Nationwide Monarch Butterfly Candidate Conservation Agreement for Energy and Transportation Lands

Application for Certificate of Inclusion in the CCAA/CCA

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To complete your application package, don't forget to include:

- 1. Your completed application form (this document)
- 2. Maps displaying the extent of enrolled lands being enrolled in the Agreement
- 3. Section 7 analysis supporting documentation
- 4. Any supplemental information necessary to support your application

Return the completed application to:

Monarch Agreement Program Administrator Energy Resources Center The University of Illinois at Chicago 1309 S Halsted Street, MC 156 Chicago, IL 60607

Iris Caldwell, Program Manager Office: (312) 355-1483 Email: iriscald@uic.edu

Upon review of your completed application package, the Program Administrator will request:

- 1. A signed copy of your organization's Certificate of Inclusion (pages 25-26 of this document)
- 2. Payment for the first year's administrative fee as calculated by the Program Administrator

I. Applicant Information

Organization Name:

Primary Point of Contact Name:	Click or tap here to enter text.		
Address:	Click or tap here to enter text.		
Phone Number:	Click or tap here to enter text.		
E-mail:	Click or tap here to enter text.		
Authorizing Signature Contact Name	Click or tap here to enter text.		
Address:	Click or tap here to enter text.		
Phone Number:	Click or tap here to enter text.		
E-mail:	Click or tap here to enter text.		

□ This application contains confidential or sensitive business information per Section 8 of the Agreement. If you checked "yes", please note what parts of the application are considered confidential.

(Check the box if answering "yes").

Click or tap here to enter text.

II. Description of Existing Conditions

- a. Type of use and operations (up to three, as applicable) being enrolled:
 - Choose an item.
 - Choose an item.
 - Choose an item.
- b. Provide a short (1-2 paragraph) summary of the system of lands being enrolled in the Agreement. Describe:
 - Location and estimated acreage of enrolled lands
 - Describe your land management ability: owned, easement, and (if applicable) facilities located on easement or ROW held by other entities

Click or tap here to enter text.

c. Summarize the covered activities included within your enrollment. If enrolling the entire list of activities included in Section 5 of the Agreement, note as such. If only enrolling for a subset of activities, then list or summarize which categories of, or specific, covered activities are included.

Click or tap here to enter text.

d. Provide a short (1-2 paragraph) description summarizing monarch habitat availability and the conservation measures you envision your organization contributing to the Agreement. Section V of this application includes a table with check boxes to indicate the general measures that will be implemented. More specific details will be requested in the Implementation Plan to be submitted after the Application is approved.

Click or tap here to enter text.

e. Attach a map or GIS files showing the location and extent of the enrolled lands. To the greatest extent practical, provide maps that display parcel and/or corridor route locations for areas included within your enrolled lands. For applicants with assets in multiple states, please provide state-scaled maps and/or a table of enrolled acres by state. Describe the boundaries or limits used to delineate enrolled lands versus lands excluded from the Agreement.

Click or tap here to enter text.

f. Describe in a short (1-2 paragraph) summary any constraints that affect your ability to implement conservation measures or to address key threats. Management constraints are limitations on your management controls that may result from laws and regulations, land or easement ownership requirements, organizational policies, or management capabilities. *Note: There is a separate field in Section IV.b. for proposing a schedule for phasing in conservation measure adoption over time.*

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g. Provide a summary of any existing agreements, permits, or other authorizations your organization may have regarding incidental take coverage for other Federal-listed endangered species. For example, list any habitat conservation plans (HCPs) or incidental take permits (ITAs) authorized to your organization, or other candidate conservation agreements (CCA/CCAA) or safe harbor agreements (SHA) you are enrolled within. Consultations or programmatic guidance (e.g. 4(d) guidance for listed bats, or USFWS guidance for listed invertebrates or plants) also apply.

Click or tap here to enter text.

h. In accordance with the USFWS Conference Opinion prepared for the Nationwide Candidate Conservation Agreement for Monarch Butterfly for Energy and Transportation Lands, provide documentation to support the USFWS Section 7 evaluation of covered activities and their potential jeopardy to current, or proposed, Federal-listed plant species and designated critical habitats.

Provide a summary of:

- i. A list of the current or proposed Federal-listed species within the enrolled lands and critical habitats that overlap with enrolled lands
- ii. Covered activities to be included for evaluation
- iii. The geography where impacts may occur
- iv. Which activities are, or are not, subject to S7 elsewhere
- v. What avoidance and minimization measures are currently used by the Applicant for each individual current, or proposed, Federal-listed plant species and designated critical habitat.

Summarize in an attachment to this application.

III. Agreement to Participate in the Monarch CCAA/CCA

In witness of, the participating agency hereto has, as of the last signature date below, executed this Candidate Conservation Agreement with Assurances to be in effect as of the date the USFWS issues the permit.

	Click or tap here to enter text.	Date
Applicant(s) Signature	Printed Name, Title	Date
	Click or tap here to enter text.	Date
Program Administrator	Printed Name, Title	Date

The enrolled Partner must adhere to all terms and conditions of the Agreement. According to the pending listing finding, the primary threat to monarchs is habitat loss and degradation. Therefore, in order for this Agreement to address the conservation needs of the monarch, the conservation measures selected in the table below must be implemented by all representatives of the applying organization on the enrolled system of lands.

