

## Sediment, Turbidity and Erosion

- Adams, P., and J. Ringer. 1994. The effects of timber harvesting and forest roads on water quantity and quality in the Pacific Northwest: Summary and annotated bibliography. Pages 147. The Oregon Forest Resources Institute, Corvallis, OR.
- Ambers, R. 2001. Using the sediment record in a western Oregon flood-control reservoir to assess the influence of storm history and logging on sediment yield. *Journal of Hydrology* 244: 181-200.
- Anderson, B. and D.F. Potts. 1987. Suspended sediment and turbidity following road construction and logging in western Montana. *Water Resources Bulletin*. 23(4): 681-690.
- Anderson, H.W., M.D. Hoover and K.G. Reinhart. 1976. *Forests and Water: Effects of Forest Management on Floods, Sedimentation, and Water Supply*. Pacific Southwest Forest and Range Experiment Station. USDA Forest Service Gen. Tech. Rep. PSW-18. Berkeley, CA.
- Bash, J., C. Berman, and S. Bolton. 2001. Effects of turbidity and suspended solids on salmonids. Pages 92. Washington State Transportation Center, Seattle, WA.
- BC Environment. 1997. *Ambient Water Quality Guidelines (Criteria) For Turbidity, Suspended and Benthic Sediments – Technical Appendix*. British Columbia, Ministry of Environment, Lands and Parks, Victoria, B.C.
- BC Environment. 1997. *Sampling Strategy For Turbidity, Suspended and Benthic Sediments*. British Columbia, Ministry of Environment, Lands and Parks. Victoria, B.C.
- BC Environment. 1999. *Ambient Water Quality Guidelines (Criteria) For Turbidity, Suspended and Benthic Sediments - Overview*. British Columbia, Ministry of Environment, Lands and Parks. Victoria, B.C.
- BC Ministry of Forests & Ministry of Environment Lands and Parks. 1995. *Forest Road Engineering Guidebook*. Ministry of Forests & Ministry of Environment Lands and Parks. 153 pp.
- BC Ministry of Forests & Ministry of Environment Lands and Parks. 1995. *Gully Assessment Procedure (GAP)*. Ministry of Forests / Ministry of Environment Lands and Parks. 40 pp.
- Beasley, R.S. 1979. Intensive site preparation and sediment losses on steep watersheds in the Gulf Coastal Plain. *Soil Science Society of America Journal* 43: 412-417.
- Beasley, R.S. and A.B. Granillo. 1988. Sediment and water yields from managed forests on flat coastal plain sites. *Water Resources Bulletin*. 24(2): 361-366.
- Beasley, R.S., A.B. Granillo and V. Zillmer. 1986. Sediment losses from forest management: mechanical vs. chemical site preparation after clearcutting. *Journal of Environmental Quality*. 15 (4): 413-416.
- Beechie, T., and S. Bolton. 1999. An approach to restoring salmonid habitat-forming processes in Pacific Northwest watersheds. *Fisheries* 24: 6-15.
- Benavides-Solorio, J., and L. MacDonald. 2001. Post-fire runoff and erosion from simulated rainfall on small plots, Colorado Front Range. *Hydro Proc* 15: 2931-2952.
- Berry, T., and T. Webb. 1993. Forestry-drinking water quality interactions: Final workshop report. Pages 105. BC Ministry of Environment, Lands and Parks and Ministry of Forests, Vancouver, BC.
- Beschta, R.L. 1978. Debris removal and its effect on sediment in an Oregon coast range stream. *Northwest Science*. 53: 71-77.



- Beschta, R.L. 1978. Long-term patterns of sediment production following road construction and logging in the Oregon coast range. *Water Resources Research*. 14(6): 1011-1016.
- Beschta, R.L. 1981. *Management Implications of Sediment Routing Research. Forest Management Practices and Their Effect on Sediment and Streams with Aquatic Habitat*. National Council of the Paper Industry for Air and Stream Improvement. New York, Special Report: 18-23.
- Beschta, R.L. 1983. Sediment and organic matter transport in mountain streams of the Pacific Northwest. *Proceedings of the D.B. Simons Symposium on Erosion and Sedimentation*, Simons, Li & Assoc., Ft. Collins, Co. 1.69 To 1.89.
- Bettinger, P., J. Sessions, and K. Johnson. 1998. Ensuring the compatibility of aquatic habitat and commodity production goals in eastern Oregon with a Tabu search procedure. *Forest Science* 44: 96-112.
- Bettinger, P., K. Johnson, and J. Sessions. 1998. Improving aquatic habitat conditions over time while producing wood products: An examination of options. *Journal of the American Water Resources Association* 34: 891-907.
- Bilby, R. 1985. Contributions of road surface sediment to a western Washington stream. *Forest Science* 31: 827-838.
- Bilby, R.E. 1984. Removal of woody debris may affect stream channel stability. *Journal of Forestry* 82(10): 609-613.
- Bilby, R.E. and J.W. Ward. 1991. Characteristics and function of large woody debris in streams draining old-growth, clear-cut, and second-growth forests in Southwestern Washington. *Canadian Journal of Fisheries and Aquatic Sciences*. 48: 2499-2508.
- Bilby, R.E. and P.A. Bisson. 1992. Allochthonous versus autochthonous organic matter contributions to the trophic support of fish population in clear-cut and old-growth forested streams. *Canadian Journal of Fisheries and Aquatic Sciences*. 49(3): 540-551.
- Bilby, R.E., K. Sullivan and S. Duncan. 1989. The generation and fate of road surface sediment in forested watersheds in southwestern Washington. *Forest Science*. 35(2): 453-468.
