## **Environmental Studies**

Throughout the planning and study of the SH-82 project, ODOT has made efforts to avoid, minimize, or mitigate impacts to both the natural and human environment. These efforts will continue through the design and construction of the SH-82 project. ODOT has completed detailed environmental studies of all environmental resources on the selected alternative and has consulted with the appropriate agencies. These studies included detailed investigations of waters and wetlands, threatened and endangered species and their habitat, cultural resources, potential hazardous materials sites, and a traffic noise study.



Waters & Wetlands: The project will require construction within several Waters of the United States (WOTUS) that are regulated by the U.S. Army Corps of Engineers (USACE). ODOT will continue to coordinate with the USACE to determine what type of permit will be needed for the project, and if mitigation for impacts to waters and wetlands will be required.



Threatened and Endangered Species: ODOT identified potential habitat for several federally-protected species within the project area. These include the Gray Bat, Ozark Big-Eared Bat, the Northern Long-Eared Bat, and the American Burying Beetle. Additional commitments have been added to the project to avoid and/or minimize impacts to these species.



**Cultural Resources:** The project will not have impacts to any significant historic or archeological site. No additional investigations of cultural resources are required.



Hazardous Materials: An Initial Site Assessment (ISA) was performed for the project to identify any potentially hazardous or contaminated sites that may affect project construction. The ISA identified staining and above and underground ground storage tanks. These in-use tanks were determined to have environmental conditions of potential risk to the project. Upon review of project plans, it was determined that the risk to the project is low and

no additional investigations or special protective measures will be required.



**Traffic Noise:** A Traffic Noise Study was completed according to Federal Highway Administration (FHWA) and ODOT policies and procedures using FHWA Traffic Noise Model version 2.5. One hundred one model receptor sites were analyzed represented one hundred 121 residential dwellings, four places of worship, and one cemetery. Under current conditions, no residential dwellings are impacted by noise (i.e.

have a current noise level of 66 decibels or greater). Based on the proposed project and the 2045 design year traffic volumes, no residential dwellings will meet or exceed the 66 decibel threshold defined as a noise impact. However, six residential dwellings will experience a substantial noise impact of 15 decibels or more over the existing condition.

Noise abatement in the form of free standing noise walls was considered for those identified impacted receptors. For one receptor (R45), due to its isolated location, a noise wall of the length and height required to achieve a 7-decibel reduction in future noise levels would prove not feasible or reasonable. For the remaining five receptors, two separate noise walls were evaluated at various lengths and heights placed within five feet of the proposed highway right-of-way. The results of this analysis indicated

that with wall heights ranging up to the maximim 22 feet, mitigation provide not feasible and/or reasonable in accordance with ODOT noise policy for both noise walls. Therefore, noise walls will not be included in the project.

## **Project Commitments**

Project commitments documented in the Environmental Assessment (EA) include:

- Relocations are anticipated for the project. Acquisition and relocation assistance
  will be conducted in accordance with the Uniform Relocation Assistance and Real
  Property Acquisition Policies Act of 1970, as amended, effective February 3,
  2005. Housing of last resort may be required and will be provided if sufficient
  comparable replacement housing is not available within the financial means of
  displacees.
- The action may involve work in potentially jurisdictional waters and potentially jurisdictional wetlands. The Section 404 permit application form will be submitted at the time of right-of-way submittal for evaluation and determination of the appropriate Clean Water Act Section 404 permit application for the project.
- A storm water pollution prevention plan (SWP3) will be developed for the project, and a temporary erosion and sediment control plan will be included in the construction plans to avoid or minimize impacts to water quality.
- All properties will remain accessible during construction of the project.
- Additional efforts will be made to reach low-income and minority populations during the detailed studies. These could include one-on-one meetings or small group meetings through community services such as churches or the Cherokee Nation Housing Authority. Prior to conducting field studies, ODOT will mail out an Environmental Justice questionnaire to all affected property owners to identify any special needs or concerns.

Additional commitments to protect waters and wetlands and threatened and endangered species will be incorporated into the project plans.