CAST WEBINAR SERIES ON **#6**

State Regulatory Agencies as Conduit for Informing Local Conditions in Federal Pesticide Processes

Gary Bahr

Science Liaison SFIREG Chair Washington State Department of Agriculture



CAST Quick Facts

- 501(c)3 membership-supported nonprofit
- Formed in 1972 as a result of 1970 National Academy of Sciences Report
- Nonpartisan and apolitical
- Membership includes 27 scientific societies; 20 universities; 19 libraries; 45 nonprofits; 21 companies; and over 500 individuals from 46 states and 7 countries
- Celebrated its 50th anniversary in 2022





The Science Source for Food, Agricultural, and Environmental Issues

Mission

CAST convenes and coordinates networks of experts to assemble, interpret, and communicate credible, unbiased, science-based information to policymakers, the media, the private sector, and the public.

Vision

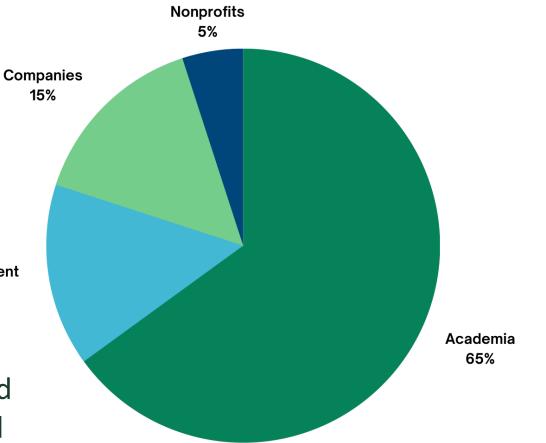
A world where decision making related to agriculture, food, and natural resources is based on credible information developed through reason, science, and consensus building.



How CAST Accomplishes Its Mission

With the help of many volunteer contributors:

- 65 Board Members representing scientific societies, companies, nonprofits, and Government 15% universities
- Nearly 200 active task force members working on CAST reports yet to be released
- Volunteer scientific experts as authors and reviewers—more than 1800 volunteers since 2008





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State Regulatory Agencies as Conduit for Informing Local Conditions in Federal Pesticide Processes

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This Presentation Is Designed To...

- Understand the role of pesticide State Lead Agencies (SLAs) as co-regulators
- EPA and State Lead Agency cooperative agreement processes & developing state pesticide program elements
- Examples of ESA mitigation, education, and regulatory options
- Suggestions to help implementation of FIFRA in compliance with the ESA



State Pesticide Regulatory Agencies

- In each US state and Territory, pesticide regulatory agencies are known as State Lead Agencies (SLAs).
- SLAs are co-regulators with EPA to ensure successful implementation and enforcement of pesticide labels and applications. FIFRA was amended to provide States with Primacy for FIFRA Implementation, Use, and Enforcement (1978).
 - Oversee registration
 - Rules and regulations governing pesticide use
 - Certification and training programs for applicators
 - Notification or posting requirements prior to application
 - Registering complaints concerning a misapplication
 - Exposure or misuse reporting, investigation, and enforcement of labels at the state level
 - Established the State FIFRA Issues Research and Evaluation Group (SFIREG), a working committee of Association of American Pesticide Control Officials (AAPCO)