- Blackburn, W.H., R.W. Knight, J.C. Wood and H.A. Pearson. 1990. Stormflow and Sediment Loss From Intensively Managed Forest Watersheds In East Texas. *Water Resources Bulletin* 26(2): 465-476.
- Blais, J.M., R.L. France, L.E. Kimpe and R.J. Cornett. 1998. Climatic changes in northwestern Ontario have had a greater effect on erosion and sediment accumulation than logging and fire: evidence from 210Pb chronology in lake sediments. *Biogeochemistry* 43: 235-252.
- Bolda, K., and W. Meyers. 1997. Conducting a long-term water quality monitoring project: A case study on the McCloud River, California. *Journal of Soil and Water Conservation* 52: 49-54.
- Brewer, R., S. Sylvestre, M. Sekala, and T. Tuominen. 1999. Sediment quality in the Fraser River basin. Pages 93-107 in C. Gray and T. Tuominen, eds. *Health of the Fraser River Aquatic Ecosystem*. Environment Canada, Vancouver.
- Brown, G.W. and J.T. Krygier. 1971. Clear-Cut logging and sediment production in the Oregon coast range. *Water Resources Research*. 7(5): 1189-1198.
- Brunet, R.C. and K.B. Astin. 1997. Spatio-temporal variations in sediment nutrient levels: the River Adour. *Landscape Ecology* 12: 171-184.
- Bustard, D., and D. Wilford. 1987. Assessment of stream protection practices in the interior of the Prince Rupert Forest Region. Pages 54. BC Ministry of Forests, Victoria, BC.



- Carson, B. 1996. Turbidity monitoring: The EKG of watershed managers? Pages 267-273 in R. Hicks, ed. *Watercourses: getting on stream with current thinking*. Canadian Water Resources Association, Vancouver, BC.
- Cederholm, C.J., L.M. Reid and E.O. Salo. 1981. Cumulative effects of logging road sediment on Salmonid populations in the Clearwater River, Jefferson County, Washington. Pgs. 39-74 in *Proceedings from the Conference, Salmon-Spawning Gravel: A Renewable Resource in the Pacific Northwest*. State of Washington. Wat. Res. Ctr. Rep 39. Pullman, WA. 38-41.
- Chatwin, S.C., D.L. Hogan, P.J. Tschaplinski (eds). 1998. *Carnation Creek and Queen Charlotte Islands Fish/Forestry Workshop : Applying 20 Years Of Coast Research To Management Solutions*. Victoria, British Columbia, Ministry of Forests Research Program, 1998 Land management handbook ; no. 41 275 pp.
- Chatwin, S.C., R.B. Smith, D.E. Walling, T.R. Davies and B. Hasholt. 1992. Reducing soil erosion associated with forestry operations through integrated research: an example from coastal British Columbia, Canada. British Columbia Ministry of Forests, Research Branch, Victoria. In: *Erosion, Debris Flows and Environment In Mountain Regions: Proceedings of International Symposium Held At Chengdu, China*. 5-9 July 1992.
- Cheong, A.L., J.C. Scrivener, J.S. Macdonald, B.C. Andersen and E.M. Choromanski. 1995. *A Discussion of Suspended Sediment in the Takla Lake Region: The Influence of Water Discharge and Spawning Salmon*. Dept. of Fisheries and Oceans, West Vancouver Laboratory. Canadian Technical Report of Fisheries and Aquatic Sciences, No. 2074.
- Christie, T., and W. Fletcher. 1999. Contamination from forestry activities: implications for stream sediment exploration programmes. *Journal of Geochemical Exploration* 67: 201-210.
- Church, M., R. Kellerhals and P.R.B. Ward. 1985. *Sediment in the Pacific and Yukon Region: Review and Assessment*. Report For Canadian Department of Environment, Inland Waters Directorate.
- Collins, B., and G. Pess. 1997. Evaluation of forest practices prescriptions from Washington's watershed analysis program. *Journal of the American Water Resources Association* 33: 969-996.
- Copestead, R., K. Moore, T. Ledwith, and M. Furniss. 1998. An annotated bibliography on road effects? Pages 160. USDA Forest Service, San Dimas Technology and Development Centre, San Dimas, CA.
- Corner, R.A., J.H. Bassman and B.C. Moore. 1996. Monitoring timber harvest impacts on stream sedimentation: instream vs. upslope methods. *Western Journal of Applied Forestry* 11(1): 25-32.
- Culp, J.M., F.J. Wrona and R.W. Davies. 1986. Responses of stream benthos and drift to fine sediment deposition versus transport. *Can. J. Zool.* 64: 1345-1351.
- Debano, L.F. 1977. Influence of Forest Practices on Water Yield, Channel Stability, Erosion, and Sedimentation In The Southwest. *Proceedings Soc. Am. For. 1977 National Convention, Oct. 2-6, 1977, Albuquerque, N.M.* 74-78.
- Dissmeyer, G., ed. 2000. *Drinking Water from Forests and Grasslands: a synthesis of the scientific literature*. USDA Forest Service, Asheville, North Carolina.
- Duncan, S., and J. Ward. 1985. The influence of watershed geology and forest roads on the composition of spawning gravel. *Northwest Science* 59: 204-212.
- Duncan, S., R. Bilby, J. Ward, and J. Heffner. 1987. Transport of road-surface sediment through ephemeral stream channels. *Water Resources Bulletin* 23: 113-119.



- Dunne, T. 1998. Critical data requirements for prediction of erosion and sedimentation in mountain drainage basins. *Journal of the American Water Resources Association* 34: 795-808.
- Egan, A.F. 1999. Forest roads: where soil and water don't mix. *Journal of Forestry*. Aug. 1999: 18-21.
