



PERC Pesticide Educational
Resources Collaborative

PERC Update

March 3, 2026 | AAPCO

Suzanne Forsyth, UC Davis Continuing & Professional Education
Kaci Buhl, Oregon State University





PERC Pesticide Educational
Resources Collaborative

The **Pesticide Educational Resources Collaborative** is a 5-year cooperative agreement between the EPA's Office of Pesticide Programs and University of California Davis Continuing and Professional Education, in collaboration with Oregon State University.

PERC: 2016 – 2021
(with a one-year no-cost extension)

PERC 2.0: 2021 - 2026
(with the last year's funding removed)

Advisory Board 2025-2026

Agnes Baik – Legal Aid Chicago

Lisa Blecker* – Colorado State University

Melanie Forti* – Association of Farmworker Opportunity Programs

Carmina Hanson – North Carolina Department of Agriculture

Caroline Kohnert – Plunkett's Pest Control

Catherine LePrevost – North Carolina State University

Bethany Plewe – U.S. EPA, Region 10

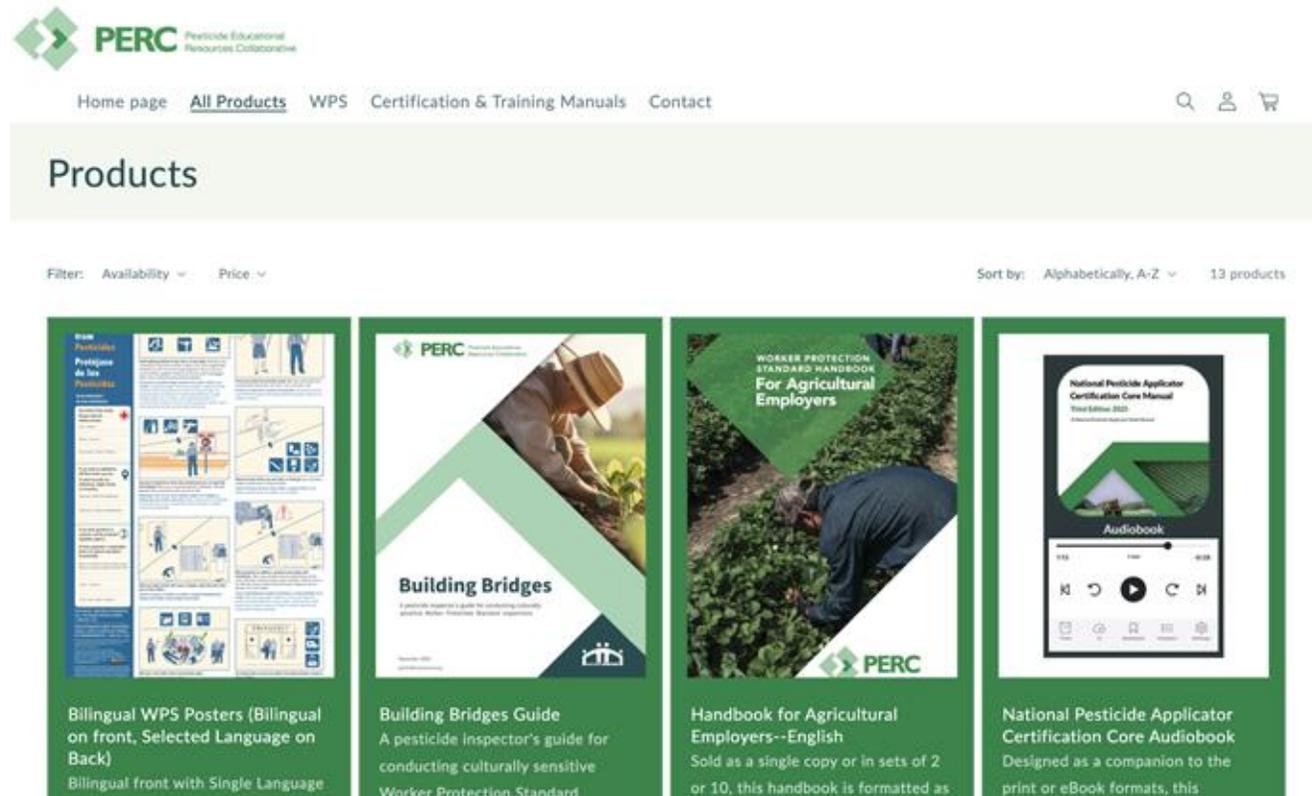
David Reddel – Wilbur-Ellis Agribusiness

Amy Sullivan* – Association of American Pesticide Control Officials

*Inaugural members since 2016

PERC Operations

- PERC operations will end in phases through August 2026, with a transition for some functions to UC Davis Continuing & Professional Education (UCD CPE).
- UCD CPE is committed to maintaining the PERC Store and the availability of print-runs (hard copies) and modifiable files for applicator certification manuals.
- The continued availability of the PERC website and Vimeo channel depends on several factors, such as income from the PERC Store.





