

### Natural Resources Conservation Service

## NRCS Pest Management

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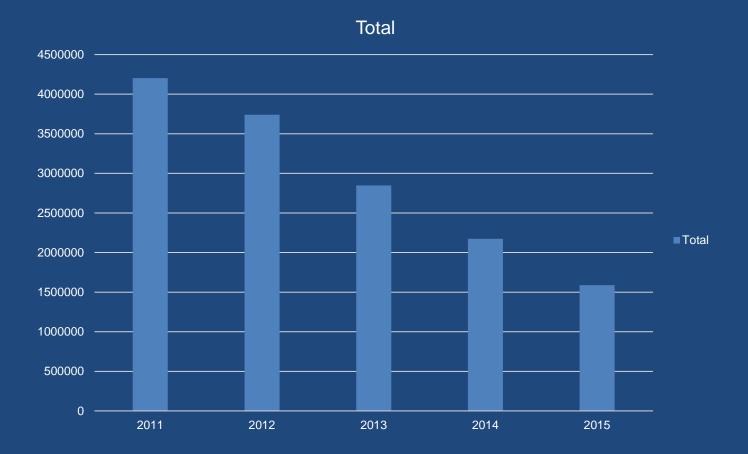
## **NRCS** Pest Management Policy

### • NRCS roles in pest management are to:

- (1) Evaluate environmental risk associated with a client's probable pest suppression strategies.
- (2) Provide technical assistance to clients to mitigate the identified environmental risk of pest suppression strategies through mitigation practices and activities.
- (3) Assist clients to adopt IPM techniques that protect natural resources.
- o (4) Assist clients to:
  - (i) Inventory, assess, and suppress noxious and invasive weeds on non-cropland.
  - (ii) May provide assistance to clients to suppress weeds to ensure successful implementation and/or maintenance of permanent vegetative conservation practices (e.g., buffer type practices).

NRCS shall not develop chemical pest suppression recommendations or change pesticide label instructions for clients.

## **IPM Acres Reported Applied**



USDA

## **Historical Application of IPM**

<b>EWG's</b> Conservation	Database About the data 😆							
EQIP in The United Stat	z The United States							
The United States	Pick a state 🗸							
EQIP								
Summary	Environmental Quality Incontinue Province (EQIP) prosting quite powersts in							
By Practice Class	Environmental Quality Incentives Program (EQIP) practice suite payments in the United States, 1997-2015							
By Practice Suite	Practice: Integrated Pest Management (IPM)							
By Most Common Practice	r ractice. Integrated r est management (n m)							
Contract Statistics	Practice Definition: A site specific combination of pest prevention, pest avoidance, pest monitoring and pest							
Impacts	supression strategies.							
Top States	30,000,000 15,000							
About EQIP								
WHIP	20,000,000							
CRP								
<u>CSP</u>	10,000,000							
	0 1998 2000 2002 2004 2006 2008 2010 2012 2014							
	<u>CanvasJ5.com</u>							

### January 2010

#### INTEGRATED PEST MANAGEMENT (IPM)

(Ac.)

CODE 595

#### DEFINITION

A site-specific combination of pest prevention, pest avoidance, pest monitoring, and pest suppression strategies.

#### PURPOSE

- Prevent or mitigate off-site pesticide risks to water quality from leaching, solution runoff and adsorbed runoff losses.
- Prevent or mitigate off-site pesticide risks to soil, water, air, plants, animals and humans from drift and volatilization losses.
- 3. Prevent or mitigate on-site pesticide risks to pollinators and other beneficial species through direct contact.
- 4. Prevent or mitigate cultural, mechanical and biological pest suppression risks to soil, water, air, plants, animals and humans.

#### CONDITIONS WHERE PRACTICE APPLIES

On all lands where pests will be managed.

### July 2008

#### PEST MANAGEMENT

(Ac.)

CODE 595

#### DEFINITION

Utilizing environmentally sensitive prevention, avoidance, monitoring and suppression strategies, to manage weeds, insects, diseases, animals and other organisms (including invasive and non-invasive species), that directly or indirectly cause damage or annoyance.

#### PURPOSE

This practice is applied to support the following purposes:

- Enhance quantity and quality of commodities.
- Minimize negative impacts of pest control on soil resources, water resources, air resources, plant resources, animal resources and/or humans.

#### CONDITIONS WHERE PRACTICE APPLIES

Wherever pests will be managed.

## Standard Comparison

### January 2010

- Identification of appropriate mitigation techniques. See Agronomy Technical Note 5 - Table || for pesticide risk mitigation management techniques.
- A list of pest prevention and avoidance strategies that will be implemented, if applicable.
- A scouting plan and threshold levels for each pest, if applicable.
- Other monitoring plans, if applicable, such as weather monitoring to indicate when pesticide application for prevention is warranted.
- A list of accepted pest thresholds or methods to determine thresholds that warrant treatment, if applicable.

Note: Items 5, 6, 7 and 8 are required to document a comprehensive IPM system, but they may not be applicable when only a limited number of mitigation techniques are sufficient to address identified natural resource concerns.

### July 2008

#### PLANS AND SPECIFICATIONS

The pest management component of a conservation plan shall be prepared in accordance with the criteria of this standard and shall describe the requirements for applying the practice to achieve its intended purpose(s).