State	Agency Name	New Hampshire	New Hampshire Department of Agriculture, Markets & Food
Alaska	Alaska Department of Environmental Conservation	New Jersey	New Jersey Department of Environmental Protection
Alabama	Alabama Department of Agriculture & Industries	New Mexico	New Mexico Department of Agriculture - Pesticide Compliance
Arkansas	Arkansas State Plant Board	Nevada	Nevada Department of Agriculture - Plant Industry
Arizona	Arizona Department of Agriculture	New York	New York State Department of Environmental Conservation
California	California Department of Pesticide Regulation	Ohio	Ohio Department of Agriculture
Colorado	Colorado Department of Agriculture	Oklahoma	Oklahoma Department of Agriculture, Food & Forestry
Connecticut	Connecticut Department of Energy & Environmental Protection	Oregon	Oregon Department of Agriculture
Delaware	Delaware Department of Agriculture	Pennsylvania	Pennsylvania Department of Agriculture
Florida	Florida Department of Agriculture & Consumer Services	Rhode Island	Rhode Island Department of Environmental Management
Georgia	Georgia Department of Agriculture	South Carolina	Clemson University Department of Pesticide Regulation
Hawaii	Hawaii Department of Agriculture	South Dakota	South Dakota Department of Agriculture and Natural Resources
lowa	Iowa Department of Agriculture & Land Stewardship	Tennessee	Tennessee Department of Agriculture
Idaho	Idaho State Department of Agriculture		
Illinois	Illinois Department of Agriculture	Texas	Texas Department of Agriculture
Indiana	Office of Indiana State Chemist	Utah	Utah Department of Agriculture & Food
Kansas	Kansas Department of Agriculture	Virginia	Virginia Department of Agriculture & Consumer Services
Kentucky	Kentucky Department of Agriculture	Vermont	Vermont Agency of Agriculture, Food and Markets
Louisiana	Louisiana Department of Agriculture & Forestry	Washington	Washington State Department of Agriculture
Massachusetts	Massachusetts Department of Agriculture Resources		Wisconsin Department of Agriculture, Trade & Consumer
Maryland	Maryland Department of Agriculture	Wisconsin	Protection
Maine	Maine Department of Agriculture, Conservation, & Forestry	West Virginia	West Virginia Department of Agriculture
Michigan	Michigan Department of Agriculture & Rural Development	Wyoming	Wyoming Department of Agriculture
Minnesota	Minnesota Department of Agriculture	Washington D.C.	Washington D.C. Department of the Environment
Missouri	Missouri Department of Agriculture	Puerto Rico	Puerto Rico Department of Agriculture
Mississippi	Mississippi Department of Agriculture & Commerce	American Samoa	American Samoa Environmental Protection Agency
Montana	Montana Department of Agriculture	Guam	Guam Environmental Protection Agency
North Carolina	North Carolina Department of Agriculture & Consumer Services	Northern Mariana	Commonwealth of the Northern Mariana Islands - Division of
North Dakota	North Dakota Department of Agriculture	Islands	Environmental Quality
Nebraska	Nebraska Department of Agriculture	Virgin Islands	US Virgin Islands Department of Agriculture
		0	

Information from the National Pesticide Information Center (NPIC) website: <u>http://npic.orst.edu/reg/state_agencies.html#map.</u>



EPA FIFRA Type Guidance's related to SLA work

- SLAs and Tribes work with EPA under three primary guidance's
 - EPA is starting the revision processes with input from SFIREG, SLAs, and Tribes
- EPA Office of Pesticide Program (OPP) guidance:
 - <u>https://www.epa.gov/compliance/fiscal-year-2022-2025-fifra-cooperative-agreement-guidance</u>
 - https://www.epa.gov/sites/default/files/2021-02/documents/22-25guidance.pdf
- Office of Chemical Safety and Pollution Prevention (OCSPP) guidance:
 - <u>https://www.epa.gov/system/files/documents/2022-08/fy-2023-2024-ocspp-npg.pdf</u>
- Office of Enforcement and Compliance Assistance (OECA) guidance:
 - https://www.epa.gov/system/files/documents/2022-08/fy-2023-2024-oeca-npg.pdf



2022-2025 FIFRA Cooperative Agreement Guidance

2022-2025 FIFRA Cooperative Agreement Guidance



February 17, 2021





U.S. Environmental Protection Agency as of Chemical Safety and Pollution Prevention

n Agency evention

- The EPA funds cooperative agreements that help SLAs implement EPA's pesticide program
- Required programs (enforcement, C&T, WPS, worker and applicator safety, water quality)
- Pick list programs (ESA, Pollinators, IPM, Spray Drift Reduction, Bed Bugs, Fumigation, Working with Tribes, Emerging Public Health)
- Pesticides & ESA work would need to be included so that SLAs can successfully implement pesticide program aspects related to ESA

and Pesticide Compliance



EPA OCSPP National Program Guidance

• Office of Chemical Safety and Pollution Prevention (OCSPP) Fiscal Years 2023-2024

National Program Guidance, August 2022

- OCSPP's National Pesticide Program establishes cooperative agreements with states, tribes, and territories to implement FIFRA.
- To promote regulatory decisions and programs for achieving protections.
- Ensures EPA regional offices are involved with SLAs and Tribes.
- Negotiating, implementing, and managing state and tribal cooperative agreements, technical support and oversight.