Looking Back & Looking Ahead

Looking Back

- “The Resources Grant” before PERC
- PERC 1: Emphasis on WPS
- PERC 2: Emphasis on C&T and Community-Based Projects

Looking Ahead

- PERC Store and more from UCD CPE
- States/coalitions charged with creating/funding new resources to implement FIFRA, ESA, etc.

Timeline of Actions

1972

FIFRA was amended by the Federal Environmental Pesticide Control Act of 1972

1974

40 CFR Part 171 is formally issued, requiring all RUP users to be certified by 1976

1975

The first federal grants for Pesticide Applicator Training (PAT) were issued to State Extension Services

1980

The concept of “recertification” developed. Requirements were state specific until 2017

2002

The name PAT was changed to Pesticide Safety Education Program (PSEP)

2010-2015

NASDARF executed the first "Resources Grant" to support PSEPs. They drafted national manuals: core, aerial, fumigation, etc.

2017

C&T rule updated (40 CFR Part 171)

1988

Baseline funding increased to \$15K for each state's PAT program

2000-2007

PSEP funding via CSREES eliminated; PRIA 3 adds \$500K/year

2016

PERC selected to execute the Resources Grant

1992

The Worker Protection Standard (WPS) issued by EPA in 40 CFR Part 170

1995

The WPS takes effect nation-wide

2015

Major revisions were published

2016-

PERC selected to execute the Resources Grant

2017-2018

WPS Revisions went into effect, becoming enforceable





The Resources Grant

PERC 2016 - 2026
NASDARF 2010 - 2015

- Support implementation of FIFRA, WPS, and the C&T Rule
- “Baseline” resources that meet federal requirements can be adopted and/or adapted by PSEPs and SLAs
- States/tribes/territories “do more with less” with the resources provided



The Resources Grant

PERC 2016 - 2026
NASDARF 2010 - 2015

Efficiencies:

- A limited pool of experts is assembled to create one authoritative resource, rather than 50+ resources
- EPA reviews one resource, rather than 50+, for accuracy
- Preventing multiple “how to comply” resources prevents confusion for the regulated community and inspectors
- A five-year project (agreement) can generate more and better resources than five one-year projects (agreements)

2016-

PERC selected
to execute the
Resources
Grant

WPS Resources?

2017-2018

WPS Revisions
went into effect,
becoming
enforceable

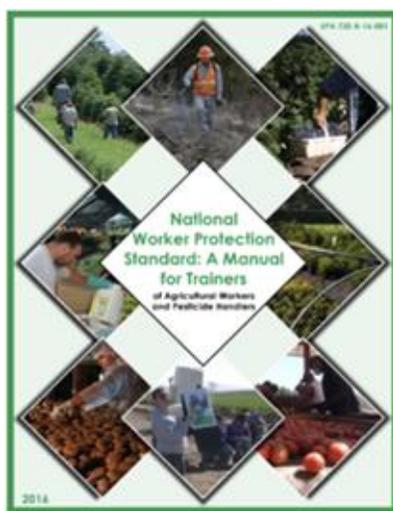
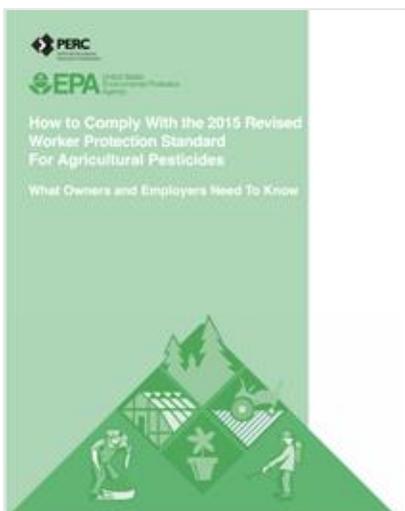
PERC Resources for WPS 2016-2018

WPS Compliance Assistance Library

Does the WPS apply to you?

