



The Endangered Species Act, Monarch Listing Decision, and Utility Conservation Efforts

Maryland Utilities Conference

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October 2019

What has happened in the pollinator world during 2019?

2019 and Pollinators

- > Late 2018 – NYT article summarizes documented declines.
- > Researchers have documented large declines in insects (40-80% of some species) across North America and Europe.
- > Monarchs are part of this broader concern over pollinator losses.

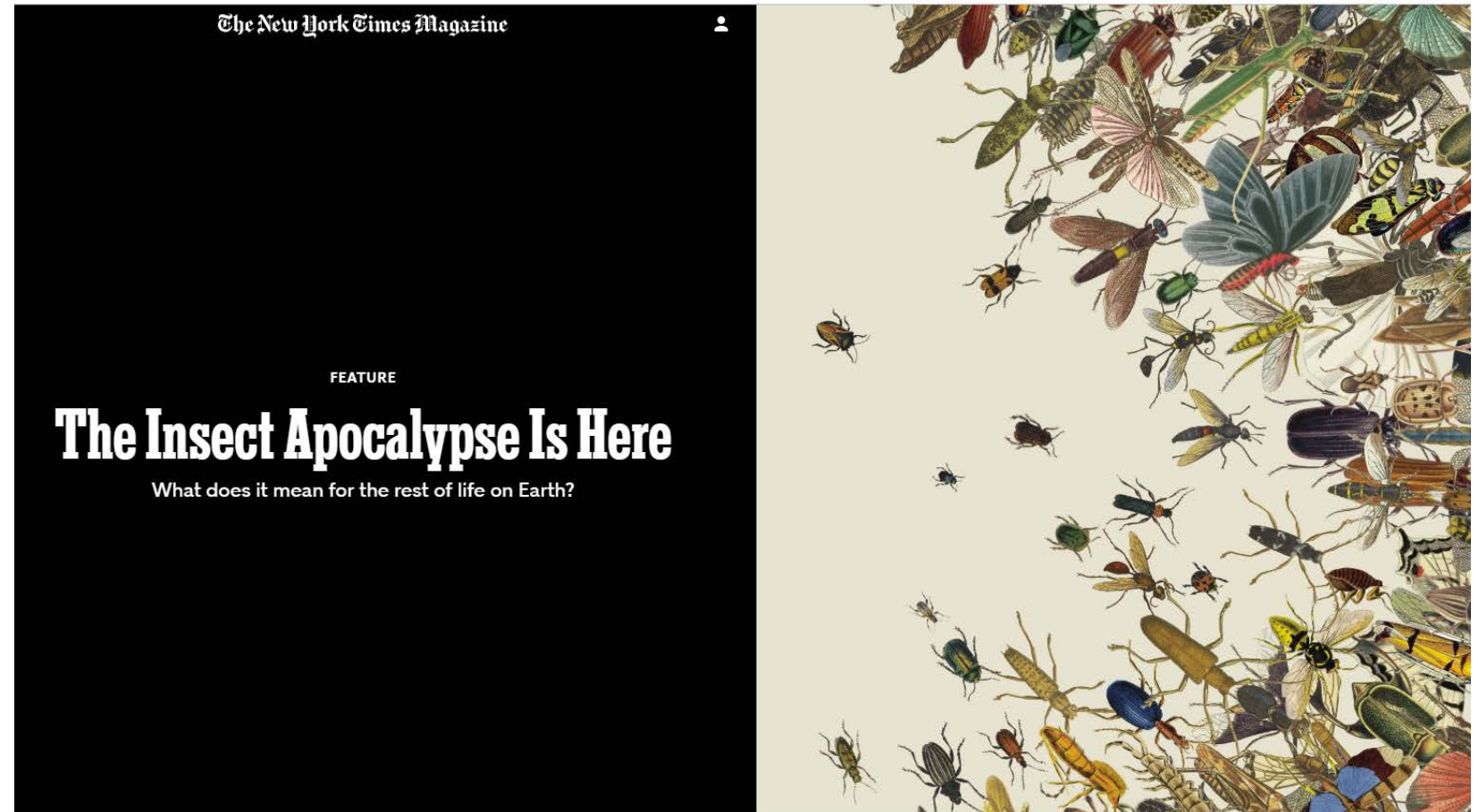
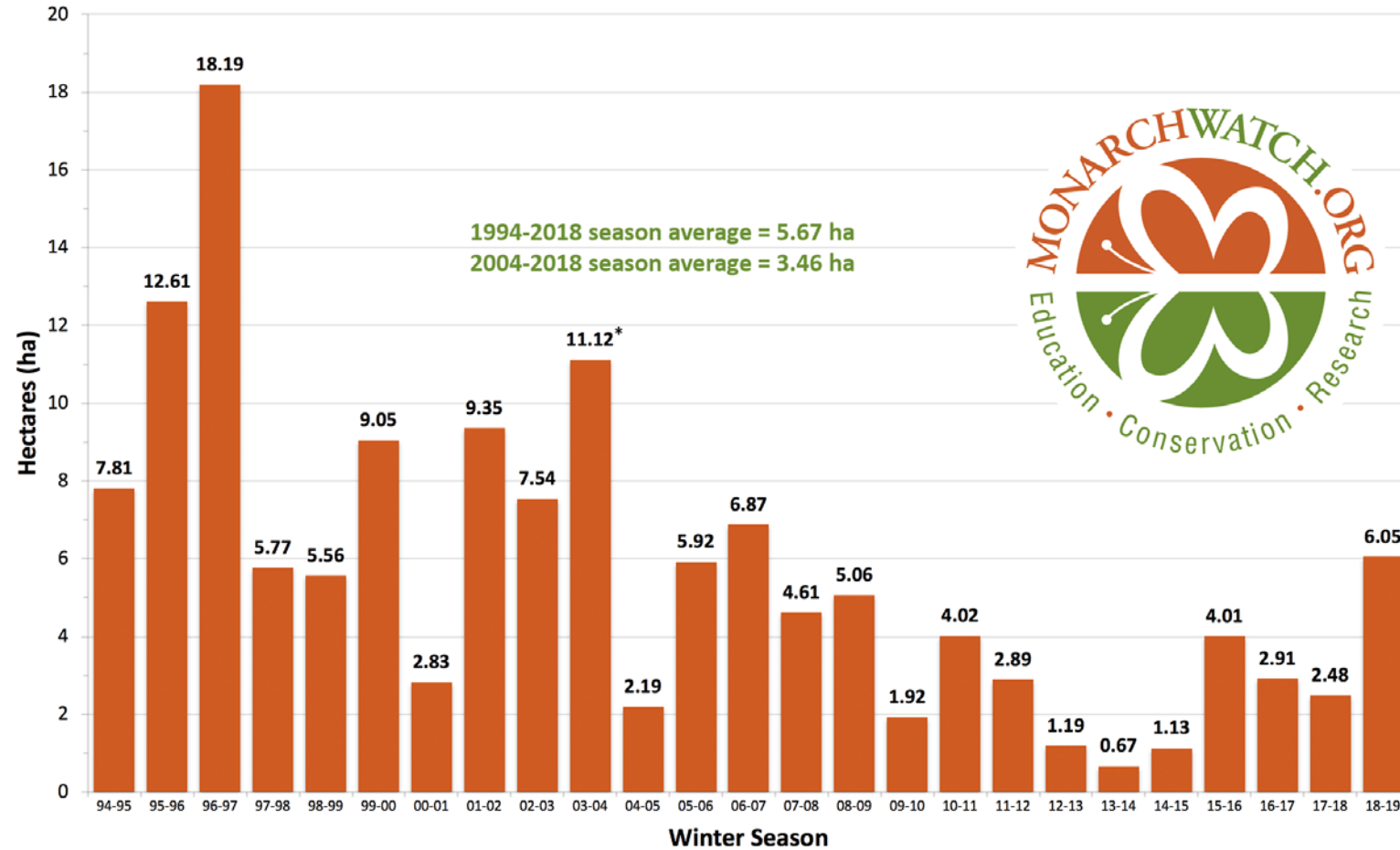


Image: New York Times. Article online at
<https://www.nytimes.com/2018/11/27/magazine/insect-apocalypse.html>

Why Such Concern Over Monarchs?

