

BIBLIOGRAPHY

- Alpine AE, Cloern JE (1982) Trophic interactions and direct physical effects control phytoplankton biomass and production in an estuary. *Limnol Oceanogr* 37:946-955.
- Alvarez-Salgado XA, Gago J, Miguez BM, Gilcoto M, Pérez FF (2000) Surface waters of the NW Iberian margin: upwelling on the shelf versus outwelling of upwelled waters from the Rías Baixas. *Est Coast Shelf Sci* 51:821-837.
- Anderson GC (1972) Aspects of marine phytoplankton studies near the Columbia River, with special reference to a subsurface chlorophyll maximum, in Pruter AT, Alverson DL (ed.), *The Columbia River Estuary and Adjacent Ocean Waters*, Univ Washington Press, 219-240.
- Andrews RS (1965) Modern sediments of Willapa Bay, Washington: a coastal plain estuary. Univ Washington Dept Oceanogr.
- Arakawa A, Lamb VR (1979) Computational design of the basic dynamical processes of the UCLA general circulation model. *Meth Comput Phys* 17:173-265.
- Austin JA (2004) Estimating effective longitudinal dispersion in the Chesapeake Bay. *Est Coast Shelf Sci* 60:359-368.
- Banas NS, Hickey BM, MacCready P, Newton JA (2004) Dynamics of Willapa Bay, Washington: A highly unsteady, partially mixed estuary. *J Phys Oceanogr* 34:2413-2427.
- Banas NS, Hickey BM (2005) Mapping exchange and residence time in a model of Willapa Bay, Washington, a branching, macrotidal estuary. *J Geophys Res*, submitted.
- Batchelor GK (1967) *An Introduction to Fluid Dynamics*. Cambridge, 615pp.
- Beerens SP, Ridderinkhof H, Zimmerman JTF, El Naschie MS (1994) An analytic study of chaotic stirring in tidal areas, in Aref H (ed.), *Chaos Applied to Fluid Mixing*, Pergamon, Oxford.
- Blanton JO, Andrade FA (2001) Distortion of tidal currents and the lateral transfer of salt in a shallow coastal plain estuary (O Estuario do Mira, Portugal). *Estuaries* 24:467-480.
- Bowden KF, Gilligan RM (1971) Characterisation of features of estuarine circulation as represented in the Mersey Estuary. *Limnol Oceanogr* 16:490-502.

Boynton WR, Kemp WM, Keefe CW (1992) A comparative analysis of nutrients and other factors influencing estuarine phytoplankton productivity, in Kennedy VS (ed.), *Estuarine Comparisons*, Academic, New York.

Burchard H (2002) *Applied Turbulence Modelling in Marine Waters*. Springer, Berlin.

Burchard H, Bolding K (2001) Comparative analysis of four second-moment turbulence closure models for the oceanic mixed layer. *J Phys Oceanogr* 31:1943-1968.

Burchard H, Bolding K (2002) GETM, a general estuarine transport model: Scientific documentation. Technical report, European Commission, Ispra.

Burchard H, Bolding K, Villareal MR (1999) GOTM, a general ocean turbulence model. Technical report EUR 18745 EN, European Commission.

Burchard H, Bolding K, Villareal MR (2004) Three-dimensional modelling of estuarine turbidity maxima in a tidal estuary. *Ocean Dynamics* 54:250-265.

Burrowing Shrimp Committee (1992) Findings and recommendations and an integrated pest management plan for the control of burrowing shrimp on commercial oyster beds in Willapa Bay and Grays Harbor, Washington State. Report to Grays Harbor and Pacific County Commissioners, South Bend, WA.

Canuto VM, Howard A, Cheng Y, Dubovikov MS (2001) Ocean turbulence I: one-point closure model. Momentum and heat vertical diffusivities with and without rotation. *J Phys Oceanogr* 31:1413-1426.

Chapman WM, Esveldt GD (1943) The spawning and setting of the Pacific oyster (*Ostrea gigas* Thunberg). Biol. Rep. 43A, Washington Dept Fisheries, 25pp.

Cloern JE (1982) Does the benthos control phytoplankton biomass in south San Francisco Bay (USA)? *Mar Ecol Prog Ser* 9:191-202.

