Collaborative Approach to Offsets for Pesticides and Endangered Species from Region 3: An Update

A Pilot Project with U.S. Fish and Wildlife Service Region 3

Presentation to the SFIREG ESI Committee, April 8, 2026

Presenters: Sarah Warner, FWS; Ashlea Frank, CSI

Agenda

Background and definitions

What we've learned over the past year

Next steps

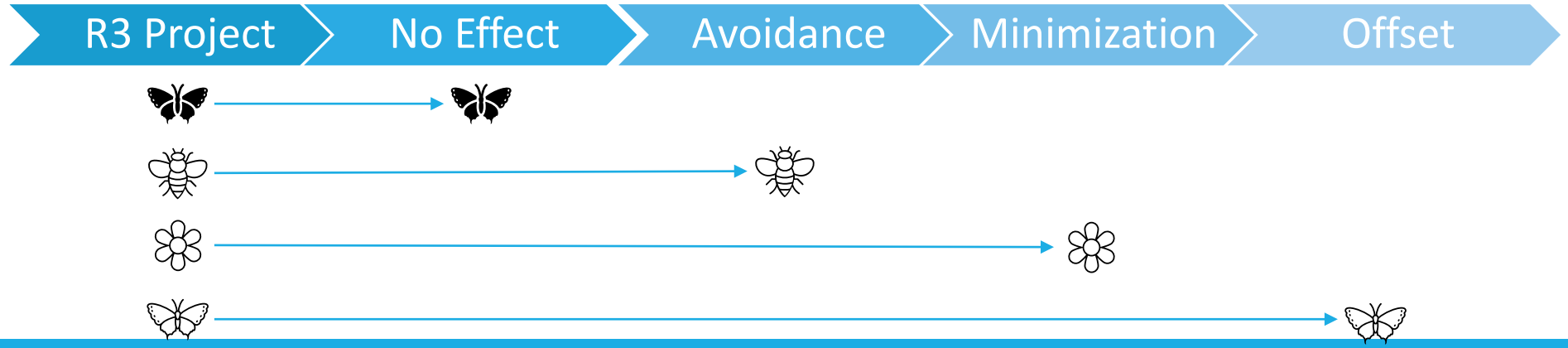
Discussion and questions

Background and Goals

Background: Incorporating mitigation offsets into the pesticide consultations has been a topic of discussion for years.

- Discussions with FWS HQ, FESTF, and FWS Region 3 resulted in the development of a real-world project that will assess avoidance, minimization, and determine how to incorporate offsets into the consultation process.
- Bayer, Syngenta, and BASF joined the effort, agreeing this is an important project.
- Benefits:
  - Help avoid jeopardy/adverse modification determinations
  - Streamline the consultation process
  - Regional component provides a scalable approach for accomplishing this work

Goal: starting with EPA's biological evaluations, develop a process for incorporating offsets into the pesticide evaluations and consultations that will be useful, informative, and practical for FWS HQ and EPA.



Starting Place – Defining Offsets for this Exercise

Offset Definition (for purpose of exercise)

Offsets are a mitigation option to:

- Address unavoidable impacts from potential pesticide exposure.
- Further species conservation and reduce impacts of mitigations on growers.
- Provide greater flexibility by providing more options to meet ESA obligations.
- Provide registrants with another outlet other than modifying the label to enhance species conservation and to efficiently achieve product registration.
- Ensure a no-net loss in the status of the affected resource.
- Develop the offset to be usable for FWS, pesticide registrants, and the EPA so that it can be incorporated as part of the ‘action’ in pesticide registration review.

Offset Program Components

Pilot Program

Purpose: To test the feasibility in diverse agriculture regions (Region 3)

Details: 3 species, 1 active

Connected to: Mitigation Equation/Tool and Stakeholder Engagement

Stakeholder Engagement

Purpose: To build a program that works for all entities – collaborative

Details: Entities are EPA, FWS HQ, Registrant, FWS R3, Mitigation Fund Provider, others

Connected to: Policy Development, Pilot Program, Mitigation Equation/Tool

Policy Development

Purpose: To inform and align with current policy including EPA's ESA Work Plan and Strategies

