on behalf of SDCC From: Pauline Evans Sent: Saturday, 1 January 2011 5:06 AM

Subject: QEMR as at 05,00am Saturday 1 January 2011

DEPARTMENT OF COMMUNITY SAFETY **Daily Queensland Emergency Management Report**

as at 5:00am Saturday 01 January 2011

SIGNIFICANT INFORMATION

To:

With the flooding of the Fitzroy River expected to reach 9m by Sunday and 9.4m by Tuesday, Rockhampton Airport will cease normal domestic (RPT) services Saturday afternoon.

AIRLINE INFORMATION:

- AIRLINE INFORMATION:

 QantasLink their last flight will be Saturday (Rockhampton to Mackay at 11:10am)

 Virgin Blue last flight will be Saturday (Rockhampton to Brisbane at 1:45pm)

 Tiger Airways last flight will be Friday (Rockhampton to Brisbane at 3:50pm)

 Indications from the Bureau of Meteorology's web site is that the airport could be inundated until 11 Janaury 2011, with clean-up operations commencing after that time.

 Rockhampton City Council's website is advising that the Fitzroy River is expected to reach 9m in a major flood by Sunday and the LDMG is now preparing for a 9.4m level by Tuesday, with possible higher levels after that. These high water levels are also anticipated to persist for 7-10 days.

 With the Ettzroy River curvently at 8.2m and expected to each 9m in a major flood by Sunday with
- With the Fitzroy River currently at 8.2m and expected to reach 9m in a major flood by Sunday with levels rising to 9.4m by Tuesday, the LDMG has contacted more than 2000 residents urging them to self evacuate from today.
- Rockhampton Regional Council Mayor and LDMG Chair said that up to 40% of Rockhampton City will be affected by a 9.4m flood level and the LDMG will be mandatorily evacuating people from low lying
- "We have four Black Hawk choppers and a Chinook that could be made available should assistance be required, and we are commencing the preparation of food drops to isolated rural properties today," Cr Carter said.
- Council is strongly urging people to self evacuate and not to be complacent this is a major flood event and given the predicted levels, mandatory evacuations will be enforced. They are urging people to relocate to friends or family in higher ground, taking appropriate clothing including wet weather gear, pets, medication and scripts, toiletries, linen and towels and appropriate footwear.
- Council further advises that If people are unable to secure afternate accommodation Council has prepared an evacuation centre at the Central Queensland Community Sports Complex, located at the Central Queensland University (CQUniversity) on Yaamba Road. The evacuation centre was open from 8am Friday 31 December.

Jet A1 fuel update

Fuel available

- Emerald to run out of Jet A1 on 1st January
- 17,000L of Jet A1 has arrived at Capella and is currently being utilised.
- Another truck with 16,000L of Jet A1 has been sourced from Mt Isa and will arrive late on the 1st of January or early on the 2nd January
- It has been organised with this company to continue supplying Jet A1 fuel. The trucks will return to

AVGAS 50,000L: there has been a request for 50,000L of AVGAS which is currently unable to be

DISASTER MANAGEMENT SYSTEM ACTIVATION STATUS AND KEY ACTIVITIES

Changes from SITREP 1700 31.12.10:

Brisbane DDMG Bundaberg DDMG Gold Coast LDMG Lean Forward Stand Up Level One Level Two Stand Down Rockhampton LDMG Redlands LDMG Lean Forward Alert Brisbane LDMG Stand Down

DISTRICT REPORTS (changes since SITREP 1700 31.12.10)

Central Highlands - Emerald

- Of the total number of houses in Emerald (4000), 3000 have water in the yard, of which 1000 are inundated (water over the floorboards) 100% of industrial properties are inundated

- 95% of commercial properties are inundated. The Nogoa River peaked at 0600 31.12.10 at 16.05, dropped to 15.90m at 21:00 last night which was 1.5m above the Vince Lester Bridge. Based on current forecasts, it is expected that the river will recede slowly throughout the day.

WEATHER OBSERVATIONS

A ridge along the east coast of Queensland will begin to weaken during today, weakening further

on Sunday as the high in the Tasman Sea moves eastwards. The monsoon trough will become established again on Saturday through Torres Strait and will then move slowly southwards over Cape York Peninsula. An upper trough will begin to develop off the southeast coast today, shifting further inland over the southeast of the state on Sunday.

Scattered showers and thunderstorms in the northwest and tropics, tending to rain areas in the far north. Scattered showers along most of the east coast, tending to rain at times with possible thunderstorms about the north tropical coast with moderate falls. Showers and inland thunderstorms about central and southern districts east of about Emerald. Fine elsewhere. Light to moderate SE to NE winds, fresh at times near the coast.

Flood warnings are current for the following:

- Baffle Creek and Kolan River Burdekin River System
- Burnett River and Tributaries Condamine and Balonne Rivers

- Fitzroy River Basin Moonie River Thomson and Barcoo Rivers and Cooper Creek
- Warrego Rive
- Weir and Macintyre Rivers

Other flooding includes:

- Gulf Rivers: Minor flooding rising in Magnificent Creek at Kowanyama Alrport.

 Minor flooding rising in the Norman River at Yappar River. Minor flooding rising in the Flinders River at Richmond, with moderate flood levels likely.

 Diamantina River: Minor to moderate flooding continues between Diamantina Lakes and Monkira.

 Bulloo River. Minor flooding remains steady at Qulipie.

 Lower Brisbane: SEQ Water advises that releases will continue from Wivenhoe dam during the weekend. Minor flooding will continue downstream to Mt Crosby Weir during today and the weekend.

 Mary River: Minor flooding easing in the Mary River between Miva and Home Park, and also in Tinana Creek at Teddington Weir.

