21st International RIVER SYMPOSIUM

Northern Australia Environmental Resources Hub
National Environmental Science Programme

TRaCK Tropical Rivers and Coastal Knowledge

THE UNIVERSITY OF WESTERN AUSTRALIA

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CHARLES DARWIN UNIVERSITY

Northern Territory Government

Talking together, working together, walking together: Collaboration & environmental flows research

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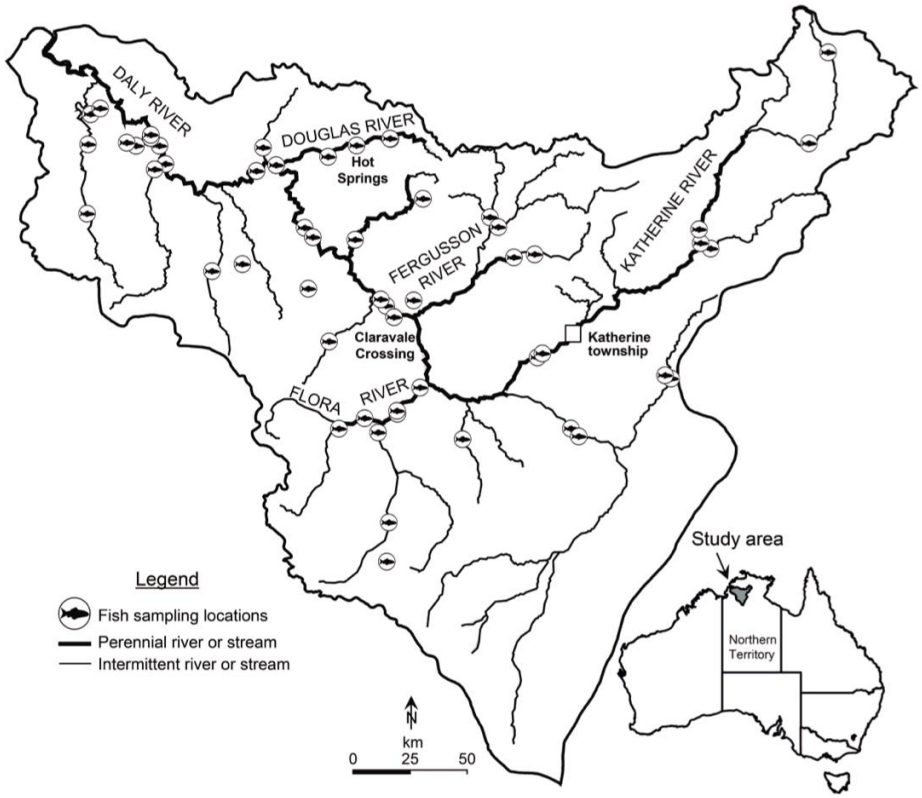
Daly River, Northern Territory



- 250 km south of Darwin
- 50,000 km^2 catchment
- "Iconic" river
  - Tourism
  - Conservation significance
  - Recreational fishing
  - Agriculture

Aboriginal people and the Daly River

- Aboriginal people
  - Own 30% of catchment
  - Are 30% of population
  - Wagiman are largest Indigenous land owners
  - 10% of the catchment (5,000 km^2)

- Strong connection with land and the river

- Knowledge of aquatic systems
  - Not well documented or recognised

Daly River Fish and Flows Project

- **Project Aims**:
  1. Predict how changes in river flows will affect fish
  2. Document indigenous knowledge and cultural significance of fish

- **Project partners**:
  - CSIRO, CDU, GU, Uni of Washington, NT Government, Monash University
  - Wagiman & Wardaman Traditional Owners

- **Timeline**
  - 2004-05 Project planning
  - 2006- Collected fish twice a year (June and Sept.)

September 2018:
Reflect on the collaboration after 13 years

Indigenous people are respectfully advised that this video contains photographs of people who have since passed away.

Their families' have granted permission to use these images.

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CSIRO

TRaCK
Tropical Rivers and Coastal Knowledge

National Environmental Research Program

NORTHERN AUSTRALIA hub

Northern Australia Environmental Resources Hub
National Environmental Science Programme

Australian Government
Land & Water Australia

Australian Government
National Water Commission

Natural Heritage Trust
Helping Communities Helping Australia
An Australian Government Initiative

Research to support sustainable development in northern Australia

Summary

- Two-way knowledge sharing
- Ongoing collaboration
- Clear communication & benefits
- Long-term view

Research benefits of collaboration: this project

- Building capacity of researchers
  - New approach for most ecological researchers
- Local knowledge
  - –where to work and when?
- Knowledge integration
  - Chan et al (2012) River Research and Management
  - Jackson *et al.* (2014) Ecology and Society

Broader research benefits from this project

- Influence on other northern programs
  - TRaCK, NERP, NESP
- Indigenous engagement strategies and protocols
- Over 100 projects in NT, WA, Qld
- Over 300 researchers

Community Development Approach – Focus on Wagiman people/Not paper

- Empowerment
- Pride
- Leadership
- Aspirations of the Traditional owners
- Ownership and Control
- Transfer of Indigenous knowledge
- Maintain cultural Traditions
- Training
- Education
- Employment
- Have a political voice
- Back on country
- Spiritual well being
- Appropriateness

Extended timeline

- 2004 Project planning
- 2005 Secure funding and continue planning
- Collect fish twice a year (June and September)
  - 2006-07 (Land & Water Australia)
  - 2008-10 (CERF Tropical River & Coastal Knowledge)
  - 2011-14 (NERP Northern Australia Hub)
  - 2015- (NESP Northern Australia Hub)
  - >40 researchers involved

- Project steering committee 2006-09
- Wagiman steering committee 2011-
- Review by Mona Liddy (2011)

Benefits of knowledge integration

- **Indigenous knowledge (IK) and scientific knowledge (SK) from Daly congruent**
  - Greater confidence in short term SK study
- **IK from Daly congruent with SK from elsewhere**
  - Greater confidence in extrapolating SK to Daly
- **IK and SK both limited**
  - Need more research
- **Incongruence between knowledge systems**
  - Differences in spatial scale of observation