

Our Ref: D1501013



22 April 2013

Essential Services Commission  
Att: Chris Hutchins  
Officer in Charge - Expenditure Review  
Level 37 / 2 Lonsdale Street  
Melbourne VIC 3000

Dear Mr Hutchins

**Loch, Nyora and Poowong Sewerage Scheme**

Thank you for meeting with us on Friday 19 April to discuss South Gippsland Water 2013-18 Water Plan.

Please find following, Submission to Essential Services Commission: Draft Determination for South Gippsland Water Plan 2013-2018 from South Gippsland Shire Council.

South Gippsland Shire Council respectfully request that the funding proposed for the Loch, Nyora and Poowong Sewerage Scheme by South Gippsland Water in its five-year plan be retained and *not* postponed as recommended by the Commission in its draft determination.

Should you wish to discuss further, please do not hesitate to contact Council's Chief Executive Officer on 5662 9204 or via [tim.tamlin@southgippsland.vic.gov.au](mailto:tim.tamlin@southgippsland.vic.gov.au) We thank you in advance for your consideration of our submission.

Yours sincerely

A handwritten signature in black ink, appearing to be "Kieran Kennedy".

Kieran Kennedy  
**Mayor**

A handwritten signature in blue ink, appearing to be "Tim Tamlin".

Tim Tamlin  
**Chief Executive Officer**



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**SUBMISSION TO ESSENTIAL SERVICES COMMISSION:  
Draft Determination for South Gippsland Water Plan 2013 - 2018  
South Gippsland Shire Council**

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**Contention:** That the funding proposed for the Loch, Nyora and Poowong Sewerage Scheme by South Gippsland Water in its five-year plan be retained and *not* postponed as recommended by the Commission in its draft determination.

**1. COMMUNITY REPRESENTATION AND CONCERN:**

- i. The majority of residents and landowners of Loch, Nyora and Poowong that would benefit from a sewerage scheme support its construction and implementation. Those communities have an overwhelming desire for the sewerage scheme to be built as soon as possible. Community groups and individuals have been approaching Council and South Gippsland Water (SGW) demanding progress on the scheme which they were originally advised would be operational by 2012.
- ii. 84% of potentially affected landowners in the three towns voted in favour of the scheme when surveyed by South Gippsland Water in 2007.
- iii. Following the completion of South Gippsland Water's investigation and design of a sewerage system for the townships of Loch, Nyora and Poowong, Council made it a priority to support its early implementation and at its Ordinary Council Meeting of 22 April 2009, unanimously resolved to:

"ACKNOWLEDGE SOUTH GIPPSLAND WATER'S INTENTION TO SEWER LOCH, NYORA AND POOWONG AND INSTRUCT OFFICERS TO PROVIDE ONGOING SUPPORT FOR THE IMPLEMENTATION OF THE PROJECT WHERE APPROPRIATE."

- iv. In March 2013, a community petition collected 387 signatures in Loch, Nyora and Poowong within two weeks seeking "our town to be healthy and clean with reticulated sewerage system". This petition was presented to Council at its Ordinary Meeting on 27 March 2013. The number of signatories is high relative to the population of the towns.
- v. At the same 27 March 2013 Meeting, it was unanimously resolved:

"THAT COUNCIL:

1. REITERATE STRONGLY AND URGENTLY ITS COMMITMENT TO AND IMPLEMENTATION OF RETICULATED SEWERAGE PROVISION IN THE TOWNS OF NYORA, POOWONG AND LOCH ON THE GROUNDS OF PUBLIC AND ENVIRONMENTAL HEALTH.



2. WRITE LETTERS AFFIRMING COUNCIL'S POSITION AND REQUEST MEETINGS WITH:

- a. MINISTER FOR WATER, HON. PETER WALSH;
- b. MEMBER FOR GIPPSLAND SOUTH, HON. PETER RYAN;
- c. MINISTER FOR PLANNING THE HON. MATTHEW GUY;
- d. BOARD OF SOUTH GIPPSLAND WATER;
- e. MELBOURNE WATER; AND
- f. CARDINIA SHIRE COUNCIL.

