

# Fish and invertebrate faunas in Kimberley estuaries

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Photo Courtesy of M. Travers



Government of **Western Australia**  
Department of **Fisheries**

# Project outline

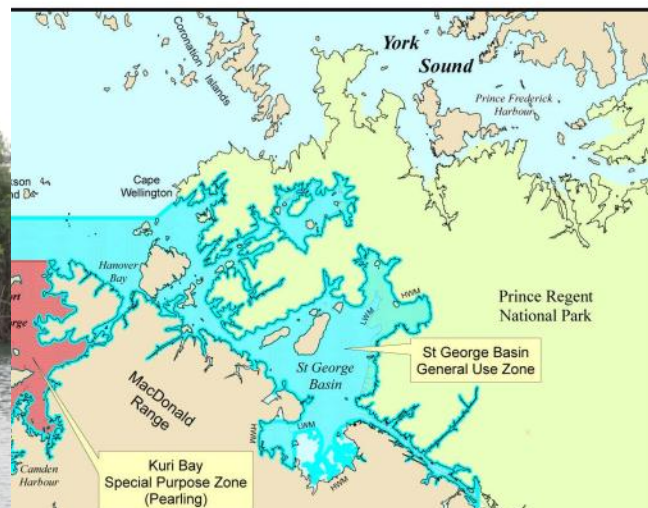
- Proposed 3 year research project on the fish and invertebrate faunas of select Kimberley estuaries.
- Undertaken with WA DoF as part of their monitoring program of aquatic resources in Camden Sound Marine Park (CSMP).
- Major objectives:
  - Characterise the major spatial and temporal (wet vs dry seasons; tidal cycles) differences in fish, benthic invertebrate and zooplankton faunas in select estuaries.
  - Examine the age, growth and reproductive biology of key fish species in these estuaries.
  - Work with traditional owners to produce an integrated synthesis of knowledge for these estuarine fauna.
  - Devise reliable and cost-effective programs for monitoring these faunal groups into the future.
- Proposed start: Aug/Sept 2013.

# CAMDEN SOUND

## LEGEND

- Limit of Coastal Waters of the Commonwealth
- DEC managed lands
- Marine park boundary and management zones**
- Marine park boundary \*
- Sanctuary zone
- Special purpose zone (whale and dolphins)
- Special purpose zone (wildlife)
- Special purpose zone (pearling)
- General use zone

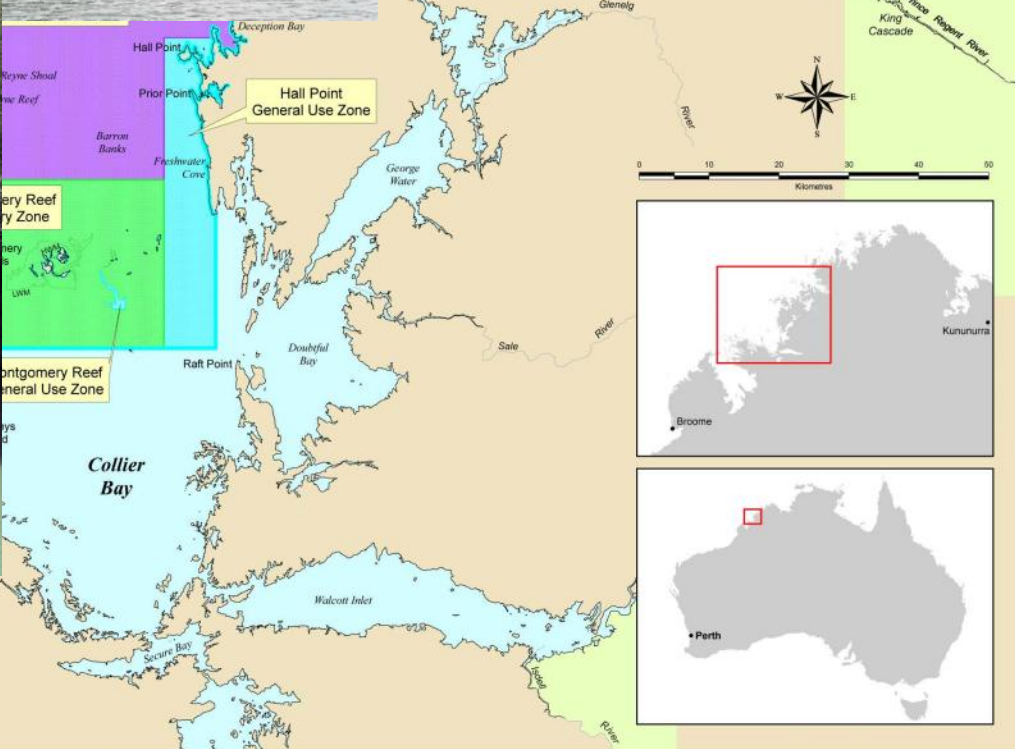
\* Where adjacent the mainland and islands, the marine park will initially be defined as seaward of the Outer Limit of an Indigenous Land Use Agreement (ILUA) with the traditional owners in compliance with the ILUA, where possible, be extended to the high water mark (HWM).



