



# FAR NORTH QUEENSLAND REGIONAL WATER ALLIANCE

## Minutes

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<b>Meeting No</b>	27
<b>Meeting Name</b>	FNQ Regional Water Alliance
<b>Date</b>	30 July 2021
<b>Time</b>	10:00 am
<b>Venue</b>	Committee Room – Level 3 – Cairns Regional Council

## Attendance

Name	Organisation
Geoffrey Smart	Cassowary Coast Regional Council
Manu Gravatt	Cassowary Coast Regional Council
Morris Hamill	Mareeba Shire Council
Shane Bandiera	Cassowary Coast Regional Council
Toni Veronese	Cairns Regional Council
Jon Turner	Tablelands Regional Council
Garry Pickering	Croydon Shire Council
Peter Tonkes	Douglas Shire Council
Sam Bann	Yarrabah Aboriginal Shire Council
Duncan Middleton	SEQ Water (via Teams)
Robyn Maddalena	Cook Shire Council
Victor Mills	Wujal Wujal Aboriginal Shire Council (via Teams)
Wendy Hughes	FNQROC

## Apologies

Name	Organisation
Shane Butler	Etheridge Shire Council
Jennifer Godin	Cook Shire Council
Gene Brooks	Hope Vale Aboriginal Shire Council
Rohan Geddes	Mareeba Shire Council
Peter Martin	Hinchinbrook Shire Council

### 1. Welcome and apologies

Meeting opened 10.10am. W Hughes thanked everyone for coming and welcomed all to the meeting.

### 2. Confirmation of previous minutes

Minutes noted and accepted.

### 3. Business arising

Item	Action	Responsible
26.1	W Hughes to circulate DWQMP audit summary notes as presented by D Deere with the minutes.	W Hughes
<b>Item Update:</b> Complete.		
26.2	All members to consider the opportunities raised for potential regional projects (asset management standards, field instrument standards, consumables shelf life standards, combined regional audits, pathogen research, regional skills database) and be ready to discuss at the meeting in July.	All
<b>Item Update:</b> Added to agenda for discussion. Refer item 4.		
26.3	D Deere to discuss crypto level guidelines with the regulator to clarify the requirements for Councils.	D Deere
<b>Item Update:</b> D Deere has raised with DRDMW as a state-wide issue.		
26.4	D Deere to consider additional opportunities for regional projects, taking into account current risk management initiatives and their effectiveness in adding value for service delivery.	D Deere
<b>Item Update:</b> Complete. Final report circulated with agenda.		
26.5	W Hughes to investigate examples of staff/internal resourcing benchmark reports to aid in understanding the options for a regional benchmarking project to be initiated.	W Hughes
<b>Item Update:</b> Complete. Staff/internal resourcing benchmark reports not available for sector, neither are current examples of a regional skills database. Most relevant tools at present are the qldwater <a href="#">workforce snapshot</a> , the <a href="#">WIOA certification scheme</a> portal, and the Jobs Queensland <a href="#">anticipating future skills</a> tool.		
26.6	W Hughes to contact Seqwater to investigate accessing sample chlorate studies.	W Hughes
<b>Item Update:</b> Chlorate simulation tool shared by Seqwater, which aids in predicting chlorate concentrations. Duncan Middleton to explain the tool. Refer Item 5 on the agenda.		