Frequently Asked Questions and Guides for:

- Agricultural Workers (Disponible en español)
- Pesticide Handlers (Disponible en español)
- Agricultural Employers
- Crop Advisors
- Labor Contractors
- Trainers of Workers
- Trainers of Handlers
- Commercial Pesticide Handler Employers



Duties for ALL Employers

General Information

Decontamination Supplies

Employer Information Exchange

Emergency Assistance



2016-

PERC selected
to execute the
Resources
Grant

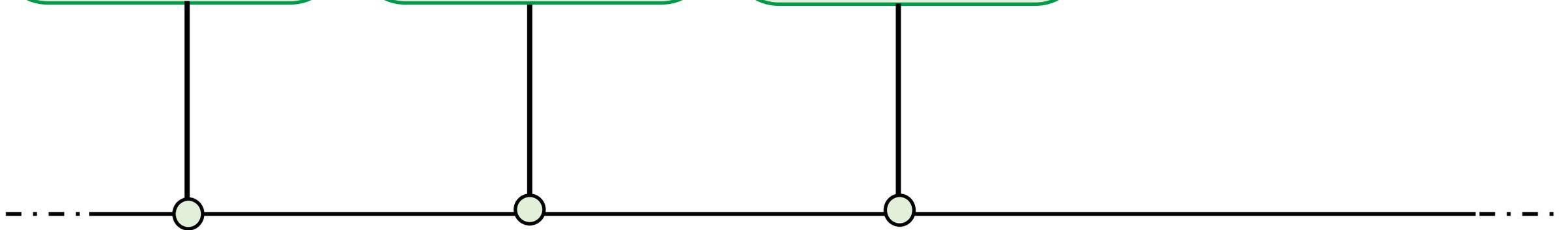
2017

C&T rule
updated (40 CFR
Part 171)

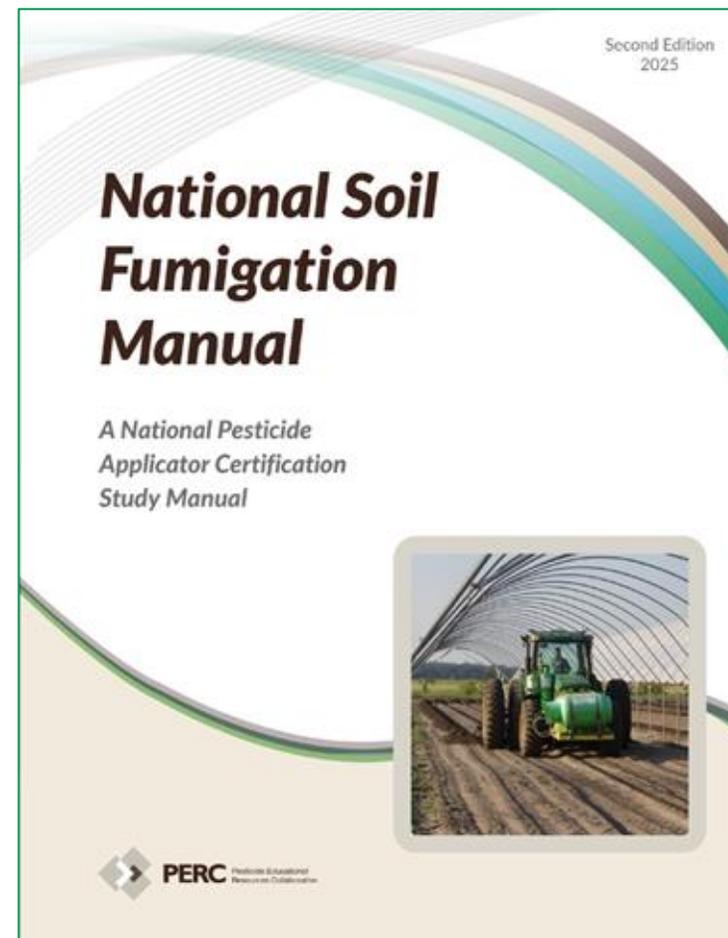
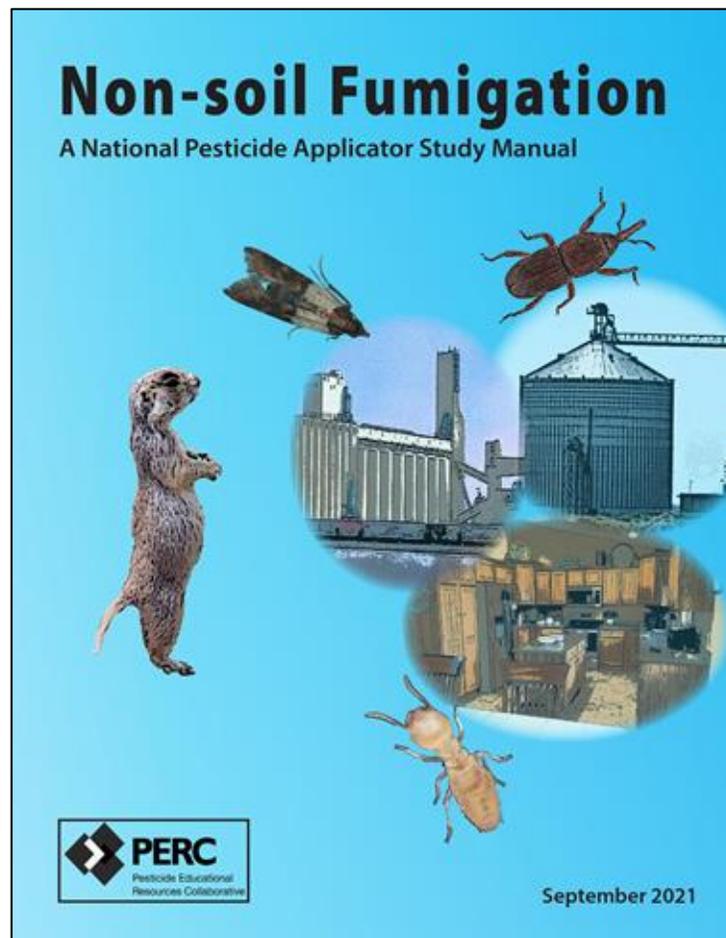
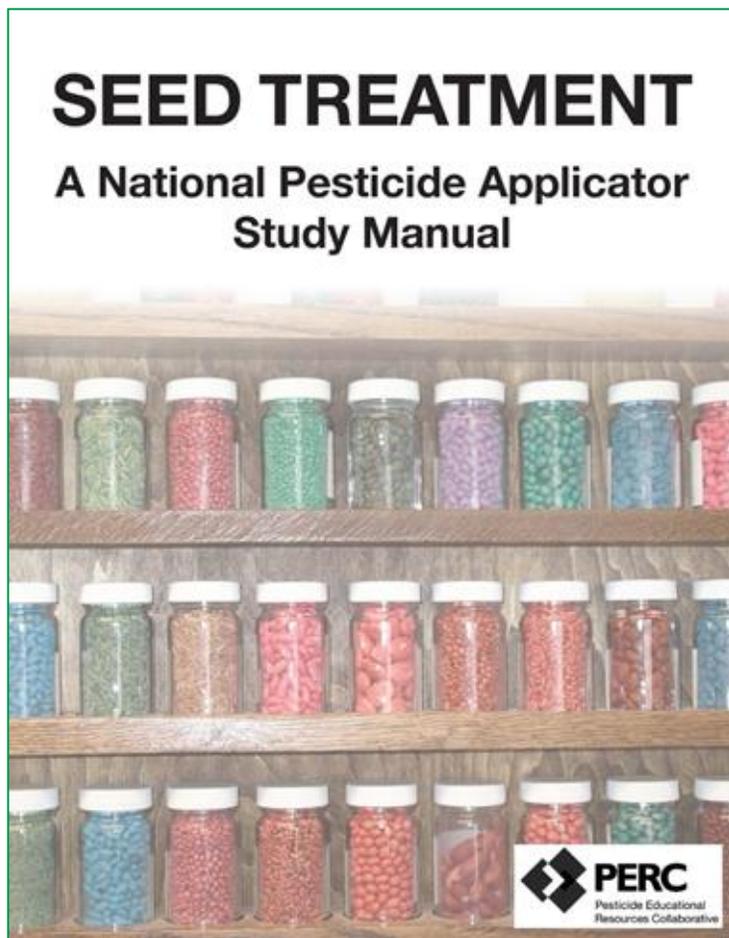
2017-2018