Rainfall

In the period from 09,00am Friday significant rainfall was recorded at:

Upper Murray Alert (Tully) 101mm 125mm

Bilyana (Tully) Sulties Creek Alert (w of Innisfail) 81mm

Topaz Alert (w of Innisfail) 66mm

SES 132 500 CALLS

616 calls were made to SES 132 500 in the period since 05.00am Friday:

Rockhampton 139 calls

Bundaberg

89 calls Emerald 59 calls

MEDIA

Numerous reports on the current flooding event have appeared in world-wide media, as well as local and national media sources. A few of these are listed below

Numerous reports on the current flooding event have appeared in world-wide media, as well as local and national media sources. A few of these are tisted below. Rockhampton Bulletin reports: Queensland Premier Anna Bilgh says there is a flood crisis in Emerald, with the army evacuating people and building makeshift emergency accommodation outside the town. http://www.themorningbulletin.com.au/story/2010/12/31/qld-floods-a-long-way-from-over-bligh/
ABC Online reports: Thousands of flood-affected Queensland residents had a soggy welcome to the new year, with those staying in evacuation centres facing the prospect of being homeless for weeks to come. With a population of around 75,000, Rockhampton is planning for what could be the city's worst flood on record. The Fitzroy River has broken its banks and is slowly filling low-fying suburbs. It is expected to peak at 9.4 metres early next week and authorities say many people could be out of their homes for weeks. http://www.abc.net.au/news/stories/2010/12/31/3104640.htm
Brisbane Times reports: Retail public holiday trading laws have been relaxed in flood-ravaged Bundaberg and Rockhampton in central Queensland. Queensland attorney general Cameron Dick said a direction has been made under disaster management laws to permit retail trading for groceries and other essential items on New Year's Day and the national public holiday on Monday. "Retailers selling food, groceries and other essential items in Bundaberg and Rockhampton will be able to open for normal trading hours, where they have supplies and are able to do so. on those days that trading would be restricted or where retail stores would otherwise be closed," he said in a statement.

the national public holiday on Monday. "Retailers selling food, groceries and other essential items in Bundaberg and Rockhampton will be able to open for normal trading hours, where they have supplies and are able to do so, on those days that trading would be restricted or where retail stores would otherwise be closed," he said in a statement http://www.brisbanetimes.com.au/queensland/holiday-trading-laws-relaxed-for-floodravaeed-towns-20101231-19c5o.htm

The Courier Mail reports: A massive logistical operation is under way across Queensland to evacuate thousands of people and deliver emergency supplies to communities and properties isolated by the worst flooding in the state's recorded history. Rising floodwaters have now hit an area bigger than France and Germany combined, with forced evacuations in the central Queensland towns of Emerald, Condamine, Theodore and the regional city of Rockhampton, which is expected to be cut off over the weekend. More than 1000 people are already staying in 17 evacuation centres. The Queensland Emergency Service said more than 4000 people could be forced to seek sanctuary in the refuges over the next few days. Rockhampton Mayor Brad Carter said experts could not rule out a flood to rival the 10.11m experienced in 1918. "This is a very serious situation," he said. https://www.news.com.au/national/housands-forced-from-homes-military-help-celled-in-as-flood-crisis-deepens/story-e6fr/kvr-1225979694261
The Australian reports: Forced evacuations in Rockhampton will start as the Fitzroy River approaches its peak next week, in what could be the biggest flood since 1918. Authorities suggest up to 10,000 people could be affected by flooding of areas around the river and low-lying regions surrounding the Queensla

devastated nearby Emerald and Theodore, https://www.theaustralian.com.au/news/nation/ficods-to-cut-airport-end-roads-in-rockhampton/story-e6/fig6nf-1225979672372
Gladstone Observer reports: Gladstone Airport carpark has become a makeshift medical centre, as the State Disaster Co-ordination Centre moved yesterday to set up a mob health facility in the wake of the floods. QAS special operations unit manager of logistics Gerry Rabelink said the move to set up the mobile medical facility was mainly to cope with patients flying in from flood-stricken Emerald. Two intensive care paramedics arrive today, and will help retrieve patients who will be flown in by helicopter. "It's a good collaboration between health and the other agencies," he said. http://www.gladstoneobserver.com.au/story/2010/12/31/patients-move-tent-city/

Pauline Evans Watch Desk Officer State Disaster Coordination Centre Emergency Management Queensland Telephone (24 hours) Fax (07) Mobile

email - sdcc@dcs.qld.gov.au

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Old

Boyle Michael

Sent:

Saturday, 1 January 2011 10:18 AM

To:

Bradley John; Wall Terry; Zubrinich Robert; Leverington Andrea; Brown Damien; Lenz Anne; Williams Christine; Anderson Danielle; Withers Greg; Moody Annie; Best Debble; Quincey Richard

Cc:

Tyson Michelle; Robinson David; Short Michael; Allen Peter; Michaels Paul; Fry Wayne; Cook Clive; Ryan John; 🚛

Subject: Flood Update Saturday 1 January 2011

Attachments: SDCC Sitrep 1700 311210.pdf

Happy new year!

Today's updates attached.

Of note

- Major preparations for Rockhampton. Waters rising slightly slower than predicted. This could
 mean a more prolonged peak. Airport closes today and is likely to be inundated tomorrow. Closed
 until 10 Jan or so and perhaps longer depending on damage to tarmac and supporting
 infrastructure. Peak of 9.4m or higher still predicted mid week. Water supply is OK to 11m. Power to 10m.
- Flooding beginning to ease at Emerald.
- St George is preparing for a flood peak of 10m+ this weekend and then 12m+ mid January. This will also be a record flood.
- With floods falling in many centres repatriation and recovery plans are being prepared. A main issue will be the supply of tradespersons, particularly initially electricians and plumbers, to reconnect and repair. Preference is to use local suppliers first.
- Transporting of food supplies north and south continues to be an issue. This will not only affect flooded areas but also the South East with fruit and veg unable to get through.
- Gladstone coal terminal is operating at 50% due to lack of supply.
- Rain will return this week but not to the extent of the last few weeks.

- . There have been persistent rumours in the Burnett that Paradise dam is structurally unsound. This is categorically untrue.
- . DERM (Bob Reitly) is meeting daily with LGAQ, QHealth and Community Safety to assess water supply and sewerage impacts in effected towns. At this stage all appears to be OK even with some water treatment plants and pumping stations without power.
- Baralaba coal mine levy banks broke on Wednesday and it is now 110m deep in water and is likely to be out of action for 12 months. Encham (?) mine also looks set to be inundated (2nd time in 3
- DERM (QPWS) responded to a media query regarding rescuing wildlife. Wildlife is quite resilient. Don't put yourself at risk to rescue an animal. Call care groups.

On Behalf Of SDCC

Let me know if I have missed anything.

Thanks

Michael Boyle Director ICT Infrastructure

Department of Environment and Resource Management

From: Pauline Evans Sent: Saturday, 1 January 2011 5:06 AM To:

Subject: QEFIR as at 05.00am Saturday 1 January 2011

DEPARTMENT OF COMMUNITY SAFETY

Daily Queensland Emergency Management Report as at 5:00am Saturday 01 January 2011

SIGNIFICANT INFORMATION

With the flooding of the Fitzroy River expected to reach 9m by Sunday and 9.4m by Tuesday, Rockhampton Airport will cease normal domestic (RPT) services Saturday afternoon.

