

MINUTES

Meeting No.	23
Meeting	FN Qld Water Alliance
Date	28 February 2020
Time	10 am
Venue	Cairns Regional Council - Committee Room – Level 3

1. Attendance

Name	Organisation
Manu Gravatt	Cassowary Coast Regional Council
Jon Turner	Tablelands Regional Council
Amy Yates	Mareeba Shire Council
Rohan Geddes	Mareeba Shire Council
Ryan Cosgrove	Qld Water
Peter Tonkes	Douglas Shire Council
Michael Suhan	Carpentaria Shire Council
Ashley Boland	Croydon Shire Council
Lachlan Rankine	FNQROC
Mark Wuth	Cairns Regional Council
John Bishop	Cairns Regional Council
Simon Page	Cairns Regional Council

2. Apologies

Name	Organisation
Morris Hamill	Mareeba Shire Council
Gene Brookes	Hopevale Aboriginal Shire Council
Geoff Smart	Cassowary Coast Regional Council
Dawn Lake	Yarrabah Aboriginal Shire Council
Paul Hoye	Douglas Shire Council
Robert Fearon	Qld Water
Robyn Maddalena	Cook Shire Council
Gary Pickering	Croydon Shire Council
Robert Uebergang	Cook Shire Council
Shane Butler	Etheridge Shire Council
Victor Mills	Wujal Wujal Aboriginal Shire Council
Graham Stanford	Tablelands Regional Council
Mark Vis	Tablelands Regional Council
Peter Martin	Hinchinbrook Shire Council

3. Welcome

The meeting was opened at 10.00 am and all participants were welcomed.

4. Acceptance of previous minutes, No. 22, 28 February 2019

The minutes of the meeting of the 28th February 2019 were accepted without change.

1. Presentation and Discussion

23.1	Biosolids Gasification System(Downer)	Mark Newland
<p>Mark Newland of Downer Group presented on the Biosolids Gasification System developed by Downer (in conjunction with Pyrocal Pty Ltd), for the purpose of sustainable upgrading of biosolids from STP's. Simple process: Dewater -> Dry -> Carbonisation (Biosolids Char). It was noted that this is done as a self sustaining (energy) process.</p> <p>Proven technology (i.e. Gasification of biomass wastes) currently operating on green wastes, cotton gin and sugarcane trash, almond and rice hull, and biosolids. Full scale test plant installed at Logan City Council, with trials occurring from February to May.</p> <p>Partially funded via federal ARENA(Australian Renewable Energy Agency Funding - https://arena.gov.au/projects/logan-city-biosolids-gasification-project/)</p> <p>Key Advantages:</p> <ul style="list-style-type: none">- Treats WAS directly- ~90% reduction of mass/cost compared to dewatered sludge cake- Sterilised(heat) end product(Class A).- Reduces leachability of metals- End product value (bio-char, agriculture, soil remediation)- Destroys emerging pollutants of concern and locks up persistent organic pollutants(POPs)/micro plastics that accumulate in sludge. <p>Site visit being organised for tentatively for the first week in April. Interested parties to contact Lachlan/Mark to organise an invitation. Lachlan to distribute the presentation with the minutes.</p> <p>Action item 23.1: Lachlan to distribute Downer biosolids gasification presentation with the minutes.</p>		
23.2	Regional Innovation - Cassowary Coast Regional Council	Manu Gravatt
<p>Cardwell Water Quality Improvement Project</p> <p>The Kennedy Bore Project was established to reduce water quality issues experienced during heavy rainfall events in the Meunga Creek catchment in the Cardwell Water Supply Scheme. Won the 2019 IPWEAQ Excellence Award <\$1 Million. Issues with high turbidity during heavy rainfall events, causing a requirement to issue boil water notices. Part of the solution was to install an autoscour on the Meunga intake, with a real time turbidity probe connected to a series of automated valves. This enabled the intake pipeline to isolate and scour back into Meunga Creek prior to turbid water entering the water supply network. On high turbidity events, supply is supplemented by the Kennedy Bore. No breaches of DWQMP have been experienced since. Total Capex \$560,000. Annual Opex \$30,000. Also, notable reduction in labour force opex due to reduction in out of hrs callouts.</p> <p>Stoter's Reservoir Roof Replacement</p>		

Primary supply to Innisfail Water Supply Scheme. Capacity of 4.5ML~35.5m dia). Built in 1950's, as open tank, later retrofitted with polyvinyl roof (2004). Retrofit has since degraded and no long performed its intended function. Obligation under ADWG to provide fully enclosed storages, be securely roofed with external drainage to prevent contamination. Additionally, to Prevent unauthorised access to, or interference with, water storages. Alternatives included replacing the existing polyvinyl roof (\$200,000) or a traditional fixed roof with columns (\$477,000). Self-supporting geodesic dome roof chosen (\$648,000 ex GST). To be completed March 2020.

