

CAST WEBINAR SERIES ON
FIFRA AND ESA

#1

FIFRA and the Endangered Species Act:
Finding a Balance Between Agricultural
Efficiency, Environmental Sustainability,
and Regulatory Stability



The Science Source for Food,
Agricultural, and Environmental Issues



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.

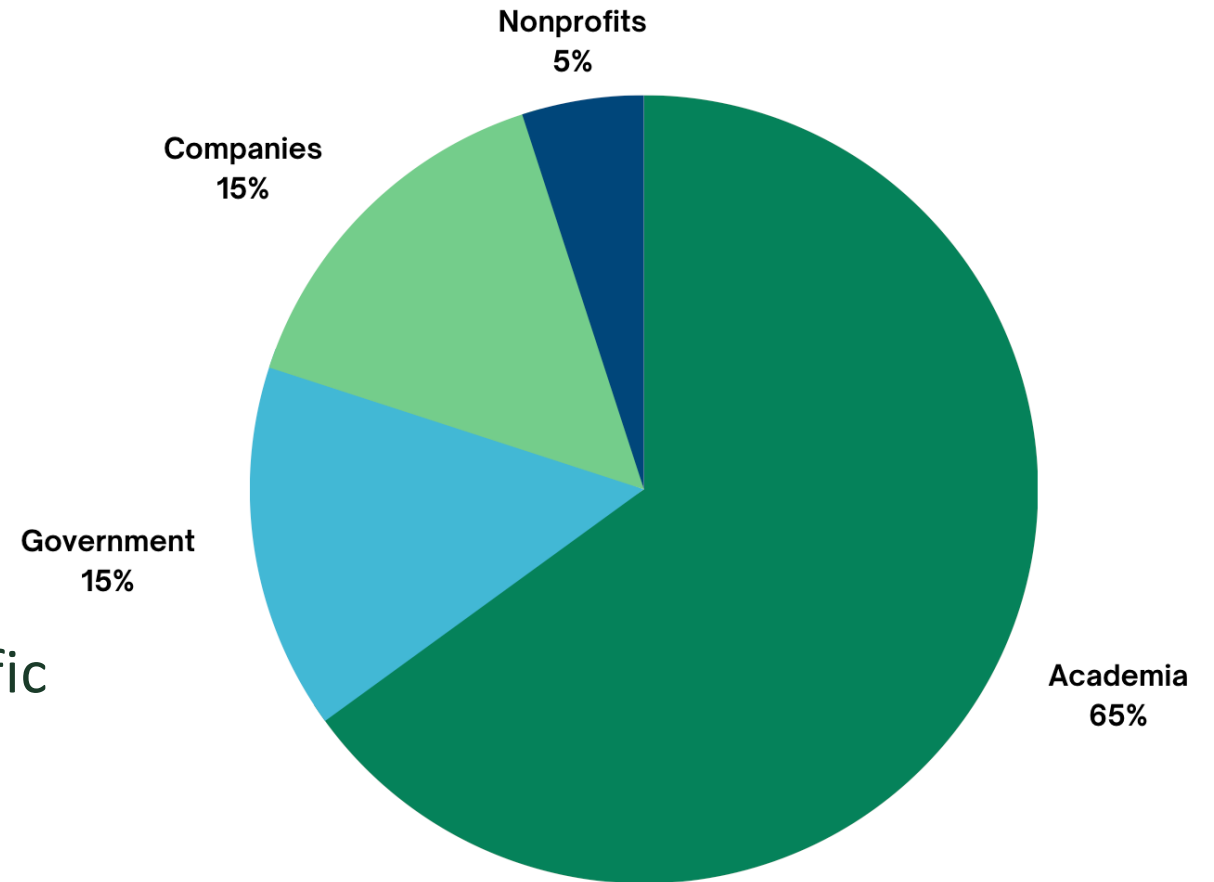
Vision

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 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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FIFRA and the Endangered Species Act: Finding a Balance
Between Agricultural Efficiency, Environmental Sustainability, and
Regulatory Stability