AIRLINE INFORMATION:

- QantasLink their last flight will be Saturday (Rockhampton to Mackay at 11:10am)
- Virgin Blue last flight will be Saturday (Rockhampton to Brisbane at 1:45pm)
- Tiger Airways last flight will be Friday (Rockhampton to Brisbane at 3:50pm)
- Indications from the Bureau of Meteorology's web site is that the airport could be inundated until 11 January 2011, with clean up operations commencing after that
- Rockhampton City Council's website is advising that the Fitzroy River is expected to reach 9m in a major flood by Sunday and the LDMG is now preparing for a 9.4m level by Tuesday, with possible higher levels after that. These high water levels are also anticipated to persist for 7-10 days.
- With the Fitzroy River currently at 8.2m and expected to reach 9m in a major flood by Sunday with levels rising to 9.4m by Tuesday, the LDMG has contacted more than 2000 residents urging them to self evacuate from today.
- Rockhampton Regional Council Mayor and LDMG Chair said that up to 40% of Rockhampton City will be affected by a 9.4m flood level and the LDMG will be mandatorily evacuating people from low lying areas today...
- "We have four Black Hawk choppers and a Chinook that could be made available should assistance be required, and we are commencing the preparation of food drops to isolated rural properties today," Cr Carter said.
- Council is strongly urging people to self evacuate and not to be complacent this is a major flood event and given the predicted levels, mandatory evacuations will be enforced. They are urging people to relocate to friends or family in higher ground, taking appropriate clothing including wet weather gear, pets, medication and scripts, toiletries, linen and towels and appropriate footwear.
- Council further advises that If people are unable to secure alternate accommodation Council has prepared an evacuation centre at the Central Queensland Community Sports Complex, located at the Central Queensland University (CQUniversity) on Yaamba Road. The evacuation centre was open from 8am Friday 31 December.

Jet A1 fuel update

- Emerald to run out of Jet A1 on 1st January
- 17,000L of Jet A1 has arrived at Capella and is currently being utilised.
- Another truck with 16,000L of Jet A1 has been sourced from Mt Isa and will arrive late on the 1st of January or early on the 2nd January.
- It has been organised with this company to continue supplying Jet A1 fuel. The trucks will return to Mackay to refuel and return

AVGAS 50,000L: there has been a request for 50,000L of AVGAS which is currently unable to be sourced from any supplier.

DISASTER MANAGEMENT SYSTEM ACTIVATION STATUS AND KEY ACTIVITIES

Changes from SITREP 1700 31.12.10:

•	Brisbane DDMG	Lean Forward	Level One
•	Bundaberg DDMG	Stand Up	Level Two
• '	Gold Coast LDMG	Stand Down	
	Rockhampton LDMG	Lean Forward	Level On
•	Redlands LDMG	Alert	

Brisbane LDMG

Stand Down

DISTRICT REPORTS (changes since SITREP 1700-31.12.10)

Central Highlands - Emerald

- Of the total number of houses in Emerald (4000), 3000 have water in the yard, of which 1000 are inundated (water over the floorboards)
- 100% of industrial properties are inundated 95% of commercial properties are inundated
- The Nogoa River peaked at 0600 31.12.10 at 16.05, dropped to 15.90m at 21:00 last night-which was 1.5m above the Vince Lester Bridge. Based on current forecasts, it is expected that the river will recede slowly throughout the day.

WEATHER OBSERVATIONS

- A ridge along the east coast of Queensland will begin to weaken during today, weakening further on Sunday as the high in the Tasman Sea moves eastwards. The monsoon trough will become established again on Saturday through Torres Strait and will then move slowly southwards over Cape York Peninsula. An upper trough will begin to develop off the southeast coast today, shifting further inland over the southeast of the state on Sunday. Scattered showers and thunderstorms in the northwest and tropics, tending to rain reas in the far north. Scattered showers along most of the east coast, tending to rain at times with possible thunderstorms about the north tropical coast with moderate falls. Showers and inland thunderstorms about central and southern districts east of about Emerald. Fine elsewhere, Light to moderate SE to NE winds, fresh at times near the coast.

Flood warnings are current for the following:

- Baffle Creek and Kolan River
- Burdekin River System Burnett River and Tributaries
- Condamine and Balonne Rivers Fitzroy River Basin
- Moonle River
- Thomson and Barcoo Rivers and Cooper Creek Warrego River
- Weir and Macintyre Rivers

Other flooding includes:

- Guif Rivers: Minor flooding rising in Magnificent Creek at Kowanyama Airport.

 Minor flooding rising in the Norman River at Yappar River. Minor flooding rising in the Flinders River at Richmond, with moderate flood levels likely.

 Diamantina River: Minor to moderate flooding continues between Diamantina Lakes and Monkira.

 Bulloo River: Minor flooding remains sleady at Quilple.

 Lower Brisbane: SEQ Water advises that releases will continue from Wivenhoe dam during the weekend. Minor flooding will continue downstream to Mt Crosby Weir during the weekend. during today and the weekend.

Mary River. Minor flooding easing in the Mary River between Miva and Home Park, and also in Tinana Creek at Teddington Weir.

Rainfall

In the period from 09,00am Friday significant rainfall was recorded at:

Upper Murray Alert (Tully) 101mm Bilyana (Tuliy) Sutties Creek Alert (w of Innisfail) 125mm 81mm Topaz Alert (w of Innisfail)

SES 132 500 CALLS

616 calls were made to SES 132 500 in the period since 05.00am Friday:

139 calls Rockhampton Bundaberg 89 calls Emeraki 59 calls

MEDIA

Numerous reports on the current flooding event have appeared in world-wide media, as well as local and national media sources. A few of these are listed below.

Rockhampton Bulletin reports: Queensland Premier Anna Bligh says there is a flood crisis in Emerald, with the army evacuating people and building makeshift emergency

Rockhampton Bulletin reports: Queensland Premier Anna Bligh says there is a flood crisis in Emerald, with the army evacuating people and building makeshift emergency accommodation outside the town. http://www.themorningbulletin.com.au/story/2010/12/31/qld-floods-a-long-way-from-over-bligh/
ABC Online reports: Thousands of flood-affected Queensland residents had a soggy welcome to the new year, with those staying in evacuation centres facing the prospect of being homeless for weeks to come. With a population of around 75,000, Rockhampton is planning for what could be the city's worst flood on record. The Fitzroy River has broken its banks and is slowly filling low-lying suburbs. It is expected to peak at 9.4 metres early next week and authorities say many people could be out of their homes for weeks. http://www.abc.net.au/new/slories/2010/12/31/3104640.htm
Brisbane Times reports: Retail public holiday trading laws have been relaxed in flood-ravaged Bundaberg and Rockhampton in central Queensland. Queensland attorney general Cameron Dick said a direction has been made under disaster management laws to permit retail trading for groceries and other essential items on New Year's Day and the national public holiday on Monday. 'Retailers selling food, groceries and other essential items in Bundaberg and Rockhampton will be able to open for normal trading hours, where they have supplies and are able to do so, on those days that trading would be restricted or where retail stores would otherwise be closed," he said in a statement. http://www.brisbanetimes.com.au/gueensland/holiday-trading-laws-relaxed-for-food/grayaged-towns-20101231-1965b.html http://www.brisbanetimes.com.au/queensland/holiday-trading-laws-relaxed-for-floodrayaged-towns-20101231-19c5g.html

