

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

### How should targeted herbicide treatments be tracked towards adopted acres?

#### Intent

Partners track adopted acres that they maintain as monarch habitat towards their annual commitments under the CCAA. Areas that are maintained need to be accurately tracked to ensure Partners are maintaining consistency in how they are estimating those acres. This guidance is intended to help Partners accurately estimate the area tracked as adopted acres based on targeted herbicide applications as a conservation measure.

#### Explanation

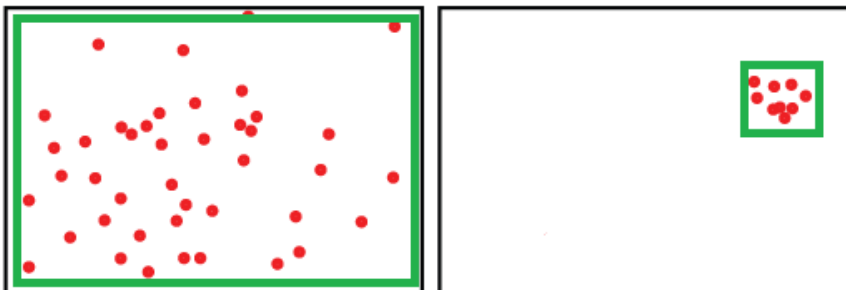
Conservation measures like targeted herbicide applications should be calculated not only based on the area that was directly treated with herbicide, but also the area that was surveyed during those treatments to determine whether the target species treated were spread throughout a given area. The way that this is calculated depends on the distribution pattern across an area.

#### Example 1

A Partner is maintaining a linear right-of-way comprised of multiple spans for invasive species control. Each span is approximately 2 acres in total area. In conducting the treatment, the Partner's vegetation management crew surveys 100% of the span area and treats scattered undesirable species where encountered. In all, approximately one acre in total area cover of undesirable species was directly treated across the 2 total acres. However, because 100% of the span was surveyed, assessed, and the areas requiring treatment were treated, the Partner would consider the full 2 acres as adopted acres.

#### Example 2

Under a similar treatment scenario as Example 1, each span is approximately 2 acres in total area. However, in this scenario, the Partner's vegetation management crew only directly treats a single area of dense brush where encountered. In all, approximately 10% of the total span was surveyed and treated across the 2 total acres. Because 10% of the span was surveyed, assessed, and treated, the Partner would consider 0.2 acres as adopted acres.



*LEFT: Example 1 scenario, where 100% of the 2 acre area was walked and treated.*

*RIGHT: Example 2 scenario, where only 10% of the 2 acre area was walked and treated.*

**Tracking**

If tracking herbicide applications by span, this tracking may be recorded on a span-by-span basis, or estimated across the percentage of the corridor as shown in Example 3 and 4. Under both examples, the tracking would be recorded internally within the Partner organization using a method most appropriate for their operations. Only the sum of the adopted acres would be tallied within the CCAA Tracking Sheet, or other tracking tool used. Any estimates should be retained for future reference if requested by the Programmatic CCAA Administrator, or USFWS.

**Example 3**

Span-by-span tracking

Span	Percent Treated	Estimated Acres Per Span	Total Adopted Acres
A	100%	2.0	2.0
B	50%	2.0	1.0
C	100%	2.0	2.0
D	10%	2.0	0.2
<b>TOTAL</b>		8.0 total acres	<b>5.2 adopted acres</b>

**Example 4**

Corridor tracking

Corridor	Percent Treated	Estimated Acres Per Corridor	Total Adopted Acres
Spans A-D	70%	8.0	5.6
Spans E-H	50%	8.0	4.0
Spans I-M	10%	10.0	1.0
Spans N-T	10%	14.0	1.4
<b>TOTAL</b>		40.0 total acres	<b>12.0 acres</b>

**Rationale**

This calculation takes into account the percent of a specific area targeted for an herbicide treatment. If a small percent of an area is treated or “surveyed”, then only that percentage of the total acreage has been treated. If the total area has been surveyed and treated because target species are scattered throughout, then that entire area has been considered treated for the purposes of adopted acres accounting.