WPS Revisions
went into effect,
becoming
enforceable

**C&T
Resources?**



PERC Resources to support C&T Rule implementation



PERC Resources to support C&T Rule implementation

 **PERC** Pesticide Educational Resources Collaborative

Pesticide Safety Training Flipchart for Noncertified Applicators Using Restricted Use Pesticides at Non-Agricultural Sites



MEETING UPDATED COMPETENCY STANDARDS FOR CERTIFIED PESTICIDE APPLICATORS

To comply with the 2017 revision of 40 CFR Part 171.103



A guide for certifying authorities to evaluate, update, or create training materials and/or certification exam content to identify and fill potential gaps

 **PERC** Pesticide Educational Resources Collaborative
www.pesticideresources.org

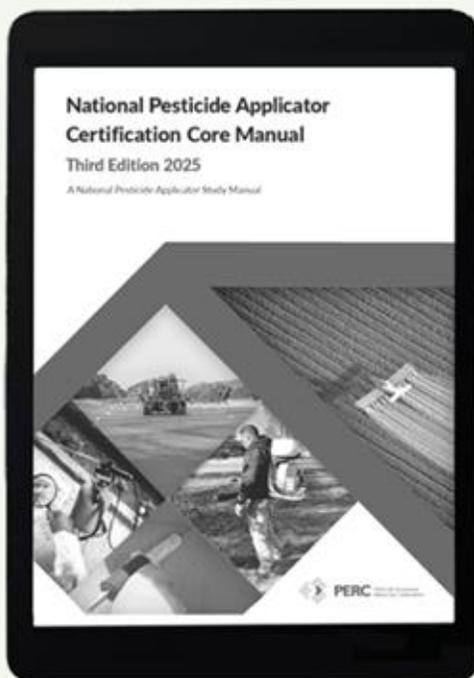
Report from the Pesticide Educational Resources Collaborative (PERC) Unmanned Aerial System (UAS) Task Force (Phase 1) Recommendations to the PERC Advisory Board for Training Materials for UAS Applicators