The Courier Mail reports: A massive logistical operation is under way across Queensland to evacuate thousands of people and deliver emergency supplies to communities and properties isolated by the worst flooding in the state's recorded history. Rising floodwaters have now hit an area bigger than France and Germany combined, with forced evacuations in the central Queensland towns of Emerald, Condamine, Theodore and the regional city of Rockhampton, which is expected to be cut off over the weekend. More than 1000 people are already staying in 17 evacuation centres. The Queensland Emergency Service said more than 4000 people could be forced to seek sanctuary in the refuges over the next few days. Rockhampton Mayor Brad Carter said experts could not rule out a flood to rival the 10.11m experienced in 1918. "This is a very serious

refuges over the next few days. Rockhampton Mayor Brad Carter said experts could not rule out a flood to rival the 10.11m experienced in 1918. "This is a very serious situation," he said. https://hwww.news.com.au/national/thousands-forced-from-homes-military-help-called-in-as-flood-crisis-deepens/story-e6frfkvr-1225979694261
The Australian reports: Forced evacuations in Rockhampton will start as the Fitzroy River approaches its peak next week, in what could be the biggest flood since 1918. Authorities suggest up to 10,000 people could be affected by flooding of areas around the river and low-lying regions surrounding the Queensland city. Rising waters are expected to cut the airport off today and the main roads to the south and west tomorrow morning, when the river reaches 9m. The Fitzroy -- which has Australia's second-largest calchment after the Murray-Darling system -- is fed by Inland central Queensland systems that are already in flood, including the Dawson, Macintyre and Nogoa, which have devastated nearby Emeraki and Theodore, https://hwww.theaustralian.com.au/news/nation/floods-to-cut-airport-and-roads-in-rockhampton/story-e6frq6nf-1225979672372
Gladstone Observer reports: Gladstone Airport carpark has become a makeshift medical centre, as the State Disaster Co-ordination Centre moved yesterday to set up a mobile health facility in the wake of the floods. QAS special operations unit manager of logistics Gerry Rabelink said the move to set up the mobile medical facility was mainly to cope with patients flying in from flood-stricken Emerakd. Two intensive care paramedics arrive today, and will help retrieve patients who will be flown in by helicopter. 'It's a good collaboration between health and the other agencies," he s

collaboration between health and the other agencies,* he said. http://www.gladstoneobserver.com.au/story/2010/12/31/patients-move-tent-city/

Pauline Evans Watch Desk Officer State Disaster Coordination Centre Emergency Management Queen

email -

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Old



Subject: QEMR as at 05.00am Tuesday 4 January 2011 **DEPARTMENT OF COMMUNITY SAFETY Daily Queensland Emergency Management Report** as at 5:00am Tuesday 04 January 2011

SIGNIFICANT INFORMATION

To:

- Minister Neil Roberts and the Commistoner of Police will be visiting Dalby and Emerald today.
- The Bruce Highway south of Rockhampton is closed. The town is now isolated with the rail way and airport closed.
- The Rockhampton airport is closed to all fixed wing aircraft, including emergency services.
- Resupply to Rockhampton is likely to occur by barge, subject to ramp availability. A second 25-bed Tactical Medical Centre is to open at St George today
- Premier Anna Bligh has accepted an offer from the New Zealand government for the deployment of up to 6 Disaster Management Officers.
- An Entomologist from the Moreton Bay Regional Council is to be sent to Bundaberg to assist with mosquito control.
- Road access issues across the Central region are limiting the ability of the Department of Communities to undertake comprehensive outreach activities.
- A man missing when his car was swept off the road between Muttaburra and Aramac into Cornish Creek yesterday moming. There have been 9 deaths altributed to the flooding since November 2010.
- 21,000 homes in Mackay are without permanent power due to load shedding.

Highway Closures (as at 18:00 03.01.11)

- The Bruce Highway south of Rockhampton.
 The Leichhardt Highway from Miles to Condamine, from Banana to Taroom, Wandoan to Miles.
 The Carnarvon Highway from \$1 George to Surat, Surat to Roma and Injune to Rolleston.
 The Moonle Highway between \$1 George and Westmar.
 The Capricom Highway from Comet to Yamala, from Westwood to Gracemere and from Rockhampton to Gracemere
- Recenteription to Gracemere.
 The Dawson Highway from Moura to Rolleston and from Rolleston to Springsure.
 The Carnarvon Highway from Injune to Rolleston.
 The Mitchell Highway from Charleville to Augethella.
 The Castlereagh Highway from Dirrenbandi to Hebel.
 The Balonne Highway from St George to Bollon.

WEATHER OBSERVATIONS

Warnings

- Flood Warnings are current for the following rivers:
 - Condamine and Balonne Rivers: Major flooding extends along the Condamine
 - Thomson and Barcoo Rivers, and Cooper Creek: Minor to moderate flooding i
 - Fitzroy River Basin: Major flooding continues along the Dawson, Comet, Mackenzie and Fitzroy
 Rivers with continued river rises and record flooding in many areas. Record major flood levels on
 the Dawson River at Theodore continue to slowly fall. The Fitzroy River at Rockhampton was 9.05
 metres at 1:30pm Monday and rising slowly with major flooding. The Fitzroy River at Rockhampton
 is expected to peak up to 9.4 metres on Wednesday and remain above the major flood level of 8.5
 matter for 1 weak effect the each. metres for 1 week after the peak.
 - Warrego River: Minor flooding will ease at Wyandra and Wallen during the next 48 hours. Moderate flood levels are expected to peak around 7.5 metres during Wednesday at Cunnamulla. Moderate flood levels at Rocky will peak around 4.2 metres on Thursday.
 - Burdekin River: Major flooding continues in the Belyando River at Albro, with mo
 - Don River: Minor flooding continues to ease in the Don River at Reeves. Downst
 - Moonie River: Moderate to major flooding is occurring in the Moonie River betwe

