



Manning River Entrance Project: Preliminary Environmental Investigations for a Permanently Open Entrance

6 September 2022, 2nd PIANC Asia Pacific Conference, Melbourne

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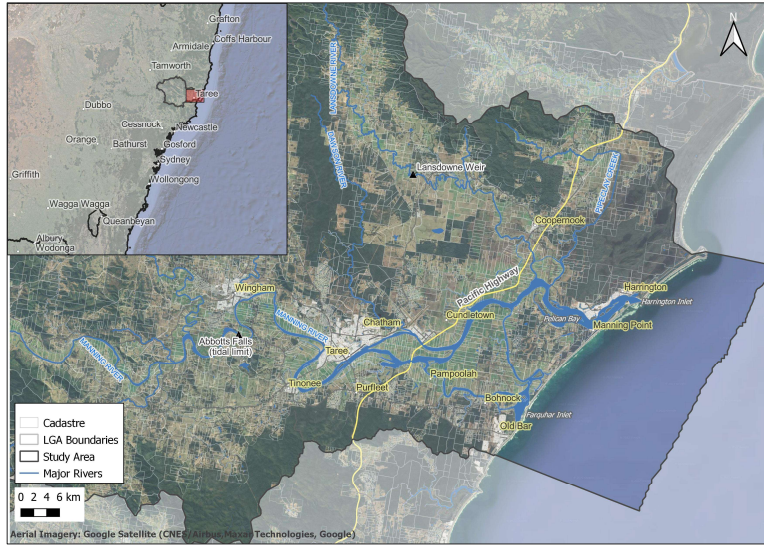
Content

- Introduction to the Manning River entrance project
- Scope and purpose of the PEI
- Manning River estuary – key processes
- Potential impacts of the project
- Key outcomes and recommendations for the project



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The Manning River (Djarrii Bila)



- Traditional Owners are the Biripi
- Dual delta system with entrances at Farquhar Inlet & at Harrington/Manning Point
- Tidal limit at Abbot Falls near Wingham
- Both entrances subject to shoaling, which limits navigational access & is a safety issue
- Impacts commercial fishing, oyster growing & recreational boating
- Perceived impact on development & regional economy – low SEIFA index
- Desire for a permanent entrance



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The Manning River (Djarrii Bila)

South S

- Originally completed in
- The wall was fascine fencing
- Extended in e
- Backed up with
- 2015-2017: sa
- 2015-2017: sa

(1150 m long)
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 approx. 43% of
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Source: Bluecoast (2021)



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Manning River Entrance Project

Primary Objectives:



Provide **reliable and safe marine access** between the Manning River and coastal waters



Enhance the utilisation and diversity of activities undertaken in the Manning River and the adjacent open coast, supporting the **growth and diversification of regional economies**

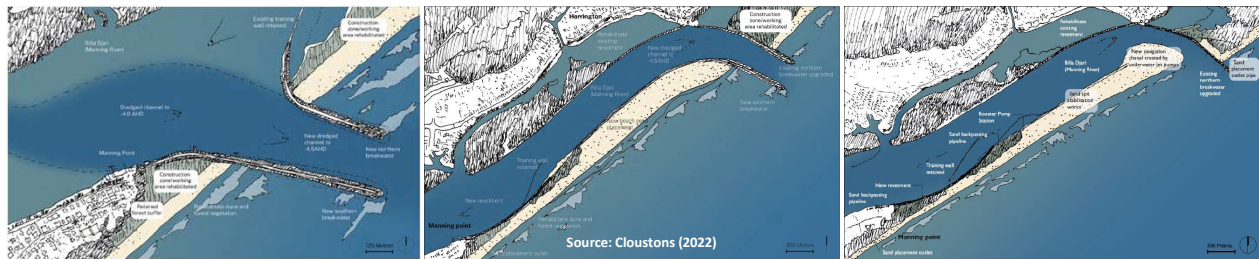


Seek to improve **estuarine water quality** conditions that facilitate commercial, recreational and environmental uses of the waterway



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Manning River Entrance Project



Fully trained southern entrance

Fully trained northern entrance

Sand transfer system

Entrance training options

Sand management option



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Scope and Purpose of the PEI

Preliminary Environmental Investigation (PEI):

- Standard TfNSW requirement that plays a key role in decision-making
- A required attachment for the Strategic Business Case
- Identify potential environmental, social and planning issues and opportunities for the proposal
- Integrate environmental, economic and social outcomes into decision-making
- Apply the principles of Ecologically Sustainable Development (ESD).