EPA OCSPP National Program Guidance

- OCSPP Program Guidance Revision process, ongoing now
- The required topics of focus for EPA Regions and SLAs are:
 - Certification & Training
 - Worker Protection Standard (WPS)
 - FIFRA grants management with the SLAs and Tribes
 - Pollinator protection and plans
 - Region-specific projects
- Question to Regions and SLAs: What to "retire", add a new priority?
- Add ESA and the development of a workable SLA FIFRA ESA Program
- Those are the basic questions; the money is the same.



Pesticide Program Requirements

- SLAs work to maintain overall pesticide programs.
- The basic pesticide program includes required program areas such as
 - enforcement,
 - certification and training,
 - applicator and worker safety,
 - worker protection,
 - water quality,
 - container containment, and
 - soil fumigation.
- SLAs also provide outreach, communication, and training as appropriate because of new and emerging issues, rules, regulations, and pesticide registration and registration review decisions.
- SLAs implement all basic programs following EPA procedures while utilizing EPA guidance documents.



Enforcement and Inspection

- Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), states have broad authority to regulate pesticides. Different sections of FIFRA authorize officials from EPA and state agencies to
 - inspect pesticide storage and distribution facilities,
 - issue orders to stop sales, supplies of products,
 - assess civil and criminal penalties for violations of FIFRA, and
 - order indemnity payments to end users, distributors, and dealers of pesticides when registrations are suspended and canceled.
- Inspection and enforcement activities include reporting information to the EPA Regions and on all known or suspected pesticide incidents
- Of high interest: pollinator topics, reporting spills, drinking water standard exceedances, human health emergencies and exposures, and significant water quality and endangered species incidents to the Regional Office project officer.



Pesticide Certification and Training

- SLAs are responsible for providing pesticide program activities related to outreach, communication, training, and technical assistance to help ensure that pesticide labels are understood and followed by pesticide applicators.
- SLAs are responsible for establishing Certification and Training (C&T) programs to provide initial licensing and continued recertification for a variety of pesticide applicator types including restricted use (RUP), commercial, dealers, aerial, consultants, structural pest inspectors, and numerous other categories and types.
- EPA has approved all the SLA and Tribal C&T Plans, November 4, 2023 deadline
 - 2017 revisions Certification of Pesticide Applicators regulations at 40 C.F.R. Part 171. Section 11 of FIFRA.
- SLAs begin implementation, EPA Implementation Guidance in 2024



SLA and Tribal Certification & Training Plans (C&T Plans)

- EPA has approved all the SLA and Tribal C&T Plans, November 4, 2023 deadline
 - 2017 revisions Certification of Pesticide Applicators regulations at 40 C.F.R. Part 171. Section 11 of FIFRA.
- Requires certifying authorities to have an EPA-approved certification plan to certify applicators of Restricted Use Pesticides (RUPs).
- SLAs and Tribes have approved plans, will need to add ESA aspects to C&T.
- Work with the American Association of Pesticide Safety Educators (AAPSE) and Pesticide Safety Education Program (PSEPs) staff,
 - Develop training, manuals, competency standards, and tests that include ESA
 - Work cooperatively on C&T needs, strategies, and implementation plans



ESA Pesticide Program "pick list" Topic Can pick from eight program areas

- Limit potential effects from pesticide use to listed species, while at the same time not placing undue burden on agriculture or other pesticide users.
- Provide outreach and education on the Endangered Species Protection Program to current and potential pesticide users and pesticide inspectors.
- Establish and maintain relationships with local and regional fish and wildlife agencies.
- Work with certification and training staff and cooperative extension services to provide endangered species information for pesticide applicator training.



ESA Pesticide Program "pick list" Topic Can pick from eight program areas

• Provide risk assessment and risk mitigation support using EPA's stakeholder engagement process at:

http://www.regulations.gov/#!documentDetail;D=EPAHQ-OPP-2012-442-0038

- Provide information such as crop data and pesticide usage data to OPP for use in listed speciesspecific risk assessments for upcoming registration review cases.
- Comment on exposure assumptions used in risk assessments.
- Comment on the feasibility of proposed, listed species-specific mitigation measures during OPP's standard processes of registration and registration review.
- Review draft bulletins if any are developed in a state's area.



Implementing FIFRA in compliance with the ESA

- The registration, sale, and distribution of pesticides under FIFRA by EPA is considered a federal action and is therefore subject to the Endangered Species Act (ESA).
- As co-regulators of pesticides, SLAs play an essential role in helping EPA implement the pesticide program, including activities related to the ESA but there are many aspects that need to be developed in order for implementation to be successful.