- Elliot, W. 2000. Roads and Other Corridors (Ch. 9). Pages 85-101 in G. Dissmeyer, ed. *Drinking Water from Forests and Grasslands: A Synthesis of the Scientific Literature*. USDA Forest Service, Southern Research Station, Asheville, NC.
- Elliot, W.J., D.E. Hall and S.R. Graves. 1999. Predicting Sediment from Forest Roads. *Journal of Forestry* 1999: 23-29.
- Elliott, W., and L. Tysdal. 1999. Predicting sedimentation from forest roads. *Journal of Forestry* 97: 23-29.
- Elliott, W., and L. Tysdal. 1999. Understanding and reducing erosion from insloping roads. *Journal of Forestry* 97: 30-34.
- Espinosa, F., J. Rhodes, and D. McCullough. 1997. The failure of existing plans to protect salmon habitat in the Clearwater National Forest in Idaho. *Journal of Environmental Management* 49: 205-230.
- Ewing, R. 1996. Postfire suspended sediment from Yellowstone National Park, Wyoming. *Water Resources Bulletin* 32: 605-627.
- Forman, R., and L. Alexander. 1998. Roads and their major ecological effects. *Annual Review of Ecology and Systematics* 29: 207-231.
- Foster, I.D.L, A.M. Gurnel and B. Webb. 1995. *Sediment and Water Quality In River Catchments*. Chichester, Wiley, New York.
- Fredriksen, R., and R. Harr. 1979. Soil, vegetation, and watershed management. Pages 231-260 in P. Heilman, H. Anderson, and D. Baumgartner, eds. *Forest Soils of the Douglas-fir Region*. Washington State University, Pullman, WA.
- Fredriksen, R.L. 1970. *Erosion and Sedimentation Following Road Construction and Timber Harvest on Unstable Soils In Three Small Western Oregon Watersheds*. Res. Pap. PNW-104. USDA For. Serv. Pacific Northwest For. Range Exp. Station. Portland, OR.
- Furniss, M., T. Ledwith, M. Love, B. McFadin, and S. Flanagan. 1998. Response of road-stream crossings to large flood events in Washington, Oregon and Northern California. Pages 18. USDA Forest Service, San Dimas Technology and Development Center, San Dimas, CA.
- Furniss, M., T. Roelofs, and C. Yee. 1991. Road Construction and Maintenance. Pages 297-323 in W. Meehan, ed. *Influences of Forest and Rangeland Management on Salmonid Fishes*. American Fisheries Society, Baltimore, MD.
- Gluns, D., and D. Toews. 1989. Effect of a major wildfire on water quality in southeastern British Columbia. Pages 487-499 in W. Woessner and D. Potts, eds. *Headwaters Hydrology*. American Water Resources Association, Missoula, Montana.
- Golden, M.S., D.L. Tuttle, J.S. Kush and J.M. Bradley. 1984. *Forestry Activities and Water Quality in Alabama: Effects, Recommended Practices, and an Erosion-Classified System*. Auburn University, Agricultural Experiment Station. Bulletin 555.
- Gomi, T., R. Sidle, M. Bryant, and R. Woodsmith. 2001. The characteristics of woody debris and sediment distribution in headwater streams, southeastern Alaska. *CJFR* 31: 1386-1399.



- Granillo, A.B., M. Chang and E.B. Rashin. 1985. Correlation between suspended sediment and other water quality parameters in small streams of forested East Texas. *Texas Journal of Sciences*. 37(3/3): 227-234.
- Gresswell, R. 1999. Fire and aquatic ecosystems in forested biomes of North America. *Transactions of the American Fisheries Society* 128: 193-221.
- Grizzel, J., and N. Wolff. 1998. Occurrence of windthrow in forest buffer strips and its effect on small streams in northwest Washington. *Northwest Science* 72: 214-223.
- Grizzel, J.D. and R.L. Beschta. 1993. *Municipal Water Source Turbidities Following Timber Harvest and Road Construction in Western Oregon: A Summary Report*. 1993.
- Gucinski, H., M. Furniss, R. Ziemer, and M. Brookes. 2001. Forest roads: A synthesis of scientific information. Pages 120. USDA Forest Service, Pacific Northwest Research Station, Portland, OR.
- Gwanikar, S., S. Cross, D. MacDonald, D. Tao, and T. Berger. 1998. Water Quality Assessment and Recommended Objectives for the Salmon River - Technical Appendix (Vol. 1). Pages 214. Environment Canada, Fraser River Action Plan, Vancouver.
- Harr, R., and R. Nichols. 1993. Stabilizing forest roads to help restore fish habitats: A northwest Washington example. *Fisheries* 18: 18-22.
- Haupt, H.F. 1959. Road and slope characteristics affecting sediment movement from logging roads. *Journal of Forestry*. 57: 329-332.
- Haupt, H.F. and W.J. Kidd. 1965. Good logging practices reduce sedimentation in Central Idaho. *Journal of Forestry* 63: 664-670.
- Helvey, J. 1980. Effects of a north central Washington wildfire on runoff and sediment production. *Water Resources Bulletin* 16: 627-634.
- Helvey, J., A. Tiedmann, and T. Anderson. 1985. Plant nutrient loss by soil erosion and mass movement after wildfire. *Journal of Soil and Water Conservation* Jan-Feb: 168-183.
- Henderson, G., and D. Toews. 2001. Using sediment budgets to test the watershed assessment procedure in southeastern British Columbia. Pages 189-208 in D. Toews and S. Chatwin, eds. *Watershed assessment in the southern interior of British Columbia*. BC Ministry of Forests, Penticton, BC.
- Hickey, R. 1997. Evaluating the WATBAL sediment loading model, Clearwater National Forest, Idaho. *Northwest Science* 71: 233-242.