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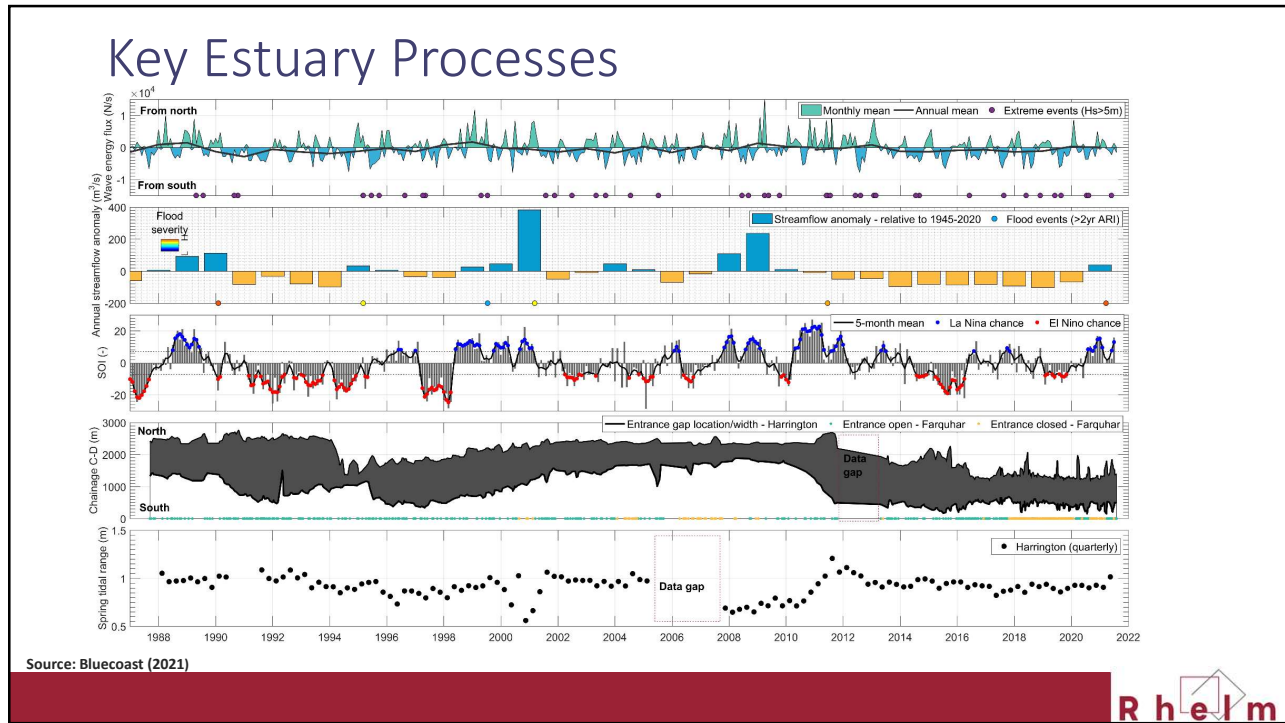
Scope and Purpose of the PEI

More detailed investigations incorporated in the scope of works:

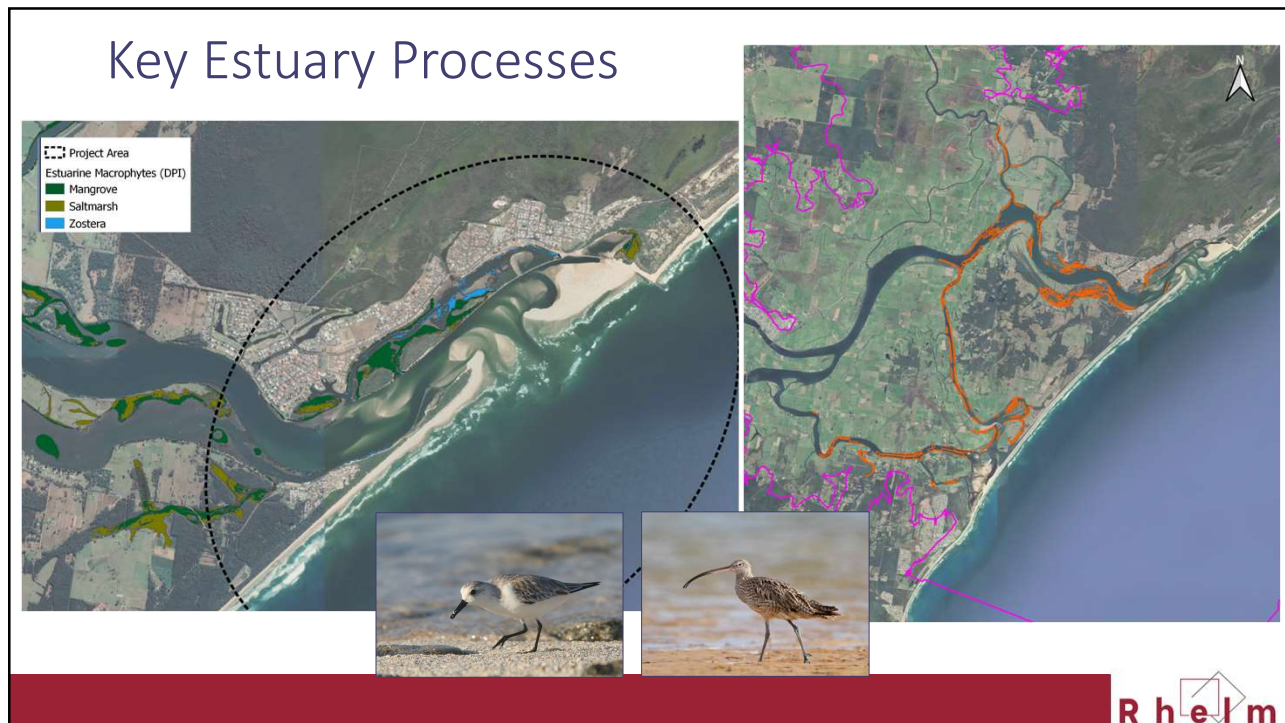
- Coastal studies
- Numerical modelling of tidal processes
- Flood modelling
- Monitoring of boating activity at Harrington and Crowdy Head
- Boating demand study
- Aboriginal cultural heritage mapping plus field survey
- Terrestrial and aquatic biodiversity, incl. limited field studies
- Climate change risk screening and sustainability pathways.



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Key Estuary Processes

- Cultural mapping workshop and field survey
- Aboriginal culture is a living thing **tangible** and **intangible** heritage
- Cultural values
- **Key resource and totem species** include mullet, pipis, oysters, mud crabs, kangaroos, wallabies, edible plants.
- **Opportunities** for Traditional Owners.



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Potential Impacts – Benefits of the project

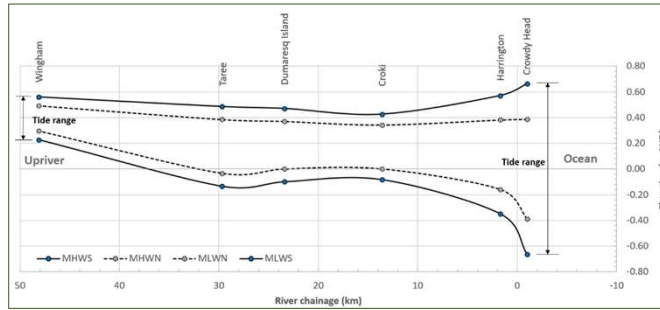
Potential benefits of the proposal identified by stakeholders:

- Improved **navigational access & safety** for vessels travelling between the river and open coastal waters
- Improved response times for **emergency responders** (Marine Rescue)
- Access for greater range of vessels, increase in **boating activity**
- Resultant **economic benefits**, employment opportunities, tourism
- Improved **water quality** for range of users including oyster growers
- Opportunity for mitigation of **coastal & flood hazards**.

