



**COLORADO**  
Department of Transportation

# **COLORADO DEPARTMENT OF TRANSPORTATION**



## **Wildlife Warning Sign Guide**

2024

## ACKNOWLEDGEMENTS

Federal Highway HWA Manual on Uniform Traffic Control Devices (2009).

AASHTO A Policy on Geometric Design of Highways and Streets (2018).

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## INTRODUCTION

Wildlife warning signs are an optional addition to the Colorado State Highway to alert road users in advance of locations where unexpected entries into the roadway might occur. The Manual on Uniform Traffic Control Devices (MUTCD) does not have specific guidance for the installation of wildlife warning signs. The Colorado Department of Transportation (CDOT) has chosen to work with local agencies to allow limited use of wildlife warning signs on state highways. The local agency shall submit a request to the corresponding CDOT Region Traffic Engineer (RTE) for review. The CDOT RTE will review the information provided from the local agency and determine whether signage is warranted.

This guidance may be used for the following wildlife warning signs or wildlife warning signs approved by the RTE:

- W11-3 (Deer)
- W11-4 (Cattle)
- W11-16 (Bear)
- W11-17 (Sheep)
- W11-18 (Bighorn Sheep)
- W11-19 (Donkey)
- W11-20 (Elk)
- W11-21 (Moose)
- W11-22 (Wild Horse)

Wildlife symbols used on warning signs shall be standard symbols in the MUTCD. Symbols not in the MUTCD shall be submitted to FHWA for approval prior to being used on a State Highway. The local agency requesting non-standard MUTCD symbols shall provide CDOT with symbol design and CDOT representatives will submit symbols to FHWA for approval.

For locations with multiple types of wildlife the RTE may decide to install a warning sign for the wildlife species with the highest population or either signs W11-59b\_CO or W11-59c\_CO with up to two wildlife symbols. The wildlife species shown on W11-59b and W11-59c should be the wildlife species with the highest population.

The RTE may use W11-59a\_CO for wildlife species that currently do not have a standard symbol in the MUTCD.



W11-59a\_CO



W11-59b\_CO



W11-59c\_CO

## SIGN GUIDANCE

### WILDLIFE WARNING SIGN

The installation of a wildlife warning sign may be considered at locations that meet one of the following conditions.

1. Have more than an average of five (5) reported wildlife crashes per mile per year over the most recent 5 years of data or ten (10) reported carcass counts per mile per year over the most recent 5 years of data.
2. Have an average of three (3) reported wildlife crashes per mile per year over the most recent 5 years or five (5) reported carcass counts per mile per year over the most recent 5 years of data and meet all the criteria listed below.
  - a. Proposed location must be known to intersect a migration path<sup>1</sup> of the respective wildlife sign. A letter from the Colorado Parks and Wildlife, Area Wildlife Manager or biologist describing the migration path may be used to show migration paths.
  - b. The location must pass through or run adjacent to a designated parkland or other natural areas<sup>2</sup> for at least one-quarter mile. Natural areas include but are not limited to United States Forest Services Land, Bureau of Land Management Lands and State or Local Open spaces and areas.

<sup>1</sup> Migration patterns may be found at the following websites:

- <https://www.arcgis.com/apps/mapviewer/index.html?layers=ca6d2802d7b34212986676d85ca9cd18>
- <https://www.arcgis.com/home/search.html?restrict=false&sortField=relevance&sortOrder=desc&searchTerm=Colorado+Parks+and+Wildlife#content>

<sup>2</sup> A map of natural areas within Colorado may be found at the following website.

- <https://cpw.maps.arcgis.com/apps/Shortlist/index.html?appid=99fbd9adfbfc49deab2d1707f49b61b2>

- c. The actual stopping sight distance provided is less than the design sight distance for the posted speed limit from the latest edition of the American Association of State Highway and Transportation Officials (AASHTO) *A Policy Geometric Design of Highways and Streets*.

For locations that meet this criteria but the migration of the wildlife is seasonal it is encouraged to use variable message signs (VMS) when feasible rather than installing a permanent sign. The typical message on the VMS should be “WATCH FOR WILDLIFE ON ROAD”.

The final determination of whether or not to install wildlife warning signs lies with the CDOT RTE.

