



DIRECTOR SHIRE SERVICE'S REPORT

9th August 2005

DSS15	Reclaimed Water Scheme – SWR
FILE: 499	EU

SUMMARY:

Reporting on the proposed reclaimed water scheme at South West Rocks.



Following Councils adoption of the Integrated Water Cycle Management Strategy and its associated 30-year Capital Expenditure Program, Macleay Water is proposing to implement the Strategy's preferred effluent management option for South West Rocks, that being a reclaimed water scheme that treats wastewater from the local Sewerage Treatment Plant to such a high level that it can be reused back into new residential development for toilet flushing, outdoor use and clothes washing machines.

The scheme will be an important component of the town's water infrastructure because it addresses a number of Social, Economic and Environmental issues simultaneously (Attached as [\(Appendix F\)](#), is the schemes description, benefits and considerations).

This option was identified in the strategy's effluent management plan and funding allocated in the capital Expenditure program for 2006/07 (\$2.1million) and 07/08 (\$3.2million). Hunter Water Australia (HWA) was engaged to determine the concept design, costs, and issues associated with the scheme. Their report is being finalised currently and preliminary capital costs and operations advice for the scheme has been provided. Advice from HWA is that infrastructure can be provided to feasibly reuse effluent by dual reticulation. However, a very high quality of reclaimed water would need to be produced which would require additional investment in operational costs, compliance testing and inspection regimes.

Preliminary costing of the scheme to the Sewerage fund was calculated to be in the order of \$4.5-5.5million. However the real cost to Macleay Water will in fact be \$3-4million because an existing water supply reservoir will be used and the \$1.5million asset cost transferred from the sewerage fund to the water fund. As can be seen

these figures are in line with the \$5.3million budget allocations. Further to this there is a chance that the cost to council will be less if an application for funding under the competitive Australian Government Water Fund (AGWF) is successful.

The first portion of funding will not be available until the 2006/07 financial year, however Council's decision to endorse the scheme is now sought for the following reasons:

1. The developer of "Sea-Scape Grove" is ready to construct the subdivision's water infrastructure and requires a determination. The provision of dual reticulation to this specific development is a crucial component in determining the viability of the scheme.
2. Macleay Water is currently preparing an application for grant funding from the Water Smart Australia Program, which is a significant component of AGWF. The second round of applications open in November and the further advanced the project the better the chance of funding.

REPORT IMPLICATIONS:

- ***Environmental***

All environmental implications are positive.

Discharge of wastewater to the sand dune disposal area will be significantly reduced (up to 65%)with the remainder being discharged at an extremely high quality.

The more efficient use of water will reduce demand on water supply sources. This positive implication is significant because South West Rocks water is sourced from within Hat Head National Park.

- ***Social***

There may be a need for some local education about the scheme so that there is an understanding of the processes in place to ensure safety. Also education should focus on the responsibilities of the residences serviced by this scheme.

- ***Economic (Financial)***

The net cost of the scheme to Macleay Water will be approximately \$3-4million. If the funding application is successful then this cost could be much less.

The construction of this scheme will not only help delay the expensive future upgrade of the new Water Treatment Plant (WTP), it will keep the town's ultimate peak day demand below the ultimate capacity of the WTP.

The construction of this scheme will help to significantly delay the need to source water from outside the South West Rocks Borefield. It was estimated that a pipeline linkage to Kinchela Emergency Borefield (the most likely choice at this stage) would cost approximately \$3.4million.

The other future savings would come from the EPA being satisfied with our wastewater reuse and quality and therefore not imposing any costly Pollution Reduction Programs or fines upon Council.

- *Policy or Statutory*

All work on this project will meet statutory requirements.

- *Directors Review*

By adopting the proposed reclaimed water scheme Council will make a major step towards ecological sustainability. Council is urged to support the recommendation.

RECOMMENDATION:

That the proposed reclaimed water scheme at South West Rocks be adopted.

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**K J Finnie
DIRECTOR SHIRE SERVICES**