

This document is one chapter from the EPA "Handbook for Developing Watershed Plans to Restore and Protect Our Waters," published in March 2008. The reference number is EPA 841-B-08-002. You can find the entire document http://www.epa.gov/owow/nps/watershed handbook.

Handbook for Developing Watershed Plans to Restore and Protect Our Waters

Bibliography

Bibliography

Arnold, J.G., and J.R. Williams. 1987. Validation of SWRRB—Simulation for Water Resources in Rural Basins. J. *Water Res. Plan. Man.* 13:243-256.

Arnold, J.G., J.R. Williams, A.D. Nicks, and N.B. Sammons. 1990. SWRRB: A Basin Scale Simulation Model for Soil and Water Resources Management. Texas A&M University Press, College Station, TX.

ASCE (American Society of Civil Engineers). 1993. *Criteria for Evaluation of Watershed Models*. American Society of Civil Engineers, Task Committee of the Watershed Management Committee.

Athayde, D.N., P.E. Shelley, E.D. Driscoll, D. Gaboury, and G.B. Boyd. 1983. *Results of the Nationwide Urban Runoff Program: Final Report*. U.S. Environmental Protection Agency, Water Planning Division, Washington, DC.

Barbour, M.T., J. Gerritsen, B.D. Snyder, and J.B. Stribling. 1999. *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish.* 2nd ed. EPA 841 B 99 002. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

Barfield, B. J., J. C. Hayes, K. F. Holbrook, B. Bates, J. Gillespie, and J. Fersner. 2002. *IDEAL Model User Manual*. J. C. Hayes and Associates, Clemson, SC.

Beasley, D.B., L.F. Huggins, and E.J. Monke. 1980. ANSWERS: A model for watershed planning. *Trans. ASAE* 23:938-944.

Beaulac, M.N., and K.H. Reckhow. 1982. An examination of land use-nutrient export relationships. *Water Resources Bulletin* 18(6): 1013 1024.

Beck, M.B. 1987. Water quality modeling: A review of the analysis of uncertainty. *Water Res. Research* 23(8):1393-1442.

Beyer, A.S., C.K. Contant, and M.J. Donahue. 2001. Seeking Signs of Success: A Guided Approach to More Effective Watershed Programs. Harbor House Publishers, Michigan.

Bingner, R.L., C.E. Murphree, and C.K. Mutchler. 1987. Comparison of Sediment Yield Models on Various Watersheds in Mississippi. ASAE paper 87-2008. American Society of Agricultural Engineers, St. Joseph, MI.

Bosch, D.D., R.L. Bingner, F.D. Theurer, G. Felton, and I. Chaubey. *Evaluation of the AnnAGNPS Water Quality Model*. Presented at the 1998 ASAE Annual International Meeting, July 12-16, 1998, Orlando, Florida. Paper no. 982195. American Society of Agricultural Engineers, St. Joseph, MI.

British Columbia Ministry of Forests. 1999. Forest Practices Code of British Columbia: Coastal Watershed Assessment Procedure Guidebook (CWAP), Interior Watershed Assessment Procedure Guidebook. 2nd ed. British Columbia Ministry of Forests.

Brown, E., A. Peterson, R. Kline-Robach, K. Smith, and L. Wolfson. 2000. *Developing a Watershed Management Plan for Water Quality: An Introductory Guide*. Michigan Department of Environmental Quality.

<www.michigan.gov/documents/deq/ess-nps-watershed-planning 210637 7.pdf>.

Brown, M.P., P. Longabucco, M.R. Rafferty, P.D. Robillard, M.F. Walter, and D.A. Haith. 1989. Effects of animal waste control practices on nonpoint source phosphorus loading in the West Branch of the Delaware River watershed. *J. Soil Water Cons.* 44(1):67-70.

California SWRCB (State Water Resources Control Board). 2003. A Process for Addressing Impaired Waters in California. Draft. California State Water Resources Control Board, CA.

Camacho, R. 1991. Financial Cost Effectiveness of Point and Nonpoint Source Nutrient Reduction Technologies in the Chesapeake Bay Basin. Unpublished draft. Interstate Commission on the Potomac River Basin, Rockville, MD.

Caraco, D., R. Claytor, P. Hinkle, H.Y. Kwon, T. Schueler, C. Swann, S. Vysotsky, and J. Zielinski. 1998. *Rapid Watershed Planning Handbook*. Center for Watershed Protection, Ellicott City, MD.