To remain in compliance with the Agreement, as an enrolled Partner, you agree to:

- Abide by all terms of the Agreement, including specific management strategies for each conservation measure as designated in the application to minimize risk of harm to monarchs on enrolled lands. Terms also include provisions associated with reporting, paying fees, and alerting UIC if there are compliance issues and/or unforeseen/changed circumstances. Administrative fees will be due prior to full execution of the Certificate of Inclusion, then on an annual basis from the date of the fully executed Certificate of Inclusion, or subject to another previously agreed upon date between the Partner and Program Administrator.
- 2. Complete a CCAA/CCA implementation plan within one year from the date of the fully executed Certificate of Inclusion. A CCAA/CCA implementation plan will consist of a short plan created by the Partner describing:
 - i. Roles and responsibilities who (within their organization) is involved in implementation of the conservation measures, and applicable communication structure, and
 - ii. How the Partner intends to implement the conservation measures, tracking, monitoring, and reporting required in the Agreement. An existing IVM plan (if consistent with conservation measures proposed in the application) may suffice for this description, or provide the basis for one.
 - General timing and prescriptions for treatments,
 - Timing expectations for tracking, monitoring, and reporting,
 - Adopted acres target ramp up periods and targets (if applicable),
 - Approach to conducting sampling for effectiveness monitoring,
 - Adherence to any applicable quality control procedures internal to the Partner organization, and

- Funding for implementation (whether funding for conservation measures and other requirements comes from capital expenditures or operations and maintenance budgets),
- How they plan on using best management practices and guidance available on the Monarch Agreement Implementation Toolbox website.
- 3. Acknowledge that, as a Partner, the organization is responsible for their own compliance with applicable state and Federal laws related to listed species, historic and cultural resources, and other environmental resource protection. The organization also acknowledges that they will communicate and coordinate with underlying landowners (as applicable), and follow terms and conditions of the Enhancement of Survival (EOS) Permit issued to the Program Administrator. The Service's guidelines for complying with Section 106 of the National Historic Preservation Act are included as part of Appendix C (Supplemental Information) in the Agreement.
- 4. Implement Partner-selected conservation measures within the first full calendar year following the full execution of an individual Certificate of Inclusion. If implementation within the first full calendar year is not practical, the Applicant may propose an alternative implementation timeline(up to five years) to the Program Administrator for review and approval in Section IV.b. below.
- 5. Achieve the target for expected adopted acres annually based on the sector-specific adoption rates, or an approved variance during the waiver period, over the duration of the Partner's enrollment within the Agreement. Should actual annual implementation tracked be below the annual adopted acres target(s) identified, then the Partner will adhere to the appropriate scenarios highlighted in Section 10 of the Agreement (Adaptive Management).
- 6. Track the location (statewide or finer scale) of where and date when (final month) conservation measures are implemented for compliance verification as described in Section 7.3 of the Agreement (Obligations of the Parties).
- 7. Conduct effectiveness monitoring within a subset of locations where conservation measures are implemented for compliance verification as described in Section 14 of the Agreement (Monitoring Provisions) and Section IV.c. below.
- 8. Provide the Service and the Program Administrator, or their agreed upon representatives, access to the enrolled property to identify or monitor monarchs and their habitat, evaluate conservation measures, and monitor effectiveness and compliance with individual Partners at mutually agreeable times. All applicable safety trainings and appropriate measures will be communicated to Program Administrator, the Service, or their designee by the Partner in a timely manner prior to site access. Any and all representatives of Program Administrator, the Service, or their designee must adhere to all Partner-specific and site-specific health and safety compliance requirements, including associated training, certifications (if applicable), and protocols.
- Allow the Program Administrator to share, as requested, with the Service or other Agreement Partners, habitat and other planning or monitoring information related to the enrolled properties. Information sharing will not include any confidential business or proprietary information per the terms and conditions specified in Section 8 (Confidentiality).

IV. Adopted Acres Contribution

By enrolling the above-mentioned lands in the Agreement, and adopting the conservation measures selected below at the agreed-upon rate, our organization is voluntarily committing to improving monarch habitat through these practices and to cooperate with the requirements of the Agreement. Adopted acres are the primary measure of the net conservation benefit provided by the Partner enrolled. If organization is not able to implement the conservation measures immediately, include a proposed implementation schedule in the text box below the table.

Note: Enrolled lands and adopted acres estimates may be demonstrated using the table below or explained in the text section following the table. Refer to the Agreement for definitions of terms. Double click the table to edit.

С	alculation of A	nnual Ado	opted Acres	Farget		
Enrolled Lands - ROW	Highway/Interst	ate ROW	County/Local R	oads ROW	Rail ROW	
Total Miles of ROW	-	miles	-	miles	-	miles
Assumed Average Width of ROW	-	feet	-	feet	-	feet
Acres of Enrolled ROW	-	acres	-	acres	-	acres
Enrolled Lands - Managed Parcels	Highway/Interst	ate - Parcels	County/Local R	oads - Parcels	Rail - Parcels	
Acres of Enrolled Parcels	-	acres	-	acres	-	acres
Acres of Enrolled Lands By Type	-	acres	-	acres	-	acres
Adoption Rate	8%		5%		5%	
Annual Adopted Acres by Type	-	acres	-	acres	-	acres
Enrolled Lands - ROW	Transmission R	ow	Distribution RO	N	Generation Parcels	
Total Miles of ROW	-	miles	-	miles	NA	
Assumed Average Width of ROW	-	feet	-	feet	NA	
Acres of Enrolled ROW	-	acres	-	acres	NA	
Enrolled Lands - Managed Parcels	Transmission -	Parcels	Distribution - Pa	rcels	Generation Parcels	
Acres of Enrolled Parcels	-	acres	-	acres	-	acres
Acres of Enrolled Lands By Type	-	acres		acres	-	acres
Adoption Rate	18%		1%		9%	
Annual Adoptetd Acres Target by Type	-	acres	-	acres	-	acres
Overall Annual Adopted Acres Target	-	acres				
					Calculated yields	
*The number of adopted acres is the target contributions do not need to be met by eacl			Pre-populated or cal	culated subto		
land of multiple types.	n category in a syster				Enter data	
and of maniple types.		-		NA	Not Applicable	

a. Narrative explanation of calculation of the annual adopted acres target.

Click or tap here to enter text.

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b. Proposed implementation schedule – If the targeted adoption rate will not be achieved during the first full calendar year of enrollment, include an estimate of the anticipated interim adoption rate(s), and the expected interim adopted acres target(s), for each of the interim years until the full target adoption rate is expected to be met (Note: Interim period cannot last longer than 5 years).

Click or tap here to enter text.

c. Proposed effectiveness monitoring schedule per Section 14 of the Agreement – indicate whether monitoring will be submitted annually or propose a plan that will involve submitting monitoring results at least every 3 years.

Click or tap here to enter text.