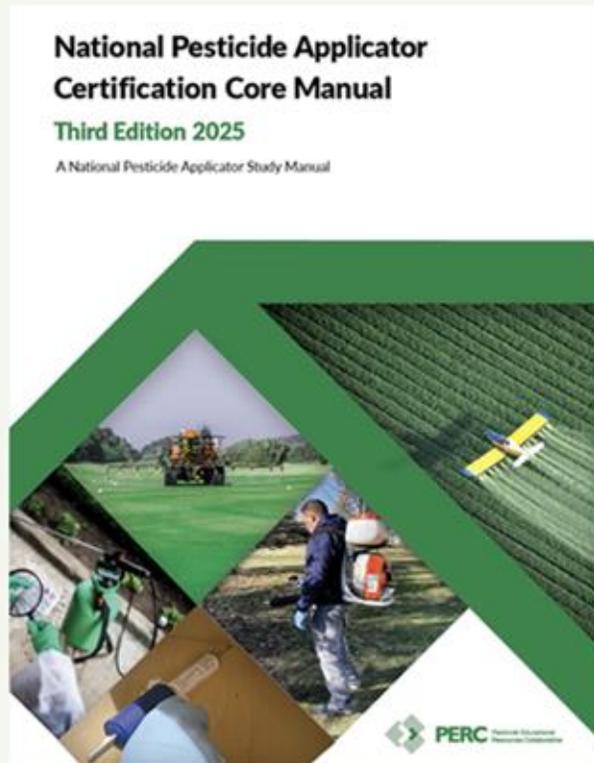
 **PERC** Pesticide Educational Resources Collaborative
Published by the Pesticide Educational Resources Collaborative
June 2025

PERC Resources to support C&T Rule implementation

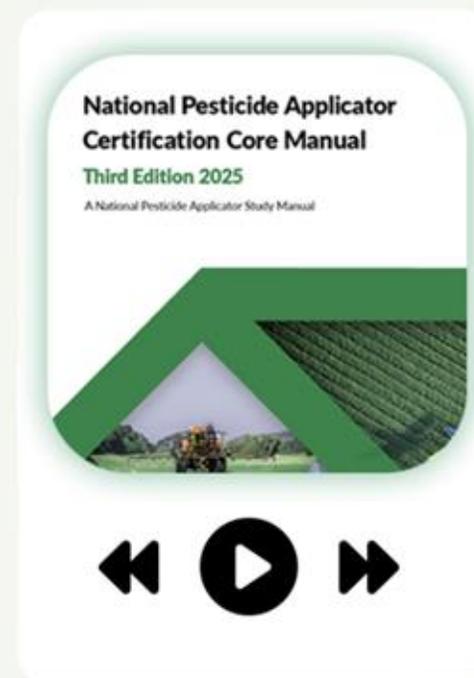
Kindle eBook



Print Manual



Audiobook





PERC Pesticide Educational
Resources Collaborative

An Essential Partner for PSEPs & SLAs

- Supporting WPS implementation (40 CFR Part 170) with training resources for employers, workers, handlers, and more
- Manuals, exams, and other training resources to support implementation of the C&T Rule: 40 CFR Part 171