Cassell, E.A. and J.C. Clausen. 1993. Dynamic simulation modeling for evaluating water quality response to agricultural BMP implementation. *Water Sci. & Technol.* 28(3 5): 635-648.

CCRS (Canada Centre for Remote Sensing). 2005. Fundamentals of Remote Sensing. http://ccrs.nrcan.gc.ca/resource/tutor/fundam/index e.php>.

Clausen, J.C. and J. Spooner. 1993. *Paired Watershed Study Design*. Office of Water, U.S. Environmental Protection Agency, Washington, DC. EPA 841-F-93-009. 8 p.

Claytor, R.A., and W.E. Brown. 1996. Environmental Indicators to Assess Stormwater Control Programs and Practices. Center for Watershed Protection, Ellicott City, MD.

Cleland, B. 2002. *TMDL Development from the "Bottom Up."* Part II. Using Duration Curves to Connect the Pieces. America's Clean Water Foundation, Washington, DC.

Cohn, T.A., and E.J. Gilroy. 1991. *Estimating Loads from Periodic Records*. U.S. Geological Survey Branch of Systems Analysis Technical Memo 91.01.

Cronshey, R.G., and F.D. Theurer. 1998. AnnAGNPS—Nonpoint Pollutant Loading Model. In *Proceedings of First Federal Interagency Hydrologic Modeling Conference*, April 19-23, 1998, Las Vegas, NV.

CTIC (Center for Technology Information Center). *Know Your Watershed Kits*. <www2.ctic.purdue.edu/kyw/kyw.html>.

CWP (Center for Watershed Protection). 1996. Crafting better urban watershed protection plans. *Watershed Protect*. Techn. 2(2): 329-337.

CWP. 2004. Unified Subwatershed and Site Reconnaissance: A User's Manual, Version 1.0. Urban Subwatershed Restoration Manual Series, Manual 11. Center for Watershed Protection, Ellicott City, MD.

Dai, T., R.L. Wetzel, T.R.L. Christensen, and E.A. Lewis. 2000. *BasinSim 1.0: A Windows Based Watershed Modeling Package. User's Guide.* Special Report in Applied Marine Science and Ocean Engineering #362. Virginia Institute of Marine Science, School of Marine Science, College of William & Mary, Gloucester Point, VA.

Davenport, T.E. 2003. *The Watershed Project Management Guide*. Lewis Publishers, Boca Raton, FL. <www.enviroscapes.com/watershed_management.htm>. Accessed March 2005.

Deal, J.C., J.W. Gilliam, R.W. Skaggs, and K.D. Konyha. 1986. Prediction of Nitrogen and Phosphorus Losses as Related to Agricultural Drainage System Design. *Ag. Ecosys. and Envir.* 18:37-51.

Donigian, A.S. 1983. Model Predictions vs. Field Observations: The Model Validation/Testing Process. In *Fate of Chemicals in the Environment*, ACS Symposium Series 225, American Chemical Society, Washington, DC, pp.151-171.

Donigian, A.S., and W.C. Huber. 1991. *Modeling of nonpoint source water quality in urban and non-urban areas*. EPA/600/3-91/039. U.S. Environmental Protection Agency, Environmental Research Laboratory, Athens, GA.

Edwards, D.R., V.W. Benson, J.R. Williams, T.C. Daniel, J. Lemunyon, and R.G. Gilbert. 1994. Use of the EPIC Model to Predict Runoff Transport of Surface-applied Inorganic Fertilizer and Poultry Manure Constituents. *Trans. ASAE* 37(2):403-409.

Elder, D. 1997. Establishing watershed benchmarks: Tools for gauging success. River Voices 8(3).

Evans, B.M., D.W. Lehning, K.J. Corradini, G.W. Petersen, E. Nizeyimana, J.M. Hamlett, P.D. Robillard, and R.L. Day. 2002. A Comprehensive GIS-Based Modeling Approach for Predicting Nutrient Loads in Watersheds. J. Spatial Hydrology 2:2.

Flanagan, D.C., and M.A. Nearing, eds. 1995. USDA-Water Erosion Prediction Project: Hill-slope Profile and Watershed Model Documentation. NSERL Report no. 10. West Lafayette, IN.