V. Conservation Measures

By enrolling in this Agreement, the Partner will identify the suite of applicable conservation measures that:

- a) Address each of the key threats identified within control of the Partner;
- b) Can be implemented over the course of the agreement by the Partner; and
- c) Can be conducted on a sufficient quantity of lands to achieve the adopted acres target resulting from the applicable adoption rate(s).

Each key threat identified within the Agreement will be addressed, within the control of the Partner, by selecting one or more corresponding conservation measures. The Service and Program Administrator recognize each Partner manages a unique system of lands and that conservation measure implementation will be based on site-specific conditions. Partners are expected to select one or more conservation measures to address each key threat within their control and achieve the expected annual adopted acres target. The Service recognizes not all conservation measures listed for a particular threat will be appropriate for a given property. Site-specific conservation measures will be based on the key threats present and the management ability of the Partner towards those threats.

Supplemental conservation measures are activities that do not directly address key threats identified, but still have important partnership and logistical contributions to the undertaking of this Agreement and monarch conservation. However, as activities, they do not directly result in an on-the-ground benefit (i.e. adopted acres). Annual reporting of supplemental conservation measures has the benefit of documenting additional Partner efforts and investments, providing more indepth monitoring to answer important management questions, and build confidence in the implementation of the Agreement. Supplemental measures can also help reduce the annual administrative fee required.

The following threats, conservation measures, current or future practices, and comments are identified for this enrolled property. Descriptions and examples of conservation measures are included after the table.

Key Threat/ Conservation Limiting Factor Measures		Pre- Agreement Practice	Post- Agreement Practice	Comments (note here if measure applies to only some ROW or parcels and if there are plans to increase the activity over time)
	Seeding and planting to restore or create habitat	 □ routine □ occasional □ none 	□ routine □ occasional □ none	Click or tap here to enter text.
Lack of Habitat and Nectar	Controlled grazing to promote suitable habitat	 □ routine □ occasional □ none 	□ routine □ occasional □ none	Click or tap here to enter text.
Resources (General)	Brush removal to promote suitable habitat	 □ routine □ occasional □ none 	□ routine □ occasional □ none	Click or tap here to enter text.
	Suitable habitat set- asides or idle lands for one or more growing seasons	 □ routine □ occasional □ none 	☐ routine ☐ occasional ☐ none	Click or tap here to enter text.
Loss of Habitat and Nectar Resources (Mowing Practices)	Conservation mowing to enhance floral resources during migration and breeding	☐ routine ☐ occasional ☐ none	☐ routine ☐ occasional ☐ none	Click or tap here to enter text.
Loss of Habitat and Nectar Resources (Herbicides)	Targeted herbicide treatment of undesirable vegetation using herbicide best management practices	□ routine □ occasional □ none	□ routine □ occasional □ none	Click or tap here to enter text.

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Supplemental Measures (Not tied to specific key threats, but help improve overall conditions for monarchs, or promote conservation actions.)

Supplemental Measures	Pre- Agreement Practice	Post- Agreement Practice	Comments (note here if measure applies to only some ROW or parcels and if there are plans to increase the activity over time)		
Use spatial modeling to prioritize areas for implementing conservation	 □ routine □ occasional □ no 	□ routine □ occasional □ no	Click or tap here to enter text.		
Minimize the spread of invasive species into areas of suitable habitat	 □ routine □ occasional □ no 	□ routine □ occasional □ no	Click or tap here to enter text.		
Incorporate pollinator habitat- focused objectives into vegetation management operations	□ routine □ occasional □ no	□ routine □ occasional □ no	Click or tap here to enter text.		
Conduct additional pollinator habitat monitoring protocols beyond those required for CCAA effectiveness monitoring.	□ routine □ occasional □ no	□ routine □ occasional □ no	Click or tap here to enter text.		
Promote supplemental pollinator conservation efforts		□ routine □ occasional □ no	Click or tap here to enter text.		

VI. Definitions

Definitions are also described within the Agreement, but provided here for reference.

Adopted acres – Within this Agreement, adopted acres are those lands within the enrolled lands where conservation measures are used to create, enhance, restore, sustain, or maintain habitat that supports monarch butterfly breeding and/or foraging requirements as documented by effectiveness monitoring in representative sampling. Adopted acres are the primary measure of Net Conservation Benefit within this Agreement.

Adoption rate - Adoption rates represent the percentage of total enrolled lands expected of individual Partners under this Agreement on which conservation measures are implemented to provide a Net Conservation Benefit. Adoption rates vary by sector with consideration for the conservation management opportunities and constraints associated with each sector.

Conservation Measures – Measures that aim to conserve and enhance the survival of the monarch butterfly and its habitat by addressing identified key threats within the covered area, as described in Section 6 of the Agreement.

Covered Activities – Energy and transportation land management, maintenance, and modernization activities on enrolled lands that have the potential to cause specific threats to monarchs. Covered activities are not reasonably certain to result in incidental take of other ESA listed animals, or are conducted in compliance with the terms and conditions of existing incidental take statements (Section 7), or Section 10 permits. All covered activities are conducted in accordance with applicable State and Federal laws, and with existing permits, easements, and agreements that allow the Partners to access and manage enrolled lands, and that may condition the manner by which they may carry out those activities. If the monarch is listed under as endangered or threatened under the ESA, incidental take of monarchs that occurs as a result of covered activities carried out by a Partner who is adhering to the terms of the Certificate of Inclusion, will be authorized under the EOS Permit and Biological Opinion. See Section 5 of this Agreement for additional detail and examples of covered activities.

Enrolled lands – The lands (either owned, leased, permitted, or managed easements) within the covered area and identified by the signed Certificate of Inclusion of all Parties. Eligible lands for enrollment include any non-Federal or Federal lands, properties, leases, and easements within the covered area on which conservation measures or covered activities may occur. To the extent that Federal lands are enrolled, the assurances provided under this CCAA/CCA would not apply on those lands. Partner specific estimates of enrolled lands will be included as part of each application, and modified in Certificates of Inclusion annually, as necessary. See Section 4 for additional information.