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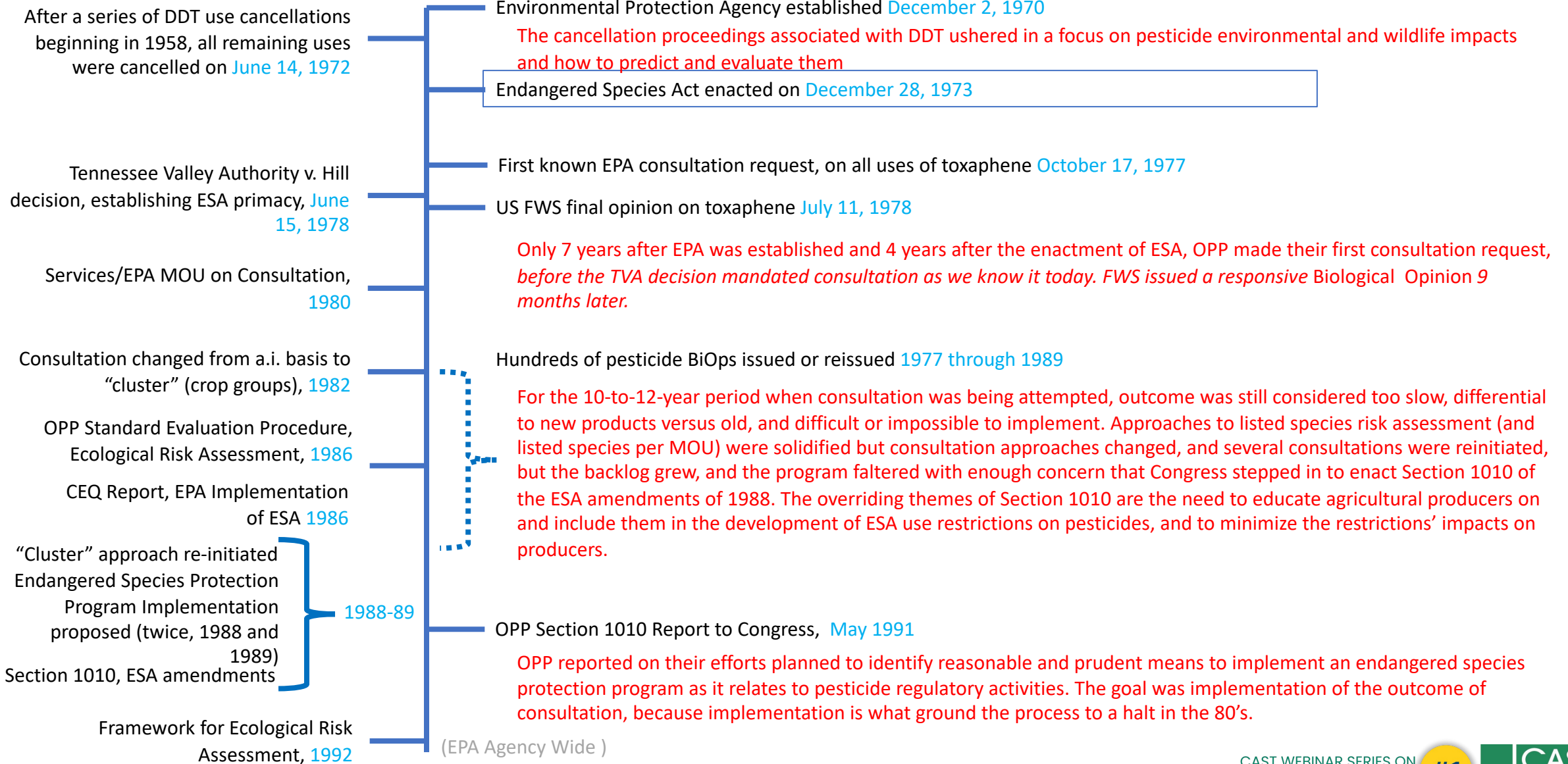
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Events that Shifted FIFRA/ESA Policy

Milestones in the FIFRA/ESA Timeline: 1972 to 1992



Events that Shifted FIFRA/ESA Policy

Milestones in the FIFRA/ESA Timeline: 1972 to 1992

After a series of DDT use cancellations beginning in 1958, all remaining uses were cancelled on **June 14, 1972**

Tennessee Valley Authority v. Hill decision, establishing ESA primacy, **June 15, 1978**

Services/EPA MOU on Consultation, **1980**

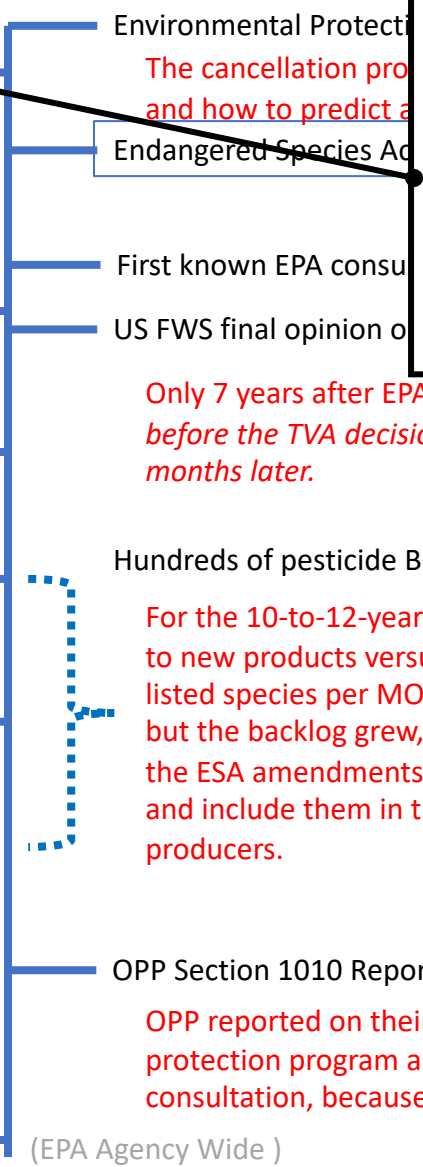
Consultation changed from a.i. basis to "cluster" (crop groups), **1982**

OPP Standard Evaluation Procedure, Ecological Risk Assessment, **1986**

CEQ Report, EPA Implementation of ESA **1986**

"Cluster" approach re-initiated Endangered Species Protection Program Implementation proposed (twice, 1988 and 1989)
Section 1010, ESA amendments

Framework for Ecological Risk Assessment, **1992**



Environmental Protection Agency

The cancellation proceedings and how to predict and evaluate wildlife impacts and how to predict and evaluate them, but most uses of DDT had been cancelled with the first series beginning in 1958

Endangered Species Act

First known EPA consultation

US FWS final opinion on

Hundreds of pesticide BiOps issued or reissued

OPP Section 1010 Report to Congress, May 1991

(EPA Agency Wide)