- Hof, J., and M. Bevers. 2000. Optimal timber harvest scheduling with spatially defined sediment objectives. *Canadian Journal of Forest Research* 30: 1494-1500.
- Hogan, D., P. Tschaplinski, and S. Chatwin. 1998. Carnation Creek and Queen Charlotte Island Fish/Forestry Workshop: applying 20 years of coast research to management solutions. BC Ministry of Forests, Victoria, BC.
- Hogan, D.L. 1986. *Channel Morphology of Unlogged, Logged, and Debris Torrented Streams In The Queen Charlotte Islands*. B.C. Ministry of Forests and Lands, Land Management Report 49. Victoria, B.C.
- Holstrom, T.A. and R. Hawkins. 1980. *Particle Size Distribution Effects on Turbidity. Symposium on Watershed Management, Boise, Idaho*. American Society of Civil Engineers, N.Y. 238-297.



- Howell, P. 2001. Effects of disturbance and management of forest health on fish and fish habitat in eastern Oregon and Washington. *Northwest Science* 75: 157-165.
- Hubbard, R.K., J.M. Sheridan and L.R. Marti. 1990. Dissolved and suspended solids transport from Coastal Plain Watersheds. *Journal of Environmental Quality*. 19: 413-420.
- Hudson, R. 2001. Comparative analysis of sediment production in two partially harvested watersheds in coastal British Columbia. Pages 34. BC Ministry of Forests, Vancouver Forest Region, Nanaimo, BC.
- Hudson, R. 2001. Interpreting turbidity and suspended-sediment measurements in high-energy streams in coastal British Columbia. Pages 18. BC Ministry of Forests, Vancouver Forest Region, Nanaimo, BC.
- Hudson, R. 2001. Storm-based sediment budgets in a partially harvested watershed in coastal British Columbia. Pages 42. BC Ministry of Forests, Vancouver Forest Region, Nanaimo, BC.
- Hudson, R., and B. D'Anjou. 2001. Roberts creek study forest: the effects of shelterwood harvesting and blowdown on sediment production in a small zero-order creek. Pages 7. BC Ministry of Forests, Vancouver Region, Nanaimo, BC.
- Idaho Department of Lands. 2000. Forest practices cumulative watershed effects process for Idaho. Pages 82. Idaho Department of Lands, Boise, ID.
- Iwamoto, R.N., E.O. Salo, M.A. Madej and R.L. McComas. 1978. *Sediment and Water Quality: A Review of the Literature Including a Suggested Approach For Water Quality Criteria*. U.S. Environmental Protection Agency, Region 10, Seattle. 151 pp.
- Jackson, C., C. Sturm, and J. Ward. 2001. Timber harvest impacts on small headwater stream channels in the coast ranges of Washington. *Journal of the American Water Resources Association* 37: 1533-1549.
- Johnson, M., and R. Beschta. 1980. Logging, infiltration capacity, and surface erodibility in western Oregon. *Journal of Forestry* 78: 334-337.
- Johnson, S., F. Swanson, G. Grant, and S. Wondzell. 2000. Riparian forest disturbances by a mountain flood - the influence of floated wood. *Hydrological Processes* 14: 3031-3050.
- Jones, J., F. Swanson, B. Wemple, and K. Snyder. 2000. Effects of roads on hydrology, geomorphology, and disturbance patches in stream networks. *Conservation Biology* 14: 76-85.
- Jordan, P. 1996. Turbidity and suspended sediment measurements using OBS meters, West Arm Demonstration Forest sediment budget study. Pages 1-10. *The Second Automatic Water Quality Monitoring Workshop*. Environment Canada and B.C. Ministry of Environment, Lands and Parks, Richmond, BC.
- Jordan, P. 2001. Sediment budgets in the Nelson Forest Region. Pages 174-188 in D. Toews and S. Chatwin, eds. *Watershed assessment in the southern interior of British Columbia*. BC Ministry of Forests, Penticton, BC.
- Jordan, P., and P. Commandeur. 1998. Sediment research in the West Arm Demonstration Forest, Nelson, B.C. Pages 348-363 in Y. Alila, ed. *Mountains to Sea: Human Interaction with the Hydrologic Cycle*. Canadian Water Resources Association, Victoria, BC.
- Kahklen, K. 2001. A method for measuring sediment production from forest roads. Pages 19. USDA Forest Service, Pacific Northwest Research Station, Portland, OR.



- Kahklen, K., and J. Moll. 1999. Measuring effects of roads on groundwater: Five case studies. Pages 24. USDA Forest Service, San Dimas Technology and Development Center, San Dimas, CA.
- Ketcheson, G., and W. Megahan. 1996. Sediment production and downslope sediment transport from forest roads in granitic watersheds. Pages 11. USDA Forest Service, Intermountain Research Station, Ogden, UT.
- Ketcheson, G., W. Megahan, and J. King. 1999. "R1-R4" and "BOISED" sediment prediction model tests using forest roads in granitics. *Journal of the American Water Resources Association* 35: 83-98.
- Laird, K., and B. Cumming. 2001. A regional paleolimnological assessment of the impact of clear-cutting on lakes from the central interior of British Columbia. *Canadian Journal of Fisheries and Aquatic Sciences* 58: 492-505.
- Laird, K., B. Cumming, and R. Nordin. 2001. A regional paleolimnological assessment of the impact of clear-cutting on lakes from the west coast of Vancouver Island, British Columbia. *Canadian Journal of Fisheries and Aquatic Sciences* 58: 479-491.
- Landsberg, J., and A. Tiedmann. 2000. Fire Management (Ch. 12). Pages 124-138 in G. Dissmeyer, ed. *Drinking Water from Forests and Grasslands: A Synthesis of the Scientific Literature*. USDA Forest Service, Southern Research Station, Asheville, NC.
