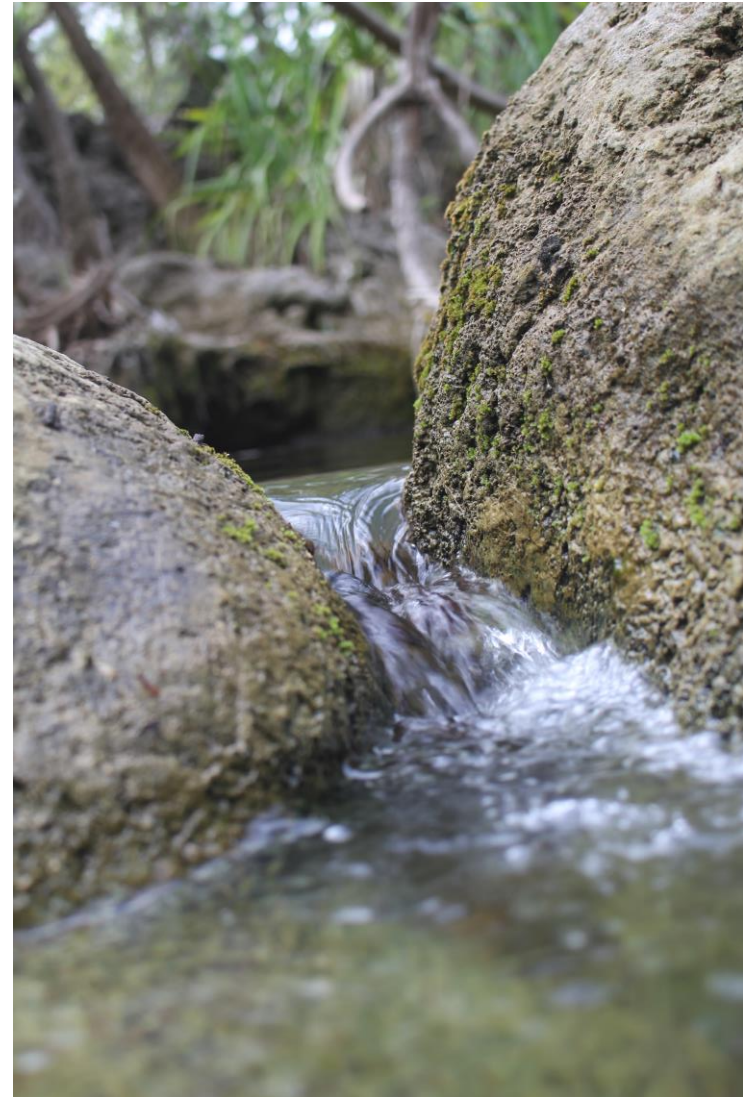


# Environmental services: opportunities for water?

## Presentation overview

- Ingredients for successful PES schemes
- ‘Thought bubble’ for PES diversification: enhanced environmental flows
- How does enhancing environmental flows stack up as a PES opportunity?
- Issues to consider



## Some important PES ingredients

- Understand the 'problem.' Clear purpose / aspirations of beneficiaries reflected in activity design
- Must cause additional outcomes
- Produces results that are measurable, verifiable and reportable
- Credible – verified by an independent Standard or trusted entity
- Cost effective & feasible
- Complimentary / enabling regulatory and policy settings
- Available market and marketability