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Potential Impacts – Tidal Processes



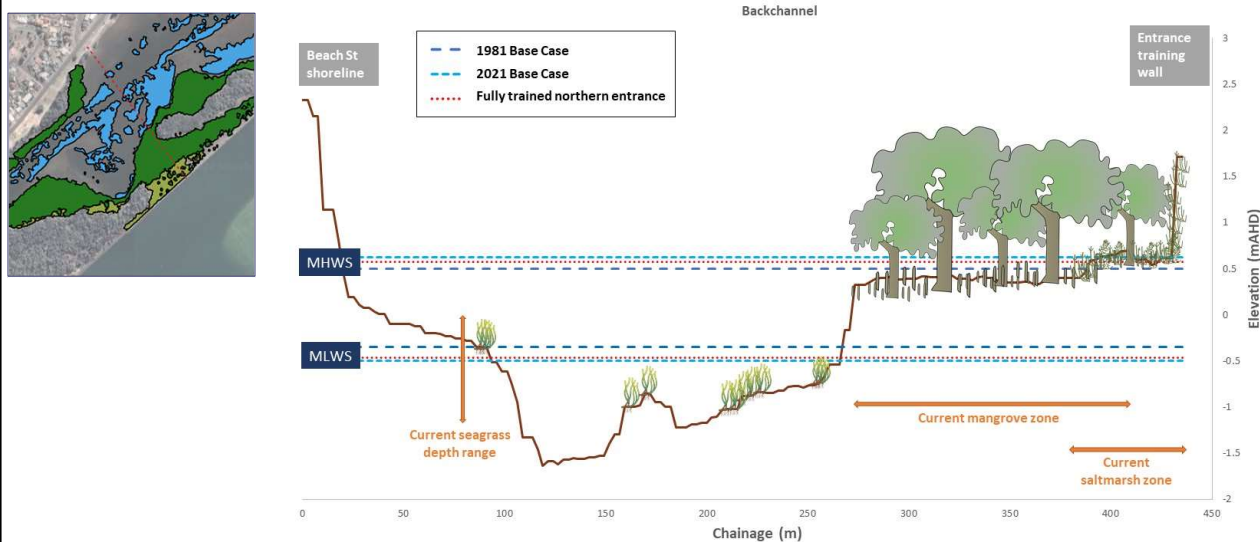
Criteria	Fully trained northern entrance	Fully trained southern entrance	Sand transfer system
Change in tidal planes (relative to envelope of variation over last 35 years)	Within envelope, but increased over base case (existing) Taree MLWS below envelope	Within envelope, but increased over base case (existing) Taree MLWS below envelope	Within envelope Smaller changes to spring tidal range
Change in tidal prism	+85 to +66% change	+15 to +77% change	-26 to +9% change
No change in flood/ebb dominance for any option.			

Source: Bluecoast (2022)



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Potential Impacts – Adverse impacts



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Key Outcomes and Recommendations

- Project objectives – be clear what the project is seeking to achieve
- Managing stakeholder expectations – the PEI and business case are just the start
- Early, detailed investigations for the PEI – long history of the project, high level of complexity & high rates of natural variability = high level of uncertainty on impacts
- Connecting with Country Framework – benefits of early and meaningful engagement with Traditional Owners and Knowledge Holders
- Non-standard approaches to EIA, mitigation & environmental management – e.g. potential for offsets at the catchment-scale with project partners that could achieve a better outcome for the estuary as a whole.