PRIA 5 Coalition is meeting

2016-

PERC selected to execute the Resources Grant

2020

Resources Grant RFA published with new Ag CBPs required

2021

PERC selected to execute the Resources Grant a 2nd time

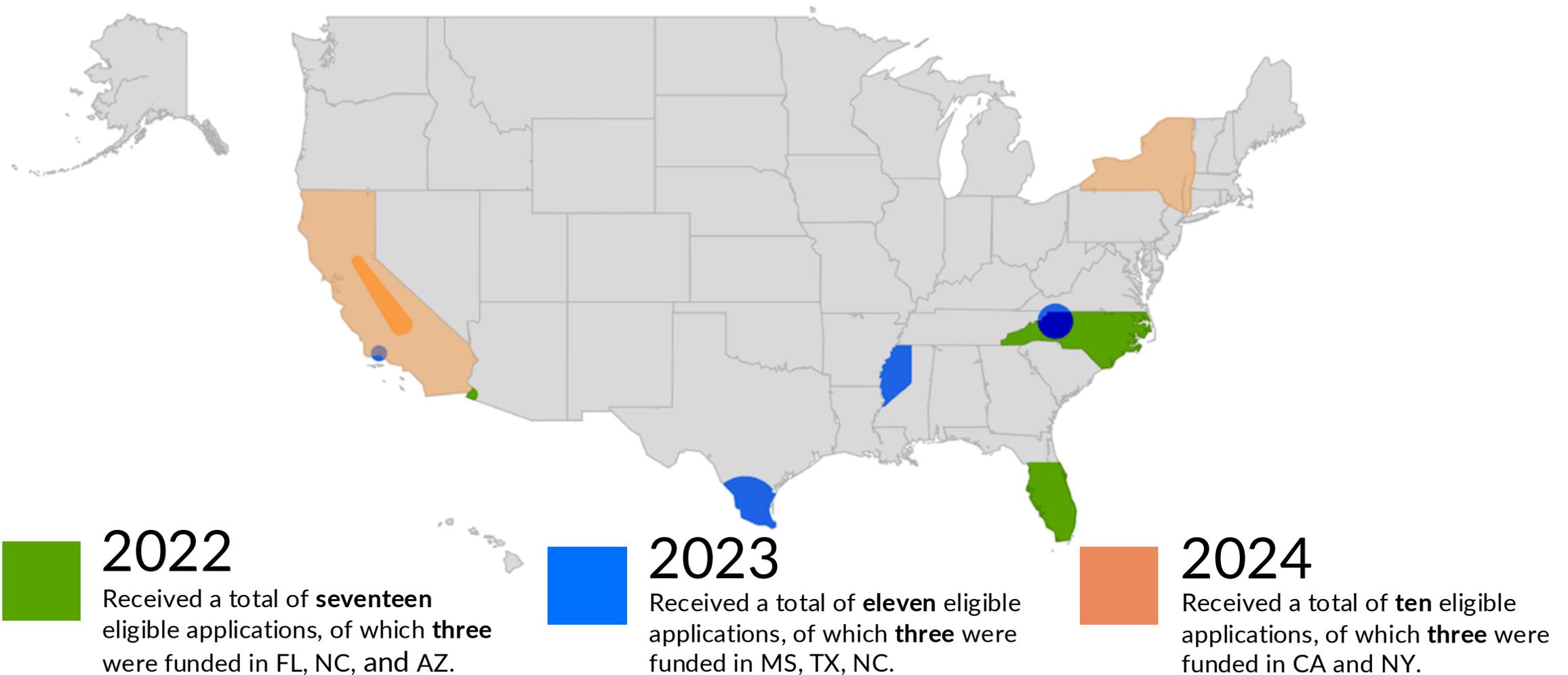


Agricultural Community-based Projects (AgCBPs)



Bassett Healthcare Network
New York Center for Agricultural
Medicine and Health

AgCBPs by Geographic Location



Resources Funded by PERC Made by Local Groups

Pesticides and Personal Protective Equipment (PPE)

ALWAYS READ THE LABEL

THIS INFORMATION OFFERS A GENERAL OVERVIEW. ALWAYS CONSULT THE LATEST PESTICIDE PRODUCT LABEL FOR SPECIFIC DETAILS AND UP-TO-DATE INSTRUCTIONS, AS FORMULATIONS AND PRODUCT AVAILABILITY CAN CHANGE.

THE "PRECAUTIONARY STATEMENT" SECTION OUTLINES THE REQUIRED PPE, SPECIFYING TYPES OF GLOVES, PROTECTIVE CLOTHING, EYE PROTECTION, AND RESPIRATORS.

DIFFERENT APPLICATION METHODS MAY REQUIRE VARYING LEVELS OF PPE. THE LABEL WILL HAVE INSTRUCTIONS RELATED TO THE TASK PERFORMED.

DIFFERENT PHYSICAL FORMS OF THE PESTICIDE, SUCH AS GRANULES, POWDERS, LIQUIDS, OFTEN REQUIRE DIFFERENT TYPES OF PPE.