The 1972 cancellation proceedings associated with DDT ushered a focus on pesticide environmental and wildlife impacts and how to predict and evaluate them, but most uses of DDT had been cancelled with the first series beginning in 1958

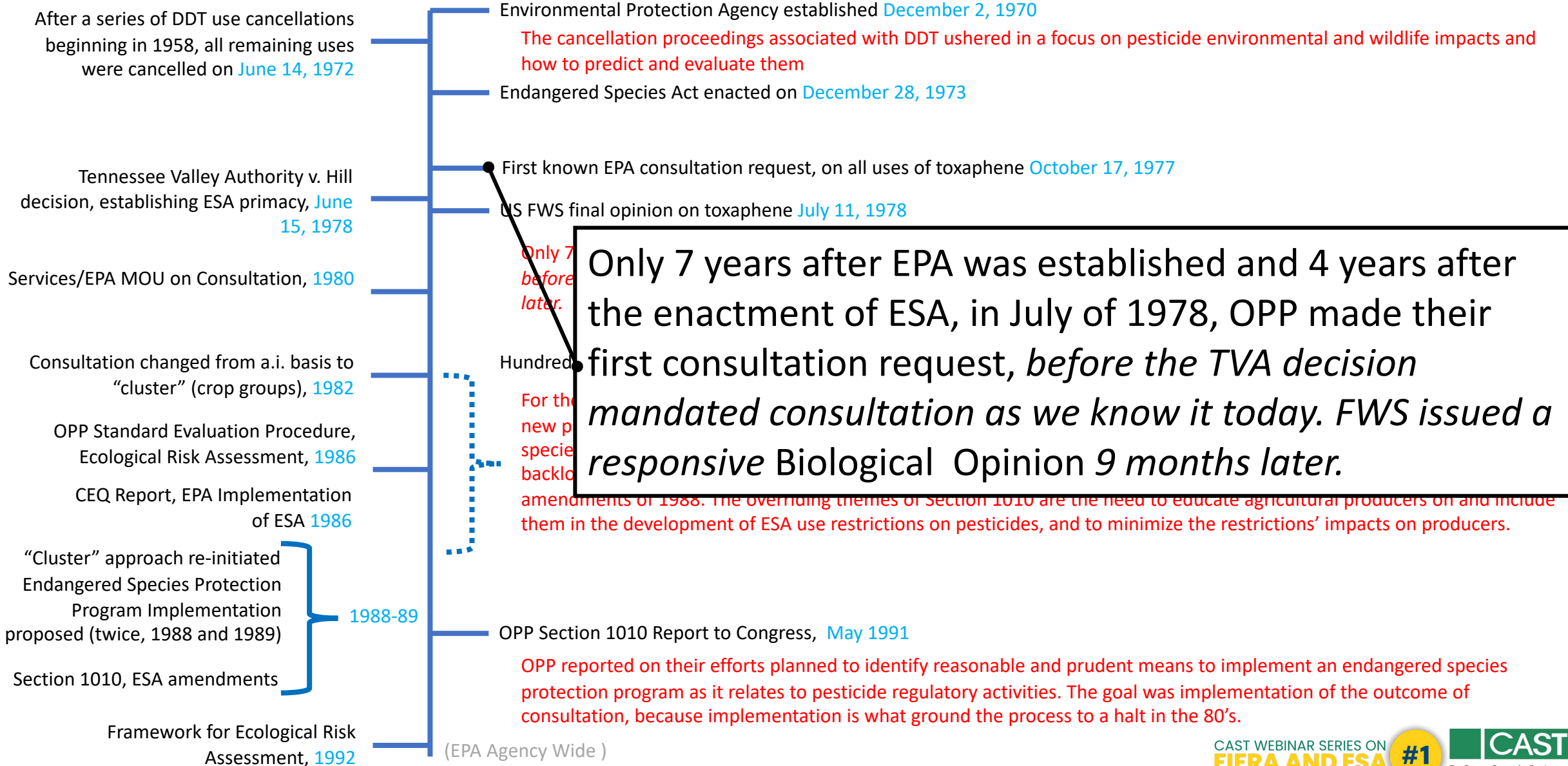
Only 7 years after EPA was established and 4 years after the enactment of ESA, OPP made their first consultation request, before the TVA decision mandated consultation as we know it today. FWS issued a responsive Biological Opinion 9 months later.

Hundreds of pesticide BiOps issued or reissued 1977 through 1989
For the 10-to-12-year period when consultation was being attempted, outcome was still considered too slow, differential to new products versus old, and difficult or impossible to implement. Approaches to listed species risk assessment (and listed species per MOU) were solidified but consultation approaches changed, and several consultations were reinitiated, but the backlog grew, and the program faltered with enough concern that Congress stepped in to enact Section 1010 of the ESA amendments of 1988. The overriding themes of Section 1010 are the need to educate agricultural producers on and include them in the development of ESA use restrictions on pesticides, and to minimize the restrictions' impacts on producers.

OPP reported on their efforts planned to identify reasonable and prudent means to implement an endangered species protection program as it relates to pesticide regulatory activities. The goal was implementation of the outcome of consultation, because implementation is what ground the process to a halt in the 80's.