Cloern JE (1991) Tidal stirring and phytoplankton bloom dynamics in an estuary. *J Mar Res* 49:203-221.

Cloern JE (1996) Phytoplankton bloom dynamics in coastal ecosystems: A review with some general lessons from sustained investigation of San Francisco Bay. *Rev Geophys* 34:127-168.

Cloern JE, Grenz C, Videgar-Lucas L (1995) An empirical model of the phytoplankton chlorophyll/carbon ratio—The conversion factor between productivity and growth rate. *Limnol Oceanogr* 40:1313-1321.

- Cokelet ED, Stewart RJ, Ebbesmeyer CC (1991) Concentrations and ages of conservative pollutants in Puget Sound, in *Puget Sound Research '91*, Vol 1, Puget Sound Water Quality Authority, 99-108.
- Conomos TJ, Gross MG, Barnes CA, Richards FA (1972) River-ocean nutrient relations in summer, in Pruter AT, Alverson DL (eds.), *The Columbia River Estuary and Adjacent Ocean Waters*, Univ Washington Press, 151-175.
- Conomos TJ, Smith RE, Gartner JW (1985) Environmental setting of San Francisco Bay. *Hydrobiologia* 129:1-12.
- Dame RF, Bushek D, Allen D, Lewitus A, Edwards D, Koepfler E, Gregory L (2002) Ecosystem response to bivalve density reduction: Management implications. *Aquat Ecol* 36:51-65.
- Dame RF, Prins TC (1998) Bivalve carrying capacity in coastal ecosystems. *Aquat Ecol* 31:409-421.
- Davis RE (1976) Predictability of sea surface temperature and sea level pressure anomalies of the North Pacific. *J Phys Oceanogr* 6:249-266.
- de-Angelis MA, Gordon LI (1985) Upwelling and river runoff as sources of dissolved nitrous oxide to the Alsea estuary, Oregon. *Est Coast Shelf Sci* 20:375-386.
- Deleersnijder E, Campin J-M, Delhez EJM (2001) The concept of age in marine modelling: I. Theory and preliminary model results. *J Mar Sys* 28:229-267.
- Dronkers J, van de Kreeke J (1986) Experimental determination of salt intrusion mechanisms in the Volkerak estuary. *Neth J Sea Res* 20:1-19.
- Dugdale RC, Goering JJ (1967) Uptake of new and regenerated forms of nitrogen in primary productivity. *Limnol Oceanogr* 12:196-206.
- Dumbauld BR (1994) Thalassinid shrimp ecology and the use of carbaryl to control populations on oyster ground in Washington coastal estuaries. Ph.D. dissertation, Univ Washington.
- Dumbauld BR, Armstrong DA, Feldman KL (1996) Life-history characteristics of two sympatric thalassinidean shrimps, *Neotrypaea californiensis* and *Upogebia pugettensis* with implications for oyster culture. *J Crustacean Biol* 16:689-708.
- Duxbury AC (1979) Upwelling and estuary flushing. *Limnol Oceanogr* 24:627-633.
- Dyer KR (1973) *Estuaries: A Physical Introduction*. Wiley, 140pp.