Total Area Occupied by Monarch Colonies at Overwintering Sites in Mexico



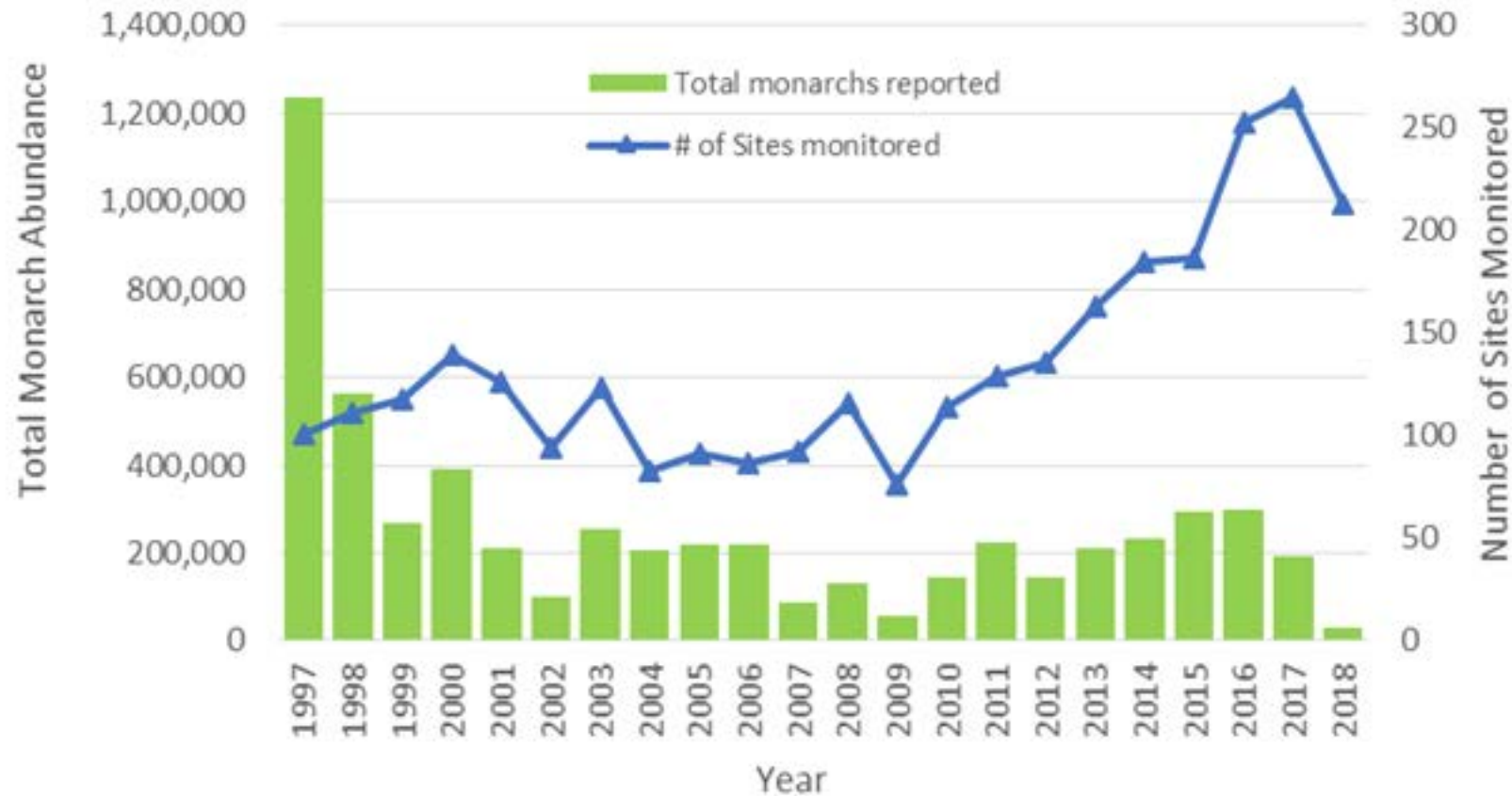
Data for 1994-2003 collected by personnel of the Monarch Butterfly Biosphere Reserve (MBBR) of the National Commission of Natural Protected Areas (CONANP) in Mexico. Data for 2004-2017 collected by World Wildlife Fund Mexico in coordination with the Directorate of the MBBR.

* Represents colony sizes measured in November of 2003 before the colonies consolidated. Measures obtained in January 2004 indicated the population was much smaller, possibly 8-9 hectares. CT

Why Such Concern Over Monarchs?

The Xerces Society Western Monarch Thanksgiving Count
Total Abundance Estimates w/Number of Sites Monitored from 1997-2018

© The Xerces Society for Invertebrate Conservation 2019



2019 and Pollinators

- > Spring – New publications reinforce declines in pollinators.
 - Study in Great Britain documents declines in one-third of insect pollinator populations.
 - Research from UNH concludes some bees have declined by 90%.

Science News

from research organizations

Widespread losses of pollinating insects in Britain

Study reveals declines in distribution of many species of bees and hoverflies

Date: March 26, 2019

Source: Centre for Ecology & Hydrology

Summary: Many insect pollinator species are disappearing from areas of Great Britain, a new study has found. Research showed one third of wild pollinator species experienced declines in terms of areas in which they were found, while one tenth increased.

AP

Wild bee species critical to pollination on the decline

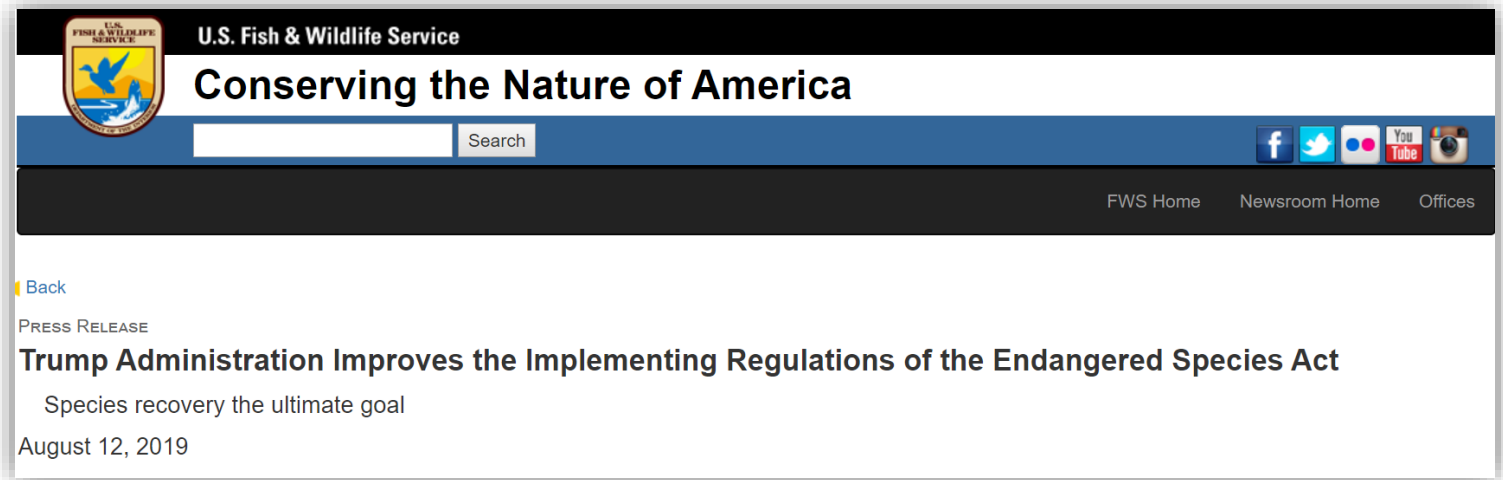
By MICHAEL CASEY April 18, 2019

2019 and Pollinators

> May – USFWS
Announced the Monarch
Listing Decision delayed
until December 15, 2020