Follet, R.F., D.R. Kenney, and R.M. Cruse. 1991. *NLEAP or Nitrogen Leaching and Economic Analysis Package*. Soil Science of America, Inc., Madison, WI.

Foster, M.A., P.D. Robillard, D.W. Lehning, and R. Zhao. 1996. STEWARD, a knowledge-based system for selection, assessment, and design of water quality control practices in agricultural watersheds. *Water Res. Bull.* In review.

GLNPO (Great Lakes National Program Office). 1994. Assessment and Remediation of Contaminated Sediments (ARCS) Program: Assessment Guidance Document. EPA 905-B94-002. Great Lakes National Program Office, Chicago, IL.

Grabow, G.L., J. Spooner, L.A. Lombardo, and D.E. Line. 1999a. Detecting water quality changes before and after BMP implementation: Use of SAS for statistical analysis. p. 1-11. In NWQEP notes. *The NCSU Water Quality Group Newsletter*. January 1999. North Carolina State Univ. Coop. Ext., Raleigh.

Grabow, G.L., J. Spooner, L.A. Lombardo, and D.E. Line. 1999b. Detecting water quality changes before and after BMP implementation: Use of SAS for trend analysis. p. 1-8. In NWQEP notes. *The NCSU Water Quality Group Newsletter*. July 1999. North Carolina State Univ. Coop. Ext., Raleigh.

Griffin, M.L., D.B. Beasley, J.I. Fletcher, and G.R. Foster. 1988. Estimating Soil Loss on Topographically Nonuniform Field and Farm Units. *J. Soil Water Cons.* 43:326-331.

Haan, C.T., B. Allred, D.E. Storm, G.J. Sabbagh, and S. Prabhu. 1995. Statistical procedure for evaluating hydrologic/water quality models. *Trans. ASAE* 38(3):725-733.

Haith, D.A. 1985. Variability of pesticide loads to surface waters. J. WPCF 57(11):1062 1067.

Harrelson, C.C., C.L. Rawlins, and J.P. Potyondy. 1994. Stream Channel Reference Sites: An Illustrated Guide to Field Technique. Gen. Tech. Rep. RM-245. U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.

Heidtke, T.M., and M.T. Auer. 1993. Application of a GIS-based nonpoint source nutrient loading model for assessment of land development scenarios and water quality in Owasco Lake, New York. *Water Sci. Technol.* 28(3 5):595-604.

Helfert, E. 1997. Techniques of Financial Analysis. 9th ed. McGraw Hill, New York.

Helsel, D.R., and R.M. Hirsch. 2002. Statistical Methods in Water Resources. Chapter A3 in Book 4, Hydrologic Analysis and Interpretation of Techniques of Water-Resources Investigations of the United States Geological Survey.

Howard County SWMD (Stormwater Management Division). 2001. Quality Assurance Project Plan for Howard County Biological Monitoring and Assessment Program. Howard County, Department of Public Works, Stormwater Management Division, Columbia, MD.

Huber, W.C. 1992. Experience with the USEPA SWMM Model for analysis and solution of urban drainage problems. *Proceedings, Inundaciones Y Redes De Drenaje Urbano*, ed. J. Dolz, M. Gomez, and J. P. Martin, eds., Colegio de Ingenieros de Caminos, Canales Y Puertos, Universitat Politecnica de Catalunya, Barcelona, Spain, pp. 199-220.

Huber, W.C., and R.E. Dickinson. 1988. Storm Water Management Model Version 4, User's manual. EPA 600/3 88/001a (NTIS PB88-236641/AS). U.S. Environmental Protection Agency, Athens, GA.

IDEM (Indiana Department of Environmental Management). 2003. *Indiana Watershed Planning Guide*. Indian Department of Environmental Management. www.in.gov/idem/catalog/documents/water/iwpg.pdf>. Accessed March 2005.

IEP, Inc. 1990. P8 Urban Catchment Model User's Manual, v1.1. IEP, Inc.

Illinois CREP (Conservation Reserve Enhancement Program). 2002. *Illinois Conservation Practices Tracking System*. Illinois Conservation Reserve Enhancement Program. <www.ilcrep.org>.

ITFM (Intergovernmental Task Force on Monitoring Water Quality). 1995. *The Strategy for Improving Water Quality Monitoring in the United States*. Final report of the Intergovernmental Task Force on Monitoring Water Quality. OFR 95-742. U.S. Geological Survey, Office of Water Data Coordination, Reston, VA.

