

REFEREED JOURNAL ARTICLES:

1. Fong, D.A. and W. R. Geyer, 2002. The alongshore transport of fresh water in a surface-trapped river plume. *JPO*, **32(3)**, 957-972.
2. Geyer, W. R. and G. A. Cannon, 1982. Sill processes related to deep water renewal in a fjord. *J. Geophys. Res.*, **87**: 7985-7996.
3. Geyer, W. R. and J. D. Smith, 1987. Shear instability in a highly stratified estuary. *J. Phys. Oceanogr.*, **17**: 1668-1679.
4. Geyer, W. R., 1989. Field calibration of mixed-layer drifters. *J. Atmos. and Oceanic Tech.*, **6**: 333-342.
5. Frechette, M., C. A. Butman and W. R. Geyer, 1989. The importance of boundary layer flows in supplying phytoplankton to the benthic suspension feeder. *Mytilus edulis* L., *Limnol. and Oceanogr.*, **34**: 19-36.
6. Geyer, W. R. and D. M. Farmer, 1989. Tide induced variation of the dynamics of a salt wedge estuary. *J. Phys. Oceanogr.*, **28**: 1060-1072.
7. Geyer, W. R. and R. P. Signell, 1990. Measurements of tidal flow around a headland with a shipboard acoustic Doppler current profiler. *J. Geophys. Res.*, **95**: 3189-3197.
8. Signell, R. P. and W. R. Geyer, 1991. Transient eddy formation around headlands. *J. Geophys. Res.*, **96**: 2561-2576.
9. Geyer, W. R. and R. P. Signell, 1992. A reassessment of the role of tidal dispersion in estuaries and bays. *Estuaries*, **15**: 97-108.
10. Geyer, W. R., 1993. Three-dimensional tidal flow around headlands. *J. Geophys. Res.*, **98**: 955-966.
11. Geyer, W. R., 1993. The importance of suppression of turbulence by stratification on the estuarine turbidity maximum. *Estuaries*, **16**: 113-125.
12. Rankin, K. L., L. S. Mullineaux and W. R. Geyer, 1994. Transport of juvenile gem clams (*Gemma gemma*) in a headland wake. *Estuaries*, **17**: 655-667.
13. Butman, C. A., M. Frechette, W. R. Geyer and V. R. Starczak, 1994. Flume experiments on food supply to the blue mussel *Mytilus edulis* L. as a function of the boundary-layer flow. *Limnol. Oceanogr.*, **39**: 1755-1768.
14. Geyer, W. R. and R. C. Beardsley, 1995. Introduction to special section on physical oceanography of the Amazon Shelf. *J. Geophys. Res.*, **100**: 2281-2282.

