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To: The Honorable Pam Marsh, Chair House Committee on Environment and Natural Resources

House Bill 4130

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The Department appreciates the opportunity to provide testimony on House Bill 4130. While the Department has no position on the bill, road mitigation is needed in the state, as roadways pose a significant risk to many of Oregon's wildlife species.

The extensive network of roads affects wildlife in a variety of ways, including acting as a barrier to animal movement (Forman et al. 2003). Overall connectivity for wildlife is reduced by roadways as a result of habitat fragmentation, reduction in available habitat or its quality, injury and mortality as a result of animal-vehicle collisions, and behavioral avoidance, among other factors (Forman et al. 2003; Fahrig and Rytwinski 2009; D'Amico et al. 2016). The impacted area extends beyond the road surface due to noise, air, water and other pollution from roads (Forman and Deblinger 1998). The cumulative impacts of roads can greatly decrease the ability of wildlife to move among suitable habitat in order to successfully find food, water, shelter, and mates, impacting genetic diversity, population size and structure, metapopulation structure, and species diversity (Trombulak et al. 2001; Forman et al. 2003; Fahrig and Rytwinski 2009; Clark et al. 2010; Patrick and Gibbs 2010).

There are significant costs incurred as a result of wildlife-vehicle collisions, even in cases where a collision with an animal is not a risk to human safety. Vehicle-related mortality can contribute to or exacerbate species population decline and, subsequently, lead to federal listing under the Endangered Species Act (Huijser et al. 2008). Most species are susceptible to at least some level of mortality or fragmentation from roads, including flighted species like birds, which are often overlooked in studies of road network impacts on wildlife (Kociolek et al. 2011; Loss et al. 2014).

House Bill 4130 appropriates funds to the Oregon Department of Transportation for projects promoting safe road crossings and connectivity for wildlife. Wildlife crossing structures help mitigate the effects of roadways on wildlife by allowing animals to safety cross under or over roads and by reducing the risk of wildlife-vehicle collisions. Crossing structures can take many forms, depending on species-specific habitat needs, from small steel or concrete culverts to at-grade trenches to large bridges or overpasses. These structures, when appropriately sited and designed, substantially reduce wildlife-vehicle



collisions, typically by more than 80 percent (Huijser et al. 2008). In addition to reducing wildlife mortality and improving safety for drivers, wildlife crossings lessen the barrier effect of roadways and help restore or maintain habitat connectivity for wildlife (Van Der Ree et al. 2015). State funding under this bill could also provide valuable match for federal funding available for wildlife crossing projects in the Infrastructure Investment and Jobs Act.

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Citations

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