Events that Shifted FIFRA/ESA Policy

Milestones in the FIFRA/ESA Timeline: 1972 to 1992



Only 7 years after EPA was established and 4 years after the enactment of ESA, in July of 1978, OPP made their first consultation request, *before the TVA decision mandated consultation as we know it today. FWS issued a responsive Biological Opinion 9 months later.*

Events that Shifted FIFRA/ESA Policy

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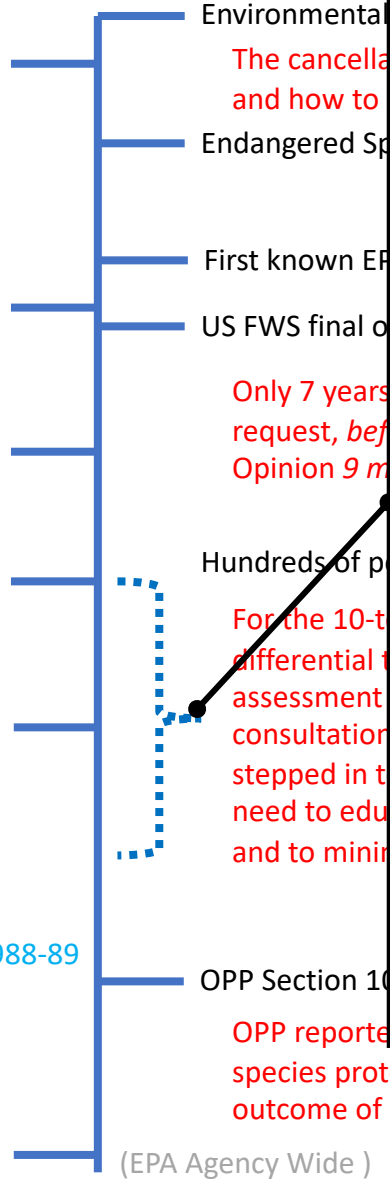
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Section 1010, ESA amendments **1988-89**

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Milestones in the FIFRA/ESA Timeline: 1972 to 1992



For the 10-to-12-year period when consultation was being attempted, outcome was still considered too slow, differential to new products versus old, and difficult or impossible to implement. Approaches to listed species risk assessment (and listed species per **MOU**) were solidified, and several consultations were reinitiated, but the backlog grew. The program faltered with enough concern that Congress stepped in to enact Section 1010 of the ESA amendments of 1988. The overriding themes of Section 1010 are the need to (1) educate agricultural producers on and (2) include them in the development of ESA use restrictions on pesticides, and (3) to minimize the restrictions' impacts on producers. Section 1010 has largely been abandoned since the early '90's.

OPP reported species protection program as it relates to pesticide regulatory activities. The goal was implementation of the outcome of consultation, because implementation is what ground the process to a halt in the 80's.

Events that Shifted FIFRA/ESA Policy

After a series of DDT use cancellations beginning in 1958, all remaining uses were cancelled on **June 14, 1972**

Milestones in the FIFRA/ESA Timeline: 1972 to 1992

Environmental Protection Agency established **December 2, 1970**

The cancellation proceedings associated with DDT ushered in a focus on pesticide environmental and wildlife impacts and how to predict and evaluate them

Endangered Species Act enacted on **December 28, 1973**

First known

US FWS f

Only 7 before later.

Hundred

For the new pesticide species backlog amendments include them in the development of ESA use restrictions on pesticides, and to minimize the restrictions' impacts on producers.

Section 1010 required agency reports to Congress and in 1991, OPP reported to Congress on their efforts and planned to identify reasonable and prudent means for an endangered species protection program as it relates to pesticide use. The goal was implementation of the outcome of consultation, because implementation is what ground the process to a halt in the 80's.

OPP Section 1010 Report to Congress, **May 1991**

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(EPA Agency Wide)

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Section 1010, ESA amendments

Framework for Ecological Risk Assessment, **1992**

Events that Shifted

FIFRA/ESA Policy

Linda Fisher "New Paradigm" Memo
October 29, 1992

National Academy of Sciences, Science
and the Endangered Species Act, 1995

FWS/NMFS Distinct Population
Segment Policy, February 7, 1996

Guidelines for Ecological Risk
Assessment April 1998

Endangered Species Protection
Program Implementation, and EPA
Process for Assessing Potential Risks to
Listed Species, December 2, 2002

Advance Notice of Public Rulemaking:
Endangered Species and Pesticide
Regulation, January 24, 2003

Proposed Joint Counterpart
Endangered Species Act Section 7
Consultation Regulations,
January 30, 2004

Final Joint Counterpart Endangered
Species Act Section 7 Consultation
Regulations,
August 5, 2004

Endangered Species Protection Program
Field Implementation, November 5, 2005

Milestones in the FIFRA/ESA Timeline: 1992 to 2005

Implementation of "New Paradigm" Memo August 25, 1993

1994 Wyoming Toad Protection Program ~July 1994

First evidence of implementation of field program as a result of FIFRA/ESA consultation finding jeopardy for 43 active ingredients.

EPA OPP "ECOFRAM" Established 1996

ECOFRAM
risk met

(EPA Agency W

ECOFRAM
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PRN 200

Extensi
atrazine

Overview of the Ecological Risk Assessment Process in the Office of Pesticide Programs, January 23, 2004 (and Williams-

Hogarth
Williams

Final Alt

Step-Wise Approach to Assessing Potential Effects of Pesticides on Listed Species and Critical Habitat, March 3, 2005

Fourth attempt to implement FIFRA/ESA program

REGROUP!!!

