

**TECHNICAL REPORT DOCUMENTATION PAGE**

1. REPORT NO. <b>FHWA-OK-11-09</b>	2. GOVERNMENT ACCESSION NO.	3. RECIPIENT=S CATALOG NO.	
4. TITLE AND SUBTITLE <b>Vegetative Rehabilitation of Highway Cut Slopes in Eastern Oklahoma</b>		5. REPORT DATE <b>September 31, 2011</b>	
		6. PERFORMING ORGANIZATION CODE	
7. AUTHOR(S) <b>James R. King</b>		8. PERFORMING ORGANIZATION REPORT	
9. PERFORMING ORGANIZATION NAME AND ADDRESS <b>USDA-NRCS Booneville Plant Materials Center 6883 South State Hwy. 23 Booneville, AR 72927</b>		10. WORK UNIT NO.	
		11. CONTRACT OR GRANT NO. <b>ODOT SPR Item Number 2188</b>	
12. SPONSORING AGENCY NAME AND ADDRESS <b>Oklahoma Department of Transportation Planning and Research Division 200 N.E. 21st Street, Room 3A7 Oklahoma City, OK 73105</b>		13. TYPE OF REPORT AND PERIOD COVERED <b>Final Report March 2006-December 2011</b>	
		14. SPONSORING AGENCY CODE	
15. SUPPLEMENTARY NOTES			
16. ABSTRACT  <b>Areas of moderate to severe erosion are occurring on highway rights of way in eastern Oklahoma. The silt from this erosion is filling ditch bottoms causing drainage problems ranging from slight to severe. Current vegetative practices call for bermudagrass slab sod and seeded introduced species of grasses on newly constructed highway rights of way slopes. These practices work well for a limited time (2-3 years). The species begin to die from drought stress, allowing erosion to begin. This study identified species of native warm season grasses that will control erosion, and survive harsh conditions found on disturbed slopes along Oklahoma highways. Along with species tests, planting dates, planting rates, mulch materials, and mulch rates were explored. Three sites were selected by ODOT to perform these tests. The first site is one mile south of the maintenance facility in Poteau, Ok. The second site is 5 miles north of Heavener, on the east side of the highway, and the third is at Sugar Creek on SH-128. Site characterizations were performed at each test site prior to planting dates. Soil amendments were applied for medium production of each species tested. The objective of this study is to test and prepare planting specifications for ODOT to use when contracting vegetative cover establishment on newly constructed highway rights of way in eastern Oklahoma.</b>			
17. KEY WORDS <b>Native warm season grasses, critical area planting, drought stress in native grasses</b>		18. DISTRIBUTION STATEMENT <b>No restrictions. This publication is available from the Planning &amp; Research Div., Oklahoma DOT.</b>	
19. SECURITY CLASSIF. (OF THIS REPORT) <b>Unclassified</b>	20. SECURITY CLASSIF. (OF THIS PAGE) <b>Unclassified</b>	21. NO. OF PAGES <b>17</b>	22. PRICE <b>N/A</b>