

## X. LIST OF REFERENCES

- AFCEE (with Howes, B.L. & Jacobs Engineering). 2000. Ashumet Pond Trophic Health Technical Memorandum. AFCEE/MMR Installation Restoration Program, AFC-J23-35S18402-M17-0005, 210pp.
- Anders, F.J., and M.R. Byrnes. 1991 Accuracy of Shoreline Change Rates as Determined from Maps and Aerial Photographs. *Shore and Beach* 16:17-26.
- Aravena, R. and W.D. Robertson. 1998. Use of Multiple Isotope Tracers to Evaluate Denitrification in Ground Water: Study of Nitrate from a Large-Flux Septic System Plume. *Ground Water*, 36(6):975-982.
- Brawley, J.W., G. Collins, J.N. Kremer, C.H. Sham, and I. Valiela, 2000. A time-dependent model of nitrogen loading to estuaries from coastal watersheds. *Journal of Environmental Quality* 29:1448-1461.
- Brigham Young University, 1998. "User's Manual, Surfacewater Modeling System."
- Cambareri, T.C. and E.M. Eichner, 1998. Watershed Delineation and Ground Water Discharge to a Coastal Embayment. *Ground Water*, 36(4): 626-634.
- Cape Cod Commission, 1998. "Cape Cod Coastal Embayment Project." Barnstable, MA.
- Cape Cod Commission Water Resources Office, 1991. Technical Bulletin 91-001, Nitrogen Loading.
- Cape Cod Commission Water Resources Office, 1998. Cape Cod Coastal Embayment Project Interim Final Report.
- Cape Cod Commission, 1998. Cape Cod Coastal Embayment Project: A Nitrogen Loading Analysis of Popponesset Bay. Cape Cod Commission Technical Report.
- Chow, V. T. (1959). *Open Channel Hydraulics*, McGraw-Hill, NY.
- Conover, J.T., 1958. Seasonal Growth of Benthic Marine Plants as Related to Environmental Factors in an Estuary. *Institute of Marine Science*, 5:97-147.
- Costa, J.E., B.L. Howes, I. Valiela and A.E. Giblin. 1992. Monitoring nitrogen and indicators of nitrogen loading to support management action in Buzzards Bay. In: McKenzie et al. (eds.) *Ecological Indicators* Chapter. 6, pp. 497-529.
- Costa, J.E., G. Heufelder, S. Foss, N.P. Millham, B.L. Howes, 2002. Nitrogen Removal Efficiencies of Three Alternative Septic System Technologies and a Conventional Septic System. *Environment Cape Cod* 5(1): 15-24.
- Costello, Charles. Section Chief, Wetlands Conservancy Program. Director, Eelgrass Mapping Program 617-292-5907.