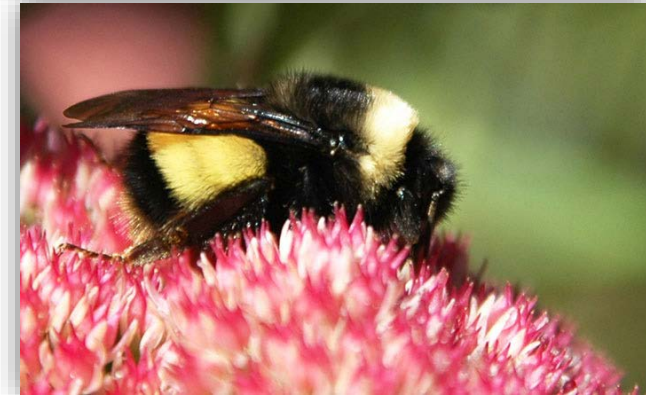
> August – Endangered
Species Act rule updates
made for the first time in
45 years



2019 and Pollinators

> August – Listing updates

- USFWS proposes to list the Franklin's bumble bee (OR, CA)
- USFWS decides not to list yellow-banded bumble bee (eastern US)



*Top. Franklin's bumble bee. Xerces Society
Bottom. Yellow-banded bumble bee. USFWS/Sandy Gillians*

How are Monarchs doing this summer?

> Eastern population status highlights

- Good reports of monarch numbers from mid MN to ME in a 5 degree band from 40-45N.
- Expect a good migration, with overall numbers reaching the overwintering sites likely to be around 5 hectares (or lower pending migration conditions)

> Western population status highlights

- Western monarch population is struggling to bounce back.
- Numbers of breeding monarchs seen during spring/early summer in CA, OR, WA, ID have been very low.



Thank you to Chip Taylor and Monarch Watch for the late summer status update! All predictions will be updated as season continues.

What's the status of Endangered Species Act revisions?

Recent ESA Rule Updates

> Recent rule changes include:

- Withdrawal of general 4(d) rule
- Changing “foreseeable future” definition to a “likely” standard (i.e. “more likely than not”)
- Designation of unoccupied critical habitat needs to be “essential”, contain “physical and biological features, and have “reasonable certainty of contribution”

How will the revised regulations affect conservation?									
Each box represents one of the 33 changes. Small text indicates how much the change departs from past practice.									
DEPENDS ON IMPLEMENTATION		NEGLECTIBLE EFFECT				HARMS CONSERVATION			
Moderate-major	Moderate-major	Minor	Minor	Minor		Moderate-major			
Moderate-major	Moderate-major	Minor	Moderate-major				Moderate-major	Minor	
Moderate-major	Moderate-major	None	None	None	None				
Moderate-major	Minor	None	None	None	None	Minor	Minor	Minor	Minor



Learn about the regulations at <http://policyinnovation.org/esaregs19/>

Learn more from the Environmental Policy Innovation Center at <http://policyinnovation.org/esaregs19/>

Will Recent ESA Rule Updates Impact the CCAA?

- > At least one legal challenge to ESA rule updates has been filed.
- > HR 4348 “Protect America’s Wildlife and Fish in Need of Protection Act of 2019” introduced in mid-September
- > Takeaways
 - There is still uncertainty in implementation
 - Updates only apply to future listings – not retroactive
 - Much of the final rule as-is is left up to interpretation by USFWS

11	UNITED STATES DISTRICT COURT	
12	FOR THE NORTHERN DISTRICT OF CALIFORNIA	
13	SAN FRANCISCO DIVISION	
14	CENTER FOR BIOLOGICAL DIVERSITY, DEFENDERS OF WILDLIFE, SIERRA CLUB, NATURAL RESOURCES DEFENSE COUNCIL, NATIONAL PARKS CONSERVATION ASSOCIATION, WILDEARTH GUARDIANS, and THE HUMANE SOCIETY OF THE UNITED STATES,	Case No. 3:19-cv-05206
15		COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF
16		(Administrative Procedure Act, National Environmental Policy Act, Endangered Species Act)
17		
18	Plaintiffs,	
19	v.	
20	DAVID BERNHARDT, U.S. Secretary of the Interior, U.S. FISH AND WILDLIFE SERVICE, WILBUR ROSS, U.S. Secretary of Commerce, and NATIONAL MARINE FISHERIES SERVICE,	
21		
22	Defendants.	
23		
24		
25	COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF - 1 -	Earthjustice 705 Second Ave., Suite 203 Seattle, WA 98104-1711 (206) 343-7340
26		

What's the status of the listing decision for Monarchs?

Monarch Listing Decision Coming in 2020

- > USFWS extended the deadline for the listing determination to December 15, 2020
- > Allows more time for:
 - Another year of monitoring data to be collected
 - More conservation to be implemented



<https://www.fws.gov/savethemonarch/>

If listed, what would be considered “take” for Monarchs?

- > USFWS is currently completing their Conference Opinion and incidental take assessment on the Monarch CCAA.
- > Final determination will be made during final review and authorization of the CCAA.
- > Based on preliminary coordination, potential take is likely focused on impacts to individual butterflies and milkweeds (required egg and larval habitat).



Could the Monarch ever *really* be listed?

- > The passenger pigeon was once the most abundant bird in the world, with a population of 3–5 billion.
- > While not the most numerous, the monarch is one of the most recognizable butterfly species.
- > Like the passenger pigeon, the thought of the monarch declining to the point of listing (or extinction) seems inconceivable.

