WR 516 Spring 2004

Books on Reserve

- Austin, S.A., 1999. M.S. thesis, Department of Earth Resources, Colorado State University. An excellent review of the effects of forest management on streamflow, and a unique analysis using flow duration cuves. 121 pp. plus appendices.
- Bauer, S.B., and S.C. Ralph, 1999. Aquatic habitat indicators and their application to water quality objectives within the Clean Water Act. EPA-910-R-99-014, U.S. Environmental Protection Agency Region 10, Seattle, WA. 77 pp.
- Beschta, R.L., and 12 others, 1995. Cumulative effects of forest practices in Oregon: Executive summary. Oregon State University, Corvallis, OR. 39 pp. This is the executive summary for a much more extensive document prepared for the Oregon Department of Forestry. The chapter on water is also on reserve (see Reiter and Beschta below).
- Bunte, K., and L.H. MacDonald, 1999. Scale considerations and the detectability of sedimentary cumulative watershed effects. NCASI Technical Report No. 776, Research Triangle Park, North Carolina. 300 pp. A fairly comprehensive review of a wide range of material relevant to the transport of suspended load and bedload in streams, including the temporal and spatial variability of sediment loads, the detectability of change, downstream transport rates, sampling errors, and measurement errors.
- Callahan, R.Z., and J.J. DeVries (tech. coords.), 1987. Proceedings of the California Watershed Management Conference. Wildland Resources Center Report No. 11, University of California, Berkeley, CA. 167 pp. A nice collection of articles on cumulative impacts, many of which are still pertinent.
- CEQ, 1997. Considering cumulative effects under the National Environmental Policy Act. Council on Environmental Quality, Washington, D.C. 64 pp. plus app. A slightly bland but still useful overview of the issues and problems with assessing cumulative effects under NEPA.
- EPA, 1980. An approach to water resources evaluation of non-point silvicultural sources. Environmental Research Laboratory, U.S. Environmental Protection Agency, Athens, Georgia. EPA-600/8-80-012. This book sets out many of the procedures that have been used by the USFS to evaluate the effects of forestry on runoff, sediment, etc. Many of these paper procedures have been computerized and incorporated into models that are heavily used by the U.S. Forest Service. Available on the Web at http://elib.cs.berkeley.edu/docs/query/shtml; enter 1790 when it asks for "ID ____ number" and click the Search button.
- EPA, 1991. Guidance for water quality-based decisions: the TMDL process. EPA 440/4-91-001, Washington, D.C. This is still the official guidance for TMDLs.

- EPA, 1992b. Compendium of watershed-scale models for TMDL development. EPA841-R-92-002, Office of Water, U.S. Environmental Protection Agency, Washington, D.C. A complete, hard copy summary of the models that might be used for developing TMDLs.
- EPA, 1999. Protocol for developing sediment TMDLs, First Edition. EPA 841-B-99-004, Office of Water, U.S. Environmental Protection Agency, Washington, D.C. A hard copy for you to refer to.
- ER 516, 1997a. Analysis of the Sheep Creek Watershed, Larimer County, Colorado. This is one of the three watershed analyses presented by the ER 516 class in 1997.
- ER 516, 1997b. James Creek watershed analysis. This is one of the three watershed analyses presented by the ER 516 class in 1997.
- ER 516, 1997c. Watershed analysis of Buckhorn Creek. This is one of the three watershed analyses presented by the ER 516 class in 1997.
- ER 516, 2000. North Boulder Creek, Colorado: Watershed analysis. The watershed analysis done by the ER 516 class in 2000.
- Gosselink, J.G., L.C. Lee, and T.A. Muir (eds.), 1990. Ecological processes and cumulative impacts: illustrated by bottomland hardwood wetland ecosystems. Lewis Publishers, Chelsea, MI. 708 pp. The wetlands people have a very different perspective on cumulative effects, and there doesn't seem to be much overlap with the forestry people. Worth some selective browsing for the ecological perspective.
- Idaho Department of Lands, 1995. Forest practices cumulative watershed effects process for Idaho. Boise, Idaho. Idaho's condensed procedure for assessing cumulative watershed effects.
- Klamath Ranger District, 1994. Watershed analysis report for the Rock, Cherry, and Nannie Creek Watershed Area. Klamath National Forest, Klamath County, Oregon. 89 pp.
- Lester Watershed Analysis, 1996. Plum Creek Timber Company, L.P, Seattle, WA. Submitted to Washington Department of Natural Resources, Olympia, WA. A relatively recent and rather massive watershed analysis provided by a friendly source.
- MacDonald, L.H., A. Smart, and R.C. Wissmar, 1991. Monitoring guidelines to evaluate the effects of forestry activities on streams in the Pacific Northwest and Alaska. U.S. Environmental Protection Agency, Seattle, WA. 164 pp. Part I is designing a monitoring project; Part II is an overview of the different variables that could be monitored and how land use activities affects these variables; much of the information is relevant to Colorado, despite the title. The best-selling document for EPA's Region 10, with over 12,000 copies distributed. Out of print, but apparently they are distributing photocopies.