Magnesium Hydroxide Dosing Program

Due to time, it was determined that findings and updates would be circulated with the minutes.

Action item 23.2: Lachlan to distribute presentations associated with Cardwell Water Quality Improvement Project, Stoter's Reservoir Roof Replacement and notes on Magnesium Hydroxide Dosing Program with the distribution of the minutes.

2. Regional Sewer Re-lining Contract Update

23.3	Sewer Relining Update	Amanda Hancock																
<p>Amanda noted the participating councils(MSC, CRC, TRC, CCRC and Douglas(CCTV)), and outlined the following timelines and stages of the sewer relining program:</p>																		
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<p>It was also noted that the ongoing regional biosolids program are up for renewal at the end of July 2020, it is suggested that this be a one year extension to contract, but to be determined in consultation with councils. Minor extra costs involved as now a State requirement to test for PFAS/TOF etc under End of Waste Code.</p>																		
<p>Water Chemicals are up for renewal at end of calendar year, and will be distributed nearer to the due time. No feedback has been received, with the program rolling on without concern.</p>																		
<p>Amanda will send out correspondence in due time for each council's consideration when these programs fall due.</p>																		
<p>Action Item 23.3: Councils to continue to liaise with Amanda regarding documentation requirements and timelines for sewer relining.</p>																		

3. Water and Environmental compliance updates and issues

23.4	Water and Environmental compliance updates and issues	All Councils
<p>No updates from the councils. It was noted that there would be benefit in inviting Lyn Powell whom sits on the SWEAP group to provide periodical updates to the FNQ Water Alliance. Ryan Cosgrove attended, whom provided the following comments:</p> <ul style="list-style-type: none"> - Emerging Contaminants workshop held last year was well received, with PFAS and associated compounds were the main focus of the workshop <p>SWEAP Strategy and standing group</p> <ul style="list-style-type: none"> - The standing group is comprised 5 key science/ environment personal from councils across QLD, the idea being that when a new emerging issues are identified, the group develop an industry response. Intended to help mitigate the potential overblown noise that often occurs. - The SWEAP group developed a strategy for future works and issues that may occur, with the standing group identified as being an integral part of dealing with future 'emerging contaminants' <p>Consortium</p> <ul style="list-style-type: none"> - SWEAP directed Qldwater to investigate partnering with CRC care which led to the development of the consortium approach. This will hopefully allow greater access and partnership with research bodies to provide greater backing to technical advocacy. Circa - Rough numbers are 7 councils are initially apart of the consortium 		

4. Actions/Updates from Previous Meeting No. 21 & 22

Meeting 21

21.2	H ₂ S/Bacterial Trials Comparison	CCRC/All Councils
<p>Group was to reconvene after H₂S/Bacterial Trials to compare the outcomes of each trial. It was noted that Bacterial trials were undertaken by CCRC, with limited success. Further information can be attained from Geoff Smart Cassowary Coast. Magnesium Hydroxide(Mg(OH)₂) trial outcomes are to be distributed with the minutes. For more information, contact Graham Chapman of CCRC.</p>		
21.2	Premature Failures of Small diameter PE Mains	Lachlan Rankine
<p>Item was listed as an amendment to regional standards in the FNQROC Development Manual, subject to the review/comments from all councils in the region. This was subsequently supported through the Council Review stage, noting the specific note/amendment to pipe selection being:</p> <p><i>'Subject to the oxidative reductive potential of the water being determined, and an appropriate determination on of class of pipe being specified by the designing engineer.'</i></p> <p>The Regional Development Manual is currently out for consultation, with the industry consultation session to be held on the 6th March 2020(10am) for Water and Waste, and the 9th March 2020(9am) for all other asset classes.</p>		