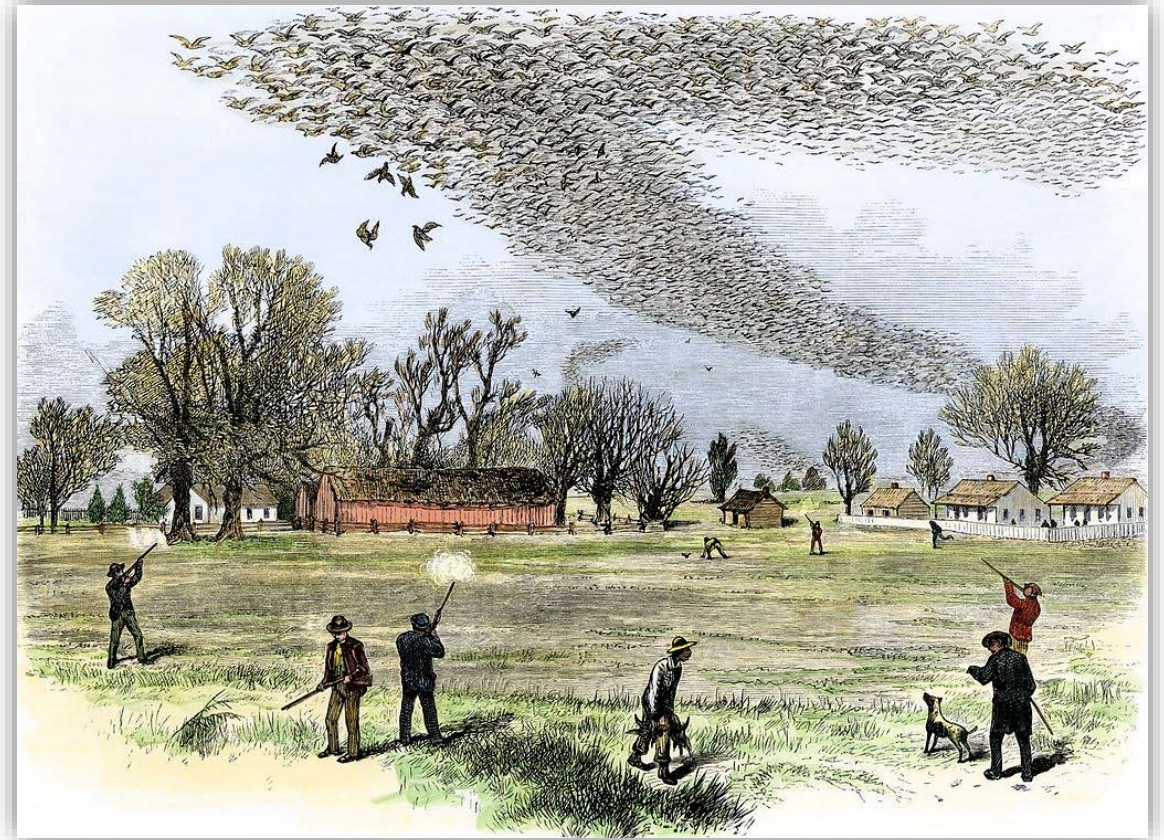


Image: Smith Bennett [1875] - Illustrated Sporting and Dramatic News

Intersection of Conservation, Regulation, and Operations

- > Endangered species and their habitat can complicate things for utilities.
 - Why would we want to promote pollinators and monarchs by creating more habitat on our lands?
 - How do we support pollinators and monarchs while maintaining operational flexibility?

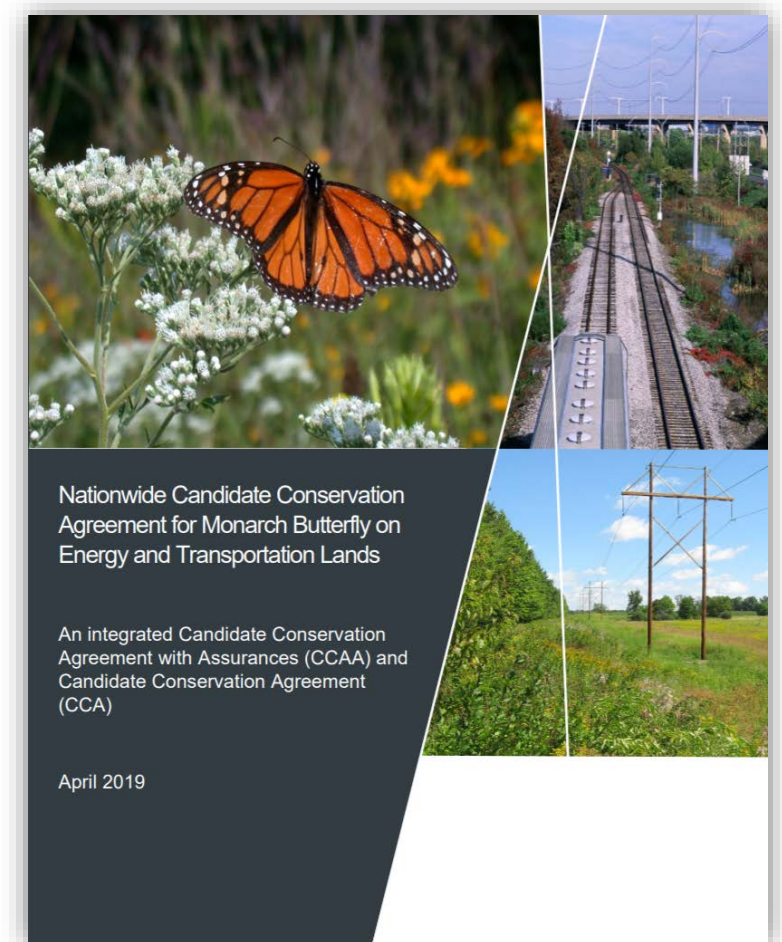


Image: Karner blue butterfly. USFS

So what can utilities do amidst these changes?

Utilities and Pollinator Conservation

- > We all benefit from *preventing* species needing to be listed under the ESA.
 - Implement simple, but effective, conservation measures
 - Consider enrollment in the Monarch CCAA



Utilities, Pollinator Conservation, and the IVM Toolbox

Conservation Action	Benefits
Adjusting mowing timing	<ul style="list-style-type: none">• Avoid loss of nectar or host plants during times when used by pollinators.• Maximize presence of flowering plants.
Targeted herbicide treatments	
Install native seed or plants	<ul style="list-style-type: none">• Maximize presence of flowering plants.• Offset temporary losses from construction and land disturbance.
Brush removal / forestry mowing	<ul style="list-style-type: none">• Maintain open grassland habitat.• Maximize presence of flowering plants.
Maintain suitable habitat set-asides	<ul style="list-style-type: none">• Avoid/Minimize disturbance to suitable habitat.• Maximize presence of flowering plants.

What is a CCAA?

- > Candidate Conservation Agreement with Assurances (CCAA):
 - Are voluntary agreements
 - Address *candidate* species-specific concerns,
 - Must provide a net conservation benefit
 - Address all key “manageable” threats under the owners’ control
 - Give assurances that USFWS will not request additional conservation measures or restrictions

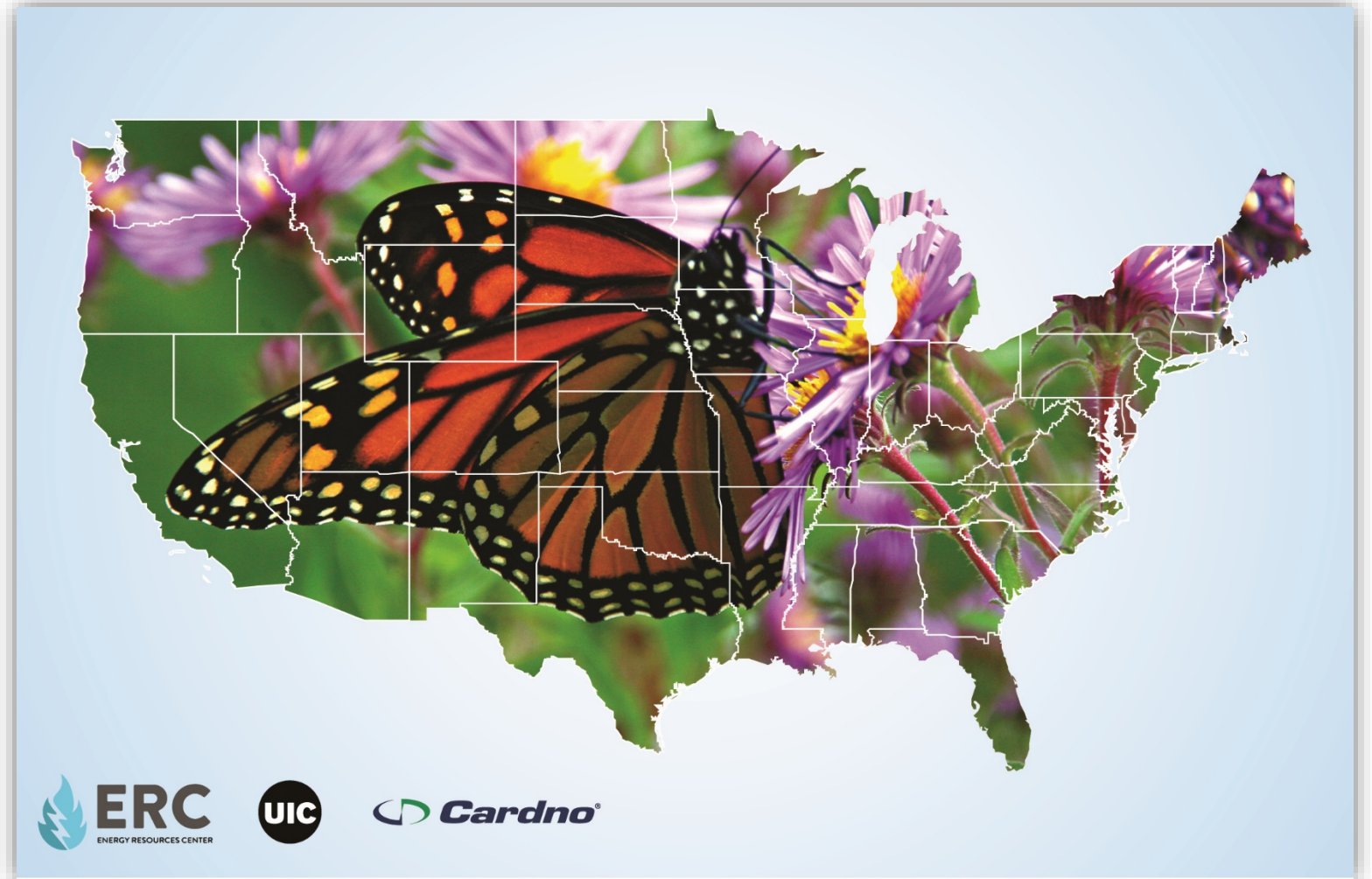


Thank you to our partners who helped make this happen!



