

8. References

- Alber, M., Sheldon, J.E., 1999. Use of a date-specific method to examine variability in the flushing times of Georgia estuaries. *Estuarine, Coastal and Shelf Science* 49, 469-482.
- Alberts, J.J., Takács, M., 1999. Importance of humic substances for carbon and nitrogen transport into southeastern United States estuaries. *Organic Geochemistry* 30, 385-395.
- Anderson, K.L., Whitlock, J.E., Harwood, V.J., 2005. Persistence and differential survival of fecal indicator bacteria in subtropical waters and sediments. *Applied and Environmental Microbiology* 71, 3041-3048.
- Bergquist, D.C., Van Dolah, R.F., Riekerk, G.H.M., Levisen, M.V., Crowe, S.E., Brock, L., Greenfield, D.I., Chestnut, D.E., McDermott, W., Fulton, M.H., Wirth, E., Harvey, J., 2009. The Condition of South Carolina's Estuarine and Coastal Habitats During 2005-2006: Technical Report. Technical Report 103. South Carolina Marine Resources Division, Charleston, SC, 74 pp.
- Bernhard, A.E., Donn, T., Giblin, A.E., Stahl, D.A., 2005. Loss of diversity of ammonia-oxidizing bacteria correlates with increasing salinity in an estuary system. *Environmental Microbiology* 7, 1289-1297.
- Boehm, A.B., Weisberg, S.B., 2005. Tidal forcing of Enterococci at marine recreational beaches at fortnightly and semidiurnal frequencies. *Environmental Science & Technology* 39, 5575-5583.
- Bricker, S.B., Clement, C.G., Pirhalla, D.E., Orlando, S.P., Jr., Farrow, D.R.G., 1999. National Estuarine Eutrophication Assessment: Effects of Nutrient Enrichment in the Nation's Estuaries. National Oceanic and Atmospheric Administration, National Ocean Service, Special Projects Office and the National Centers for Coastal Ocean Science, Silver Spring, Maryland, 71 pp.
- Bricker, S.B., Longstaff, B., Dennison, W., Jones, A., Boicourt, K., Wicks, C., Woerner, J., 2007. Effects of nutrient enrichment in the nation's estuaries: a decade of change. NOAA Coastal Ocean Program Decision Analysis Series 26. National Centers for Coastal Ocean Science, Silver Spring, MD, 322 pp.
- Caffrey, J., Younos, T., Connor, M.S., Kohlhepp, G., Robertson, D.M., Sharp, J.H., Whittall, D., 2007. Nutrient Requirements for the National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries. National Water Quality Monitoring Network, 6 pp.
- Diaz, R.J., Rosenberg, R., 1995. Marine benthic hypoxia: a review of its ecological effects and the behavioural responses of benthic macrofauna. In: Ansell, A.D., Gibson, R.N., Barnes, M. (Eds.), *Oceanography and Marine Biology: an Annual Review* 33. UCL Press, pp. 245-303.
- Diaz, R.J., Rosenberg, R., 2008. Spreading dead zones and consequences for marine ecosystems. *Science* 321, 926-929.
- DiDonato, E.M., 2010 in press. Nutrient Monitoring in Southeast Coast Network Estuarine Waters: Justification for Monitoring Total Dissolved Nitrogen (TDN) and Total Dissolved Phosphorus (TDP). Natural Resource Report NPS/SECN/NRR-2010/XXX. National Park Service, Fort Collins, CO.
- Doyle, M.P., Erickson, M.C., 2006. Closing the door on the fecal coliform assay. *Microbe* 1, 162-163.
- Duarte, C.M. (Ed.) 2009. Global Loss of Coastal Habitats: Rates, Causes and Consequences. Fundación BBVA, 184 pp.
- Dupont, S., Dorey, N., Thorndyke, M.C., 2010. What meta-analysis can tell us about vulnerability of marine biodiversity to ocean acidification? *Estuarine, Coastal and Shelf Science* 89, 182-185.

