



Natural Resources Conservation Service  
WASHINGTON

## WQL20 – Transition to **organic** cropping systems

### CSP Enhancement Washington State Supplement

Land Use Applicability: Cropland

January 2014

Client/Operating Unit:

Tract Number:

Farm/Ranch Location:

Farm Number:

Specifications Date:

Field Number(s):

Planned Installation Date:

Proposed Treatment Acres:

#### Enhancement Description:

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“Transition to Organic Cropping Systems” supports the conversion of a conventional to an organic cropping system. Key to the enhancement is the inclusion of management activities that improve water and soil quality in an “Organic System Plan (OSP)” that adheres to the National Organic Program (NOP) 205.201 criteria. Included in the plan are specifics on how producers will manage pests, weeds, diseases, and plant nutrients by following a crop rotation that incorporates cover crops and by using other cultural, biological and physical methods. The OSP also covers uses of manure and compost, measures to prevent exposure of organic crops and soils to NOP-prohibited substances, and seed sources.

#### Benefits

Environmental benefits will be operation specific. Benefits may include, but are not limited to improving soil quality through reduced erosion, increased organic matter, and balancing plant nutrients; and reducing impact of the farming operation on water quality achieved by managing pests, weeds, and diseases using biological, mechanical, and/or physical practices that eliminate the need for synthetic pesticides.

#### Conditions Where Enhancement Applies

This enhancement applies to only crop land use acres in the process of transitioning to an organic production system.

#### Criteria for transition to **organic** cropping systems

1. Implement a crop rotation that improves soil quality using a sod-based rotation, inclusion of high residue crops, addition of cover crops during non crop periods, reduced tillage, and/or other soil improving practices. Work with you local NRCS Field Office to calculate RUSLE2 STIR and SCI values in order to document the soil quality improvement.
2. Manage plant nutrients using agronomic practices such as cover crops to provide or trap nutrients and/or a crop rotation that mixes high and low nutrient feeding crops.
3. Follow NRCS practice standard criteria for Nutrient Management (590) when incorporating manure when applied within the time limit specified in the NOP 205.203c1.
4. Follow NRCS practice standard criteria for Nutrient Management (590) and follow NOP 205.203c2 before land application of compost manure and plant materials for plant nutrient use
5. Follow NRCS practice standard criteria for Nutrient Management (590) and follow criteria in NOP 205.203d & e to apply additional plant nutrient supplements to ensure they do not contribute to contamination of crops, soil, or water.

6. Manage pests through a strategy that incorporates:
  - a. prevention management practices e.g. crop rotation, sanitation measures and selection of resistant crop varieties
  - b. scouting and monitoring
  - c. suppression by using biological, mechanical, or physical practices (e.g. introduction of predators or parasites of the pest species, cultivation or weed flaming, mulching).
7. Apply all materials, including plant nutrients and pesticides for crop production in accordance with the National List of Allowed Synthetic and Prohibited Natural Substances.
8. Apply no prohibited substances, as listed in NOP §205.105 to the land for a period of 3 years immediately preceding harvest of the crop
9. Establish distinct, defined boundaries and buffer zones between fields and adjacent lands to prevent the unintended application of a prohibited substance to the crop or contact with a prohibited substance applied to adjoining land that is not under organic management.
10. Complete organic transition within three (3) years as verified by obtaining an approved Organic System Plan from a valid certifying agency.

#### **Layout Sketch & Drawing** (Provide sketch, drawings, maps, and/or aerial photographs.)

- Geo-referenced field map with all delineated treatment areas where CSP Enhancement WQL20 is to be applied.

#### **Adoption Requirements**

This enhancement is considered adopted when the land use acre is certified via an Organic System Plan.

#### **Documentation Requirements**

1. Written narrative of practices used to:
  - a. Improve soil quality including crop rotation, cover crops and other associated practices,
  - b. Provide plant nutrients, and
  - c. Control pests in the cropping system.
2. Map showing field boundaries and buffer zones.
3. RUSLE2 documents displaying STIR before and after.
4. A record of the application of inputs according to the NOP rules, e.g., type, date, rate, and amount of allowed nutrients and pesticides.
5. Documentation of practices applied and steps taken to receive organic certification based on consultation with an accredited organic certifier.
6. Copy of the Organic System Plan when approved by certifying agent.