Pesticide Certification and Training - ESA

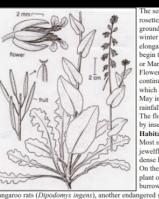
- Currently, ESA aspects related to pesticide use are not a standard or required topic in pesticide certification training.
- Some states, such as CA and WA, have pesticide program training materials on listed species. However, many states do not include listed species materials in any program activities.
- Work with the American Association of Pesticide Safety Educators (AAPSE) and Pesticide Safety Education Program (PSEPs) staff to develop training, manuals, competency standards, and tests that include ESA





California Jewelflower

the mustard family As is typical of annuals oth plant size and popula on size in this species can ary dramatically, dependng on site and weather he plant stems are hairless nd often branching. he upper leaves are egghaped and clasp the stem, like the leaves at the base f the plant, which are he maroon buds are ustered at the tip of the em and contrast with the anslucent, white flowers elow. The California



settes (clusters of leaves at round level) during the inter months, and the stem longates as flower buds egin to appear in February r March.

lowering and seed set ontinue until the plants die, which may occur as late as May in years of favorable ainfall and temperatures. The flowers are pollinated by insects. Habitats

Most sites where California ewelflower is found have ense herbaceous cover. On the Carrizo Plain, this plant occurs primarily on the burrow systems of giant

ngaroo rats (Dipodomys ingens), another endangered species. California welflower has been reported from elevations ranging from approximately 50 to 3,000 feet, and from level terrain to 25% slopes. Primary soil types at nown sites are subalkaline, sandy loams. Distribution

Today, known populations of California jewelflower are confined to three areas in hilly terrain west of the San Joaquin Valley: the Carrizo Plain, Santa Barbara Canvon (adjacent to the Cuvama Valley in Santa Barbara County), and the Kreyenhagen Hills (Fresno County). Additional populations of California jewelflower may persist in the foothills of Fresno, Kern, and Kings ounties, where potential habitat remains in private rangeland.

Example Endangered Species Field Identification Card from California's Pesticide Program



Enforcement and Inspection – ESA (1)

- SLAs throughout the nation have not determined how the state regulatory processes will be further developed under EPA's recent ESA Workplan, listed species evaluations, and strategies.
- There are many compliance and enforcement processes that need to be developed so that SLAs can work towards successful implementation of FIFRA in compliance with the ESA.
- One example is inspection and enforcement around Bulletin language found on labels:

 Endangered Species Advisory/Protection Requirements: This product may have effects on federally listed threatened or endangered species or their critical habitat in some locations. When using this product, you must follow the measures controlling the product use relevant to your location for the protection of Endangered Species. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult http://www.epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

Language taken from a current pesticide label accepted by EPA on March 29, 2022



Enforcement and Inspection – ESA (2)

• Another example is how to enforce pesticide limitations in EPA's Bulletin Live! Two system

Code	Code Limitation		
D120	To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. If applying to dicamba-tolerant soybeans with a qualified hooded sprayer, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see the label for a link to the website(s) with your product's qualified hooded sprayers. The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges: 1. Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated field. 2. Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans. 3. Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof.		
MA15	From April to June, follow one of these measures: 1. Apply malathion only before dawn or after dusk OR 2. Apply malathion only when wind is blowing away from prairie habitats OR 3. Use a 50-foot ground buffer from prairie habitats, and an aerial buffer from the habitats according to application rate: (1) 50 feet for <0.5 lbs ai/A; (2) 75 feet for 0.5 - <1 lb ai/A; (3) 150 feet for 1-2.5 lbs ai/A; (4) 200 feet for >2.5 lbs ai/A. Buffer sizes may be reduced by 25 feet for application rates (1) and (2) if a full swath displacement upwind is used during aerial application. Buffer sizes may be reduced by 50 feet for application. Habitat: Photos are provided at https://www.epa.gov/endangered-species/texas-plants-habitat-photos.		