Innovative New Model for Conservation

- The first nationwide CCAA
- Supported by over 40 industry partners
- Values cross-sector collaboration
- Completed on the fastest timeline of any such agreement.



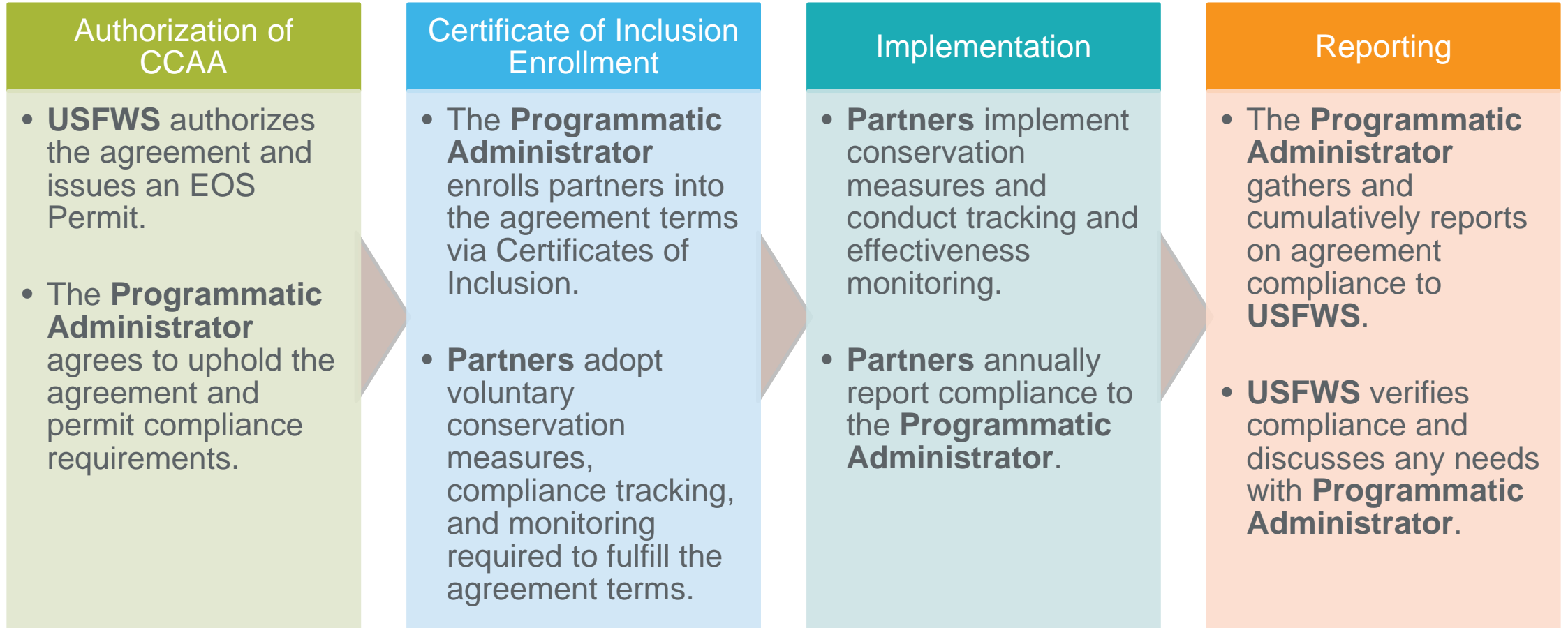
CCAA Goal and Conservation Potential

- > The goal of this CCAA is to encourage participation in voluntary conservation on energy and transportation lands that results in a net benefit to monarchs.
- > The conservation potential of the Agreement aspires to the enrollment of up to **26 million acres of energy and transportation lands contributing over 300 million stems of milkweed, and 2.3 million acres** of monarch foraging habitat, over the coming decades.



Ryan Hagerty, USFWS

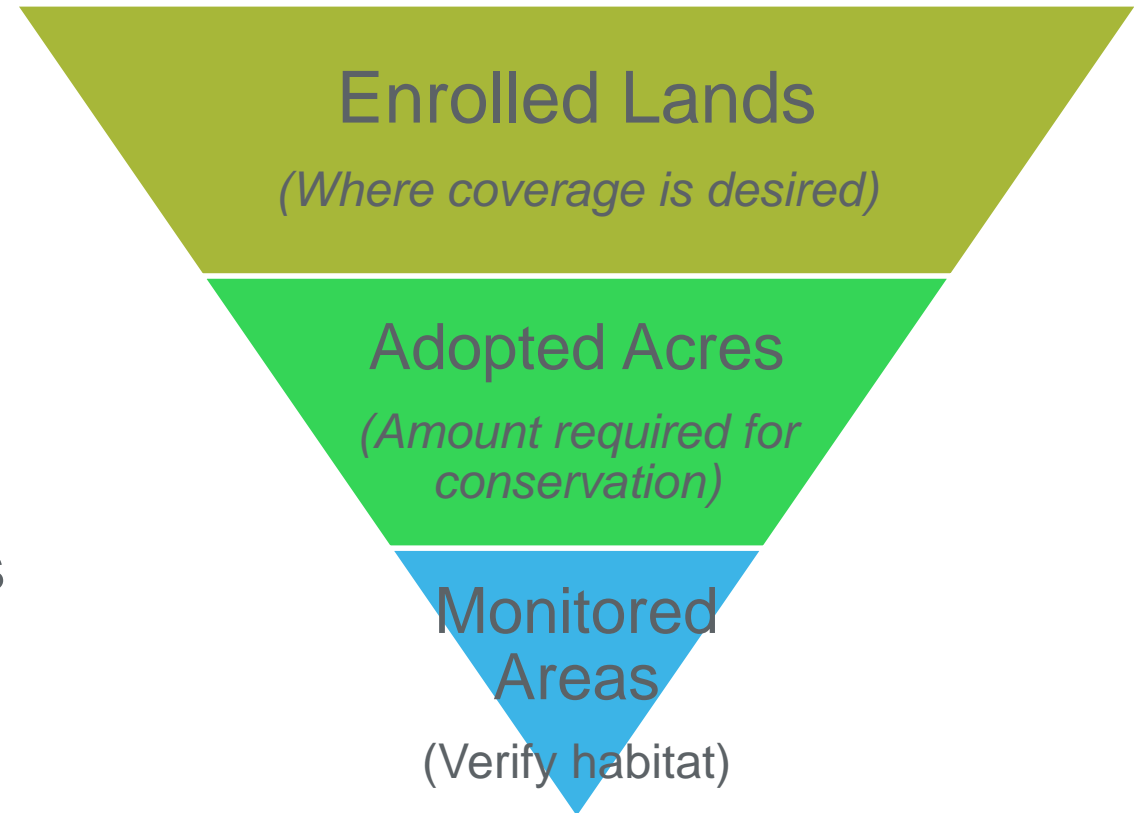
How Does This Process Work?