Keith, L.H. 1991. Environmental Sampling and Analysis: A Practical Guide. Lewis Publishers, Chelsea, Michigan.

Knisel, W.G., R.A. Leonard, and F.M. Davis. 1991. Water Balance Components in the Georgia Coastal Plain: A GLEAMS Model Validation and Simulation. *J. Soil Water Cons.* 46(6):450-456.

Lauenroth, W.K., G.V., Skogerboe, and M. Flug. 1982. *Developments in Environmental Modeling 5*. Elsevier Scientific Publishing Company.

Lee, E. R. 1999. SET-WET: A Wetland Simulation Model to Optimize NPS Pollution Control. Master's thesis, Dept. of Biological Systems Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA.

Lee, E.R., S. Mostaphimi, and T. M. Wynn. 2002. A model to enhance wetland design and optimize nonpoint source pollution control. J. AWRA 8(February):17-32.

Lin, J.P. 2004. Review of Published Export Coefficient and Event Mean Concentration (EMC) Data. ERDC TN WRAP 04 03. U.S. Army Corps of Engineers, Engineer Research and Development Center, Vicksburg, MS.

Line, D.E., S.W. Coffey, and D.L. Osmond. 1997. WATERSHEDSS—GRASS AGNPS modeling tool. *Trans. ASAE* 40(4):971-975.

Liu, B.Y., M.A. Nearing, C. Baffault, and J.C. Ascough. 1997. The WEPP Watershed Model: Three Comparisons to Measured Data from Small Watersheds. *Trans. ASAE* 40:945-952.

Lombardo, L.A., G.L. Grabow, J. Spooner, D.E. Line, D.L. Osmond, and G.D. Jennings. 2000. Section 319 Nonpoint Source National Monitoring Program Successes and Recommendations. North Carolina State University Water Quality Group, Biological and Agricultural Engineering Department, North Carolina State University, Raleigh, NC.

<www.bae.ncsu.edu/programs/extension/wqg/section319/nmp_successes.pdf>.

Lombardo, L.A., G.L. Grabow, D.E. Line, J. Spooner, and D.L. Osmond. 2004. 2004 Summary Report: Section 319 National Monitoring Program Projects. National Nonpoint Source Watersheds Project Studies, NCSU Water Quality Group, Biological and Agricultural Engineering Department, North Carolina State University, Raleigh, NC.

MD Tributary Strategy. 1997. *Close to Home: A Focus on Small Watersheds*. <www.dnr.state.md.us/bay/tribstrat/monitor/ss/small_shed.html>.

MDEQ (Mississippi Department of Environmental Quality). 2001. Quality Assurance Project Plan for 303(d) Monitoring and Assessment of Wadeable Streams in Mississippi. Mississippi Department of Environmental Quality, Office of Pollution, Jackson, MS.

MDEQ. 2003. Mississippi Gulf Coast Stormwater Toolbox Ranking Report. Mississippi Department of Environmental Quality, Department of Marine Resources.

<www.dmr.state.ms.us/CoastalEcology/Storm/SECTION-2/Section-2-Text.pdf>.

Meals, D.W. 1990. LaPlatte River Watershed Water Quality Monitoring and Analysis Program: Comprehensive Final Report. Program report no. 12. University of Vermont, Vermont Water Resources Research Center, Burlington, VT.

Meals, D.W. 1992. Relating land use and water quality in the St. Albans Bay Watershed, Vermont. In *The National Rural Clean Water Program Symposium*, *September 1992*, *Orlando*, *FL*, pp. 131-144. EPA/625/R-92/006. U.S. Environmental Protection Agency, Office of Research and Development, Washington, DC.

Meals, D.W. 2001. Lake Champlain Basin Agricultural Watersheds Section 319 National Monitoring Program Project, Final Project Report: May, 1994-September, 2000. Vermont Department of Environmental Conservation, Waterbury, VT.

Mill Creek Subwatershed Stakeholder Advisory Group. 2003. *Mill Creek Subwatershed Management Plan*. Available from the Huron River Watershed Council. <www.hrwc.org>.