Details: FIFRA, ESA, FWS Compensatory Mitigation Policy

Connected to: Stakeholder Engagement and Mitigation Equation/Tool

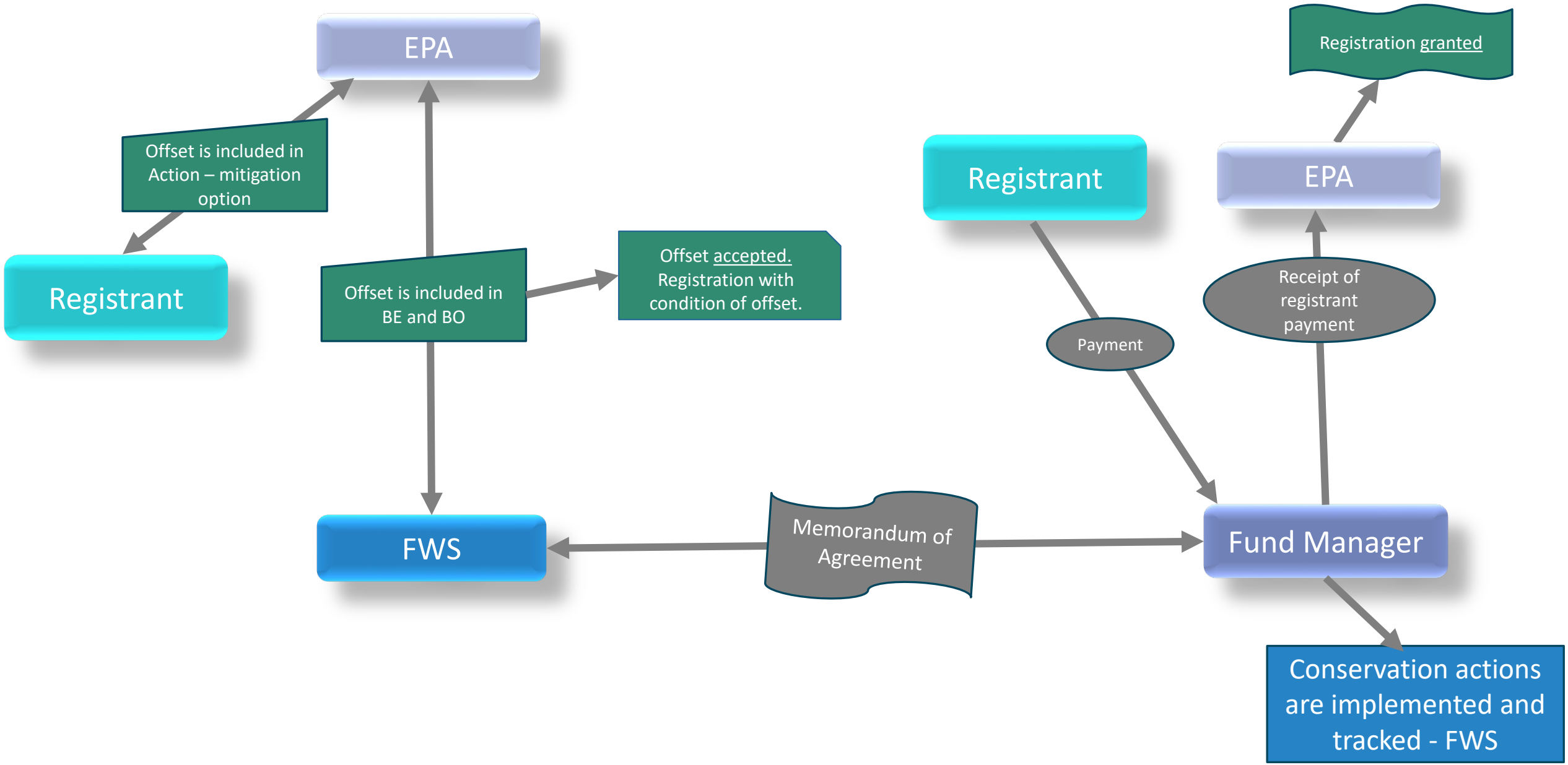
Mitigation Equation/Tool

Purpose: Quantify impact and mitigation equivalency – ensures integration and compliance

Details: Collaborators include species leads, FWS policy experts, FWS HQ, Registrants

Connected to: Pilot Program, Policy Development, Stakeholder Engagement

Communications/Overview: Incorporating Offsets into Pesticide Registrations



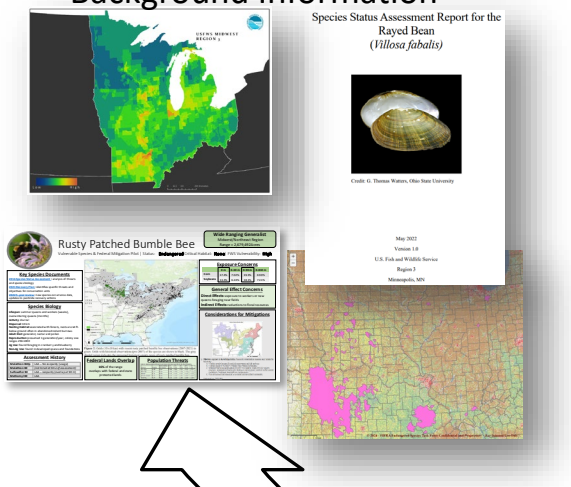
Framework for Pesticide Offset Program Development