- Lewis, Jr., W.M. and M.C. Grant. 1979. Relationships between stream discharge and yield of dissolved substances from a Colorado Mountain watershed. *Soil Science* 128(6): 353-363.
- Lewis, Jr., W.M. and M.C. Grant. 1980. Relationships between snow cover and winter losses of dissolved substances from a mountain watershed. *Arctic and Alpine Research* 12(1): 11-17.
- Lisle, T.E. 1982. Effects of aggradation and degradation of riffle-pool morphology in natural gravel channels, Northwest California. *Water Resources Research*. 18(6): 1643-1651.
- Lloyd, D.S., J.P. Koenings and J.D. LaPerriere. 1987. Effects of turbidity in Fresh Waters of Alaska. *N. Am. J. Fish. Mgmt.* 7(1): 18-33.
- Luce, C., and B. Wemple. 2001. Introduction to special issue on hydrologic and geomorphic effects of forest roads. *Earth Surface Processes and Landforms* 26: 111-113.
- Luce, C., and T. Black. 1999. Sediment production from forest roads in western Oregon. *Water Resources Research* 35: 2561-2570.
- Lull, K., J. Tindall, and D. Potts. 1995. Assessing nonpoint-source pollution risk. *Journal of Forestry* 93: 35-40.
- Macdonald, L.H. 1992. Sediment monitoring: reality and hope invited paper- EPA/USFS *Technical Workshop On Sediments, Feb. 3-7, 1992*. Corvallis, OR. 81-87.
- Madej, M. 2001. Erosion and sediment delivery following removal of forest roads. *Earth Surface Processes and Landforms* 26: 175-190.
- Martin, C.W. and J.W. Hornbeck. 1994. Logging in New England need not cause sedimentation of streams. *Northern Journal of Applied Forestry*. 11(1): 17-23.
- McClain, M., R. Bilby, and F. Triska. 1998. Nutrient cycles and response to disturbance. Pages 347-372 in R. Naiman and R. Bilby, eds. *River ecology and management: Lessons from the Pacific coastal ecoregion*. Springer-Verlag, New York.



- McCull, J.G. and D.F. Grigel. 1979. Nutrient losses in leaching and erosion by intensive forest harvesting. Paper presented at the *Symposium on Impact of Intensive Harvesting on Forest Nutrient Cycling*. College of Enviro. Sci. and Forestry, State Univ. of New York. Syracuse.
- McIver, J., and L. Starr. 2000. Environmental effects of postfire logging: Literature review and annotated bibliography. Pages 80. USDA Forest Service, Pacific Northwest Research Station, Portland, OR.
- McPhee, M., M. Gebauer, G. Holman, G. Runka, and M. Wallis. 1996. The Salmon River Watershed: An overview of conditions, trends and issues. Pages 139. Canada Department of Fisheries and Oceans, Vancouver, BC.
- Megahan, W., M. Wilson, and S. Monsen. 2001. Sediment production from granitic cutslopes on forest roads in Idaho, USA. *Earth Surface Processes and Landforms* 26: 153-163.
- Megahan, W.F. and D.C. Molitor. 1975. Erosional effects of wildfire and logging in Idaho. pgs 423-44 in *Irrig. Proc. and Drainage*. Amer. Soc. Civil Eng.
- Megahan, W.F. and G.L. Ketcheson. 1996. Predicting downslope travel of granitic sediments from forest roads in Idaho. *Water Resources Bulletin*. 32(2): 371-382.
- Megahan, W.F. and W.J. Kidd. 1972. Effects of logging and logging roads on erosion and sediment deposition from steep terrain. *Journal of Forestry* 70(3): 136-141.
- Megahan, W.F. and W.J. Kidd. 1972. *Effects of Logging Roads on Sediment Production Rates in The Idaho Batholith*. USDA For. Serv. Res. Pap. INT-123.
- Megahan, W.F., J.G. King and K.A. Seyedbagheri. 1995. Hydrologic and erosional responses of a granitic watershed to helicopter logging and broadcast burning. *Forest Science*. 41(4): 777-795.
- Mersereau, R.C. and C.T. Dryness. 1972. Accelerated mass wasting after logging and slash burning in Western Oregon. *Journal of Soil and Water Conservation* 27(3): 112-114.
- Meyer, G., J. Pierce, S. Wood, and A. Jull. 2001. Fire, storms, and erosional events in the Idaho batholith. *Hydro Proc* 15: 3025-3038.
- Meyer, V., E. Redente, K. Barbarick, and R. Brobst. 2001. Biosolids applications affect runoff water quality following forest fire. *Journal of Environmental Quality* 30: 1528-1532.
- Millard, T. 2000. Channel disturbance and logging slash in S5 and S6 Streams: An examination of streams in the Nitinat Lake area, Southwest Vancouver Island. Pages 21. BC Ministry of Forests, Vancouver Forest Region, Nanaimo, BC.
- Millard, T. 2001. Transport of logging slash and sediment in S5 and S6 streams near Boston Bar, Chilliwack Forest District. Pages 17. BC Ministry of Forests, Vancouver Forest Region, Nanaimo, BC.
- Millard, T., and S. Chatwin. 2001. Using helicopter harvesting on steep slopes to reduce erosion, preliminary results: Case study on Queen Charlotte Islands, British Columbia. Pages 8. BC Ministry of Forests, Vancouver Forest Region, Nanaimo, BC.
- Miller, D., and J. Sias. 1998. Deciphering large landslides: linking hydrological, groundwater and slope stability models through GIS. *Hydrological Processes* 12: 923-941.
