
Appendix A References

Ackers, P., and White, W.R. November 1973. "Sediment Transport: New Approach and Analysis," Journal of the Hydraulics Division, American Society of Civil Engineers, Vol. 99, No. HY 11, pp. 2040-2060.

American Iron and Steel Institute (AISI), 1980. Modern Sewer Design, Washington D.C.

American Society of Civil Engineers. 1977. "Sedimentation Engineering," Vito A. Vanoni, ed., American Society of Civil Engineers Task Committee, American Society of Engineers, New York.

Amein, M. and Fang, C.S., 1970, "Implicit Flood Routing in Natural Channels," Journal of the Hydraulics Division, ASCE, Vol. 96, No. HY12, Proc. Paper 7773, pp. 2481-2500.

Amin, M.I., and Murphy, P.J. August 1981. "Two Bed-Load Formulas: An Evaluation," Journal of the Hydraulics Division, American Society of Civil Engineers, Vol. 107, No. HY8, pp. 961-972.

Arcement, G. J., Jr., and V. R. Schneider, 1989. "Guide for Selecting Manning's Roughness Coefficient for Natural Channels and Floodplains," U.S. Geological Survey, Water Supply Paper 2339, 38 p., Washington D.C.

Barkau, R.L., 1981, "Simulation of the Failure of Illinois River Levees," Memo to File, St. Louis District, Corps of Engineers, St. Louis, MO.

Barkau, R.L., 1982, "Simulation of the July 1981 Flood Along the Salt River," Report for CE695BV, Special Problems in Hydraulics, Department of Civil Engineering, Colorado State University, Ft. Collins, CO.

Barkau, R.L., 1985, "A Mathematical Model of Unsteady Flow Through a Dendritic Network," Ph.D. Dissertation, Department of Civil Engineering, Colorado State University, Ft. Collins, CO.

Barkau, Robert L., 1992. *UNET, One-Dimensional Unsteady Flow Through a Full Network of Open Channels*, Computer Program, St. Louis, MO.

Bathe, K. and Wilson, E.L., 1976, Numerical Methods in Finite Element Analysis, Prentice-Hall, Inc., Englewood Cliffs, NJ.

Barnes, Harry H., Jr., 1967. "Roughness Characteristics of Natural Channels," U.S. Geological Survey, Water Supply Paper 1849, Washington D.C.

Blench, T. , 1970, "Regime Theory Design of Canals with Sand Beds." Journal of the Irrigation and Drainage Division, ASCE, Vol. 96, No. IR2, Proc. Paper 7381, pp 205-213.

Bodhaine, G.L., 1982, "Measurement of Peak Discharge at Culverts by Indirect Methods," Techniques of Water Resources Investigations of the United States Geological Survey, Book 3, Chapter A3, U.S. Geological Survey, WA.

- Bradley, J.N., 1978. *Hydraulics of Bridge Waterways*, Hydraulic Design Series No. 1, Federal Highway Administration, U.S. Department of Transportation, Second Edition, revised March 1978, Washington D.C.
- Brownlie, William R., 1981 (Nov). "Prediction of Flow Depth and Sediment Discharge in Open Channels," Report No. KH-R-43A, California Institute of Technology, W.M Keck Laboratory of Hydraulics and Water Resources, Report No. KH-R-43A, November 1981. Pasadena, CA.
- Brownlie, William R. 1983 (Jul). "Flow Depth in Sand Bed Channels." *Journal of Hydraulic Engineering*. American Society of Civil Engineers, Vol 109, No 7, pp 959-990.
- Bureau of Public Roads (BPR), 1965. *Hydraulic Charts for the Selection of Highway Culverts*, Hydraulic Engineering Circular No. 5, U.S. Department of Commerce.
- Bureau of Reclamation, 1977. *Design of Small Dams*, Water Resources Technical Publication, Washington D.C..
- Burkham, Durl E. and David R. Dawdy. 1976. Resistance Equation.
- Chanson, Hubert. 1999. "The Hydraulics of Open Channel Flow." John Wiley & Sons Inc., New York.
- Chen, Y.H., 1973, "Mathematical Modeling of Water and Sediment Routing in Natural Channels," Ph.D. Dissertation, Department of Civil Engineering, Colorado State University, Ft. Collins, CO.
- Chen, Y.H. and Simons, D.B., 1979, "A Mathematical Model of the Lower Chippewa River Network System," Report CER-79 DBS-YHC-58, Department of Civil Engineering, Colorado State University, Ft. Collins, CO.
- Chow, V.T., 1959, *Open Channel Hydraulics*, McGraw-Hill Book Company, NY.
- Colby, B.R. March 1964. "Practical Computations of Bed-Material Discharge," *Journal of the Hydraulics Division*, American Society of Civil Engineers, Vol 90, No. HY2, pp 217-246.
- Copeland, Ronald R., and Thomas, William A. 1989. "Corte Madera Creek Sedimentation Study." Numerical Model Investigation. US Army Engineer Waterways Experiment Station, Vicksburg, MS. TR-HL-89-6
- Copeland, Ronald R. 1994 (Sep). "Application of Channel Stability Methods—Case Studies." US Army Engineer Waterways Experiment Station, Vicksburg, MS. TR-HL-94-11.
- Cunge, J.A., Holly, F.M., and Verwey, A., 1980, *Practical Aspects of Computational River Hydraulics*, Pitman Advanced Publishing Program, Boston, MA.
- Cowan, W.L., 1956. "Estimating Hydraulic Roughness Coefficients," *Agricultural Engineering*, Vol. 37, No. 7, pp 473-475.