- Ebbesmeyer CC, Strickland RM (1995) Oyster condition and climate: evidence from Willapa Bay. Publication WSG-MR 95-02, Washington SeaGrant, Seattle, 12pp.
- Eggleston D, Armstrong D, Elis W, Patton W (1998) Estuarine fronts as conduits for larval transport: hydrodynamics and spatial distribution of megalopae. *Mar Ecol Prog Ser* 164:73-82.
- Emmett R, Llanso R, Newton J, Thom R, Hornberger M, Morgan C, Levings C, Copping A, Fishman P (2000) Geographic signatures of North American West Coast estuaries. *Estuaries* 23:765-792.
- England MH (1995) The age of water and ventilation timescales in a global ocean model. *J Phys Oceanogr* 25:2756-2777.
- Eppley RW, Peterson BJ (1979) Particulate organic matter flux and planktonic new production in the deep ocean. *Nature* 282:677-680.
- Evans GT, Parslow JS (1985) A model of annual plankton cycles. *Biol Oceanogr* 3:327-347.
- Falkowski PG, Raven JA (1997) *Aquatic Photosynthesis*. Blackwell Science, Malden, MA, 375pp.
- Feldman KL, Armstrong DA, Dumbauld BR, DeWitt TH, Doty DC (2000) Oysters, crabs, and burrowing shrimp: Review of an environmental conflict over aquatic resources and pesticide use in Washington state's (USA) coastal estuaries. *Estuaries* 23:141-176.
- Fischer HB (1976) Mixing and dispersion in estuaries. *Ann Rev Fluid Mech* 8:107-133.
- Friedrichs CT, Hamrick JH (1996) Effects of channel geometry on cross sectional variation in along channel velocity in partially stratified estuaries, in Aubrey DG, Friedrichs CT (ed.), *Buoyancy Effects on Coastal and Estuarine Dynamics*, Amer Geophys Union, 283-300.
- Garcia-Berdeal I, Hickey BM, Kawase M (2002) Influence of wind stress and ambient flow on a high discharge river plume. *J Geophys Res* 107:3130.
- Geyer WR (1997) Influence of wind on dynamics and flushing of shallow estuaries. *Est Coast Shelf Sci* 44:713-722.
- Gibson JR, Najjar RG (2000) The response of Chesapeake Bay salinity to climate-induced changes in streamflow. *Limnol Oceanogr* 45:1764-1772.

- Grant J, Dowd M, Thompson K, Emerson C, Hatcher A (1993) Perspectives on field studies and related biological models of bivalve growth, in Dame RF (ed.), *Bivalve Filter Feeders and Marine Ecosystem Processes*, Springer-Verlag, New York, 371-420.
- Grant J, Stenton-Dozey J, Monteiro P, Pitcher G, Heasman K (1998) Shellfish culture in the Benguela system: A carbon budget of Saldhana Bay for raft culture of *Mytilus galloprovincialis*. *J Shellfish Res* 17:41-49.
- Griffen BD, DeWitt TH, Langdon C (2004) Particle removal rates by the mud shrimp *Upogebia pugettensis*, its burrow, a commensal clam: Effects on estuarine phytoplankton abundance. *Mar Ecol Prog Ser* 269:223-236.
- Gross ES, Koseff JR, Monismith SG (1999) Evaluation of advective schemes for estuarine salinity simulations. *J Hydr Engin* 125:32-46.
- Gunderson DR, Armstrong DA, Shi YB, McConnaughey RA (1990) Patterns of estuarine use by juvenile English sole (*Parophrys retulus*) and Dungeness crab (*Cancer magister*). *Estuaries* 13:59-71.
- Halliwell Jr GH, Allen JS (1987) Large-scale coastal wind field along the west coast of North America 1981-1982. *J Geophys Res* 92:1861-1884.
- Hands EB, Shepsis V (1999) Cyclic channel movement at the entrance to Willapa Bay, Washington, USA. Proceedings, Coastal Sediments '99, Amer Soc Civil Engin, 1522-1536.
- Hansen DV, Rattray Jr M (1965) Gravitational circulation in straits and estuaries. *J Mar Res* 23:104-122.
- Hansen DV, Rattray Jr M (1966) New dimensions in estuary classification. *Limnol Oceanogr* 11:319-326.
- Hanson RB, Alvarez-Ossorio MT, Cal R, Campos MJ, Roman M, Santiago G, Varela M, Yoder JA (1986) Plankton response following a spring upwelling event in the Ria de Arosa, Spain. *Mar Ecol Prog Ser* 32:101-113.
- Hedgpeth JW, Obrebski S (1981) Willapa Bay: A historical perspective and a rationale for research. FWS/OBS-81/03, Office of Biological Services, US Fish and Wildlife Service, Washington, DC, 52pp.
- Heip CHR, Goosen NK, Herman PMJ, Kromkamp J, Middelburg JJ, Soetaert K (1995) Production and consumption of biological particles in temperate tidal estuaries. *Oceanogr Mar Biol Ann Rev* 33:1-149.

Hibma A, de Vriend HJ, Stive MJF (2003) Numerical modelling of shoal pattern formation in well-mixed elongated estuaries. *Est Coast Shelf Sci* 57:981-991.

Hickey BM (1979) The California current system—hypotheses and facts. *Prog Oceanogr* 8:191-279.