- Do things differently. The New Paradigm (1992)
- Show success: Wyoming Toad Protection Program
- Formalize method. Counterpart Regulations (2004)
- Develop method: Overview Document (2004)

LITIGATION

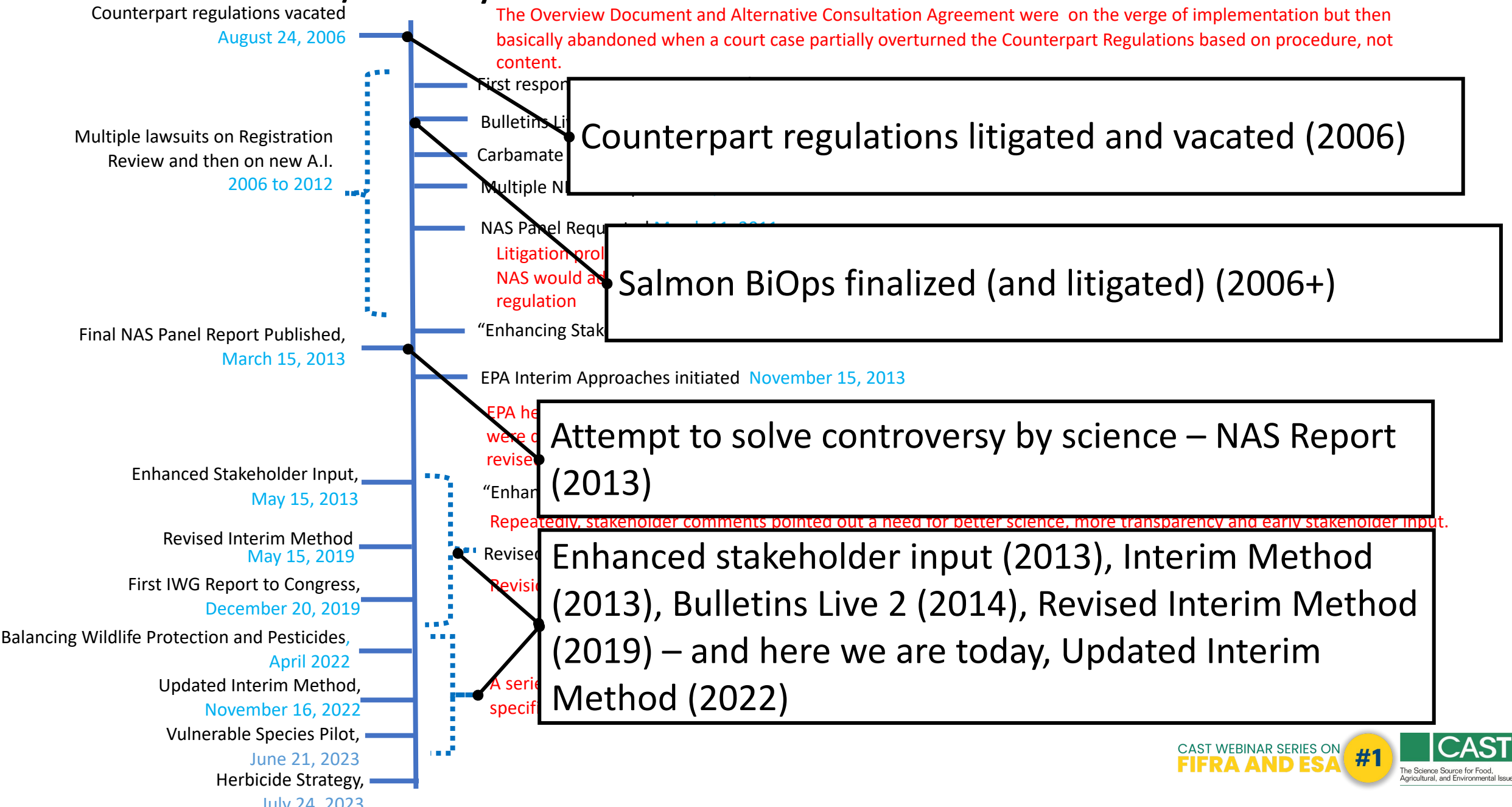
LITIGATION

LITIGATION

Counterpart regulations signed and ESPP reinstalled (2005)

Events that Shifted FIFRA/ESA Policy

Milestones in the FIFRA/ESA Timeline: 2006 to 2023

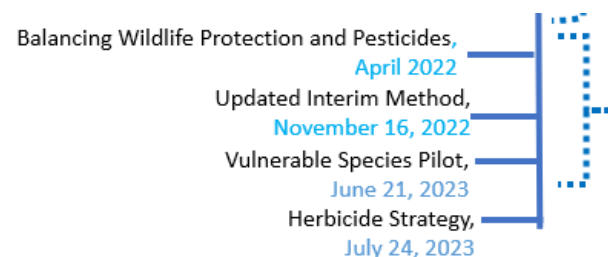


We entered 2023 with the Updated Method – and a Historical Pattern



As the Timeline Moves on . . .

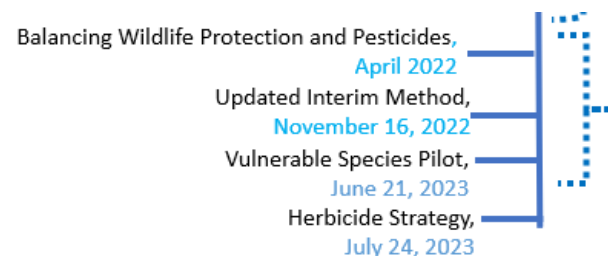
- What implications does the “Mega Suit” settlement have?
 - Most of you probably know the mega-suit covered multiple pesticides in a “failure to consult” ESA case
 - Letting the courts decide outcome was unpredictable
 - Settlement at “some cost” was not ideal, but likely the best option
- The Stipulated Agreement was finalized on September 12, 2023
 - Because the settlement process is highly confidential, the details of the settlement seemed a surprise when the agreement was announced in July – but the consequence is that those details are tied to commitments already made or contemplated by EPA (the last part of the timeline we just reviewed)



A series of actions which introduce adjusted FIFRA/ESA methods; a plan for blanket “early mitigations” and product-specific early mitigations, and species based general mitigations for species in the EPA vulnerability pilot

As the Timeline Moves on . . .

