

State Specific Training Module for Kentucky



Purpose of this Module

This module will provide some general information that TSPs need to conduct conservation planning in our state. This information is general in nature so the TSP may need to follow up with additional reading or training to make sure they have the knowledge, skill, licenses and certifications to conduct conservation planning in this state.



Kentucky

Kentucky has a total of 120 counties.

- There are roughly 73,500 farms in the state encompassing 12,900,000 acres
- The average farm size is 174 acres.

12% of this state is public lands.

Data obtained from: 2022 State Agriculture Overview, USDA, National Agricultural Statistics Service (NASS)



Review of Major Land Uses

97% of farms in the state are considered family farms

- Cropland 51.2%
- Pastureland 23.1%
- Woodland 20.8%
- Other Farmland 4.9%

Roughly 83,000 acres are irrigated

There are approximately 163 USDA certified organic farms

Data obtained from:

2022 State Agriculture Overview, USDA, National Agricultural Statistics Service (NASS)



Top 5 Crops for the State of Kentucky

- 1. Soybeans
- 2. Corn
- 3. Hay
- 4. Wheat
- 5. Tobacco

Data obtained from: 2017 Census of Agriculture, USDA, National Agricultural Statistics Service (NASS)



Engineering

- For the planning, design, installation, and certification of engineering practices, TSPs are required to have a Professional Engineer's license from the Kentucky State Board of Licensure for Professional Engineers and Land Surveyors.
- Engineering Practices include:

Access Road (560)	Agrichemical Handling Facility (309)	Agricultural Energy Design (DIA 120)	Amendments for Treatment of Agricultural Waste (591)	Animal Mortality Facility (316)
Aquatic Organism Passage (396)	Channel Bed Stabilization (584)	Clearing and Snagging (326)	CNMP Design and Implementation Activity (DIA 101) - Structural Practices	Combustion System Improvement (372)
Composting Facility (317)	Constructed Wetland (656)	Dam (402)	Denitrifying Bioreactor (605)	Dike and Levee (356)
Diversion (362)	Drainage Water Management (554)	Dry Hydrant (432)	Emergency Animal Mortality Management (368)	Energy Efficient Agriculture Operation (374)



Engineering Practices Continued...1

Energy Efficient Building Envelope (672)	Energy Efficient Lighting System (670)	Forest Trails and Landings (655)	Grade Stabilization Structure (410)	Grassed Waterway (412)
Heavy Use Area Protection (561)	Improved Management of Drainage Water Design (DIA 164)	Irrigation Land Leveling (464)	Irrigation Pipeline (430)	Irrigation Reservoir (436)
Irrigation System, Micro-irrigation (441)	Irrigation System, Surface and Subsurface (443)	Irrigation Water Management (449)	Irrigation Water Management Design (DIA 163)	Land Clearing (460)
Land Reclamation, Abandoned Mined Land (543)	Land Reclamation, Landslide Treatment (453)	Land Smoothing (466)	Lined Waterway or Outlet (468)	Livestock Pipeline (516)
Obstruction Removal (500)	Open Channel (582)	Pond (378)	Pond Sealing or Lining, Compacted Soil Treatments (520)	Pond Sealing or Lining, Concrete (522)
Pond Sealing or Lining – Geomembrane or Geosynthetic Clay Liner (521)	Precision Land Forming and Smoothing (462)	Pumping Plant (533)	Recreation Land Improvement and Protection (566)	Road/Trail/Landing Closure and Treatment (654)
Roof Runoff Structure (558)	Roofs and Covers (367)	Row Arrangement (557)	Saturated Buffer (604)	Sediment Basin (350)



Engineering Practices Continued...2

Short Term Storage of Animal Waste and Byproducts (318)	Sinkhole Treatment (527)	Spoil Disposal (572)	Spring Development (574)	Sprinkler System (442)
Stream Crossing (578)	Streambank and Shoreline Protection (580)	Structure for Water Control (587)	Subsurface Drain (606)	Subsurface Drain, Field Ditch (607)
Subsurface Drain, Main or Lateral (608)	Terrace (600)	Trails and Walkways (575)	Underground Outlet (620)	Vegetated Treatment Area (635)
Vertical Drain (630)	Waste Closure Facility (360)	Waste Recycling (633)	Waste Separation Facility (632)	Waste Storage Facility (313)
Waste Transfer (634)	Waste Treatment (629)	Waste Treatment Lagoon (359)	Wastewater Treatment, Milk House (627)	Water and Sediment Control Basin (638)
Water Well (642)	Watering Facility (614)	Well Decommissioning (351)	Wetland Creation (658)	Wetland Restoration (657)

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Pesticide Application and Planning

NRCS conservation planners are not allowed to provide recommendations for pesticides. Planners are expected to defer these recommendations to our land grant partners.

As a private consultant a TSP must have a Commercial Pesticide applicators license for any pest management recommendations.



KY Ag Water Quality Plan

- The state of Kentucky requires any farm over 10 acres to have a state Ag Water Quality Plan.
 - Within the state Ag Water Quality Plan is a component called a Kentucky Nutrient Management Plan for nutrient application.
 - The NRCS Comprehensive Nutrient Management Plan (CNMP) and the Nutrient Management Plan (NMP) meet the KY Nutrient Management plan subcomponent.
- Liquid operations must be permitted through the KY DOW

Kentucky State Ag Water Quality Website



Review of State FOTG Requirements

- Practices planned must meet requirements of the Kentucky State Field Office Technical Guide including standards, specifications, implementation requirements and associated documents.
- Only practices listed in the Kentucky state FOTG section 4 are approved for planning in Kentucky.

Kentucky State Field Office Technical Guide



Forestry

Kentucky has a state specific forest management plan guidance. There is a template that is used by the Appalachian region that is not specific to Kentucky.

Contact KY State Forester for further guidance



Highly Erodible Lands

Compliance must be considered when planning on soils indicated as highly erodible.



Expected TSP Workflow

- The State Resource Conservationist (SRC) will be responsible for reviewing TSP conservation planning for the National Planner Designation.
- Subsequent conservation plans will be reviewed by the District Conservationist (DC) at the local USDA Service Center.
- The SRC staff will conduct plan reviews for TSP planner designation and renewals.
- TSPs will work with the local District Conservationist to make sure the proper environmental evaluations (NRCS.CPA.52) are completed.



Additional References or Training

- AGR 1 Lime and Nutrient Recommendations
- <u>University of Kentucky IPM Guide</u>
- <u>Kentucky Nutrient Management Planning Guidelines (KyNMP)</u>
- The Kentucky Statutes in Chapter 322 address Professional Engineers and Land Surveyors. Click here for the full version of <u>Kentucky Revised Statutes</u> <u>- Chapter 322</u>.
- The Kentucky State Board of Licensure for Professional Engineers and Land Surveyors. Click here to access their website <u>Kentucky Board of Engineers</u> <u>& Land Surveyors</u>

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Certificate of Completion

After viewing the State Specific Training module, please print and sign the completion certificate on the following slide.

The certificate is your acknowledgement that based on the information provided in this module, you have the proper knowledge, skills and ability to conduct planning in this State.

Within your NRCS Registry profile, enter the training and upload the signed certificate to verify completion.



STATE SPECIFIC TRAINING MODULE COMPLETION CERTIFICATE

l,	_ hereby verify I have viewed and understand the content of the Kentucky State			
TSP Name				
Specific Training Module and affirm I have the knowledge, skills, and ability to conduct conservation planning				

services in this state.

TSP Signature

Date