State and Local Conservation Strategies to Provide a Mitigation Framework

Working for species recovery

- SLAs work with state, federal, local conservation and university partners, CWA Nonpoint Source Plans, Ag BMP Strategies
- SLAs work within their states, legislative, and department processes protection of ESA T&E species, nonpoint pollution abatement, pesticide regulation, and ESA recovery
- Every state has a Soil Conservation Commission type state agency, Conservation Districts, watershed projects, and partnerships with USDA NRCS, NRCS STAC, FSA, ARS, Universities, state F&W, and others
- SLAs could produce a planning strategy that ties all these things together through a Cooperative Agreement process



Examples of Regional, State and Local partners to work together

- SLAs work with state, federal, and local conservation and education partners on natural resource issues
- SLAs work within their state cabinet, legislative, and department processes for pesticide, nonpoint pollution abatement, and ESA
- SLAs as FIFRA co-regulators have the authorizes and partnerships to implement new and complex work to protect endangered species
- Every state has a Soil Conservation Commission type state agency, Conservation Districts, watershed projects, and partnerships with USDA NRCS, FSA, ARS, Universities, and others



Chesapeake Bay Program

Regional, national and international leader in ecosystem science, modeling and restoration partnerships

- 64,000 square miles that make up the Bay watershed
 - home to more than 18 million people
 - Chesapeake Bay Commission, PA, VA, DC, DE, MD, NY, WV, Conservation Districts
 - EPA, USDA NRCS, FSA, & ARS, Universities, FWS, NOAA, USGS, others
 - Restore the Bay and its rivers
- Agricultural Runoff, contaminants, climate, nutrient and sediment runoff, stormwater, pesticides, species protection, and many other nonpoint source topics
- Resource Land Assessment, Watershed Plans, TMDLs, BMPs, Funding and Grants, Monitoring
- Managing and solving the complex Bay Program partnership includes:
 - 19 federal agencies
 - 40 state agencies and programs in Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia and the District of Columbia
 - Approximately 1,800 local governments, represented through the Local Government Advisory Committee
 - More than 20 academic institutions, represented through the Scientific and Technical Advisory Committee
 - More than 60 non-governmental organizations, including businesses, nonprofits and advocacy groups
 - ex issues for the Bay
- Funding, modeling, monitoring, effectiveness evaluation, research, publications and reporting







Minnesota Nonpoint Source and Pesticide Management



- Minnesota Nonpoint Source Management Program Plan
 - Provides guidance for state, and local planning efforts
- MDA has a comprehensive Water Quality Pesticide Management Plan
 - <u>https://www.mda.state.mn.us/protecting/waterprotection/pmp</u>
- MDA has an Agricultural Best Management Practices (BMP) Handbook for Minnesota, 2017
 - Strategies for protecting water quality
 - Water quality BMPs
 - Pesticide BMPs
- Comprehensive Pesticide Water Quality work
- Every state has similar plans/programs



State and Local Programs that Promote a Systems Approach Michigan Department of Agriculture

- Michigan Agriculture Environmental Assurance Program (MAEAP)
- Started in 1998, MAEAP is a voluntary program that recognizes farmers who are top stewards of their land.
 MAEAP helps farmers adopt cost-effective practices that reduce erosion and runoff into ponds, streams, and rivers.
- This, in turn, helps farmers comply with state and federal laws.





<u>https://maeap.org/</u>



Oregon Pesticide Stewardship Program

- Voluntary program Protecting Water Quality and Salmon from pesticides through partnerships, BMPs, education, and technical assistance
- PSP alternative to TMDLs, regulations, and provides for ESA solutions
- Currently nine PSP areas across the state range of land use and partners
- Combine local expertise in mitigation and monitoring
- Find ways to reduce pesticide levels while measuring improvements in water quality, mitigation implementation, and crop management.
- <u>https://www.oregon.gov/oda/programs/pesticides/water/pages/pes</u>
 <u>icidestewardship.aspx</u>









