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**Director of Ecology, The Water Institute of the Gulf**

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**Education**

**PhD in Marine Science, 1998**  
University of Western Australia

**MSc in Marine Botany, 1994**  
University of Western Australia

**BSc Hons in Botany, 1990**  
University of Western Australia

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**Research Interests:**

- Provision of best available science and data synthesis to support restoration planning and decision making
  - Assessing ecosystem conditions to enhance restoration or adaptation to coastal change, including development of ecosystem health indicators
  - Developing and implementing approaches for preservation or restoration of natural ecosystems to increase resilience of vulnerable coastal communities
  - Linking ecosystem functions to community needs and uses of ecosystem services
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**Professional Experience:**

<b>The Water Institute of the Gulf</b> <ul style="list-style-type: none"><li>• <i>Director of Coastal Ecology</i></li></ul>	<b>2014-present</b>
<b>Secretariat of the Pacific Regional Environment Programme (Samoa)</b> <ul style="list-style-type: none"><li>• <i>Coastal and Marine Adviser</i></li></ul>	<b>2011-2014</b>
<b>University of Maryland Center for Environmental Science (MD, USA)</b> <ul style="list-style-type: none"><li>• <i>Program Manager, Integration and Application Network</i></li></ul>	<b>2009-2011</b>
<b>University of Maryland Center for Environmental Science (MD, USA)</b> <ul style="list-style-type: none"><li>• <i>Science Integrator, Integration and Application Network</i></li></ul>	<b>2003-2009</b>
<b>Smithsonian Tropical Research Institute (Bocas del Toro, Panama)</b> <ul style="list-style-type: none"><li>• <i>Mellon Post-doctoral Fellow</i></li></ul>	<b>2002-2003</b>
<b>University of Maryland Center for Environmental Science (MD, USA)</b>	<b>2001-2002</b>

- *Post-doctoral Scholar, Integration and Application Network*

University of Queensland – (Queensland, Australia)

2000-2001

- *Post-doctoral Research Fellow, Marine Botany*

**PREVIOUS PROJECTS (2011-2019):**

- 2019.** US Endowment for Forestry and Communities. Science based decision support tool for restoration and conservation project selection.
- 2019.** NOAA - DARRP. Marine mammal expert elicitation and Barataria basin marine mammal monitoring.
- 2019.** Coastal Protection and Restoration Authority. Task Order 64. Ecosystem model runs for mid-Barataria scenarios (HSIs)
- 2019.** Shell. Restoring nature-based resilience to protect critical infrastructure and communities in lower Plaquemines Parish.
- 2018.** Coastal Protection and Restoration Authority. Task Order 45.4 BA-34-2 Post-construction monitoring 2019
- 2018.** Coastal Protection and Restoration Authority. Task Order 50.2. Adaptive management of ecological restoration in Louisiana.
- 2018.** Coastal Protection and Restoration Authority. Task Order 52. Expert panel concerning ecosystem model use in the mid-Barataria environmental impact assessment.
- 2016.** National Fish and Wildlife Foundation. The natural classroom: Sustainable restoration and monitoring of Bayou Grosse Tete in Rosedale, through community participation and curricula engagement by the adjacent Starship Program.
- 2015.** Louisiana Seagrass – Synthesis project. Building community resilience through ecosystem based adaptation.
- 2015.** NOAA Saltonstall-Kennedy. Linking Blue Crab Abundance, Growth and Mortality to Marsh Fragmentation and Submerged Aquatic Vegetation Cover.
- 2015.** National Academy of Science – Gulf Research Program. Assessing long term linkages between development of oil and gas industry related coastal infrastructure, human wellbeing and ecosystem function in coastal Louisiana.
- 2013.** International Climate Initiative. Ecosystem based adaptation for sustainability of Pacific Island Peoples, in Fiji, Vanuatu and Solomon Islands.
- 2013.** United Nations Environment Programme (UNEP). Watershed cost benefit analysis of climate change adaptation options, and development of monitoring and evaluation assessment for adaptation effectiveness in Lami Town, Fiji.
- 2013.** Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) Updating wetlands inventories for Pacific island nations.
- 2013.** DSEWPaC. Support to development of ‘State of Conservation in the Pacific’ report. (AUS\$50,000)
- 2013.** DSEWPaC. Assistance in organizing and facilitating the UN Regular Process for Global Marine Assessment in the southwest Pacific.
- 2012.** AusAID (ICCAI). Ecosystem based Adaptation to climate change, implementation, capacity building and knowledge transfer.
- 2012.** UNEP. Case study analysis of Ecosystem based Management in the Pacific.
- 2012.** European Union (BEST). Marine spatial planning for Pacific island nations.
- 2011.** USAID. Ecosystem based Adaptation in the Choiseul Province, Solomon Islands.
- 2011.** UNEP. Cost benefit analysis of Adaptation options for Lami Town, Fiji.