15. Beardsley, R. C., J. Candela, R. Limeburner, W. R. Geyer and S. J. Lentz, B. M. Castro, D. Cacchione and N. Carneiro, 1995. The M₂ tide on the Amazon Shelf. *J. Geophys. Res.* **100**: 2283-2319.
16. Geyer, W. R. and G. C. Kineke, 1995. Observations of currents and water properties in the Amazon frontal zone. *J. Geophys. Res.*, **100**: 2321-2339.
17. Geyer, W. R., 1995. Tide-induced mixing in the Amazon Frontal Zone. *J. Geophys. Res.*, **100**: 2341-2353.
18. Geyer, W. R., R. C. Beardsley, J. Candela, S. J. Lentz, R. Limeburner, W. E. Johns, B. M. Castro and I. D. Soares, 1996. Physical oceanography of the Amazon Shelf. *Cont. Shelf Res.*, **16**: 575-616.
19. Nepf, H. M. and W. R. Geyer, 1996. Intratidal variations in stratification and mixing in the Hudson estuary. *J. Geophys. Res.*, **101**: 12,079-12,086.
20. Kineke, G. C., R. W. Sternberg, J. H. Trowbridge and W. R. Geyer, 1996. Fluid mud processes on the Amazon Continental Shelf. *Cont. Shelf Res.*, **16**: 667-696.
21. Geyer, W. R. and H. M. Nepf, 1996. Tidal pumping of salt in a moderately stratified estuary. *Coastal and Estuarine Studies*. **53**: 213-226.
22. Valiela, I., P. Peckol, C. D'Avanzo, K. Lajtha, J. Kremer, W. R. Geyer, K. Foreman, D. Hersh, B. Seely, T. Isaji and R. Crawford, 1996. Hurricane Bob on Cape Cod. *Amer. Scientist*, **84**: 154-165.
23. Fong, D. A., W. R. Geyer and R. P. Signell, 1997. The wind-forced response of a buoyant coastal current: Observations of the western Gulf of Maine plume. *Journal of Marine Systems*, **12**: 69-81.
24. Geyer, W. R., 1997. Influence of wind on dynamics and flushing of shallow estuaries. *Estuarine, Coastal and Shelf Science*, **44**: 713-722.
25. Jay, D. A., W. R. Geyer, R.J. Uncles, J. Vallino, J. Largier and W.R. Boynton, 1997. A Review of recent developments in estuarine scalar flux estimation. *Estuaries*, **20**: 262-280.
26. Gustafsson, O., K. O. Buesseler, W. R. Geyer, S. B. Moran and P. M. Gschwend, 1998. An assessment of the relative importance of horizontal and vertical transport of particle-reactive chemicals in the coastal ocean. *Cont. Shelf Res.*, **18**: 805-829.
27. Geyer, W.R., J.H. Trowbridge and M. Bowen, 2000. The Dynamics of a Partially Mixed Estuary. *J. Phys. Oceanogr.*, **30**(8): 2035-2048.
28. Trowbridge, J.H., W.R. Geyer, M.M. Bowen and A.J. Williams 3rd, 1999. Near-bottom turbulence measurements in a partially mixed estuary: Turbulent energy balance, velocity structure, and along-channel momentum balance. *J. Phys. Oceanogr.*, **29**: 3056-3072.

29. Geyer, W.R., P.S. Hill, T.G. Milligan and P. Traykovski, 2000. The structure of the Eel River plume during floods. *Cont. Shelf Res.*, **20**:16, 2067-2093.
30. Traykovski, P., W. R. Geyer, J. D. Irish and J. F. Lynch, 2000. The role of density-driven fluid mud flows for cross-shelf transport on the Eel River continental shelf. *Cont. Shelf Res.*, **20**, 2113-2140.
31. Hill, P.S., T.G. Milligan and W.R. Geyer. Controls on effective settling velocity of suspended sediment in the Eel River flood plume. *Cont. Shelf Res.*, (in press, 2000).
32. MacCready, P. and W.R. Geyer, 2001. Estuarine salt flux through an isohaline surface, *J. Geophys. Res.*, 106:C6, 11,629-11,637.
33. Fong, D. A., and W. R. Geyer, 2001. Response of a river plume during an upwelling favorable wind event. *J. Geophys. Res.*, **106**:C1, 1067-1084.
34. Geyer, W.R., J.D. Woodruff and P. Traykovski, 2001. Sediment transport and trapping in the Hudson River estuary. *Estuaries*, **24**(5): 670-679.
35. Woodruff, J.D., W.R. Geyer, C.K. Sommerfield and N.W. Driscoll, 2001. Seasonal variation of sediment deposition in the Hudson River estuary. *Marine Geology*, 179, pp. 105-119.
36. MacCready, P., R. D. Hetland and W. R. Geyer, 2002. Long-Term Isohaline Salt Balance in an Estuary. *Continental Shelf Research*, **22**(11-13), 1591-1601.
37. Bowen, Melissa M.; Geyer, W. Rockwell, 2003. Salt transport and the time-dependent salt balance of a partially stratified estuary. *J. Geophys. Res.* Vol. 108, No. C5
10.1029/2001JC001231

OTHER REFEREED PUBLICATIONS:

1. Geyer, W. R., 1988. The advance of a salt wedge front: Observations and dynamical model. In Dronkers and van Leussen (Eds.), *Physical Processes in Estuaries*, Springer-Verlag: New York, pp. 181-195.
2. Signell, R. P. and W. R. Geyer, 1990. Numerical simulation of tidal dispersion around a coastal headland. In R. T. Cheng (Ed.). *Residual Currents and Long-Term Transport*, Coastal and Estuarine Series, Springer-Verlag: New York, **38**, pp. 210-222.
3. Geyer, W. R., R. C. Beardsley, J. Candela, B. Castro, R. Legeckis, S. J. Lentz, R. Limeburner, L. Miranda and J. H. Trowbridge, 1991. The physical oceanography of the Amazon outflow. *Oceanography*, **4**: 8-14.
4. Geyer, W. R. and R. P. Signell, 1991. Measurements and modeling of the spatial structure of nonlinear tidal flow around a headland. In Bruce B. Parker (Ed.). *Tidal Hydrodynamics*, John Wiley & Sons, Inc.: New York, pp. 403-418.

5. Geyer, W. R., G. B. Gardner, W. S. Brown, J. Irish, B. Butman, T. Loder and R. Signell, 1992. Physical oceanographic investigation of Massachusetts and Cape Cod Bays. Massachusetts Bay Program Final Report, 497 pp.
6. Geyer, W. R., R. P. Signell, and G. C. Kineke, 1998. Lateral trapping of sediment in a partially mixed estuary. In *8th International Biennial Conference on Physics of Estuaries and Coastal Seas, 1996*. A. A. Balkema: Rotterdam, The Netherlands, pp. 115-126.
7. Geyer, W. R., J. T. Morris, F. G. Prahl and D.A. Jay, 2000. Interaction between physical processes and ecosystem structure: A comparative approach. *Estuarine Science*, Hobbie, J.E. (Ed.), Island Press: Washington DC, pp. 177-206.

MANUSCRIPTS IN REVIEW:

1. Geyer, W.R., R.P. Signell, D. A. Fong, J. Wang, D.M. Anderson and B.P. Keafer. The Freshwater Transport and Dynamics of the Western Maine Coastal Current, (in review, Continental Shelf Research, 2000.
2. Geyer, W.R., Hill, P.S., Kineke, G.C. The Transport and Dispersal of Sediment by Buoyant Coastal Flows. Continental Shelf Research. In press.

OTHER PUBLICATIONS AND REPORTS:

8. Sillcox, R.L., W.R. Geyer and G.A. Cannon, 1981. Physical transport processes and circulation in Elliott Bay. NOAA Technology Memo, Boulder, CO, 49 pp.
2. Geyer, W. R., 1985. The time dependent dynamics of a salt wedge. Ph.D. Thesis, University of Washington, 200 pp.
3. Geyer, W. R. and W.D. Grant, 1986. A field study of the circulation and dispersion in New Bedford Harbor, unpublished report, submitted to Battelle, 20 pp.
4. Geyer, W. R. and C.A. Butman, 1988. Fluid and suspended sediment transport in New Bedford Outer Harbor, unpublished report, submitted to the Environmental Protection Agency, 35 pp.
5. Trowbridge, J. H., W.R. Geyer, C.A. Butman and R.J. Chapman, 1989. The 17-Meter Flume at the Coastal Research Laboratory. Part II: Flow characteristics, (WHOI Tech. Report CRC-89-3), Woods Hole, MA: Woods Hole Oceanographic Institution, 37 pp.
6. Geyer, W. R. and P. Dragos, 1990. Hydrodynamic baseline measurements in New Bedford Harbor, (WHOI Tech. Rept. WHOI-90-54), Woods Hole, MA: Woods Hole Oceanographic Institution, 121 pp.
7. Geyer, W. R., 1990. Time-dependent, two-layer flow over a sill. *The Physical Oceanography of Sea Straits*, Pratt, L. J. (Ed.), Kluwer Academic Publishers: Dordrecht, pp. 421-432.