As a minimum, the pest management component of a conservation plan shall include:

- Plan map and soil map of managed site, if applicable.
- Location of sensitive resources and setbacks, if applicable.
- Environmental risk analysis, with approved tools and/or procedures, for probable pest management recommendations by crop (if applicable) and pest.
- Interpretation of the environmental risk analysis and identification of appropriate mitigation techniques.
- · Operation and maintenance requirements.



## Hazard Ratings

WIN-PST Identified Hazard Rating	Minimum Mitigation Index Score Level Needed
Low or Very Low	None Needed
Intermediate	20
High	40
Extra High	60



#### Table 1 IPM techniques for reducing pesticide environmental risk

	Mitigation index value <sup>4</sup> (by pesticide loss pathway)				
IPM techniques <sup>1</sup>	Leaching	Solution runoff	Adsorbed runoff	Drift	Function and performance criteria
Application timing—ambi- ent temperature				5	<ul> <li>Reduces exposure—spraying during cooler temperatures (e.g., early morning, evening or at night) can help reduce drift losses</li> <li>Avoid spraying in temperatures above 90 °F</li> </ul>
Application timing—rain	15	15	15		<ul> <li>Reduces exposure—delaying application when significant rainfall events are forecast that could produce substantial leaching or runoff can reduce pesticide transport to ground and surface water</li> </ul>
Application timing—rela- tive humidity				5	<ul> <li>Reduces exposure—spraying when there is higher relative humidity reduces evaporation of water from spray droplets thus reducing drift losses</li> </ul>
Application timing—wind				10	<ul> <li>Reduces exposure—delaying application when wind speed is not optimal can reduce pesticide drift</li> </ul>

Table 2 Conservation practices for reducing pesticide environmental risk

	Mitigation index value <sup>4</sup> (by pesticide loss pathway)				
Pesticide mitigation conservation practices <sup>1,2</sup>	Leaching	Solution runoff	Adsorbed runoff	Drift	Function and performance criteria
Alley Cropping (Code 311)	5	5	10	10	<ul> <li>Increases infiltration and uptake of subsurface water; reduces soil ero- sion; can provide habitat for beneficial insects, which can reduce the need for pesticides; also can reduce pesticide drift to surface water</li> </ul>
Anionic Polyacrylamide (PAM) Erosion Control (Code 450)		5	15		<ul> <li>Increases infiltration and deep percolation; reduces soil erosion</li> </ul>
Bedding (Code 310)	5	5	5		<ul> <li>Increases surface infiltration and aerobic pesticide degradation in the root zone</li> </ul>



### **Technical Notes**



United States Department of Agriculture

February 2014

**Agronomy Technical Note No. 5** 

Pest Management in the Conservation Planning Process USDA

### **Technical Notes**



United States Department of Agriculture

February 2014

Agronomy Technical Note No.9

Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators Using Integrated Pest Management and Other Conservation Practices







THE XERCES SOCIETY FOR INVERTEBRATE CONSERVATION

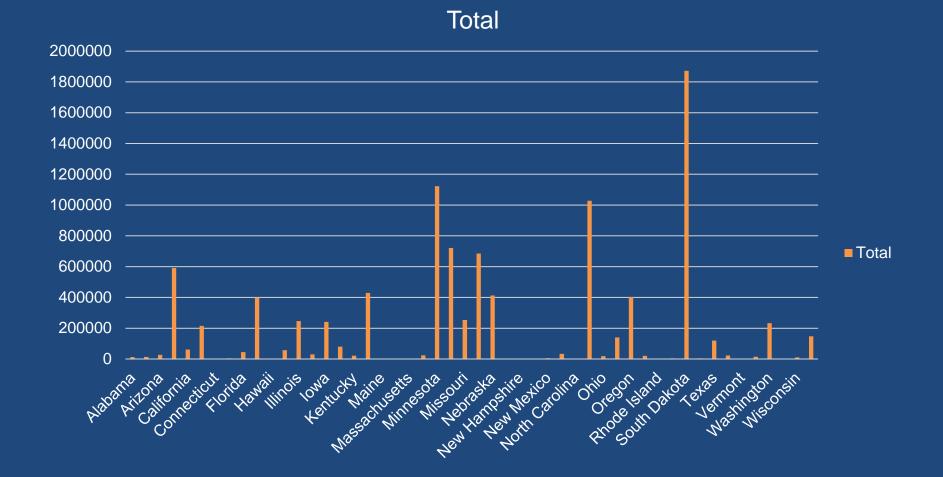


## CSP IPM Enhancements 2009 - 2016

- High Level IPM to Reduce pesticide environmental risk
- IPM for organic farming
- Non-chemical pest management for livestock
- Bundle for Improving nutrient and pesticide application: Drift reducing nozzles, adjuvants to reduce drift, Smart Sprayer, widening buffers



### CSP IPM Practice 2009-2016 3<sup>rd</sup> qtr 9,781,759 acs





## New CSP IPM Enhancements

CONSERVATION ENHANCEMENT ACTIVITY E595116X

#### CONSERVATION STEWARDSHIP PROGRAM

Reduce risk of pesticides in surface water by utilizing precision

pesticide application techniques

CONSERVATION ENHANCEMENT ACTIVITY E595116Z STEWARDSHIP PROGRAM

Reduce risk of pesticides in surface water by utilizing IPM PAMS techniques

CONSERVATION ENHANCEMENT ACTIVITY E595129Z CONSERVATION STEWARDSHIP PROGRAM

Reduce ozone precursor emissions related to pesticides by utilizing IPM PAMS techniques



## Welcome feedback: Contact Information

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