- Miller, E.L., R.S. Beasley and E.R. Lawson. 1988. Forest Harvesting and site preparation effects on erosion and sedimentation in the Ouachita Mountains. *Journal of Environmental Quality* 17: 219-225.



- Minshall, G., C. Robinson, and D. Lawrence. 1997. Postfire responses of lotic ecosystems in Yellowstone National Park, USA. *Canadian Journal of Fisheries and Aquatic Sciences* 54: 2509-2525.
- Minshall, G., J. Brock, and J. Varley. 1989. Wildfires and Yellowstone's stream ecosystems. *BioScience* 39: 707-715.
- Minshall, G., J. Brock, D. Andrews, and C. Robinson. 2001. Water quality, substratum and biotic responses of five central Idaho (USA) streams during the first year following the Mortar Creek fire. *International Journal of Wildland Fire* 10: 185-199.
- Montgomery, D. 1997. River management - What's best on the banks? *Nature* 388: 328-329.
- Montgomery, D., G. Grant, and K. Sullivan. 1995. Watershed analysis as a framework for implementing ecosystem management. *Water Resources Bulletin* 31: 369-386.
- Montgomery, D., K. Schmidt, H. Greenberg, and W. Dietrich. 2000. Forest clearing and regional landsliding. *Geology* 28: 311-314.
- Montgomery, D.R. 1994. Road Surface Drainage, Channel Initiation, and Slope Stability. *Water Resources Research*. 30(6): 1925-1932.
- Moody, J., and D. Martin. 2001. Initial hydrologic and geomorphic responses following a wildfire in the Colorado Front Range. *Earth Surface Processes and Landforms* 26: 1049-1070.
- Morgan, A., and D. Smith. 1997. Trends in disturbance and recover of selected salmonid habitat attributes related to forest practices: A literature review and monitoring recommendations. Pages ?? Northwest Indian Fisheries Commission and TFW Monitoring Program, Olympia, WA.
- Morris, S., and T. Moses. 1987. Forest fire and the natural soil erosion regime in the Colorado Front Range. *Annals of the Association of American Geographers* 77: 245-254.
- Murray, G.L.D., R.L. Edmonds and J.L. Marra. 2000. Influence of partial harvesting on stream temperatures, chemistry, and turbidity in forests on the western Olympic Peninsula, Washington. *Northwest-Science*. 74 (2): 151-164.
- Nagle, G., and J. Ritshie. 1999. The use of tracers to study sediment sources in three streams in northeastern Oregon. *Physical Geography* 20: 348-366.
- Naiman, J. 1982. *Characteristics of Sediment and Organic Carbon Export from Pristine Boreal Forest Watersheds. The Matamek Research Program: Annual Report For 1981*. Technical Report No. Whoi-83-29. Woods Hole Oceanographic Institute, Massachusetts, USA.
- Naiman, R., and H. Descamps. 1997. The ecology of interfaces: Riparian zones. *Annual Review of Ecology and Systematics* 28: 621-658.
- Nakamura, F., F. Swanson, and S. Wondzell. 2000. Disturbance regimes of stream and riparian systems - a disturbance-cascade perspective. *Hydrological Processes* 14: 2849-2860.
- NCASI. 1981. *Research on the Effects of Mass Wasting of Forest Lands on Water Quality and The Impact of Sediment on Aquatic Organisms*. Stream Improvement Technical Bulletin. National Council of the Paper Industry for Air and Stream Improvement. USA. No. 344. 60 pp.
- NCASI. 1983. *Forest Management Practices and Natural Events: their Relation to Landslides and Water Quality*. National Council of the Paper Industry for Air and Stream Improvement. USA.



- NCASI. 1994. Forests as nonpoint sources of pollution and effectiveness of best management practices. Pages 63. National Council for Air and Stream Improvement, New York, NY.
- NCASI. 1999. Scale considerations and the detectability of sedimentary cumulative watershed effects. Pages 328. NCASI, Research Triangle Park, NC.
- NCASI. 2001. Forest roads and aquatic ecosystems: A review of causes, effects and management practices. Pages 70. National Committee for Air and Stream Improvement, Corvallis, OR.
- Newcombe, C.P. 1994. *Suspended Sediment in Aquatic Ecosystems: Ill Effects as a Function of Concentration and Duration of Exposure*. Habitat Protection Branch. British Columbia Ministry of Environment, Lands and Parks. Victoria. 298 pp.
- Nistor, C.J. 1996. *Temporal Patterns In The Normal-Regime Fine-Sediment Cascade In Russell Creek Basin, Vancouver Island*. University of British Columbia, Vancouver, B.C. Department of Geography. M.Sc Thesis.
- Novotny, V. and G. Chesters. 1989. Delivery of sediment and pollutants from nonpoint sources: a water quality perspective. *Journal of Soil and Water Conservation*. Nov/Dec: 568-576.
- Ottens, J. and J. Rudd. 1977. *Environmental Protection Costs In Logging Road Design and Construction To Prevent Increased Sedimentation In The Carnation Creek Watershed (Vancouver Island)*. Pacific Forest Research Centre, Canada. Report No. BC-X-155.
- Packer, P.E. 1967. Designing and locating logging roads to control sediment. *Forest Science* 13(1): 2-18.
- Patric, J.H. 1976. Soil Erosion in the Eastern Forest. USDA Forest Service, Parsons, W. Virginia. *Journal of Forestry*. 74(10): 671-677.
- Patric, J.H., J.O. Evans and J.D. Helvey. 1984. Summary of sediment yield data from forested land in the United States. *Journal of Forestry*. 82(2): 101-104.
- Petticrew, E., B. Cumming, R. Nordin, K. Liard, and C. Spicer. 1999. Evaluation of the effects of different forest harvesting practices on lake ecosystems in British Columbia. Pages 37. University of Northern British Columbia, Prince George, BC.
