# Nationwide Candidate Conservation Agreement for Monarch Butterfly on Energy and Transportation Lands

## Suitable Habitat Idle Lands, or Set-Asides Implementation and Tracking

April 2025

## Purpose

Partners track adopted acres maintained as monarch habitat through conservation measures outlined in the CCAA. This guidance helps Partners with consistent tracking and implementation of the **suitable habitat idle lands, or set-asides** conservation measure.

## Background

The suitable habitat idle lands, or set-asides conservation measure can be implemented on adopted acres by following the guidelines outlined in the Monarch CCAA and published Best Management Practices for monarchs. Suitable habitat idle lands, or set asides involves sustaining areas of relatively undisturbed suitable habitat throughout the portions of the growing season when monarchs may be present and allowing intervals of non-disturbance between active management cycles. Doing so ensures adequate nectar and habitat resources for monarchs and other pollinators throughout the growing season.

This guidance clarifies acceptable approaches for implementing suitable idle lands, or set asides and how to track these areas for CCAA compliance reporting. These habitat areas may spatially shift annually based on availability and maintenance requirements, and implementation may vary depending on site context.

### Approach #1: GIS Mapping

What it involves: Designate suitable habitat areas within the enrolled lands system using GIS or another mapping tool. Coordinate with field staff to ensure that these areas remain undisturbed throughout the growing season.

How to do it: Before each annual management cycle, designate specific areas to be set aside from vegetation management and other on-the-ground work using GIS or other mapping tools. When selecting these sites, prioritize areas with:

- Minimal conflict with underlying or neighboring landowner operations
- High nectar plant diversity
- Low coverage of brush or invasive species

Assess habitat quality based on prior management and biological effectiveness monitoring data.

Ensure on-the-ground personnel are able to easily reference these locations, either via mobile GIS access

(e.g., ArcOnline) or physical boundary markers. Providing training and other resources is also recommended to reinforce the purpose and designated boundaries of habitat set-asides.

Tracking: Utilize GIS or another mapping system to calculate the combined acreage of mapped habitat set asides for annual reporting.

Rationale: Setting aside suitable habitat sites ahead of annual management cycles secures essential habitat and nectar resources for monarch butterflies. Utilizing GIS or other mapping tools allows partners to effectively designate sites based off of habitat quality and management history. This approach will also allow for accurate acreage calculation and compliance tracking.

**Approach #2: Planned Width and Mowing Schedules**

What it involves: Determine what areas will be left idle throughout the growing season by analyzing annual mowing schedules and site-specific mowing needs.

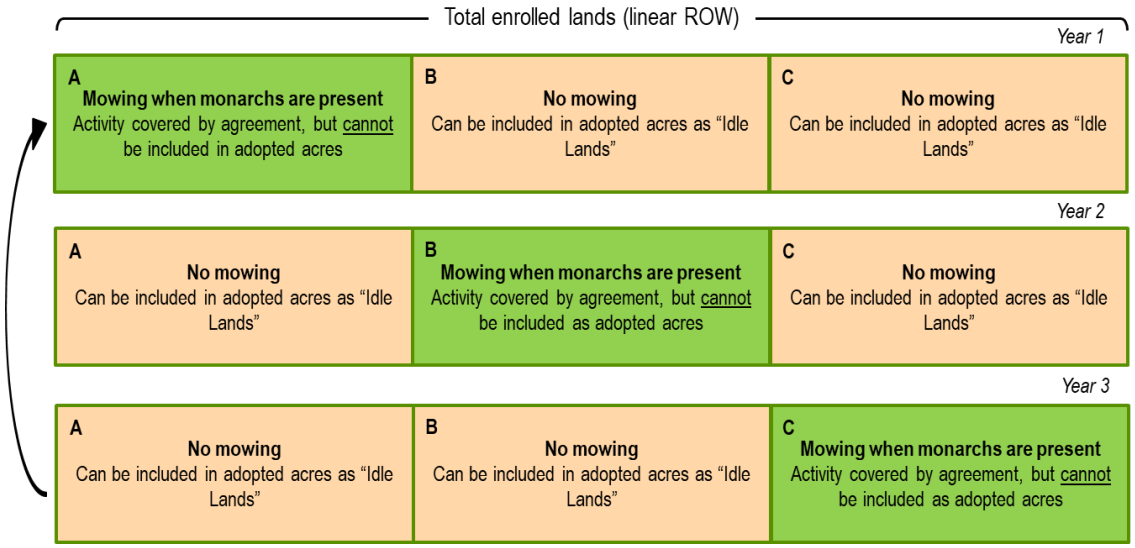
How to do it: Assess which areas within an enrolled lands system will be mowed within an annual cycle, and the timing and frequency that mowing activities will occur. Mowing activities implemented during times of year where monarchs are not present are considered the **mowing to enhance floral resources conservation measure**. Consult the Mowing for Monarchs guidance to determine the appropriate dates for conservation mowing within your region.