Sample studies: Urban Water Security Research Alliance <a href="#">technical reports</a> :		
<ul style="list-style-type: none"> <li>• <a href="#">Assessment of Regulated and Emerging Disinfection By-Products in South East Queensland Drinking Water</a></li> <li>• <a href="#">Disinfection By-product Formation and Minimisation in South East Queensland Drinking Water</a></li> </ul>		
26.7	All Councils to provide a signed Statutory Declaration for their individual water audit reports to FNQROC by 24 May.	All
<b>Item Update:</b> Complete.		
26.8	D Deere to submit final audit reports to the regulator by 31 May.	D Deere
<b>Item Update:</b> Complete.		
26.9	FNQROC to issue DWQMP project invoices to all Councils by 31 May.	FNQROC
<b>Item Update:</b> Complete.		
26.10	W Hughes to circulate a copy of the FNQROC strategic dam study with the minutes.	W Hughes
<b>Item Update:</b> Complete.		
26.11	FNQROC to coordinate a special meeting between the procurement, water and materials recovery technical committees to discuss biosolids reuse and the implications of resource recovery for procurement contracting. Meeting to be scheduled for end May/early June.	FNQROC
<b>Item Update:</b> Complete. Meeting held Friday 25 June. Feasibility study indicates biosolids and organic materials are non-complementary for processing. Biosolids to remain separate from organics for the purpose of regional procurement.		

Actions from minutes noted and accepted.

#### 4. New regional projects – discussion and prioritisation

##### Asset management standards

- Water and sewerage system revaluations and/or maintenance programs are potential regional procurement opportunities – often coordinated by financial teams, not by operations
- Everyone is at a different stage of asset management maturity
- There may be a lack of data on performance of individual assets – electrical, mechanical, civil values are different across Councils
- Pump renewal program for example is open to interpretation
- Asset maintenance and renewal is specific to financial priorities of each council at any given point in time – key challenge to be considered and overcome if ‘minimum standard’ maintenance program is developed
- May have been some useful life research completed by FNQROC previously

### Operational maintenance scheduling

- Minimum standards in operational activities would be good to work towards
- Would require subclass level detail – minimum desirable standards for maintaining pumps for example, becomes a choice to maintain at a higher level but minimum is at least established
- Would set the rules and triggers for when maintenance needs to occur (eg pump hours)
- Action for all – pull together what's in place right now to identify potential gaps so we know the current baseline
- Desired project outcome – will help build an argument for more resources if required to ensure Councils achieve the minimum standard when putting through budget submissions

### Pathogen research

- Potential research to understand pathogens in the waterways – tropical health unit/DES etc already on the ground in Wujal Wujal, includes looking at leases etc
- Preference is for research to remain localised when it makes sense for an individual council
- Review of testing regime underway in multiple councils to confirm whether over-testing is occurring – may be an opportunity for a regional project in future

### Turbidity measures

- Regulator looking for levels under 1 which puts smaller systems under pressure, especially where disinfectant is used instead of treatment
- Best fit for purpose treatment for each scheme and for each intake as a potential piece of work to be developed
- Much of the regulation is set in southern Australia. Do we setup a body of information as a reference for the tropical zones?
- Not much known about pathogens in waters with turbidity between 1 and 5. Opportunity?
- Every council has different triggers for shutdown, not just turbidity level
- Collective argument to QLD Health unlikely to be successful. Up to individual Councils to work with QLD Health and the regulator around pathogen testing, turbidity levels etc
- New standing agenda item to be added to future meetings – lessons learned on shutdowns, regulatory issues etc

### Building relationships with the regulator

- Opportunity to invite representatives from DES and QLD Health to attend meetings bi-annually to increase engagement – aim for next meeting
- First item to discuss – agreement between DES and Councils to contact via phone to verify details of any issues prior to taking regulatory action

### Hypochlorite storage

- Coogee delivering more often now which is a positive – used to deliver less often
- How we receive hypo in FNQ is different to how it's received in SEQ
- Testing of hypo for chlorate levels is now built into DWQMPs for several councils to address known issues of just topping-up
- Current delivery docket includes chlorine concentration but not the pH value – may need to be considered for future procurement contracts
- Testing at time of delivery not done as a standard – could be considered for future procurement contracts