### **DISTANCE PLAQUE / SIGN CONSPICUITY ENHANCEMENTS**

Distance plaques (W7-3aP or W16-4P) may be added as a supplemental sign to the wildlife crossing warning sign in areas where consecutive one (1) mile segments meet the criteria and be considered a wildlife zone. Segments that meet criteria but are separated by less than a one-mile stretch should be treated as one continuous segment. If W7-3aP or W16-4P signs are used the maximum distance used should be 5 miles. Successive signs may be added for wildlife zones greater than 5 miles and may be spaced at intervals of 1-5 miles, depending on local conditions. For locations where the migration path of the wildlife intersects the state highway at one specific location the use of distance plaques is discouraged.

At the discretion of the RTE sign plaques W11-60aP\_CO and W11-60bP\_CO may be added to wildlife warning signs to provide drivers with additional information of what the expected driving behavior is.



W11-60aP\_CO



W11-60bP\_CO

To provide enhanced sign conspicuity during migration seasons a warning beacon may be used.

### **SIGN PLACEMENT**

The first signs should be placed at advance of the start of the wildlife crossing limits. The advanced placement distance should be per *Table 2C.4 Guidelines for Advance Placement of*

*Warning Signs* in the Manual on Uniform Traffic Control Devices (MUTCD). The typical condition used should be for warning of a potential stop condition.

## **REMOVAL / REPLACEMENT**

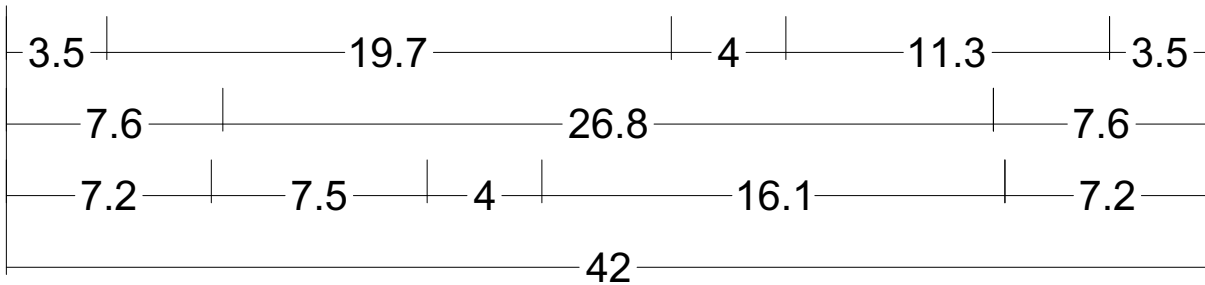
Existing warning signs should be removed or relocated when wildlife crossings have been eliminated through wildlife fencing or other access modifications<sup>3</sup> or where changes in the habitat or migration patterns have substantially decreased the crossing activity. Prior to replacing wildlife warning signs at the end of the sign's life cycle, the location should be re-evaluated to ensure the criteria set forth in this guide are still met.

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<sup>3</sup> Access modifications include wildlife overpasses and underpasses.  
(<https://experience.arcgis.com/experience/309a78b1c4ce4c93bcd20400682f363b>)

## **APPENDIX A: SIGN PACKAGE**





42\_W11-59a\_CO;

1.5" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;

