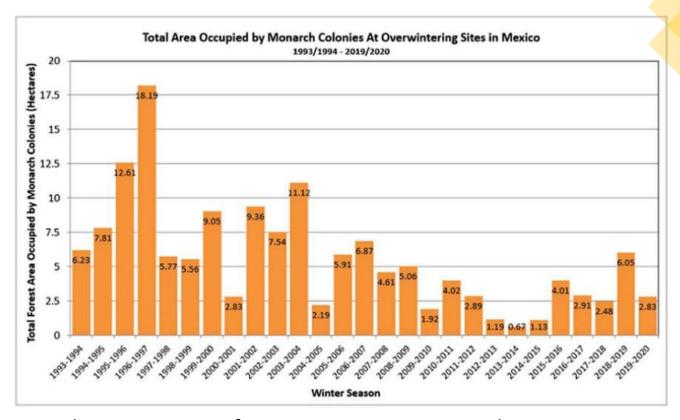
Monarch Candidate Conservation Agreement with Assurances





Overview of Monarch Butterflies

- Monarch butterfly populations have a wide distribution
 - Span approximately 90 different countries and island nations
 - Represented by 31 populations
 - Four populations in United States
- "Warranted but Precluded" status under the Endangered Species Act in 2020
 - Loss of habitat, exposure to chemicals, impacts to overwintering sites, climate change
- The Eastern Population of monarchs has been in decline since the 1990's
 - Systematically monitored since the early 1990's during migrations and at overwintering sites



Population estimates from over wintering grounds in Mexico. Data displayed in hectares where 1 ha = 2 1 million individuals. Photo from Monarch Joint Venture.

Monarch Habitat within Rights-of-Way

- Rights-of-way provide habitat!
- Rights-of-way can be broken into three zones
 - Zone 1 Road surface & shoulder
 - Zone 2 Ditch (inslope)
 - Zone 3 Backslope
- Zones 2 and 3 are typically managed for either early successional or natural vegetation characteristics and can support monarchs
- Maintenance actions can remove habitat or impact monarchs

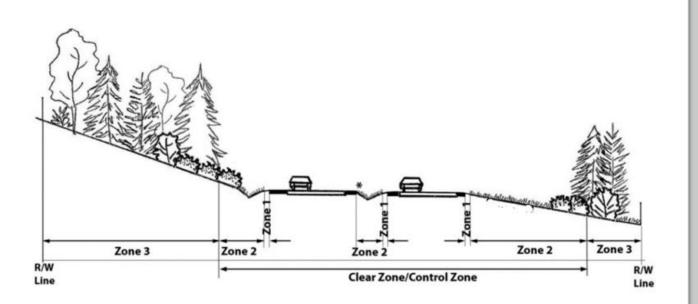


Photo Credit: WSDOT

What is the Conservation Candidate Agreement with Assurances (CCAA)?

- Nationwide agreement available for transportation and energy lands
 - Administered by the University of Illinois at Chicago (UIC)
- You (Partner) agree to voluntarily commit to implement conservation actions for monarch
- We (FWS) provide an Enhancement of Survival permit with assurances that additional conservation would not be required if monarch is listed in the future







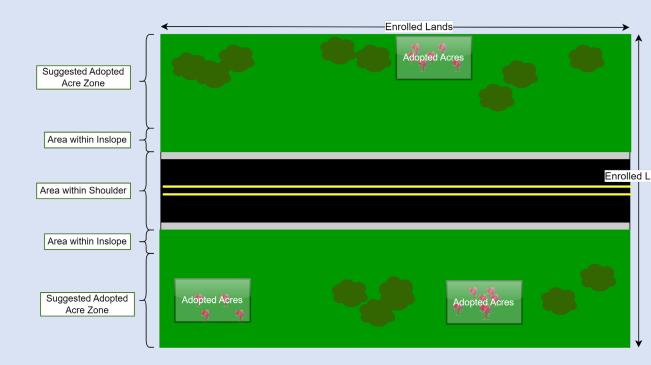




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Qualifying Lands for Enrollment