- Effler, S.W., 1988. Secchi disc transparency and turbidity. *Journal of Environmental Engineering* 114, 1436-1447.
- Fabry, V.J., Seibel, B.A., Feely, R.A., Orr, J.C., 2008. Impacts of ocean acidification on marine fauna and ecosystem processes. *ICES Journal of Marine Science* 65, 414-432.
- Frischer, M.E., Verity, P.G., 2006. Alternatives to Coliform Bacteria as Indicators of Human Impact on Coastal Ecosystems. In: Kleppel, G.S., DeVoe, M.R., Rawson, M.V. (Eds.), *Changing Land Use Patterns in the Coastal Zone: Managing Environmental Quality in Rapidly Developing Regions* Springer, New York, pp. 253-284.
- Georgia Department of Natural Resources, 2009. Rules and Regulations for Water Quality Control. 391-3-6.03 Water Use Classifications and Water Quality Standards. Atlanta, Georgia.
- Grumbles, B.H., 2007. Memorandum to Directors of State Water Programs, Directors of Great Water Body Programs, Directors of Authorized Tribal Water Quality Standards Programs and State and Interstate Water Pollution Control Administrators on Nutrient Pollution and Numeric Water Quality Standards. U.S. Environmental Protection Agency, Washington, DC.
- Guadagnoli, D., Good, B., Mackinnon, J., Flournoy, P., Harvey, J., Harwell, L., 2005. The Condition of Georgia's Estuarine and Coastal Habitats 2000-2001 Interim Report. 001. Georgia Department of Natural Resources, Coastal Resources Division.
- Hagy, J.D., Boynton, W.R., Keefe, C.W., Wood, K.V., 2004. Hypoxia in Chesapeake Bay, 1950-2001: Long-term change in relation to nutrient loading and river flow. *Estuaries* 27, 634-658.
- Haines, E.B., 1979. Nitrogen pools in Georgia coastal waters. *Estuaries* 2, 34-39.
- Hartel, P., Gates, K., Payne, K., 2004. Targeted sampling of St. Andrews Park on Jekyll Island to determine sources of fecal contamination. Final Report, 9 pp.
- Harwood, V.J., Butler, J., Parrish, D., Wagner, V., 1999. Isolation of fecal coliform bacteria from the diamondback terrapin (*Malaclemys terrapin centrata*). *Applied and Environmental Microbiology* 65, 865-867.
- Hendriks, I.E., Duarte, C.M., Álvarez, M., 2010. Vulnerability of marine biodiversity to ocean acidification: A meta-analysis. *Estuarine, Coastal and Shelf Science* 86, 157-164.
- Hendriks, I.E., Duarte, C.M., 2010. Ocean acidification: Separating evidence from judgment e A reply to Dupont et al. *Estuarine, Coastal and Shelf Science* 89, 186-190.
- Howarth, R.W., 1988. Nutrient limitation of net primary production in marine ecosystems. *Annual Review of Ecology and Systematics* 19, 89-110.
- Howarth, R.W., Anderson, D., Cloern, J.E., Elfring, C., Hopkinson, C.S., Jr., Lapointe, B., Malone, T.C., Marcus, N., McGlathery, K., Sharpley, A., Walker, D., 2000. Nutrient pollution of coastal rivers, bays, and seas. *Issues in Ecology* 7, 1-15.
- Howarth, R.W., Marino, R., 2006. Nitrogen as the limiting nutrient for eutrophication in coastal marine ecosystems: evolving views over three decades. *Limnology and Oceanography* 51, 364-376.
- Iriarte, A., de la Sota, A., Orive, E., 1998. Seasonal variation of nitrification along a salinity gradient in an urban estuary. *Hydrobiologia* 362, 115-126.
- Jahnke, R.A., Alexander, C.R., Kostka, J.E., 2003. Advective pore water input of nutrients to the Satilla River Estuary, Georgia, USA. *Estuarine, Coastal and Shelf Science* 56, 641-653.