### Skills shortage issues

- Skills matrix with qldwater has some of the data for local skills
- Every council has different staffing structures – one solution doesn't fit all
- Issues raised during COVID around staff leaving their own family for up to a month on a secondment – has made it difficult to backfill smaller councils
- Individual councils are to review apprenticeship funding opportunities – not a regional project
- Do we have a formal agreement with labour hire companies to tap into existing talent pool structures? May be an option to consider for future
- Wujal Wujal are working with George Wall to standardise training procedures – looking at standardised training for indigenous councils
- Operational networking – new program to be considered:
  - Special interest day where council teams share what they're working on and informally run Q&As with each other
  - Operators as participants, not engineers
  - Examples of half day in an informal setting at Marlin Coast or Stratford – organised site famils at the different councils
  - Opportunities to learn from new innovations around the region, upskilling through seeing and hearing from peers
  - Include a short course with a specialist speaker at each session – themed visits, add in practice analysing different results at other sites
  - Water and wastewater facilities to be included
  - AWA series of 6 webinars are on now but too high level, not targeted at operators – query opportunities for qldwater to run some operator-specific webinars
- Consider training matrix first, know who all the operators are, identify the gaps, then focus sessions around the gaps (eg SCADA, UV, disinfection)

**Action 27.1:** W Hughes to source the asset management 'useful life' research conducted previously by the water alliance and circulate with the minutes. Alliance members are to review and be ready to discuss at the meeting on Friday 24 September as a potential project to be re-visited.

**Action 27.2:** All water alliance members are to collate and review their council's operational maintenance schedules to understand what's currently in place and to identify potential gaps. Be ready to discuss at the meeting on Friday 24 September. The aim is to map current baseline standards to identify the need for developing regional operational maintenance standards.

**Action 27.3:** W Hughes to add a new standing agenda item to future meetings for lessons learned – all water alliance members to share any lessons learned on shutdowns, regulatory issues etc between meetings.

**Action 27.4:** W Hughes to invite representatives from DES and QLD Health to attend the meeting on Friday 24 September with a view to bi-annual attendance to increase communication and engagement opportunities with the regulators.

**Action 27.5:** W Hughes to review options to develop a regional skills and networking program that's built around gaps identified through a regional skills training matrix.

## 5. Chlorates simulation tool and considerations for regional guidelines

*Q&A with Duncan Middleton, Principal Product Quality Seqwater*

Duncan joined the meeting at 11.20am.

### Presentation

- Duncan addressed the topic of chlorate dosing from sodium hypochlorite and hypo concentration impacts
- The way hypo is manufactured has impacts on the rate of decline – recommendation to manufacture at the rate needed, not diluted down
- Seqwater require manufacture at 10% - not 18% then diluted to 10% to get the best outcome
- Use multiple dosing facilities at break points for chlorination – can easily go over 0.8mg/l if not monitored and managed well
- Work off a rate of 0.8 as a guide for water – interim standard introduced by the regulator
- Have structured acceptance criteria set around concentration of hypo delivered to sites
- Manage hypo supplies into waste plants when chlorates are starting to build
- Future improvements being considered – fridges at small sites, onsite generation (being considered but complex and not likely to be necessary)
- Looking at how to potentially achieve 0.3 mg/l if regulated – not considered achievable so feeding data back to WHO to promote argument of 0.8 not 0.3 as the guideline (0.3 was the level originally proposed by NHMRC)
- Chlorates tool – have capability to analyse now so don't actively use any more but was useful and reliable previously
- Pathogen research can be expensive, however value in FNQ is that temperatures are warm so we can potentially demonstrate that levels are lower in warm climates than what the guidelines stipulate.
- Probably not much value in chlorate research unless aiming to validate temperature influences in local council areas.