Mullens, J.A., R.F. Carsel, J.E. Scarbrough, and I.A. Ivery. 1993. *PRZM-2, A Model for Predicting Pesticide Fate in the Crop Root and Unsaturated Soil Zones: Users Manual for Release 2.0.* EPA/600/R 93/046. U.S. Environmental Protection Agency, Office of Research and Development, Environmental Research Laboratory, Athens, GA.

Munoz-Carpena, R., and J.E. Parsons. 2003. VFSMOD-W—Vegetative Filter Strips Hydrology and Sediment Transport Modeling System, Model Documentation and User's Manual. University of Florida, Agricultural and Biological Engineering.

NASA (National Aeronautics and Space Administration). 2005a. *Remote Sensing: Special Signatures*. http://earthobservatory.nasa.gov/Library/RemoteSensing/remote 05.html>.

NASA. 2005b. Remote Sensing: Remote Sensing Methods. National Aeronautics and Space Administration. http://earthobservatory.nasa.gov/Library/RemoteSensing/remote_08.html.

NCDENR (North Carolina Department of Environment and Natural Resources). 2003. North Carolina Nonpoint Source Management Program, Tar-Pamlico Nutrient Strategy. http://h2o.enr.state.nc.us/nps/tarpam.htm>.

NOAA (National Oceanic and Atmospheric Administration). 2005a. NOAA's Remote Sensing Activities. <www.magazine.noaa.gov/stories/mag13.htm>.

NOAA. 2005b. NOAA Uses Remote Sensing Technology to Monitor and Identify Harmful Algal Blooms. National Oceanic and Atmospheric Administration. <www.noaanews.noaa.gov/stories/s2096.htm>.

Novotny, V., and H. Olem. 1994. Water Quality: Prevention, Identification, and Management of Diffuse Pollution. Van Nostrand Reinhold, New York.

NRCS (Natural Resources Conservation Service). 1997. *National Handbook of Water Quality Monitoring*. 450-vi-NHWQM. National Water and Climate Center, Portland, Oregon.

NRCS. 2005. *National Conservation Practice Standards*. <www.nrcs.usda.gov/technical/Standards>.

NSFC (National Small Flows Clearinghouse). 1993. National Onsite Wastewater Treatment: Summary of Onsite Systems in the United States. National Small Flows Clearinghouse, Morgantown, WV.

NWQMC (National Water Quality Monitoring Council). 2005. *Water Quality Data Elements*. http://wi.water.usgs.gov/methods/tools/wqde/index.htm>.

Ohio EPA (Ohio Environmental Protection Agency). 1989. *The Qualitative Habitat Evaluation Index (QHEI): Rationale, Methods, and Application*. Ohio, Environmental Protection Agency, Ecological Assessment Section, Division of Water Quality Planning and Assessment. Columbus, OH.

Ohio EPA. 1997. A Guide to Developing Local Watershed Action Plans in Ohio. <www.epa.state.oh.us/dsw/nps/wsguide.pdf>.

PGDER (Prince George's County Department of Environmental Resources). 1995. *Biological Monitoring and Assessment Program, Prince George's County, Maryland*. Maryland Department of Environmental Resources, Programs and Planning Division, Technical Support Section, Landover, MD.

Prince George's County. 2001. Low-Impact Development Management Practices Evaluation Computer Module, User's Guide. Prepared for Prince George's County, Maryland, by Tetra Tech, Inc., Fairfax, VA.

Reckhow, K.H., M.N. Beaulac, and J.T. Simpson. 1980. *Modeling Phosphorus Loading and Lake Response Under Uncertainty: A Manual and Compilation of Export Coefficients*. EPA 440/5-80-011. U.S. Environmental Protection Agency, Washington, DC.

Richards, R.P. 1997. Estimation of Pollutant Loads in Rivers and Streams: A Guidance Document for NPS Programs. Draft. Heidelberg College, Water Quality Laboratory, Tiffin, OH.

Ritchie, J.C., and C.M. Cooper. 2001. Remote sensing techniques for determining water quality: Applications to TMDLs. In *TMDL Science Issues Conference*, *Water Environment Federation*, *Alexandria*, *VA*, pp. 367-374. <www.wef.org/Home>.

Rosgen, D. 1996. Applied River Morphology. Wildland Hydrology, Pagosa Springs, CO.

Schueler, T.R. 1987. Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs. Metropolitan Council of Governments, Washington, DC.

Schueler, T.R. 1995. Site Planning for Urban Stream Protection. Center for Watershed Protection, Silver Spring, MD.