Hickey BM (1989) Patterns and processes of circulation over the shelf and slope, in Hickey BM, Landry MR (eds.), *Coastal Oceanography of Washington and Oregon*, Elsevier, 41-115.

Hickey BM, Banas NS (2003) Oceanography of the U. S. Pacific Northwest coastal ocean and estuaries with application to coastal ecology. *Estuaries* 26:1010-1031.

Hickey BM, Pietrafesa LJ, Jay DA, Boicourt WC (1998) The Columbia River plume study: Subtidal variability in the velocity and salinity fields. *J Geophys Res* 103:10339-10368.

Hickey BM, Robinson AR (1998) Coastal Oceanography of Western North America from the tip of Baja California to Vancouver Is, in Brink KH (ed.), *The Sea*, Vol 11, Wiley, 45-393.

Hickey BM, Zhang X, Banas N (2002) Coupling between the California Current System and a coastal plain estuary in low riverflow conditions. *J Geophys Res* 107:3166, 101029/1999JC000160.

Hickey BM, Geier SL, Kachel NB, MacFadyen A (2005) A bi-directional river plume: The Columbia in summer. *Cont Shelf Res*, in press.

Hughes FW, Rattray Jr M (1980) Salt flux and mixing in the Columbia River Estuary. *Est Coast Mar Sci* 10:479-494.

Huzzey LM (1988) The lateral density distribution in a partially mixed estuary. *Est Coast Shelf Sci* 26:351-358.

Huzzey LM, Brubaker JM (1988) The formation of longitudinal fronts in a coastal plain estuary. *J Geophys Res* 93:1329-1334.

Ianniello JP (1977) Tidally induced residual currents in estuaries of constant breadth. *J Mar Res* 35:755-786.

Jay DA, Geyer WR, Uncles RJ, Vallino J, Largier J, Boynton WR (1997) A review of recent developments in estuarine scalar flux estimation. *Estuaries* 20:262-280.

Jay DA, Smith JD (1990) Residual circulation in shallow, stratified estuaries. II: Weakly-stratified and partially-mixed systems. *J Geophys Res* 95:733-748.

- Jay DA, Smith JD, van Leussen W (1988) Residual circulation in and classification of shallow, stratified estuaries, in Dronkers J (ed.), *Physical Processes in Estuaries*, Springer-Verlag, 21-41.
- Kalnay E, Kanamitsu M, Kistler R, Collins W, and group (1996) The NCEP/NCAR 40-1996 Reanalysis Project. *Bull Amer Met Soc* 77:437-471.
- Kjerfve B (1986) Circulation and salt flux in a well mixed estuary, in van de Kreeke J (ed.), *Physics of Shallow Estuaries and Bays*, Springer-Verlag, 22-29.
- Kobayashi M, Hofmann EE, Powell EN, Klinck JM, Kusaka K (1997) A population dynamics model for the Japanese oyster, *Crassostrea gigas*. *Aquaculture* 149:285-321.
- Koseff JR, Holen JK, Monismith SG, Cloern JE (1993) Coupled effects of vertical mixing and benthic grazing on phytoplankton populations in shallow, turbid estuaries. *J Mar Res* 51:843-868.
- Kranenburg C (1986) A timescale for long-term salt intrusion in well-mixed estuaries. *J Phys Oceanogr* 16:1329-1331.
- Kraus NC (2000) Study of navigation channel feasibility, Willapa Bay, Washington. Final Report, US Army Corps of Engineers Seattle District, 440pp.
- Kuo AY, Hamrick JM, Sisson GM (1990) Persistence of residual currents in the James River estuary and its implication to mass transport, in Cheng RT (ed.), *Residual Currents and Long-Term Transport*, Springer-Verlag, 389-401.
- Landry MR, Hassett RP (1982) Estimating the grazing impact of marine microzooplankton. *Mar Biol* 67:283-288.
- Landry MR, Postel JR, Peterson WK, Newman J (1989) Broad-scale distributional patterns of hydrographic variables on the Washington/Oregon shelf, in Hickey BM, Landry MR (eds.), *Coastal Oceanography of Washington and Oregon*, Elsevier, 1-40.
- Largier JL (1996) Hydrodynamic exchange between San Francisco Bay and the ocean: the role of ocean circulation and stratification, in Hollibaugh JT (ed.), *San Francisco Bay: The Ecosystem*, Amer Assoc Adv Sci, pp 69-105.
- Leonard BP (1979) A stable and accurate convective modeling procedure based on quadratic upstream interpolation. *Comput Meth Appl Mech Engin* 19:59-98.
- Leonard BP (1991) The ULTIMATE conservative difference scheme applied to unsteady one-dimensional advection. *Comput Meth Appl Mech Engin* 88:17-74.