- Commitments made in the settlement are
 - Organophosphate Consultations – two alternatives
 - Track 1 – Organophosphates completed as one group (8 products) with a final EPA BE due 9/30/27 (drafts due 3/31/27, with a 60-day comment period)
 - Track 2 – Organophosphates completed as two groups, with Group 1 (4 BEs) due on 9/30/26 (drafts due 3/31/26, with a 60-day comment period) and Group 2 per Track 1 schedule
 - Rodenticide Consultations (11 products, draft BEs already issued)
 - Some confusing language here but final BEs are due 11/12/24
 - Allowance for comment extensions
 - Development of mitigation strategies for certain pesticide groups and the expansion of the VSPP

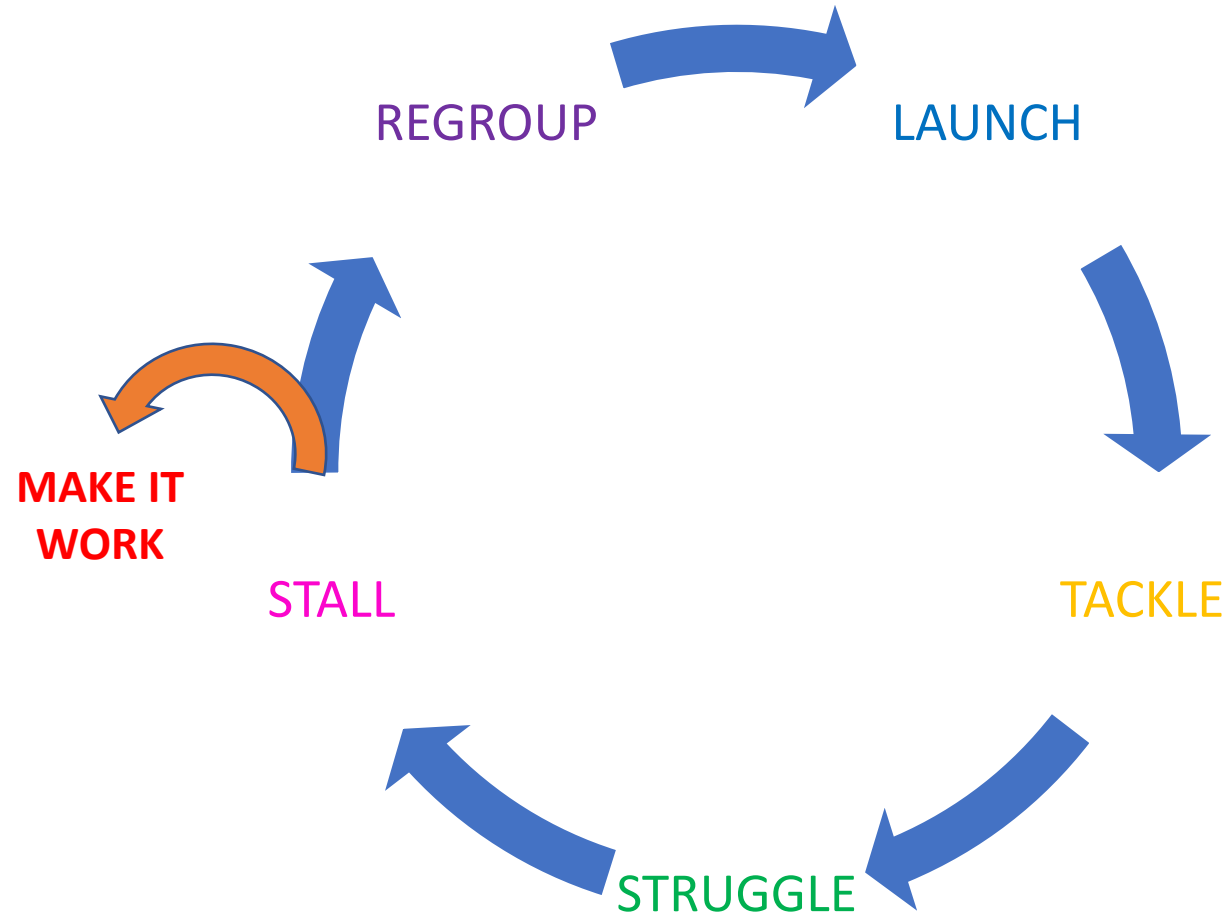


A series of actions which introduce adjusted FIFRA/ESA methods; a plan for blanket “early mitigations” and product-specific early mitigations, and species based general mitigations for species in the EPA vulnerability pilot

In Summary - Mitigation Strategies are

- Herbicide Strategy
- Insecticide Strategy
- Rodenticide Strategy
- Fungicide Strategy
- And, separately, and expansion of the VSPP

The Mood of the Courts, Agencies and Industry . . .