- McCammon, B., J. Rector, and K. Gebhardt, 1998. A framework for analyzing the hydrologic condition of watersheds. U.S.D.A. Forest Service and Bureau of Land Management, BLM Technical Note 405, Washington, D.C. 37 pp. A Forest Service/BLM document that has been widely distributed, but may be too general to provide much useful guidance.
- Meehan, W.R. (ed.), 1991. Influences of forest and rangeland management on salmonid fishes and their habitats. American Fisheries Society Special Publication no. 19, Bethesda, MD. 751 pp. An impressive collection of review articles on salmonids and the effects of land use activities. 100 pages of references!
- National Research Council, 2001. Assessing the TMDL approach to water quality management. National Academy Press, Washington, D.C., 103 pp. A rapidly-produced review of the EPA's TMDL program by a small, highly-qualified group of scientists, consultants, and government officials. Both Congress and EPA are now trying to figure out how to deal with the issues and recommendations raised in this report.
- Naiman, R.J. (ed.), 1992. Watershed management. Springer-Verlag, New York, N.Y. 542 pp. Proceedings of a symposium held in November 1990. Some good stuff.
- NCASI, 1986. Papers presented at the American Geophysical Union meeting on cumulative effects. National Council for Air and Stream Improvement Tech. Bull. No. 490, New York, NY. The 1985 Fall Meeting included a special session on cumulative watershed effects. The papers presented at this session were subsequently printed in this volume. Noteworthy for the discussion (with pictures!) of cumulative effects as the UFOs of hydrology. 73 pp.
- NCASI, 1992. Status of the NCASI cumulative watershed effects program and methodology. National Council of the Pulp and Paper Industry for Air and Stream Improvement, New York, N.Y. 24 pp. plus appendices. An outline of what NCASI was planning to do as well as a relatively condensed version of how they (primarily Walt Megahan) think cumulative watershed effects should be analysed. The program info is now somewhat dated.
- Reid, L.M., and T. Dunne, 1996. Rapid evaluation of sediment budgets. Catena Verlag GMBH, Reiskirchen, Germany (also available as a GeoEcology paperback). 164 pp. A somewhat general guide to constructing sediment budgets.
- Reiter, M.L., and R.L. Beschta, 1995. Effects of forest practices on water. Chapter 7 in Cumulative Effects of Forest Practices in Oregon: Literature and Synthesis. Unpublished report. 185 pp. A comprehensive and very good review of the numerous field studies.
- Renard, K.G., G.R. Foster, G.A. Weesies, D.K. McCool, and D.C. Yoder, 1997. Predicting soil erosion by water: a guide to conservation planning with the Revised Universal Soil Loss Equation (RUSLE). Agriculture Handbook No. 703, U.S. Department of Agriculture. 384 pp. An excellent guide to the updated version of the Universal Soil Loss Equation. On reserve for ER 440.

- Satterlund, D.R., and P. Adams, 1992. Wildland watershed management. 436 p. An updated version of a classic in the field; may not always be the easiest read.
- Swanson, F.J., R.J. Janda, T. Dunne, and D.N. Swanston, 1982. Sediment budgets and routing in forested drainage basins. USDA Forest Service Gen. Tech. Rep. PNW-141, Corvallis, OR. 165 pp. Not the most recent publication, but it's still an excellent compilation of articles and ideas.
- Wigmosta, M.S., and S.J. Burges (eds.), 2001. Land use and watersheds: human influences on hydrology and geomorpholgy in urban and forest areas. American Geophysical Union, Washington, D.C. 227 pp. Some good articles, but the title is belied by the book's strong bias towards the Pacific Northwest and the lack of articles on other land uses.
- Wilcock, P.R. and R.M. Iverson (eds.), 2003. Prediction in geomorphology. American Geophysical Union, Washington, D.C. 256 pp. A new book with chapters by eminent geomorphologists about the development and use of models. Many of the chapters report on the gaps between science, modeling, and land managers, and their experience with letting models loose in the real world.