Shaffer, M.J. 1985. Simulation Model for Soil Erosion Productivity Relationships. J. Environ. Oual. 14(1):144-150.

Shaffer, M.J., and W.E. Larson, eds. 1985. NTRM: A Soil-Crop Simulation Model for Nitrogen, Tillage, and Crop Residue Management. U.S. Department of Agriculture, Agricultural Research Service, St. Paul, MN.

Shaffer, M.J., S.C. Gupta, D.R. Linden, J.A.E. Molina, C.E. Clapp, and W.E. Larson. 1986. Simulation of Nitrogen, Tillage, and Residue Management Effects on Soil Fertility. In *Analysis of Ecological Systems: State-of-the-art in Ecological Modelling*, ed. W.K. Lauenroth, G.V.

Sharpley, A.N., and J.R. Williams, eds. 1990. *EPIC—Erosion/Productivity Impact Calculator: 1. Model Documentation*. Bulletin no. 1768. U.S. Department of Agriculture.

Shilling, F., S. Sommarstrom, R. Kattelmann, B. Washburn, J. Florsheim, and R. Henly. 2004. *California Watershed Assessment Manual*. Prepared for the California Resources Agency. http://cwam.ucdavis.edu.

Skaggs, R.W. 1980. A Water Management Model for Artificially Drained Soils. North Carolina Agricultural Research Service technical bulletin 267. North Carolina State University, Raleigh, NC.

Smith, M.C., A.B. Bottcher, K.L. Campbell, and D.L. Thomas. 1991. Field testing and comparison of the PRZM and GLEAMS models. *Trans. ASAE* 34(3):838-847.

Sugden, R., and A. Williams. 1981. Principles of Practical Cost Benefit Analysis. Oxford University Press, Oxford, UK.

Sugiharto, T., T.H. McIntosh, R.C. Uhrig, and J.J. Lavdinois. 1994. Modeling alternatives to reduce dairy farm and watershed nonpoint source pollution. *J. Environ. Qual.* 23:18-24.

Tetra Tech, Inc. 2000. *Ecological Data Application System (EDAS): A User's Manual.* Prepared for U.S. Environmental Protection Agency, Office of Water, Office of Wetlands, Oceans and Watersheds, by Tetra Tech, Inc., Owings Mills, MD. (For more information on this report, contact Robert King, USEPA, at 202-566-1177).

Tetra Tech, Inc. 2001. Greater Battle Creek Area Watershed Management Plan. Prepared for the City of Springfield.

Tiscareno Lopez, M., V.L. Lopes, J.J. Stone, and L.J. Lane. 1993. Sensitivity analysis of the WEPP watershed model for rangeland applications: I. Hillslope Processes. *Trans. ASAE* 36:1659-1672.

University of Nebraska. 2005. Development and Implementation of a Comprehensive Lake and Reservoir Strategy for Nebraska as a Model for Agriculturally Dominated Ecosystems. The Center for Advanced Land Management Information Technologies (CALMIT), University of Nebraska-Lincoln (supported through EPA STAR Grant R828635). http://digitalcommons.unl.edu/geosciencefacpub/21.

University of Texas. 2002. Symposium on Terrain Analysis for Water Resources Applications, December 16 18, 2002. Center for Research in Water Resources, University of Texas, Austin. <www.crwr.utexas.edu/terrainAnalysis/presentations.cfm>.

USDA (U.S. Department of Agriculture). 1996. Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE). Renard, K.G., G.R. Foster, G.A. Wessies, D.K. McCool, and D.C. Yoder, coordinators. U.S. Department of Agriculture, Agricultural Handbook No. 703. 404 pp.

USDA-ARS (U.S. Department of Agriculture–Agricultural Research Service). No date. *User's Guide for REMM: Riparian Ecosystem Management Model*. http://sacs.cpes.peachnet.edu/remmwww/remm/users.htm>.

USDA-NRCS (U.S. Department of Agriculture, Natural Resources Conservation Service formerly Soil Conservation Service). 1986. *Urban Hydrology for Small Watersheds*. Technical release no. 55, rev. ed. U.S. Department of Agriculture, Washington, DC.

USEPA (U.S. Environmental Protection Agency). 1980. Modeling Phosphorus Loading and Lake Response Under Uncertainty: A Manual and Compilation of Export Coefficients. EPA 440/5-80-011. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 1985. Field Agricultural Runoff Monitoring (FARM) Manual. EPA/600/3-85/043. U.S. Environmental Protection Agency, Environmental Research Laboratory, Athens, GA.