Key Threats Addressed	Conservation Measure	Purpose	Description	Examples
Loss of habitat resulting from land conversion	Seeding and planting to restore or create habitat	Active planting of an area to promote preferred native floral resources for monarch breeding and/or foraging.	Completing seeding or planting projects that create areas of suitable habitat with milkweed and/or floral resources available throughout the growing season. Seed mixes should be free of invasive or aggressive non-native species that inhibit species diversity when established. Seed mixes and plugs should not be treated with systemic insecticides. Determine applicability of seeding and planting based on seasonality, frequency, location, and timing for implementation based on state or regional guidelines.	 Establish native seed mixes containing a diversity of native wildflowers, including milkweed, as appropriate. Apply native seed mixes in bare soil areas, including those recently cleared, graded, or disturbed. Landscape facilities with native flowering plants that act as nectar resources. Implement enhancement projects that increase the habitat available (special partnership habitat restoration projects – both on/off Partner lands, and post-construction enhanced seeding where appropriate)
Loss of habitat resulting from herbicide use Loss of habitat resulting from mowing	Controlled grazing to promote suitable habitat	Use of controlled grazing to sustain open early successional habitats suitable for monarchs.	Implement grazing within suitable habitat using BMPs that minimize impacts to monarchs. Determine applicability of grazing based on seasonality, frequency, location, and timing for implementation based on state or regional guidelines.	 Minimize use of grazing in existing monarch habitat during peak monarch breeding and migration periods while considering the long-term goal of improving habitat for the species and promoting fall nectar plants.

VII. Conservation Measures and Descriptions

Key Threats Addressed	Conservation Measure	Purpose	Description	Examples
Loss of habitat resulting from herbicide use Loss of habitat resulting from mowing	Brush removal to promote suitable habitat	Management or removal of woody (non-herbaceous) plants including those that are invasive or listed as a noxious weed.	Removal of dense brush using forestry mowing, chainsaws, or other mechanical methods to promote more open grassland habitat types. Maintenance of brush management involves monitoring for regrowth or reoccurrence of brush.	 Removal of woody plants in densely covered shrub areas not containing suitable habitat (e.g. shrub thickets, invasive species colonies). Removal of woody plants in areas containing suitable habitat when monarchs are not likely present. Removal of woody plants by hand at any time of the year.
Loss of habitat resulting from herbicide use Loss of habitat resulting from mowing	Prescribed burning to promote suitable habitat	Management through use of prescribed fire to sustain or enhance plant diversity.	Use of prescribed fire to sustain open early successional habitats suitable for monarchs.	 Conduct prescribed burns in suitable habitat using BMPs that minimize impacts to monarchs or their habitat use.
Loss of habitat resulting from herbicide use Loss of habitat resulting from mowing	Suitable habitat idle lands, or set-asides	Sustain areas of relatively undisturbed suitable habitat throughout the portions of the growing season when monarchs may be present.	Maintaining areas of suitable habitat annually that will be undisturbed by temporary losses from construction, maintenance, or vegetation management in any given year. These areas may change spatially on an annual basis as new habitat becomes available and maintenance needs occur.	 Sustaining idle lands in between vegetation management treatments or cycles. Designating special habitat 'preserves' in areas that will be protected from construction or maintenance. These may include special restoration projects, high quality areas, or other location designated by the CCAA/CCA Partner. Avoid disruption to disturbance of existing monarch habitat during peak monarch breeding and migration periods.

Key Threats Addressed	Conservation Measure	Purpose	Description	Examples
Loss of habitat resulting from mowing	Conservation mowing to enhance floral resource habitat	Mowing in a manner that promotes habitat and minimizes impacts based on monarch breeding and migration activity.	Conduct mowing and/or haying practices in a manner consistent with the intent and recommendations outlined in published BMPs for monarchs, and in conjunction with operational needs. Timing may be informed by published guidance, annual monitoring documented by Journey North, or in consultation with the Program Administrator or USFWS Agreement Coordinator.	 Conduct mowing in suitable habitat where possible in conjunction with recommended practices by <u>Monarch Joint Venture</u>, <u>Xerces</u> <u>Society</u>, FHWA <u>BMPs for pollinators, mowing</u> <u>BMPs (pages 18-25)</u>, and/or Federal agencies <u>BMPs for Mowing and Pollinators (p. 29)</u> Mowing or haying at a periodic rotation (e.g. less frequently than annually), or based on an Applicant-defined IVM strategy that is within the targets set for net conservation benefit. Conduct training for mower operators to help identify and avoid milkweed and blooming nectar plants during operations.
Loss of habitat resulting from herbicide use	Targeted herbicide treatments	Herbicide applied to control undesirable vegetation and restore native or desired plant communities, and enhance suitable habitat.	Targeted application of herbicides completed in a manner that applies chemicals to a specific plant or group of plants while avoiding herbicides contacting off-target vegetation.	 Spot spraying of ecologically invasive, defined noxious weeds, or incompatible woody vegetation to promote a diversity of nectar plants. Keep broadcast applications limited to active use facilities, or areas within spans containing non-contributing lands with little or no available milkweed and/or blooming nectar resources. Targeted herbicide treatments applied in conjunction with other conservation measures such as site preparation for native seed mix installations, or follow up treatment of previously-mowed dense brush.

Conservation Measures	Time Period	Applicable Location	Purpose
Maintain and enhance flowering nectar plants. As much as possible, avoid removing flowering nectar plants and shrubs.	November 15 th - March 15th	One mile inland of known winter aggregation sites along southern Atlantic Ocean coast.	In winter months (approximately November 15 th - March 15 th), some monarchs remain in reproductive diapause in sites along the southern Atlantic Ocean coast. These sightings are primarily coastal (Howard et al. 2010, p. 3). Most of the Atlantic clustered monarchs are found in eastern red cedar forest. Overwintering monarchs tend to become more active in warmer weather (60-70 degrees Fahrenheit) and nectar on flowering resources nearby (usually planted flowers in developed areas). Maintaining nectar resources in the winter when they are typically scarce is important for the population.
Maintain and enhance flowering nectar plants. Avoid removing flowering nectar plants	October 1 st - March 1st	Within one mile known aggregation sites in California, Arizona, and Nevada	Migratory monarchs in the western North American population primarily overwinter in groves along the coast of California and Baja California (Jepsen and Black 2015, p. 149) although some monarchs aggregate in areas of California, Arizona, and Nevada. These aggregation sites are outside the scope of the CCAA/CCA, however conservation measures and adopted acres (in early successional habitats) within one mile of these areas will reflect one of the most pressing needs for western monarchs.
Do not remove trees and shrubs with the except for the purpose of maintaining human health and safety	All Times	Within one mile known aggregation sites ¹⁷ in California, Arizona, and Nevada	The maintenance of trees and shrubs within 1-mile buffers is to preserve the microclimate of overwintering groves. These microclimates are a new area of study and it is uncertain what a meaningful buffer area is. As new information becomes available, it may be acceptable to restrict these areas to a smaller buffer, and this can be addressed through adaptive management.