#### **References\*:**

Lockeretz, W., G. Shearer, and D. Kohl. 1981. Organic farming in the Corn Belt. Science. Vol. 211, Issue 4482. pp. 540-547.

Mohler, C.L. and S.E. Johnson, editors. 2009. Crop Rotation on Organic Farms: A Planning Manual. Natural Resource, Agriculture, and Engineering Service. Cooperative Extension. IV. Series: NRAES (Series); 177.

USDA-AMS. 2011. Organic Production and Handling Standards. National Organic Program

<http://www.ams.usda.gov/AMsv1.0/getfile?dDocName=STELDEV3004445>

USEPA. 2011. Water Quality Criteria for Nitrogen and Phosphorus Pollution.

<http://water.epa.gov/scitech/swguidance/waterquality/standards/criteria/aqlife/pollutants/nutrient/index.cfm>

USDA-Study Team on Organic Farming. 1980. Report and Recommendations on Organic Farming. US Government Printing. Office 1980-0-310-944/96. Beltsville, MD.

**Field Office Technical Guide:**

eFOTG, <http://www.nrcs.usda.gov/technical/efotg/>

\* Some online documents may take several minutes to download.

## State Supplemental Information

**States should be familiar with National Organic Program (NOP) requirements.**

Any conservation practices implemented will meet NRCS standards. The web site for Nation Organic Programs is

[http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=3f34f4c22f9aa8e6d9864cc2683cea02&tpl=/ecfrbrowse/Title07/7cfr205\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=3f34f4c22f9aa8e6d9864cc2683cea02&tpl=/ecfrbrowse/Title07/7cfr205_main_02.tpl)

### ***National Organic Program***

Specifications for Conservation Practices that are included in a conservation plan are designed and implemented in such a way as to conform to National Organic Program (NOP) criteria. The desire to transition to Organic is a planning objective for the conservation plan. Conservation practice alternatives are presented to the client and the client selects which practices will be used to address identified resource concerns and client objectives. The Organic system plan is submitted to a certifying agency for certification by the client.

An approved organic system plan includes specific resource concerns that must be addressed. These are Soil and Water Quality. Individual conservation practice specifications are designed and implemented to meet resource concern and conservation practice criteria as well as NOP plan criteria.

**For Specific Information on the National Organic Program Rules for organic certification, refer to:**

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=c4c9b5f8b4b90547eac919968c3e049b;rgn=div5;view=text;node=7%3A3.1.1.9.32;idno=7;cc=ecfr>

**(Subpart C – Organic Production and Handling Requirements)**

**For specific information on the National List of Allowed Synthetic and Prohibited Natural Substances, refer to:**

<http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateJ&leftNav=NationalOrganicProgram&page=NOPNationalList&description=National%20List%20of%20Allowed%20and%20Prohibited%20Substances&acct=nopgeninfo>

**For specific information on the National Organic Program Home Page, refer to:**

<http://www.ams.usda.gov/AMSV1.0/nop>

**Washington State Website for Organic Food and Production:**

<http://agr.wa.gov/FoodAnimal/Organic/>

**Common Conservation Practices used in a Resource Management System for clients transitioning to organic cropping systems include:**

Nutrient Management 590

Cover Crop 340

Integrated Pest Management 595

Conservation Crop Rotation 328

Residue Management Practices 345, 344 and 329

Irrigation Water Management 449

Multiple vegetative Buffer practices. 386, 393, 412

Mulching 484



5. Documentation of practices applied and steps taken to receive organic certification based on consultation with an accredited organic certifier.

6. Copy of the Organic System Plan when approved by certifying agent.

**Client's Acknowledgement** (To be signed before the Enhancement is applied.)

By signing below, I acknowledge that I:

- have reviewed and understand the site specific design, installation specifications and operation/maintenance requirements in this State Supplemental Sheet and have an understanding of the purpose(s) of this Enhancement;
- will install, operate, and maintain this Enhancement in accordance with the National Sheet, the Washington State Supplemental Sheet and the site specific specifications.
- will make no changes to the planned design and installation without prior written approval of the Natural Resources Conservation Service.
- will obtain all necessary permits and/or rights, and comply with all ordinances and laws pertaining to the installation, operation, and maintenance of this Enhancement, prior to the start of installation; and
- will assume responsibility for notifying all Utilities affected by the installation, operation and maintenance of this Enhancement.

Signature

Date

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