### Discussion

- Can chlorate in testing bottles impact E.coli or other contamination rates?
  - If hypo used to flush the taps suggests that equipment has not been cleaned properly before testing. Reminder around process/procedures to address this.
- Sample of chlorine stock for chlorate – what's a good chlorate level in the chlorine?
  - Depends how much you're dosing. Acceptance for SEQ around 900mk/kg. Storing hypo for 1-2 weeks. If storing for 3 months, forms quickly then slows down over time.
- Hypo acceptance procedures for Seqwater?
  - Acceptance = correct pH value and chlorine concentration at delivery. Helps with monitoring of product at different sites. Duncan to share acceptance criteria used for tendering for the group to consider.
- Gas chlorination in use by Seqwater?
  - Yes, at some sites. Get very low level of chlorates at those sites, not as much concern as hypo. Environmental studies indicate chlorates stay around the levels that the dosing occurs at. Disposal to the environment is not a concern at this stage.

**Action 27.6:** D Middleton to share hypochlorite tendering specifications used by Seqwater to aid in future contract reviews by FNQROC procurement.

## 6. General business

- **National Chemicals Working Group (NCWG)** – review of EOW codes for PFAS in biosolids
  - The NCWG are working on the next iteration of the PFAS National Environment Management Plan (PFAS NEMP), which includes the development of risk-based guidance to assist in the improved management of PFAS in biosolids.
  - Letter on 2 July from DES to Arkwood seeking access to deidentified data for FNQROC councils PFAS concentrations in biosolids and amended soils pre and post biosolids application.
- **New careers in water website** – qldwater
  - Will highlight career opportunities in the industry and share stories of successful traineeships, qualification and funding information, career pathways and fact sheets about job roles.
  - qldwater seeking input from skills partners about what will be of most value in promoting water industry careers.
- **\$70 million for Building our Regions (Round 6)**
  - Round 6 of Building Our Regions will provide \$70 million over three years for councils to improve their water supply and sewerage systems and will be jointly administered by Department of State Development with the Department of Regional Development, Manufacturing and Water.
- **Sewer re-lining contract** – QWRAP application
  - Variation to existing contract
  - Support needed from Councils to apply for second round of funding
  - Benefit realisation analysis from last year - \$155,000 saving across the region estimated. Just under 15% saving as a region for the first year of delivery
  - Alliance endorsement required for the submission to be made through QWRAP
- **Potential procurement projects**
  - Potential for new regional contract options to assist with scheduling and to make sure councils have access to services as needed:
    - Hydrants Servicing and Valve Maintenance & Replacements program
    - Water Main Air Scouring & Flushing maintenance program
    - Sewer Main Fogging maintenance program

**Action 27.7:** A Hancock to circulate QWRAP application to alliance members as a flying minute for formal approval before submission to qldwater for funding consideration.

**Action 27.8:** W Hughes to seek levels of interest from alliance member Councils in participating in potential regional procurement programs for hydrants servicing and valve maintenance, water main air scouring and flushing maintenance, and sewer main fogging maintenance.

## 7. Next Meeting Dates

- Friday 24 September
- Friday 19 November

## 8. Meeting Close

12.30pm

### Actions as at end of Meeting No. 27:

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<b>Action 27.3:</b>	W Hughes to add a new standing agenda item to future meetings for lessons learned – all water alliance members to share any lessons learned on shutdowns, regulatory issues etc between meetings.	W Hughes/ All
<b>Action 27.4:</b>	W Hughes to invite representatives from DES and QLD Health to attend the meeting on Friday 24 September with a view to bi-annual attendance to increase communication and engagement opportunities with the regulators.	W Hughes
<b>Action 27.5:</b>	W Hughes to review options to develop a regional skills and networking program that's built around gaps identified through a regional skills training matrix.	W Hughes
<b>Action 27.6:</b>	D Middleton to share hypochlorite tendering specifications used by Seqwater to aid in future contract reviews by FNQROC procurement.	D Middleton
<b>Action 27.7:</b>	A Hancock to circulate QWRAP application to alliance members as a flying minute for formal approval before submission to qldwater for funding consideration.	A Hancock
<b>Action 27.8:</b>	W Hughes to seek levels of interest from alliance member Councils in participating in potential regional procurement programs for hydrants servicing and valve maintenance, water main air scouring and flushing maintenance, and sewer main fogging maintenance.	W Hughes