

## Select Resources for Designing Wildlife Crossing Structures

### *Guidelines for Terrestrial Wildlife*

- Clevenger, A. P. and M. P. Huijser. 2011. Wildlife crossing structure handbook: design and evaluation in North America. Report to the Federal Highway Administration. Publication No. FHWA-CFL/TD-11-003. Western Transportation Institute, Bozeman, Montana.
  - <http://www.cflhd.gov/programs/techDevelopment/wildlife/>
  - This report to FHWA includes detailed Hot Sheets describing species-specific guidelines for each of the different structure types.
- Arizona Game and Fish Department. 2008. Guidelines for Bridge Construction or Maintenance to Accommodate Fish and Wildlife Movement and Passage. Arizona Game and Fish Department, Habitat Branch, Phoenix, AZ.
  - [www.azgfd.gov/hgis/pdfs/BridgeGuidelines.pdf](http://www.azgfd.gov/hgis/pdfs/BridgeGuidelines.pdf)
- Wildlife and Roads Website
  - Offers decision making guidance and resources on evaluating the use and effectiveness of wildlife crossing structures.
  - <http://wildlifeandroads.org>
- Massachusetts Department of Transportation. 2010. Design of Bridges and Culverts for Wildlife Passage at Freshwater Streams. Massachusetts Department of Transportation. Boston, MA.
  - [http://www.mhd.state.ma.us/downloads/projDev/Design\\_Bridges\\_Culverts\\_Wildlife\\_Passage\\_122710.pdf](http://www.mhd.state.ma.us/downloads/projDev/Design_Bridges_Culverts_Wildlife_Passage_122710.pdf)
- Kintsch, J. and P. C. Cramer. 2011. Permeability of existing structures for terrestrial wildlife: a passage assessment system. Research Report No. WA-RD 777.1. Washington Department of Transportation. Olympia, WA.
  - The Passage Enhancement Toolbox compiled for this report provides photo examples of enhancements that can be made to existing structures to render them more functional for wildlife passage.
  - <http://www.wsdot.wa.gov/Research/Reports/700/777.1.htm>

### *Guidelines for Fish Passage*

- USDA Forest Service stream crossing guidelines
  - <http://www.fs.fed.us/eng/pubs/pdf/StreamSimulation/index.shtml>
- Massachusetts Department of Fish and Game stream crossing handbook
  - <http://www.mass.gov/dfwele/der/freshwater/rivercontinuity/guidancedoc.htm>