Funding and Financing IWM

Webinar presentation to WSAA 14 December 2021



CRC Water Sensitive Cities study – 2020

Key questions addressed

- What policy and regulatory reforms are needed to promote increased investment in IWCM?
- What is the current state of play across the jurisdictions?
- What progress is being made by utilities, governments and regulators to address the barriers?





Impetus for the study

- Relatively low level of investment being made into IWM
 - Small % of the ~ \$6 bill spend on water,
 sewerage and drainage infrastructure
 in Australia in 2019
- Mostly small-scale projects
- This is despite there being a strong economic case for more IWM
 - Public amenity benefits
 - Urban cooling
 - Alternative, cost-effective water source
- What's holding back the investment?



Study approach



policy agencies from multiple states

IWM characteristics



- Projects often cross-cut multiple authorities
- Benefits accrue to multiple parties
- Benefits dispersed across time and space
- Non-market benefits
- IWM not considered a 'monopoly service'

Implications

- ➤ Opaque accountabilities and responsibilities for provision
- ➤ Difficult to recover costs through customer charges
- Sometimes difficult to quantify the benefits in dollar terms



Funding mechanisms

Regulated charges Utility customers and Water and sewerage tariffs Council ratepayers Drainage charges Developer charges Government-funded **Environmental levies Private investment** Developer premiums on lot sales Private water utilities **Market based instruments** Insurance providers Stormwater offsets Philanthropy Water quality offsets Biodiversity credits.

General taxation

Government programs
Government grants
CSO payments
Operating subsidies



Interjurisdictional review

Distinguishing criteria	Observations
Authorising policy environment for IWM	 Generally poor Water utilities don't have legislative responsibility for urban amenity Poorly articulated policy objectives for IWM Responsible parties for delivering IWM outcomes ill defined Stormwater not integrated into general water planning Statutory land planning and water planning not formally linked Some progress being made: Victoria's IWM Forums NSW's Western Sydney Planning Partnership
Weight given by economic regulators to customer preferences	 Variable Victoria's PREMO framework is the most customer-centric NSW (IPART's) discretionary investment framework Customer preferences given less weight (in a formal sense) in other jurisdictions
Degree of acceptance of non-market values by economic regulators	 Some evidence of NMVs being influential in decision making in NSW and VIC Less so in the other states
 Charging & funding mechanisms Environmental levies, drainage charges, etc. Developer charges Stormwater offsets 	Environmental levies - highly variable across jurisdictions Developer charges – common for all jurisdictions, except Sydney and Hunter (NSW). Stormwater offsets – a feature of Victoria's framework. Facilitates development where on-site stormwater quality management is difficult to achieve
Level of competition in the market and pricing policy	 Generally low-levels of competition Competition emerging in NSW (in part facilitated through WICA) Pricing distortions in the market, where developer charges and water and wastewater tariffs do not necessarily reflect the actual cost of servicing a customer at a local level

Identified areas for reform



Government policy

Articulation of outcomes being sought.
Embedding objectives in statutory planning.



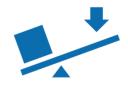
Improved accountability for outcomes

Improved legislative guidance on who is responsible for outcomes.



Increased government investment

Recognition of IWM as a legitimate community service



Regulatory incentives

Incentivise utilities to pursue initiatives that meet customer needs



Remove pricing distortions

Remove pricing distortions that impede efficient entry of private utilities and decentralised solutions.



Improve information systems

Improve information systems for monitoring outcomes, identifying beneficiaries and measuring efficiencies.



Government policy reform

- Determine what outcomes are being sought from water sensitive cities
 - Water quality?
 - Amenity improvement?
 - Public health?
 - Climate resilience through IWM (eg. wastewater recycling)?
- Appropriate metrics
- Informed by community values and preferences
 - High-quality non-market valuation studies
- Create the right 'authorising environment'
 - regulatory orders
 - design standards and codes
 - policy guidelines





Improved accountability for outcomes



- Assignment of responsibilities local government, utilities and others
 - Eg. responsibility for stormwater and drainage
- Better definition of roles
 - policy
 - regulation
 - asset ownership
 - operation and maintenance
- Legislative amendments
- Governance frameworks



Government investment

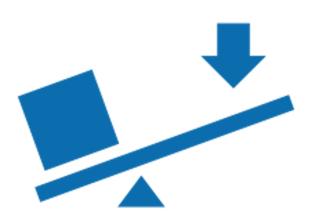
- Government funding for those outcomes that are nonmarket benefits and extend to the broader community
- Addressing of legacy environmental issues
- Payment for outcomes approach:
 - CSO payments made directly to utilities and/or local councils
 - Contestable?
 - Tender auctions?





Regulatory incentives

- Financial reward to utilities for innovation and ambition
- Customers pay through higher tariffs
- PREMO model
 - financial incentive for utilities that demonstrate efficient service delivery
 - outcomes that customers want
- The evidence base for non-market values
 - Raising the bar on quality of non market valuation studies





Address pricing distortions

- Potential for IWM delivery through a competitive market
- Market drivers:
 - Premiums on lot sales
 - Decentralised wastewater treatment
- But retail prices charged by utilities may not reflect actual cost of service
 - Cost averaging across the business
 - Postage stamp pricing
 - Developer charges that are set to over/under recover
- New entrants may not be able compete



Improve information systems

- Identifying socially efficient IWM opportunities
- Identifying beneficiaries
- Monitoring outcomes
- Measuring efficiencies in the water supply system
 - Eg. avoided costs attributable to IWM