- Plamondon, A.P. 1982. Increase in suspended sediments after logging and duration of effect. *Can. J. For. Res.* 12: 883-892.
- Reid, L.M. 1981. *Sediment Production from Gravel-Surfaced Forest Roads, Clearwater Basin, Washington*. FRI-UW-8108. Fisheries Research Institute, University of Washington, Seattle. 247 pp.
- Reid, L.M. and T. Dunne. 1984. Sediment production from forest road surfaces. *Water Resources Research*. 20(11): 1753-1761.
- Reid, L.M., T. Dunne and C.J. Cederholm. 1981. Application of sediment budget studies to the evaluation of logging road impact. *N.Z. Journal of Hydrology*. Vol 20: 49-62.
- Rex, J.R. 1997. *Selected Methods For Monitoring Sediment Impacts From Forest Harvesting Activities In British Columbia, With A Literature Review of Sediment Impact on Freshwater Systems and A Summary of Fall, 1996 Field Tests Results*. Environmental Protection Program, Ministry of Environment Lands And Parks, Omineca - Peace Region. Draft Report.
- Rice, R. 1999. Erosion on logging roads in Redwood Creek, northwestern California. *Journal of the American Water Resources Association* 35: 1171-1182.



- Rice, R., R. Ziemer, and J. Lewis. 2002. Evaluating forest management effects on erosion, sediment and runoff: Caspar Creek and Northwestern California. Pages 7-1 to 7-16. *Lessons from the Grandmasters of Watershed Management*. Society of American Foresters, Bethesda, MD.
- Rice, R.M. and J. Lewis. 1991. Estimating erosion risks associated with logging and forest roads in Northwest California. *Water Resources Bulletin*. 27(5): 809-817.
- Rice, R.M., F.B. Tilley and P.A. Datzman. 1979. *A Watershed's Response To Logging and Roads: South Fork of Caspar Creek, California, 1967-1976*. USDA For. Serv. Res. Pap. PSW-146, Pacific Southwest Forest And Range Experiment Station, Berkeley, California.
- Roberts, R., and M. Church. 1986. The sediment budget in severely disturbed watershed, Queen Charlotte Ranges, British Columbia. *Canadian Journal of Forest Research* 16: 1092-1106.
- Robichaud, P., J. Beyers, and D. Neary. 2000. Evaluating the effectiveness of postfire rehabilitation treatments. Pages 85. USDA Forest Service, Rocky Mountain Research Station, Fort Collins, CO.
- Rothrock, J., P. Barten, and G. Ingam. 1998. Land use and aquatic biointegrity in the Blackfoot River watershed, Montana. *Journal of the American Water Resources Association* 34: 565-581.
- Rothwell, R. 1977. Suspended sediment and soil disturbance in a small mountain watershed after road construction and logging in Alberta. *Watershed Research Program Symposium Proceedings*. Fish. Environ. Can., Can. For. Serv. North. For. Res. Cent. Edmonton, Alta. Inf. Rep. NOR-X-176: 285-300.
- Rothwell, R.L. 1983. Erosion and sediment production at road-stream crossings. *Forestry Chronicle* 23: 62-66.
- Ryan, S.E. and G.E. Grant. 1991. Downstream effects of timber harvesting on channel morphology in Elk River Basin, Oregon. *Journal of Environmental Quality*. 20(1): 60-72.
- Sauder, E.A., R.K. Kray and G.V. Wellburn. 1987. *Logging and Mass Wasting in the Pacific Northwest, With Application to the Queen Charlotte Islands, BC: A Literature Review*. Land Management Report #53. Forest Engineering Research Institute of Canada. Province of British Columbia, Ministry of Forests and Lands.
- Schiefer, E., K. Reid, A. Burt, and J. Luce. 2001. Assessing natural sedimentation patterns and impacts of land use on sediment yield: A lake-sediment-based approach. Pages 209-236 in D. Toews and S. Chatwin, eds. *Watershed assessment in the southern interior of British Columbia*. BC Ministry of Forests, Penticton, BC.
- Scrivener, J.C. 1988. Changes In Composition of The Streambed Between 1973 And 1985 and The Impacts on Salmonids In Carnation Creek. In T.W. Chamberlin. (ed). *Proceedings of The Workshop: Applying 15 Years of Carnation Creek Results*. Workshop Held January 13-15, 1987, Nanaimo, British Columbia.
- Scrivner, J., and B. Anderson. 1993. Studies of suspended sediment transported in the Takla Lake and Middle River tributaries. Pages 53-57 in J. Macdonald, ed. *Takla Fishery/Forestry Workshop: A Two Year Review*. Canadian Department of Fisheries and Oceans, Prince George, BC.
- Sheridan, J.M., R. Lowrance and D.D. Bosch. 1999. Management effects on runoff and sediment transport in riparian forest buffers. *Transactions of the ASAE*. Jan-Feb 42(1): 55-64.
- Sidle, R., and A. Campbell. 1985. Patterns of suspended sediment transport in a coastal Alaska stream. *Water Resources Bulletin* 21: 909-917.
- Slaymaker, O. 2000. Assessment of the geomorphic impacts of forestry in British Columbia. *Ambio* 29: 381-387.



- Stednick, J. 2000. Timber Management (Ch. 10). Pages 103-119 in G. Dissmeyer, ed. *Drinking Water from Forests and Grasslands: A Synthesis of the Scientific Literature*. USDA Forest Service, Southern Research Station, Asheville, NC.
- Stednick, J.D. 1987. *The Potential of Subalpine Forest Management Practices on Sediments Production*. USDA Forest Service, Rocky Mountain Forest And Range Experiment Station. General Technical Report RM-149, Fort Collins, CO. 95-100.
