

Pre-construction wildlife monitoring for Washington's I-90 Snoqualmie Pass East project.

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Interest in wildlife crossing structures and other tools (e.g., fencing and jump-outs) for mitigating the effects of roads on wildlife is growing rapidly, with state departments of transportation increasingly including such measures in highway projects. Often, wildlife monitoring efforts associated with such projects are under-funded and conducted only after construction or for only short time periods of time. As part of an ambitious project to improve a 15-mile stretch of Interstate 90 (I-90) east of Snoqualmie Pass, the Washington State Department of Transportation (WSDOT) is planning to install a large number of wildlife underpasses, multiple overpasses, wildlife fencing, and jump-outs. The crossing structures have been designed and located with a broad range of species in mind (e.g., amphibians, fish, mammals). A key component of the I-90 project is its commitment to extensive wildlife monitoring—both prior to and following the construction of structures. The long-term and multi-phased nature of this project will make it possible to collect valuable baseline data prior to construction, with sufficient power to detect effects. Working with WSDOT and other project partners, the Western Transportation Institute has developed a comprehensive monitoring plan and begun pre-construction monitoring of this project. Pre-construction monitoring objectives include quantifying existing rates of highway crossing by various species and species groups, assessing the rate of roadkill and wildlife-vehicle collisions, and surveying throughout the project area to evaluate species occupancy and distribution. In addition, the I-90 project emphasizes a unique, multi-tiered approach that will permit large-scale questions of wildlife connectivity to be explored. Here we review the important components of the monitoring program, and present some results from the first full year of monitoring.