3. COMMUNICATE THIS MESSAGE TO THE COMMUNITIES OF LOCH, POOWONG AND NYORA."

- vi. The only 'community' represented by the Yannathan Road Development Group is the relatively small number of landowners near the site of the proposed wastewater treatment facility (WWTF) in Hills Rd Nyora. They may have a small amount of support from residents in Nyora who fear sewerage will result in an amount of development that would reduce Nyora's 'small town' atmosphere.

**2. NEED FOR SCHEME:**

- i. The population density, small lot sizes, age and operational quality of septic systems, high rainfall, clay soils and poor drainage in Loch, Nyora and Poowong have resulted in a public health risk and environmental pollution for many years. Testing undertaken in open stormwater drains in 2001 and 2004 provided evidence of high levels of *E. coli* and faecal *Streptococcus*, indicating regular contamination by wastewater. This wastewater drains to Westernport Bay which has national environmental significance and has a high level of recreational use. Further testing in the towns during 2007 by SGW found high percentages of 'fairly wet' septic systems in the towns, with quite a number displaying signs of failure such as pooled effluent. A large proportion of properties in the towns also discharge grey water directly to stormwater drains or the surrounding environment.
- ii. The need for a reticulated sewerage scheme was recognised by the State Government in 2005 when it directed SGW to prepare a sewerage scheme for Loch, Nyora and Poowong. Seven years has not reduced the need for the scheme. Offensive odours from the stormwater drains in the towns, especially during summer in Nyora are an obvious reminder that the unhealthy circumstances remain.
- iii. South Gippsland Shire's population is growing, with greatest growth anticipated at the western end, which is the location of Loch, Nyora and Poowong, due to its proximity to Melbourne's south east fringe. Improvements over recent years to road connections in Melbourne's south east make Loch, Nyora and Poowong attractive, small rural town locations that are simultaneously close to Melbourne's opportunities for employment, business and services. Not only are the existing populations of Loch, Nyora and Poowong well overdue for a sewerage scheme - the future population relies on it too. If reticulated sewerage is provided, Council anticipates Nyora will be the fastest growing town in the Shire.



- iv. The draft version of Council's Municipal Domestic Wastewater Management Plan (MDWWMP) 2012-2017 which is to be considered for adoption in coming months, assumes that Loch, Nyora and Poowong will be sewered.
- v. Council will consider the adoption of Planning Scheme Amendment C72 – Western Townships Structure Plan Implementation (Loch, Nyora, Poowong and Meeniyán) which plans for future growth of these towns. Urban development in Loch, Nyora and Poowong is dependent on provision of reticulated sewerage. (Meeniyán is already sewered, with wastewater treatment undertaken by a lagoon system like that proposed for the other three towns).

### **3. PROPOSED SCHEME FOR LOCH, NYORA AND POOWONG WITH TREATMENT FACILITY AT HILLS RD NYORA:**

- i. South Gippsland Water has undertaken a significant amount of investigation into the most efficient and effective sewerage scheme for Loch, Nyora and Poowong since the direction to prepare the scheme in 2005. In undertaking these investigations, SGW has employed professionals who are experts in design and construction of effluent lagoons, reticulation, pumping, rising mains, water balance works, odour modelling, agricultural water reuse, flooding, cultural heritage, flora and fauna (including a Giant Gippsland Earthworm expert), and land use planning.
- ii. A scheme comprising a reticulation network linking the three towns with a wastewater treatment facility somewhere north or north-east of Nyora was chosen as the best option in terms of feasibility, quality, cost, suitability for the size of the towns, the climatic and environmental conditions that apply, and SGW's rate base. The decision to locate a plant north or north east of Nyora was announced at public meetings in 2009 with no objection received from the community.
- iii. After additional community engagement activity including meetings and tours of similar existing lagoon system WWTFs, SGW made application to Council for a Planning Scheme Amendment (C59) in July 2012. The request included a rezoning to Public Use Zone 1 (Service and Utility) for 65 Hills Rd Nyora where the (WWTF) was proposed, and an Environmental Significance Overlay 4 (Sewage Treatment Plant and Environs) applied to land within 700 metres of the centre of a proposed facultative lagoon.