- Crowell, M., S.P. Leatherman, M.K. Buckley. 1991. Historical Shoreline Change: Error Analysis and Mapping Accuracy. *Journal of Coastal Research* 7(3):839-852.
- D'Elia, C.F., P.A. Steudler and N. Corwin. 1977. Determination of total nitrogen in aqueous samples using persulfate digestion. *Limnology and Oceanography* 22:760-764.
- DeSimone, L.A. and B.L. Howes. 1996. Denitrification and nitrogen transport in a coastal aquifer receiving wastewater discharge. *Environmental Science and Technology* 30:1152-1162.
- Dyer, K.R., 1997. *Estuaries, A Physical Introduction*, 2nd Edition, John Wiley & Sons, NY, 195 pp.
- Eichner, E.M. and T.C. Cambareri, 1992. Technical Bulletin 91-001: Nitrogen Loading. Cape Cod Commission, Water Resources Office, Barnstable, MA. Available at: <http://www.capecodcommission.org/regulatory/NitrogenLoadTechbulletin.pdf>
- Eichner, E.M., T.C. Cambareri, G. Belfit, D. McCaffery, S. Michaud, and B. Smith, 2003. *Cape Cod Pond and Lake Atlas*. Cape Cod Commission. Barnstable, MA.
- Eichner, E.M., T.C. Cambareri, K. Livingston, C. Lawrence, B. Smith, and G. Prahm, 1998. *Cape Coastal Embayment Project: Interim Final Report*. Cape Cod Commission, Barnstable, MA.
- Ellis, M.Y., 1978. *Coastal Mapping Handbook*, Department of the Interior, U.S. Geological Survey and U.S. Department of Commerce, National Ocean Service and Office of Coastal Zone Management, U.S. GPO, Washington, D.C.
- Fischer, H. B., List, J. E., Koh, R. C. Y., Imberger, J., and Brooks, N. H. (1979). *Mixing in inland and coastal waters*. Academic. San Diego.
- FitzGerald, D.M., 1993. "Origin and Stability of Tidal Inlets in Massachusetts." In: *Coastal and Estuarine Studies: Formation and Evolution of Multiple Tidal Inlets, Volume 29, Symposium on Hydrodynamics and Sediment Dynamics of Tidal Inlets* (D. G. Aubrey and G.S. Geise, eds.). American Geophysical Union, Washington, D.C. pp. 1-61.
- Geise, G.S., 1988. "Cyclical Behavior of the Tidal Inlet at Nauset Beach, Massachusetts: Application to Coastal Resource Management." In: *Lecture Notes on Coastal and Estuarine Studies, Volume 29, Symposium on Hydrodynamics and Sediment Dynamics of Tidal Inlets* (D. Aubrey and L. Weishar, eds.), Springer-Verlag, NY, pp. 269-283.
- Hampson, G.R., E.T. Moul. 1978. No. 2 Fule Oil Spill in Bourne, Massachusetts: Immediate Assessment of the Effects on Marine Invertebrates and a 3-Year Study of Growth and Recovery of a Salt Marsh. *Journal of Fisheries Research Bd. Canada* 35(5):731-744
- Hampson, G.R. 1989. A REMOTS Survey of Buzzards Bay with Ground Truth Verification, EPA Report Region I Water Management Division, CR-8142976-01
- Harbaugh, A.W. and McDonald, M.G., 1996. User's Documentation for MODFLOW-96, an update to the U.S. Geological Survey Modular Finite-Difference Ground-Water Flow Model: U.S. Geological Survey Open-File Report 96-485, 56p.

- Henderson, F. M., 1966. *Open Channel Flow*. Macmillan Publishing Company, New York. pp. 96-101.
- Howes, D.L., D.D. Goehring, 1996. Water Quality Monitoring of Falmouth's Coastal Ponds: Results from the 1994 and 1995 Seasons
- Howes, B.L., D.D. Goehring, N.P. Millham, D.R. Schlezinger, G.R. Hampson, C.D. Taylor and D.G. Aubrey. 1997. Nantucket Harbor Study: A quantitative assessment of the environmental health of Nantucket Harbor for the development of a nutrient management plan. Technical Report to the Town of Nantucket, pp. 110.
- Howes, B.L., J.S. Ramsey and S.W. Kelley, 2000. Nitrogen modeling to support watershed management: comparison of approaches and sensitivity analysis. Final Report to MA Department of Environmental Protection and USEPA, 94 pp. Published by MADEP.
- Howes, B.L., R.I. Samimy and B. Dudley, 2003. Massachusetts Estuaries Project, Site-Specific Nitrogen Thresholds for Southeastern Massachusetts Embayments: Critical Indicators Interim Report
- Howes B., S. W. Kelley, J. S. Ramsey, R. Samimy, D. Schlezinger, E. Eichner (2003). Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Stage Harbor, Sulphur Springs, Taylors Pond, Bassing Harbor, and Muddy Creek, Chatham, Massachusetts. Massachusetts Estuaries Project, Massachusetts Department of Environmental Protection. Boston, MA.
- Howes, B., Kelley, S., Ramsey, J., Samimy, R., Eichner, E., Schlezinger, D., and Wood, J., 2004. Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Popponesset Bay, Mashpee and Barnstable, Massachusetts. Commonwealth of Massachusetts, Department of Environmental Protection, Massachusetts Estuaries Project, 138 pp. + Executive Summary, 10 pp.
- Howes, B.L., R.I. Samimy, D.R. Schlezinger, S. Kelley, J. Ramsey, T. Ruthven, and E. Eichner, 2004. Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the Quashnet River, Hamblin Pond, and Jehu Pond, in the Waquoit Bay System of the Towns of Mashpee and Falmouth, MA. Massachusetts Estuaries Project Final Report, pp. 147.
- Jorgensen, B.B. 1977. The sulfur cycle of a coastal marine sediment (Limfjorden, Denmark). *Limnology Oceanography*, 22:814-832.
- King, Ian P. (1996). "Users Guide to RMA2 Version 4.2." US Army Corps of Engineers – Waterways Experiment Station Hydraulics Laboratory.
- Kelley, S.W., Ramsey, J.R., Côté, J.M., Wood, J.D. (2001). "Tidal Flushing Analysis of Coastal Embayments in Chatham, MA" Applied Coastal Research and Engineering, Inc. report prepared for the Town of Chatham. 115 pp.
- King, Ian P., 1990. "Program Documentation - RMA2 - A Two Dimensional Finite Element Model for Flow in Estuaries and Streams." Resource Management Associates, Lafayette, CA.