1. Set-up

Identify Team

Timeline

Background Information



2. Component Selection

Species

Single or multiple

On or off field

Location

Range of species, one state, region, nation

Pesticide

One or multiple a.i.s

Use site(s)

New registration or re-registration

3. Details

Description of offset option and mitigation type

Conservation activities approved for the offset option, management and funding, stakeholder Engagement

4. Mitigation Ratio

Calculation for determining potential impact, no-net loss, and cost to participate in offset project.

Cost to participate in the offset project will include:

- Cost to registrant based on acres or other proxy
- Details of administrative costs

5. Evaluation

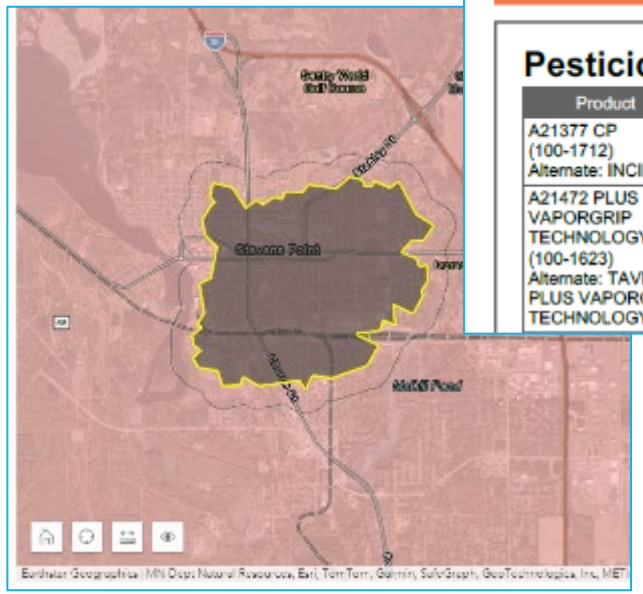
Description of how outcomes of conservation activities will be evaluated, and mechanism for how project can be updated as needed

6. Feedback: Outcomes feed into FWS documents (Status of Species, 5-yr Review, etc.), FIFRA/ESA assessments

Questions to answer before setting up an offset program with a fund provider

- Who should be involved with the process? (USFWS, Offset Manager, EPA, others)
- What species will be covered by the program?
- How will **mitigation requirement** be calculated? Same for each species?
- How will **mitigation offset type and location** be determined?
- What is the **best estimate of mitigation need** in the next 15 years?
- How much is the **mitigation fee**?

Species-specific Endangered Species mitigations – an extension of the label/Bulletin



Endangered Species Protection Bulletin

Pesticide Use Limitation Summary Table

Product	AI	Use	Method	Form	Code	Last Update
A21377 CP (100-1712) Alternate: INCIPIO	Isocycloseram	Cucurbits	All Application Methods	Any Form	IS325	1/26/2026
A21472 PLUS VAPORGRIP TECHNOLOGY (100-1623) Alternate: TAVIUM PLUS VAPORGRIP TECHNOLOGY	Dicamba, diglycolamine salt	Dicamba-Tolerant Cotton	Ground spray	Liquid	D120	11/17/2020

Codes and Limitations Table

Code	Limitation
IS325	**DO NOT** use on cucurbits in bloom from two hours after sunrise until two hours before sunset.

This document contains legal requirements for the use of certain pesticides.
Do not modify any text, graphics or coloration or otherwise alter this document.
ESPP Contact: ESPP@epa.gov Phone: 1-844-447-3813
Date Printed: 1/30/2026, 11:26:14 AM

Endangered Species Protection Bulletin

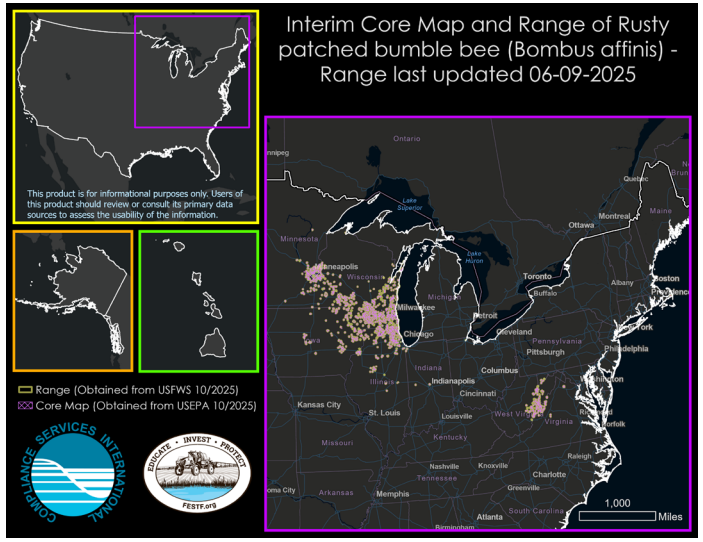
D120	To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. If applying to dicamba-tolerant soybeans with a qualified hooded sprayer, both a 240-foot in-field wind-directional 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.

