

# **Integrated Pest Management Plan Criteria**

## **Practice/Activity Code (114) (No.)**

### **1. Definition:**

Integrated Pest Management (IPM) is an ecosystem-based strategy that is a sustainable approach to manage pests using a combination of techniques such as chemical tools biological control, habitat manipulation, and modification of cultural practices and use of resistant varieties. Methods of chemical applications are selected in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment. The Integrated Pest Management activity plan:

- Meets NRCS quality criteria for soil erosion, water quality, air quality, and plant quality;
- Complies with federal, state, tribal, and local laws, regulations and permit requirements;
- Addresses operator's objectives.

Producers choose to implement an Integrated Pest Management Plan for reasons that include, but are not limited to:

- Managing pests effectively and economically;
- Minimizing the risk associated with pest suppression;
- Producing quality commodities;

### **2. IPM Plan Criteria**

A. This section establishes the minimum criteria to be addressed in the development and implementation of Integrated Pest Management Plans developed by a certified Technical Service Provider (TSP). Complete the Integrated Pest Management Plan (114) template provided that includes the following items:

- Background and site information;
- Farm location and mailing address;
- Soils Map and soil map units description using the Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> as a minimum printout the Soil Report > AOI Inventory > Map Unit Descriptions
- Site specific assessment of environmental risk associated with existing and alternative pest suppression system;
- Digital Conservation plan map with;
  1. Streams, surface waters, surface drainage, and wetlands on or adjacent to site
  2. Property lines, field Boundaries, name/number, acres, and land use
  3. Map scale
  4. Structural practices located on Map
  5. Legend

- Grower Name, County, State;
- Monitoring guidelines;
- State University's IPM guidelines for specific crops (optional)
- Record Keeping
- WIN-PST Report provided when pesticides are applied.
- Total acres of the plan;
- Resource evaluations and mitigation process for soil, water, air and plant quality as related to suppression tactics that are being applied to the treated site.
- Planned conservation practices and IPM technique to mitigate potential environmental risk not to degrade the soil, water, air, and plant quality as related to suppression tactics being applied to manage the pest.
  - See Agronomy Technical Note #5: Pest Management in the Conservation Planning Process @ <http://directives.sc.egov.usda.gov/> See Technical Notes > Title 190 Ecological Sciences > Agronomy > Technical Note #5.
  - NRCS (State Field Office Technical Guide – FOTG) [http://efotg.sc.egov.usda.gov/efotg\\_locator.aspx](http://efotg.sc.egov.usda.gov/efotg_locator.aspx), Select State, Go to Section IV, then to Practice 595 Integrated Pest Management.
  - Other practices to address soil, water, air, plant quality, and other resources concerns.
- List and document information about the site condition, pests, tools needed on the template or jobsheet;
  1. Site Specific Assessment of Environmental Risks Associated with Existing and Alternative Pest Management System.
    - a. Digital Conservation Plan Map;
    - b. Field locations of planned areas;
    - c. Soil type and characteristics; note potential for runoff or permeability;
    - d. Site risk condition description;
    - e. Window Pesticide Screening Tool (WIN-PST) Soil/Pesticide Interaction Hazard Report
    - f. Identification of pests, crop, plant community condition and degree of infestation;
    - g. Irrigation system and management (where appropriate);
    - h. Locations of sensitive resource areas identified on the plan map to include:
      - Streams, drains, surface waters, wetlands, wells, groundwater, drains, grassed waterways and existing buffer practices;
      - Sensitive wildlife habitat (on and off-site), food plots;

- Potential off-target drift areas;
  - Identification of beneficial predators and parasites;
  - Consideration for pollinator habitat and pollinator protection;
  - Other risk mitigation practices in use.
2. **Monitoring Guidelines:** This element addresses monitoring strategies that utilize damage and economic thresholds to prevent pest resistance and potential harmful effects on human health and the environment. The monitoring should include:
- a. List of crops to be maintained
  - b. Scouting for insects (both beneficial and pest), disease, weeds with dates and results;
  - c. Weather forecasting;
  - d. Degree-day prediction of pest life cycle events;
  - e. Other methods of monitoring and results, such as pheromone traps
3. **State University IPM guidelines for specific crops.** This element addresses individual State University Year Round Integrated Pest Management Programs to be utilized by planners:
- Where available use State Agricultural University issued crop specific:
- a. Integrated Pest Management guidance for individual crops that indicate activities to be undertaken throughout the year based on the crop production cycle. For example; monitoring may be prescribed for a particular pest or pests during pre-plant, pre-emergence, rapid growth, dormancy, bud-break, bloom, fruit set, maturation, harvesting, postharvest and storage periods;
  - b. Where available, use State Agricultural University issued Integrated Pest Management guidance for individual crops, pests and diseases. These differ from year round programs in that they may only refer to management of a single pest.
- Note:** There are non-state university organization that likewise provide credible guidelines (e.g., Rodale Institute, Kutztown,)
4. **Recordkeeping.** This element addresses a list of records that shall be maintained detailing:
- a. Date of monitoring;
  - b. Results of monitoring;
  - c. Identification of both vertebrate and invertebrate pests;
  - d. Identification of beneficial insects enlisted;
  - e. Identification of specific raptors and/or bats enlisted;
  - f. Identification of crop and/or plant community condition;