**Theses:**

- **Carruthers, T.J.B. 1998.** [Ecology of \*Ruppia megacarpa\* Mason in Wilson Inlet: a perspective on survival in a highly variable aquatic environment](#). PhD thesis. Marine Biology: University of Western Australia. 95 pp.
- **Carruthers, T.J.B. 1994.** Leaf production, canopy structure and light climate of a density manipulated *Amphibolis griffithii* meadow. MSc thesis. Marine Botany: University of Western Australia. 63 pp.
- **Carruthers, T.J.B. 1990.** *Phenotypic plasticity of the Chlorophyte macroalga Caulerpa racemosa Advisor*. Honours thesis. Botany Department: University of Western Australia. 148 pp.

**Science newsletters and brochures and booklets ([www.ian.umces.edu](http://www.ian.umces.edu) and [www.sprep.org](http://www.sprep.org)):**

**2012.** A vision for effective and streamlined reporting in the Pacific. SPREP brochure. 4pp.

**2012.** Samoa 2012 Environmental Outlook: developing a vision for the next 50 years. Samoa MNRE brochure 4pp.

**2011.** War in the Pacific National Historical Park. Connecting Guam's Natural Resources with its Culture and History. US NPS Natural Resources Park Brochure. 2pp

**2010.** People and Oceans: managing marine areas for human well-being. Conservation International Marine Management Area Science Program. 4pp.

**2010.** Living with the Sea: local efforts buffer effects of global change. Conservation International Marine Management Area Science Program. 4pp.

**2010.** Groundwater resources at Kaloko-honokohau National Historical Park. National Park Service, Inventory and Monitoring, Pacific Island Network. 2pp.

**2010.** National Park of American Samoa: a place of spectacular beauty on our doorstep. National Park Service, Inventory and Monitoring, Pacific Island Network. 2pp.

**2010.** Bridging the gap between culture and conservation. Conservation International Marine Management Area Science Program. 4pp.

**2010.** Economic incentives motivate human behavior change. Conservation International Marine Management Area Science Program. 4pp.

**2010.** Adapting to climate change; maintaining ecosystem services for human well-being in the Verde Island Passage, Philippines. Conservation International. 12pp.

**2010.** Conceptual diagrams: tools for science communication. Integration and Application Network. 4pp.

**2009.** Hawai'i Volcanoes National Park: Kama'aina care about the land. Inventory and monitoring program, Pacific Island Network, National Park Service. 2pp.

**2008.** South Caucasus region transboundary report card (English and Russian). USAID. 4pp.

**2008.** Upstream land use effects water quality in Maryland's Coastal Bays. Maryland Coastal Bays Program. 4pp.

2007. A cultural context for preserving Hawaii's diverse ecological landscape. Inventory and monitoring program, Pacific Island Network, National Park Service. 4pp.
2007. Morro Bay: working together for a healthy ecosystem. Published in association with SLOCEA, California. 4pp.
2007. Measuring the health of our national parks: Rock Creek Park. Published by National Park Service, Inventory and Monitoring, National Capital Region. 4pp.
2007. Biological indicators enhance water quality monitoring in Maryland's Coastal Bays. March. Published by the Maryland Coastal Bays Program.
2007. [Restore vs retreat: securing ecosystem services provided by coastal Louisiana](#). Published by Coastal Louisiana Ecosystem Assessment & Restoration (CLEAR). 4pp.
2007. The role of benthic communities in the health of Maryland's Coastal Bays. February Published by University of Maryland Cooperative Extension, Wye Mills Research and Education Center. 4pp.
2006. [Enhancing landscape integrity in Coastal Louisiana: Water, sediment and ecosystems](#). July Published by Coastal Louisiana Ecosystem Assessment & Restoration (CLEAR). 4pp.
2005. Reducing flood damage in Coastal Louisiana: Communities, culture and commerce. November Published by Coastal Louisiana Ecosystem Assessment & Restoration (CLEAR). 4pp.
2005. Bay grass restoration in Chesapeake Bay. August Published by the Integration Application Network, Maryland Department of Natural Resources and the SAV restoration workgroup. 4pp.
2005. Creating a framework for reporting ecological conditions: National Capital Region of the National Park Service. August Published by Integration and Application Network and National Parks Service. 4pp.