- Einstein, Hans A. 1950. "The Bed Load Function for Sediment Transportation in Open Channels," Technical Bulletin 1026, US Department of Agricultural, Soil Conservation Service, Washington, D.C.
- Fasken, G.B., 1963. "Guide for Selecting Roughness Coefficient n Values for Channels," Soil Conservation Service, US department of Agriculture, 45 p.
- Federal Emergency Management Agency, 1985. *Flood Insurance Study Guidelines and Specifications for Study Contractors*, FEMA 37, Washington D.C., September 1985.
- Federal Highway Administration, 1984. "Guide for Selecting Manning's Roughness Coefficients for Natural Channels and Flood Plains," Report No. FHWA-TS-84-204, McLean, Virginia.
- Federal Highway Administration, 1985. *Hydraulic Design of Highway Culverts*, Hydraulic Design Series No. 5, U.S. Department of Transportation, September 1985, Washington D.C..
- Federal Highway Administration, 1986. *Bridge Waterways Analysis Model: Research Report*, Report No. FHWA/RD-86/108, July 1986, Washington D.C..
- Federal Highway Administration, 1990. User's Manual for WSPRO - A Computer Model for Water Surface Profile Computations, Publication No. FHWA-IP-89-027, September 1990.
- Federal Highway Administration, 1995. *Evaluating Scour at Bridges*, Federal Highway Administration, HEC No. 18, Publication No. FHWA-IP-90-017, 3rd Edition, November 1995, Washington D.C.
- Federal Highway Administration, 1996. *Channel Scour at Bridges in the United States*, Publication No. FHWA-RD-95-184, August 1996, Washington D.C.
- Fread, D.L., 1974, Numerical Properties of the Implicit Four Point Finite Difference Equations of Unsteady Flow," NOAA Technical Memorandum NWS Hydro-18, U.S. Department of Commerce, NOAA, NWS, Silver Spring, MD, 123pp.
- Fread, D.L., 1976, "Theoretical Development of an Implicit Dynamic Routing Model," Hydrologic Research Laboratory, Office of Hydrology, U.S. Department of Commerce, NOAA, NWS, Silver Spring, MD., presented at Dynamic Routing Seminar, Lower Mississippi River Forecast Center, Slidell, LA., 13-17 Dec 1976.
- French, R.H., 1985, *Open-Channel Hydraulics*, McGraw-Hill Book Company, New York.
- Friazinov, 1970, "Solution Algorithm for Finite Difference Problems on Directed Graphs," Journal of Mathematics and Mathematical Physics, Vol. 10, No. 2, (in Russian).
- Froehlich, D.C., 1989. *Local Scour at Bridge Abutments*, Proceedings of the 1989 National Conference on Hydraulic Engineering, ASCE, New Orleans, LA, pp. 13-18.
- Froehlich, D.C., 1991. *Analysis of Onsite Measurements of Scour at Piers*, Proceedings of the ASCE National Hydraulic Engineering Conference, Colorado Springs, CO.