Conservation Measures Specific to Known Winter Aggregation Sites and the Western Population of Monarch Butterflies

Conservation Measures	Time Period	Applicable Location	Purpose
Avoid planting milkweed along the coast of California, in most areas	All Times	Along the coast of California, in most areas. Local guidance on milkweed planting may be provided through the Service, or other partners in monarch conservation.	Milkweed does not naturally grow close to the coast north of Santa Barbara (www.monarchmilkweedmapper.org). Milkweed near aggregation sites can interrupt healthy monarch migratory and overwintering behavior and it can result in parasite load buildup such as <i>Ophryocystis elektroscirrha</i> , or OE (Satterfield et al. 2016, p. 4).
Report all Western monarch observations, including breeding	Reporting during any time of the year his helpful, however winter observations is important to help inform future conservation efforts.	Report observations of Western monarchs through tracking programs available. This measure only applies in Arizona, Nevada, and California.	Report all monarch observations, including breeding, to the Western Monarch Milkweed Mapper or via iNaturalist: https://xerces.org/milkweedsurvey/

Supplemental Measures and Descriptions

Supplemental Measure	Purpose	Description	Examples
Spatially-focused conservation delivery	Use spatial modeling to prioritize areas for implementing conservation	Focusing conservation measure implementation on defined priority areas based on science-based modeling tools.	 Use spatial tools, scoring assessments, or decision models (i.e. Roadsides as Habitat Tool, Working Group Scorecard, POWR Model, or similar) to identify suitable habitat areas to focus conservation and restoration efforts.
Incorporate pollinator habitat-focused objectives into integrated vegetation management operations	Define objectives for considering monarch habitat requirements while conducting vegetation management activities.	Implement IVM approach to considering monarch habitat needs as an objective for vegetation management that helps determine on- the-ground measures as appropriate. Implementation may involve one or more other conservation measures.	 Develop/incorporate monarch habitat-specific objectives, targets, and thresholds into the Applicant's IVM planning procedures to guide vegetation management activities within areas of suitable habitat. IVM planning will be done in accordance with ANSI 300 or other applicable guidelines. Review and implement associated conservation measures as determined by site assessment and ability to support monarch habitat objectives. These may include mechanical, chemical, biological, or a combination of these techniques. Post-treatment measures may be needed to achieve the pollinator-focused IVM objective(s).
Invasive species prevention best management practices	Minimize the spread of invasive species into areas of suitable habitat.	Use invasive species prevention measures to prevent the spread of noxious weeds and invasive species in areas of suitable habitat.	 Clean equipment after use in invasive weed areas, or before use in areas of suitable habitat. Tailor management timing to prevent weed seed establishment and plant distribution.

Supplemental Measure	Purpose	Description	Examples
Additional pollinator habitat monitoring	Collect and evaluate additional information regarding suitable habitat quality and management response to supplement ongoing management decisions.	Conducting additional pollinator habitat monitoring protocols beyond those required for CCAA/CCA effectiveness monitoring.	 Conduct more in-depth monarch or pollinator focused monitoring efforts to better characterize habitat available and understand management response. Examples include, but are not limited to: Rights-of-Way as Habitat Working Group Pollinator Habitat Scorecard Monarch Joint Venture Integrated Monarch Monitoring Program (IMMP) Monarch Joint Venture Roadside as Monarch Habitat Evaluation Tool Xerces Monarch Breeding and Milkweed Survey Xerces Western Monarch Thanksgiving Count Applicant-developed protocols that evaluate monarch breeding and foraging requirements.
Promote supplemental landowner pollinator conservation efforts	Leverage the conservation targets of the CCAA/CCA to implement additional conservation through partnerships.	Promote voluntary pollinator conservation through landowner outreach programs, small grant programs, and pollinator garden planting projects.	 Provide Applicant-funded small grants to community projects that restore habitat or promote native pollinator plantings, or Monarch-related education. Fund or facilitate installation of monarch waysides or pollinator gardens.

Certificate of Inclusion in the Nationwide CCAA/CCA for Monarch Butterfly on Energy and Transportation Lands

A.1 Certificate of Inclusion Tracking Number _

This Certificate of Inclusion (CI) certifies that _________ (Partner), as the owner, leaseholder, or easement holder (or authorized agent thereof) of the property(s) identified in Exhibit 1 (Enrolled Lands) to this CI, hereby agrees that activities conducted on the enrolled lands are subject to the terms and conditions of the attached Enhancement of Survival Permit, Permit No. [**insert Permit No**.] (the Permit, Exhibit 1) and the Nationwide Candidate Conservation Agreement with Assurances, with Integrated Candidate Conservation Agreement for Monarch Butterflies (the CCAA/CCA; Exhibit 2). The Permit was issued on [**insert date**] by the U.S. Fish and Wildlife Service (the Service) to the Board of Trustees of the University of Illinois, a body corporate and politic of the State of Illinois, on behalf of the University of Illinois at Chicago (UIC; the Program Administrator) under the authority of Section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (ESA), 16 U.S.C. 1531-1544. This Permit was issued in conjunction with, and to support, the CCAA/CCA. The purpose of the Permit and the CCAA/CCA is to support UIC's ongoing and future efforts to promote conservation within energy and transportation lands and promote conservation by industry representatives. The definitions and acronyms set forth in the CCAA/CCA that is attached hereto shall apply to this CI, unless otherwise specified.