RISK TIPS	LOW	MODERATE	INTERMEDIATE	HIGH
	<ul style="list-style-type: none"> WEAR LIGHTWEIGHT, BREATHABLE CLOTHING. CONSIDER SUN PROTECTION. FOCUS ON COMFORT. WEAR SOCKS WITH CLOSED-TOED SHOES. 	<ul style="list-style-type: none"> USE CHEMICAL RESISTANT PRODUCTS (E.G. GLOVES AND BOOTS) WITHOUT FLOCCED LINING. MADE OF NYLON, PEG, OR POLYURETHANE. CONSIDER REUSABLE PPE FOR SUSTAINABILITY. 	<ul style="list-style-type: none"> COVERALLS CREATE A BARRIER FOR MOST SKIN SURFACES. PULL COVERALLS OVER TOP OF BOOTS. CHEMICAL GOGGLES ARE WORN OVER TOP OF THE RESPIRATOR. 	<ul style="list-style-type: none"> THE APRON HELPS STOP SPLASHING DURING LOADING AND UNLOADING. FULL FACE RESPIRATORS MAY HELP PREVENT FOGGING. MULTIPLE LAYERS OF PPE CAN TRAP HEAT AND REDUCE EVAPORATION. WATCH FOR SIGNS OF HEAT STRESS AND SUNBURN. DO NOT RESTRICTED USE PESTICIDES (RUPP.)
EXAMPLES	N/A	HERBICIDES LIKE GLYPHOSATE AND GUANIDINATE	SOME HERBICIDES LIKE DICHAIRA AND ATRAZINE, AND INSECTICIDES, LIKE IMIDACLOPRID	

BASED ON HEALTH AND SAFETY ALLIANCE WWW.HEALTHANDSAFETY.COM
FUNDED BY THE PESTICIDE EDUCATIONAL RESOURCES COLLABORATIVE (PERC) #WORLDWIDE
DESIGN & ILLUSTRATION BY SCOTT HODNEY



Ministerio Médico Surry & La Colaboración de Recursos Educativos sobre Pesticidas

EVITA Pesticidas:

Educación Virtual Inclusiva para Trabajadores Agrícolas: Árboles de Navidad

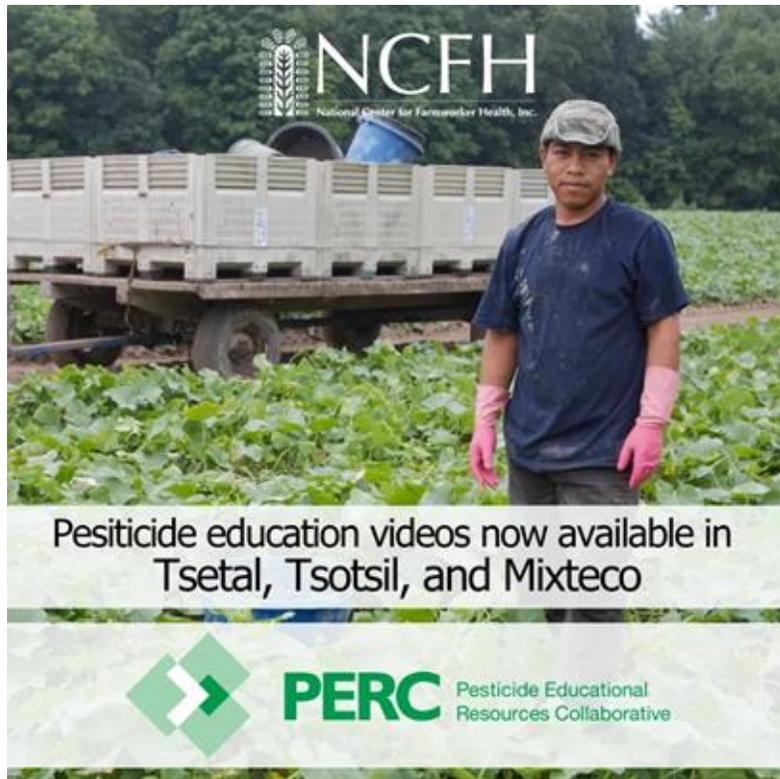
SMM PERC




REPORTE

- ODA: Hora
- ODA: Ubicación
- Ubicación del campo
- ODA: Operador
- Pesticida

Historic Firsts



Language	Subtitles	YouTube Link
Mixteco	Spanish	https://youtu.be/eDz2NrIN8dE
Tsetal	Spanish	https://youtu.be/RxmK30B05Zk
Tsetal	Tsetal	https://youtu.be/VgkJmdJ7S0I
Tsotsil	Spanish	https://youtu.be/WtanQTXhqml
Tsotsil	Tsotsil	https://youtu.be/8KdPb68sWAg

PRIA 5 Coalition is meeting and prioritizing

2016-

PERC selected to execute the Resources Grant

2020

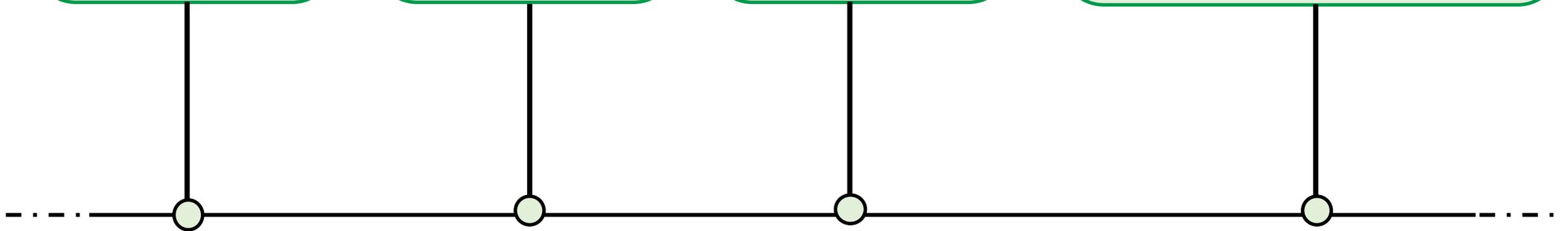
Resources Grant RFA published with new Ag CBPs required