USEPA. 1986. Eastern Lake Survey. Phase 1. Characteristics of Lakes in the Eastern United States: Volume 1. Population Descriptions and Physico Chemical Relationships. EPA/600/4 86/007a. U.S. Environmental Protection Agency, Office of Acid Deposition, Environmental Monitoring, and Quality Assurance, Office of Research and Development, Washington, DC.

USEPA. 1989. A Probabilistic Methodology for Analyzing Water Quality Effects of Urban Runoff on Rivers and Streams. Final report. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 1993a. Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters. EPA 840-B-92-002. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 1993b. Post Audit Verification of the Model AGNPS in Vermont Agricultural Watersheds. EPA 841-R-93-006. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 1997a. EPA's Techniques for Tracking, Evaluating, and Reporting the Implementation of Nonpoint Source Control Measures—Agriculture. EPA 841-B-97-010. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 1997b. BASINS Training Course, December 8 12, 1997. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 1997c. Compendium of Tools for Watershed Assessment and TMDL Development. EPA 841-B-97-006. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 1997d. Monitoring Guidance for Determining the Effectiveness of Nonpoint Source Controls. EPA 841-B-96-004. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 1998. Guidelines for Ecological Risk Assessment. EPA 630-R-095-002F. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC.

USEPA. 1999a. *Protocol for Developing Nutrient TMDLs*. EPA 841-B-99-007. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 1999b. *Protocol for Developing Sediment TMDLs*. EPA 841-B-99-004. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 2000a. Guidance for the Data Quality Objectives Process. EPA QA/G-4. EPA/600/R-96/055. U.S. Environmental Protection Agency, Office of Environmental Information, Washington, DC.

USEPA. 2000b. Stressor Identification Guidance Document. EPA/822/B-00/025. U.S. Environmental Protection Agency, Office of Water and Office of Research and Development, Washington, DC.

USEPA. 2000c. Projecting Land Use Change: A Summary of Models for Assessing the Effects of Community Growth and Change on Land Use Patterns. EPA 600-R-00-098. U.S. Environmental Protection Agency, Office of Research and Development, Washington, DC.

USEPA. 2001a. *Protocol for Developing Pathogen TMDLs*. 1st ed. EPA 841-R-00-002. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 2001b. *Getting in Step: Engaging Stakeholders in Your Watershed*. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 2002a. 319 Success Stories, Volume III: The Successful Implementation of the Clean Water Act's Section 319 Nonpoint Source Pollution Program. EPA 841-S-01-001. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 2002b. Community Culture and the Environment: A Guide to Understanding a Sense of Place. EPA 842-B-01-003. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 2002c. Water Quality Assessment of the Black Warrior River Basin. U.S. Environmental Protection Agency, Region 4, Nonpoint Source Branch.

USEPA. 2003a. *National Management Measures to Control Nonpoint Source Pollution from Agriculture*. EPA 841-B-03-004. U.S. Environmental Protection Agency, Office of Water, Washington, DC. <www.epa.gov/owow/nps/agmm>.

USEPA. 2003b. Post Construction Storm Water Management in New Development & Redevelopment. U.S. Environmental Protection Agency, Office of Wastewater Management. http://cfpub.epa.gov/npdes/stormwater/menuofbmps/post.cfm>.

USEPA. 2003c. Getting in Step: A Guide for Conducting Watershed Outreach Campaigns. EPA 841-B-03-002. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA. 2005. *TMDL Model Evaluation and Research Needs*. EPA/600/R-05/149. U.S. Environmental Protection Agency, Office of Research and Development, National Risk Management Research Laboratory, Cincinnati, OH.

<www.epa.gov/nrmrl/pubs/600r05149/600r05149.htm>.

USEPA, Montana Operations Office, Flathead National Forest, and Tetra Tech, Inc. 2004. Water Quality Assessment and TMDLs for the Flathead River Headwaters Planning Area, Montana. Prepared for Montana Department of Environmental Quality.

USEPA and USDA. 1998. Clean Water Action Plan: Restoring and Protecting America's Waters. U.S. Environmental Protection Agency, Washington, DC, and U.S. Department of Agriculture, Washington, DC.