This CI documents the Partner's voluntary agreement to enroll specified property in the CCAA/CCA. Through this CI, the Partner voluntarily commits to implement specific conservation actions that will reduce and/or potentially remove threats to the monarch as provided in this CI, the CCAA/CCA and the Permit. Pursuant to this CI and the Permit, incidental take of monarchs as a result of the covered activities and conservation measures identified in the CCAA/CCA on or associated with enrolled non-Federal lands, in the event the monarch is federally listed as endangered or threatened, is authorized. The Permit further provides the Partner (and their authorized representatives working on their behalf) with assurances regarding the imposition of additional conservation measures and land use restrictions for monarchs on enrolled non-Federal lands, as specified in the Permit and the CCAA/CCA, in the event the monarch is federally listed. The incidental take authorization and assurances provided by the Permit are conditioned on the Partner's compliance with the terms and conditions of this CI, the CCAA/CCA and the Permit.

This CI is effective upon signature of this CI by the Partner and UIC. Unless terminated as provided in Section B.7 below, this CI shall continue from its effective date through the duration of the CCAA/CCA and Permit as defined in the CCAA/CCA. In the event of a conflict between the terms and conditions of this CI and the CCAA/CCA or Permit, the terms and conditions of the CCAA/CCA or Permit in effect at the time of enrollment shall govern. If the terms and conditions of the Permit and the CCAA/CCA conflict, the terms of the Permit shall govern.

By signing below, the Partner acknowledges that it has read and understands this CI and the CCAA/CCA in effect on the date of the Partner's signature. The Partner further commits to comply with the terms and conditions of the CCAA/CCA and the Permit attached to this CI. Finally, the Partner acknowledges that this CI and the CCAA/CCA may not be sufficient to prevent the listing of the monarch.

A.2 Enrolled Property

A.2.1 Summary of Enrolled Lands

Partner Name and Contact Information:	
Description of Enrolled Properties (or Attach Detailed Map):	
Total Acres of Enrolled Properties (all properties covered by permit):	
Total Adopted Acres Target (based on adoption rate):	
General Description of Monarch Habitat on Enrolled Lands:	
Duration of Certificate of Inclusion (years from last signature; end date):	
Conservation Measures to be Taken on the Enrolled Lands:	

A.2.2 Partner Affirmation

By executing this CI, the Partner affirms that it is a Property Owner of the enrolled non-Federal lands as defined by 50 CFR §17.3, which provides that a Property Owner for these purposes is a person or entity with a fee simple, leasehold, or property interest (including owners of water or other natural resources), sufficient to carry out the conservation measures and any other management activities contemplated by this CI, the CCAA/CCA and the Permit, subject to applicable State law, on enrolled, non-Federal land. As to enrolled Federal lands, the Partner affirms that it is a person or entity with a leasehold or other property interest sufficient to carry out the conservation measures and any other management activities contemplated by this CI and the CCAA/CCA on enrolled lands with underlying Federal ownership.

A.2.3 Additions to Enrolled Lands

The Partner may seek to enroll additional eligible lands in this CI during the enrollment period as set out in Section 4 (Enrolled Lands) of the CCAA/CCA.

A.2.4 Transfer of Enrolled Lands

If the Partner transfers its property interest in all or a portion of its enrolled lands, it shall notify UIC as described in Section 9 (Duration of Agreement and Permit) of the CCAA/CCA. Coverage under the Permit for such property will be transferred to the new Property Owner of the CCAA/CCA.

A.2.5 <u>Termination of Enrolled Lands or this Cl</u>

A Partner may terminate enrollment of a property in this CI, or terminate this CI in its entirety, in accordance with Section 4 (Enrolled Lands) of the CCAA/CCA. The Program Administrator may also terminate enrollment of a property or this CI as provided in the CCAA/CCA. The process and effect of termination of this CI is described in Sections 7 (Obligations of the Parties) and 9 (Duration of Agreement and Permit) of the CCAA/CCA.

A.2.6 <u>Revisions to Enrolled Lands</u>

B.2.1 (Partner Application; Summary of Enrolled Lands) may be revised in accordance with the procedures outlined in Section 4 (Enrolled Lands) of the CCAA/CCA.

A.3 Participant Agreement to Implement Conservation Measures

The Partner agrees to comply with the requirements of this CI, the CCAA/CCA attached, and the Permit. This Agreement includes the Partner's commitment to implement conservation measures on enrolled lands as provided in their application and Section 6 (Conservation Measures) of the CCAA/CCA.

The Partner shall also notify and educate all relevant personnel, agents, and contractors about the requirements of this CI and the CCAA/CCA, and take steps necessary to ensure that such personnel, agents, and contractors comply with these requirements in their activities on the enrolled lands.

A.4 National Historic Preservation Act

The Partner must comply with all applicable laws and regulations required to protect cultural or archaeological resources pursuant to Section 106 of the National Historic Preservation Act.

A.5 Participant Compliance

A.5.7 Unpaid Administrative Fees

If the Partner fails to remit an administrative fee in accordance with Section 4 (Enrolled Lands) or Section 17 (Administrative Fees) of the CCAA/CCA the Program Administrator may suspend this CI as to the enrolled lands for which the administrative fee is due until such administrative fee is paid. The Program Administrator will notify the Partner 15 business days after the due date of the administrative fee. If the administrative fee is not paid within 30 business days of receipt of the notice, the Program Administrator will issue a Notice of Noncompliance to the Partner. Upon receipt of the administrative fee, the Program Administrator will issue a Notice of Reinstatement to the Partner.

A.5.8 Compliance

Compliance Notice

In response to an alleged failure to implement a condition of this Agreement, the Program Administrator may either directly contact or provide written notice to a Partner (see Compliance Notice). This notice shall require the Partner to submit, within 30 calendar days of the date of the Compliance Notice or other specified time, a written explanation or statement in response that includes: (a) corrective steps taken by the Partner and results achieved; (b) a schedule and description of corrective steps that will be taken and results expected; or (c) a statement denying that the alleged failure has occurred and additional information supporting the statement.