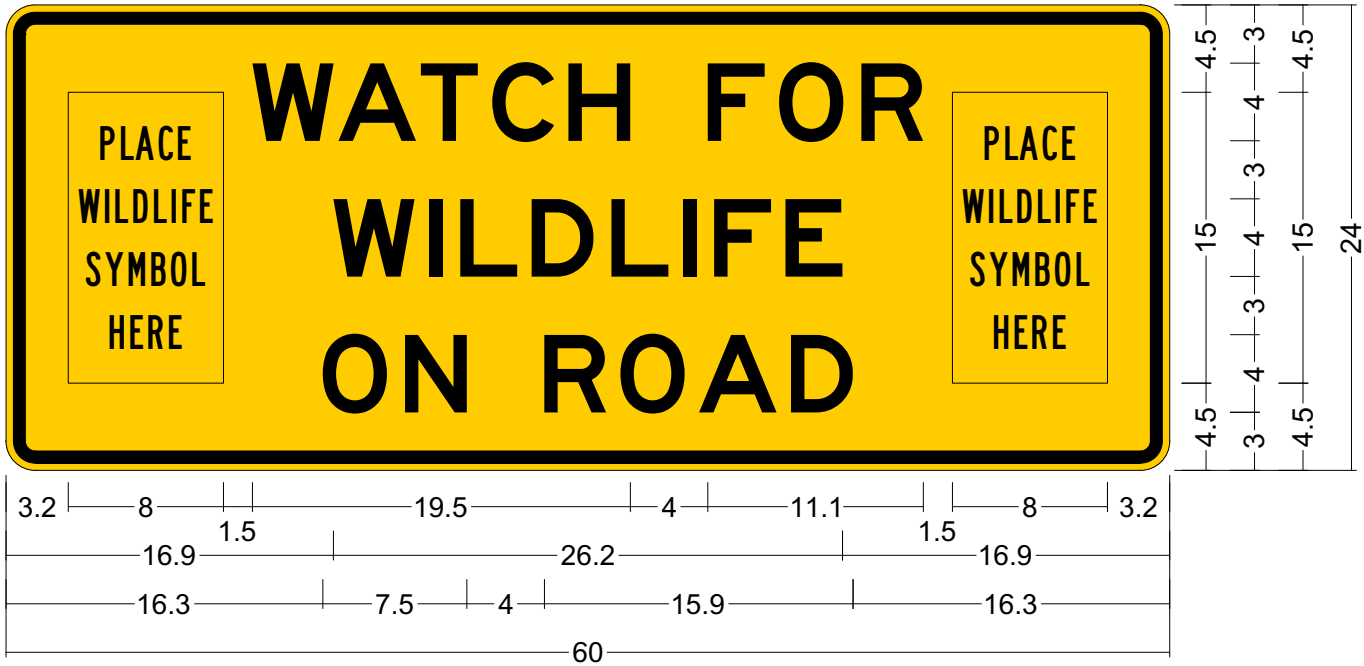
"WATCH FOR", E; "WILDLIFE", E; "ON ROAD", E;

Table of letter and object lefts

<b>W</b>	<b>A</b>	<b>T</b>	<b>C</b>	<b>H</b>	<b>F</b>	<b>O</b>	<b>R</b>
3.5	8.0	12.2	16.0	20.0	27.2	31.0	35.3

<b>W</b>	<b>I</b>	<b>L</b>	<b>D</b>	<b>L</b>	<b>I</b>	<b>F</b>	<b>E</b>
7.6	12.6	14.3	18.0	22.3	26.0	27.7	31.5

<b>O</b>	<b>N</b>	<b>R</b>	<b>O</b>	<b>A</b>	<b>D</b>
7.2	11.5	18.7	22.7	26.8	31.7

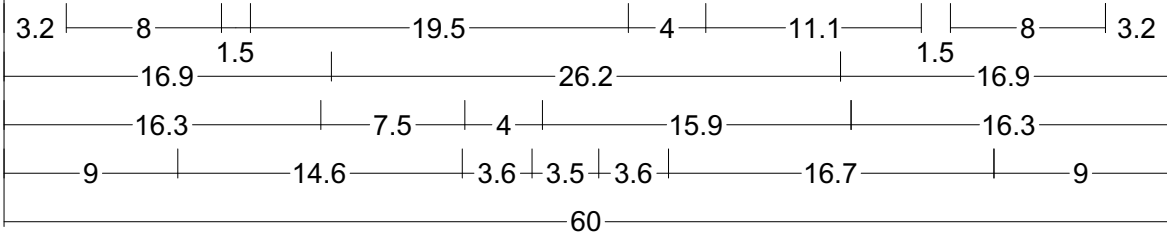


60\_W11-59b\_CO;

1.5" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;  
 Wildlife Symbol Place Holder; "WATCH FOR", E 90% spacing;  
 "WILDLIFE", E 90% spacing; "ON ROAD", E 90% spacing;  
 Wildlife Symbol Place Holder;