8. AMASSedS Research Group, 1990. A multidisciplinary Amazon shelf sediment study. *Eos*, **45(6)**: 1771, 1776-1777.
9. Alessi, C. A., S.J. Lentz, R.C. Beardsley, B.M. Castro and W.R. Geyer, 1992. A multidisciplinary Amazon Shelf Sediment Study (AMASSedS): Physical oceanography moored array component (WHOI Tech. Rept. WHOI-92-36). Woods Hole, MA: Woods Hole Oceanographic Institution, 87 pp.
10. Sankar, S., C. R. Newell and W.R. Geyer, 1992. A finite difference model for determining concentration contours above seeded mussel beds in Maine. *Aquaculture '92*, pp. 200-201.
11. National Research Council, 1993. *Managing Wastewater in Coastal Urban Areas*, National Academy Press: Washington, DC, 477 pp. (panelist).
12. Geyer, W.R. and J.R. Ledwell, 1994. Final Report: Massachusetts Bay Dye Study. Boston: Massachusetts Water Resources Authority. Report ENQUAD 1994-17. 13pp + tables and figures.
13. Geyer, W.R. and J.R. Ledwell, 1997. Summary Report: Boundary Mixing in Massachusetts Bay. Massachusetts Water Resources Authority. ENQUAD Technical Report 97-9. 20 pp.
14. Fredericks, J. J., J. H. Trowbridge, W. R. Geyer, A. J. Williams 3rd, M. Bowen and J. Woodruff, 1998. Stress, salt flux and dynamics of a partially mixed estuary. WHOI Tech Rep., WHOI-98-17, 133 pp., Woods Hole Oceanographic Institution, Woods Hole, MA.
15. MacDonald, D.G. and W.R. Geyer, 2000. Observations of shear-induced mixing in a salt wedge estuary. Stratified Flows: Proceedings of the Fifth International Symposium on Stratified Flows (I.A.H.R.), Vancouver, British Columbia, 895-900.

PUBLISHED ABSTRACTS:

1. Geyer, W. R., 1981. Deep water renewal in Puget Sound. *Eos, Trans. American Geophysical Union*, **62(45)**, p. 933.
2. Geyer, W. R., 1982. Gravity currents in the Fraser Estuary. *Eos, Trans. American Geophysical Union*, **63(45)**, p. 1013.
3. Geyer, W. R., 1984. Richardson number dependence of turbulent transport in a shear flow. *Eos, Trans. American Geophysical Union*, **65(16)**, pp. 221-222.
4. Geyer, W. R. and J. Smith, 1985. Interfacial exchange in a strong estuarine front. Fifth Conference on Atmospheric and Oceanic Waves and Stability, *American Meteorological Society*, p.39.
5. Geyer, W. R., 1986. Modeling the motion of an estuarine front. *Eos, Trans. American Geophysical Union*, **67(16)**, p. 295.

6. Geyer, W. R. and C. Sherwood, 1987. Wind-driven circulation in a small estuary. *Eos, Trans. American Geophysical Union*, **68**(16), p. 335.
7. Signell, R. and W. Geyer, 1987. Steady wind forced currents in a shallow narrow channel. *Eos, Trans. American Geophysical Union*, **68**(44), p. 1302.
8. Geyer, W. R., 1987. Assessing the performance of Holey Sock Drogues. *Eos, Trans. American Geophysical Union*, **68**(44), p. 1310.
9. Geyer, W. R., 1987. Dynamics of the Amazon Plume. First Brazil/US Workshop on Physical Oceanography. Institute for the Study of Earth, Oceans and Space, University of New Hampshire, p. 34.
10. Geyer, W. R. and R. Signell, 1988. Vorticity dynamics of tidal flow around a headland. *Eos, Trans. American Geophysical Union*, **69**(44), p. 1257.
11. Geyer, W. R., 1989. Mixing in the Amazon plume: Some early results of AMASSedS. Second Brazil/US Workshop on Physical Oceanography. Instituto Oceanográfico da Universidade de São Paulo, São Paulo, Brazil, p. 14.
12. Geyer, W. R., 1990. Freshwater transport through the Amazon frontal zone. *Eos, Trans. American Geophysical Union*, **71**(43), p. 1376.
13. Lentz, S., R. Beardsley, R. Geyer and R. Limeburner, 1990. Moored current observations on the Amazon inner and mid-shelf. *Eos, Trans. American Geophysical Union*, **71**(43), p. 1366.
14. Beardsley, R., J. Candela, W. Geyer, S. Lentz and R. Limeburner, 1990. Semidiurnal tides on the Amazon shelf. *Eos, Trans. American Geophysical Union*, **71**(43), p. 1376.
15. Miranda, L., B. Castro, R. Beardsley, and W. Geyer, 1990. An intercomparison between the S4 and the SD2000 current meters on a subsurface mooring. *Eos, Trans. American Geophysical Union*, **71**(43), p. 1394.
16. Geyer, W. R., R. Sternberg, and G. Kineke, 1991. The role of estuarine fronts in suspended sediment distributions: A review. *11th International Estuarine Research Conference - Abstracts*, p. 47.
17. Geyer, W. R., 1992. Momentum balance and mixing in the Amazon frontal zone. *Eos, Trans. American Geophysical Union*, **73**(43), p. 268.
18. Geyer, W. R., 1993. How does variation in vertical mixing affect the estuarine circulation? 12th Biennial International Estuarine Research Federation Conference, *The Science & Management of Coastal Estuarine Systems*, p. 43.
19. Geyer, W. R. and G. Kineke, 1993. Transverse structure of an estuarine turbidity maximum. 12th Biennial International Estuarine Research Federation Conference, *The Science & Management of Coastal Estuarine Systems*, p. 43.

