## Bibliography of Various Sources Reviewed in Developing NC DWQ Coastal Stormwater Study

**Notes:** In reference #2, which is the Pew Oceans Commission study by Beach, there is an additional bibliography and summary on page #8 of this document. This bibliography contains a number of additional studies that support the hypothesis that impervious surface densities over 10 to 15% negatively impact aquatic habitats.

Please note that reference #6, published by the EPA, was published in January 2006, after the original presentation on this matter to the EMC in December 2005. However, because this reference was so relevant to the discussion it was incorporated into the follow-on presentations on this matter.

Many of the references listed below contain additional references that can be used to support the hypothesis that impervious surface densities over 10 to 15% negatively impact aquatic habitats.

- 1. **Arnold, C.L., Gibbons, J.C.** 1996. Impervious Surface Coverage: The Emergence of a Key Environmental Indicator. Journal of the American Planning Association **62:**243-258.
- 2. **Beach, D.** 2002. Coastal sprawl: the effects of urban design on aquatic ecosystems in the United States. Pew Oceans Commission.
- 3. Doll, B.A., Wise, D.E., Buckner, C.M., Wilkerson, S.D., Harman, W.A., Smith, R.E., Spooner, J., 2002. Hydraulic Geometry Relationships for Urban Streams Throughout the Piedmont of North Carolina. American Water Resources Association 38:641-651.
- 4. **Center for Watershed Protection.** 2003. Impacts of Impervious Cover on Aquatic Systems. Center for Watershed Protection.
- 5. **Goonetillekea, A., Thomas, E., Ginnc, S., and Gilbert, D.** 2005. Understanding the role of land use in urban stormwater quality management. Journal of Environmental Management **74:**31-42.
- 6. **Grumbles, B., Mannix, B.F.** 2006. Protecting Water Resources with Higher-Density Development. United States Environmental Protection Agency.
- 7. **Klein, R.D.** 1979. Urbanization and Stream Quality Impairment. Journal of the American Water Resources Association **15**:948-963.

- 8. Mallin, M.A., Williams, K.E., Esham, E.C., and Lowe, R.P. 2000. Effect of Human Development on Bacteriological Water Quality in Coastal Watersheds. Ecological Applications 10:1047-1056.
- 9. Mallin, M.A., Cahoon, L.B., Posey, M.H., Parsons, D.C., Johnson, V.L., Alphin, T.D., and Merritt, J.A. 2003. Environmental Quality of Wilmington and New Hanover County Watersheds, 2001-2002. Center for Marine Science, University of North Carolina at Wilmington.
- 10. May, C.W., Horner, R.R., Karr, J.R., Mar, B.W., Welch, E.B. Effects Of Urbanization On Small Streams. Feature article from Watershed Protection Techniques 2:483-494.
- 11. May, C.W., Horner, R.R. 2000. The Cumulative Impacts of Watershed Urbanization on Stream-Riparian Ecosystems. Presented at the International Conference on Riparian Ecology and Management in Multi-Land Use, Portland, Oregon, USA.
- 12. North Carolina Department of Natural Resources and Community Development. 1985. Coastal Development and Shellfish Waters. Division of Environmental Management.
- 13. North Carolina Division of Water Quality. 2005. State Stormwater Management (15A NCAC 2H .1000): Project characteristics and compliance account for five (5) selected coastal counties in southeastern North Carolina. Department of Environment and Natural Resources.
- 14. North Carolina National Estuarine Research Reserve. 2003. Addressing Microbial Pollution in Coastal Waters. North Carolina Coastal Nonpoint Source Program.
- 15. **Paul M. J. and Meyer, J. L.** 2001. Streams in Urban Landscape. Annual Review of Ecology and Systematics **32**:333-366.
- 16. **Schueler T.R. and Holland H.K.** 2000. The Practice of Watershed Protection. Center for Watershed Protection, Ellicott City, MD.
- 17. **Schueler, T.R.** 1994. The Importance of Imperviousness. Watershed Protection Techniques **1:**100-111.
- 18. **Schueler, T.R.** 1995. The Importance of Imperviousness, Site Planning for Urban Stream Protection. Metropolitan Washington Council of Governments, Center for Watershed Protection, Washington, DC, Silver Spring, MD.

- 19. Stewart, J.S., Downes, D.M., Wang, L., Wier, J.A. and Bannerman, R. 2000. Influences of Riparian Corridors on Aquatic Biota in Agricultural Watersheds. Presented at the Proceedings of the International Conference on Riparian Ecology and Management in Multi-Use Watersheds, Middleburg, VA.
- 20. **United States Environmental Protection Agency.** 2002. National Management Measures to Control Nonpoint Source Pollution from Urban Areas. United States Environmental Protection Agency, Office of Water.