## PUBLICATION LIST

### Refereed journal articles, books and book chapters:

1. Hijuelos, A.C., Dijkstra, J.T., Carruthers, T.J.B., Heynert, K., Reed, D.J., and van Wesenbeeck, B.K. 2019. Linking management planning for coastal wetlands to potential future wave attenuation under a range of relative sea-level rise scenarios. *PloS one* 14 (5): e0216695
2. Glaser, M., Breckwoldt, A., Carruthers, T.J.B., Forbes, D.L., Costanzo, S., Kelsey, H., Ramachandran, R., and Stead, S. 2018. Towards a framework to support coastal change governance in small islands. *Environmental Conservation* 45 (3): 227-237
3. Stagg, C.L., Baustian, M.M., Perry, C.L., Carruthers, T.J.B., and Hall, C.T. 2018. Direct and indirect controls on organic matter decomposition in four coastal wetland communities along a landscape salinity gradient. *Journal of Ecology* 106 (2): 655-670
4. Baustian, M.M., Stagg, C.L., Pery, C.L., Moss, L.C., Carruthers, T.J.B., and Allison, M. 2017. Relationships between salinity and short-term soil carbon accumulation rates from marsh types across a landscape in the Mississippi River Delta. *Wetlands* doi:10.1007/s13157-016-0871-3
5. Jerabek, A., Darnell, K.M., Pellerin, C., and Carruthers, T.J.B. 2017. Use of marsh edge and submerged aquatic vegetation as habitat by fish and crustaceans in degrading southern Louisiana coastal marshes. *Southeastern Geographer* 57 (3): 212-230

