

Peer-Reviewed Publications with CBNERR-VA Authors Since 2014 - updated 2023-06-13

- Raposa, K. B., Woolfolk, A., Endris, C. A., Fountain, M. C., Moore, G., Tyrrell, M., Swerida, R., Lerberg, S., Puckett, B. J., & Ferner, M. C. (2023). Evaluating thin-layer sediment placement as a tool for enhancing tidal marsh resilience: A coordinated experiment across eight US National Estuarine Research Reserves. *Estuaries and Coasts*, 1–21. <https://doi.org/10.1007/s12237-022-01161-y>
- Plaisted, H. K., Shields, E. C., Novak, A. B., Peck, C. P., Schenck, F., Carr, J., Duffy, P. A., Evans, N. T., Fox, S. E., & Heck, S. M. (2022). Influence of rising water temperature on the temperate seagrass species eelgrass (*Zostera marina* L.) in the northeast USA. *Ecophysiology and Biogeochemistry of Marine Plants in the Anthropocene*, 9, 920699. <https://doi.org/10.3389/fmars.2022.920699>
- Saintilan, N., Kovalenko, K. E., Guntenspergen, G., Rogers, K., Lynch, J. C., Cahoon, D. R., Lovelock, C. E., Friess, D. A., Ashe, E., Krauss, K. W., Cormier, N., Spencer, T., Adams, J., Raw, J., Ibanez, C., Scarton, F., Temmerman, S., Meire, P., Maris, T., Thorne, K., Brazner, J., Chmura, G. L., Bowron, T., Gamage, V. P., Cressman, K., Endris, C., Marconi, C., Marcus, P., Laurent, K. St., Reay, W., Raposa, K. B., Garwood, J. A., & Khan, N. (2022). Constraints on the adjustment of tidal marshes to accelerating sea level rise. *Science*, 377(6605), 523–527. <https://doi.org/10.1126/science.abo7872>
- Turner, J. S., Fall, K. A., & Friedrichs, C. T. (2022). Clarifying water clarity: A call to use metrics best suited to corresponding research and management goals in aquatic ecosystems. *Limnology and Oceanography Letters*. <https://doi.org/10.1002/lol2.10301>
- Wright, C. L., Friedrichs, C. T., & Massey, G. M. (2022). Controls on sediment bed erodibility in a muddy, partially-mixed tidal estuary. *Frontiers in Earth Science*, 231. <https://doi.org/10.3389/feart.2022.805130>
- Fall, K. A., Friedrichs, C. T., Massey, G. M., Bowers, D. G., & Smith, S. J. (2021). The importance of organic content to fractal floc properties in estuarine surface waters: Insights from video, LISST, and pump sampling. *Journal of Geophysical Research: Oceans*, 126(1), e2020JC016787. <https://doi.org/10.1029/2020JC016787>
- Knobloch, A. L. J., Reay, W. G., & Canuel, E. A. (2021). Carbon pools differ in source and temporal patterns in a tidal marsh creek system of the York River, VA estuary. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-020-00878-y>
- Turner, J. S., Friedrichs, C. T., & Friedrichs, M. A. (2021). Long-term trends in Chesapeake Bay remote sensing reflectance: Implications for water clarity. *Journal of Geophysical Research: Oceans*, 126(12), e2021JC017959. <https://doi.org/10.1029/2021JC017959>
- Turner, J. S., St-Laurent, P., Friedrichs, M. A., & Friedrichs, C. T. (2021). Effects of reduced shoreline erosion on Chesapeake Bay water clarity. *Science of the Total Environment*, 769, 145157. <https://doi.org/10.1016/j.scitotenv.2021.145157>
- Bowers, D. G., Roberts, E. M., Hoguane, A. M., Fall, K. A., Massey, G. M., & Friedrichs, C. T. (2020). Secchi disk measurements in turbid water. *Journal of Geophysical Research: Oceans*, 125(5), e2020JC016172. <https://doi.org/10.1029/2020JC016172>
- Johnson, A. J., Shields, E. C., Kendrick, G. A., & Orth, R. J. (2020). Recovery dynamics of the seagrass *Zostera marina* following mass mortalities from two extreme climatic events. *Estuaries and Coasts*, 44(2), 535–544. <https://doi.org/10.1007/s12237-020-00816-y>
- Killberg-Thoreson, L., Baer, S. E., Sipler, R. E., Reay, W. G., Roberts, Q. N., & Bronk, D. A. (2020). Seasonal nitrogen uptake dynamics and harmful algal blooms in the York River, Virginia. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-020-00802-4>
- Nunez, K., Zhang, Y. J., Herman, J., Reay, W., & Hershner, C. (2020). A multi-scale approach for simulating tidal marsh evolution. *Ocean Dynamics*, 70(9), 1187–1209. <https://doi.org/10.1007/s10236-020-01380-6>
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- Perkey, D. W., Smith, S. J., Fall, K. A., Massey, G. M., Friedrichs, C. T., & Hicks, E. M. (2020). Impacts of muddy bed aggregates on sediment transport and management in the tidal James River, VA. *Journal of Waterway, Port, Coastal, and Ocean Engineering*, 146(5), 04020028. [https://doi.org/10.1061/\(ASCE\)WW.1943-5460.0000578](https://doi.org/10.1061/(ASCE)WW.1943-5460.0000578)