https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins

Pesticide Offsets Mitigation Option

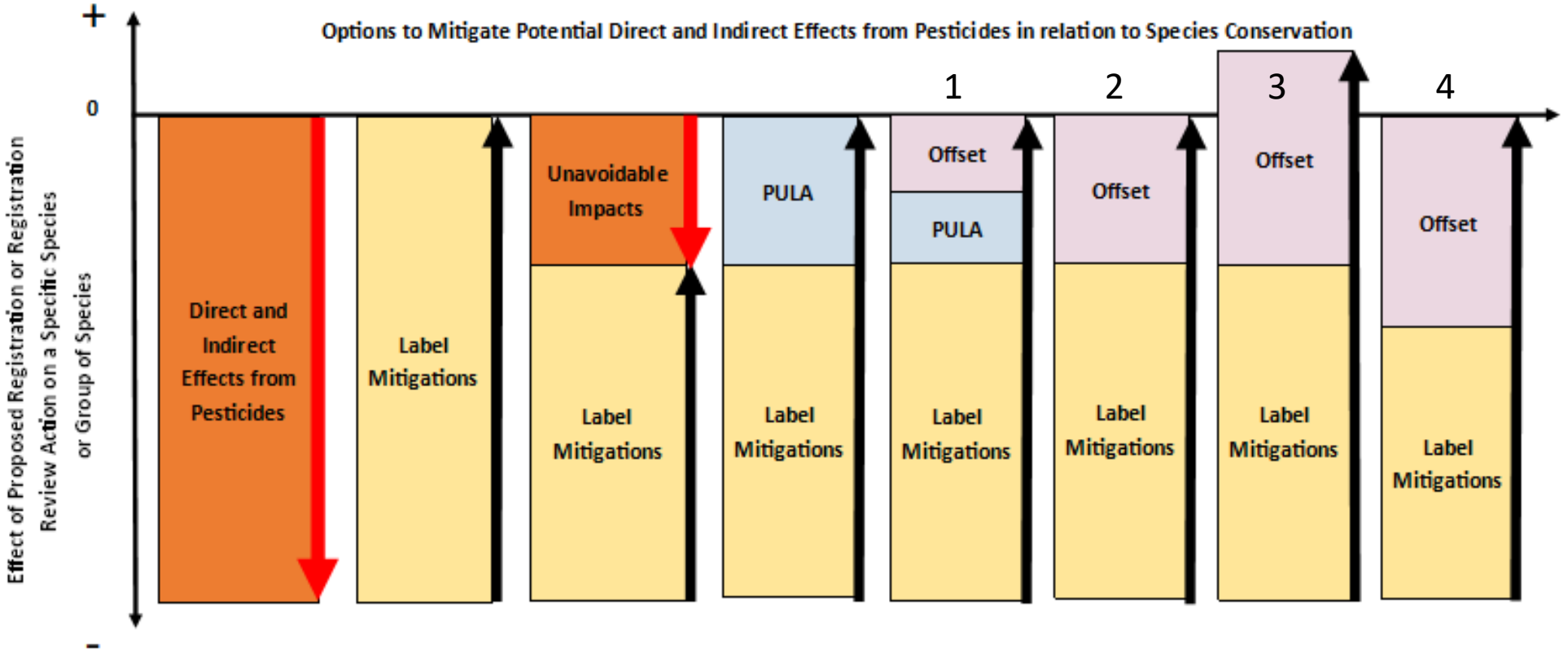
Offset = mitigation option that compensates for the potential “loss” from the use of a pesticide within a Pesticide Use Limitation Area (PULA)

Offsetting the “loss” to the species that would have otherwise been mitigated by additional avoidance and/or minimization options within the PULA above what is on the label.



PULA Mitigations (i.e., expanded drift buffers, additional points, avoidance areas, timing limitations, etc.)

Offsets = compensation for “loss” from the use of the pesticide within the PULA subject to the label.