USGS (U.S. Geological Survey). 2005a. *Remote Sensing*. <www.gcmrc.gov/about/programs/isp/dasa/survey/remotesensing.htm>.

USGS. 2005b. About Terrestrial Remote Sensing. http://terraweb.wr.usgs.gov/about.html>.

USGS. 2005c. *LIDAR—Light Detection and Ranging*. http://vulcan.wr.usgs.gov/Monitoring/LIDAR/description LIDAR.html>.

USOMB (U.S. Office of Management and Budget). 2005. *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs* (Revised), January 2005. Circular no. A-94. <www.whitehouse.gov/omb/circulars/a094/a094.html>.

Van Ness, K., K. Brown, M.S. Haddaway, D. Marshall, and D. Jordahl. 1997. *Montgomery County, Water Quality Monitoring Program, Stream Monitoring Protocols*. Department of Environmental Protection, Watershed Management Division, Rockville, MD.

Walker, W. W. 1985. Empirical Methods for Predicting Eutrophication in Impoundments; Report 3, Phase III: Model Refinements. Technical Report E-81-9, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Walker, W. W. 1986. Empirical Methods for Predicting Eutrophication in Impoundments; Report 3, Phase III: Applications Manual. Technical Report E-81-9, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Walker, W.W. 1990. P8 Urban Catchment Model Program Documentation, v1.1.

Walker, W.W. 1996. Simplified Procedures for Eutrophication Assessment and Prediction: User Manual. Chapter 2, FLUX. Instruction Report W. U.S. Army Corps of Engineers, Water Operations Technical Support Program.

Wischmeier, W.H., and D. Smith. 1965. Predicting Rainfall-Erosion Losses from Cropland East of the Rocky Mountains: Guide for Selection of Practices for Soil and Water Conservation. USDA-ARS Agriculture Handbook no. 282. U.S. Department of Agriculture, Washington, DC.

Wischmeier, W.H., and D. Smith. 1978. *Predicting Rainfall Erosion Losses: A Guide to Conservation Planning*. USDA ARS Agriculture Handbook no. 537. U.S. Department of Agriculture, Washington, DC.

Wong, T.H.F., Duncan, H.P., Fletcher, T.D. and Jenkins, G.A. 2001. A Unified Approach to Modelling Urban Stormwater Treatment. In *Proceedings of the 2nd South Pacific Stormwater Conference*. Auckland, New Zealand, June 27-29, 2001. pp.319-327.

Wong, T.H.F., J. Coleman, H. Duncan, T. Fletcher, G. Jenkins, L. Siriwardena, A. Taylor, and R. Wootton. 2005. *MUSIC: User Guide*. MUSIC Development Team, Cooperative Research Center for Catchment Hydrology, Australia.

Wright, J.F., D.W. Sutcliffe, and M.T. Furse. 2000. Assessing the Biological Quality of Fresh Waters: RIVPACS and Other Techniques. Freshwater Biological Association, Ambleside, Cumbria, UK.

Wylie, B.K., M.J. Shaffer, M.K. Brodohl, D. Dubois, and D.G. Wagner. 1994. Predicting Spatial Distributions of Nitrate Leaching in Northeastern Colorado. *J. Soil Water Cons.* 49:288-293.

Wylie, B.K., M.J. Shaffer, and M.D. Hall. 1995. Regional Assessment of NLEAP NO3-N Leaching Indices. *Water Res. Bull.* 31:399-408.

Young, R.A., C.A. Onstad, D.D. Bosch, and W.P. Anderson. 1994. *Agricultural NonPoint Source Pollution Model, Version 4.03 AGNPS User's Guide*. U.S. Department of Agriculture, Agricultural Research Service, Morris, MN.

Yu, S.L., G.M. Fitch, and T.A. Earles. 1998. *Constructed Wetlands for Stormwater Management*. VTRC 98-R35RB. Virginia Department of Transportation Research Council.

Zacharias, S., C. Heatwole, T. Dillaha, and S. Mostighimi. 1992. *Evaluation of GLEAMS and PRZM for Predicting Pesticide Leaching Under Field Conditions*. ASAE paper 92-2541. American Society of Agricultural Engineers, St. Joseph, MI.



United States Environmental Protection Agency
Office of Water
Nonpoint Source Control Branch
Washington, DC 20460
EPA 841-B-08-002
March 2008