

**TWEED SHIRE COUNCIL
MEETING TASK SHEET**

User Instructions

If necessary to view the original Report, double-click on the 'Agenda Report' blue hyperlink above.

Action Item - COUNCIL MEETING Tuesday, 15 February 2011

Action is required for Item **23** as per the Council Resolution outlined below.

TITLE: [CNR-CM] Sewerage Strategy for Future West Pottsville Area

**Cr P Youngblutt
Cr B Longland**

RESOLVED that Council:

1. Provides in principle support to entering an agreement to contributing \$55,000 GST inclusive to have SIREX Water Utilities develop a private Sewerage and Water Strategy for the West Pottsville area based on stand alone private water and wastewater utility scheme under the Water Industry Competition Act 2006 (WIC Act) and Independent Pricing and Regulatory Tribunal (IPART) Licensing regime.
2. Undertakes a probity review to determine the appropriateness and legal impacts of the proposed agreement.
3. Seeks compensation from the developer for any Council contributions incurred if the developer seeks to withdraw from the process.

The Motion was **Carried**

**FOR VOTE - Cr P Youngblutt, Cr B Longland, Cr J van Lieshout, Cr K Skinner
AGAINST VOTE - Cr W Polglase, Cr D Holdom, Cr K Milne**

[Agenda Report](#)

TITLE: [CNR-CM] Sewerage Strategy for Future West Pottsville Area

ORIGIN:

Water

SUMMARY OF REPORT:

At its meeting of 16 February 2010 Council resolved to proceed with negotiations for the preparation of a Memorandum of Understanding for a Landholder/proponent funded sewerage and reuse strategy to facilitate the development of the Urban Land Release Strategy Areas 5, 6 and 7, and Employment Land Release Area 7.

Council has now received an offer to be part of and contribute to the development of a Private Sewerage Strategy for the future West Pottsville Area. There are advantages to Council in being involved which include the redirecting of existing sewerage areas to the proposed scheme removing the need to further augment the Hastings Point Wastewater Treatment Plant above 18,000 Equivalent Persons. There are some significant longer term benefits to Council's conveyancing system, including less odour generation and the associated asset degradation resulting in ongoing cost savings.

The proposed scheme intends to maximise effluent reuse for the new development area including a third pipe system for non-potable residential reuse. Additionally sewage redirected from the existing adjacent development can be treated and reused. This approach is in line with Government and community directions and Council's Integrated Water Cycle Management strategy.

The contribution to the development of this initial strategy is \$50,000 exclusive of GST.

There is a risk that this contribution could ultimately not deliver an outcome as critical parties involved may opt out at future stages. Council itself will also have to consider its position at each stage of the proposed scheme potentially putting at risk any previous investment.

As the scheme progresses beyond the preliminary phase Council will need to gain specific advice on legislative procurement requirements to ensure compliance.

Council would normally develop sewerage strategies for land identified for rezoning. However Council's resources are allocated to the development of land already rezoned.

To progress any further consideration of this area for rezoning a sewerage strategy is required. If Council intends to give consideration to rezoning of this area in the short to medium term then it is recommended that this offer be accepted.

RECOMMENDATION:

That Council:

- 1. Provides in principle support to entering an agreement to contributing \$55,000 GST inclusive to have SIREX Water Utilities develop a private**

Sewerage and Water Strategy for the West Pottsville area based on stand alone private water and wastewater utility scheme under the Water Industry Competition Act 2006 (WIC Act) and Independent Pricing and Regulatory Tribunal (IPART) Licensing regime.

- 2. Undertakes a probity review to determine the appropriateness and legal impacts of the proposed agreement.**

REPORT:

At its meeting of Tuesday, 16 February 2010 Council resolved:

That notwithstanding Council's adopted Urban Release Strategy, Council proceeds with negotiations for the preparation of a Memorandum of Understanding (MOU) which would involve:

- Landholder/proponent funded sewerage and reuse strategy to facilitate the development of Urban Land Release Strategy Areas 5, 6 and 7, and Employment Land Release Area 7;
- Memorandum of Understanding (MOU) covering terms of reference, risk allocation, timings and scope for the strategy stages and to obtain agreements for the proposal to fund the various stages of the strategy; and
- Preparation of a report to Council with MOU and funding agreements for Council approval before proceeding with engaging consultants for the preparation of the strategy.

