SYDNEY'S WATER CRISIS: A PLANNER'S VIEW

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SYDNEY WATER & THE TRIPLE BOTTOM LINE

- Problems from reconciling the triple bottom line
- **Economic**:
  - Sydney Water 2006 revenue $1,540m, profit $462m, Treasury dividend $193m
  - Dividends not paid before 1980s
  - Is Treasury dividend needed for a basic necessity? Return dividend to Sydney Water -> recycling?
- **Social:**
  - 1998 water supply infection have turned government to desalination instead of outfall recycling
- **Environmental:**
  - Requirements for H-N flows add to supply pressure

PAYING FOR WATER AS A SCARCE RESOURCE

- Full user-pays for water consumption should be implemented
- Would increase revenue available for enhancing supply, including waste water and stormwater recycling
- ‘Basic necessity’ allowance for each household to have low price
- All apartment units to be separately metered

WATER SUPPLY SYSTEM: STRATEGIC ENHANCEMENT (1)

- Recycling of ocean outfall waste water back to reservoirs can provide environmentally acceptable potable supply increase
  - Prospect cheaper than Warragamba, but risk from insufficient detention time
  - Community engagement needed
- Melbourne option: Use recycled water to cool power stations to free up potable supplies
  - High capital cost
  - Risky reliability

WATER SUPPLY SYSTEM: STRATEGIC ENHANCEMENT (2)

- Desalination: Energy need is high
  - Renewable energy should be used (like Perth)
  - Renewable energy should not just be diverted from other uses
- Direct mains stormwater discharges into
  - Eastern Sydney aquifer
  - New wetlands in SW & NW sectors for reuse by industry, parks in dry months
- Potential for full water trading regime to divert water from non-metropolitan uses to metro areas

LOCAL PLANNING FOR STORMWATER REUSE

- Main principle: Treat hard surfaces as an asset
- State to introduce controls requiring capture of all runoff from new roofs (unless ‘greened’ via vegetation) in tanks
- State to require highway runoff to be captured and reused for nearby non-potable uses
- State to require new subdivisions to capture street/footpath runoff via swales and wetlands
  - Recycling of captured water required for larger estates

LOCAL PLANNING FOR WASTE WATER REUSE

- State to provide subsidies and technical advice for back yard reed beds and tanks to recycle sewage for non-potable uses (a la Mobbs house)

CONCLUSIONS

- Money can be found for new supply initiatives from Treasury dividend and higher use charges
- This will allow more environmentally sustainable recycling solutions
- Developments with new hard surfaces should pay for recycling of the runoff