- Weir Rivers: Moderate to major flooding is expected to develop downstream along the lower Weir River during this week. Moderate flooding is rising slowly in the Weir River at Giddi Giddi. Moderate to major flooding will develop downstream during this week with a major flood peak expected at Talwood during Friday or Saturday. Overnight rainfalls have produced renewed rises and minor flood levels in the upper Weir River in the O'Connor area.
- Gulf Rivers: Recent rainfall has produced river level rises in the Flinders and Norman Rivers. Minor flooding is occurring in the Norman River at the

Rainfall

- In the period since 09.00am Monday significant rainfall was recorded at:
 - Powerline (Ayr) 106mm
 Black River Alert (Townsville) 96mm
 Myuna TM (Burdekin Dam) 76mm
 - Mareeba AP 72mm Amiens Knob Alert (Warwick) 61mm

Weather Outlook

- A ridge along the east coast of Queensland is weakening as a high near New Zealand moves eastwards. The monsoon trough lies across Cape York Peninsula. A low pressure system is deepening well off the SE coast and will move away towards New Zealand today.
- The monsoon trough moves a little south over Gulf waters otherwise little change in the weather across the state. Monsoonal rain areas and thunderstorms over the tropics, showers and thunderstorms generally over eastern and southeast districts. Isolated late showers and thunderstorms over the western interior. Patchy rain developing in the far west.

SES 132 500 CALLS

- 372 calls were made to SES 132 500 in the period since 05.00am Monday.
 - Rockhampton 102 calls Brishage 22 calls

MEDIA

- ABC Online reports: The central Queensland town of Rockhampton is now completely isolated by floodwaters, Premier Anna Bligh says. Hundreds of homes have been inundated and people have been forced to evacuate ahead of the Fitzroy River's expected peak of 9.4 metres on Wednesday. Three Black Hawk helicopters have also been relocated to Rockhampton from Emerald as water snakes toward the CBD. Ms Bligh told ABC TVs 7.30 Report that the last route out of town the highway to the north of the city is now under water, completely stranding the city's 75,000 residents. The airport was closed days ago after the termac became flooded and no rail services are operating. 'We're really still in the middle of an unfolding disaster,' she said. 'That means not only are there supply issues for Rockhampton, but of course [for] towns like Mackay, Townsville and Calms that are north of there. We have some towns and cities now starting the heart-breaking business of clean-up and recovery, while we're still in response mode in places like Rockhampton, St George and in that south-west area," she said. "As we turn to recovery there's certainty some big logistical issues. The city of Emerald, for example, we flew 13 tonnes of cleaning equipment and disinfectant in there this morning and they need more. So that's just one town.

 http://www.abc.net.au/news/stories/2011/01/03/3105704.htm
 - The Courier Mail reports: Flooded Queensland rivers are tipped to cause further devastation as high waters move across the state in coming weeks, while ultimately delivering long-term benefits to dry interstate regions. University of Queensland Professor in Civil Engineering Hubert Chanson said it could take weeks for water to drain from Queensland river systems. "If we have more rain to come in the next few days or few weeks, that rain is simply going to continue to flood some of those catchments," he said. The flooded Condamine River system, currently wreaking havor in Condamine, Inchrilla and Dalby, will continue to damage properties as it travels south across the border into the Murray-Darling Basin. "The magnitude of flooding might be of less significance than what we're observing in Dalby and Chinchilla, but there is no doubt that there will be some major flooding," Prof Chanson said, http://www.couriermail.com.au/news/queensland-flood-waters-may-flow-to-parched-murray-darling-basin/story-e6/reon6-12/25980642300

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qld

From:

Boyle Michael

Sent:

Tuesday, 4 January 2011 10:26 AM

To: Cc: Bradley John; Wall Terry; Zubrinich Robert; Leverington Andrea; Brown Damien; Lenz Anne; Williams Christine; Anderson Danielle; Withers Greg; Moody Annie; Best Debbie; Quincey Richard; Mcnamara James

Tyson Michelle; Robinson David; Short Michael; Allen Peter; Michaels Paul; Fry Wayne; Cook Clive; Ryan John;

Subject: Flood Update Tuesday 4 January 2011

Attachments: SDCC Sitrep 1800 030111.pdf

Today's updates attached

Issues remain largely the same. Fitzroy at Rocky was at 9.15m as at 6am today. Still rising slowly. Repatriation of Condamine town may take a few days to allow essential utilities to be up and running.

DERM leading collection of satellite imagery of flood extents to assist with future planning.

Thanks Michael Boyle SDCG Rep Director ICT Infrastructure Department of Environment and Resource Management

On Behalf Of SDCC Sent: Tuesday, 4 January 2011 5:17 AM To:

Subject: QEMR as at 05.00am Tuesday 4 January 2011

DEPARTMENT OF COMMUNITY SAFETY

Daily Queensland Emergency Management Report as at 5:00am Tuesday 04 January 2011

SIGNIFICANT INFORMATION

- Minister Neil Roberts and the Commisioner of Police will be visiting Dalby and Emerald today.
- The Bruce Highway south of Rockhampton is closed. The town is now isolated with the rail way
- The Rockhampton airport is closed to all fixed-wing aircraft, including emergency services.
- Resupply to Rockhampton is likely to occur by barge, subject to ramp availability.

- A second 25-bed Tactical Medical Centre is to open at St George today
- Premier Anna Bligh has accepted an offer from the New Zealand government for the deployment of up to 6 Disaster Management Officers.
- An Entomologist from the Moreton Bay Regional Council is to be sent to Bundaberg to assist with mosquito control.
- Road access issues across the Central region are limiting the ability of the Department of Communities to undertake comprehensive outreach activities.
- A man missing when his car was swept off the road between Multaburra and Aramac into Cornish Creek yesterday morning. There have been 9 deaths attributed to the flooding since November 2010.
- 21,000 homes in Mackay are without permanent power due to load shedding.

