

The carrot and stick:
linking Payments for Ecosystem
services (PES) to a water Cap-and-Trade
scheme to secure a transition to
sustainable water and land
management in South Africa's water
stressed catchments.

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Thicket Forum
Sept 2012



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Payments for Ecosystem Services (PES)

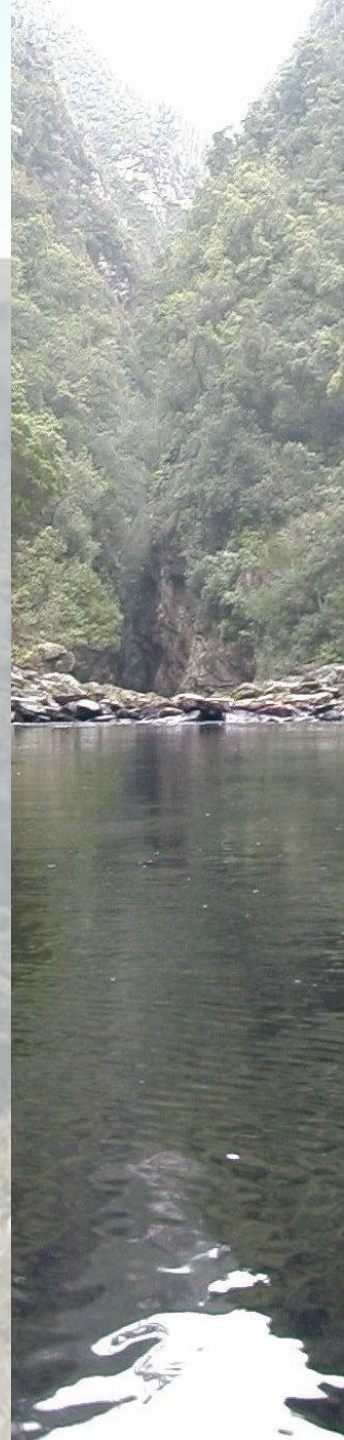
- PES is a rewards scheme to facilitate a shift to sustainable agric., conservation and restoration land uses
- Water users pay or reward farmers to restore or conserve their land to increase water supply
- This payment theoretically covers the opportunity costs of the farmers and makes it financially feasible for them to make the shift
- In SA, PES advocated by conservation agencies but not by DWA – why?

Problems for DWA

- PES seen by DWA as ‘nice to have’ but not ready
- Restoration not seen by DWA as a reliable, competitive and cost effective means of increasing water supply
- PES would benefit rural private land owners who DWA consider to be a problem
- DWA already struggling to implement the NWA & PES seen as just an additional burden & potential loss of revenue for them
- PES only likely to be supported by DWA if it assisted them to implement the Nat. Water Act

