



Assessing Your Fields After a Flood

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Introduction

Flooding is the result of runoff or overflowing from surface waters such as streams, lakes, and rivers. When assessing agricultural land after a flood you should consider field history, crop selection, surrounding land, the source of the floodwaters, and how long your field was flooded. If there was a crop present in your fields during this type of flood and the edible portion of that crop came into contact with floodwaters then it is considered adulterated food by the U.S. Food and Drug Administration and cannot be sold for human consumption. If you had crop insurance you should complete any necessary documentation that you will need to receive reimbursement for lost crops before moving or disposing of anything. Floodwaters can contain physical (ex – debris), chemical (ex – oil, gasoline, diesel fuel, pesticides, heavy metals), and biological (ex – sewage, mycotoxins, human pathogens) hazards. It is likely that floodwaters contain many of these hazards. After the floodwaters recede take the steps listed below to assess and reduce current and future risks.*

Practical Steps

- Allow your soil to dry sufficiently before tillage. This can take weeks depending on how long your soil was flooded and your soil conditions. Till to a minimum of 6 inches deep. Make sure you have access to equipment large enough to do this. [Shared use equipment may be available in your community.](#)
- Have your soil tested for pH and nutrient needs and follow the recommendations [at your local extension office.](#)

- Other soil tests** to consider after flooding:
 - Soil textural class (sand, silt, clay %) – this can change significantly after flooding events
 - Heavy metals (Cd, Cr, Ni, Pb, Zn, Cu) – ask for this test at your extension office
- Allow a minimum of 60 days (100 days for root crops) before planting food intended for human consumption and a minimum of 120 days after waters have receded until harvest.
- Plant a cover crop** to prevent further soil erosion, suppress weeds and improve soil structure.
- If you have fields that were not affected by flooding that still contain food crops you intend to harvest and sell for human consumption, it is important to prevent cross-contamination from flooded fields.
 - Do not enter contaminated fields until you have finished working in the clean fields.
 - Wear designated rubber boots and gloves when working in the fields that flooded
 - Clean and sanitize potentially contaminated equipment before using in fields with food crops intended for human consumption or maintain separate equipment.

- Water testing* is recommended.
 - Request a quantified generic E.coli test.– [FDA approved methods, labs locations in KY](#)
 - [Kentucky Certified Drinking Water Laboratories](#) (if well water contamination suspected)



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***Disclaimer:** Each flooded field should be assessed on a case-by-case basis before crops intended for human consumption are planted. The above best practices are meant to be a basic guide on the steps a grower should take in the assessment of their fields after a flooding event. Contact your county extension service for further technical assistance and resource guidance. If you expect or know of significant chemical, biological, or physical contamination from your flooding event, the steps above may not be sufficient to ensure that future crops grown for human consumption are safe.

****Note:** Funding may be available through local, state, and federal agencies for cover crop seeds or soil/water tests after a significant flood event – please contact your county extension agent for guidance.

References

FDA. 2011. *Guidance for Industry: Evaluating the Safety of Flood-affected Food Crops for Human Consumption*. <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-evaluating-safety-flood-affected-food-crops-human-consumption#:~:text=Segregate%20flood%2Daffected%20crops%20from,1>.

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PSA Food Safety for Flooded Farms <https://producesafetyalliance.cornell.edu/sites/producesafetyalliance.cornell.edu/files/shared/Food%20Safety%20for%20Flooded%20Farms.pdf>



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For additional information, contact your local [County Extension](#) agent

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