Highway Closures (as at 18:00 03.01.11)

- The Bruce Highway south of Rockhampton.
 The Leichhardt Highway from Miles to Condamine, from Banana to Taroom, Wandoan to Miles.
 The Carnarvon Highway from St George to Surat, Surat to Roma and Injune to Rolleston.
 The Moonie Highway between St George and Westmar.
 The Capricorn Highway from Cornet to Yamala, from Westwood to Gracemere and from Rockhampton to Gracemere.
 The Dawson Highway from Moura to Rolleston and from Rolleston to Springsure.
 The Carnarvon Highway from Injune to Rolleston.
 The Mitchell Highway from Charleville to Augathella.
 The Castlereagh Highway from Diranbandi to Hebel.
 The Balonne Highway from St George to Bollon.
 WEATHER OBSERVATIONS

Warnings

- Flood Warnings are current for the following rivers:
- Condamine and Balonne Rivers: Major flooding extends along the Condamine and Balonne River system between Brigalow Bridge through to ti
- Thomson and Barcoo Rivers, and Cooper Creek: Minor to moderate flooding is occurring in the Thomson River between Muttaburra and Junda
- Fitzroy River Basin: Major flooding continues along the Dawson, Comet, Mackenzie and Fitzroy Rivers with continued river rises and record flooding in many areas. Record major flood levels on the Dawson River at Theodore continue to slowly fall. The Fitzroy River at Rockhampton was 9.05 metres at 1:30pm Monday and rising slowly with major flooding. The Fitzroy River at Rockhampton is expected to peak up to 9.4 metres on Wednesday and remain above the major flood level of 8.5 metres for 1 week after the peak.
 Warrego River: Minor flooding will ease at Wyandra and Wallen during the next 48 hours. Moderate flood levels are expected to peak around 7.5 metres during Wednesday at
- Cunnamulla. Moderate flood levels at Rocky will peak around 4.2 metres on Thursday,
- Burdekin River: Major flooding continues in the Belyando River at Albro, with moderate flood levels easing downstream in the Suttor River at St / Don River: Minor flooding continues to ease in the Don River at Reeves. Downstream at Bowen Pump Station, a minor flood peak to 3.65 metres
- Moonie River: Moderate to major flooding is occurring in the Moonie River between Flinton and Nindigully, with the flood peak approaching Mt Dr
- Weir Rivers: Moderate to major flooding is expected to develop downstream along the lower Weir River during this week. Moderate flooding is rising slowly in the Weir River at Giddi Giddi. Moderate to major flooding will develop downstream during this week with a major flood peak expected at Talwood during Friday or Saturday. Overnight rainfalls have produced renewed rises and minor flood levels in the upper Weir River in the O'Connor area.
- Gulf Rivers: Recent rainfall has produced river level rises in the Flinders and Norman Rivers. Minor flooding is occurring in the Norman River at ti Rainfall
 - In the period since 09.00am Monday significant rainfall was recorded at:

61mm

Powerline (Ayr) Black River Alert (Townsville) Myuna TM (Burdekin Dam) 106mm 76mm Mareeba AP 72mm Amiens Knob Alert (Warwick)

Weather Outlook

- A ridge along the east coast of Queensland is weakening as a high near New Zealand moves eastwards. The monsoon trough lies across Cape York Peninsula. A low pressure system is deepening well off the SE coast and will move away towards New Zealand today.
- on trough moves a little south over Gulf waters otherwise little change in the weather across the state. Monsoonal rain areas and thunderstorms over the tropics showers and thunderstorms generally over eastern and southeast districts. Isolated late showers and thunderstorms over the western interior. Patchy rain developing in the far

SES 132 500 CALLS

- 372 cells were made to SES 132 500 in the period since 05.00am Monday.
 - Rockhampton 102 calls Brisbane

MEDIA

- ABC Online reports: The central Queensland town of Rockhampton is now completely isolated by floodwaters, Premier Anna Bligh says. Hundreds of homes have been inundated and people have been forced to evacuate ahead of the Fitzroy River's expected peak of 9.4 metres on Wednesday. Three Black Hawk helicopters have also been relocated to Rockhampton from Emerald as water snakes toward the CBD. Ms Bligh told ABC TV's 7.30 Report that the last route out of town the highway to the north of the city is now under water, completely stranding the city's 75,000 residents. The airport was closed days ago after the termac became flooded and no rail services are operating. "We're really still in the middle of an unfolding disaster," she said. "That means not only are there supply Issues for Rockhampton, but of course [for] towns like Mackay. Townsville and Cairns that are north of there. We have some towns and cities now starting the heart-breaking business of clean-up and recovery, while we're still in response mode in places like Rockhampton, St George and in that south-west area," she said. "As we turn to recovery there's certainty some big logistical issues. The city of Emerald, for example, we flew 13 tonnes of cleaning equipment and disinfectant in there this morning and they need more. So that's just one town.

 http://www.abc.net.au/news/stories/2011/01/03/3105704.htm
 - The Courier Mail reports: Flooded Queensland rivers are tipped to cause further devastation as high waters move across the state in coming weeks, while ultimately delivering long-term benefits to dry interstate regions. University of Queensland Professor in Civil Engineering Hubert Chanson said it could take weeks for water to drain from Queensland river systems. "If we have more rain to come in the next few days or few weeks, that rain is simply going to continue to flood some of those catchments," he said. The flooded Condamine River system, currently wreaking havoe in Condamine, Chinchilla and Dalby, will continue to damage properties as it travels south across the border into the Murray-Darling Basin. "The magnitude of flooding might be of less significance than what we're observing in Dalby and Chinchilla, but there is no doubt that there will be some major flooding," Prof Chanson said, http://www.couriermail.com.au/news/queensland-flood-waters-may-flow-to-parched-murray-darling-basin/stony-e6freon8-12258a64230n

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Old



Subject: QEMR as at 05.00am Wednesday 5 January 2011 "DEPARTMENT OF COMMUNITY SAFETY Daily Queensland Emergency Management Report as at 5:00am Wednesday 05 January 2011

SIGNIFICANT INFORMATION

Sent:

To:

- Arrangements have been made to evacuate residents today from the Warrawee Nursing Home,

 - A flight from Brisbane will arrive at St George at 8:20am.
 The flight is scheduled to depart from St George at 10:00am, arriving in Brisbane at 11:20am, with the 33 passengers.
- At 9:30am today a teleconference will occur to discuss logistic arrangements to ensure the restocking of the Coles and Woolworths supermarkets in affected areas. The teleconference will include both state and local supermarket representatives, as well as members from Local Disaster Management Groups. This discussion will help coordinate restocking efforts between supermarket distribution contres, transportation providers and coincide with plans of the Local Disaster Management Groups.
- Yesterday a barge service arrived in Rostyn Bay, delivering supplies for IGA and carrying TipTop bread. The barge service collected pineapples whilst at Rostyn Bay and returned these to Gladstone. More groceries are expected to arrive by barge in Rostyn Bay today.

 It is expected that these barges will continue to be used for restocking of Rockhampton through Rostyn Bay and back loading of produce to Gladstone.
- The Royal Autralian Navy are providing two Sea King Helicopters from Nowra, New South Wales, to support response and recovery efforts in effected areas.

 The two Sea King Helicopters are to arrive in Roma today.

 - The Australian Defence Force will pre-position fuel in St George to support the Sea King's
- With effect of Tuesday, Mackay has had power restored to areas that were affected by major fault of electrical equipment.

