

## Wetland Carbon Sequestration Bibliography

### Compiled by California Ocean Science Trust

Following is a list of published and grey literature relevant to tidal wetland carbon sequestration. This bibliography is arranged into broad subject areas and alphabetically by author within those areas. The subject areas are:

- General Papers
- Greenhouse Gas (GHG) Models
- Landscape Models
- Mineral/Geomorphology Models
- Organic-Focused Models
- Wetland Ecosystem Dynamics/Processes
- Wetland Ecosystem Service Valuation/Economics
- Wetland GHG Fluxes
- Wetland Law and Land Use Policy
- Wetland Biogeochemistry
- Wetland Restoration/Design
- Wetland Sediment Dynamics
- Wetland Soil Carbon/Carbon Cycle Analysis
- Wetlands Response to Climate Change

### General Papers

Bridgham, S. D., Megonigal, J. P., Keller, J. K., Bliss, N. B., & Trettin, C. 2006. The carbon balance of North American wetlands. *Wetlands*, 26: 889-916.

Chmura, G. L., Anisfeld, S. C., Cahoon, D. R., & Lynch, J. C. 2003. Global carbon sequestration in tidal, saline wetland soils. *Global Biogeochemical Cycles*, 17: 12.

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Crooks, S., J. Findsen, K. Igusky, M.K. Orr, and D. Brew. 2009. Greenhouse Gas Mitigation Typology Issues Paper: Tidal Wetlands Restoration. Report by PWA and SAIC to the California Climate Action Registry, PWA Reference 1957.

Neubauer, S. C. 2008. Contributions of mineral and organic components to tidal freshwater marsh accretion. *Estuarine Coastal and Shelf Science*, 78: 78-88.

Steven, S. A., Gastil-Buhl, M., & Melack, J. 2007. Characterizing patterns of plant distribution in a southern California salt marsh using remotely sensed topographic and hyperspectral data and local tidal fluctuations. *Remote Sensing of Environment*, 110: 226-239.



Temmerman, S., Govers, G., Wartel, S., & Meire, P. 2003. Spatial and temporal factors controlling short-term sedimentation in a salt and freshwater tidal marsh, Scheldt estuary, Belgium, SW Netherlands. *Earth Surface Processes and Landforms*, 28: 739-755.

Yan, Y., Zhao, B., Chen, J. Q., Guo, H. Q., Gu, Y. J., Wu, Q. H., & Li, B. 2008. Closing the carbon budget of estuarine wetlands with tower-based measurements and MODIS time series. *Global Change Biology*, 14: 1690-1702.

## **Greenhouse Gas Models**

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Cao, M. K., Marshall, S., & Gregson, K. 1996. Global carbon exchange and methane emissions from natural wetlands: Application of a process-based model. *Journal of Geophysical Research-Atmospheres*, 101: 14399-14414.

Cui, J. B., Li, C. S., & Trettin, C. 2005. Modeling biogeochemistry and forest management practices for assessing GHGs mitigation strategies in forested wetlands. *Environmental Modeling & Assessment*, 10: 43-53.

Li, C. S. 2007. Quantifying greenhouse gas emissions from soils: Scientific basis and modeling approach. *Soil Science and Plant Nutrition*, 53: 344-352.

Zhang, Y., Li, C. S., Trettin, C. C., Li, H., & Sun, G. 2002. An integrated model of soil, hydrology, and vegetation for carbon dynamics in wetland ecosystems. *Global Biogeochemical Cycles*, 16: 17.

## **Landscape Models**

Kirwan, M. L., & Murray, A. B. 2008. Ecological and morphological response of brackish tidal marshland to the next century of sea level rise: Westham Island, British Columbia. *Global and Planetary Change*, 60: 471-486.

Reyes, E., Day, J. W., Lara-Dominguez, A. L., Sanchez-Gil, P., Lomeli, D. Z., & Yanez-Arancibia, A. 2004. Assessing coastal management plans using watershed spatial models for the Mississippi delta, USA, and the Usamacinta-Grijalva delta, Mexico. *Ocean & Coastal Management*, 47: 693-708.

Reyes, E., White, M. L., Martin, J. F., Kemp, G. P., Day, J. W., & Aravamuthan, V. 2000. Landscape modeling of coastal habitat change in the Mississippi Delta. *Ecology*, 81: 2331-2349.

## **Mineral/Geomorphology Models**

D'Alpaos, A., Lanzoni, S., Marani, M., & Rinaldo, A. 2007. Landscape evolution in tidal embayments: Modeling the interplay of erosion, sedimentation, and vegetation dynamics. *Journal of Geophysical Research-Earth Surface*, 112: 17.

French, J. 2006. Tidal marsh sedimentation and resilience to environmental change: Exploratory modelling of tidal, sea-level and sediment supply forcing in predominantly allochthonous systems. *Marine Geology*, 235: 119-136.

Kirwan, M., & Temmerman, S. 2009. Coastal marsh response to historical and future sea-level acceleration. *Quaternary Science Reviews*, 28: 1801-1808.

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Mariotti, G., & Fagherazzi, S. A numerical model for the coupled long-term evolution of salt marshes and tidal flats. *Journal of Geophysical Research-Earth Surface*, 115: 15.

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Temmerman, S., Bouma, T. J., Govers, G., Wang, Z. B., De Vries, M. B., & Herman, P. M. J. 2005. Impact of vegetation on flow routing and sedimentation patterns: Three-dimensional modeling for a tidal marsh. *Journal of Geophysical Research-Earth Surface*, 110: 18.

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## **Organic-Focused Models**

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## **Wetland Ecosystem Dynamics/Processes**

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Cloern, J. E. 1996. Phytoplankton bloom dynamics in coastal ecosystems: A review with some general lessons from sustained investigation of San Francisco Bay, California. *Reviews of Geophysics*, 34: 127-168.

- Craft, C., Megonigal, P., Broome, S., Stevenson, J., Freese, R., Cornell, J., Zheng, L., & Sacco, J. 2003. The pace of ecosystem development of constructed *Spartina alterniflora* marshes. *Ecological Applications*, 13: 1417-1432.
- Culberson, S. 2001. The interaction of physical and biological determinants producing vegetation zonation in tidal marshes of the San Francisco Bay/Delta, California USA. Ph.D., University of California, Davis.
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## **Wetland Ecosystem Service Valuation/Economics**

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## **Wetland GHG Fluxes**

Abril, G., & Iversen, N. 2002. Methane dynamics in a shallow non-tidal estuary (Randers Fjord, Denmark). *Marine Ecology-Progress Series*, 230: 171-181.

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Hendriks, D. M. D., Dolman, A. J., van der Molen, M. K., & van Huissteden, J. 2008. A compact and stable eddy covariance set-up for methane measurements using off-axis integrated cavity output spectroscopy. *Atmospheric Chemistry and Physics*, 8: 431-443.

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## **Wetland Law and Land Use Policy**

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## **Wetland Biogeochemistry**

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