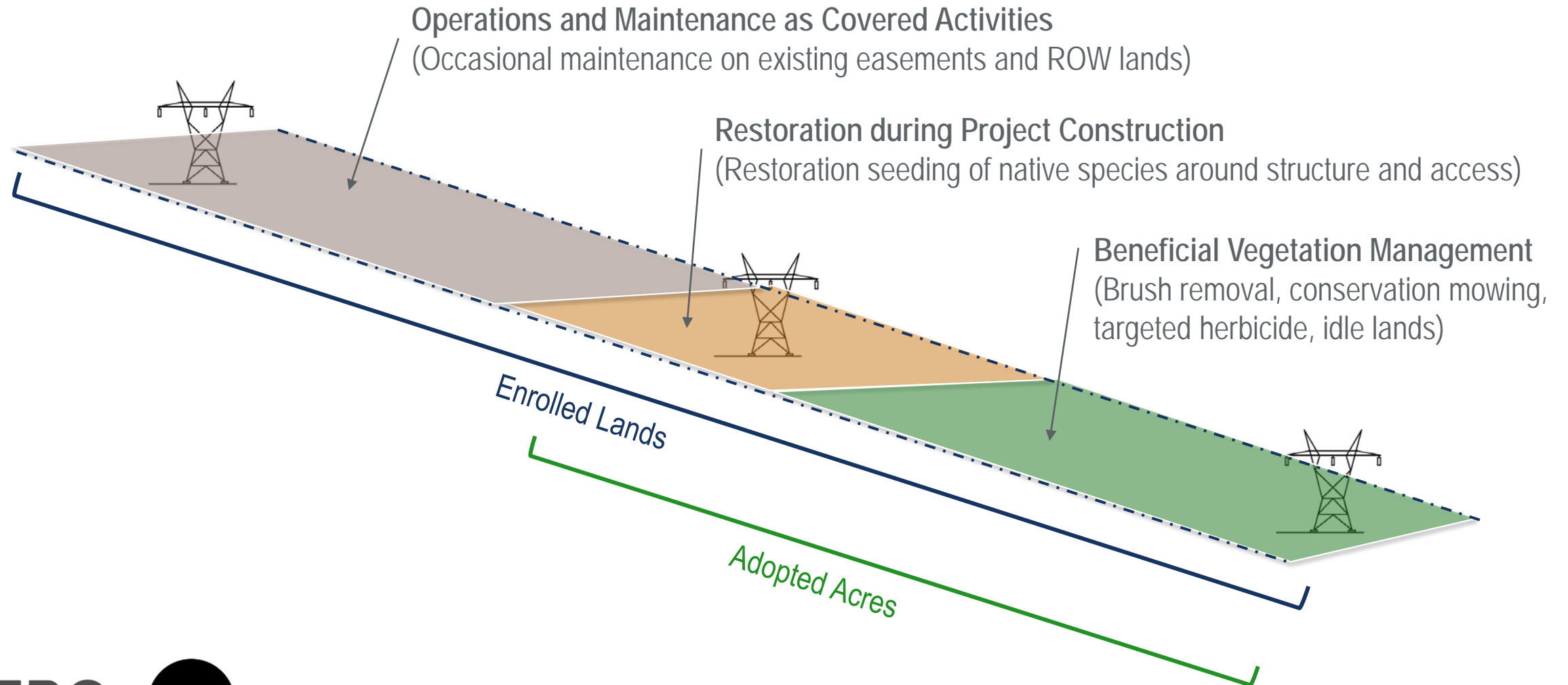
What's Required?

- > Enroll lands in the Agreement
 - Owned
 - Leased
 - Easements

- > Commit to:
 - Implementing conservation measures
 - Track where implemented
 - Monitor and report effectiveness
 - Support the Program Administrator



How a CCAA Works on the Ground



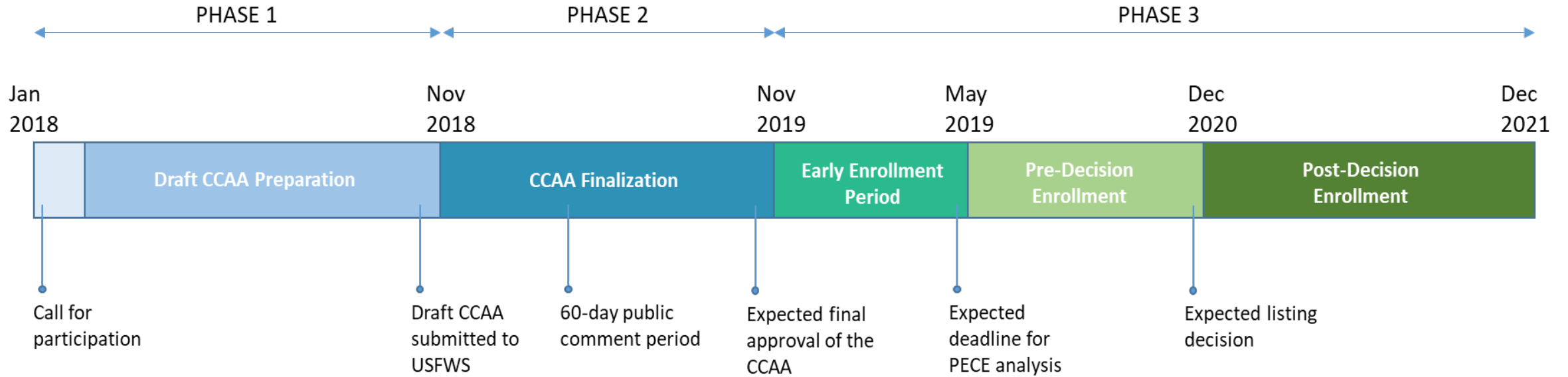
Assurances Provided By CCAA

- > USFWS provides regulatory assurances authorized by ESA:
 - Section 7 of the Act requires the Service to review/use programs to further the purposes of the Act. Through the CCAA Policy, the Service uses Candidate Conservation program to further conservation of fish and wildlife.
 - Section 10(a)(1)(A) of the Act allows the Service to issue permits for acts that would otherwise be prohibited if such acts are expected to enhance the survival of the affected species.

- > Once approved, the Service will:
 - Not require additional conservation measures nor impose additional land, water, or resource use restrictions beyond those voluntarily agreed to and described in the “Conservation Measures” and “Covered Activities” sections of the CCAA.
 - Review, when needed, assurances tied to the effects of “changed circumstances” and “unforeseen circumstances.”



CCAA Timeline

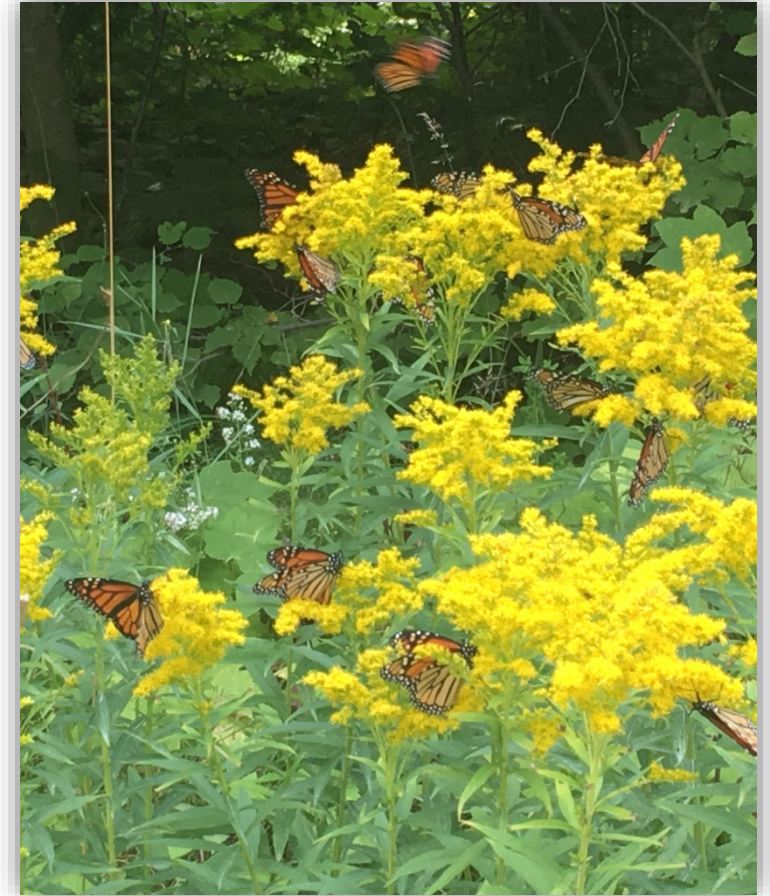


- > USFWS approval expected by end of November.
- > Early enrollment period is important to weigh in to listing decision.

