Appendix 9: Published Scientific Research Related to Forestry Best Management Practices, Post-2006

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Abstract

The forestry best management practices (BMPs) manual is a document administered by the N.C. Forest Service (NCFS) containing a collection of effective and practical methods to minimize nonpoint source pollution from forest operations. The NCFS engaged with stakeholders and a Forestry Technical Advisory Committee to discuss and scrutinize the content of the manual.

The first revision to the BMP manual using this review process was completed in 2006 and laid an excellent foundation for subsequent editions. A survey of customers that use the manual indicated that it should be reexamined for the applicability of new information revealed in applied research and professional experiences.

This bibliography is intended to serve as a detailed listing of digitally available references, post-2006, related to applied research investigations. The bibliography of references is categorized by applicability to all or specific regions (coastal plain, piedmont, and mountain). References are not duplicated among categories. These resources were examined in the 2020-2021 revision of the North Carolina Forestry BMP Manual. We recognize that some references may have been missed and encourage readers to submit additional relevant references to the NCFS at ncfs.water@ncagr.gov. Each reference noted in this bibliography has an online digital copy available; however, access to some articles will require a subscription to its host journal.

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General Knowledge Applicable to Multiple North Carolina Regions


Caldwell, P.V.; Sun, G.; McNulty, S.G.; [and others]. 2013. Impacts of impervious cover, water withdrawals, and climate change on river flows in the conterminous US. Hydrology and Earth System Sciences. 16: 2839-2857.


Sugden, B.D. 2018. Estimated sediment reduction with forestry best management practices implementation on a legacy forest road network in the Northern Rocky Mountains. Forest Science. 64(2): 214-224.


Sun, G.; Caldwell, P.V.; McNulty, S.G. 2015. Modelling the potential role of forest thinning in maintaining water supplies under a changing climate across the conterminous United States. Hydrological Processes. 29: 5016-5030.


Tremblay, G.; Valeria, O.; Imbeau, L. 2017. Characterization of beaver habitat parameters that promote the use of culverts as dam construction sites: can we limit the damage to forest roads?. Forests. 8, 494, 13 p.


Coastal Plain Region


Liu, X.; Sun, G.; Mitra, B.; [and others]. 2018. Drought and thinning have limited impacts on evapotranspiration in a managed pine plantation on the southeastern United States coastal plain. Agricultural and forest meteorology. 262: 14-23.


Piedmont Region


Morris, B.C.; Bolding, M.C.; Aust, W.M.; [and others]. 2016. Differing levels of forestry best management practices at stream crossing structures affect sediment delivery and installation costs. Water. 8, 92, 18 p.


Mountain Region


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