



SOUTH LAKES GOLF CLUB INC

Water Management Sub-Committee

Water Options Update - April 2009

Introduction

The following is a further supplement to the original SLGC Water Options Paper produced in June 2008.

It should be read in the context of the original paper and the update issued in January 2009.

It contains new information on those developments that are now seen as most likely to benefit the Club.

This information has been obtained at various times during continuing discussions between the Club and the Mayor and CEO of Alexandrina Council, Kym McHugh and Mr John Coombe and from a Management Committee briefing conducted by Neville Styan – the Council’s General Manager, Infrastructure Planning & Design – on 16 April 2009.

Most significantly, during this briefing, Mr Styan stated that SLGC was now the Alexandrina Council’s “number one priority for water.”

1. The Clayton Weir

Environmental approvals for the Clayton/Finniss/Currency Creek regulators is expected in the very near future, with a view to having the temporary measures in place by the end of August.

The three regulators are expected to remain in place for up to 7 years.

Once they are in place, approximately 30 g/l of fresh water will be pumped into the Goolwa pool from Lake Alexandrina, raising it to more normal levels (i.e., above sea level);

Currently the pool level is 1.7 metres below sea level at Clayton, but it will rise to 0.7 metres above sea level by the end of winter, adding 1.5 to 2 metres to the pool level where SLGC pumps are positioned.

This level is expected to drop to 0.0 metres by the end of summer 2010. However, this will still be about 1.5 metres above the current level.

The water pumped from Lake Alexandrina will be supplemented by between 70 and 100 g/l of winter run-off from the Finniss and Currency Creek and is expected to dilute the saline water currently in the Goolwa pool to between 7,500 and 10,000 ppm salt.

At the lower level, SLGC may be able to resume irrigation from the river, with the salt content too high for tees and greens, but acceptable for fairway irrigation over short periods. Continued irrigation at higher levels would have a detrimental effect on the fairway grasses.

2. Recycled storm water

Council is progressing on schedule with its project to pipe winter 2009 storm water from Murray Smith Reserve at the rear of the Council Chambers to two 20 m/l holding ponds at Kessell Rd.

The water will be stored there over winter and pumped back to irrigate the Town Oval and adjacent council parks in summer.

The oval water requirement is estimated to be in the region of 20 m/l pa.

Council expects to harvest 75 to 100 m/l from Murray Smith reserve, with 40 m/l held at Kessell Rd and the remainder directed into the river.

SLGC has been advised that should water surplus to Council's requirements be collected and stored it will be made available to SLGC.

SLGC has been further advised that Council will have a better idea of how much (if any) any water will be available at the end of winter, once an assessment of water collection and loss through seepage/evaporation etc can be made.

Should a surplus be available, additional piping will be required from the Town Oval to SLGC (a distance of 1.4 km to the 15th tee area or 1.8 km to Billabong Rd). Council advises a 1.8 km pipe and all necessary pumping infrastructure is expected to cost in the vicinity of \$250,000 to \$300,000 and would take 18-25 days to construct, and while preliminary planning could take 3-6 months, Council has previously indicated this would be fast-tracked if water became available and was required in a shorter time span.

No decision in this regard (including funding) will be made until Council has a better idea of how much surplus water may be available.

3. Middleton STEDS scheme

Council has been advised verbally that its application to the Local Government Association for seed funding to investigate options for a STEDS (Septic Treated Effluent Disposal) Scheme for Middleton has been approved.

This funding will be used for engineering studies and initial planning for the scheme, which will incorporate 1000 homes and cost in the order of \$7 to \$12 million to complete.

During discussions between Mayor Kym McHugh and Council CEO, John Coombe and SLGC President, Stephen Middleton in late March, Mayor McHugh stated that the five-to-ten year project may be fast-tracked if the initial studies confirm the cost-benefit aspects of the project and local residents approve.

Council's proposal is to collect the effluent in Middleton, use the existing treatment plant north of Goolwa to treat it and dispose of the treated water by providing it to SLGC for course irrigation without the Club being required to meet costs associated with the project.

Issues such as:

- timing
- quantities of available recycled water
- health authority requirements for use of it within close proximity of housing
- cost (if any) of water supplied to the Club

remain unresolved, but are not considered by Council or SLGC to be insurmountable.

4. Langhorne Creek desalination plant

This matter has been raised by several members, who ask why SLGC cannot install a desalination plant if a local wine grape grower has been able to do so.

As outlined in the original water options paper, desalination does not represent a viable option for SLGC.

Nevertheless and in the context of this update, the private Langhorne Creek desalination project provides has been assessed in consultation with Alexandrina Council. This assessment has identified no new information that would benefit SLGC.

Indeed, figures provided by Alexandrina Council confirm that a desalination plant along the lines of the Langhorne Creek model is not a viable option for SLGC.

Council advises the Langhorne Creek plant (built by a local grape grower) cost \$250,000 and produces 100,000 litres of usable water per day.

At this rate it would take 10 days to produce 1 m/l.

SLGC requires 70-90 m/l per year; i.e. 700-900 production days per year, which is clearly not feasible. In addition, SLGC requires the bulk of this water over a four month period, which exacerbates the problem.

Further, desalination comes with issues relating to disposal of brine.

As a final issue, operating costs for the Langhorne Creek system are in the 60c to 70 per kilolitre range.

At the lower level of production costs, and based on SLGC water requirements, such a project cost in the vicinity of \$42,000 per annum to operate, with financing costs associated with the \$250,000 required to construct of a plant that in any event could not meet SLGC summer water requirements.

This assessment has been provided as clarification of the issue for those members who believe desalination should be pursued.

The next step

SLGC and Alexandrina Council will closely monitor the storm water recycling project and the impact of the Clayton/Finniss/Currency Creek flow regulators.

Further, SLGC will work closely with Council to derive the maximum benefit to the Club and earliest construction time for the Middleton STEDS scheme, which is ultimately considered to be the most logical and cost-effective long-term solution to the water issue.

SLGC Water Options Sub-Committee

28 April 2009