Interested in enrolling?

Interested in Enrolling?

- > Review Draft CCAA and supporting webinars
- > Estimate your commitments (enrolled lands and resulting adopted acres)
- > Reach out to UIC for a pre-application meeting



How to Get Involved?

- Find more information here: <http://rightofway.erc.uic.edu/>
 - Check out *Monarch CCAA* page and *CCAA Task Force* under *Working Group Access*
 - Webinar recordings
 - FAQs
 - Talking Points
 - Cost-Benefit Analysis
- Reach out to UIC and setup your pre-application meeting



Why Enroll Early?

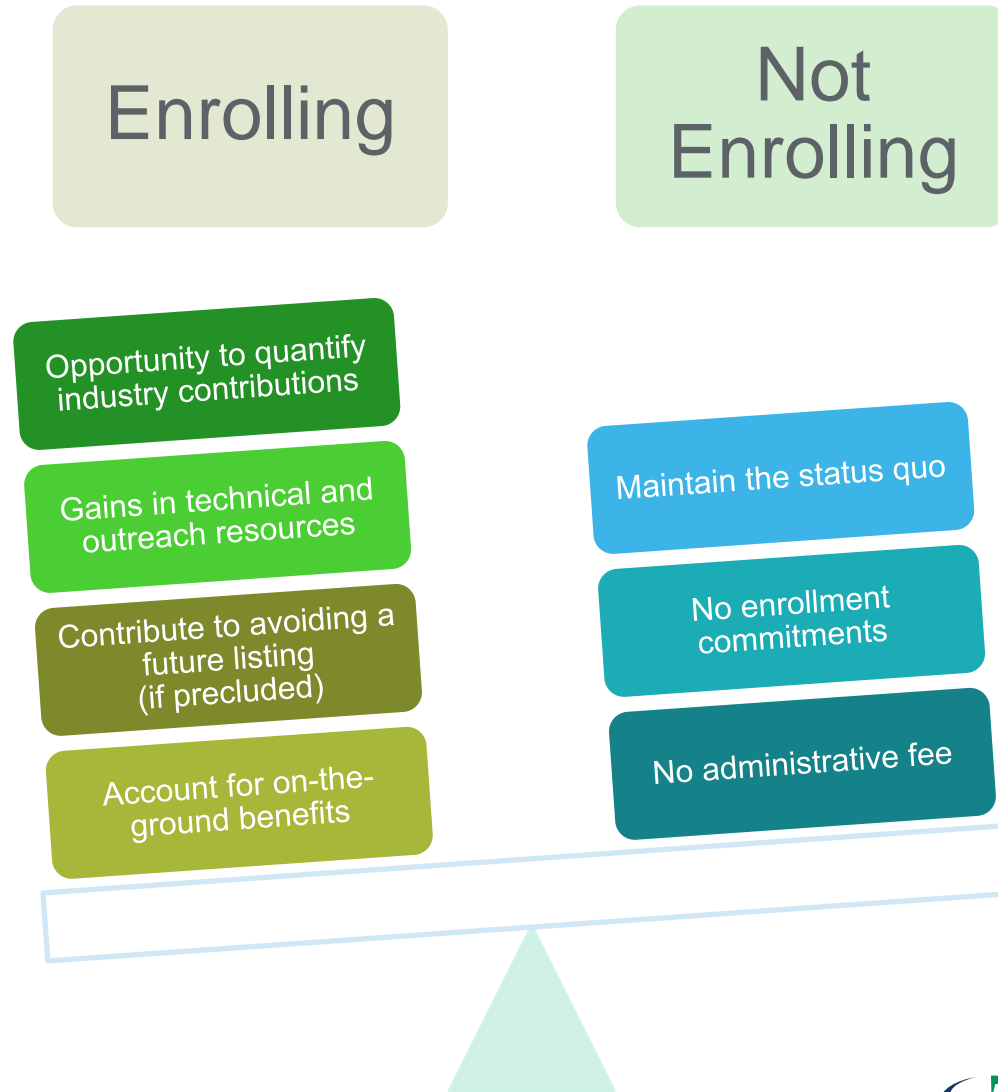
- > Be an industry leader
- > Demonstrate your commitment to monarch conservation
- > Commitments will be considered in the listing decision
- > More time to “ramp up” implementation ahead of a potential listing
- > Low-risk investment to minimize business risks
- > Participation is completely voluntary
- > Reduced administrative fee if enrolled before April 15, 2020



Consider Benefits and Weighing Costs

> Weight the benefits of enrolling vs. not enrolling in the Agreement.

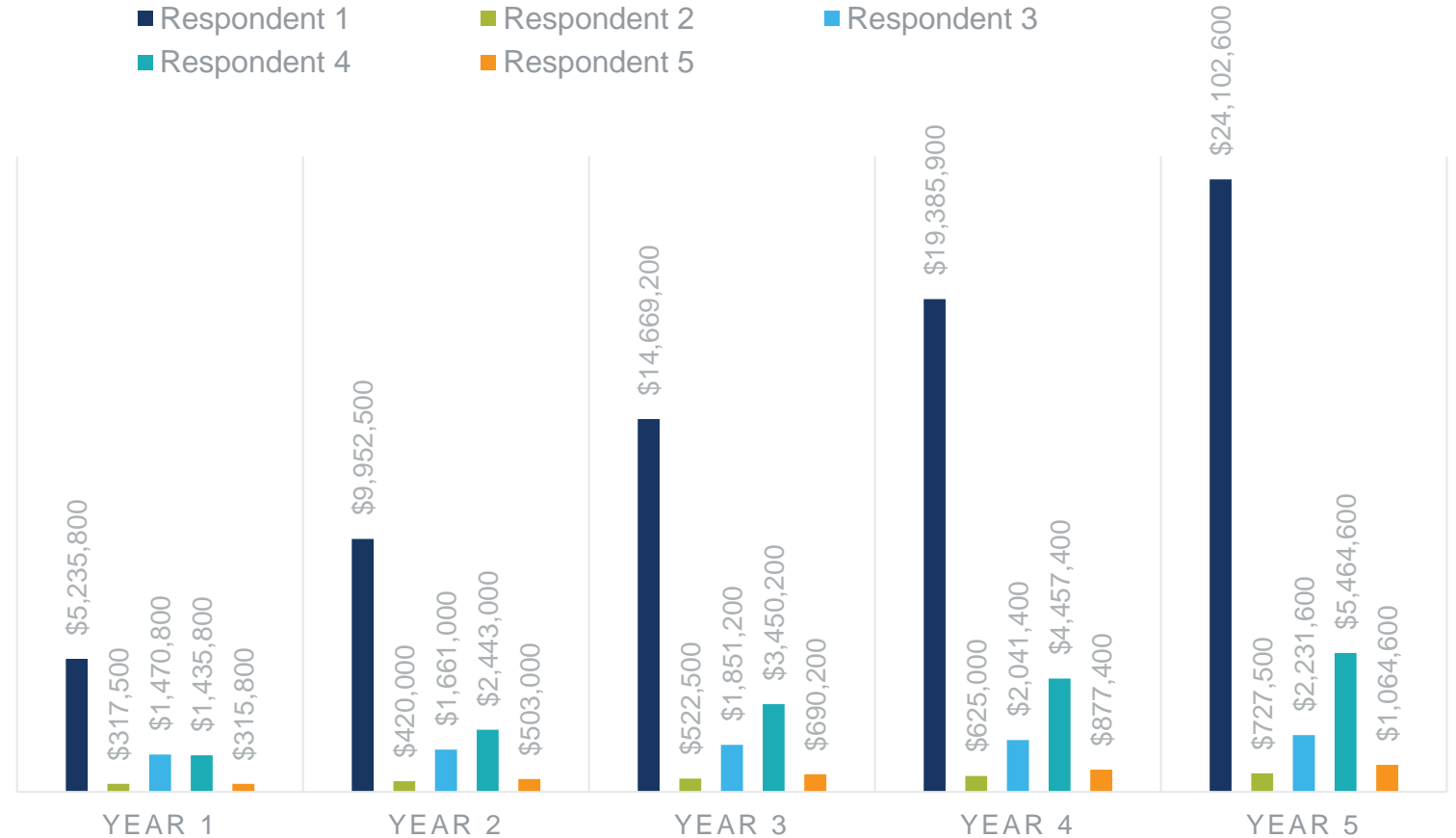
- > Consider
- Value of contributions
 - Risk management
 - Conservation or sustainability commitments