- Lewis RE, Lewis JO (1983) The principal factors contributing to the flux of salt in a narrow, partially stratified estuary. *Est Coast Shelf Sci* 33:599-626.
- Lewis RE, Uncles RJ (2003) Factors affecting longitudinal dispersion in estuaries of different scale. *Ocean Dynamics* 53:197-207.
- Li C, O'Donnell J (1997) Tidally induced residual circulation in shallow estuaries with lateral depth variation. *J Geophys Res* 102:27915-27929.
- Lincoln JH (1977) Derivation of freshwater inflow into Puget Sound. Special Rep No 72, Univ Washington Dept Oceanogr.
- Linden PF, Simpson JE (1988) Modulated mixing and frontogenesis in shallow seas and estuaries. *Cont Shelf Res* 8:1107-1127.
- Lucas LV, Koseff JR, Cloern JE, Monismith SG, Thompson JK (1999a) Processes governing phytoplankton blooms in estuaries. I: The local production-loss balance. *Mar Ecol Prog Ser* 187:36905.
- Lucas LV, Koseff JR, Monismith SG, Cloern JE, Thompson JK (1999b) Processes governing phytoplankton blooms in estuaries. II: The role of horizontal transport. *Mar Ecol Prog Ser* 187:17-30.
- Lucas LV, Cloern JE, Koseff JR, Monismith SG, Thompson JK (1998) Does the Sverdrup critical depth model explain bloom dynamics in estuaries? *J Mar Res* 56:375-415.
- MacCready P (1999) Estuarine adjustment to changes in river flow and tidal mixing. *J Phys Oceanogr* 29:708-726.
- MacCready P (2004) Toward a unified theory of tidally-averaged estuarine salinity structure. *Estuaries* 27:561-570.
- Malamud-Roam KP (2000) Muted tidal regimes in marshes of the San Francisco estuary: theory and implications for ecological restoration. Ph.D. Dissertation, Univ California, Berkeley.
- Malone TC, Crocker LH, Pike SE, Wendler BW (1988) Influence of river flow on the dynamics of phytoplankton production in a partially stratified estuary. *Mar Ecol Prog Ser* 48:235-249.
- McCarthy RK (1993) Residual currents in tidally dominated well-mixed estuaries. *Tellus* 45A:325-340.

- Mellor GL, Yamada T (1982) Development of a turbulence closure model for geophysical fluid problems. *Rev Geophys* 20:851-875.
- Monismith SG, Kimmerer W, Burau JR, Stacey MT (2002) Structure and flow-induced variability of the subtidal salinity field in northern San Francisco Bay. *J Phys Oceanogr* 32:3003-3019.
- Monteiro PMS, Largier JL (1999) Thermal stratification in Saldhana Bay (South Africa) and subtidal, density-driven exchange with the coastal waters of the Benguela upwelling system. *Est Coast Shelf Sci* 49:877-890.
- Monteiro PMS, Spolander B, Brundrit GB, Nelson G (1998) Shellfish culture in the Benguela system: Estimates of nitrogen-driven new production in Saldhana Bay using two physical models. *J Shellfish Res* 17:3-13.
- Newell CR (1990) The effects of mussel (*Mytilus edulis*, Linnaeus, 1758) position in seeded bottom patches on growth at subtidal lease sites in Maine. *J Shellfish Res* 9:113-118.
- Newton JA, Horner RA (2003) Use of phytoplankton species indicators to track the origin of phytoplankton blooms in Willapa Bay, Washington. *Estuaries* 26:1071-1078.
- NOAA (1985) National estuarine inventory data atlas. Strategic Assessment Branch, Ocean Assessments Division, Office of Oceanography and Marine Assessment, National Ocean Service, Rockville, MD.
- NOAA/EPA (1991) Susceptibility and status of West Coast estuaries to nutrient discharges: San Diego Bay to Puget Sound. Summary report, Strategic Assessment of Near Coastal Waters, Rockville, MD.
- Norén F, Haamer J, Lindahl O (1999) Changes in the plankton community passing a *Mytilus edulis* bed. *Mar Ecol Prog Ser* 191:187-194.
- O'Donnell J (1993) Surface fronts in estuaries: A review. *Estuaries* 16:12-39.
- Officer CB, Kester DR (1991) On estimating the non-advective tidal exchanges and advective gravitational circulation exchanges in an estuary. *Est Coast Shelf Sci* 32:99-103.
- Officer CB, Smayda TJ, Mann R (1982) Benthic filter feeding: A natural eutrophication control. *Mar Ecol Prog Ser* 9:203-210.
- Okubo A (1973) Effect of shoreline irregularities on streamwise dispersion in estuaries and other embayments. *Neth J Sea Res* 6:213-224.