Areas left unmowed during time periods when monarchs are present may align with the suitable habitat idle lands, or set-asides conservation measure. Determine the mowing width needed to achieve operational goals in applicable areas. Areas outside of designated mowing corridors that are otherwise left idle throughout an annual management cycle can be counted towards the suitable habitat idle lands, or set-asides conservation measure.

Partners might also utilize rotational mowing, which involves cutting a designated portion of lands each year while leaving other vegetation unmowed. In subsequent years, mowing may shift to other previously unmowed areas – often following a 2-to-5-year cycle. Areas left unmowed in a given year when implementing this practice may also be counted towards the suitable habitat idle lands or set-asides conservation measure.

Tracking: Track unmowed adopted acres as the suitable habitat set aside, or idle lands conservation measure. Mowing conducted when monarchs are present is considered take and is only covered under the CCAA enhancement of survival permit. Such acres are not counted toward the conservation measure. An example of this is highlighted below.

*Example of Rotational Mowing and Idle Lands*




Rationale: This approach may align well with existing mowing policies and operational requirements. This system provides a method for implementing conservation measures on adopted acres across a large system of lands where mowing is a primary tool, where personnel or equipment availability is limited, or where certain types or timing of mowing is required by law or policy. This approach also offers a simplified, and assured, manner for calculating adopted acres each year.

**Approach #3: Past Treatment Vegetation Management Records**

What it involves: Identify idle areas retrospectively using vegetation management records to determine suitable habitat areas that were left undisturbed during the reporting year.

How to do it: Utilizing GIS or other internal vegetation management records, evaluate vegetation management activities that occurred over the past year as part of reporting of adopted acres. Then, determine suitable habitat areas where vegetation management did not occur and were otherwise left undisturbed throughout the entirety of the annual management cycle.

Tracking: To calculate an estimation of acreage left undisturbed throughout the year, partners can subtract the total number of acres where vegetation management activities were applied from the total number of adopted acres areas to be counted towards the conservation measure. On-the-ground verification is recommended to ensure accurate reporting of these areas as idle lands.

Rationale: This retrospective approach may be practical for Partners with robust vegetation management tracking systems. It encourages partners to recognize opportunities to integrate suitable habitat idle lands and set asides into their management regime and provides a simplified, assured method of calculating adopted acres each year.

## Other Approaches

Designation of suitable habitat idle lands, or habitat set asides can vary by site and vegetation management practices. If an Applicant or Partner wishes to propose a different method for applying this conservation measure, contact the Monarch CCAA Program Administrator to confirm alignment with the CCAA's intent.

## Verification

All habitat set-aside or idle land areas should be verified to confirm they remained undisturbed during the reporting year. A visit near the end of the growing season helps confirm:

- No unplanned disturbances occurred
- Neighboring landowner activities did not impact conservation goals
- Reported acreage is accurate

Verification may include habitat monitoring to confirm the presence of milkweed and nectar plants. Advance coordination with field personnel during annual monitoring is recommended. Partners should also ensure that their random sampling methodology appropriately considers all potential adopted acres in their CCAA monitoring plan.