Results – Cumulative Return Over 5 Years

- > Considers an “If Monarchs are Not Listed” scenario.
- > Cumulative return (over 5 years) ranges from \$700,000 to >\$24M.
- > Results based on initial assessments completed by 5 participants.

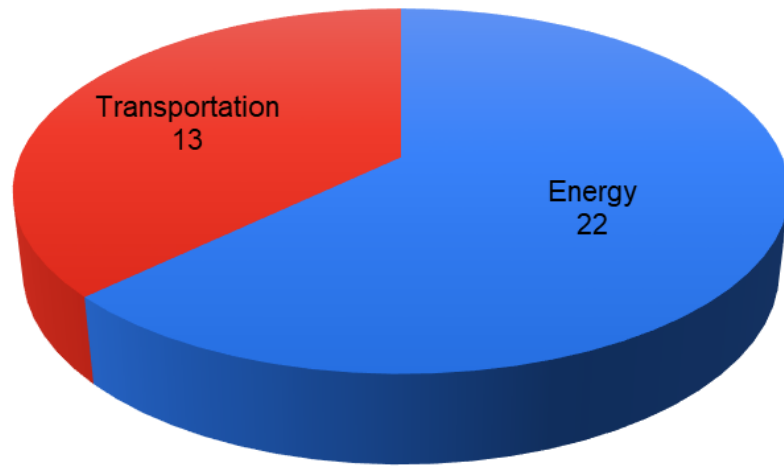
CUMULATIVE ROI RESPONSE RESULTS



Early Enrollment

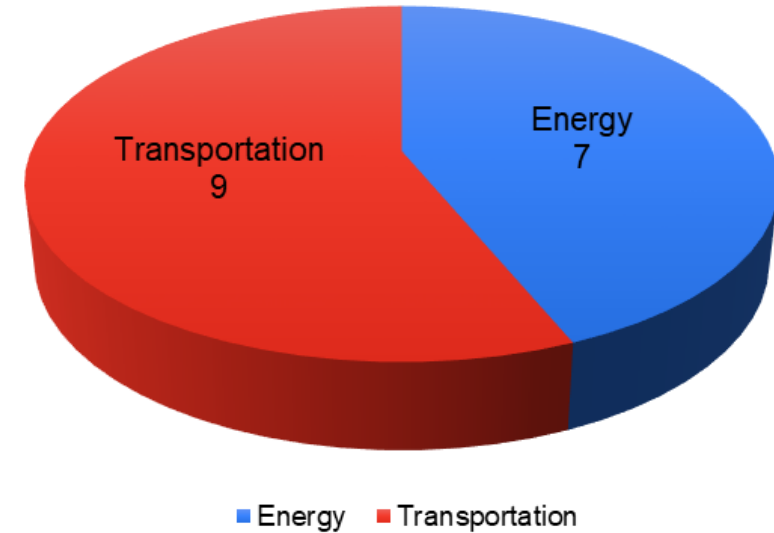
> Early signs indicate continued interest in early enrollment!

Interested Potential Applicants



35

Committed Applicants



16

This is Not a New Problem

*The crux of the [conservation] problem is that every landowner is the custodian of two interests, not always identical, the public interest and his own. **What we need is a positive inducement or reward for the landowner who respects both interests in his actual land practice.** All conservation problems — erosion, forestry, game, wild flowers, landscapes — ultimately boil down to this.*

— Aldo Leopold, 1934

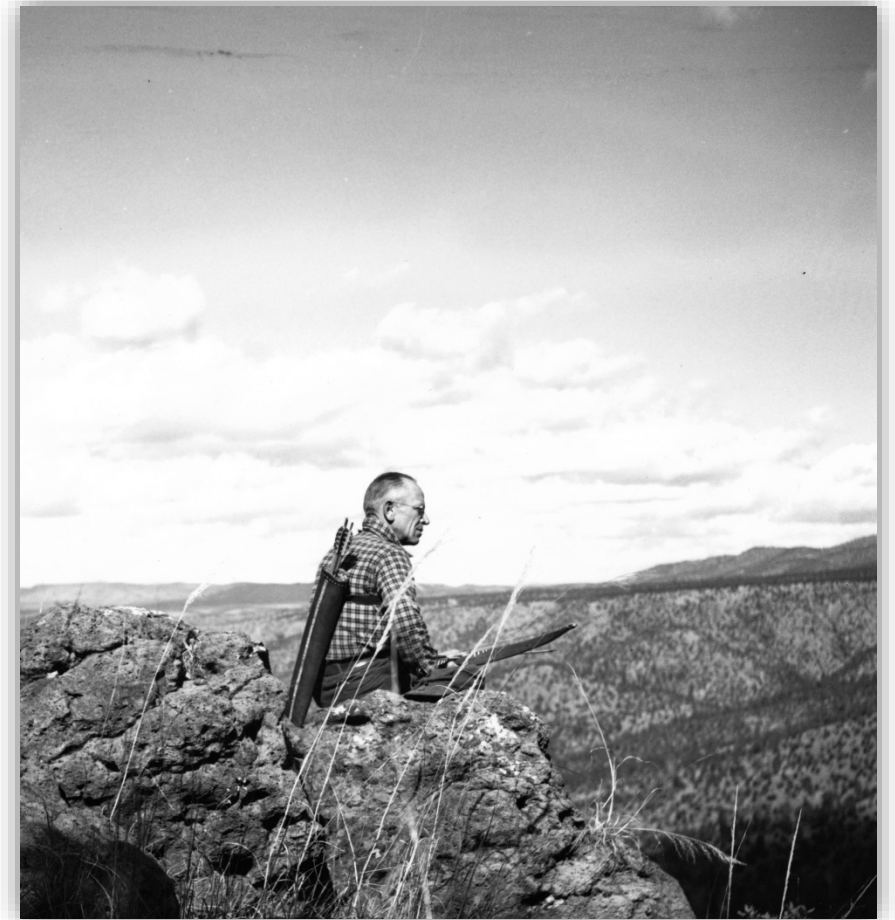


Image: Aldo Leopold seated on rimrock above the Rio Gavilan in northern Mexico while on a bow hunting trip in 1938. Image from Aldo Leopold Foundation and USDA.

Questions?

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