Potential for Water Payments

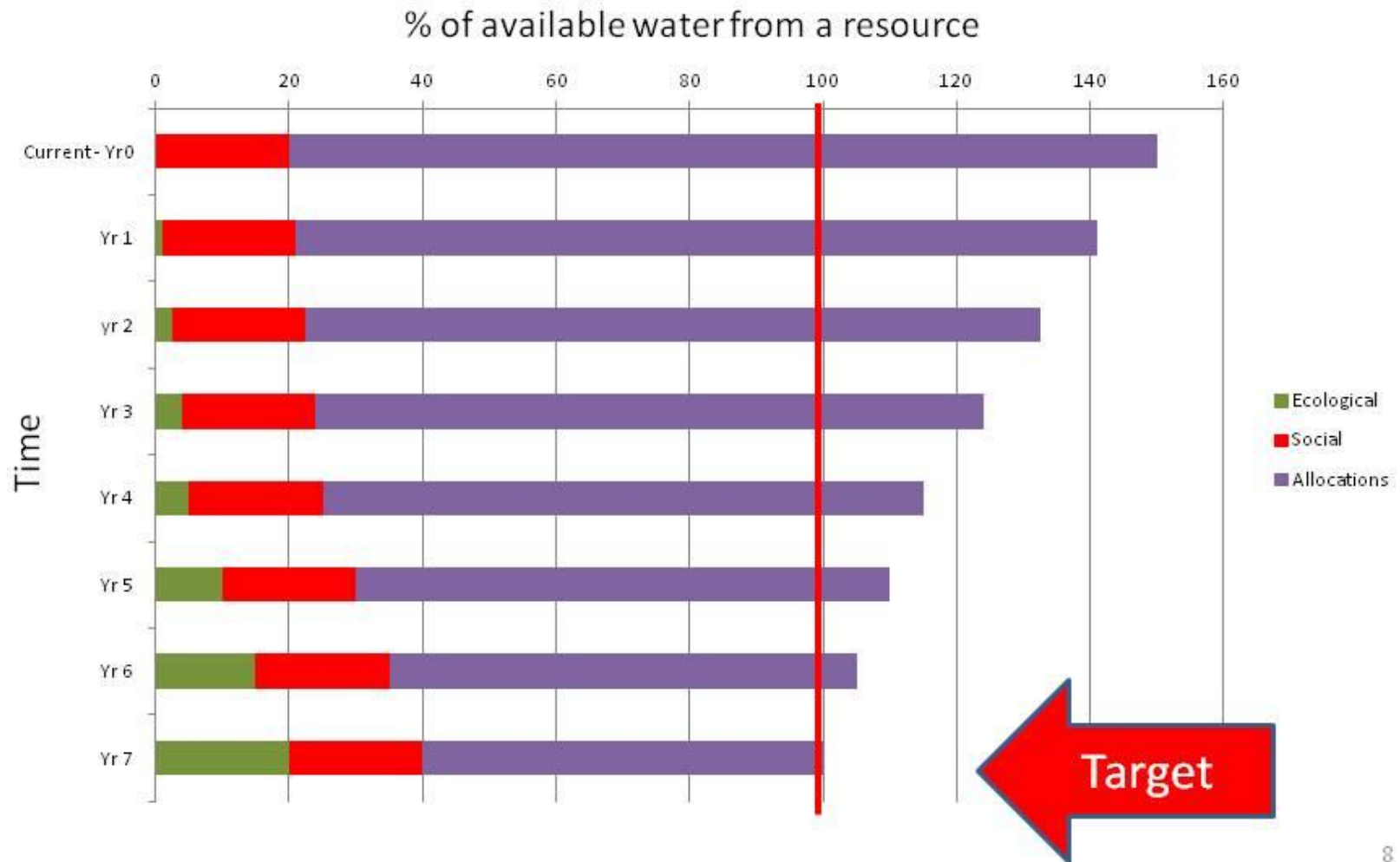
- Ownership of Water – State vs Farmers
- Over-allocation Problems in Stressed catchments
- DWA's responsibilities
- Consequences for PES
 - Restoration & sust. LU can reduce water use and increase baseflow (supply)
 - PES payments have to be based on land use change rather than water supplied
 - Additional payments from trade in water allocations