To progress this matter a meeting with Developers and Landholder was held on 9 June 2010.

At this meeting Council Officers advised of the difficulties and risks in gaining an approved Sewerage Strategy, which generally related to effluent disposal, community acceptance, approvals, time and cost issues.

The consensus reach at this meeting was that Developers would explore further, the private option of providing wastewater services before coming back to Council to consider a strategy study and associated MOU. This effectively placed Council's resolution on hold.

Additionally the Developers advised that they had previously been in discussions with representatives from a private water utilities company, SIREX, and requested a further meeting with Council Officers be scheduled.

This follow up meeting was held with Developers, SIREX and Council Officers on 15 July 2010.

Heritage Pacific advised they have engaged SIREX (a private water utility company) to investigate the provision of water and wastewater infrastructure and services for the West Pottsville area development and specifically for the industrial land site.

SIREX propose to provide these facilities and services under an IPART Licence approved under the Water Industry Competition ACT 2006 (WIC Act), (This Act became fully operational with regulations in August 2008).

Their approach to developing a sewerage scheme includes the following advantages:

- The production of a non-potable residential reuse standard effluent maximising the opportunity for reuse.
- The Treatment process offered is robust in respect to achieving the effluent standard proposed, ie. Membrane Bio-Reactor (MBR), Ultra-Filtration (UF), Reverse Osmosis (RO), Ultra-Violet disinfection (UV) and Chlorination.
- A pressure sewer system has the potential to achieve low infiltration and inflow volumes, minimising wet weather impacts.
- The system incorporates sophisticated technology to maximise flow balancing within the collection and transfer system, reducing peak flows and hence the size of pipes, pumps and the Wastewater Treatment Plant (WWTP).
- Incorporates 3rd pipe residential effluent reuse system, and reuse for other non-potable demands.

The outcomes of this meeting for the Pottsville Development Areas 5, 6, 7 and employment land Area 7 were:

- Council requires an overall strategy for the area to be developed.
- Council would consider a strategy based on a private water utility provider licensed under IPART producing effluent of a non-potable residential reuse standard incorporating a 3rd pipe system and maximising reuse.
- Council would consider a private stand alone system to service part of employment lands Area 7 if licensed under IPART producing effluent of non-potable residential reuse standard incorporating a 3rd pipe system and maximising reuse. However the design of this system should allow for later incorporation into an overall strategy.
- Council also indicated that it would consider the opportunity to redirect part of the existing Hastings Point catchment to this scheme to avoid the need to further augment the existing WWTP.

A workshop held 12 October 2010 provided Councillors with an update in relation to these discussions.

A meeting also held 12 October 2010 arranged by Heritage Pacific, SIREX provided a presentation to some of the landowners with Council's Manager Water in attendance. SIREX presented a draft proposal to the group for the preparation of Sewerage and Water Strategy for the West Pottsville area which is reproduced below. The meeting canvassed the land owners for a commitment to funding the initial Strategy Study.



Proposed: West Pottsville Sewerage and Water Strategy Plan

Project Appreciation and Background

Heritage Pacific has commissioned Sirex Water Utilities (Sirex) to develop a sewerage strategy plan. This will incorporate a standalone private wastewater utility for their proposed first stage of the Pottsville industrial development known as Pottsville East Industrial land. Sirex noted that the Pottsville area is (including the Heritage Pacific industrial site) within the Tweed Shire Council, and this area is currently undergoing significant planning and development for urban release. Sirex, after discussion with Tweed Shire Council and several of the major urban development stakeholders in West Pottsville area, agreed to investigate the option of providing a sewerage & water cycle strategy plan to service this area by a private utility.

The Business-as-Usual provision of sewerage and water supply infrastructure for this urban expansion has major financial, environmental and sustainability limitations. Thus, Sirex which is a private company established in 2005 specialising in the provision of water, wastewater and recycled water infrastructure services is submitting this proposal to investigate the option for the scheme stakeholders.