- Graf, Walter Hans. 1971. "Hydraulics of Sediment Transport." McGraw Hill, Inc.,
- Hicks, D.M. and P.D. Mason, 1991. *Roughness Characteristics of New Zealand Rivers*, Water Resources Survey, DSIR Marine and Freshwater, New Zealand, June 1991.
- Hydrologic Engineering Center, 1986. "Accuracy of Computed Water Surface Profiles," Research Document 26, U.S. Army Corps of Engineers, Davis CA.
- Hydrologic Engineering Center, 1991. *HEC-2, Water Surface Profiles*, User's Manual, U.S. Army Corps of Engineers, Davis CA.
- Hydrologic Engineering Center, August 1993. HEC-6 Generalized Computer Program. "Scour and Deposition in Rivers and Reservoirs," User's Manual. U.S. Army Corps of Engineers, Davis CA.
- Hydrologic Engineering Center, 1994. *HECDSS, User's Guide and Utility Programs Manual*, U.S. Army Corps of Engineers, Davis CA.
- Hydrologic Engineering Center, 1995. RD-41, A Comparison of the One-Dimensional Bridge Hydraulic Routines from: HEC-RAS, HEC-2, and WSPRO, U.S. Army Corps of Engineers, Davis CA., September 1995
- Hydrologic Engineering Center, 1995. RD-42, Flow Transitions in Bridge Backwater Analysis, U.S. Army Corps of Engineers, Davis CA., September 1995
- Hydrologic Engineering Center, 1997. *UNET, One-Dimensional Unsteady Flow Through a Full Network of Open Channels*, User's Manual, U.S. Army Corps of Engineers, Davis, CA.
- Henderson, F.M., 1966, *Open Channel Flow*, Macmillan Publishing Co., Inc., NY, 523pp.
- Iwagaki, Yuichi. 1954. "On the Law of Resistance to Turbulent Flow in Open Rough Channels," Proceedings of the 4th Japan National Congress for Applied Mechanics, pp 229-233.
- Jansen, P.Ph. 1979. "Principles of River Engineering, the Non-Tidal Alluvial River." Delftse Uitgevers Maatschappij, Delft, The Netherlands.
- Jarrett, R.D., 1984. "Hydraulics of High Gradient Streams," A.S.C.E. Journal of Hydraulic Engineering, Vol. 110, No. 11, November 1984.
- Keulegan, Garbis H. 1938. "Laws of Turbulent Flow in Open Channels," Research Paper RP 1151, National Bureau of Standards, Journal of Research, vol 21: PP 701-741.
- King, H.W. and E.F. Brater 1963. *Handbook of Hydraulics*, Fifth Edition, McGraw Hill Book Company, New York.
- Lane, E.W., 1953, "Design of Stable Channels." American Society of Civil Engineers, Transactions, Paper number 2776, pp 1234-1261.
- Laursen, Emmett M., 1958 (Feb). "Total Sediment Load of Streams," Journal of the Hydraulics Division, American Society of Civil Engineers, 84(HY1), 1530-1 to 1530-36.

- Laursen, E.M., 1960. *Scour at Bridge Crossings*, ASCE Journal of Hydraulic Engineering, Vol. 89, No. HY 3.
- Laursen, E.M., 1963. *An Analysis of Relief Bridges*, ASCE Journal of Hydraulic Engineering, Vol. 92, No. HY 3.
- Liggett, J.A., and Cunge, J.A., 1975, "Numerical Methods of Solution of the Unsteady Flow Equations," in *Unsteady Flow in Open Channels*, edited by K. Mahmood and V. Yevjevich, Vol. I, Chapter 4, Water Resources Publications, Ft. Collins, CO.
- Limerinos, J.T. 1970. "Determination of the Manning Coefficient from Measured Bed Roughness in Natural Channels," Geological Survey Water-Supply Paper 1898-B, Prepared in cooperation with the California Department of Water Resources, US Government Printing Office, Washington DC, 20402.
- Lindsey, W.F., 1938. "Typical Drag Coefficients for Various Cylinders in Two Dimensional Flow," NACA Technical Report 619.
- Microsoft Corporation, 2000. *Microsoft Windows 2000*, User's Manual, Redmond WA.
- Parmakian, J., 1963, *Waterhammer Analysis*, Dover Publications, Inc., NY.
- Proffitt, G.T., and Sutherland, A.J. 1983. "Transport of Non-Uniform Sediments," *Journal of Hydraulic Research*, vol. 21, No. 1, pp. 33-43.
- Raudkivi, Arved J. 1998. "Loose Boundary Hydraulics," A.A. Balkema, Rotterdam, pp 8-28.
- Rubey, W.W. 1933. "Settling Velocities of Gravel, Sand, and Silt Particles," *American Journal of Science*, 5th Series, Vol. 25, No 148, 1933, pp. 325-338.
- Reed, J.R. and A.J. Wolfkill, 1976. "Evaluation of Friction Slope Models," *River 76*, Symposium on Inland Waterways for Navigation Flood Control and Water Diversions, Colorado State University, CO.
- Richardson, E.V., D.B. Simons and P. Julien, 1990. *Highways in the River Environment*, FHWA-HI-90-016, Federal Highway Administration, U.S. Department of Transportation, Washington, D.C.
- Schaffranek, R.W., et al., 1981, "A Model for the Simulation of Flow in Singular and an Interconnected Network of Channels," *Techniques of Water Resources Investigations*, Chapter 3, U.S. Geological Survey, Reston, VA.
- Schlichting, Hermann. 1968. "Boundary-Layer Theory," Translated by J. Kestin. McGraw-Hill Book Company, New York, pp 578-586.
- Shearman, J. O., 1990. User's Manual for WSPRO - A computer model for water surface profile computations, Federal Highway Administration, Publication No. FHWA-IP-89-027, 177 p.
- Shames, I.H., 1962, *Mechanics of Fluids*, McGraw-Hill Book Company, NY.