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- Cahoon, D. R., Olker, J. H., Yeates, A. G., Guntenspergen, G. R., Grace, J. B., Adamowicz, S. C., Anisfeld, S. C., Baldwin, A. H., Barrett, N., Beckett, L., Benzecri, A., Blum, L. K., Burdick, D. M., Crouch, W., Ekberg, M. C., Fernald, S., Grimes, K. W., Grzyb, J., Hartig, E. K., Kreger, D. A., Larson, M., Lerberg, S., Lynch, J. C., Maher, N., Maxwell-Doyle, M., Mitchell, L. R., Mora, J., O'Neill, V., Padeletti, A., Prosser, D. J., Quirk, T., Raposa, K. B., Reay, W. G., Siok, D., Snow, C., Starke, A., Stevenson, J. C., Staver, L., & Turner, V. (2019). *Hurricane Sandy impacts on coastal wetland resilience* (Report No. 2018-1142; Open-File Report). USGS Publications Warehouse. <https://doi.org/10.3133/ofr20181142>
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- Shadwick, E. H., Friedrichs, M. A. M., Najjar, R. G., Meo, O. A. D., Friedman, J. R., Da, F., & Reay, W. G. (2019). High-frequency CO₂ system variability over the winter-to-spring transition in a coastal plain estuary. *Journal of Geophysical Research: Oceans*, 124(11), 7626-7642. <https://doi.org/10.1029/2019jc015246>
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- Shields, E. C., Parrish, D., & Moore, K. (2019). Short-term temperature stress results in seagrass community shift in a temperate estuary. *Estuaries and Coasts*, 42(3), 755-764. <https://doi.org/10.1007/s12237-019-00517-1>
- Tarpley, D. R. N., Harris, C. K., Friedrichs, C. T., & Sherwood, C. R. (2019). Tidal variation in cohesive sediment distribution and sensitivity to flocculation and bed consolidation in an idealized, partially mixed estuary. *Journal of Marine Science and Engineering*, 7(10), 334. <https://doi.org/10.3390/jmse7100334>
- Turner, J. S., Kellogg, M. L., Massey, G. M., & Friedrichs, C. T. (2019). Minimal effects of oyster aquaculture on local water quality: Examples from southern Chesapeake Bay. *PLOS ONE*, 14(11), e0224768. <https://doi.org/10.1371/journal.pone.0224768>
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- Raposa, K. B., Wasson, K., Smith, E., Crooks, J. A., Delgado, P., Fernald, S. H., Ferner, M. C., Helms, A., Hice, L. A., Mora, J. W., Puckett, B., Sanger, D., Shull, S., Spurrier, L., Stevens, R., & Lerberg, S. (2016). Assessing tidal marsh resilience to sea-level rise at broad geographic scales with multi-metric indices. *Biological Conservation*, 204, 263-275.
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- Shields, E. C., & Moore, K. A. (2016). Effects of sediment and salinity on the growth and competitive abilities of three submersed macrophytes. *Aquatic Botany*, 132, 24-29. <https://doi.org/10.1016/j.aquabot.2016.03.005>
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- Jarvis, J. C., Brush, M. J., & Moore, K. A. (2014). Modeling loss and recovery of *Zostera marina* beds in the Chesapeake Bay: The role of seedlings and seed-bank viability. *Aquatic Botany*, 113, 32-45.
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- Jarvis, J. C., & Moore, K. A. (2014). Effects of seed source, sediment type, and burial depth on mixed-annual and perennial *Zostera marina* L. seed germination and seedling establishment. *Estuaries and Coasts*, 38(3), 964-978.
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<https://doi.org/10.1016/j.jembe.2014.05.024>
- Kennish, M. J., Brush, M. J., & Moore, K. A. (2014). Drivers of change in shallow coastal photic systems: An introduction

CBNERR-VA Staff Authors of Peer-Reviewed Publications Since 2014

Friedrichs, Carl - Research Coordinator, 2019-present.

Lerberg, Scott - Stewardship Coordinator, 2006-present.

Moore, Ken - Research Coordinator, 2002-2018.

Nunez, Karinna - Rouse Bottom Fellow, 2017-2019.

Nuss, Sarah - Education Coordinator, 2005-present.

Parrish, Dave - Environmental Data Center Manager, 2007-present

Reay, Willy - Director, 2001-present.

Sharpe, Kristen - Marine Education Specialist, 2014-2018.

(Papers published following departure from CBNERR-VA are included if significant work on the paper was completed while at CBNERR-VA.)