6. Darnell, K.M., Carruthers, T.J.B., Biber, P., Georgiou, I.Y., Michot, T.C., Boustany, R.G. 2017. Spatial and temporal patterns in *Thalassia testudinum* leaf tissue nutrients at the Chandeleur Islands, Louisiana, USA. *Estuaries and Coasts* 40 (5): 1288-1300
7. Baustian, M.M., Stagg, C.L., Pery, C.L., Moss, L.C., Carruthers, T.J.B., and Allison, M. 2017. Relationships between salinity and short-term soil carbon accumulation rates from marsh types across a landscape in the Mississippi River Delta. *Wetlands* doi:10.1007/s13157-016-0871-3
8. Jupiter, S.D., Jenkins, A.P., Long, W.J.L., Maxwell, S.L., Carruthers, T.J.B., Hodge, K., Govan, H., Tamelander, J., Watson, J.E.M. 2014. Principles for integrated island management in the tropical Pacific. *Pacific Conservation Biology* 20 (2): 193-205
9. Fertig, B., Carruthers, T.J.B., Dennison, W.C., Meyer, K.A., and Williams, M.R. 2014. Isotopic values in oysters indicate elemental sources constrained by multiple gradients. *Ecological Indicators* 46:101-109
10. Hills, T., Carruthers, T.J.B., Chape, S., and Donohoe, P. 2013. A social and ecological imperative for ecosystem-based adaptation to climate change in the Pacific islands. *Sustainability Science*. doi 10.1007/s11625-013-0217-5
11. Fertig BM, O'Neil JM, Beckert KA, Cain CJ, Needham DM, Carruthers TJB, Dennison WC. 2013. Elucidating terrestrial nutrient sources to a coastal lagoon, Chincoteague Bay, Maryland, USA. *Estuarine Coastal and Shelf Science* 116:1-10
12. Fertig BM, Carruthers TJB, Dennison WC. 2013. Oyster deltaN-15 as a Bioindicator of Potential Wastewater and Poultry Farming Impacts and Degraded Water Quality in a Subestuary of Chesapeake Bay. *Journal of Coastal Research* 30(5): 881-892
13. Schupp CA, Winn NT, Pearl TL, Kumer JP, Carruthers TJB, Zimmerman CS. 2013. Restoration of overwash processes creates piping plover (*Charadrius melodus*) habitat on a barrier island (Assateague Island, Maryland). *Estuarine Coastal Shelf Science* 116:11-20
14. Carruthers TJB, Beckert K, Schupp CA, Saxby TA, Kumer JP, Thomas JES B., Dennison WC, Williams M, Fisher T, Zimmerman CS. 2013. Improving management of a mid-Atlantic coastal barrier island through assessment of habitat condition. *Estuar. Coast. Shelf Sci.* 116:74-86
15. Murray L, Gurbisz C, Gibson D, Woerner J, Carruthers T. 2012 Collaborative partnernships help bridge the gap between science and education. *EOS, Transactions American Geophysical Union*. Vol 93 (49) 510 doi:10.1029/2012EO490003
16. Carruthers TJB, Carter SL, Lookingbill TR, Florkowski LN, Hawkey JM, Dennison WC. 2012. A Habitat-Based Framework for Communicating Natural Resource Condition. *ISRN Ecology* 2012:13pp doi:10.5402/2012/38489
17. Kendrick GA, Waycott M, Carruthers TJB, Cambridge MLH R., Krauss SL, Lavery PS, Les DH, Lowe RJ, Mascaro i Vidal O, Ooi JLS, Orth RJ, Rivers DO, Ruiz-Montoya L, Sinclair EA, Statton J, van Dijk JK, Verduin JJ. 2012. The Central Role of Dispersal in the Maintenance and Persistence of Seagrass Populations. *Bioscience* 62(1):56-65
18. Newton A, Carruthers TJB, Icely J. 2012. The coastal syndromes and hotspots on the coast. *Estuarine Coastal Shelf Science* 96:39-47
19. Short FT, Polidoro B, Livingstone SR, Carpenter KE, Bandeira S, Bujang JS, Calumpong HP, Carruthers TJB, Coles RG, Dennison WC, Erftemeijer PLA, Fortes MD, Freeman AS, Jagtap TG, Kamal AHM, Kendrick GA, Kenworthy WJ, La Nafie YA, Nasution IM, Orth RJ, Prathep A, Sanciangco JC, van Tussenbroek B, Vergara SG, Waycott M and Zieman JC. 2011. Extinction risk assessment of the worlds seagrass species. *Biological Conservvation* 144(7):1961-1971
20. Longstaff, B.J., Carruthers, T.J.B., Dennison, W.C., Lookingbill, T.R., Hawkey, J.M., Thomas, J.E., Wicks, E.C. and Woerner, J.L. (eds). 2010. Integrating and applying science: a practical handbook for effective coastal ecosystem assessment. 244 pp. IANPress.

