# Washington State Dept. of Agriculture
# Organic Food Program

Certification Fact Sheet

## Flood Events and Certified Organic Farms

The Washington State Department of Agriculture (WSDA) Organic Program is accredited to certify organic producers and handlers in accordance with the United State Department of Agriculture (USDA) National Organic Program (NOP) Rule, 7 CFR Part 205. Winter flooding is a fact of life in our state and operators have questions and concerns about how flood events may impact organic farms' certifications.

### Does flooding of a farm jeopardize the operation's certification?

*No.* The NOP regulations require that land used for organic production must not have had prohibited materials applied to it for a period of 3 years immediately preceding the harvest of an organic crop. The NOP also recognizes that there is unavoidable residual environmental contamination (UREC) which could potentially impact the crops grown on an organic site. However, the NOP standards are process based and do not mandate zero tolerance for residues in soils.

Inundation of farmland with floodwaters is not likely to jeopardize the operation's certification or the organic status of the field. However, the WSDA Organic Program may sample organic crops following a flood event. If these sample results indicate that there are prohibited material residues above FDA action levels or above 5% of the EPA tolerance, the crop must be diverted from the organic marketplace and the operation must develop and implement a plan to prevent future contamination.

### How has the WSDA Organic Program responded to previous flood events?

In December of 2007, 17 organic farms located in the Chehalis River basin were inundated with record flood waters and suffered major losses of crops, livestock, infrastructure, and machinery. Immediately following the flood, WSDA organic inspectors visited each of these 17 organic farms.

Inspectors walked the fields to note how high water levels rose, where the flood deposited sediment on the farmland, and if there were any signs of petrochemical residues or other contaminants. The inspectors' initial assessments found silt, mud, and woody debris, but no areas of concern from synthetic contaminants.

Later that winter, WSDA inspectors collected plant material growing on the flooded farms. WSDA laboratory staff tested the plants for a wide range of pesticides that would threaten the organic status of the farms' crops. Forty samples were collected and the testing results indicated that the flood waters did not cause any contamination that threatened the farms' organic status or prevented them from marketing that year's crop as organically grown.

**How can certified operations better prepare for and cope with floods?**
Jennifer Belknap of Rising River Farm in Rochester, WA, has been through several severe floods and, in a WSDA Farm Wisdom video, shares some lessons learned. Producers should assume that "hundred-year" floods will happen every year and plan accordingly. When buying flood insurance be clear on what is being covered in your policy. Some plans may not include contents of structures, but only the structures themselves. Consider insuring equipment and implements that cannot be moved to an alternative location. In addition to having places like barn lofts to store items up high, safe places where equipment and tractors can be moved are needed.

Belknap notes that now when floods threaten, the farm harvests all crops still in the field. This helps minimize losses since any crop, organic or conventional, whose edible portion has come into contact with floodwater is considered "adulterated" by the US Food and Drug Administration and cannot be sold for human consumption. Crops most at risk from floodwater contamination include leafy greens, root crops, and other crops that might be eaten raw. Since adulterated crops must be destroyed, fields that are known to flood should not be planted to these crops. Even if the contact occurred months before harvest of the crop, as may happen with root crops, for example, the crops are still adulterated.

To prevent contamination of unaffected fields, the FDA recommends a 30 foot buffer between flooded areas and unaffected fields. Farm equipment should not be driven through flooded areas. The FDA also recommends waiting at least 60 days before replanting flooded fields. If the well head was submerged, re-testing well water is a good idea to make sure that only safe, potable water comes into direct contact with produce. Producers should be aware of evidence of contamination including oily residues on soil, soil that smells of pesticides or petroleum, poor seed germination, and crops that appear diseased or stunted. Only large debris needs to be removed from fields. Tilling and increasing organic matter content of soils can speed the breakdown of some contaminants. Improving soil drainage and porosity will help restore soils affected by standing water.

**Resources**
*WSDA Organic Program*
http://agr.wa.gov/FoodAnimal/Organic/, Phone: (360)902-1805, E-mail: organic@agr.wa.gov

*WSDA Farm Wisdom: Managing Risk on Small Farms Video Series*
http://agr.wa.gov/Marketing/SmallFarm/managerisk.aspx

*WSDA Food Safety Program*
http://agr.wa.gov/FoodAnimal/FSP/, Phone: (360) 902-1876, E-mail: foodsafety@agr.wa.gov

*USDA National Organic Program (USDA NOP)*
http://www.ams.usda.gov/AMSv1.0/nop, Phone: 202-720-3252

*Cooperative Extension*
Webinar on flooding and organic certification:
http://www.extension.org/pages/60874/flooding-and-organic-certification-webinar

Food and Feed Safety after Flooding
http://www.uvm.edu/extension/?Page=emergency.html

Protecting Livestock after a Flood
http://www.nd.gov/des/uploads%5Cresources%5C261%5Cprotecting-livestock-during-a-flood.pdf