Simons, Daryl B., and Senturk, Fuat. 1992. "Sediment Transport Technology." Water Resources Publications, Littleton, Colorado.

Smith, R.H., 1978, "Development of a Flood Routing Model for Small Meandering Rivers," Ph.D. Dissertation, Department of Civil Engineering, University of Missouri at Rolla, MO.

Stelczer, K. 1981. "Bed-Load Transport." Water Resources Publications, Littleton, Colorado.

Streeter, V.L. and Wylie, E.B., 1967, Hydraulic Transients, McGraw-Hill Book Company, NY.

Toffaletti, F.B. 1968. Technical Report No. 5. "A Procedure for Computation of Total River Sand Discharge and Detailed Distribution, Bed to Surface", Committee on Channel Stabilization, U.S. Army Corps of Engineers, November, 1968

Tucci, C.E.M., 1978, "Hydraulic and Water Quality Model for a River Network," Ph.D. Dissertation, Department of Civil Engineering, Colorado State University, Ft. Collins, CO.

U.S. Army Corps of Engineers, 1965. *Hydraulic Design of Spillways*, EM 1110-2-1603, Plate 33.

USACE, 1993, River Hydraulics, Engineer Manual 1110-2-1416, Headquarters, U.S. Army Corps of Engineers, Washington, DC, October 1993.

US Army Corps of Engineers. 1994. "Channel Stability Assessment for Flood Control Projects," EM 1110-2-1418, US Army Corps of Engineers, Washington DC.

US Army Corps of Engineers. 1994. "Engineering and Design – Hydraulic Design of Flood Control Channels," EM 1110-2-1601, US Army Corps of Engineers, Washington DC.

US Army Corps of Engineers, Waterways Experiment Station. 1998. "SAM Hydraulic Design Package for Channels User's Manual," Vicksburg, MS.

U.S. Bureau of Reclamation (USBR), 1985, Canal Radial Gate Structure Design for Arizona Canal System, WCPM 11.04.

U.S. Geological Survey, 1953. Computation of Peak Discharge at Contractions, Geological Survey Circular No. 284, Washington, D.C.

U.S. Geological Survey, 1968. Measurement of Peak Discharge at Width Contractions By Indirect Methods, Water Resources Investigation, Book 3, Chapter A4, Washington, D.C.

Van Rijn, Leo C. 1984. "Sediment Transport, Part I: Bed Load Transport," Journal of Hydraulic Engineering, American Society of Civil Engineers, Vol 110, No. 10, pp 1412-1430.

Van Rijn, Leo C. 1993. "Principles of Sediment Transport in Rivers, Estuaries, Coastal Seas and Oceans," International Institute for Infrastructural, Hydraulic, and Environmental Engineering, Delft, The Netherlands.

Waterways Experiment Station (WES), 1973, Bridge Pier Losses, Section 010-6, Hydraulic Design Criteria, U.S. Army Corps of Engineers, Vicksburg, MS.

Yang, C.T. 1973. "Incipient Motion and Sediment Transport," Journal of the Hydraulics Division, American Society of Civil Engineers, Vol. 99, No HY10, October, 1973, pp 1679-1704.

Yang, C.T. 1984. "Unit Stream Power Equation for Gravel," Journal of the Hydraulics Division, American Society of Civil Engineers, Vol. 110, No. 12, December 1984, pp1783-1797.

Yang, C.T., Schenggan, Wan, 1991. "Comparison of Selected Bed-Material Load Formulas," Journal of Hydraulic Engineering, American Society of Civil Engineers, Vol 117, No. 8, August 1991, pp 973-989.

Yarnell, D.L., 1934. "Bridge Piers as Channel Obstructions," Technical Bulletin 442, U.S. Department of Agriculture, Washington D.C.