- Klump, J. and C. Martens. 1983. Benthic nitrogen regeneration. In: Nitrogen in the Marine Environment, (Carpenter & Capone, eds.). Academic Press.
- Lindeburg, Michael R., 1992. *Civil Engineering Reference Manual, Sixth Edition*. Professional Publications, Inc., Belmont, CA.
- Massachusetts Department of Environmental Protection, 1999. DEP Nitrogen Loading Computer Model Guidance. Bureau of Resource Protection. Boston, MA. Available at: <http://www.state.ma.us/dep/brp/dws/techtool.htm>
- Massachusetts Department of Revenue. November, 2002. Property Type Classification Codes.
- Massachusetts Water Resources Authority, 1983. Water supply study and environmental impact statement for the year 2020, Task I: Water demand projections. MWRA Report, Boston.
- Masterson, J.P., Walter, D.A., Savoie, J., 1996, Use of particle tracking to improve numerical model calibration and to analyze ground-water flow and contaminant migration, Massachusetts Military Reservation, western Cape Cod, Massachusetts: U.S. Geological Survey Open-File Report 96-214, 50 p.
- Millham, N.P. and B.L. Howes, 1994a. Freshwater flow into a coastal embayment: groundwater and surface water inputs. *Limnology and Oceanography* 39: 1928-1944.
- Millham, N.P. and B.L. Howes, 1994b. Patterns of groundwater discharge to a shallow coastal embayment. *Marine Ecology Progress Series* 112:155-167.
- Millham, N.P. and B.L. Howes. 1994. Nutrient balance of a shallow coastal embayment: I. Patterns of groundwater discharge. *Marine Ecology Progress Series* 112:115-167.
- Millham, N.P. 1993. Groundwater flow to a shallow coastal embayment: Little Pond, Cape Cod, Massachusetts. Ph.D. Thesis, Boston University, Boston, pp. 237.
- Millham, N.P. and B.L. Howes. 1994. A comparison of methods to determine K in a shallow coastal aquifer. *Groundwater*. 33:49-57.
- Norton, W.R., I.P. King and G.T. Orlob, 1973. "A Finite Element Model for Lower Granite Reservoir", prepared for the Walla Walla District, U.S. Army Corps of Engineers, Walla Walla, WA.
- O'Hara, C.J., Oldale, R.N., 1987. Geology, Shallow Structure, and Bedform Morphology, Nantucket Sound, Massachusetts. 1:125,000. United States Geological Survey Miscellaneous Field Studies Map MF 1911.
- Oldale, R. N., 1992, Cape Cod and the Islands: The geologic history: East Orleans, MA, Parnassus Imprints, 208 p.
- Pleasant Bay Technical Advisory Committee, and Ridley & Associates, Inc., 1998. Pleasant Bay resource management plan. Report to the Pleasant Bay Steering Committee, 158 pp + app.

