

#### **Gosford City Council**

# Submission on Pricing of Recycled Water to Independent Pricing and Regulatory Tribunal

31 March 2006



#### introduction

- Background
- Current recycled water use
- New recycled water schemes
- Potential recycled water initiatives & uses
- Discussion of possible pricing methodology
- Summary of recommendations

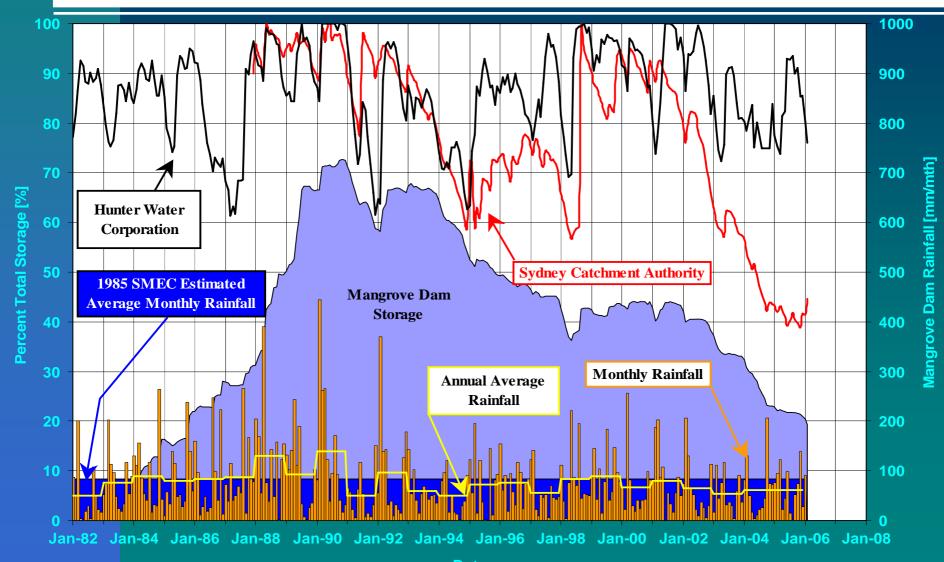


#### Background

- Central Coast is currently experiencing extended drought conditions with below average rain in 10 of the past 13 years
- Water storage level currently at 19%
- Key feature of WaterPlan 2050 is reduction in reliance on surface water sources
- Recycled water can help establish a more diverse water supply on Central Coast and reduce demand on potable water supply, and is therefore being investigated
- This submission is a result of IPART review of recycled water pricing



#### Water storage performance





#### Current Recycled Water Use

- GCC reuses approx. 350 ML per annum of treated effluent at its 2 sewage treatment plants
- Council has not historically put a \$ value on this reclaimed effluent

Council currently does not provide or sell any reclaimed / treated effluent or recycled water in any form externally



#### New Recycled water schemes

- A recycled water tanker filling station being built at Kincumber STP. Tertiary filtration and disinfection plant will produce recycled water for use in dust suppression, road works, construction, roadside garden watering and landscape work. Ready by Sept 06 and will produce up to 73 ML per annum
- A sewer mining demonstration plant being constructed at Gosford Racecourse. Sewage extracted from local carrier will be treated via a subsurface flow constructed wetland. Ready in early 2007 for irrigation of racecourse and will produce up to 75 ML per annum

# Water Recycling Initiatives Study



- Council has engaged Kellogg Brown and Root (KBR) to investigate wide range of water recycling options including:
  - Recycled waste water for irrigation & industrial use
  - Stormwater harvesting for irrigation & industrial use
  - Aquifer storage and recovery using treated effluent & stormwater
  - Indirect potable reuse (recycled water &/or stormwater back to dams)
  - Environmental flow substitution using treated effluent and stormwater

## Potential Recycled Water schemes



- Shortlist of recycled water schemes for further investigation:
- 1. Reticulation from KTW to Somersby
- 2. Sewer mining at Terrigal, Somersby, Lisarow, West Gosford, Kincumber & St Huberts Island
- 3. Stormwater harvesting in Railways & Dept of Agriculture dams, & at Tarragal Glen & Lisarow
- 4. Woy Woy aquifer storage and recovery by injection of purified recycled water or stormwater



#### Pricing Methodology

- Maximum price should ideally allow for full cost recovery
- Council may negotiate a lower price if necessary to ensure take up (in conjunction with a recycled water agreement e.g using Qld EPA approach)
- Price to be made up of a fixed service charge based on meter size + recycled water usage charge
- Recycled water usage charge to be made up of nominal raw product charge + variable charge that covers capital cost and operating costs over life of asset
- Recycled water usage charge may vary between schemes due to varying final product quality, distribution costs and varying end use.
- Council does not support a "blanket" or common usage charge nor a charge that is set too low.



#### Pricing Methodology

- Council proposes same fixed charge as Sydney (currently \$25.32 for 20 mm meter)
- For larger meter sizes, fixed charge to be (meter size)<sup>2</sup>/400 x 20 mm charge
- Raw product charge should be set at zero for raw sewage & stormwater, & \$0.10/KL for treated effluent
- Recycled water usage charge = [nominal raw product charge + variable charge (capital cost spread over life of asset + operating cost per annum)] per kilolitre
- Prices to have CPI increase applied each year

## Summary of Recommendations



- Pricing methodology that allows full cost recovery
- Price to be negotiated for individual schemes i.e. price may vary between schemes
- 2 part recycled water price = fixed based on meter size + variable (to reflect cost of collection, treatment and delivery)
- Variable price to include a nominal cost for raw product
- Recycled water price to run in parallel to W,S & D fees and charges price path
- Sewer mining to include plants owned and operated by water authority