Sirex has operational residential subdivision projects, located at; Deep Creek Marina at Moama, NSW; Forest Resort at Creswick Victoria; Fyansford near Geelong VIC; and ERA residential at Redlands QLD; currently in use.

Sirex also has an approved licence from the VIC EPA to build and operate a water cycle scheme for the Fyansford 2000-lot residential subdivision with Class A+ recycled water for unrestricted non-potable water reuse and emergency discharges to the Moorabool River.

Annexure A

The proposed scheme's land owners are shown in the table below

Area	Growth Area	Net (Assume 80% developable)	Yield	Assumed ET rate	Total ET
Tweed Shire Council					770
Kings Land	27ha (as per Tuelrs 2009) (25ha HP & 2 ha others)	22ha	Assume 13 lots per ha	1ET per allotment	286
Pottsville Development Corp Land (Cowan)	74ha (as per RC figures)	49ha	10ha at 13p/ha 39ha at 9 p/ha	130 351	481
Dunloe (Petersen)	175ha (as per TUELRS 2009)	140ha	Assume 13 lots per ha	1,820	1,820
Springfield RTA	15ha (as per TUELRS 2009)	Assume 80% dev. 12ha	30EP per ha 360EP	2.8EP =1ET	129
Tagget Residential	6.5ha (as per RC figures)	4.8ha	Assume 13 lots per ha	63	63
Pottsville Employment	99ha (as per TUELRS 2009)				
Hardy Land	74 ha	Assume 80% developable 59.2ha	30EP ha = 1776	2.8EP=1ET 634 ET	634
Others	Inc: 18ha (Kudgerie Av & scattered residential lots)	Assume 80% Developable 14.4ha	30EP per ha 432	2.8EP=1ET 154 ET	154
Jackson's (a component of Pottsville Employment lands above)	7ha (as per TUELRS 2009)	Assume 80% developable 5.6ha	30EP per ha 168	2.8EP=1ET 60ET	60
Pottsville Industrial	14.75ha (as per TSC resolution 17 th August 2010)	Assume 80% developable 11.66ha	30EP per ha 350 EP	2.8EP=1ET 125 ET	125
Total					4,522 ET

Annexure A

Currently, Tweed Shire Council provides the existing urban areas in the Pottsville area with water and sewerage services from their Water Treatment Plant at Bray Park and their Sewerage Treatment Plant (STP) at Hastings Point.

The Hastings Point STP has effluent disposal issues and cannot fully service the proposed urban expansion areas. Additionally some of these expansion areas would require extensive (and expensive) pressurised sewerage to transfer wastewater to the Hastings Point STP, which would be located some 10 km away from the STP. Alternatively, the private utility option provides an integrated standalone water and wastewater solution that is individually tailored for the proposed urban expansion considering the existing infrastructure.

The Sirex, private utility option would have the following benefits:

- Certainty in timing and service delivery of sewerage, wastewater treatment, recycled water and potable water infrastructure for the urban expansion areas.
- Sustainability benefits including optimum water conservation (55% reduction in potable water use compared to a standard residential house) and minimal environmental impact through integrated water cycle management including safe use of Class A+ recycled water for all non-potable water urban demands.
- Innovative technology using state-of-the-art membrane and control systems leading to smaller footprint, higher quality recycled water and minimal impact on surrounding environment.
- More cost effective compared to business-as-usual options with capital cost spread over time or as required.
- Coordination with Tweed Shire Council in formulating the strategy plan that it meets all the future planning, environmental and health issues.

Scope of services

Based on our understanding of the proposed scheme's requirements, we propose the following scope of services:

- a Meet with the relevant stakeholders of the proposed scheme to discuss their planning and water cycle services issues at the commencement of the assignment to clarify the objectives of the project, scope and deliverables.
- b Review relevant available data and background information such as those related to existing sewerage infrastructure, current sewerage planning for the proposed precinct plans, catchment plans and contours, rainfall data, environmental studies, water quality and quantity of available water resources.
- c Develop a water balance model for the scheme. This would include estimation of wastewater generation, potable and recycled water demands for the various land uses within the urban expansion area.
- d Develop alternative water cycle strategies for the proposed scheme. This would include investigating options to find the most cost-effective strategy

Annexure A

to manage sewerage and meet the potable and non-potable water demands for the scheme considering its constraints and opportunities. A standalone option will be investigated, which assumes that the scheme will be completely independent of the Springfield sewerage network. The main elements of this option will be preliminarily ascertained such as; staging; treatment plant footprint; storages; recycled water provision; interface with potable water supply; and preliminary cost budgets. This would involve master plan modelling for wastewater transfer and potable water supply options to service the proposed urban expansion areas.