20. Kineke, G. and W. Geyer, 1993. The formation of fluid muds on the Amazon continental shelf. 12th Biennial International Estuarine Research Federation Conference, *The Science & Management of Coastal Estuarine Systems*, p. 62.
21. Nepf, H. and W. Geyer, 1993. Estimates of tidal variation of stress and eddy viscosity in the Hudson River. 12th Biennial International Estuarine Research Federation Conference, *The Science & Management of Coastal Estuarine Systems*, p. 90.
22. Geyer, W.R. and M.M. Bowen, 1996. Testing the Mellor-Yamada turbulence closure model against measurements in a partially mixed estuary. *Eos, Trans. American Geophysical Union*, **77**(46), p. 367.
23. Bowen, M.M., and W.R. Geyer, 1996. Modeling the variability of vertical salt fluxes with depth, tidal forcing, and along-channel density gradient. *Eos, Trans. American Geophysical Union*, **77**(46), p. 367.
24. Geyer, W.R., 1997. Frontogenesis, sediment trapping and gravity currents in estuaries. *Eos, Trans. American Geophysical Union*, **78**(46), pp. 271-272.
25. W.R. Geyer, D.J. Mondeel, P. S. Hill and T.G. Milligan, 1998. The Eel River Plume during the 1997 flood: freshwater and sediment transport. *Eos, American Geophysical Union (Ocean Sciences Meeting)*.
26. D.A. Fong and W.R. Geyer, 1998. Alongshore Transport of a Surface-trapped River Plume. *Eos, American Geophysical Union (Ocean Sciences Meeting)*.
27. T.G. Milligan, D.J. Mondeel, P.S. Hill and W.R. Geyer, Particle Size Characteristics in the Eel River Plume During the 1997 New Year's Flood. *Eos, American Geophysical Union (Ocean Sciences Meeting)*.
28. P.S. Hill, W.R. Geyer and T.G. Milligan, Estimates of Sediment Loss from the Eel River Flood Plume Based on Suspended Sediment Grain Size Distributions. *Eos, American Geophysical Union (Ocean Sciences Meeting)*.
29. Bowen, M.M. and W.R. Geyer, 1998. Salt Transport in the Hudson Estuary, New York. *Eos, Trans. American Geophysical Union*, **79**(45), p. 451.
30. Geyer, W.R. and B. Bang, 1998. The Eel River Plume During Floods: Momentum, Stress and Particle Dynamics. *Eos, Trans. American Geophysical Union*, **79**(45), p. 455.
31. Hill, P.S., T.G. Milligan and W.R. Geyer, 1998. Effect of Turbulence on Floc Size in the Eel River Flood Plume. *Eos, Trans. American Geophysical Union*, **79**(45), p. 455-456.
32. Milligan, T.G., P.S. Hill and W.R. Geyer, 1998. The effect of turbulence on bottom sediment size distributions on the Eel River shelf. *Eos, Trans. American Geophysical Union*, **79**(45), p. 497.
33. Traykovski, P., J.D. Irish, J.F. Lynch, and W.R. Geyer, 1998. Across Shelf Sediment Transport on the Eel River Continental Shelf: From Plume to Deposition. *Eos, Trans. American Geophysical Union*, **79**(45), p. 497.