The Program Administrator shall notify the relevant Service contact of the potential compliance issue at the time they send a written Compliance Notice to the Partner, including any consideration for protecting confidential information (Section 8, Confidentiality). The Program Administrator will determine if further Service coordination is required for resolution.

The Program Administrator shall respond in writing to the Partner's response and either: (a) accept the Partner's response and state that the notice is resolved (a Notice of Resolution), or (b) not accept the Partner's response.

Deficiency Notice

If a Partner fails to respond to a Compliance Notice or the Program Administrator disagrees with the Partner's response, the Program Administrator may issue a written Deficiency Notice. A Deficiency Notice shall require the Partner to provide, within 30 calendar days of the date of the Deficiency Notice or other specified time, a written explanation or statement in response that includes: (a) corrective steps taken by the Partner and results achieved; (b) a schedule and description of corrective steps that will be taken and results expected; or (c) a statement denying that the alleged failure has occurred with additional information supporting the statement and a request for discussions.

After coordination with the Advisory Committee, and the Service if necessary, the Program Administrator shall respond in writing to a Partner's response and either: (a) accept the Partner's response and provide a Notice of Resolution; or (b) not accept the Partner's response.

Notice of Noncompliance

If a Partner fails to respond to Deficiency Notice or if the Program Administrator and the Partner cannot resolve the issue through discussions, the Program Administrator shall issue a Notice of Noncompliance. Notices of Noncompliance shall require the Partner to submit, within 30 calendar days of receipt of the Notice of Noncompliance or other specified time, a written explanation or statement in response that includes: (a) corrective steps taken by the Partner and results achieved; (b) a schedule and description of corrective steps that will be taken and results expected; or (c) a statement denying that the alleged failure has occurred with additional information supporting the statement and a request for discussions.

The Advisory Committee will make a recommendation to the Program Administrator regarding whether to accept or not accept the Partner's response. The Program Administrator, with input from the Advisory Committee, will make a determination on whether to accept or not accept the Partner's response. The Program Administrator shall respond in writing to the Partner's response and either: (a) accept the Partner's response and state that the notice is resolved (a Notice of Resolution), or (b) not accept the Partner's response. If the Program Administrator does not accept the Partner's response, the Notice of Noncompliance will be considered unresolved and the Partner may be subject to termination as described in Section 9 (Duration of Agreement and Permit).

Advisory Committee and Program Administrator Review

At any time before a response is due to the Program Administrator, a Partner may seek review of any Compliance Notice, Deficiency Notice, Notice of Noncompliance or proposed termination by submitting a written request to the Advisory Committee. The Program Administrator and the Partner each may prepare a statement of position for review by the Advisory Committee or request a face-to-face review. The Advisory Committee shall review statements, information provided in a face-to-face and other information available to it and issue a recommendation to the Program Administrator, including any recommended corrective action.

The Program Administrator shall review the recommendation of the Advisory Committee, confer with the relevant Service contact, or its designee, and issue its finding and any required corrective action in writing.

The Partner and the Program Administrator shall comply with the findings, and the Program Administrator will issue a written Notice of Resolution once the Partner complies with its findings. If the Partner fails to implement the required corrective action within 30 calendar days of its receipt of the findings, the Program Administrator shall notify the Partner in writing that the Notice of Noncompliance has not been addressed

and may either provide notice to the Service, or terminate the Certificate of Inclusion of the Partner at that time.

Content and Service of Notices, and Management of Notices and Responses

All Compliance Notices, Deficiency Notices, and Notices of Noncompliance shall be sent either electronically, or by U.S. mail, with a return receipt, to the company representative designated in a Partner's Certificate of Inclusion. All Compliance Notices, Deficiency Notices, and Notices of Noncompliance shall concisely identify the terms or conditions of this Agreement or the Certificate of Inclusion that the Program Administrator believes the Partner has not implemented.

A.6 Termination for Noncompliance

Lands enrolled under this CI may include tens or hundreds of thousands of acres. If a Partner, after Notice of Noncompliance and subsequent response (or lack thereof), still remains in Notice of Noncompliance on lands enrolled under this CI, an appropriate action may be to terminate this CI as it relates to the individual easement(s), lease(s) or parcel(s) of land on which the noncompliance occurred. Depending on the scale or scope of the violations, the failure can result in termination of some or all of this CI. The Program Administrator and the Service, however, recognize that termination of this entire CI is a severe and dramatic action limited to unusual circumstances after all efforts to address noncompliance have been exhausted.

In issuing the Notice of Noncompliance, the Partner shall be notified in writing by the Program Administrator of the proposed termination by certified or registered mail addressed to the contact name in Section 14 of this CI. This notice shall identify the lands for which this CI will be terminated, the reason(s) for the termination. Upon receipt of a notice of proposed termination, the Partner may file written objection to the proposed action within 45 calendar days of the date the Partner received the notice of proposed termination. The objection must state the reasons why the Partner objects to the proposed termination and may include supporting documentation. The Advisory Committee will review the written objection and all documentation, and will issue a recommendation to the Program Administrator on the proposed termination.

The Program Administrator will confer with the relevant the Service CCAA/CCA Coordinator. The Program Administrator will make a decision on the proposed termination within 45 calendar days after the end of the objection period and notify the Partner in writing of its decision and the reasons thereto. The Partner reserves the right to any and all legal remedies, whether at law or in equity, arising from a decision to terminate some or all of this CI.

A.7 Property Access

The Partner agrees to provide access to enrolled lands as provided in Section 7.3 of the CCAA/CCA.

A.8 No Waiver

The Partner, by entering into this CI, does not concede its agreement with, or endorsement of, any or all of the underlying studies and conclusions in the CCAA/CCA. Further, the Partner does not waive any legal rights or remedies that may exist outside of this CI. The Partner is also not responsible for work being accomplished by the Service, the Program Administrator or any third parties using the Partners' contributed funds.

