



ACIL Tasman

Research Policy Strategy

# Drainage Funding: Who should pay and how?

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# Purpose

- To determine what funding model would be best for WA
  - Choice of criteria and importance of each
  - Discuss how well alternative models would work
    - Strengths and weaknesses
  - Determine a way forward



# Criteria

- Efficiency
  - Revenue sufficiency
  - Allocative, productive and dynamic efficiency
- Equity
  - Different interpretations
    - Uniform charges,
    - charges reflects costs imposed/benefits received,
    - ability to pay
- Simplicity
  - Pricing transparent and understandable
  - Min administration costs
  - Min implementation costs



# Questions on criteria

## Are the criteria all of equal importance?

- Do we need to rank them in importance?
- What weight should be attached to each?
- Is a different balance of criteria appropriate for water quality and quantity?
- To what extent should prices be averaged vs reflect the cost of service (definition of equity)?



# Status quo

- WC responsible for water quantity mg' mt in main drainage areas
  - WC funded through annual and headworks charges
    - Annual charges based on GRV
    - Std headworks charge = 40% of MEA drainage infra per lot
    - Additional headworks charges if beyond dev front
  - Licensed supplier, with charges reviewed by ERA
- LCs responsible for stormwater management plans that include quality objectives
  - LCs funded through rates, special drainage rate, developer charges



# Status quo - weaknesses

- Revenue sufficiency
  - In particular, funding water quality improvements
- Lack of incentives
  - Annual charges, headworks charges
- GRV charges are not cost reflective
  - Not efficient or equitable
- Balance between existing and new customers
  - Std headworks charge doesn't recover cost of new development



# Alternative funding models

- Modified status quo
  - Based on the Melbourne model
- Universal charge model
  - Same charging approach for all drainage suppliers
- Variants on each, incl status quo



# Experience in Melbourne

- MW given responsibility for water quality and quantity
  - Under its Waterways and Drainage Operating Charter
  - Includes goals and performance targets
- Drainage schemes
  - Established on catchment basis
  - Basis for planning for urban development
  - Local councils can include drainage in their development servicing plans, OR be included in MW drainage scheme
- Charges
  - Developer contributions cover infra cost of the drainage scheme
  - Includes cost of assets handed over to LCs
  - Stormwater quality charges – general and scheme specific
  - Drainage rate covers MW op and maint costs (based on RV)



# Modified status quo

- Based on the “Melbourne model”
  - WC responsibilities widened to cover water quality
  - Drainage rate extended to all metro area
    - Stormwater quality charge
    - Plus quantity mg'mnt charge in main drainage areas
  - Stormwater quality charge introduced in headworks charges
    - Abated if developers implement best practice
  - NRM charges for drainage planning
- Variants include:
  - Annual charges: fixed or by land area
  - Scheme based headworks charges



# Modified status quo - assessment

- Improved revenue sufficiency
  - Transferal of responsibility to WC
  - NRM charges for planning
- Improved incentives
  - Through headworks stormwater quality charge
- Extension of drainage rate to metro area
  - Reflects beneficiary pays approach to legacy costs
  - Would involve two tier rates (in main drainage areas)
  - => greater complexity
- Implementation
  - Requires institutional changes
  - Incidence effects



# Questions - Modified status quo

Would the Melbourne (modified status quo) model work in Perth? If not why not?

To guide discussion, perhaps consider:

- Would WC be able to extend responsibilities to water quality?
- Requires extensive Liaison with local councils?
- Would it provide sufficient funding to address water quality



# Questions - Modified status quo II

Does the Melbourne (modified status quo) model have advantages over the status quo model?

To guide discussion, perhaps consider:

- Would it provide sufficient revenue to local councils?
- Would the stormwater quality charge provide useful signals
- Are the administration costs manageable?



# Universal charge

- WC and LCs responsible for quality and quantity
  - WC services no longer restricted to main drainage areas
  - All drainage service suppliers licensed
- Centralised collection of charges, allocation of revenue across suppliers
  - Drainage charges cover quality and quantity
  - Extended to the whole of the metro area
  - Replace existing charges by WC and local councils
  - Developer charges based on specific scheme costs
- Variants incl levy & charges for water quality only



# Universal charge - assessment

- Revenue sufficiency improved
  - All suppliers brought under building-block approach
  - NRM charges for planning
- Improved incentives
  - Developer charges provide incentive for best practice through stormwater quality charge
  - Also reflect the cost of scheme development
  - Enables competing solutions to quality problems to be assessed
- Simplicity and implementation
  - Significant change to current institutional arrangements, with separation of service provision and billing
  - If charges made cost reflective, could become complex



# Questions - Universal charge model

Does the universal charge model have significant advantages over the other models?