2021

PERC selected to execute the Resources Grant a 2nd time

2022

PRIA 5 is signed removing the Resources Grant after PERC ends, adding Farmworker-focused agreements



Did You Know? PERC has a Storefront!

Print and Online Manuals, Trainings, and Guides for you and your teams.

PERC's Storefront



Home page [All Products](#) WPS Certification & Training Manuals Contact



Products

Filter: Availability Price

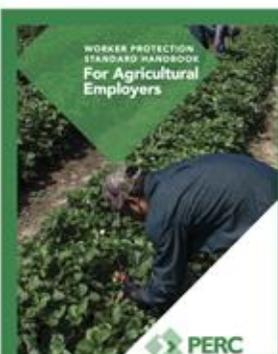
Sort by: Alphabetically, A-Z 13 products



Bilingual WPS Posters (Bilingual on front, Selected Language on Back)
Bilingual front with Single Language



Building Bridges
A pesticide inspector's guide for conducting culturally sensitive Worker Protection Standard



Handbook for Agricultural Employers--English
Sold as a single copy or in sets of 2 or 10, this handbook is formatted as



National Pesticide Applicator Certification Core Audiobook
Designed as a companion to the print or eBook formats, this



bitly

Kindle eBook

Print Manual

Audiobook



Our Commitment

UCDAVIS
CONTINUING AND
PROFESSIONAL EDUCATION

- Responding to inquiries from states/tribes/territories about PERC resources
- Enabling states/tribes/territories to modify PERC resources with license agreements
- Operating the PERC Store
- Offering low-cost print-runs to certifying authorities
- Maintaining the PERC website

Looking Ahead...

Aug 2026

PERC 2.0 concludes.
“Aprè-PERC”
operates at 0.20
FTE

Oct 2026

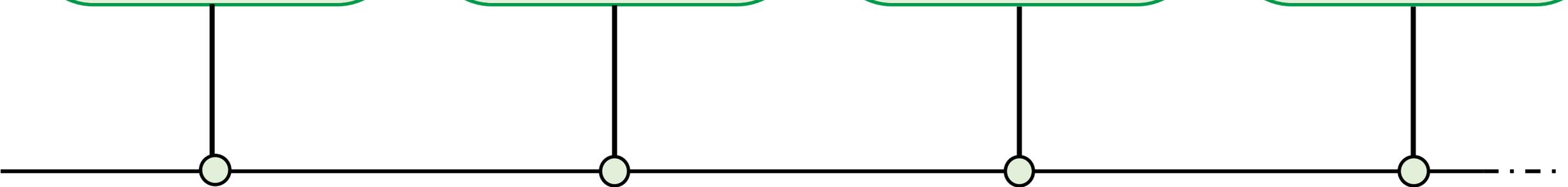
Statutory
deadline for EPA
to review
pesticides
registered
before 2007

2026

PRIA 6 Coalition
working to
influence PRIA 6

Sept 2027

**PRIA 5
expires**





Looking Ahead...

What are the Essentials?

- Supporting WPS implementation (40 CFR Part 170) with training resources for employers, workers, handlers, and more
- Manuals, exams, and other training resources to support implementation of the C&T Rule: 40 CFR Part 171

Ongoing Needs, for example

WPS: AEZ Changes Final in December 2024

- PERC was able to update most WPS materials to reflect changes

ESA: Court Orders Require Sweeping Implementation

- A “How-to-Comply” manual is needed for ESA

The PERC Team



Suzanne Forsyth
Director



Kaci Buhl
Deputy Director



Emily Ripken
Program Manager



Christian Gella
Program Coordinator



Ann Marie O'Shea
Marketing Manager



Thank You

Pesticide Education Resource Collective

www.pesticideresources.org

PERCsupport@ucdavis.edu

Facebook: www.facebook.com/PERCPesticide/

Twitter: www.twitter.com/PERCPesticide/

LinkedIn: www.linkedin.com/company/PERCpesticide

Instagram: www.instagram.com/PERCpesticide/

YouTube: www.youtube.com/channel/UCto11hDpAjpUG5IzWeXPIBg