A.9 Release

If at any time any administrative or legal challenge to the CCAA/CCA prevents the implementation of this CI, the Partner shall be excused from its performance and shall release the signatories of the CCAA/CCA and CI from any legal claims of the Partner's related to this CI and CCAA/CCA. If at any time any administrative or legal challenge to the CCAA/CCA prevents the implementation of this CI, the Program Administrator agrees to release the Partner from any legal claims related to this CI and CCAA/CCA. Partners' obligation to make payments of administrative fees as described in Section 17 (Administrative

Fees) of the CCAA/CCA shall be suspended if any administrative or judicial challenge prevents the implementation of this CCAA/CCA or its CIs. If a Partner voluntarily terminates the Agreement, or the Partner is terminated for nonperformance or noncompliance, all funds paid by that Partner will be retained by the Program Administrator for use in CCAA/CCA administration or monarch conservation. In the event of an external termination of the Agreement (e.g. transfer of the Agreement, or lack of conservation need), the Program Administrator will work with Partners to determine the appropriate refund amounts for any prepaid annual administrative fees beyond the final year of the Agreement, or Program Administrator involvement.

A.10 Amendment

As described in Section 10 (Adaptive Management) of the CCAA/CCA, the effectiveness of the conservation measures in the CCAA/CCA will be reviewed by the Program Administrator, the Service, and Partners periodically over the life of the CCAA/CCA. However, changes to the CCAA/CCA in effect at the time after the Partner executes this CI may only be applied to the Partner upon its written consent. This CI, except for Exhibit 2 (CCAA/CCA), may be amended with the written consent of each of the Parties hereto. Exhibit 1 may be revised in accordance with the procedures outlined in Section 4 (Enrolled Lands) of the CCAA/CCA. The Parties agree to process requests for amendments in a timely manner. This CI will only be amended upon written agreement of both the Program Administrator and the Partner. This CI may also be amended to accommodate changes to applicable legal requirements, including but not limited to the Endangered Species Act, the National Environmental Policy Act, and the Service's permit regulations at 50 CFR § 13 and 50 CFR § 17. The proposer of the amendment shall provide a statement describing the proposed amendment and the reasons for it.

A.11 Multiple Originals

This CI may be executed in any number of multiple originals. A complete original of this CI shall be maintained in the records of each of the Parties hereto.

A.12 Reporting Requirements

The Partner will comply with the reporting requirements outlined in Section 14 (Monitoring Provisions) of the CCAA/CCA.

A.13 Confidentiality

The Parties recognize that energy and transportation infrastructure information is confidential and sensitive business information held and not routinely disclosed and may be exempt from disclosure under the Federal and/or Illinois Freedom of Information Act (FOIA). Such confidential, proprietary, and sensitive business information includes but is not limited to the following:

- Any maps depicting lands enrolled by an individual Partner that specifically identify the Partner, or specific location of lands;
- Information describing critical infrastructure information, or critical energy/electric infrastructure information designations;
- Identifying information about an individual Partner's acreage and its specific location or position; or
- Any information that contains proprietary business information as identified and designated by the Partner supplying that information.

Accordingly, the Program Administrator shall limit access to the foregoing information to only employees or agents of the Program Administrator, and the Partner that provided the information, unless otherwise authorized in writing by the Partner, or as may be required by law, court order or administrative action. The Program Administrator shall only allow such access to the information via methods allowed by the applicable Partner(s) and solely for the purpose of allowing the relevant and particular information for

monitoring and reporting, as described herein. The Program Administrator will not authorize anyone to download, possess, or distribute the information, unless otherwise authorized in writing by the Partner.

The Service and the Program Administrator shall take all reasonable steps to maintain confidentiality under the relevant laws, as well as the Service and the Program Administrator, and their employees and/or agents. Neither the Service nor the Program Administrator are responsible for any information ultimately subject to disclosure under the relevant public open record laws.

For disputes and resolutions being reviewed by the Advisory Committee, the Program Administrator will take similar confidentiality measures when considering the sharing of information with Partners acting within the capacity of the Advisory Committee, and involved with reviews or compliance considerations being considered. The Program Administrator shall only allow such access to the information via methods allowed by the applicable Partner(s) and solely for the purpose of allowing the relevant and particular information for the specified request provided in writing.

If the Service, or the Program Administrator, receives a request under the Federal FOIA, or UIC receives a request under the Illinois FOIA for information which a Partner has identified as potentially confidential in this section, and has responsive documents in its possession containing such information, and as time allows, the Service or the Program Administrator will consult with the Partner that submitted the information and provide an opportunity for the Partner to object to disclosure prior to determining if the information is exempt from disclosure pursuant to the Freedom of Information Act, pursuant to applicable exemptions in the Federal or Illinois FOIA Acts. Additional information regarding the Service's process for responding to Freedom of Information Act requests for possibly confidential information is set out at 43 CFR 2.26-2.36 (2013).

A.14 Contacts

Any notice permitted or required by this CI, the CCAA/CCA or the Permit shall be transmitted within any time limits described in this CI, the CCAA/CCA or the Permit to the persons set forth below. Notice may be provided electronically (via email) or in writing unless the form of notice is otherwise identified in this CI, the CCAA/CCA or the Permit. Any notice provided by electronic mail is deemed received upon the sender's receipt of an electronic mail from the intended recipient confirming delivery. Lack of receipt within five (5) business days may result in follow up via phone call, or a duplicate notice provided in writing. Notice in writing shall be deemed given five (5) business days after deposit in the United States mail, sent certified and postage prepaid, and return receipt requested. All notices and correspondence will be addressed to the contacts listed below. Should either party designate other contacts for day-to-day communications, that notification will be sent to the Program Administrator in writing similar to other notices outlined here:

Partner:	
Contact Name	
Title	
Address:	
Telephone:	
Fax:	
Email:	
UIC/Permit Holder Repr	esentative:
UIC/Permit Holder Repr Contact Name	esentative:
	esentative:
Contact Name	esentative:
Contact Name Title	esentative:
Contact Name Title	esentative:
Contact Name Title Address:	esentative:

A.15 Signatures

IN WITNESS WHEREOF THE PARTIES HERETO have executed this Certificate of Inclusion to be in effect on the date of the last signature below.

Partner and Affiliation

Program Administrator/Permit Holder Representative

Nationwide Monarch Butterfly Candidate Conservation Agreement with Assurances for Energy and Transportation Lands 27

Date

Date