21. Fertig, B.M., Carruthers, T.J.B., Dennison, W.C., Fertig, E.J. and Altabet, M.A. 2010. Eastern oyster (*Crassostrea virginica*)  $\delta\text{N}^{15}$  as a bioindicator of nitrogen sources: observations and modeling. *Marine Pollution Bulletin* 60: 1288-1298
22. Orth, R.J., Williams, M.R., Marion, S.R., Wilcox, D.J., Carruthers, T.J.B, Moore, K.A., Kemp, W.M., Dennison, W.C., Rybicki, N., Bergstrom, P. and Batiuk, R.A. 2010. Long-term trends in submersed aquatic vegetation (SAV) in Chesapeake Bay, USA, related to water quality. *Estuaries and Coasts* 33: 1144-1163
23. Fertig, B.M., Carruthers, T.J.B., Dennison, W.C., Jones, A.B., Pantus, F. Longstaff, B. 2009. Oyster and macroalgae bioindicators detect elevated  $\delta\text{N}^{15}$  in Maryland's Coastal Bays. *Estuaries and Coasts* 32: 733-786
24. Dennison, W.C., Thomas, J.E., Cain, C.J., Carruthers, T.J.B., Hall, M.R., Jessien, R.V., Wazniak, C.E. and Wilson, D.E. (eds). 2009. Shifting Sands: environmental and cultural change in Maryland's Coastal Bays. 396pp.
25. Waycott, M., Duarte, C.M., Carruthers, T.J.B., Orth, R.J., Dennison, W.C., Olyarnike, S., Calladine, A., Fourqurean, J.W., Heck, K.L.Jr., Hughes, A.R., Kendrick, G.A., Kenworthy, W.J., Short, F.T. and Williams, S.L. 2009. Accelerating loss of seagrasses across the globe threatens coastal ecosystems. *Proceedings of the National Academy of Sciences* 106: 12377-12381
26. Ksiazek K, McGlathery K, Reynolds L, Schwartzchild A, Wilkerson C, Carruthers TJB, Gurbitsz C, Woerner JL, Murray L. 2009. Learning about Coastal Trends: what is the story with seagrasses... and how does it affect me? *Science Activities* 46(3):27-31
27. Duarte, C.M., Dennison, W.C., Orth, R.J. and Carruthers, T.J.B. 2008. The relative charisma of coastal ecosystems: coral reefs, mangrove forests, salt marshes and seagrass meadows. *Estuaries and Coasts* 31:233-238
28. Heck, K.L., Carruthers, T.J.B., Duarte, C.M., Hughes, A.R., Kendrick, G., Orth, R.J. and Williams, S.L. 2008. Trophic transfers from seagrass meadows subsidize diverse marine and terrestrial consumers. *Ecosystems* 11: 1198-1210
29. Carruthers, T.J.B., Dennison, W.C., Kendrick, G.A., Waycott, M., Walker, D.I. and Cambridge, M.L. 2007. Seagrasses of south-western Australia: a conceptual synthesis of the world's most diverse and extensive seagrass meadows. *Journal of Experimental Marine Biology and Ecology*: 350: 21-45
30. Carter, S.L., Mora-Bourgeois, G., Lookingbill, T.R., Carruthers, T.J.B. and Dennison, W.C. 2007. The Challenge of communicating monitoring results to effect change. *The George Wright Forum* 24: 48-58
31. Dennison, W.C., Lookingbill, T.R., Carruthers, T.J.B., Hawkey, J.M. and Carter, S.L. 2007. An eye opening approach to integrated environmental assessments. *Frontiers in Ecology* 5: 307-314
32. Grinham, A., Carruthers, T.J.B., Fisher, P., Udy, J. and Dennison, W.C. 2007. Accurately measuring the abundance of benthic microalgae (BMA) in spatially variable habitats. *Limnology and Oceanography methods* 5: 119-125
33. Short, F., Carruthers, T.J.B., Dennison, W.C. and Waycott, M. 2007. Global seagrass distribution and diversity: a bioregional model. *Journal of Experimental Marine Biology and Ecology* 350: 3-20
34. Wazniak, C.E., Hall, M.R., Carruthers, T.J.B. and Sturgis, B. 2007. Assessing eutrophication in a shallow lagoon: evaluating status and establishing trends in Maryland Coastal Bays. *Ecological Applications* 17: S64-S78
35. Orth, R.J., Carruthers, T.J.B., Dennison, W.C., Duarte, C.M., Fourqurean, J.W., Heck, K.L., Hughes, A.R., Kendrick, G.A., Kenworthy, W.J., Olyarnik, S., Short, F.T., Waycott, M. and Williams, S.L. 2006. A global contemporary crisis for seagrass ecosystems. *Bioscience* 56: 987-996

