Tidal Treasures of the Tamar:
Community Saltmarsh Monitoring Program

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Outline

- State-wide saltmarsh conservation project
- Tamar River estuary environment
- Tamar saltmarshes
- Tamar Saltmarsh Monitoring Program
  - Methodology
  - Findings
  - Future directions
Aerial imagery of NRM North saltmarshes
Output: Image files

Baseline mapping and inventory development
Output: GIS dataset

Reporting of mapping methodology and results
Output: Technical report

**Review for community-based monitoring**
Output: Review paper

**Engagement with key stakeholders**
*Ongoing*

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**Stage 1: Preliminary Research**

- Atlas of NRM North saltmarshes
  Output: Maps booklet

- Saltmarsh conceptual diagrams
  Output: Conceptual diagrams

- Saltmarsh monitoring toolkit
  Output: Guide booklet

- Vascular plants identification field guide
  Output: Plant identity kit

**Stage 2: Community Engagement**

- Atlas of Coastal Saltmarsh Wetlands in Northern Tasmania
- A Guide to the Plants of Tasmanian Saltmarsh Wetlands
Saltmarsh: 86 ha (6%)

Spartina marshes: 437 ha (28%)

Freshwater wetlands: 760 ha (50%)

Cleared wetlands in agricultural land: 246 ha (16%)
Why care about the Tamar saltmarshes?

- Supports Human Use
- Birdlife
- Plant
- Crabs and Snails
- Insects and Spiders
- Fish Nursery
- Education and Research
- Upland Vegetation
- Benefits Nearby Habitats
- Tidal Creeks
- Coastal Buffer
- Carbon Capture
Tamar Saltmarsh Monitoring Program

- Began in 2016
- **Aim:** engage citizen scientists to monitor Tamar saltmarshes and collect data on their biodiversity and threats
- Collect data to inform management
Site Selection

- Long Tom Reef
- Kelso Bay
- West Arm
- Middle Arm
- Middle Point
- Swan Point
Survey Methodology

- Recruiting volunteers
  - Community members, CVA, Green Army
  - Survey training days
Survey Methodology

- Follow state-wide data collection methods for consistency
  - Birds, plants, human impacts
- Photopoint monitoring
- Vegetation transect monitoring
- Handy GPS – pinpoint weed incursions/impacts for follow-up
Results – Birds

- Total of 2152 individuals representing 24 species
- Diversity: 2 – 11 species per survey
- Abundance: 2 – 492 individuals per survey

Black swan, Pied oystercatcher, pacific gull, Masked lapwing, Little pied cormorant, white-faced heron
Results – Plants

- **56 species** across all sites
- Diversity ranged from 12 – 32 species per site
- Most common species:

  - Coast speargrass *Austrostipa stipoides*
  - Coast paperbark *Melaleuca ericifolia*
  - Sea rush *Juncus kraussii*
  - Beaded glasswort *Sarcocornia quinqueflora*
  - Creeping brookweed *Samolus repens*
Results – Engagement

- **50 volunteers engaged** (some have participated in up to 11 surveys)
- Community involvement
  - Expert knowledge of local field naturalists
On-ground Outcomes

- Weed management, marine debris clean-ups
- Awareness among local councils
- Interpretive signage proposal
Where to from here?

- Tamar Management Plan
- Contact with land managers
- Expand to other areas along northern Tasmanian coastline (e.g. Bellingham)
- Continue to build community capacity
Acknowledgements

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Questions?