#### 4. BACKGROUND TO DECISION FOR HILLS RD WWTF

- i. Early investigations for a separate WWTF for each town were estimated as too expensive. Another option considered included pumping Poowong's waste to Korumburra WWTF. Less suitable forms of treatment, for example a Septic Tank Effluent Disposal Scheme was discarded as unsuitable for the area's rainfall, soil type and standard of septics.
- ii. Existing examples of the lagoon treatment system in SGW's area of responsibility are operating well. The Waratah Bay WWTF has been operating since 2007, with reuse water irrigated to an adjoining dairy farm. When the Meenyan lagoon system WWTF was commissioned in September 2011, it was warmly welcomed by the community, with the site close to the town seen as a recreational, environmental and tourism benefit in addition to the sewerage treatment. Tarraville and Cape Paterson are other successful lagoon system WWTFs operated by SGW. The avoidance of mechanical treatment saves on both capital and operational costs. Lagoon systems are used successfully in other parts of Australia.
- iii. At the time of the early investigations (2006 - 2008), a joint sewerage project with South East Water (SEW) was not considered. Joint capital works programs with adjoining sewer authorities are uncommon in Victoria. Some investigations currently being undertaken for a joint scheme with SEW could see wastewater pumped to an upgraded Lang Lang mechanical facility (incorporating Koo Wee Rup waste treatment), with winter storage ponds (holding joint-authority reuse water) located at the Hills Rd site. The authorities would only progress with this scheme if the savings to be shared does not result in increased costs to SGW. At this stage it is yet to be determined if there would be cost neutrality or savings by the time the extra piping, pumping and share of mechanical treatment (including ongoing operational costs) are taken into account. It is Council's understanding that SGW has been consulting with SEW about the Hills Rd proposal since early 2012 and about alternative joint sharing possibilities since December 2012. Preliminary results of investigations and costings originally anticipated by late April are now advised to be more likely in June - July with the answers known/Board decisions made around August - September 2013.
- iv. The Hills Road site was chosen and purchased after a thorough process of due diligence which involved investigation of several potential sites. Nyora is lower than the other two towns (enables maximum use of gravity and minimisation of pumping to move the wastewater) and is anticipated to be the largest population. This makes Nyora the most logical location for the scheme's WWTF. The Environment Protection Authority (EPA) recommends a 700-metre buffer between a WWTF of the capacity proposed and 'sensitive' land uses such as residential uses. This consideration considerably narrowed the choice of locations potentially suitable for the WWTF. Topography and soil type are also significant factors in determining site suitability as they affect gravity, cost of earthworks, cost of constructing impermeable clay-lined lagoons and ability to consume reuse water by irrigation.



- v. It is Council's understanding that other sites being considered were discarded as being less suitable on grounds of proximity to existing sensitive uses or proposed urban growth areas, topography and geotechnical circumstances, or higher reticulation costs.
- vi. Investigation of the Hills Road site took between 12-18 months prior to purchase. An independent audit review of the site selection, prompted by Yannathan Road Development Group's (YRDG) lobbying against a proposed treatment site being close to its members' landholdings, was conducted by consultancy RSM Bird Cameron. The review found, that "the organisation (SGW) conducted itself in accordance with regulatory guidelines and has an effective process in place for identifying and approving strategic land acquisitions." The only improvements suggested were relatively minor and were for earlier development of a community engagement plan and more detailed policies for engagement.
- vii. Since focussing on the Hills Rd site and developing the reticulation network plan, SGW has consulted with South Gippsland Shire Council, Melbourne Water, Southern Rural Water, the Department of Sustainability and Environment, the Environment Protection Authority, the Department of Planning and Community Development, Cardinia Shire Council, VicRoads and VicTrack. Apart from some yet to be substantiated objections from Cardinia Shire Council, the proposed project has not been opposed by these organisations.
- viii. It is Council's contention that SGW is required to find a site that is well-suited for the purpose and does not expose it to unacceptable risk or unreasonable cost. A satisfactory site has been found without the need for applying the statutory public acquisition process due to a willing seller which has saved time, money and reduced uncertainty. Council therefore considers that SGW has conducted itself appropriately and selected the most appropriate site for the WWTF.
- ix. In July 2012, SGW applied to Council for a Planning Scheme Amendment (C59) including a rezoning to Public Use Zone 1 (Service and Utility) for 65 Hills Rd Nyora where the WWTF was proposed, and an Environmental Significance Overlay 4 (Sewage Treatment Plant and Environs) applied to land within 700 metres of the centre of a proposed facultative lagoon.
- x. In October 2012, Council received permission from the Minister for Planning to prepare Amendment C59. Consultation with SGW, the Environmental Protection Authority (EPA), Department of Planning and Community Development (DPCD) and Planning Panels Victoria (PPV) resulted in Council making a request on 17 December 2012 to the Minister for a joint Planning Panel/Advisory Committee to hear submissions to both C59 and the EPA Works Approval for the WWTF. At the time of the request, the target exhibition date for C59 was late March 2013.