## Could enhanced environmental (water) flows have potential as a PES activity?



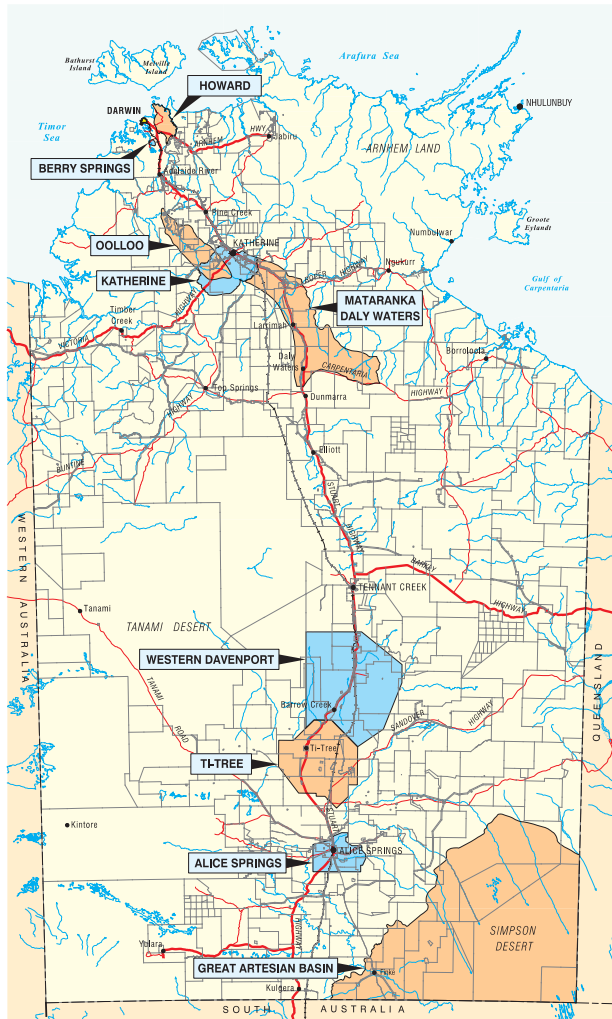
Environmental services created by enhancing natural flows into NT rivers



## An opportunity?

- NT Cabinet recently approved the Strategic Aboriginal Water Reserve (SWR) policy
  - intent is to enable Aboriginal economic participation
  - Aboriginal people can access the water for their own use or chose to trade
- What if Aboriginal people could chose to ‘trade’ their entitlement back into the river as an economic / livelihood opportunity?
- Benefits in enhanced flows and for Aboriginal land and freshwater management

## NT WATER ALLOCATION PLANNING AREAS



### NORTHERN TERRITORY OF AUSTRALIA

Water Allocation Plans aim to ensure the equitable sharing of available water between users, to protect the environment and ensure the long term sustainability of the water resource.

They usually occur in regions where there are competing demands for water, there is risk from water use to significant environmental values or a need to manage the whole system (surface water and groundwater resources) due to their significant inter-connection.

#### Declared Water Allocation Plans

- Katherine:** 2016 - 2019
- Alice Springs:** 2016 - 2026
- Berry Springs:** 2016 - 2026
- Western Davenport:** 2011 - 2021 (under review)

#### Water Allocation Plans in Progress

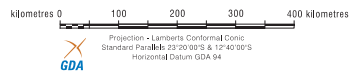
- Howard:** In draft
- Ti Tree:** In draft
- Oolloo:** In draft
- Mataranka Daly Waters:** In draft
- Great Artesian Basin:** In draft



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October 2016  
File: NT\_Water-Allocation-Plans  
Drawing Ref: DENR2016019



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## Water data portal

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### Data Warehouse - Rivers

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Info Map



#### Rivers Data

The Rivers Data Warehouse contains data for over 500 sites across 34 river drainage basins or Surface Water Management Areas.

These sites represent current and historical monitoring data spanning more than 60 years.

The site level contains details about the site and the data available, as well as links to [NR Maps](#) should more spatially contextual information and data be required.

Downloadable data includes (where available):

- River heights (m) - with respect to gauge datum
- River heights (m) - with respect to Australian Height Datum (AHD)
- River flow (cumecs) - for those sites with rating tables
- Instantaneous rainfall (mm)

## How does it stack up against PES ingredients?

Ingredient	“Rating”	Comments
Clear purpose / aspirations of beneficiaries reflected in activity design?	Has potential	May match aspirations for Aboriginal people (maybe more so than horticulture)
Additional ecosystem benefits?	Possible	Do ecosystem benefits accrue with additional flow?
Additional social, cultural and livelihood benefits?	Likely	E.g. If payments channeled into ranger employment; water monitoring etc.
Measurable, verifiable, reportable?	Nails it	Baseline data exists, water extraction and flow readily measurable
Credible – verified by an independent Standard or trusted entity?	Got nothing	Could look internationally – e.g. Plan Vivo. Would need to set up a standard or verification entity
Cost effective & feasible?	Reasonable prospects	MRV potentially low cost
Complimentary / enabling regulatory and policy settings?	Almost	Water Allocation Plans provide the policy framework for licensing, use & trade: could be adapted.
Available market and marketability?	Potential	Potential offset buyers? Enhanced environmental flows sounds like something that could sell...

## Issues to consider

- PES versus regulation for environmental flows
- Threatening to traditional development sectors?
- Value of a water credit: opportunity cost versus value of water trading
- Water policy and planning is already complex: e.g. announced allocations – how could enhanced environmental flows be accommodated?

## Contact

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