- e Screen the scheme options and evaluate the shortlisted options based on financial, risk, regulatory and environmental considerations.
- f Scope regulatory issues and requirements, and outline a probable performance and implementation model for the selected scheme.
- g Ascertain implementation requirements including timing for approvals, design, construction and implementation.
- h Consult with the land owners in the selected scheme.
- i Document all findings in a report that would include the preferred water cycle strategy for the scheme including cost estimates, implementation strategy, timing, staging, preliminary layout, regulatory implications and environmental sustainability. This report would be the basis for a Sirex commercial proposal if the scheme land owners decided to progress this option further.
- j The costs for the West Pottsville Sewerage Strategy Plan would be proportioned over the interested land owners on an ET basis.

The costs based on all stakeholders accepting, would be proportioned as follows;- *(all amounts exclude GST)*

✓ (a) Tweed Shire Council	770 ET	\$ 36,960
× (b) Kings Land	286 ET	\$ 13,728
✓ (c) Pottsville Development Corp	481 ET	\$ 23,088
× (d) Dunloe (Petersen)	1,820ET	\$ 87,360
× (e) Springfield RTA	129ET	\$ 6,192
✓ (f) Tagget	63ET	\$ 3,024
✓ (g) Pottsville Employment	634ET	\$ 30,432
× (h) Pottsville Employment others	154ET	\$ 7,392
× (i) Pottsville Employment Jackson	60ET	\$ 2,880
✓ (j) Pottsville Industrial Stage-1	125ET	\$ 6,000
Total	4,522ET	\$217,056

Annexure A

Commercial Terms:

- 25% upon signing the Agreement and first payment made by the 15th November 2010;
- 50% on issue of draft report to be paid within 14 days of date of tax invoice date;
- 25% on Tweed Shire Council acceptance of the strategy plan to be paid within 14 days of tax invoice date;

Subsequent to this meeting Council received correspondence confirming which Landholders are currently prepared to contribute to the strategy study and are listed in the table below.

Owner	ET Potential
Kings Land	286
Pottsville Development Corp Land	481
Springfield RTA	128
Tagget Residential	63
Jackson's (a component of Pottsville Employment Lands)	60
Pottsville Industrial	125
Total	1144
Possible Tweed Shire Council component – Redirection of either Black Rocks and parts of Pottsville Waters or parts of Seabreeze Estate	770
Combined Total	1914

The revised cost of the strategy for this smaller loading is \$160,000 excluding GST.

Council now has an opportunity to investigate the redirection of up to 770 Equivalent Tenements from the Hastings Point Sewerage Catchment to this proposed private utility scheme.

At a workshop for Councillors held 27 October 2009 it was highlighted that there were capacity limitations in providing for growth outside the existing catchment without further augmentation. There are some real constraints to achieving further augmentation of this Wastewater Treatment Plant (WWTP) which include:

- The Dune Ex-Filtration System's ongoing capacity is unlikely to be greater than 18,000 Equivalent Persons (EP), noting it has already been doubled in size and further approvals are unlikely.
- A full range of government approvals will be required for augmentation of the plant in excess of 18,000 EP including requirements for more effluent reuse, noting existing developed areas provide limited opportunities for viable and cost effective reuse and the new development is located on the fringe of the catchment far from the WWTP.
- A Creek / Estuary discharge is unlikely to gain community or Government Agency support.
- A deep ocean release would be costly and may also be unlikely to gain community or Government Agency support.

The potential benefits to Council if the proposed private scheme was developed include:

- Avoiding Augmentation of the Hastings Point WWTP above 18000EP.
- Reduced Septicity in the existing conveyancing system to Hasting Point WWTP. Reducing odour, odour control costs and asset degradation due to sulphuric acid generation.