Park K, Kuo AY (1996) Effect of variation in vertical mixing on residual circulation in narrow, weakly nonlinear estuaries, in Aubrey DG, Friedrichs CT (eds.), *Buoyancy Effects on Coastal and Estuarine Dynamics*, Amer Geophys Union, 301-317.

Pawlowicz R, Beardsley B, Lentz S (2002) Classical tidal harmonic analysis including error estimates in MATLAB using T_TIDE. *Comput Geosci* 28:929-937.

Percy KL, Bella DA, Sutterlin C, Klingeman PC (1974) Descriptions and information sources for Oregon estuaries. Sea Grant College Program, Oregon State Univ, Corvallis, OR.

Peterson CH, Black R (1987) Resource depletion by active suspension feeders on tidal flats: Influence of local density and tidal elevation. *Limnol Oceanogr* 32:143-166.

Pitcher GC, Calder D (1998) Shellfish culture in the Benguela system: Phytoplankton and the availability of food for commercial mussel farms in Saldhana Bay, South Africa. *J Shellfish Res* 17:15-24.

Powell EN, Hofmann EE, Klinck JM, Ray SM (1992) Modeling oyster populations I. A commentary on filtration rate. Is faster always better? *J Shellfish Res* 11:387-398.

Prins TC, Smaal AC, Dame RF (1998) A review of the feedbacks between bivalve grazing and ecosystem processes. *Aquat Ecol* 31:349-359.

Pritchard DW, Bunce RE (1959) Physical and chemical hydrography of the Magothy River. Tech. Rep XVII, Ref 59-2, Chesapeake Bay Inst.

Pritchard DW, Carpenter JH (1960) Measurements of turbulent diffusion in estuarine and inshore waters. *Bull Int Assoc Sci Hydrol* 20:37-50.

Pritchard DW (1956) The dynamic structure of a coastal plain estuary. *J Mar Res* 15:33-42.

Ridderinkhof H, Zimmerman JTF (1992) Chaotic stirring in a tidal system. *Science* 258:1107-1111.

Rodhouse PG, Roden CM (1987) Carbon budget for a coastal inlet in relation to intensive cultivation of suspension-feeding bivalve molluscs. *Mar Ecol Prog Ser* 36:225-236.

Roe PL (1985) Some contributions to the modeling of discontinuous flows. *Lect Notes Appl Math* 22:163-193.