36. Thomas, J.E., Saxby, T.A., Jones, A.B., Carruthers, T.J.B., Abal, E.G. and Dennison, W.C. 2006. Communicating Science Effectively: A practical handbook for integrating visual elements. IWA Press, U.K. 136pp.
37. Carruthers, T.J.B., Barnes, P.A.G., Jacome, G.E. and Fourqurean, J.W. 2005. Lagoon scale processes in a coastally influenced Caribbean system: implications for the seagrass *Thalassia testudinum*. *Caribbean Journal of Science* 41(3), 441-455.
38. Carruthers, T.J.B., van Tussenbroek, B.I. and Dennison, W.C. 2005. Influence of submarine springs and wastewater on nutrient dynamics of Caribbean seagrass meadows. *Estuarine Coastal and Shelf Science* 64:191-199.
39. Smith, M., Carruthers, T. and Bunn, S. 2005. Aquatic Habitats. In: Abal, E.G., Bunn, S. and Dennison, W.C. (Eds). Healthy Waterways Healthy Catchments: Making the connection in South East Queensland, Australia. Moreton Bay and Catchments Partnership, Brisbane 240p.
40. Dennison, W.C., Carruthers, T.J.B., Thomas, J.E. & Glibert, P.M. 2004 A comparison of issues and management approaches in Moreton Bay, Australia and Chesapeake Bay, USA. In: *Developments in Ecosystems volume 1: Wetlands Ecosystems in Asia: Function and Management* (MH Wong, ed). pp. 3-25.
41. Carruthers T.J.B., Dennison W.C., Longstaff B.J., Waycott M., Abal E.G., McKenzie L.J., Long W.J.L. 2002. Seagrass habitats of north eastern Australia: models of key processes and controls. *Bulletin of Marine Science* 71(3): 1153–1169.
42. Mellors, J., Marsh, H.M., Carruthers, T.J.B. and Waycott, M. 2002. Do seagrasses influence nutrient and sediment structure in tropical intertidal environments? *Bulletin of Marine Science* 71(3):1215-1226.
43. Carruthers, T.J.B., Longstaff, B. J., Dennison, W.C., Abal, E.G., and Aioi, K. 2001. [Measurement of light penetration in relation to seagrass](#). In: Short, F and Coles, R (Eds) *Global seagrass methods*. Elsevier. Chapter 19. pp 369-392.
44. Carruthers T.J.B. 1999. Within canopy growth strategies of the two seagrass species *Amphibolis griffithii* (J. Black) den Hartog and *Amphibolis antarctica* (Labillardiere) Sonder & Ascherson ex Ascherson. *Proceedings of the 1996 Rottnest Island Marine Biological Workshop*.pp 41-50
45. Carruthers T.J.B. and D.I. Walker. 1999. Sensitivity of transects across a depth gradient for measuring changes in aerial coverage and abundance of *Ruppia megacarpa* Mason. *Aquatic Botany*.65:281-292
46. Carruthers T.J.B., Walker D.I. and G.A. Kendrick. 1999. Abundance of *Ruppia megacarpa* Mason in a seasonally variable estuary. *Estuarine Coastal and Shelf Science* 48: 497-509
47. Carruthers T.J.B. and D.I. Walker. 1997. Light climate and energy flow in the seagrass canopy of *Amphibolis griffithii* (J.M. Black) den Hartog. *Oecologia* 109:335-341
48. Walker D.I., T.J.B. Carruthers, P.F. Morrison and A.J. McComb. 1996. Experimental manipulation of canopy density in a temperate seagrass (*Amphibolis griffithii* [Black, Den hartog]) meadow: effect on sediment. *Seagrass Biology: proceedings of an international workshop, Rottnest Island, Western Australia 25-29 Jan 1996*. pp 117-122
49. Carruthers T.J.B., D.I. Walker and J.M. Huisman. 1993. An investigation of the taxonomy of two forms of *Caulerpa* from Perth, Western Australia, with a description of a new species. *Botanica Marina*: 36: 589-596

#### **REPORTS:**

- Carruthers, T., Jung, H., McInnis, A., and Bregman, M. 2019. Hysteresis – aquatic habitat suitability index calculations for mid-Barataria. CPRA TO 64. 64pp