## 5. COST:

- i. Annual indexes for construction, local government, wages and consumption have been in positive figures for many years. An estimated cost of \$16 million in 2007 for capital works can be expected to cost close to \$20 million by 2013 assuming an annual index of 3.5%. (Note: the Municipal Association of Victoria has published the Local Government Cost Index estimate for 2012-13 as 3.9 per cent.)
- ii. SGW's original estimate of \$16 million for the proposed project was based on concept designs, with no specific site identified. The estimate had a standard contingency of 40%. (The contingency can commonly be 50% for sewerage projects at this design stage). Therefore, the project could originally have been expected to cost up to \$23.2 million as at 2007 if the contingency to +45% applied. With the annual cost index added (assume 3.5%), the project could conceivably be costing \$28,518,721 by 2013, which is very close to the current detailed design stage budget of \$28.6 million in SGW's 2013-18 Water Plan.
- iii. Concept design cost estimates are based on "average" costs (for example reticulation, linking, lagoon construction etc.) and necessarily make a number of assumptions. In hindsight, it is understood that the original concept stage costing underestimated a few factors, which have cumulatively raised the estimated cost.
- iv. In practice, the combination of time delays, some initial underestimated assumptions and progression to the detailed design stage has increased the estimated project cost to the current figure of \$28.6 million in SGW's five-year plan.
- v. Whether considered as a cost per allotment serviced, cost per year of the plan, as a cost per SGW residential ratepayer, or as a percentage increase of the total cost, the difference between the concept stage estimate of \$16 million indexed over time to \$20 million, or the detailed design currently estimated at \$28.6 million. Council considers that this cost is not excessive when all factors are taken into consideration.
- vi. SGW's five year Water Plan 2013-2018, (which includes the \$28.6 million budget for the Loch, Nyora and Poowong Scheme), proposes low residential tariff rises. Annual average combined water and wastewater general residential tariff increases range from 1.2% to 2.7 % and vacant residential tariffs from 0.9% to 3% over the five years for the Authority's two differential tariff regions. Residential customers comprise 93% of SGW customers.



- vii. According to the Commission's Table 21 Price Changes proposed by [water] business and prices under the draft decision – average 2012-14 to 2017, the [five-year accumulated, all charges, all customer groups, all regions basket] “price increases over five years proposed by the 12 water businesses in their Water Plans ranged from -3.4 per cent to 28.3 per cent.” SGW's proposed increase at 10.2% was placed fifth lowest out of the 12 businesses. If the draft decision is not applied to SGW, this increase still sits well within the moderated price adjustments the Commission “proposes to accept.” These “range from -10.8 per cent to 20.0 per cent over the coming five years.”
- viii. As a ‘directed’ scheme with the funding program supporting \$800 per lot contribution to SGW over 20 years, the scheme is not a ‘cost recovery’ proposition. As a water industry authority, SGW is in the position of providing services for net public and environmental benefit; it is not in the position of generating entrepreneurial profits in a free market solely for those that can afford to pay.
- ix. In the context of the above information, the proposed Loch, Nyora and Poowong sewerage scheme is clearly not causing unsustainable financial difficulty or risk to SGW, its ratepayers, or the State Government.
- x. As noted above, estimated costs increase annually outside of SGW's control. Investigations into alternative options also incur substantial expert consultancy costs. The more detailed the alternative option investigations, the more expensive they become. However if not sufficiently detailed, such investigations will offer less accurate budget estimates. Therefore further time delays and investigation will only increase these costs.
- xi. The scheme is consistent with several undertaken within SGW's region and across Victoria under the Country Towns Water Supply and Sewerage Program, including neighbouring authority, Gippsland Water.