Meeting 22

Item	Action	Responsible
22.1	Lachlan to prepare a submission to QWRAP Bid Pool Funding for the costs associated with the FNQ Regional water quality alliance workshop and symposium.	Lachlan
Item Update: Funding received, project complete and acquitted.		
22.2	Lachlan to prepare a Terms of Reference document for the FNQ Regional water quality alliance for review by the FNQ Regional Water Alliance Group.	Lachlan
Item Update: Terms of reference complete and distributed. Group no longer proceeding. Item to be removed.		
22.3	All interested councils(Mareeba SC, Cairns RC, Tablelands RC) to provide Amanda with quantities of sewer relining works (lengths/connections/manholes etc) to allow a project scope to be developed.	All Councils
Item Update: Program proceeding – See Minutes.		
22.4	All councils to send a quantum(\$) and criticality of both water and sewer assets reaching their end of life within the next 5 years to Arron (Arron.Hieatt@lgaq.asn.au), also copied to Lachlan(l.rankine@fnqroc.qld.gov.au)	All Councils
Item Update: No further action required on this item. Outcomes of which were used in the development of LGAQ's Rural Water and Wastewater Guarantee. Item to be removed.		
22.5	Lachlan to organise regional cert III - Water Industry Operations within the region. Will advise/request from council if/where further information is needed.	Lachlan
Item Update: Item completed and sent to Councils. Alternative may be undertaken directly through Water skills Queensland.		
22.6	Lachlan to submit QWRAP funding application for regional cert III - Water Industry Operations training within the region.	Lachlan
See Item Above. Alternative funding opportunity sourced.		

5. General Business

23.5	Contract Documents	Amanda Hancock
<p>Councils were notified that design and construction have been available for quite some time on the FNQROC website, with a new tranche of goods and services contracts now available. Each contract set is specific to each council.</p> <p>Councils are also requested to submit feedback (improvements/suggestions/workability on the documents through the document change register also online), with updates being collated, and integrated regular intervals for the benefit of all councils.</p> <p>It was noted that we are considering running another round of training around April/May, specific to the goods and services documents, which will be notified on confirmation of dates and funding.</p>		
23.6	Chlorates/Electrochlorination	Lachlan Rankine
<p>A brief discussion was undertaken around Chlorates/Electrochlorination, considering the states inclination in further legislating the use of these, which subsequently considered further technical aspects and dosing rates etc. It was noted that the presentation given by Coogee Chemicals during</p>		

their Cairns Depot opening contained a large amount of information addressing these concerns, so it was subsequently requested that this be distributed with the minutes.

Action Item 23.6: Lachlan to distribute the Coogee Chemical Depot Opening presentation with the minutes.

23.7	FNQROC Dam Study	Lachlan Rankine
<p>FNQROC are currently undertaking a study into Capital Investment in dams. It centres around the requirement of COAG’s National Water Initiative Pricing Principles³, agreed to in 2010, established that water pricing is to be on commercial rates, which is over the economic life of the infrastructure, not the useful life of the asset. This key premise is the subject of the study. Aurecon has been commissioned to undertake the study. Base Case is Rockhampton, with 3 other Australian Dams considered(Tinaroo/Emerald/WA) and one international site – St Louis, USA. Has been undertaken in consultation with Infrastructure Australia. Initial feedback due circa 2 weeks(Mid March). Briefing note to be distributed with the minutes.</p> <p>https://www.fnqroc.qld.gov.au/files/media/original/004/9f3/e93/b1f/FNQROC-Briefing-Note_Tinaroo-Dam-V4.0.pdf</p> <p>Action Item 23.7: Lachlan to distribute FNQROC Capital Investment In Dams briefing note with the minutes.</p>		

23.8	Cyber Security	Lachlan Rankine
<p>A brief discussion was had about cybersecurity risks and considerations as part of the Drinking Water Quality Management Plan assessments of risk. Cairns nominated that they had undertaken significant work in this regard, in conjunction with their IT department. Cairns Regional Council nominated to present on the topic at the next meeting (Simon Page/Shane Pfeiffer) . It was also noted that there would be merit in sharing the scoping documents for RFT’s when requesting contractors to undertake cybersecurity investigations (the WSA guidelines for Cybersecurity were also a good resource).</p> <p>Action Item 23.8: Cairns Regional Council to present on their developments in Cyber security as it relates to their Drinking Water Quality Management Plan (Risk assessments) at the next meeting(Simon Page/Shane Pfeiffer).</p> <p>Action Item 23.9: To share (if available to do so), scoping documents for request for tenders for cybersecurity investigations.</p>		