- Carruthers, T., Jung, H., Sable, S., and McInnis, A. 2019. Habitat Suitability Index calculations for mid-Barataria scenarios. CPRA TO 64. 59pp.
- Carruthers, T., Jung, H., Bregman, M., and McInnis, A. 2019. Hysteresis – detailed oyster habitat suitability index results for mid-Barataria EIS. CPRA TO 64. 179pp
- Moss, L., Bienn, H., McInnis, A., Vingiello, M., Carruthers, T., and Dausman, A. 2019. A gulf wide synthesis; stressors, ecosystem services, and human well-being indicators. CPRA TO 62. 57pp.
- The Water Institute of the Gulf. 2019. Louisiana Adaptive Management Status and Improvement Report: Vision and Recommendations. Prepared for the Coastal Protection and Restoration Authority (CPRA) and the Louisiana Trustee Implementation Group (LA TIG), funded by the LA TIG. Task Order 50.2, Contract No. 2503-12-58 Baton Rouge, LA (202 pp).
- Ainsworth, C., Brady, D., and Rose, K. 2019. Potential use of existing ecological models for the mid-Barataria diversion EIS. CPRA. CPRA TO52.2. 45pp
- Carruthers, T., Vu, H., Moss, L., Bienn, H., McInnis, A., Vingiello, M., Hemmerling, S., Baustian, M., Ramachandirane, C., and Wold, A. 2019. Science-based decision support for restoration and conservation planning in the northern Gulf of Mexico. USEFC. 131pp
- SPREP 2018. Planning for ecosystem-based adaptation in Port Vila, Vanuatu. A synthesis report by the Secretariat of the Pacific Regional Environment Programme, Apia, Samoa. 16 pp.
- SPREP 2018. Planning for ecosystem-based adaptation in Taveuni, Fiji. A synthesis report by the Secretariat of the Pacific Regional Environment Programme, Apia, Samoa. 16 pp
- SPREP 2018. Planning for ecosystem-based adaptation in Honiara, Solomon Islands. A synthesis report by the Secretariat of the Pacific Regional Environment Programme, Apia, Samoa. 16 pp.
- Carruthers, T.J.B., Hemmerling, S.A., Barra, M., Saxby, T.A., Moss, L. 2017. “This is your shield this is your estuary.” Building community and coastal resilience to a changing Louisiana coastline through restoration of key ecosystem functions. WISR-002-2017. The Water Institute of the Gulf. 48pp.
- Hemmerling, S.A., Carruthers, T.J.B., Hijuelos, A.C., Riley, A.C., and Bienn, H.C. 2016. Trends in oils and gas infrastructure, ecosystem function, and socioeconomic wellbeing in coastal Louisiana. WISR-001-2016. The Water Institute of the Gulf. 20pp.
- Iacovino, C., Donohoe, P., Carruthers, T. and Chape, S. 2013. Ecosystem-based Adaptation and climate change vulnerability for Choiseul Province, Solomon Islands – a synthesis report. SPREP, Apia, Samoa, 14 pp.
- Rao NS, Carruthers TJB, Anderson P, Sivo L, Saxby TA, Durbin, T, Jungblut V, Hills T and Chape S. 2012. A comparative analysis of ecosystem-based adaptation and engineering options for Lami Town, Fiji. UNEP Technical Report, 28pp
- Lookingbill T, Bentsen CN, Carruthers TJB, Costanzo SD, Dennison WC, Doherty C, Lucier S, Madron J, Poppell E and Saxby TA. 2012. Colonial National Historical Park natural resource condition assessment. USNPS Technical Report, 156pp
- Thomas JE, Calzarette J, Campbell JP, Carruthers TJB, Cohen D, Dennison WC, Donaldson L, Landsman A, Lehman M, Nortrup M and Wenschhof E. 2011. Antietam National Battlefield Natural Resource Condition Assessment. USNPS Technical Report,, 160pp
- Thomas JE, Campbell JP, Carruthers TJB, Dennison WC, Gorsira B, Lehman M and Nortrup M. 2011. Manassas National Battlefield Park Natural Resource Condition Assessment. USNPS Technical Report,, 144pp
- Thomas JE, Banasik A, Campbell JP, Carruthers TJB, Dennison WC, Lehman M and Nortrup M. 2011. Monocacy National Battlefield Natural Resource Condition Assessment. IAN Press, Cambridge, MD, 148pp



- Carruthers TJB, Beckert KA, Dennison WC, Thomas JE, Saxby TA, Williams MR, Fisher T, Kumer J, Schupp C, Sturgis B, and Zimmerman C. 2011. Assateague Island National Seashore Natural Resource Condition Assessment. IAN Press, Cambridge, MD, 182pp
- Carruthers, T., Carter, S., Florkowski, L.N., Runde, J. and Dennison, B. 2009. Rock Creek Park Natural Resource Condition Assessment. National Park Service, Natural Resource Report NPS/NCRN/NRR-2009/109
- Beckert, K., Fertig, B., O'Neil, J., Carruthers, T.J., Wazniak, C., Sturgis, B., Hall, M., Jones, A.B. and Dennison, W.C. 2008. Fine scale pattern of water quality in three regions of Maryland's Coastal Bays: assessing nitrogen source in relation to land use. Report to Maryland Coastal Bays Program.
- Fertig, B., Carruthers, T.J. and Dennison, W.C. 2007. Linking Monie Bay watershed land use to nitrogen stable isotopes in tissues of the native eastern oyster, *Crassostrea virginica*. Report to National Estuarine Research Reserve.
- Banisak, A and 33 others. 2006. A conceptual basis for natural resource monitoring. Report to National Park Service, Inventory and Monitoring, National Capital Region Network.
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