- Steedman, R.J., R.L. France, R.T. Brooks and N. Lust (eds). 2000. Origin and transport of Aeolian sediment from new clear-cuts into boreal lakes. Northwestern Ontario, Canada. In *The Science of Managing Forests To Sustain Water Resources. Proceedings of an International Conference, Sturbridge, Massachusetts, USA, November 8-11 1998*. Water, Air, and Soil Pollution. 122: 139-152
- Stover, S., and D. Montgomery. 2001. Channel change and flooding, Skokomish River, Washington. *Journal of Hydrology* 243: 272-286.
- Sullivan, K. 1985. Long-term patterns of water quality in a managed watershed in Oregon: 1 suspended sediment. *Water Resources Bulletin*. 21(16): 977-987.
- Swank, W. 2000. Forest Succession (Ch. 11). Pages 120-123 in G. Dissmeyer, ed. *Drinking Water from Forests and Grasslands: A Synthesis of the Scientific Literature*. USDA Forest Service, Southern Research Station, Asheville, NC.
- Swanson, F., F. Scatena, G. Dissmeyer, M. Fenn, E. Verry, and J. Lynch. 2000. Watershed Processes - Fluxes of Water, Dissolved Constituents and Sediment (Ch. 3). Pages 26-41 in G. Dissmeyer, ed. *Drinking Water from Forests and Grasslands: A Synthesis of the Scientific Literature*. USDA Forest Service, Southern Research Station, Asheville, NC.
- Swanson, R.H. and C.T. Dryness. 1975. Impact of clearcutting and road construction on soil erosion by landslides in West Cascade Range. *Geology* 3(7): 393-396.
- Swift, L.W. Jr. 1988. Forest access roads: design, maintenance and soil loss. In Swank, D.A. and W.T. Crossley (eds). *Forest Hydrology and Ecology at Coweeta*. New York: Springer Verlag 325-338.
- Sylvestre, S., R. Brewer, M. Sekala, T. Tuominen, and G. Moyle. 1998. Survey of contaminants in suspended sediment and water in the Fraser River Basin from McBride to Vancouver (1996). Pages 116. Fraser River Action Plan, Vancouver.
- Tang, S., J. Franklin, and D. Montgomery. 1997. Forest harvest patterns and landscape disturbance processes. *Landscape Ecology* 12: 349-363.
- Tassone, B.L. 1988. Sediment loads from 1973 to 1984 08hb048 Carnation Creek at the mouth, British Columbia. in T.W. Chamberlin (ed). *Proceedings of the Workshop: Applying 15 Years of Carnation Creek Results. Workshop Held January 13-15, 1987*. Nanaimo, British Columbia.
- Teti, P., R. Winkler, B. Guy, and H. Hamilton. 1997. An annotated bibliography of surface erosion from forest roads. Pages 41. BC Ministry of Forests, Cariboo Forest Region, Williams Lake, BC.
- Trombulak, S., and C. Frissell. 2000. Review of ecological effects of roads on terrestrial and aquatic communities. *Conservation Biology* 14: 18-30.
- Ursic, S.J. 1986. Sediment and forestry practices in the south. *Proceedings 4th Federal Interagency Sedimentation Conference March 24-27, 1986, Las Vegas, NY* (1) 28-37.



- Ursic, S.J. and F.E. Dendy. 1965. Sediment yields from small watersheds under various land uses and forest covers. *Federal Inter-Agency Sediment Conference Proceedings 1963*. USDA Misc. Publ. 970 47-52.
- Van Lear, D.H., J.E. Douglass, S.K. Cox and M.K. Augspurger. 1985. Sediment and nutrient export in runoff from burned and harvested pine watersheds in the South Carolina piedmont. *Journal of Environmental Quality*. 14(2): 169-173.
- Waters, T.F. 1995. *Sediment in Streams: Sources, Biological Effects, and Control*. American Fisheries Society Monograph No. 7. American Fisheries Society, Bethesda, Maryland.
- Welch, E., J. Jacoby, and C. May. 1998. Stream Quality. Pages 69-94 in R. Naiman and R. Bilby, eds. *River ecology and management: Lessons from the Pacific coastal ecoregion*. Springer-Verlag, New York.
- Wemple, B., F. Swanson, and J. Jones. 2001. Forest roads and geomorphic process interactions, Cascade Range, Oregon. *Earth Surface Processes and Landforms* 26: 191-204.
- Wemple, B., J. Jones, and G. Grant. 1996. Channel network extension by logging roads in two basins, western Cascades, Oregon. *Water Resources Bulletin* 32: 1195-1207.
- Wissmar, R., J. Smith, B. McIntosh, H. Li, G. Reeves, and J. Sedell. 1994. Ecological health of river basins in forested regions of eastern Washington and Oregon. Pages 65. USDA Forest Service, Pacific Northwest Research Station, Portland, OR.
- Wondzell, S. 2001. The influence of forest health and protection treatments on erosion and stream sedimentation in forested watersheds of eastern Oregon and Washington. *Northwest Science* 75: 128-140.
- Woolridge, D.D. 1979. *Suspended Sediment Transport and Forest Road Construction, Wildhorse Creek, Kalama River Basin*. Report DOE 79-5a-1, Department of Ecology, State of Washington, Olympia, Washington. 40 pp.
- Woolridge, D.D. 1979. *Suspended Sediment From Truck Traffic on Forest Roads, Meadow and Coal Creeks In Forest Practices Water Quality Management Plan*. Washington State Department of ecology. Olympia, WA. 33 pp.
- Yoho, N.S. 1980. Forest management and sediment production in the south - a review. *Southern Journal of Applied Forestry*. 4: 27-36.