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Acknowledgements

- Andrew Dooley, MIDO / TfNSW – Project Director
- Mark Woods, TfNSW – Snr. Sustainability and Environment Officer
- Louise Collier, Rhelm – Project Director
- Leo Drynan, Rhelm – Project Manager, Business Case Lead, Socio-economics
- Evan Watterson, Bluecoast Consulting Engineers – Coastal Engineering Lead

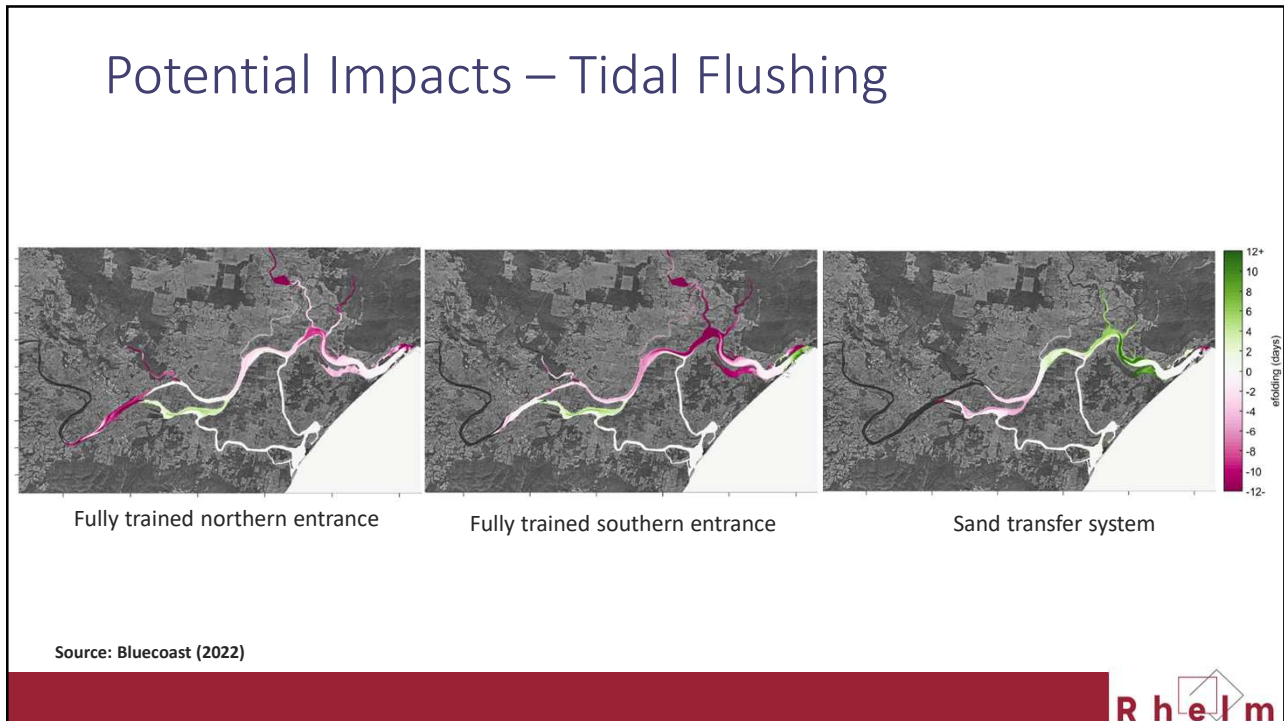
<https://roads-waterways.transport.nsw.gov.au/maritime/projects/manning-river-entrance/index.html>



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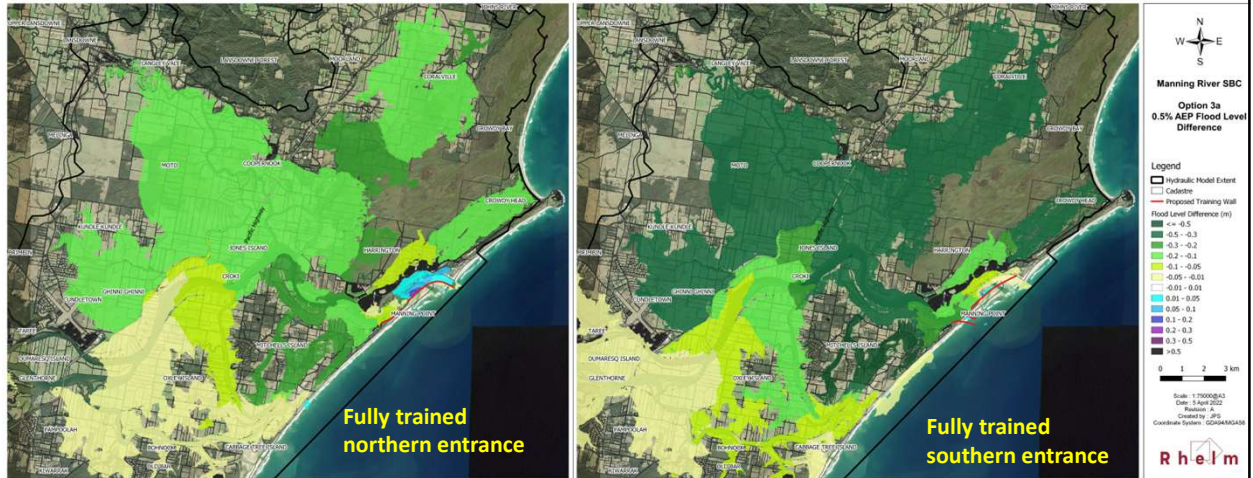