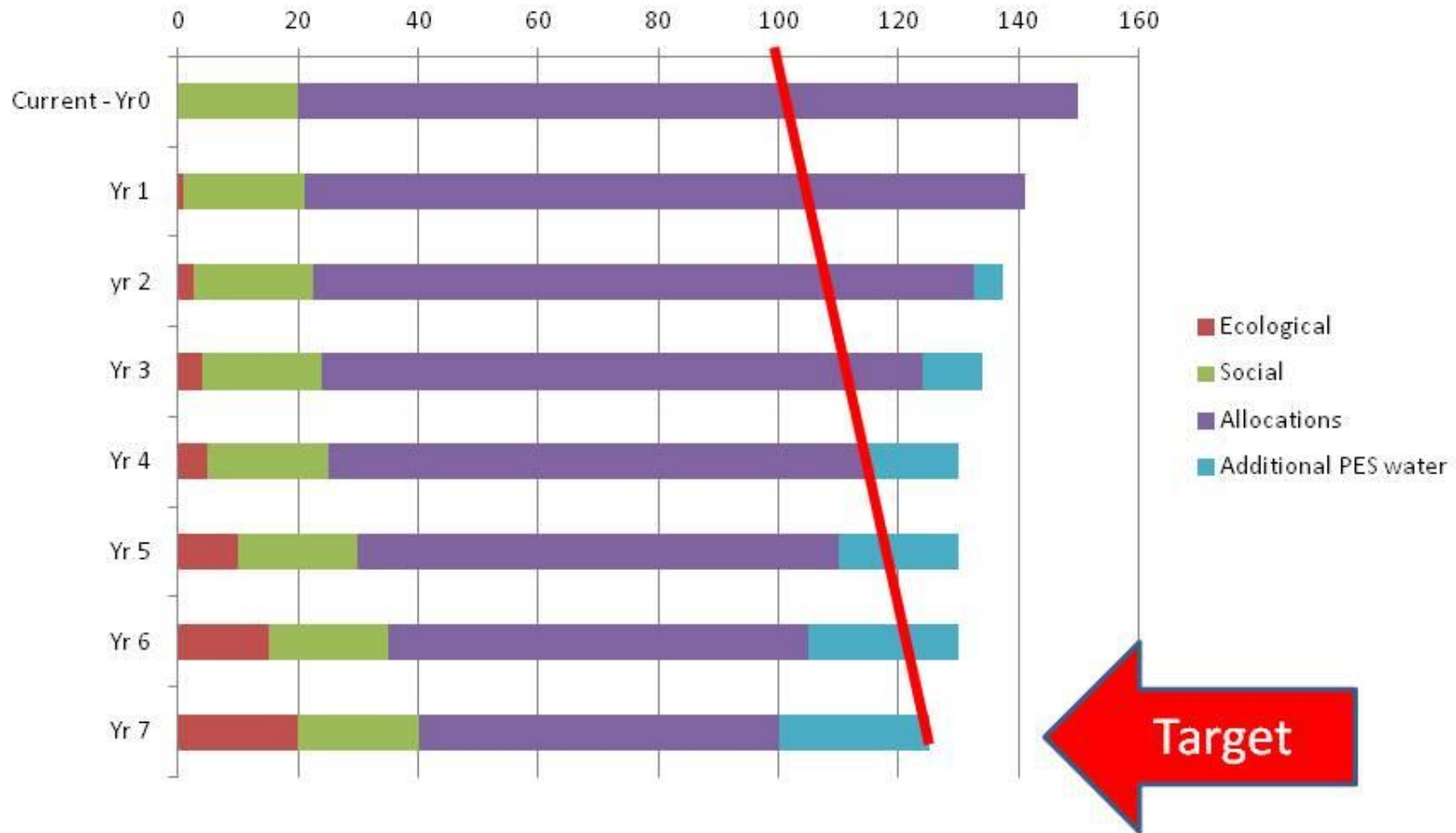
Advocating PES to DWA

- Need to change the way we advocate PES to DWA
- Compliment PES ‘reward’ schemes with regulatory markets for water
 - as means to reduce & redistribute water use allocations and increase base flow (water supply & security)
- Use restoration rewards and trading in water allocations as a temporary ‘financial transition mechanism’ to allow farmers to shift to more sustainable land & water use options
- Need to investigate the potential to use water cap-and-trade auctions combined with restoration auctions to achieve this.

Hypothetical C&T Scenario



Hypothetical C&T Scenario + PES Restoration/Conservation



Cap-and-Trade + Restoration Auctions

- Start with over-allocation
- DWA sets Cap & lowers it over time till target reached
- DWA or CMA creates water auction & allows users to trade their water allocations
- Result: reduction & redistribution of water allocations & increased efficiency of water use
- Addition of restoration & SLU auction = increases water supply and eases the adjustment process
- Creates incentive for private sector investment in restoration & SLU

How does this benefit thicket?

- Creates incentives for much more private sector investment in restoration.
- Increases the financial resources available for investment in ecosystem services
- Encourages more land owners to make their land available for restoration

Thank You



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