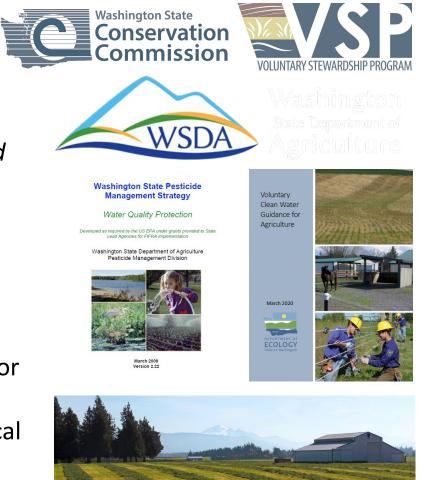






Washington State Program Examples

- WSCC Voluntary Stewardship Program (VSP):
 - VSP Program focuses on results rather than regulations
 - Education, planning, cost share, monitoring evaluation
- <u>WSDA</u> WA State Initiated Plan ESA Plan (2004, 2007) and The Endangered Species Act and the Impacts to Pesticide Registration and Use (2010), Washington State Pesticide Management Strategy for Water Quality (2009)
- WSDA Pesticide Stewardship Program (PSP)
 - Program to conduct pesticide monitoring, education and mitigation
 - Project areas in Salmon watersheds and other ESA areas
 - State and EPA Grant funded, NRCS practices, including monitoring
- <u>WA State Ecology</u> NPS Plan, and Voluntary Clean Water Guidance for Agriculture
- <u>USDA Natural Resource Conservation Service (NRCS)</u> State Technical Advisory Committee and Field Office Technical Guide Practice Standards





State and Local Programs that Promote a Systems Approach

Iowa Department of Agriculture and Land Stewardship

- Iowa Nutrient Reduction Strategy implemented through the IDALS Field Service Bureau
- Iowa Nutrient Reduction Strategy is a science and technology-based framework to assess and reduce nutrients to lowa waters and the Gulf of Mexico. It is designed to direct efforts to reduce nutrients in surface water from both point and nonpoint sources in a scientific, reasonable and cost effective manner.
- https://iowaagriculture.gov/field-services-bureau

The Iowa Nutrient Reduction Strategy was developed by:





IOWA STATE UNIVERSITY





NRCS Conservation Practice Standards & Support Documents - ESA and pesticide mitigation

- NRCS Field Office Technical Guide Practice Standards Field Office Technical Guide | NRCS USDA
- There are several dozen practices that are choices for ESA mitigation
- NRCS State Technical Advisor Committee (STAC) and State Conservation partners work to revise and utilize those in each state
- NRCS practice "Pest Management Conservation System code 595"

(https://www.nrcs.usda.gov/resources/guides-and-instructions/pest-management-conservation-system-ac-595-conservation-practice)

 Common Associated Practices - Pest Management Conservation System (595) with conservation practices such as Conservation Crop Rotation (328), Nutrient Management (590), Conservation Cover (327), Irrigation Water Management (449), Grassed Waterway (412), and Cover Crop (340), and FSA CRP practices, others.



NRCS Conservation Practice Standards & Support Documents - ESA and pesticide mitigation

- Agrichemical Handling Facility (309)
- Alley Cropping (311)
- Amending Soil Properties with Gypsum Products (333)
- Anionic Polyacrylamide (PAM) Application (450)
- Aquaculture Pond (397)
- Brush Management (314)
- Conservation Cover (327)
- Conservation Crop Rotation (328)
- Constructed Wetland (656)
- Contour Buffer Strips (332)
- Contour Farming (330)
- Contour Orchard and Other Perennial Crops (331)
- Cover Crop (340)
- Critical Area Planting (342)
- Cross Wind Ridges (588)
- Cross Wind Trap Strips (589)
- Dam (402)
- Dam, Diversion (348)
- Deep Tillage (324)
- Dike or Levee (356)
- Diversion (362)
- Drainage Ditch Covering (775)
- Drainage Water Management (554)

- Early Successional Habitat Development/Management (647)
- Fence (382)
- Field Border (386)
- Filter Strip (393)
- Forest Farming (379)
- Forest Stand Improvement (666)
- Grade Stabilization Structure (410)
- Grassed Waterway (412)
- Groundwater Testing (355)
- Hedgerow Planting (422)
- Herbaceous Weed Treatment (315)
- Herbaceous Wind Barriers (603)
- High Tunnel System (325)
- Hillside Ditch (423)
- Irrigation and Drainage Tailwater Recovery (447)
- Irrigation Canal or Lateral (320)
- Irrigation Ditch Lining (428)
- Irrigation Field Ditch (388)
- Irrigation Land Leveling (464)
- Irrigation Pipeline (430)
- Irrigation Reservoir (436)
- Irrigation System, Microirrigation (441)
- Irrigation System, Surface and Subsurface (443)
- Irrigation Water Management (449)
- Lined Waterway or Outlet (468)



NRCS Conservation Practice Standards & Support Documents - ESA and pesticide mitigation