- g. Threshold of infestation;
  - h. Strategies implemented with dates;
  - i. All required records required by state and federal requirements;
  - j. Records required or needed as part of the State University IPM guidelines being used;
- Typical Practice Standards that support an Integrated Pest Management Activity Plan:
    1. Document the planned conservation practices. When any of the following practices are used in this plan the site specific specifications shall be developed in the attached template, in a NRCS approved Jobsheet, or separate plan.
      - Integrated Pest Management (595)
      - Conservation Crop Rotation (328)
      - Cover Crop (340)
      - Field Border (386)
      - Filter Strip (393)
      - Residue and Tillage Management, Mulch Till (345)
      - Residue Management, No Till/Strip Till/Direct Seed (329)
      - Residue Management, Ridge Till (346)
      - Residue Management, Seasonal (344)
      - Stripcropping (585)
    2. For all other practices the practice shall be documented for the planned amount, the fields where the practice is to be applied, and the planned year of application. Below is a reference guide that provides mitigations conservation practices and IPM techniques for potential environmental risk associated with pest control tactics.
      - Agronomy Technical Note #5: Pest Management in the Conservation Planning Process @ <http://directives.sc.egov.usda.gov/> See Technical Notes > Title 190 Ecological Sciences > Agronomy > Technical Note #5.References

### 3. Deliverables for the Client – a hardcopy of the plan that includes:

- Cover page (Template) – name, address, phone of client and TSP; Total Acres of the Plan, signature blocks for the TSP and producer, and a signature block for the NRCS acceptance.
- Complete hardcopy of the client’s plan (MsWord copy of the “Plan Template”) with appropriate practice specifications (or jobsheets) for the (list in D above) planned practices and mitigations. **Optional:** If a Conservation Plug-in/Cplanner version is used the Conservation Plan Map, the Soils Map, and Planned

Conservation Practices can be deleted from the Planned Template.

- Soils Map and soil map units descriptions using the Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> as a minimum printout the Soil Report > AOI Inventory > Map Unit Descriptions
- Resource assessment results soil erosion, water quality, air quality, plant quality, and others identified resource concerns that may be needed. Complete in the template or add printouts from assessment tool (RUSLE2, WEPS).
- Provide the Window Pesticide Screening Tool (WIN-PST) Soil/Pesticide Interaction Hazard Ratings report (**Only if the WIN-PST Identified Hazard Rating is intermediate or higher**).
- Digital Conservation plan map with;
  - a. Streams, surface waters, surface drainage, and wetlands on or adjacent to site
  - b. Required setbacks
  - c. Property lines, field boundaries, field name/number/acres, and land use
  - d. Map scale
  - e. Structural practices located on map
  - f. Legend
  - g. Grower Name, County, State

**4. Deliverables for NRCS Field Office (Same as client, but add an electronic copy of the materials:**

- Cover page (Template) – name, address, phone of client and TSP; Total Acres of the Plan, signature blocks for the TSP and producer, and a signature block for the NRCS acceptance.
- Complete hardcopy of the client’s plan (MsWord copy of the “Plan Template”) with appropriate practice specifications (or jobsheets) for the (list in D above) planned practices and mitigations. **Optional:** If a Conservation Plug-in/Cplanner version is used the Conservation Plan Map, the Soils Map, and Planned Conservation Practices can be deleted from the Planned Template.
- Soils Map and soil map units descriptions using the Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> as a minimum printout the Soil Report > AOI Inventory > Map Unit Descriptions
- Resource assessment results soil, water, air, plant quality, and others identified resource concerns that may be needed) complete in the template or add printouts from assessment tool (RUSLE2, and WEPS).
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- f. Legend
- g. Grower Name, County, State