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Information for Growers in Areas Affected by Flooding Events

Recent flooding resulting from storms in California is a significant agricultural event for growers. While California is the focus of the recent weather event, flooding issues may and do occur, in other growing regions as well. Understanding the hazards associated with flooding and having a proactive plan in place to respond to flooding is recommended.

It is important that growers conduct and document a risk assessment for all flood affected land, assessing all potential hazards, the likelihood that the crop (present and future) will be affected and the consequences. Be aware that where the edible portion of a crop (including underground crops) has been exposed to floodwaters (either in the field or in storage), the crop is considered adulterated and should not enter human food channels. Refer to FDA references below for more information.

A thorough risk assessment will consider hazards specific to the local area including source of flood waters and possible upstream contaminant sources, type of crop, stage of crop development, degree and duration of crop exposure, weather, soil type and soil testing.

Each grower's situation is unique and will require a customized response. There are numerous resources available for those seeking information on how to handle their particular situation (some are listed below). In addition, Federal, State, university and technical specialists may be contacted for further input.

Useful References:

FDA Guidance for Industry: Evaluating the Safety of Food-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

FDA Resources for Human and Animal Food Producers Affected by Flooding https://www.fda.gov/about-fda/office-human-and-animal-food-operations/resources-human-and-animal-food-producers-affected-flooding

Western Growers On-Farm Flood Management Response https://wga.s3.amazonaws.com/science/2023/wg_sci_38711_on-flood-management-presentation 23 final.pdf

Western Growers Bulletin: California Flooding Events, Soil Sampling and Testing https://lgma-assets.sfo2.digitaloceanspaces.com/downloads/wg_science_34114_23_flood-white-paper_prod.pdf

Produce Safety and Flood Resources https://ucsmallfarmfoodsafety.ucdavis.edu/english/agricultural-water/potential-biological-hazards/produce-safety-and-flood-resources

LGMA Flooding Resources Webinar https://lgma.ca.gov/lgma-connect/flooding-resources-webinar

 $LGMA\ Flooding\ Fact\ Sheet\ \underline{https://lgma-assets.sfo2.digitaloceanspaces.com/downloads/Flooding-Fact-Sheet\ \underline{Jan-2023.pdf}$

Food Safety for Southern U.S. Food Crop Producers After Flooding https://www.aces.edu/blog/topics/crop-production/food-safety-for-southern-u-s-food-crop-producers-after-flooding/

PrimusGFS Guidance for GAP Risk Assessments https://primusgfs.com/wp-content/uploads/2022/03/PGFS-R-074-R0-Guidance-for-GAP-Risk-Assessments.pdf

PrimusLabs Toolkit Risk Assessment Documents https://intranet.primuslabs.com/Toolkit/User/Default.aspx

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Document Revision History		
Date	Rev.#	Description
08-21-2023	1	. Addition of the link to the Western Growers bulletin
		titled: California Flooding Events, Soil Sampling
		and Testing. The 3-page document provides
		guidance to help growers and shippers assess
		leafy greens fields after a flooding event. It is based
		on learnings from previous flood events and a
		research project conducted by Dr. Channah Rock
		with support by Dr. Trevor Suslow earlier 2023.

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