

NSW Blue Carbon Generation from existing mangroves and saltmarsh

ANZLIC Metadata Element	Fields
Title	NSW Blue Carbon Generation from existing mangroves and saltmarsh
File Identifier	
Abstract	<p><i>Generation</i> is defined as the capacity for existing mangrove forests and saltmarshes to contribute to carbon additionality from living biomass, dead organic material, and soil organic carbon. Several studies indicate that carbon addition is greater in mangrove forests than saltmarshes (Chmura et al., 2003; Pendleton et al., 2012), and this is likely due to greater height and biomass of mangroves compared to herbaceous saltmarsh vegetation. In NSW where both ecosystems occur, mangroves forests typically occupy lower positions within the tidal frame than saltmarshes, and their distribution can be defined based on elevation and hydroperiod (Hughes et al., 2019). Additionally, preservation of soil organic carbon within the contemporary range of mangroves has been found to be greater within fine grained sediments of fluvial origin than sandy coastal barrier sediments.</p> <p>Chmura, G.L., Anisfeld, S.C., Cahoon, D.R., and Lynch, J.C. (2003). Global carbon sequestration in tidal, saline wetland soils. <i>Global Biogeochem. Cycles</i> 17, 1111.</p> <p>Pendleton, L., Donato, D.C., Murray, B.C., Crooks, S., Jenkins, W.A., Sifleet, S., Craft, C., Fourqurean, J.W., Kauffman, J.B., Marbà, N., Magonigal, P., Pidgeon, E., Herr, D., Gordon, D., and Baldera, A. (2012). Estimating Global “Blue Carbon” Emissions from Conversion and Degradation of Vegetated Coastal Ecosystems. <i>PLoS ONE</i> 7, e43542.</p>
Purpose	<p>This project – A Coastal Wetland Restoration First Pass Prioritisation for Blue Carbon and Co-benefits in NSW was funded by the NSW Government under Initiative 2 of the Marine Estate Management Strategy 2018 – 2028 (MEMS): ‘delivering healthy coastal habitats with sustainable use and development’ (NSW Government, 2018). This output will help achieve the NSW Government’s broad vision for the NSW marine estate: A healthy coast and sea, managed for the greatest wellbeing of the community, now and into the future. It will also inform delivery of other MEMS actions and initiatives, in particular, the development of estuary specific marine vegetation strategies and prioritisation and undertaking of on ground coastal wetland rehabilitation projects that could involve the restoration of natural hydrology.</p>

Contact	fisheries.data@dpi.nsw.gov.au
Jurisdictions	
Geographic Bounding Box	West: 207748.97 North: 6884024.73 South: 5844796.40 East: 560702.25
Lineage	Lal, K.K. and Rogers, K. 2021. A Coastal Wetland Restoration First Pass Prioritisation for Blue Carbon and Co-benefits in NSW. Report. NSW DPI Fisheries. Parent datasets: SRTM Digital Elevation Modal (DEM), New South Wales Coastal Quaternary Geology
Extent	West: 207748.97 North: 6884024.73 South: 5844796.40 East: 560702.25
Distribution Format	Vector, Raster
Keyword	Blue Carbon, Estuaries, Mangrove, Saltmarsh, Generation
Maintenance And Update Frequency	Regarded as Complete, no updates planned
Use Limitation	Creative Commons
Legal Constraints	None
Resolution	
DQ Completeness	
Reference System	GDA_1994_MGA_Zone_56
Topic Category	inlandWaters
DateType Date Created	20/04/2020
DateType Date Published	
DateType Date Last Revised	