- Roegner GC, Hickey BM, Newton JA, Shanks AL, Armstrong DA (2002) Wind-induced plume and bloom intrusions into Willapa Bay, Washington. *Limnol Oceanogr* 47:1033-1042.
- Roegner GC, Armstrong DA, Hickey BM, Shanks AL (2003) Ocean distribution of Dungeness crab megalopae and recruitment patterns to estuaries in southern Washington state. *Estuaries* 26:1058-1070.
- Roegner GC, Shanks AL (2001) Import of coastally-derived chlorophyll *a* to South Slough, Oregon. *Estuaries* 24:244-256.
- Ruesink JL, Roegner GC, Dumbauld BR, Newton JA, Armstrong DA (2003) Contributions of coastal and watershed energy sources to secondary production in a Northeastern Pacific estuary. *Estuaries* 26:1079-1093.
- Ruesink JL, Feist BE, Harvey CJ, Hong JS, Wisehart AC (2005) Changes in productivity associated with four introduced species: Ecosystem transformation of a “pristine” estuary. *Mar Ecol Prog Ser*, in revision.
- Schoener A, Tufts DF (1987) Changes in oyster condition index with El Nio-Southern Oscillation events at 46°N in an eastern Pacific bay. *J Geophys Res* 92:101029/OJGREAA000092000C13014429000001.
- Schroeder WW, Dinnel SP, Wiseman Jr WJ (1992) Salinity structure of a shallow, tributary estuary, in Prandle D (ed.), *Dynamics and Exchanges in the Coastal Zone*, Amer Geophys Union, 155-171.
- Sharples J, Simpson JH, Brubaker JM (1994) Observations and modelling of periodic stratification in the upper York River estuary, Virginia. *Est Coast Shelf Sci* 38:301-312.
- Signell R, Geyer WR (1990) Numerical simulation of tidal dispersion around a coastal headland, in Cheng RT (ed.), *Residual Currents and Long-Term Transport*, Springer-Verlag, New York, 210-222.
- Simpson JH, Brown J, Matthews J, Allen G (1990) Tidal straining, density currents, stirring in the control of estuarine stratification. *Estuaries* 26:1579-1590.
- Simpson JH, Vennell R, Souza AJ (2001) The salt fluxes in a tidally-energetic estuary. *Est Coast Shelf Sci* 52:131-142.
- Smaal AC, Prins TC (1993) The uptake of organic matter and the release of inorganic nutrients by bivalve suspension feeder beds, in Dame RF (ed.), *Bivalve Filter Feeders and Marine Ecosystem Processes*, Springer-Verlag, New York, 271-298.

- Smaal AC, Prins TC, Dankers N, Ball B (1998) Minimum requirements for modelling bivalve carrying capacity. *Aquat Ecol* 31:423-428.
- Smith R (1996) Combined effects of buoyancy and tides upon longitudinal dispersion, in Aubrey DG, Friedrichs CT (eds.), *Buoyancy effects on coastal and estuarine dynamics*, Amer Geophys Union, 319-330.
- Smith SV, Hollibaugh JT, Dollar SJ, Vink S (1991) Tomales Bay metabolism: CNP stoichiometry and ecosystem heterotrophy at the land-sea interface. *Est Coast Shelf Sci* 33:223-257.
- Sonsangjinda P, Matsuda O, Yamamoto T, Rajendran N, Maeda H (2000) The role of suspended oyster culture on nitrogen cycle in Hiroshima Bay. *J Oceanogr* 56:223-231.
- Stacey MT, Burau JR, Monismith SG (2001) Creation of residual flows in a partially stratified estuary. *J Geophys Res* 106:17013-17037.
- Stanev E, Wolff J-O, Burchard H, Bolding K, Flöser G (2003) On the circulation in the East Frisian Wadden Sea: numerical modeling and data analysis. *Ocean Dynamics* 53:27-51.
- Stips A, Bolding K, Pohlmann T, Burchard H (2004) Simulating the temporal and spatial dynamics of the North Sea using the new model GETM (general estuarine transport model). *Ocean Dynamics* 54:266-283.
- Strickland JD, Parsons TR (1968) A practical handbook of seawater analysis. Bulletin 167, Fisheries Research Board of Canada, Ottawa.
- Sverdrup HU (1953) On conditions for the vernal blooming of phytoplankton. *J du Conseil Intl pour l'Exploration de la Mer* 18:287-295.
- Thiele G, Sarmiento JL (1990) Tracer dating and ocean ventilation. *J Geophys Res* 95:9377-9391.
- Tweddle JF, Simpson JH, Janzen CD (2005) Physical controls on food supply to benthic filter feeders in the Menai Strait. *Mar Ecol Prog Ser*, in press.
- Tyler MA, Seliger HH (1980) Time scale variations of estuarine stratification parameters and impact on the food chains of the Chesapeake Bay, in Neilson BJ, Kuo A, Brubaker J (ed.), *Estuarine Circulation*, Humana, Clifton, NJ.
- Umlauf L, Burchard H (2003) A generic length-scale equation for geophysical turbulence models. *J Mar Res* 61:235-265.