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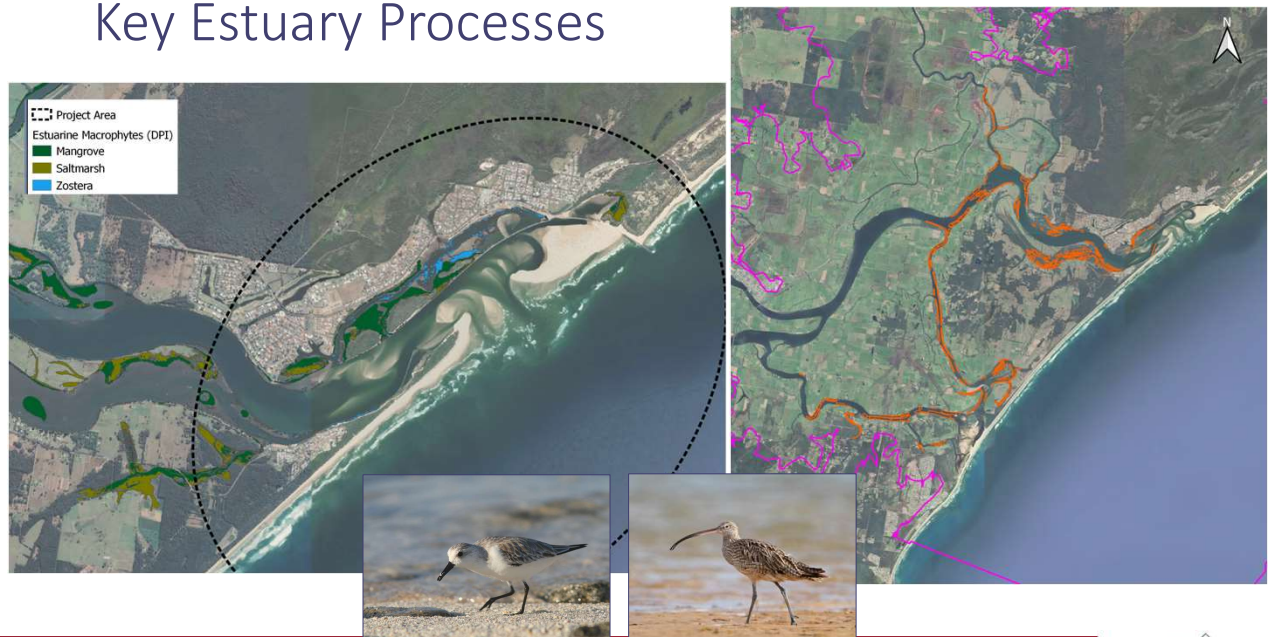
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Potential Impacts – Flooding



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Key Estuary Processes



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Manning River Entrance Project

Supporting Objectives:



Enhance the understanding and awareness of the unique environmental values, coastal hazards and hydrology of the Manning River, its entrances and the active and passive use opportunities it affords



Seek to improve environmental values and protect public and private property from natural hazards influenced by entrance conditions



Value and respect Aboriginal cultural knowledge and practices in both the management of the estuary and its ongoing use by Aboriginal people.