- Potential for a significant quantity of wastewater generated from existing residential development to be redirected and reused.
- The production of a non-potable residential reuse standard effluent maximising the opportunity for reuse.
- Incorporates 3rd pipe residential effluent reuse system, and reuse for other non-potable demands in the new developments.
- The Treatment process offered is robust in respect to achieving the effluent standard proposed, ie. Membrane Bio-Reactor (MBR), Ultra-Filtration (UF), Reverse Osmosis (RO), Ultra-Violet disinfection (UV) and Chlorination. There by significantly reducing the impact on receiving waters for the portion that may have to be discharged.
- A pressure sewer system has the potential to achieve low infiltration and inflow volumes, reducing the amount of sewage requiring collection, treatment and reused.
- The system incorporates sophisticated technology to maximise flow balancing within the collection and transfer system, reducing peak flows and hence the size of pipes, pumps and the Wastewater Treatment Plant (WWTP).
- Potentially a cost effective option to provide the additional future treatment capacity Council requires in this area.

For the Strategy study to proceed, it is proposed that all parties financially contribute on an ET proportional basis. If Council wishes to take advantage of this opportunity the contribution calculation would be 770 ET / 1914 ET x \$160,000 equating to \$64,368 excluding GST. The developers however have offered to limit Council's contribution to \$50,000 excluding GST.

There are risks involved with proceeding with such an offer, as the scheme at any stage may not proceed due to developers deciding not to progress, SIREX discontinuing their involvement, approvals not being gained and for many other reasons.

The next steps in the process beyond the Strategy include SIREX gaining IPART approval to construct and operate such a scheme which would be a prerequisite for consideration of any future rezoning applications.

Council would have to consider carefully its involvement at each step along the process, noting its previous investments in developing the scheme to each subsequent stage could be at risk.

Investment in such a scheme beyond the preliminary stages will be complicated by compliance with the Local Government Act's Procurement requirements and Regulations. Specific Ministerial approvals are likely to be required to justify a value for money outcome.

Historically Council would develop and therefore fund sewer strategies for land proposed to be rezoned. In this case it is considered to be out of sequence development and Council's resources are allocated to the development of existing zoned land. This circumstance has required developers to take the initiative and demonstrate how this area can be effectively sewered before any rezoning application could be considered.

Therefore in reference to all of the above issues and if Council intends to progress consideration of this area for future rezoning in the short to medium term, then it is recommended that this offer be accepted for the following reasons:

- The rezoning considerations can't progress without a sewerage strategy
- The Strategy is based on the premise of maximising effluent reuse and incorporates technology that allows this.
- Such a Strategy is considered to be the only realistic option of achieving government and Community acceptance.
- It allows Council the opportunity to investigate a potentially significant water reuse scheme likely to have very good water cycle management outcome.
- The proposed shared cost arrangement is considered to be cost effective for this type of engagement and minimises the individual parties' contributions to overhead costs.
- Council is not committed beyond the Strategy development.

LEGAL/RESOURCE/FINANCIAL IMPLICATIONS:

Progression of this proposal beyond this strategy stage will require legal advice in respect compliance with procurement requirements and will require an escalating financial commitment at each stage. The implications of each future stage will require reassessment.

Adoption of the service delivery model using a private water utility would relieve Council of the responsibilities associated with development of a sewerage treatment plant in anticipation of development. The licensed network operator would be responsible for compliance with environmental and other considerations and the licensed retailer would be responsible for collection of charges and paying the network operator for its facilities. This proposal however includes an agreement for Council to provide the retail services to the licensed retailer.

POLICY IMPLICATIONS:

Proceeding with this strategy is contrary to Council's adopted position on the Urban Land Release Strategy.

UNDER SEPARATE COVER/FURTHER INFORMATION:

*To view any "**non confidential**" attachments listed below, access the meetings link on Council's website www.tweed.nsw.gov.au (from 8.00pm Wednesday the week before the meeting) or visit Council's offices at Tweed Heads or Murwillumbah (from 8.00am Thursday the week before the meeting) or Council's libraries (from 10.00am Thursday the week of the meeting).*

Nil.
