

**Pre-construction baseline monitoring of amphibians for Washington's I-90 Snoqualmie Pass East project: Distribution, detection and tracking.**

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Amphibians are often overlooked species with respect to mitigation efforts for development projects. However, the Washington State Department of Transportation (WSDOT) has designed crossing structures to facilitate connectivity of multiple taxa along a 15-mile stretch of Interstate 90 (I-90) Snoqualmie Pass corridor. In order to assist with this effort, we are developing a baseline monitoring plan for amphibians as indicators of low mobility species. During 2008, we conducted distribution surveys and pilot studies to identify focal species and techniques useful in the project area. Intensive visual encounter surveys were conducted throughout the project area to map species occurrence with respect to connectivity enhancement areas (CEAs) and existing potential crossing structures (i.e., culverts, overpasses etc). Pilot studies included the assessment of funnel traps, drift fences, pit fall traps, and visual encounter transect surveys for amphibian detection. In addition, we evaluated toe clipping, visual implant elastomers and radio telemetry as methods for tracking individuals. Based upon our results, we have developed a baseline monitoring plan consisting of focal species and a combination of techniques to quantify the existing connectivity of amphibian populations.