- Mulching (484)
- On-Farm Secondary Containment Facility (319)
- Pasture and Hay Planting (512)
- Pest Management Conservation System (595)
- Pond (378)
- Pond Sealing or Lining Geomembrane or Geosynthetic Clay Liner (521)
- Pond Sealing or Lining, Compacted Soil Treatment (520)
- Pond Sealing or Lining, Concrete (522)
- Precision Land Forming and Smoothing (462)
- Range Planting (550)
- Residue and Tillage Management, No-Till (329)
- Residue and Tillage Management, Reduced Till (345)
- Restoration of Rare or Declining Natural Communities (643)
- Riparian Forest Buffer (391)
- Riparian Herbaceous Cover (390)
- Saturated Buffer (604)
- Sediment Basin (350)
- Shallow Water Development and Management (646)
- Silvopasture (381)
- Sprinkler System (442)
- Stormwater Runoff Control (570)
- Stream Habitat Improvement and Management (395)
- Streambank and Shoreline Protection (580)
- Stripcropping (585)

- Structure for Water Control (587)
- Structures for Wildlife (649)
- Subsurface Drain (606)
- Surface Drain, Field Ditch (607)
- Surface Drain, Main or Lateral (608)
- Surface Roughening (609)
- Terrace (600)
- Tree/Shrub Establishment (612)
- Tree/Shrub Pruning (660)
- Tree/Shrub Site Preparation (490)
- Underground Outlet (620)
- Upland Wildlife Habitat Management (645)
- Vegetated Treatment Area (635)
- Vegetative Barrier (601)
- Vertical Drain (630)
- Water and Sediment Control Basin (638)
- Water Harvesting Catchment (636)
- Waterspreading (640)
- Wetland Creation (658)
- Wetland Enhancement (659)
- Wetland Restoration (657)
- Wetland Wildlife Habitat Management (644)
- Wildlife Habitat Planting (420)
- Windbreak/Shelterbelt Establishment and Renovation (380)
- Windbreak/Shelterbelt Renovation (650)
- Woody Residue Treatment (384)



Conservation Reserve Program The Conservation Reserve Program (CRP) CRP Practice Library

- <u>CP-1</u> -- "Establishment of Permanent Introduced Grasses & Legumes"
- <u>CP-2</u> -- "Establishment of Permanent Native Grasses"
- <u>CP-3/3A</u> --"Tree Planting"
- <u>CP-4D</u> -- "Permanent Wildlife Habitat"
- <u>CP-5A</u> --"Field Windbreak Establishment"
- <u>CP-8A</u> --"Grass Waterway"
- <u>CP-9</u> -- "Shallow Water Areas for Wildlife"
- <u>CP-12</u> --"Wildlife Food Plot"
- <u>CP-15A</u> --"Contour Grass Strips"
- <u>CP-16A</u> -- "Shelterbelt Establishment"
- <u>CP-17A</u> --"Living Snow Fences"
- <u>CP-18B</u> -- "Establishment of Permanent Vegetation To Reduce Salinity"
- <u>CP-21</u> --"Filter Strip"
- <u>CP-22</u> -- "Riparian Buffers"
- <u>CP-23</u> -- "Wetland Restoration On Floodplains"
- <u>CP-23A</u> -- "Wetland Restoration, Non-Floodplain"
- <u>CP-25</u> -- "Rare And Declining Habitat"
- <u>CP-27 & 28</u> --"Farmable Wetlands Program"
- <u>CP-29</u> -- "Marginal Pastureland Wildlife Buffer"

- <u>CP-30</u> -- "Marginal Pastureland Wetland Buffer"
- <u>CP-31</u> -- "Bottomland Timber Establishment on Wetlands"
- <u>CP-33</u> -- "Habitat Buffers for Upland Birds"
- <u>CP-36</u> -- "Longleaf Pine Establishment"
- <u>CP-37</u> -- "Duck Nesting Habitat"
- <u>CP-38</u> -- "State Acres for Wildlife Enhancement (SAFE)"
- <u>CP-39</u> -- "Farmable Wetlands Program Constructed Wetlands"
- <u>CP-40</u> -- "Farmable Wetlands Program Aquaculture Wetlands"
- <u>CP-41</u> -- "Farmable Wetlands Program Flooded Prairie Wetlands
- <u>CP-42</u> -- "Pollinator Habitat"
- <u>CP-43</u> -- "Prairie Strips"
- <u>Restoring Duck Nesting Habitat</u>
- Enhancing Wildlife
- Improving Soil Health
- Longleaf Pine
- <u>Restoring Pollinator Habitat</u>
- Protecting Water Quality
- Upland Bird Habitat Buffers
- <u>Restoring Wetland</u>
- <u>Restoring Wildlife Habitat</u>