To guide discussion, perhaps consider:

- Would it ensure revenue sufficiency?
- Is separation of service provision from billing feasible?
- Would all suppliers need to come under the licensing regime?
- Should the model apply just to remedial quality work, or replace existing arrangements?



# The way forward

## Which funding model would work best in WA?

To guide discussion, perhaps consider:

- Would a variant on the status quo do enough?
- Is it feasible to have different funding models for quantity and quality?
- If can't agree, how can we progress the debate?



# Further questions

- Do the models provide sufficient transparency?
- In an alternative model is introduced, would it be in one go or phased?



# Status quo variants

- Variants to explore incremental improvements
- Improve cost reflectivity
  - Replace GRV with:
    - Fixed charge (varied by customer class)
    - Land area charge
  - Abate annual charge for best practice (large users)
    - Provide ongoing incentive for best practice
- Public funding for water quality management
  - Would sufficient funding be available?



# Experience in NSW

- Local councils have prime responsibility
  - For water quality and quantity
  - Sydney water provides some trunk main services
  - LC rates pegged to CPI/Wages Price Index
  - Developer charges follow DEUS guidelines (similar to IPART)
  - Councils were unable to fund obligations under stormwater program
- Stormwater management plans
  - Required by EPA, prepared by service providers
  - Establish a program of actions identified on catchment basis
- Urban stormwater program
  - \$82m trust established by government
  - Councils can now levy a stormwater management charge



# Assessment – Status quo

	Status quo	Variant: Service or land area charge	Variant: Abatement of annual charge	Variant: Public funding legacy costs
<b>Efficiency criteria</b>				
Revenue sufficiency	Medium/Poor	Medium/Poor	Medium/Poor	Medium
Appropriate price signals	Medium/Poor	Medium	Medium	Medium/Poor
Incentives for best practice	Poor	Poor	Poor	/Medium/Poor
Incentives for investment	Medium	Medium	Medium	Medium/Good
Incentives for cost discipline	Medium	Medium	Medium	Medium
<b>Equity criteria</b>				
Appropriate costs allocation	Medium/Poor	Medium	Medium	Medium/Poor
Equity between developers	Medium	Medium	Medium	Medium
<b>Simplicity</b>				
Transparent and understandable	Good	Good	Medium/Good	Good
Low administrative burden	Good	Medium/Good	Good	Good
<b>Implementation</b>				
Institutional infrastructure needed	Good	Good	Good	Good
Capacity	Medium	Medium	Medium	Medium/Good
Incidence effects	Good	Good	Good	Good



# Assessment – Modified status quo

	Modified status quo	Variant: Service or land area charge	Variant: Abatement of annual charge	Variant: Dev conts on scheme costs
<b>Efficiency criteria</b>				
Revenue sufficiency	Medium/Good	Medium/Good	Medium/Good	Medium/Good
Appropriate price signals	Medium	Medium/Good	Good	Good
Incentives for best practice	Good	Good	Good	Good
Incentives for investment	Medium/Good	Medium/Good	Medium/Good	Medium/Good
Incentives for cost discipline	Medium	Medium	Medium	Medium
<b>Equity criteria</b>				
Appropriate costs allocation	Medium	Medium/Good	Medium/Good	Medium/Good
Equity between developers	Medium	Medium	Medium	Good
<b>Simplicity</b>				
Transparent and understandable	Medium/Good	Medium/Good	Medium	Medium
Low administrative burden	Medium/Good	Medium/Good	Medium	Medium
<b>Implementation</b>				
Institutional infrastructure needed	Medium	Medium	Medium	Medium
Capacity	Good	Good	Medium/Good	Good
Incidence effects	Medium/Good	Medium/Good	Medium	Medium



# Assessment – Universal charge

	Universal charge	Variant: Service or land area charge	Variant: Abatement of annual charge	Variant: Levy
<b>Efficiency criteria</b>				
Revenue sufficiency	Good	Good	Good	Good
Appropriate price signals	Medium/Good	Medium/Good	Good	Medium
Incentives for best practice	Good	Good	Good	Good
Incentives for investment	Good	Good	Good	Good
Incentives for cost discipline	Medium/Good	Medium/Good	Medium/Good	Medium/Good
<b>Equity criteria</b>				
Appropriate costs allocation	Good	Good	Good	Medium/Poor
Equity between developers	Good	Good	Good	Good
<b>Simplicity</b>				
Transparent and understandable	Medium	Medium/Good	Medium	Good
Low administrative burden	Poor	Poor	Poor	Medium/Poor
<b>Implementation</b>				
Institutional infrastructure needed	Medium/Poor	Medium/Poor	Medium/Poor	Medium/Poor
Capacity	Medium/Poor	Medium/Poor	Medium/Poor	Medium/Poor
Incidence effects	Medium	Medium	Medium	Medium/Poor