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<sup>1</sup> Price Review 2012: Regional Urban Water Businesses Draft Decision – Volume 1, Essential Services Commission





## 6. COMMENTS ON YANNATHAN ROAD DEVELOPMENT GROUP'S (YRDG) DECEMBER 2012 SUBMISSION TO THE COMMISSION:

- i. The YRDG submission against the currently proposed sewerage scheme proceeding as planned is not representative of the general community view. Instead, it represents a group of landowners near the proposed sewerage treatment plant site in Hills Rd who wish to act against the proposal.
- ii. In regards to the proposed scheme, SGW has held numerous public meetings, run WWTP tours, sent many letters to landowners and occupiers (even by hand delivery where appropriate), and had phone contact and held one-on-one meetings with landowners/occupiers. Further, several press releases have been issued over the years, Council has been briefed at least twice and offers have been made to Cardinia Council for briefings (one accepted). Liaison between SGW and Council has been ongoing throughout the years of the project's development. Council considers YRDG claims about lack of consultation and respect of the community to be baseless.
- iii. Council considers YRDG's proposal for the WWTF and water reuse to be conducted solely at a Nyora sand quarry to be impractical given that regulatory approval is extremely unlikely to be given by the EPA for Class C water to be reused at the site. (Reasons – rapid dispersal through sandy soil to the aquifer, human contact in the mining/handling process, handling of wet sand, the sand's end product being toothpaste etc.) Mechanical treatment would be required to bring the reuse water to Class A standard (suitable for the situation). Class A quality reuse water would require mechanical treatment making it much more expensive to treat than the current Hills Road WWTF proposal. In addition, extra pumping and reticulation costs would be involved to get the waste to the quarry. It would also be a significant risk for SGW to rely on a single user taking 100% of the reuse water to make the project work. (For example what happens if the business ceases?)
- iv. The Hills Road site is suitable for onsite irrigation of reuse water, for sending reuse water to agricultural users and for linking into the SEW reuse system. The relatively sandy soil in the vicinity of Hills Rd can produce a greater irrigation demand than a heavy clay soil site. SGW has already identified five times the demand for agricultural reuse water within a five kilometre radius of the Hills Rd site than it could provide even when the WWTF is at full capacity from the anticipated 2035 population. With the proposed winter storage capacity and initial population being served by a WWTF at Hills Rd, it is understood that SGW does not anticipate being able to supply reuse water for the first two years after the facility is commissioned.
- v. SEW has advised Council that it has 'Heads of Agreement' demand far outstripping supply. These users are required to install the necessary infrastructure at their properties prior to SEW constructing a pipe to the property. Rumours reported to be circulating in the community indicating lack of reuse demand are false. Reuse demand has also been established from potential customers located between Hills Rd and the Lang Lang WWTF. These could be serviced by a reuse pipeline between the two locations.



- vi. The proposed Hills Rd site winter storages are designed to cope with the 90th percentile peak rain event. The Hills Rd site also has space for construction of additional winter storage lagoons.
- vii. The Hills Road site is not flood prone. Surface sheet water during periods of heavy rain, draining to a non-permanent watercourse on the site, can be readily diverted around the proposed treatment lagoons to ensure they are kept separate. This occurs at the Meeniyah WWTF. To make the most of gravity flow, WWTFs are normally located in low-lying areas.
- viii. Given the above points, Council submits that the YRDG's claims about the proposed scheme being technically flawed and making inadequate provision for reuse water, treated water and flood protection are in contradiction with the facts.

## **7. CONCLUSION:**

Council contends that there has been wide consultation for the existing suitable proposal for the Loch, Nyora and Poowong Sewerage Scheme comprising a reticulation network for the three towns and a WWTF at 65 Hills Rd Nyora. This scheme is well-founded, is well supported by the community and is close to exhibition readiness for both planning and EPA approvals. It is also consistent with other schemes both within the SGW region and within other water regions where the Country Towns Water Supply and Sewerage Program has been applied.

Council takes the view that the statutory exhibition process will enable full community comment and an independent hearing process for the proposed scheme. The majority of population of the communities in the three towns urgently desire implementation of the scheme in order to have adequate wastewater disposal and to remove existing public health and environmental risks.

Council respectfully urges the Commission to revise its Draft Determination for budget postponement in respect of the scheme and accept the scheme budget as contained in SGW's Water Plan III for 2013-18 to enable the Loch, Nyora and Poowong WWTF to be constructed and functional without further delay.