- Jay, D.A., Geyer, W.R., Montgomery, D.R., 2000. An ecological perspective on estuarine classification. In: Hobbie, J.E. (Ed.), *Estuarine Science: A Synthetic Approach to Research and Practice*. Island Press, Washington, DC, pp. 149-176.

- Knutzen, J., 1981. Effects of decreased pH on marine organisms. *Marine Pollution Bulletin* 12, 25-29.
- Koroleff, F., 1983. Determination of ammonia. In: Grasshoff, K., Ehrhardt, M., Kremling, K. (Eds.), *Methods of seawater analysis: second, revised and extended edition*. Verlag Chemie, Weinheim, pp. 150-157.
- Kruskopf, M., Flynn, K.J., 2006. Chlorophyll content and fluorescence responses cannot be used to gauge reliably phytoplankton biomass, nutrient status or growth rate. *New Phytologist* 169, 525-536.
- Mallin, M.A., Johnson, V.L., Ensign, S.H., MacPherson, T.A., 2006. Factors contributing to hypoxia in rivers, lakes, and streams. *Limnology and Oceanography* 51, 690-701.
- Mallin, M.A., McIver, M.R., Ensign, S.H., Cahoon, L.B., 2004. Photosynthetic and heterotrophic impacts of nutrient loading to blackwater streams. *Ecological Applications* 14, 823-838.
- Meyer, J.L., 1992. Seasonal patterns of water quality in blackwater rivers of the Coastal Plain, southeastern United States. In: Becker, C.D., Neitzel, D.A. (Eds.), *Water Quality in North American River Systems*. Battelle Press, Columbus, OH, pp. 249-276.
- Meyer, J.L., Benke, A.C., Edwards, R.T., Wallace, J.B., 1997. Organic matter dynamics in the Ogeechee River, a blackwater river in Georgia, USA. *Journal of the North American Benthological Society* 16, 82-87.
- Morris, A.W., Howland, R.J.M., Woodward, E.M.S., Bale, A.J., Mantoura, R.F.C., 1985. Nitrite and ammonia in the Tamar Estuary. *Netherlands Journal of Sea Research* 19, 217-222.
- Mortazavi, B., Iverson, R.L., Landing, W.M., Huang, W., 2000. Phosphorus budget of Apalachicola Bay: a river-dominated estuary in the northeastern Gulf of Mexico. *Marine Ecology Progress Series* 198, 33-42.
- National Oceanic and Atmospheric Administration (NOAA), 2009. Coastal Zone Management Act Performance Measurement System: 2009 Report on Contextual Indicators. <http://coastalmanagement.noaa.gov/success/media/contextualindicator2009.pdf>.
- National Research Council, 2000. *Clean Coastal Waters: Understanding and Reducing the Effects of Nutrient Pollution*. National Academy Press, Washington, D. C., 405 pp.
- National Shellfish Sanitation Program, 2007. *Guide for the Control of Molluscan Shellfish 2007*. Washington, DC.
- Neal, C., Neal, M., Wickham, H., 2000. Phosphate measurement in natural waters: two examples of analytical problems associated with silica interference using phosphomolybdic acid methodologies. *Science of the Total Environment* 251/252, 511-522.
- Ott, J.A., Duffey, R.M., Erickson, S.E., Fuhr, K.S., Rodgers, B.A., Schneider, M.A., 2006. Comparison of light limiting water quality factors in six Florida aquatic preserves. *Florida Scientist* 69, 73-91.
- Paerl, H.W., 1988. Nuisance phytoplankton blooms in coastal, estuarine, and inland waters. *Limnology and Oceanography* 33, 823-847.
- Pomeroy, L.R., Smith, E.E., Grant, C.M., 1965. The exchange of phosphate between estuarine water and sediments. *Limnology and Oceanography* 10, 167-172.
- Rabalais, N.N., Turner, R.E., Scavia, D., 2002. Beyond science into policy: Gulf of Mexico hypoxia and the Mississippi River. *BioScience* 52, 129-142.