HIGHWAY CLOSURES (as at 13:47 04-01-2011)

- Bruce Highway north of Gladstone
- Leichardt Highway north of Wandoan
- Fitzroy Development Rd north of Taroom
- Burnett Highway north of Monto
- Dawson Highway Calliope to Springsure
- Canarvon Highway north of Injune
- Warrego Highway west of Dafby
- Moonee Highway west of Moonee Barwon Highway - west of Goondiwindi

WEATHER OBSERVATIONS

Warnings

- Flood Warnings are current for the following rivers:
 - Condamine and Balonne Rivers: Major flooding extends along the Condamine and Balonne Rivers:
 - Thomson and Barcoo Rivers, and Cooper Creek: Minor to moderate flooding is occurring in the
 - Fitzroy River Basin: Major flooding continues along the Dawson, Comet, Mackenzie and Fitzroy Rivers. The Fitzroy River at Rockhampton was 9.2 metres at 3:15pm Tuesday and rising slowly with major flooding. The Fitzroy River at Rockhampton is expected to peak up to 9.4 metres on Wednesday and remain above the major flood level of 8.5 metres for 1 week after the peak.
 - Burdekin River: Major flooding continues in the Belyando River at Albro, with moderate flood lev
 - Don River: Minor flooding continues to ease in the Don River at Reeves, Downstream at Bowen I
 - Moonie River: Moderate to major flooding is occurring in the Moonie River between Flinton and It

- Welr Rivers: Moderate to major flooding is expected to develop downstream along the lower Weir River during this week. Moderate flooding has peaked in the Weir River at C
- Gulf Rivers: Recent rainfall has produced river level rises in the Flinders, Norman and Gilbert Rivers. Minor flooding is occurring in the Norman River at the Yappar River junct

Rainfall

- In the period since 09.00am Tuesday significant rainfall was recorded at:
 - Expedition Pass Alert (Charters Towers) 106mm
 - Upper Black River Alert (Townsville)
 Upper Bogie Alert (Proserpine)
 Stewart River (North Cooktown)

Weather Outlook

- A weak ridge lies along the Queensland coast. A cloudband covers the southwest of the state with patchy light rain and isolated thunderstorms. An upper trough will move
 across southern districts today before developing further into a significant upper level low pressure system on Thursday.
- A developing upper level trough over the interior will increase precipitation over much of Queensland during the day, particularly over southeast and southern Queensland. Becoming fine during the afternoon and evening over the southwest of the state as patchy rain and isolated thunderstorms clear to the east. Occasional thunderstorms developing through the Warrego, Maranoa and the Darling Downs today will develop further to thundery rain areas by evening and extend east to the southeast coast. Moderate to heavy falls are likely in these districts overnight. Mainly isolated showers and thunderstorms elsewhere, more frequent in the afternoon and evening.

SES 132 500 CALLS

- 321 calls were made to SES 132 500 in the period since 05.00am Tuesday:
 - Rockhampton 107 calls
 - Brisbane 19 calls
 - Gold Coast 18 calls
 - Bundaberg 17 calls

MEDIA

- ABC Online reports: The Fitzroy River is expected to peak about 9.4 metres sometime tomorrow, inundating hundreds of homes and effecting thousands of properties. The floodwaters have nowhere to go and hydrologist Peter Baddiley says they are likely to stay around that level for several days. For the second day in a row, a RAAF cargo plane loaded with goods took off from Amberley, south-west of Brisbane, and landed in Mackay to Rockhampton's north. Barges filled with food have been ferrying supplies from Gladstone and helicopter drops are also being made, while other supplies are being trucked in through the one highway in and out of the city.
- The Courier Mail reports: Beleaguered residents in St George are scrambling to build massive levees to hold out a record flood predicted to swamp 80 per cent of the southwest Queensland town. The weather bureau said the Balonne River will peak at a record 14 metres at St George this weekend or early next week. Emergency services have established a temporary field hospital for outpatients and short stay patients on higher ground on the Carnarvon Highway. http://www.couriermail.com.eu/news/st-george-braces-for-record-flood/story-e6freon6-1225981949368

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qld

Boyle Michael

Sent:

Wednesday, 5 January 2011 10:17 AM

To:

Bradley John; Wall Terry; Zubrinich Robert; Leverington Andrea; Brown Damien; Lenz Anne; Williams Christine; Anderson Danielle; Withers Greg; Moody Annie; Best Debbie; Quincey Richard; Mcnamara James

Tyson Michaels Paul; Fry Wayne; Cook Clive; Ryan John; Steven; Birchley Michael; Pearce Martin Flood Update Wednesday 5 January 2011

Subject: Attachments: DOC040111-007.pdf

Today's updates attached.

Of note

- Fitzroy at Rockhampton remained at 9.15m as at 7am and so may not reach the predicted 9.4m
- Balonne at St George was at 12.32m at 9am. Peak remains difficult to predict but is likely to be 14m+. 14m takes it over the levies.
- Rivers to remain high in both centres for extended periods Vulnerable people being evacuated from St George today by air. Last remaining road access could be cut today. Essential utilities should still be OK.

For DERM

- . International treaty for capture of satellite imagery activated for first time in Australia. No cost for
- Confirming integrity of St George levies

For interest

A load of pineapples has made its way from North Qld to the south via road and barge.

Thanks

Michael Boyle SDCG Rep Director ICT Infrastructure Department of Environment and Resource Management

From: Steven Dunn On Behalf Of SDCC Sent: Wednesday, 5 January 2011 5:03 AM To:

Subject: QEMR as at 05.00am Wednesday 5 January 2011

"DEPARTMENT OF COMMUNITY SAFETY

Daily Queensland Emergency Management Report as at 5:00am Wednesday 05 January 2011

SIGNIFICANT INFORMATION

- Arrangements have been made to evacuate residents today from the Warrawee Nursing Home, St George.
 - A flight from Brisbane will arrive at St George at 8:20am.
 - The flight is scheduled to depart from St George at 10:00am, arriving in Brisbane at 11:20am, with the 33 passengers.
- At 9:30am today a teleconference will occur to discuss logistic arrangements to ensure the restocking of the Coles and Woolworths supermarkets in affected areas. The teleconference will include both state and local supermarket representatives, as well as members from Local Disaster Management Groups. This discussion will help coordinate restocking efforts between supermarket distribution centres, transportation providers and coincide with plans of the Local Disaster Management Groups.
- Yesterday a barge service arrived in Roslyn Bay, delivering supplies for IGA and carrying TipTop bread. The barge service collected pineapples whilst at Roslyn Bay and returned these to Gladstone. More groceries are expected to arrive by barge in Roslyn Bay today.