23.9	Drinking Water Quality Management Plan Audits.	Lachlan Rankine
<p>A brief discussion was had regarding the upcoming required Drinking Water Quality Management Plan Audits required by the regulator. The group requested Lachlan to prepare a regional request for quote similar to that of 2017.</p> <p>Action Item 23.10: Lachlan to prepare a regional request for quote for Drinking Water Quality Management Plan Audits.</p>		

6. Update from LGAQ Advisory Committee representative (Mark Wuth)

7. Update from LGAQ and Water Directorate (Ryan Cosgrove)

23.5	Water Directorate Update	Ryan Cosgrove
<p>Reef MIP</p> <p>The Reef Councils Major Integrated Project (Reef MIP) is a LGAQ initiative to reduce nutrient flows to the GBR. Funded by OGBR to LGAQ, with Qldwater managing the cleaner wastewater component of the MIP. 3 components; fish friendly councils, unsealed roads run-off and the cleaner wastewater. The cleaner wastewater has multiple outputs to assist councils in reducing nitrogen to the reef.</p> <ul style="list-style-type: none"> - Options matrix: the options matrix is to provide a ‘high-level’ smorgasbord of potential treatment technologies that councils could apply in the reef catchment. These technologies range from low tech to high tech solutions or, offsets, to algae ponds to MABR plants. Designed to give a broader picture of applicable technologies rather than current technology trends favoured by consultants. - Through 2 workshops, held as part of the project, councils were invited to submit a site for a high level LCA of an identified alternative treatment solution. - 5 of the 10 applications successful, the alternative approaches are; Macro Algae (Burdekin), Recycled water scheme (Douglas), Tree plantation irrigation (Fraser Coast), changed farming practice offset (Mackay) and a modular containerised MABR (Yarrabah) - Final component of the works is an investment strategy for LGAQ to use to advocate for more funding for STPs in the reef - Investment strategy will use components of the LCA, options matrix and prior workshop components to inform the strategy <p>QWRAP</p> <p>RAPAD Region SCADA Project</p> <ul style="list-style-type: none"> - The RAPAD region has undertaken a SCADA project to help provide direction for future services - The SCADA review consisted of an audit/ assessment of their current kit (site inspections) and included a rough quote for remediation and upgrade works - Review was initially difficult to get across the line for councils, once works had begun and issues identified all councils involved have praised the project, e.g. project identified radio frequencies were to expire relatively soon - Region is progressing into the next phase which is the CONOPS (Concept of Operations) - Project included adhering to the WSAA SCADA/ Cybersecurity guidelines <p>DASB Region SCADA Project</p> <ul style="list-style-type: none"> - Project was to develop a regional set of SCADA guidelines for use across the region. - The councils involved all have various SCADA systems and working to a common approach or system is only possible over a 5-10+ year plan - Guidelines are available to share, based on the WSAA SCADA Guidelines <p>QLD Water - Water Industry Worker (WIW)</p> <ul style="list-style-type: none"> - The WIW program was expanded through the WIM QWRAP Group (Whitsunday, Isaac and Mackay) - The program was cross regional as Townsville and Cairns have been included, Burdekin was a part of the initial rollout - Further training rounds are slowing occurring with the WBBROC group undertaking the training approach in their region 		

- If you want to get a better understanding of the project contact Carlie Sargent at qldwater.

8. Points for noting to the FNQROC Board

None Arising.

9. Next Meeting

Next meeting date Tuesday 19 May 2020.

10. Actions Arising out of this meeting:

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23.2	Lachlan to distribute presentations associated with Cardwell Water Quality Improvement Project, Stoter's Reservoir Roof Replacement and notes on Magnesium Hydroxide Dosing Program with the distribution of the minutes.	Lachlan
23.3	Councils to continue to liaise with Amanda regarding documentation requirements and timelines for sewer relining.	All Councils
23.6	Lachlan to distribute the Coogee Chemical Depot Opening presentation with the minutes.	Lachlan
23.7	Lachlan to distribute FNQROC Capital Investment In Dams briefing note with the minutes.	Lachlan
23.8	Cairns Regional Council to present on their developments in Cyber security as it relates to their Drinking Water Quality Management Plan (Risk assessments) at the next meeting(Simon Page/Shane Pfeiffer).	CRC (Simon Page)
23.9	CRC to share (if available to do so), scoping documents scoping documents for request for tenders for cybersecurity investigations.	CRC
23.10	Lachlan to prepare a regional request for quote for Drinking Water Quality Management Plan Audits.	Lachlan

11. All Action Items Pending:

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