- Uncles RJ, Peterson DH (1996) The long-term salinity field in San Francisco Bay. *Cont Shelf Res* 16:2005-2039.
- Uncles RJ, Stephens JA (1990) Computed and observed currents, elevations, and salinity in a branching estuary. *Estuaries* 13:133-144.
- Valle-Levinson A, O'Donnell J (1996) Tidal interaction with buoyancy driven flow in a coastal-plain estuary, in Aubrey DG, Friedrichs CT (eds.), *Buoyancy Effects on Coastal and Estuarine Dynamics*, Amer Geophys Union, 265-281.
- Valle-Levinson A, Reyes C, Sanay R (2003) Effects of bathymetry, friction, Earth's rotation on estuary/ocean exchange. *J Phys Oceanogr* 33:2375-2393.
- van Veen J (2002) Ebb and flood channel systems in the Netherlands tidal waters. Orig publ *J Royal Dutch Geogr Soc* 67:303-325, 1950. Introd., annot., transl. Bonekamp H, Elias E, Hibma A, van de Kreeke C, van Ledden M, Roelvink D, Schuttelaars H, de Vriend H, Wang Z-B, van der Spek A, Stive M, Zitman T, Delft Univ Press.
- Walters RA (1982) Low-frequency variations in sea level and currents in south San Francisco Bay. *J Phys Oceanogr* 2:658-668.
- Walters RA, Cheng RT, Conomos TJ (1985) Timescales of circulation and mixing processes of South San Francisco Bay waters. *Hydrobiologia* 129:13-36.
- Wang D-P, Elliot AJ (1978) Non tidal variability in the Chesapeake Bay and Potomac River: Evidence for non local forcing. *J Phys Oceanogr* 8:225-232.
- Wang J, Cheng RT, Smith PC (1997) Seasonal sea-level variations in San Francisco Bay in response to atmospheric forcing, 1980. *Est Coast Shelf Sci* 45:39-52.
- Warner JC, Sherwood CR, Arango HG, Signell RP (2005) Performance of four turbulence closure models implemented using a generic length scale method. *Ocean Modelling* 8:81-113.
- Whitney FA, Welch DW (2002) Impact of the 1997-8 El Niño and 1999 La Niña on nutrient supply in the Gulf of Alaska. *Prog Oceanogr* 54:405-421.
- Winant CD, Gutiérrez de Velasco G (2003) Tidal dynamics and residual circulation in a well-mixed inverse estuary. *J Phys Oceanogr* 33:1365-1379.
- Winterwerp JC (1983) The decomposition of mass transport in narrow estuaries. *Est Coast Mar Sci* 16:627-639.

Wiseman Jr WJ, Swenson EM, Kelly FJ (1990) Control of estuarine salinities by coastal ocean salinity, in Cheng RT (ed.), *Residual Currents and Long-Term Transport* Springer-Verlag, 184-193.

Wong K-C, Lu X (1994) Low-frequency variability in Delaware's inland bays. *J Geophys Res* 99:12683-12695.

Wong K-C, Moses-Hall JE (1998) On the relative importance of the remote and local wind effects to the subtidal variability in a coastal plain estuary. *J Geophys Res* 103:18393-18404.

Zimmerman JTF (1976) Mixing and flushing of tidal embayments in the western Dutch Wadden Sea, Part I: Distribution of salinity and calculation of mixing time scales. *Neth J Sea Res* 10:149-191.

Zimmerman JTF (1986) The tidal whirlpool: A review of horizontal dispersion by tidal and residual currents. *Neth J Sea Res* 20:133-154.

VITA

Neil Banas was born in New Jersey. As an undergraduate, he studied Physics and Religion at Swarthmore College, from which he received a B.A. with Distinction in 1995. He continued in Religious Studies at the University of Colorado in Boulder, with an emphasis on American nature writers and the cultural history of ecology, earning an M.A. in 1998. He moved to the University of Washington to study Oceanography later that year. At UW he has developed and taught undergraduate courses on “Humans and Other Animals” and “Northwest Coastal Stories: Salmon, First Peoples, and the Science of Uncertainty” in the School of Oceanography, the Comparative History of Ideas program, and the University Honors Program. Neil lives in Seattle, and especially likes *Crassostrea gigas* pan-fried with a little lemon.