34. Woodruff, J.D., W.R. Geyer and N. Driscoll, 1998. Sediment deposition within the Hudson River Estuary. *Eos, Trans. American Geophysical Union*, 79(45), p. 451.
35. Geyer, W.R., J. D. Woodruff, C. Sommerfield and P. Traykovski, 1999. Sediment trapping in the Hudson estuary, paleo and present. Estuarine Research Federation biannual meeting, 1999.
36. Geyer, W.R., J. D. Woodruff and P. Traykovski. Seasonal and spring-neap variability of sediment trapping in an estuary. Ocean Sciences Meeting, 2000.
37. Harris, C.K., W.R. Geyer and R.P. Signell. Dispersal of flood sediment by oceanic currents and energetic waves. Ocean Sciences Meeting, 2000.
38. MacDonald, D., A. Horner, S. Inagkaki, Y. Kasajima, C. Troy, W.R. Geyer, D. Jay, S. Monismith and P. Rhines. Salt wedge dynamics in the Fraser River Estuary. Ocean Sciences Meeting, 2000.
39. Kineke, G.C., Geyer, W.R., Milligan, T.G., Alexander, C.R., Ramsey, A.L., Blake, A.C. Sediment trapping and localized mud accumulation in two estuaries. The Geological Society of America Annual Meeting 2001.
40. Geyer, W.R., Traykovski, P., Sommerfield, C.K. Frontal convergence causes sediment trapping in the Hudson River Estuary. The Geological Society of America Annual Meeting 2001.
41. Traykovski, P., Geyer, W.R., Sommerfield, C.K. Acoustic measurements of rapid sediment accumulation in the Hudson River Estuary. The Geological Society of America Annual Meeting 2001.
42. Sommerfield, C.K., Traykovski, P., Geyer, W.R. Scales of Intra-Annual Sedimentation in the Hudson River Estuary as revealed by short-lived radioisotopes. The Geological Society of America Annual Meeting 2001.
43. Field, P., Rosenthal, Y., Sherrell, R., Mason, R., Hayes, A., Geyer, W.R., Sommerfield, C.K., The effect of sediment transport on the geochemical dynamics of metal pollutants in Hudson River sediments. The Geological Society of America Annual Meeting 2001.
44. Hetland, R. Geyer, W.R., Idealized numerical simulations of river plumes. Ocean Sciences Meeting 2002.
45. Doherty K., Frye, D., Geyer, W.R., Liberatore, S., An underwater winch for estuarine research. Ocean Sciences Meeting 2002.
46. Lerczak, J.A., Geyer W.R. Modeling the lateral circulation in stratified estuaries. Ocean Sciences Meeting 2002.
47. Woodruff, J., Geyer W.R., Traykovski, P.A. Sediment Transport and Trapping in the Hudson River Estuary: a tough test for a 3-dimensional model. Ocean Sciences Meeting 2002.
48. Geyer, W.R., Chant, R., Houghton, R. Direct observations of estuarine dispersion: results from a recent dye study. Ocean Sciences Meeting 2002.

49. Traykovski, P., Geyer, W.R., Sommerfield, C.K. Sediment accumulation via deposition and erosion of fluid mud in the Hudson River Estuary. Ocean Sciences Meeting 2002.
50. Harris, C.K., Geyer, W.R., Traykovski, P. Flood layer formation on the Northern California Shelf by near-bed gravitational sediment flows and oceanographic transport. Ocean Sciences Meeting 2002.
51. MacDonald, D.G., Geyer, W.R. Turbulent energy production and mixing in a highly stratified estuarine front. Ocean Sciences Meeting 2002.
52. Lerczak, J.A., Geyer W.R.. Mechanisms controlling the salt flux in a stratified estuary. Ocean Sciences Meeting 2002.
53. Chant, R.J., Geyer, W.R., Houghton, R., Hunter E. A largrangian view of the estuarine neap/spring transition. Ocean Sciences Meeting 2002.
54. MacDonald, D.G., Horner, A.R., Geyer, W.R. Vertical salt flux in a salt wedge estuary. Ocean Sciences Meeting 2002.