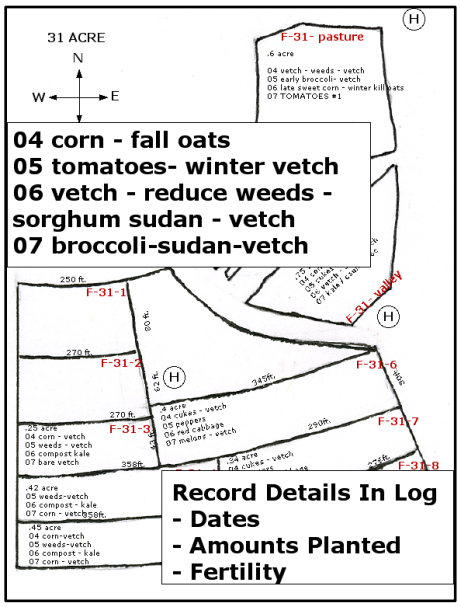
F-1 Field History, Farm Maps, and Risk Assessments

Farm Maps

A simple and inexpensive tool that you will use daily are basic farm map templates outlining fields, with field ID numbers, acreage, and distances.

Useful for Planning, Recordkeeping and Communicating with Workers.

Production practices can be recorded on them—crops and soil building rotations, planting dates, irrigation, tracking wildlife activity, and more.



Create Your Farm Map Templates

There are many ways to make your map. Simple line drawings can be made with a pen and ruler. Or print a google map satellite image and use as is, or trace onto blank paper your production areas and other farm features.

Once you have your map(s) drawn, print copies of them to have on hand. You might want to print one poster size, laminate it, and use with erasable markers in work areas.

Previous/Present Field and Land Use Risk Assessment with Farm Maps

A Land Use Risk Assessment is a first step in assessing "areas of land use food safety actions" that should be addressed because of contamination risks. It will describe the steps you plan that will reduce these risks.

Risks can be hard to see. Creating a farm map risk assessment creates a visual depiction of potential hazards. It can help farmers see how food safety hazards can move onto food via pathways: wind, water, animals, equipment, or people.

Start with a basic template or create a simple line drawing.

1. Basic Features: Draw basic features on your map. Include:

- Farm name, location
- Date/or update of map
- Indicate directions, N, S, E, W
- Crop production areas with numbering ID
- Buildings, and infrastructure
- Greenhouses, and high tunnels
- Packing and storage areas
- Water sources: wells, irrigation hydrants, ponds, canals, and streams
- Irrigation pipes
- Valves, gates, reservoirs, returns
- Roads and driveways

2. Identify Potential Hazards: Add potential contaminant sources. Include neighboring land that could impact your farm. You'll also address survival and reproduction of pathogens by looking for puddles, food sources, and habitat. Biological risks are like other species. If they have water, food, and shelter they can survive and reproduce.

- Livestock barns, pens, pastures
- Manure storage and use
- Compost production and storage
- Domestic animal areas: feeding, grazing, travel lanes, etc.
- Use of domestic animals for fieldwork
- Previous recent history of animal operations
- Areas pets frequent
- High levels of wild animal activity (i.e. nesting or feeding areas)
- Produce cull sites
- Gasoline storage
- Chemical, fertilizer, and pesticide storage
- Previous recent history of waste or industrial activities or heavy metals
- Areas for washing equipment and animals
- Areas that have flood potential
- Areas where water pools
- Human sanitation facilities and septic leach fields
- Trash receptacles

3. Contamination Pathways: air, water, animals, people, tools and equipment

Your map now provides a visual depiction of the sources of potential hazards and the areas that produce, process and store food. Your next step is to analyze the ways the potential hazards can move onto the food you produce. Jo Ann Baumgartner of Wild Farm Alliance calls these pathways. Pathways include air/wind, water, wildlife, insects, and domestic animals, people, tools and equipment. Wind can blow pathogens in from surrounding areas; animals can be carriers as well as sources, people and equipment can introduce pathogens, chemicals, and physical hazards. Topographical features such as slopes can send runoff to fields.

Draw pathways on your maps—linking contaminant sources with your production and packing areas. This will make it clear where systems are needed to minimize the chance that a contaminant will get on your food product.

- With arrows show prevailing wind movement.
- Indicate water movement with arrows
- Indicate sloping land with arrows and other topographic features
- Draw equipment paths that travel between sources and food
- Draw migratory bird routes and paths of wild animals
- Indicate domestic animal lanes

4. Add Co-Management Systems to your map

Identify natural features that may capture or filter pathogens between sources of contamination and production areas and water sources. Continue on for information to apply co-management to your farm.

- Buffers
- Wetlands
- Grass strips and grass field edges
- Hedgerows and windbreaks
- Vegetated diversions
- Riparian buffers
- Forestland