- Transportation lands that can support habitat for monarch
 - ROWs along roadsides
 - Rest Areas
 - Storage and Maintenance facilities
 - Wetland or other mitigation sites
- Applicants must adopt <u>at least</u> 5% of enrolled lands
 - Adopt means to apply conservation measures to enhance, restore, and/or maintain
 - Adopted acres are accounted for on an annual basis
- Adopted acres should be prioritized where it is possible to carry out conservation measures and to meet 5-year target
 - Habitat is most likely to be maintained in areas that are <u>not</u> frequently managed









Covered Activities

- General operations and emergency response
- Construction and modernization within the footprint of existing infrastructure
- Maintenance, including vegetation management
 - Herbicide use
 - Mowing
 - Woody vegetation removal
- Covered activities do **not** include construction of new infrastructure

Conservation Measures

Pgs. 39 - 47











CREATE

PLANT A VARIETY
OF MILKWEED
AND NATIVE
FLOWERING
PLANTS TO
RESTORE OR
ENHANCE HABITAT

PLAN

TIME MOWING, BRUSH REMOVAL, AND HERBICIDE USE WHEN MONARCHS, EGGS, OR CATERPILLARS ARE NOT PRESENT

AVOID

REDUCE MOWING
AND SPRAYING,
AND USE
TARGETED
PRACTICES WHERE
POSSIBLE TO
ENHANCE
SUITABLE HABITAT

MANAGE

ADOPT GRAZING,
BURNING, AND
OTHER
MANAGEMENT
PRACTICES TO
PROMOTE
BENEFICIAL
PLANTS

SET ASIDE

ALLOW CERTAIN
AREAS TO REMAIN
IN A NATURAL
STATE WITH AS
LITTLE ACTIVE
MANAGEMENT AS
POSSIBLE

Monitoring, Reporting, and Fees

- Must monitor adopted acres annually
 - # of plots determined by # of adopted acres
 - 90% of plots need 6+ stems of milkweed
- Must file an annual report
 - Summary of lands managed, monitoring, and upcoming year forecast
- Annual administrative fee required
 - Estimated cost for state DOTs/national energy companies \$10,000 – \$15,000 per year
- An implementation plan must be completed within one year
- Must meet adopted acres targets within five years

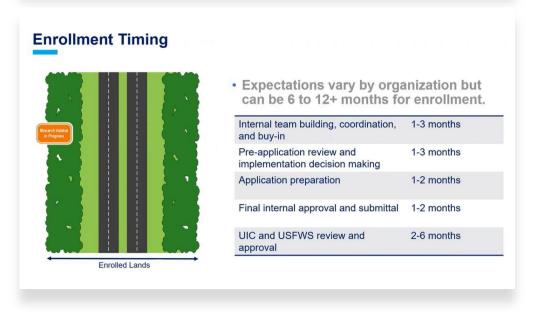
Estimated Adopted Acres	Anticipated No. of Annual Samples
Fewer than 1,000	10
1,001 to 10,000	30
10,001 to 30,000	50
30,001 to 60,000	70
60,001 or more	70, plus one additional point for each 1,000 acres exceeding 60,001 adopted acres.



CCAA Application Process

- There are four steps in the CCAA Application Process
 - Pre-Application Outreach*
 - 2. Application Preparation*
 - 3. Application Review
 - 4. Certificate of Inclusion Issuance
- Consider timeline for compiling application materials (potentially 6-12 months)
- Applicants cannot rely on CCAA coverage until they receive the Certificate of Inclusion
- Not possible to join CCAA once final rule goes into effect





Benefits of Enrollment

- Assist in conservation and may help preclude listing
- Voluntary
- Decreased costs
- Regulatory assurance if monarch is listed
- Transportation Case Study
 - Vegetation management changes reduced cost of operation
 - Reduced uncertainty, technical guidance, and information sharing



COSTS

- Administrative and Legal Costs
- Implementation Costs
- Annual Reporting
- Compliance Tracking
- · Effectiveness Monitoring

BENEFITS

- 3rd Party Administration and Reporting
- Reduced Implementation Costs
- Benefits from Future Adaption
- Technical Support
- USFWS Coordination
- Cost Reduction from Regulatory Assurances



Web Resources

- Monarch CCAA
- University of Illinois, Chicago CCAA
 Home Page
- Monarch CCAA Webinars and Case Studies
- Monarch CCAA Toolkit
- FWS FAQs about Monarch CCAA
- Administrative Fees
 - <u>Calculator</u>
 - FAQs