- Ringwood, A.H., Keppler, C.J., 2002. Water quality variation and clam growth: is pH really a non-issue in estuaries? *Estuaries* 25, 901-907.

- Sanger, D., Hernandez, D., Libes, S., Voulgaris, G., Davis, B., Smith, E., Shuford, R., Porter, D., Koepfler, E., Bennett, J., in press. A case history of the science and management collaboration in understanding hypoxia events in Long Bay, South Carolina, USA. *Environmental Management*.
- Scavia, D., Kelly, E.A., Hagy, J.D., 2006. A simple model for forecasting the effects of nitrogen loads on Chesapeake Bay hypoxia. *Estuaries and Coasts* 29, 674-684.
- Scavia, D., Rabalais, N.N., Turner, R.E., Justic, D., Wiseman, W.J., Jr., 2003. Predicting the response of Gulf of Mexico hypoxia to variations in Mississippi River nitrogen load. *Limnology and Oceanography* 48, 951-956.
- Schlüter, L., Møhlenberg, F., Havskum, H., S., L., 2000. The use of phytoplankton pigments for identifying and quantifying phytoplankton groups in coastal areas: testing the influence of light and nutrients on pigment/chlorophyll a ratios. *Marine Ecology Progress Series* 192, 49-63.
- Sea-Bird Electronics Inc., 2002. Application Note 64.
- Sheldon, J.E., 2009a. Statistical analysis of Tybee Island sanitary survey data. Georgia Coastal Research Council, Department of Marine Sciences, University of Georgia, Athens, GA, 9 pp.
- Sheldon, J.E., 2009b. Statistical analysis of St. Simons Island sanitary survey data. Georgia Coastal Research Council, Department of Marine Sciences, University of Georgia, Athens, GA, 10 pp.
- Sheldon, J.E., 2009c. Statistical analysis of Jekyll Island sanitary survey data. Georgia Coastal Research Council, Department of Marine Sciences, University of Georgia, Athens, GA, 10 pp.
- Sheldon, J.E., Alber, M., 2006. The calculation of estuarine turnover times using freshwater fraction and tidal prism models: a critical evaluation. *Estuaries and Coasts* 29, 133-146.
- Smith, L.M., Engle, V.D., Summers, J.K., 2006. Assessing water clarity as a component of water quality in Gulf of Mexico estuaries. *Environmental Monitoring and Assessment* 115, 291-305.
- South Carolina Department of Health and Environmental Control, 2008. Water Classifications and Standards. R.61-68. Columbia, SC.
- Steel, E.A., Neuhauser, S., 2002. Comparison of methods for measuring visual water clarity. *Journal of the North American Benthological Society* 21, 326-335.
- Sundareshwar, P.V., Morris, J.T., Koepfler, E.K., Fornwalt, B., 2003. Phosphorus limitation of coastal ecosystem processes. *Science* 299, 563-565.
- Thoresen, M., Alber, M., submitted. Contribution of benthic diatoms to the diets of suspension-feeding bivalves (eastern oyster, *Crassostrea virginica*). *Marine Ecology Progress Series*.
- Uncles, R.J., Howland, R.J.M., Easton, A.E., Griffiths, M.L., Harris, C., King, R.S., Morris, A.W., Plummer, D.H., Woodward, E.M.S., 1998. Seasonal variability of dissolved nutrients in the Humber-Ouse Estuary, UK. *Marine Pollution Bulletin* 37, 234-246.
- U.S. Environmental Protection Agency, 1986. Ambient Water Quality Criteria for Bacteria - 1986. EPA-440/5-84-002. Office of Water, Washington, DC, 24 pp.
- U.S. Environmental Protection Agency, 2000. Ambient Aquatic Life Water Quality Criteria for Dissolved Oxygen (Saltwater): Cape Cod to Cape Hatteras. EPA-822/R-00/012. Office of Water, Washington, DC, 133 pp.