SLA efforts to implement and educate on FIFRA & ESA recovery

- All the 27 Pilot Species have recovery plans, and a long history of science and planning work with the states
 - Species like the Taylor's Checkerspot & Poweshiek skipperling & Fender's Blue Butterfly
- Impacts habitat loss, fragmentation, degradation, climate change, pathogens, small genetic pool, and pesticide use
- SLA's have further opportunities to join their state and local partners to work together on recovery plans, actions, projects, improving habitat, education, pesticide regulatory mitigation, PULA refinement, other such as grants and research



Taylor's Checkerspot

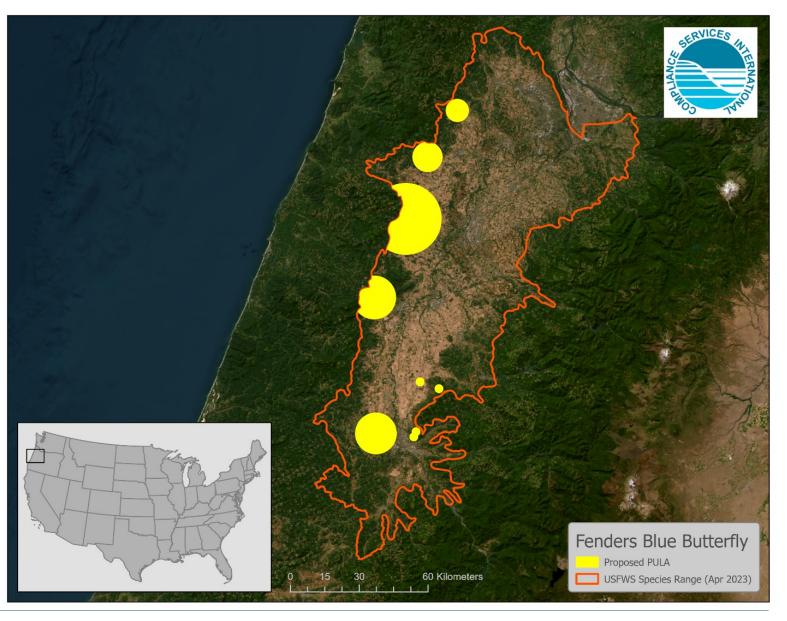


Poweshiek skipperling



PULAs and Ranges

- State and regional efforts should be available to refine PULAs and ranges
- In this example, the range of the Fender's Blue Butterfly can be informed by refined using population data, habitat (lupine patches) and dispersal distance (based on FWS Recovery Plan)





Summary of SLA Pesticide and ESA Program Development

- EPA OCSPP, FIFRA Cooperative, and OECA Strategic plans and Agreements should be updated to include SLA Pesticide and ESA Program responsibilities
- Guidance's should be established for SLA implementation
- SLAs could produce a planning strategy that ties all these things together through a cooperative agreement process
- SLA develop Pesticide Programs that utilize a blending of FIFRA, CWA Nonpoint Source Planning, BMP manuals, State and Federal ESA Recovery planning and other strategies implement FIFRA ESA Mitigations and Interim Ecological Mitigation (IEM)
- Develop commodity specific mitigation systems that match species and agricultural diversity
- C&T updating and development of training manuals, study guides, tests, training modules
- Conservation Program Exemption, and Mitigation and IEM implementation through traditional NRCS and Conservation District type FOTG type practices and Conservation Systems approach



Summary of SLA Pesticide and ESA Program Development

- EPA and Cooperative Grant Agreement Guidance's should be written to outline EPA ESA Programs and expectations for SLAs and partners
- SLAs can form an ESA Pesticide Program framework and conservation systems
- Incorporating elements of existing SLA programs with State BMP and CWA programs, and NRCS systems
- Develop Conservation Systems, IEM, landowner, and applicator reporting and verification
- Development of SLA compliance assistance, regulatory program, and monitoring assessment





Summary of SLA Pesticide and ESA Program Development

- Continue to implement and improve C&T programs and overall education
- Substantial training, education, and outreach are needed for success
- Additional collaboration with State Lead Agencies is needed to facilitate training and outreach and to clarify enforcement expectations
- SLAs are in a unique position to provide key information to the federal pesticide process and equip end-users with ESA-related information, such as mitigations to protected listed species
- Phase in periods for SLAs and agriculture







Thank you!

Contact

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QUESTIONS?







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