EPA's Commitment to Other Strategies in the Settlement Agreement

- Herbicide Strategy – Final by March 30, 2024 ?
 - *“No later than May 30, 2024, EPA shall issue a final Herbicide Strategy based on an analysis of representative active ingredients including, at a minimum” 12 herbicides in the claim: 2,4-D and its salts and esters, Dicamba and its salts, Diuron, MCPA and its salts and esters, Metolachlor and its isomer S-metolachlor, Metribuzin, Oxyfluorfen, Paraquat Dichloride, Pendimethalin, Propanil, Thiobencarb, and Trifluralin*
 - *“No later than 60 days before May 30, 2024, EPA shall provide a status report to the Court and other Parties on its progress toward completing the final Herbicide Strategy by May 30, 2024 and whether it expects to meet that commitment.”*
 - *Once EPA issues the final Herbicide Strategy, EPA shall consider incorporating and expects to incorporate the mitigation measures identified in the Herbicide Strategy into PIDs issued under EPA's registration review program.*
 - *Where EPA finds that groups of herbicides should receive the same mitigation measures, EPA plans to issue group PIDs, instead of chemical-specific ones, where appropriate.*

EPA's Commitment to Other Strategies in the Settlement Agreement

- Rodenticide Strategy
 - *“In November 2023, EPA expects to issue the draft Rodenticide Biological Evaluation”*
 - *“EPA plans to complete Rodenticide Biological Evaluation by no later than November 12, 2024 and will initiate consultation as necessary”*
 - *“Another goal of the strategy is to develop a suite of mitigation measures that will reduce the likelihood of jeopardy to species potentially affected by rodenticides and of adverse modification to designated critical habitat potentially affected by rodenticides, as well as to minimize take for approximately 90 ESA-listed species”*

EPA's Commitment to Other Strategies in the Settlement Agreement

- Insecticides Strategy
 - *“EPA will complete Biological Evaluations for . . . Eight Organophosphates (“Organophosphates Biological Evaluations”) no later than September 30, 2027”*
 - *“EPA may identify mitigation measures that are developed through its Insecticide Strategy that could be relevant to the Organophosphate Biological Evaluations, and include those measures in the Biological Evaluations, as appropriate*
 - *“EPA will use its best efforts to issue a final Insecticide Strategy by January 17, 2025, and in no event shall issue it later than March 31, 2025”*
 - *“No later than 60 days before January 17, 2025 (i.e. by November 18, 2024), the Parties shall meet and confer to discuss whether EPA expects to issue a final Insecticide Strategy by January 17, 2025”*
 - *“No later than July 30, 2024, EPA commits to provide the draft Insecticide Strategy for a 60-day public comment period.”*
 - *“Once EPA issues the final Insecticide Strategy, EPA . . . expects to incorporate the mitigation measures . . . into PIDs issued under EPA’s registration review program.”*
 - *“EPA may issue group PIDs, instead of chemical-specific ones, where appropriate.”*

EPA's Commitment to Other Strategies in the Settlement Agreement

- Fungicides Strategy
 - *“EPA intends to develop a strategy to address vulnerable species that may be affected by fungicides (“Fungicides Strategy”) including, inter alia, the fungicides at issue”*
 - *“Before finalizing a Fungicides Strategy, EPA will consider input from stakeholders”*
 - *“EPA cannot currently commit to a date certain to complete its final Fungicides Strategy”*
 - *“The Parties agree to meet and confer no later than August 31, 2024 to discuss the development of a Fungicides Strategy and attempt to agree upon a date for completion of EPA’s final Fungicides Strategy.”*

Vulnerable Species Pilot Program

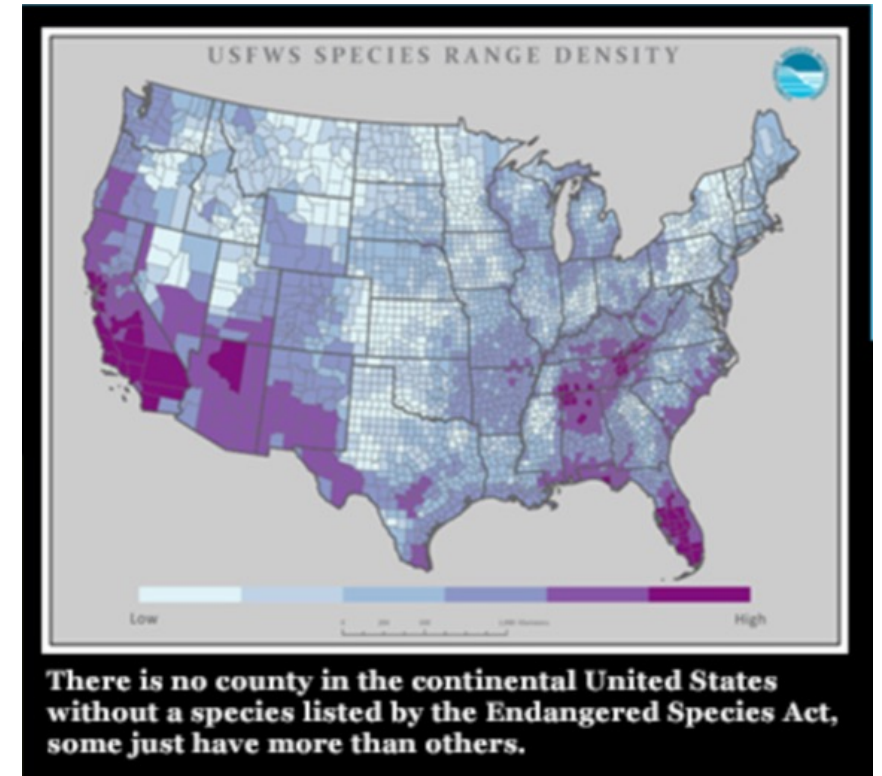
- Two separate pilot efforts, the Federal Pilot and the Vulnerable Species Pilot, that have different objectives but overlap in their intention to identify mitigation measures that can be applied to protect ESA-listed species
- EPA expects to provide updates on its progress on the efforts set forth in the Work Plan by updating its websites – “at least quarterly”
- In addition to the 25 species already identified, EPA expects to begin to expand the VSPP to include additional species
- No later than December 30, 2023, after the completion of its public outreach, EPA shall determine whether any mitigation measures identified by the Vulnerable Species Pilot should be revised or whether more should be added
- No later than September 30, 2024, EPA shall determine how it could expand the approach used in the Vulnerable Species Pilot to other selected vulnerable species