- U.S. Environmental Protection Agency, 2001a. National Coastal Condition Report. EPA-620/R-01/005. Office of Research and Development and Office of Water, Washington, DC.
- U.S. Environmental Protection Agency, 2001b. Nutrient Criteria Technical Guidance Manual - Estuarine and Coastal Marine Waters. EPA-822/B-01/003. Office of Water, Washington, DC, 362 pp.

- U.S. Environmental Protection Agency, 2004. National Coastal Condition Report II. EPA-620/R-03/002. Office of Research and Development and Office of Water, Washington, DC.
- U.S. Environmental Protection Agency, 2008. National Coastal Condition Report III. EPA-842/R-08/002. Office of Research and Development and Office of Water, Washington, DC.
- U.S. Environmental Protection Agency, 2009. National Recommended Water Quality Criteria. Office of Water, Washington, DC, 22 pp.
- Van Dolah, R.F., Bergquist, D.C., Riekerk, G.H.M., Levisen, M.V., Crowe, S.E., Wilde, S.B., Chestnut, D.E., McDermott, W., Fulton, M.H., Wirth, E., Harvey, J., 2006. The Condition of South Carolina's Estuarine and Coastal Habitats During 2003-2004: Technical Report. Technical Report 101. South Carolina Marine Resources Division, Charleston, SC, 70 pp.
- Van Dolah, R.F., Jutte, P.C., Riekerk, G.H.M., Levisen, M.V., Crowe, S.E., Lewitus, A., Chestnut, D.E., McDermott, W., Bearden, D., Fulton, M.H., 2004. The Condition of South Carolina's Estuarine and Coastal Habitats During 2001-2002: Technical Report. Technical Report 100. South Carolina Marine Resources Division, Charleston, SC, 68 pp.
- Van Dolah, R.F., Jutte, P.C., Riekerk, G.H.M., Levisen, M.V., Zimmerman, L.E., Jones, J.D., Lewitus, A.J., Chestnut, D.E., McDermott, W., Bearden, D., Scott, G.I., Fulton, M.H., 2002. The Condition of South Carolina's Estuarine and Coastal Habitats During 1999-2000: Technical Report. Technical Report 90. South Carolina Marine Resources Division, Charleston, SC, 132 pp.
- Vaquer-Sunyer, R., Duarte, C.M., 2008. Thresholds of hypoxia for marine biodiversity. *Proceedings of the National Academy of Sciences* 105, 15452-15457.
- Verity, P.G., 2002a. A decade of change in the Skidaway River estuary. I. Hydrography and nutrients. *Estuaries* 25, 944-960.
- Verity, P.G., 2002b. A decade of change in the Skidaway River estuary. II. Particulate organic carbon, nitrogen, and chlorophyll *a*. *Estuaries* 25, 961-975.
- Verity, P.G., Alber, M., Bricker, S.B., 2006. Development of hypoxia in well-mixed subtropical estuaries in the southeastern USA. *Estuaries and Coasts* 29, 665-673.
- Verity, P.G., Borkman, D.G., 2010. A decade of change in the Skidaway River estuary. III. Plankton. *Estuaries and Coasts* 33, 513-540.
- Wade, T.J., Pai, N., Eisenberg, J.N.S., Colford, J.M., 2003. Do U.S. Environmental Protection Agency water quality guidelines for recreational waters prevent gastrointestinal illness? A systematic review and Meta-analysis. *Environmental Health Perspectives* 111, 1102-1109.
- Weston, N.B., Hollibaugh, J.T., Sandow, J., Joye, S., 2003. Nutrients and dissolved organic matter in the Altamaha River and loading to the coastal zone. In: Hatcher, K.J. (Ed.), *Proceedings of the 2003 Georgia Water Resources Conference*. Institute of Ecology, University of Georgia, Athens, Georgia.
- Wiegert, R.G., Freeman, B.J., 1990. Tidal Salt Marshes of the Southeastern Atlantic Coast: A Community Profile. Biological Report 85(7.29). U. S. Fish and Wildlife Service, Washington, DC.