



DIRECTOR SHIRE SERVICES REPORT

10th October 2006

DSS3 NSW SUSTAINABLE WATER CHALLENGE
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SUMMARY:

Reporting on the recent award obtained in the 2006 NSW Sustainable Water Challenge.



DESCRIPTION:

On 14 September 2006 Kempsey Shire Council was awarded winner of the Greenfield Development Category for the South West Rocks Wastewater Recycling Project in the NSW Sustainable Water Challenge for 2006. This award was presented at the 'Meeting the Sustainable Water Challenge' seminar organised by the Metropolitan Catchment Management Authority, the Stormwater Industry Association, the Australian Water Association, Water Sensitive Urban Design (Sydney Region) and the Parramatta River Catchment Trust.

The NSW Sustainable Water Challenge is open to all councils in NSW with awards given in the categories of planning/policy, landscaping infill, greenfield, commercial & industrial, community engagement and retrofit projects. The awards and seminar had previously been Sydney-centric and have been broadened to be statewide with the current water sustainability challenges facing many councils. Shortlisted award nominees were asked to give a 10-minute presentation on their project and Eli Ussher attended on behalf of Council to complete this presentation.

The Wastewater Recycling Project will ensure that 30-40% of the wastewater produced at South West Rocks Sewage Treatment Works (STW) is treated to an extremely high level so that it can be used within new residential developments. The recycled water will be delivered via dual reticulation for use in outdoor/garden applications, toilet flushing and washing machine cold water streams. In addition, the scheme will also provide water for irrigation to the local golf course and sporting fields.

It is anticipated that over the next five years the recycled water scheme will service 400 new residential lots in a new subdivision called "Sea-Scape Grove". Ultimately the scheme has been designed to service 1,500 lots as identified future subdivisions are developed. Including the golf course and sporting fields it has been estimated that the scheme will recycle approximately 220ML/annum of wastewater from the South West Rocks Sewage Treatment Works.

It is intended to construct a "state of the art" reclaimed water facility to treat secondary effluent from the South West Rocks STW. The facility will include an efficient and effective filtration process (membrane technology), Ultraviolet (UV) treatment and Chlorine dual disinfection systems. The treatment facility will also be designed to enable phosphorus and colour removal.

The Wastewater Recycling Project is currently at the detailed design stage. It is anticipated that construction will commence in March 2007 with completion expected around March 2008. Recycled water (dual) reticulation for one subdivision is already in place.

The South West Rocks Wastewater Recycling Project was developed as part of the Macleay Water Integrated Water Cycle Management Strategy (IWCMS). This project addresses many of the environmental sustainability issues faced at South West Rocks due to the rapid growth of this village, predominantly from the 'sea change' phenomena and the resulting pressure being placed on the water resources and water/wastewater infrastructure. The environmental sustainability issues addressed are listed below:

- Reduction of effluent being discharged to the environment;
- Positive impacts upon the water quality at Back Creek which is also a recreational estuary;
- Significant reduction in the demands placed upon the water resources for South West Rocks (borefield is a coastal aquifer underlying Hat Head National Park);
- Significant delay in providing supplementary water resources to South West Rocks from the Kempsey system.

This project has involved the development of significant cooperation and trust bonds with sectors of the community. These bonds will require continued development as the project enters the implementation phase.

REPORT IMPLICATIONS:

- ***Environmental***

Nil.

- ***Social***

Nil.

- *Economic (Financial)*

Nil.

- *Policy or Statutory*

Nil.

- *Director's Review*

The award provides recognition of the efforts of Macleay Water staff, particularly Gary Smith and Eli Ussher, in the development of this project.

RECOMMENDATION:

That the information be noted.

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A P Vermeulen
DIRECTOR SHIRE SERVICES