Table of letter and object lefts

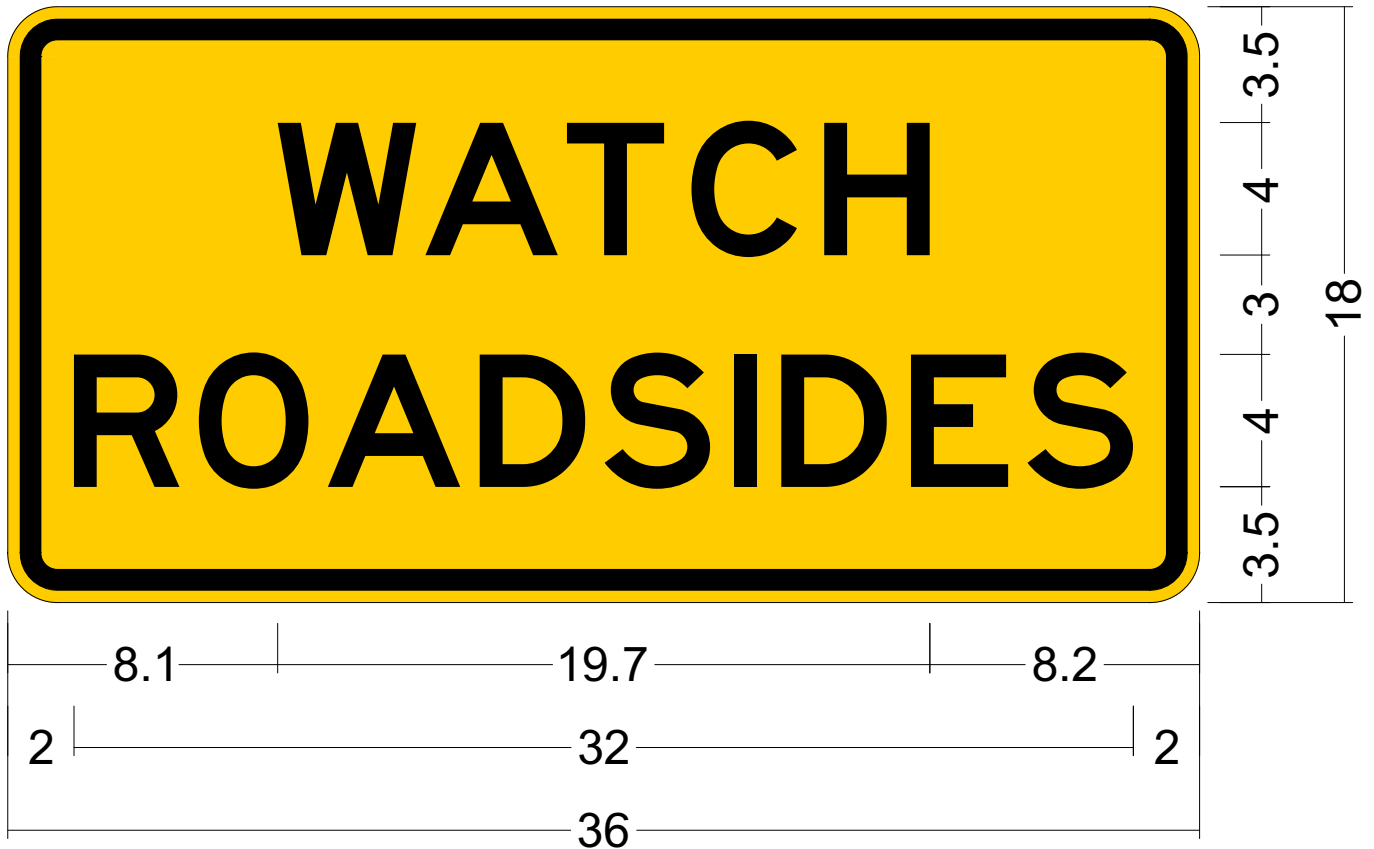
☐	<b>W</b>	<b>A</b>	<b>T</b>	<b>C</b>	<b>H</b>	<b>F</b>	<b>O</b>	<b>R</b>	☐
3.2	12.7	17.1	21.4	25.1	29.0	36.2	39.9	44.1	48.8
<b>W</b>	<b>I</b>	<b>L</b>	<b>D</b>	<b>L</b>	<b>I</b>	<b>F</b>	<b>E</b>		
16.9	21.8	23.4	27.1	31.2	34.9	36.5	40.2		
<b>O</b>	<b>N</b>	<b>R</b>	<b>O</b>	<b>A</b>	<b>D</b>				
16.3	20.6	27.8	31.7	35.7	40.5				



60\_W11-59c\_CO;

1.5" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;  
 Wildlife Symbol Place Holder; "WATCH FOR", E 90% spacing;  
 "WILDLIFE", E 90% spacing; "ON ROAD", E 90% spacing;  
 Wildlife Symbol Place Holder; "NEXT X MILES", E 90% spacing;  
 Table of letter and object lefts

3.2	W	A	T	C	H	F	O	R	48.8	
12.7	17.1	21.4	25.1	29.0	36.2	39.9	44.1			
16.9	21.8	23.4	27.1	31.2	34.9	36.5	40.2			
16.3	20.6	27.8	31.7	35.7	40.5					
9.0	N	E	X	T	X	M	I	L	E	S
13.1	16.8	20.7	27.2	34.3	38.9	40.5	44.2	47.9		