Compensatory Mitigation Options Development

- EPA intends to consider the use of compensatory mitigation (also known as offsets) to address the effects of pesticide registrations on ESA-listed species
- Offsets could include, without limitation, measures intended to replace or provide substitute resources or environments for ESA-listed species through the restoration, establishment, enhancement, or preservation of resources or environments
- CLA Intervenors will organize and fund a workshop for interested stakeholders, comparable to the workshop held in August of 2021 to be held within 24 months of the date of the settlement agreement

But “Can it work?”

- The current updated method is far from mature operationally
- “Offspring products” of the method are currently moving targets



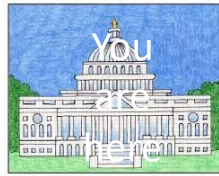
– but we won’t get out of the repeating cycle if we don’t try to make it work – rather than just saying why it won’t.

Consider the Views . . .

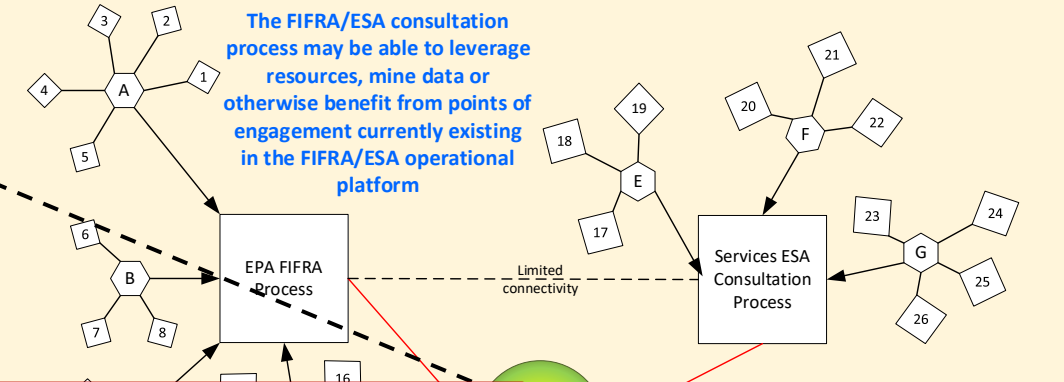
- Informed by
 - A. Registrant research
 - B. EPA science review
 - C. EPA cost benefit
 - D. Docketed public

- Informed by
 - H-J. Federal programs
 - EPA FIFRA enforcement
 - EPA applicator certification
 - NAS S
 - USDA IPM Centers
 - USDA ARS
 - USDA NRCS
 - K-L. State Programs
 - State dept ecology/environment
 - State dept natural conservation programs
 - State pesticide registration
 - Quality standards
 - State noxious weed control boards

- M-N. Conservation
- O-Q. Economic drivers
- R-S. Operational conditions
- T-U. Environmental conditions



High



Our subsequent papers will explore this “land between views” to examine how we might move from the national registration action to the local use action under FIFRA/ESA consultation – in a way that protects endangered species but allows robust agricultural production.

We still need to answer the question:

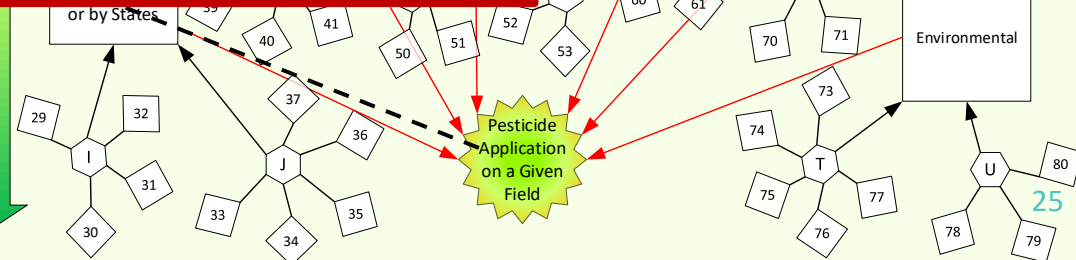
How do you get from



to



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Thank you for your participation!

Questions?



The Science Source for Food,
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Upcoming Webinars

- December 19** A Legal Discussion of the FIFRA/ESA Consultation Process Over Time
-
- January 9** Improving the Science Behind the Process: Implementing Better Data and Tools to Streamline the FIFRA/ESA Process
-
- January 30** Developing and Adopting Economically Effective Mitigation Strategies: Critical to the Survival of Agriculture and Endangered Species
-
- February 20** FIFRA, ESA and Pesticide Consultation: Understanding and Addressing the Complexities
-
- March 12** The topic of this webinar is the role of states in the implementation and regulation of FIFRA. Exact content will be announced later.



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