Unavoidable Impacts

- PULA → Off-field species-specific mitigation: E.g., An increase in the in-field downwind buffers from 100 ft for aerial, 25 ft for ground, and 75 ft for airblast to 320 ft for aerial, 230 ft for ground, and 160 ft for airblast. On-field species-specific mitigation: E.g., Do not apply within three days prior to bloom, during bloom, and until petal fall is complete.
- Offset → Compensation for the unavoidable impact (PULA)

4. Mitigation Ratio

Calculation for determining potential impact, no-net loss, and cost to participate in offset project.

Cost to participate in the offset project will include:
- Cost to registrant based on acres or other proxy
- Details of administrative costs

Habitat Equivalency Analysis Concept

- Habitat equivalency analysis (HEA) is a methodology used to determine compensation for resources that have been lost or injured.
- It is an ecosystem valuation tool to facilitate planning, restoration, and mitigation.
- The principal concept underlying the method is that the losses of species or habitat resources can be compensated for through habitat replacement projects providing additional resources of the same type.
- HEA is a widely used mitigation analysis methodology for evaluating cost and is effective, defensible, and is a quantitatively based compensatory mitigation strategy.

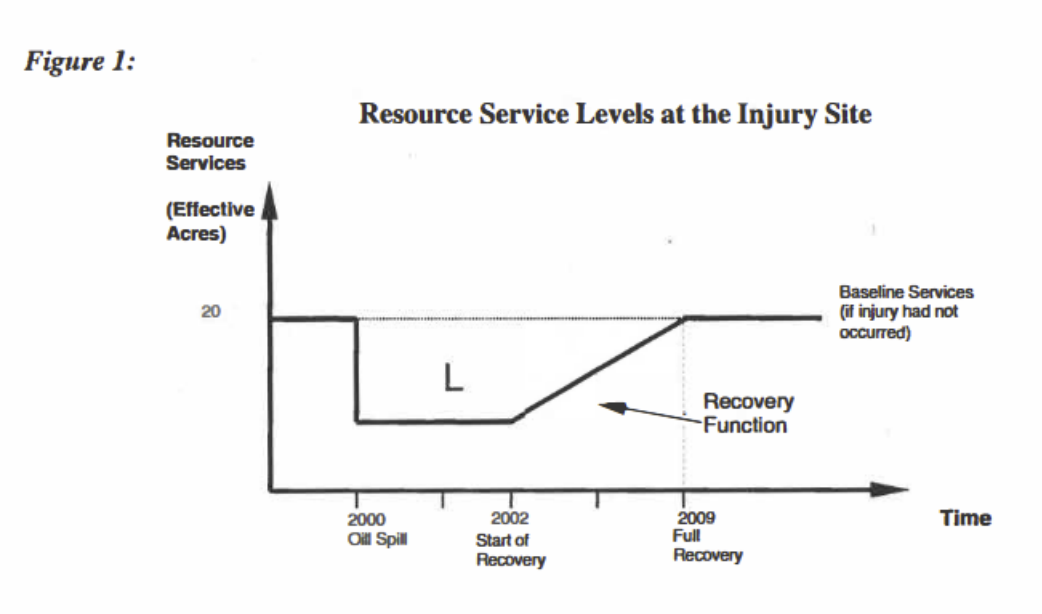
4. Mitigation Ratio

Calculation for determining potential impact, no-net loss, and cost to participate in offset project.

Cost to participate in the offset project will include:
- Cost to registrant based on acres or other proxy
- Details of administrative costs

Developing a HEA for Pesticides

- Currently exploring the development of a HEA for pesticides as a tool to calculate the mitigation ratio
  - NOAA HEA as reference
  - Rusty patched bumble bee and attractive crops as example
- Uncertainties and assumptions are associated with the HEA process and will need to be fully explained
- Peer review team has been established to guide development



Habitat equivalency analysis : an overview

Next Steps for R3 Offset Project

- Develop an offset mitigation instrument with feedback from FWS HQ, species leads, and HEA experts; EPA EFED, and registrants.
- Work with EPA on how to incorporate offsets into a pesticide registration action with the Biological Evaluation as the entry point
- Identify the mitigation provider and process for a fund and species-specific projects
- Pilot the offset in an application for a new active ingredient – work the offset through the BE and BO process with the EPA, FWS, and registrant
- Engage stakeholders at several key steps in the process

Let’s Discuss

We really appreciate SFIREG’s engagement!

How does SFIREG JWC see their involvement in offsets?

- Interested in being a stakeholder as a decision-maker? Listening participant?

Are there any concerns that we should be aware of to consider as the offset program develops?

Do you see this as a positive project that could benefit you and your constituents?

Any questions for us?