36\_W11-60aP\_CO;

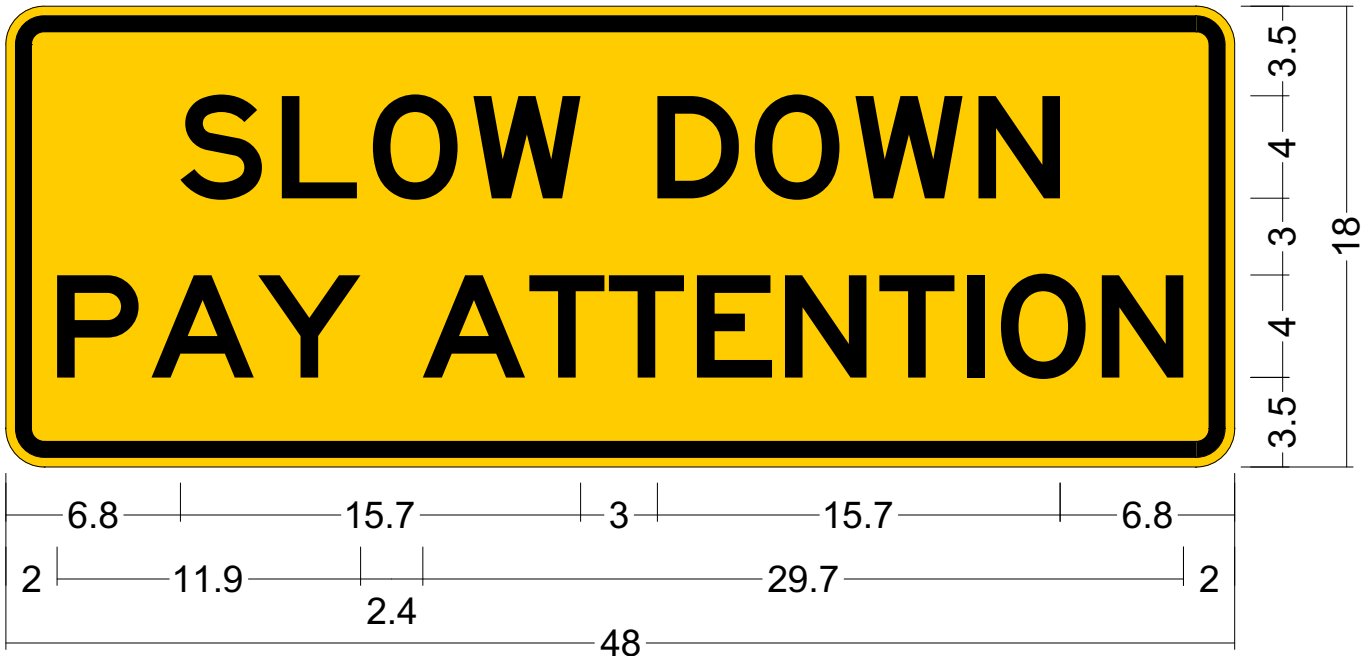
1.5" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;

"WATCH", E; "ROADSIDES", E specified length;

Table of letter and object lefts

<b>W</b>	<b>A</b>	<b>T</b>	<b>C</b>	<b>H</b>
8.1	12.6	16.9	20.7	24.7

<b>R</b>	<b>O</b>	<b>A</b>	<b>D</b>	<b>S</b>	<b>I</b>	<b>D</b>	<b>E</b>	<b>S</b>
2.0	5.8	9.7	14.3	18.0	21.9	23.4	27.3	30.8



48\_W11-60aP\_CO;

1.5" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;

"SLOW DOWN", E 75% spacing;

"PAY ATTENTION", E specified length;

Table of letter and object lefts

<b>S</b>	<b>L</b>	<b>O</b>	<b>W</b>	<b>D</b>	<b>O</b>	<b>W</b>	<b>N</b>
6.8	10.8	14.3	18.3	25.5	29.3	33.2	38.0

<b>P</b>	<b>A</b>	<b>Y</b>	<b>A</b>	<b>T</b>	<b>T</b>	<b>E</b>	<b>N</b>	<b>T</b>	<b>I</b>	<b>O</b>	<b>N</b>
2.0	5.7	9.9	16.3	20.5	23.6	27.0	30.4	34.1	37.6	38.9	42.8

