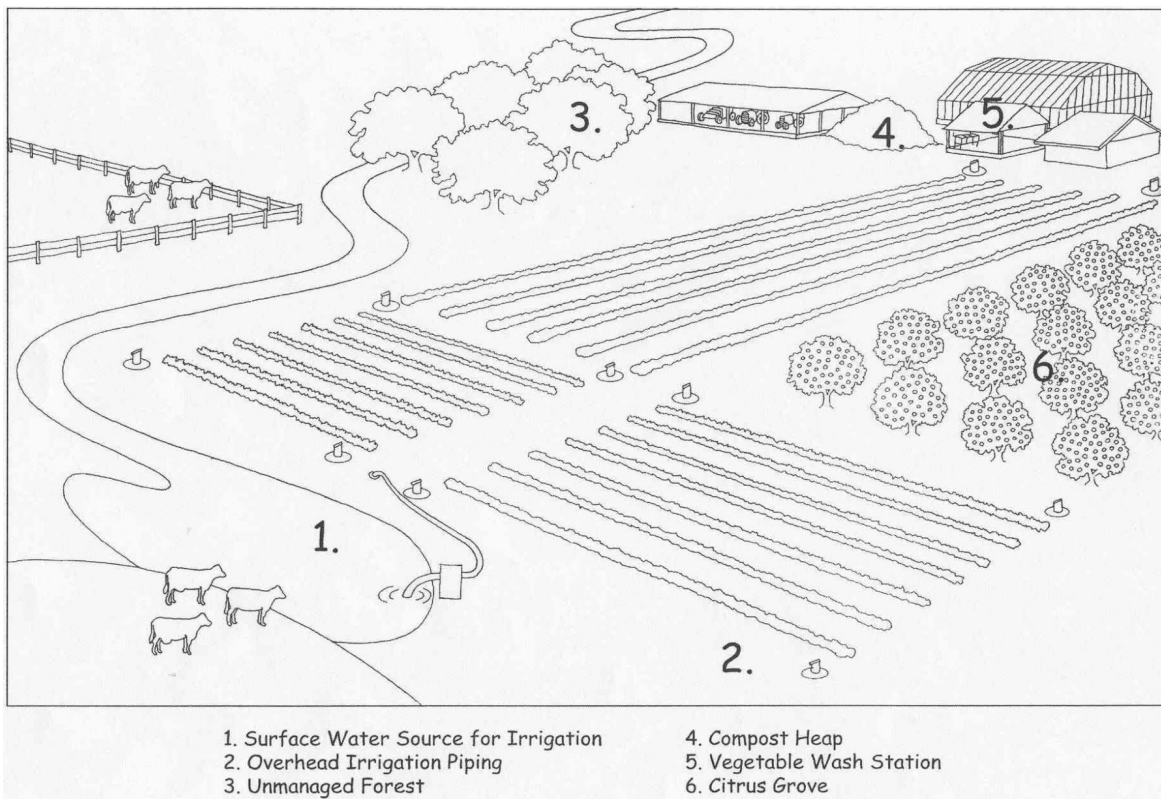
- Make copies of the farm map located at the end of this document for all participants.
- Distribute one map to each participant.
- Draw participants' attention to the numbered items on the map.
- This is an individual exercise. Have each participant write down all of the potential hazards for microbial contamination that they can identify for each of the numbered items on the map.
- Lead a group discussion. Ask individual participants to describe the potential hazards for each numbered item. Get them to describe potential solutions as well. Call on as many participants as possible.

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- The key points for discussion are provided in this guide. If these points are not brought up by participants, bring them up yourself.

- Growers may want to consider low-volume sprays, drip, furrow or underground irrigation as part of their overall program, where available and appropriate.

Key points



1. Surface water source for irrigation

- This is a potential hazard for microbial contamination, principally because the water source is open to livestock, which creates a potential hazard of fecal contamination.
- Adequate fencing around the water source is one potential solution.
- Additional methods for protecting surface waters are diversion berms, runoff control structures and vegetative buffers.

2. Overhead irrigation piping

- This method of irrigation can have an effect on food safety if the water quality is poor. The producer needs to test for potential microbial contaminants.
- Growers may want to consider irrigation practices that minimize contact between water and the edible portion of the crop.

3. Unmanaged forest

- This land use creates minimal risk, but if the area harbors large concentrations of wildlife (such as deer or waterfowl) that enter the field, there is the possibility of animal fecal contamination.
- Control of wild animal populations may be difficult. However, to the extent possible, growers should try to use agricultural practices to deter or redirect wildlife to areas that are not used to produce fresh produce. Federal, state, or local animal protection rules and regulations must be observed, including those that protect endangered species.

4. Compost heap

- Manure storage or treatment sites close to fresh produce fields or packinghouses increase the risk of microbial contamination. Manure storage and

treatment sites should be situated as far as practicable from these areas.

- The minimum distance necessary will depend on many factors, including farm layout and the slope of the land, what runoff controls are in place, the likelihood of wind or heavy rainfall, and the quantity of manure and how it is contained.
- Some method of physical containment should also be considered. Examples include concrete blocks, soil berms, pits or lagoons.

5. Covered washbasin

- The triple wash sink shown is located in a convenient location to the field and is in a covered area that can minimize contamination from wildlife and other sources.

6. Orchard

- The location of the orchard next to the field should not lead to microbial contamination.

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