- Pollock, D.W., 1994. User's Guide to MODPATH/MODPATH\_PLOT, version 3 – A particle tracking post-processing package for MODFLOW, the U.S. Geological Survey modular three dimensional finite-difference ground-water-flow-model: U.S. Geological Survey Open-File Report 94-464, [variously paged].
- Ramsey, J.S., B.L. Howes, S.W. Kelley, and F. Li (2000). "Water Quality Analysis and Implications of Future Nitrogen Loading Management for Great, Green, and Bourne Ponds, Falmouth, Massachusetts." Environment Cape Cod, Volume 3, Number 1. Barnstable County, Barnstable, MA. pp. 1-20.
- Robertson, W.D., S.L. Schiff, and C.J. Ptacek. 1998. Review of Phosphate Mobility and Persistence in 10 Septic System Plumes. *Ground Water*, 36(6):1000-1010.
- Ryther, J.H., and W.M. Dunstan. 1971. Nitrogen, phosphorous and eutrophication in the coastal marine environment. *Science*, 171:1008-1012.
- Scheiner, D. 1976. Determination of ammonia and Kjeldahl nitrogen by indophenol method. *Water Resources* 10: 31-36.
- Shalowitz, A.L., 1964. Shore and Sea Boundaries--with special reference to the interpretation and use of Coast and Geodetic Survey Data. U.S. Department of Commerce Publication 10-1, Two Volumes, U.S. GPO, Washington, D.C.
- Smith, K. 1999. Salt Marsh Uptake of Watershed Nitrate, Mashapaquit Creek Marsh, West Falmouth Harbor, Falmouth, Cape Cod, Massachusetts. Masters Thesis, Boston University Department of Earth Sciences, Boston, pp. 1-76.
- Smith, K.N. and B.L. Howes. Manuscript. Attenuation of watershed nitrogen by a New England salt marsh: a buffer for cultural eutrophication of coastal waters.
- Smith, R.L., B.L. Howes and J.H. Duff. 1991. Denitrification in nitrate-contaminated groundwater: occurrence in steep vertical geochemical gradients. *Geochimica Cosmochimica Acta* 55:1815-1825.
- Stearns and Wheler. 2001. Wastewater Facilities Plan and Final Environmental Impact Report for the Town of Falmouth, Massachusetts. Hyannis, MA.
- Taylor, C.D. and B.L. Howes, 1994. Effect of sampling frequency on measurements of seasonal primary production and oxygen status in near-shore coastal ecosystems. *Marine Ecology Progress Series* 108: 193-203.
- Thieler, E.R., J.F. O'Connell, C.A. Schupp, 2001. The Massachusetts Shoreline Change Project: 1800s to 1994. Technical Report, 60 p.
- U.S. Army Corps of Engineers (1964). "Beach Erosion Control Report on Cooperative Study of Falmouth, Massachusetts." Headquarters, Department of the Army, Office of the Chief of Engineers, Washington, D.C.
- U.S. Army Corps of Engineers, New England Division, Tidal Flood Profiles, New England Coastline, September 1988.

- US Army, Engineer Research and Development Center, Waterways Experiment Station, Coastal and Hydraulics Laboratory, Users Guide To RMA4 WES Version 4.5, June 05, 2001.
- USGS web site for groundwater data for Massachusetts and Rhode Island:  
[http://ma.water.usgs.gov/ground\\_water/ground-water\\_data.htm](http://ma.water.usgs.gov/ground_water/ground-water_data.htm)
- Van de Kreeke, J., 1988. "Chapter 3: Dispersion in Shallow Estuaries." In: Hydrodynamics of Estuaries, Volume I, Estuarine Physics, (B.J. Kjerfve, ed.). CRC Press, Inc. pp. 27-39.
- Walter, D.A. and Whealan, A.T. 2005. Simulated Water Sources and Effects of Pumping on Surface and Ground Water, Sagamore and Monomoy Flow Lenses, Cape Cod, Massachusetts. US Geological Survey Scientific Investigations Report 2004-5181, 85 p.
- Weiskel, P.K. and B.L. Howes, 1991. Quantifying Dissolved Nitrogen Flux Through a Coastal Watershed. Water Resources Research, Volume 27, Number 11, Pages 2929-2939.
- Weiskel, P.K. and B.L. Howes, 1992, Differential Transport of Sewage Derived Nitrogen and Phosphorous through a Coastal Watershed. Environmental Science and Technology, Volume 26, No. 2, pp. 352 - 360
- Wilhelm, S.R., S.L. Schiff, and W.D. Robertson. 1996. Biogeochemical Evolution of Domestic Waste Water in Septic Systems: 2. Application of Conceptual Model in Sandy Aquifers. Ground Water, 34(5):853-864.
- Wood, J.D., J.S. Ramsey, and S. W. Kelley, 1999. "Two-Dimensional Hydrodynamic Modeling of Barnstable Harbor and Great Marsh, Barnstable, MA." Applied Coastal Research and Engineering, Inc. report prepared for the Town of Barnstable. 28 pp.
- Zimmerman, J.T.F., 1988. "Chapter 6: Estuarine Residence Times." In: Hydrodynamics of Estuaries, Volume I, Estuarine Physics, (B.J. Kjerfve, ed.). CRC Press, Inc. pp. 75-84.