## U.S. Fish and Wildlife Service California - Great Basin Region Migratory Birds Program

## Recommended Buffer Zones for Ground-based Human Activities around Nesting Sites of Golden Eagles in California and Nevada

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For most ground-based human activities, we recommend a one-mile no-disturbance buffer surrounding golden eagle nesting sites in California and Nevada; see table below for specifics on activity and buffer recommendations. Recommended buffers may increase or decrease, depending on specific site or activity circumstances. Buffers may be reduced in consultation with the U.S Fish and Wildlife Service (Service) when the nest is not in use or activities are not in line-of-sight of the nest<sup>a</sup>. In parts of California, eagles maintain year-round territories that may require additional protection. We recommend consultation with the Service for determining buffer zones for high intensity or long duration activities, unique circumstances, activities not listed in the table below, or when historic levels of human activity are a consideration.

Activity	Recommended No-Disturbance Buffer	
Use of Motorized Vehicles off-road and on water:		
Including, but not limited to, passenger vehicles, all-terrain vehicles, dirt bikes, and	1 mile	
s now mobiles. Any passenger vehicle driving on dirt or gravel roads that are not part of a		
routinely used transportation corridor. Also includes motorized boating activities.		
Pedestrian and Non-Motorized Activity <sup>b</sup> :		
Including, but not limited to, walking, running, hiking, biking, camping, rockclimbing, bird	1 mile	
watching, fishing, hunting, horseback riding, canoeing, kayaking, and biological surveys <sup>c</sup> .		
Developed Sites:	1 mile	
Including, but not limited to, facilities, developed campground sites, and designated snowmobile		
and off-road vehicle courses.		
Industrial, Municipal, and Construction Activity:		
Including, but not limited to, urbanization; mining; oil and gas development; solar development;	1 mile	
logging; power line construction; road construction & maintenance; facilities construction; and		
agricultural operations.		
Blasting and other loud non-regular noise:		
Including, but not limited to, detonation devices, fireworks classified by the Federal Department	2 miles	
of Transportation as Class B explosives, recreational shooting, and outdoor concerts.		

<sup>&</sup>lt;sup>a</sup> An *in-use nest* is defined as a "golden eagle nest characterized by the presence of one of more eggs, dependent young, or adult eagles on the nest in the past 10 days during the breeding season" (50 CFR 22.3) and "(b)reeding begins... with the start of courtship..." (*Programmatic Environmental Impact Statement for the Eagle Rule Revision*, United States Department of the Interior, Fish and Wildlife Service, December 2016).

<sup>&</sup>lt;sup>b</sup> Many existing nest sites experience some level of intermittent and on-going low levels of disturbance from these types of human activities, and the resident pair of eagles may have acclimated to these existing levels of disturbance. However, increases in human activity may not be tolerated by nesting eagles.

<sup>&</sup>lt;sup>c</sup> Qualified biologists conducting ground-based eagle monitoring may follow distance recommendations in Pagel et al (2010).