Courtesy of M. Travers



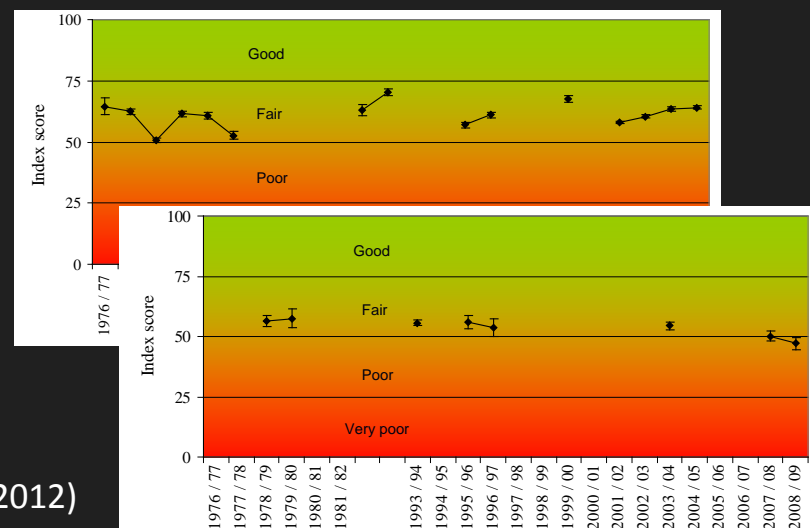
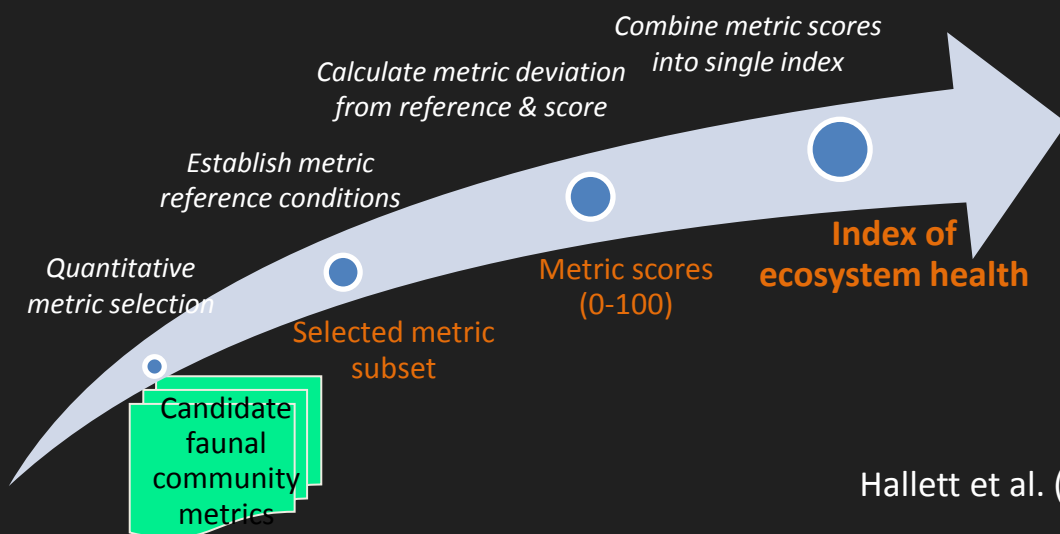
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# Knowledge-building & linkages

Additionally, this project will enable:

- Comparison of north-west vs south-west WA estuarine faunas, promoting State-wide understanding.
  - Murdoch's CFFAER has >30 yrs experience and historical data in the latter region.
  - NW presents the 'polar opposite' to the SW in many respects, e.g. tidal range, estuarine geomorphology, projected climate change impacts, human impacts.
- Rare chance to quantify & track estuarine health status from pristine state.



Hallett et al. (2012)

# Knowledge-building & linkages

- **Integration with other research projects, e.g.**
  - Other fish/invertebrate work in adjacent marine waters (e.g. DoF CSMP monitoring) or freshwaters (e.g. Murdoch's Freshwater Fish Group, WA Museum).
  - Benthic habitat mapping projects.
  - Ecological connectivity & processes examining catchment to coast pathways.
  - Collating and integrating indigenous knowledge.
- **Greater collaborative partnerships among research, management and community sectors.**