 It is expected that these barges will continue to be used for restocking of Rockhampton through Roslyn Bay and back loading of produce to Gladstone.
- The Royal Autralian Navy are providing two Sea King Helicopters from Nowra, New South Wales, to support response and recovery efforts in effected areas.
 - The two Sea King Helicopters are to arrive in Roma today.
 - The Australian Defence Force will pre-position fuel in St George to support the Sea King's operations.
- With effect of Tuesday, Mackay has had power restored to areas that were affected by major fault of electrical equipment

HIGHWAY CLOSURES (as at 13;47 04-01-2011)

- Bruce Highway north of Gladstone
- Leichardt Highway north of Wandoan Fitzroy Development Rd north of Taroom

- Burnett Highway north of Monto Dawson Highway Calliope to Springsure
- Canarvon Highway north of Injune
- Warrego Highway west of Daiby Moonee Highway west of Moonee
- Barwon Highway west of Goondiwindi

WEATHER OBSERVATIONS

- Flood Warnings are current for the following rivers:
 - Condamine and Balonne Rivers: Major flooding extends along the Condamine and Balonne River system between Brigalow Bridge through to the St George and Dirrenband Thomson and Barcoo Rivers, and Cooper Creek: Minor to moderate flooding is occurring in the Thomson River between Multaburra and Jundah. Moderate to major flooding
 - Fitzroy River Basin: Major flooding continues along the Dawson, Comet, Mackenzie and Fitzroy Rivers. The Fitzroy River at Rockhampton was 9.2 metres at 3.15pm Tuesday and rising slowly with major flooding. The Fitzroy River at Rockhampton is expected to peak up to 9.4 metres on Wednesday and remain above the major flood level of 8.5 and fishing slowly will ming in Roburg. The Frizing raver at Robustanian is expected to peak after the peak.

 Burdekin River: Major flooding continues in the Belyando River at Albro, with moderate flood levels easing downstream in the Suttor River at St Anns. Minor flooding continue Don River: Minor flooding continues to ease in the Don River at Reeves. Downstream at Bowen Pump Station, a minor flood peak to 3.65 metres was recorded at 11pm Mond Moonle River: Moderate to major flooding is occurring in the Moonle River between Finition and Nindigully, with the flood peak currently in the Mt Driven area. At Nindigully, flo Weir Rivers: Moderate to major flooding is expected to develop downstream along the lower Weir River during this week. Moderate flooding has peaked in the Weir River at C Gulf Rivers: Recent rainfall has produced river level rises in the Flinders, Norman and Gilbert Rivers. Minor flooding is occurring in the Norman River at the Yappar River junct

Rainfall

- period since 09.00am Tuesday significant rainfall was recorded at: 106mm
 - Expedition Pass Alert (Charters Towers)
 Upper Black River Alert (Townsville) 32mm

 - Upper Bogie Alert (Proserpine) 39mm Stewart River (North Cooktown) 47mm

Weather Outlook

- A weak ridge lies along the Queensland coast. A cloudband covers the southwest of the state with patchy light rain and isolated thunderstorms. An upper trough will move across southern districts today before developing further into a significant upper level low pressure system on Thursday.
- A developing upper level trough over the interior will increase precipitation over much of Queensland during the day, particularly over southeast and southern Queensland. Becoming fine during the afternoon and evening over the southwest of the state as patchy rain and isolated thunderstorms clear to the east. Occasional thunderstorms developing through the Warrego, Maranoa and the Darling Downs today will develop further to thundery rain areas by evening and extend east to the southeast coast. Moderate to heavy falls are likely in these districts overnight. Mainly isolated showers and thunderstorms elsewhere, more frequent in the afternoon and evening.

SES 132 500 CALLS

- 321 calls were made to SES 132 500 in the period since 05.00am Tuesday;
 - Rockhampton

107 calls

Brisbane

19 calls 18 calls

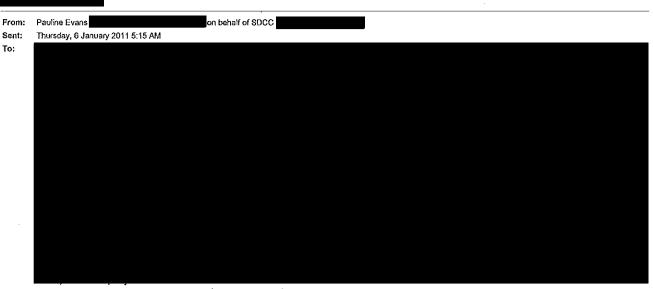
Gold Coast Bundabero

17 calls

MEDIA

- ABC Online reports: The Fitzroy River is expected to peak about 9.4 metres sometime tomorrow, inundating hundreds of homes and affecting thousands of properties. The floodwaters have nowhere to go and hydrologist Peter Baddiley says they are likely to stay around that level for several days. For the second day in a row, a RAAF cargo plane loaded with goods took off from Amberley, south-west of Brisbane, and landed in Mackey to Rockhampton's north. Barges filled with food have been ferrying supplies from Gladstone and heficopter drops are also being made, while other supplies are being trucked in through the one highway in and out of the city. http://www.abc.net.au/news/stories/2011/01/04/3106350.htm
- braces-for-record-flood/story-e6freon6-1225981949368

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Old



Subject: QEMR as at 05,00am Thursday 6 January, 2011

DEPARTMENT OF COMMUNITY SAFETY Daily Queensland Emergency Management Report as at 5:00am Thursday 06 January 2011

SIGNIFICANT INFORMATION

- River levels are rising slowly at St George, steady at Rockhampton.
- St George is expected to reach 13 metres late Thursday with further rises. A major flood peak possibly higher than 14 metres is expected at St George on Monday or Tuesday of next week
- Restocking of Coles and Wootworths supermarkets in affected areas is being coordinated consistent with Local Disaster Management Groups.
- Channel 9 is planning a live telethon on Sunday night (6.30-8.30 local time) to screen nationally to raise money for the flood appeal. Discussions are currently underway with SSQ regarding using the QG phone numbers and call centre.
- SSQ scripting is being developed to support the Premiers Relief Appeal.
- Governor General of Australia may visit flood-effected towns in Queensland over the next two
- The current Declaration of a Disaster Situation at Rockhamoton has been extended until 26/01/11.
- 15 SES volunteers from New Zealand will be deployed to Condamine on 08/01/11, adding to the volunteers from Victoria already activated

HIGHWAY CLOSURES (as at 10pm, 05 January 2011)

- Bruce Highway north of Gladstone
- Leichardt Highway north of Wandoan
- Fitzroy Development Rd north of Taroom
- Dawson Highway Calliope to Springsure
- Carnaryon Highway north of Injune
- Warrego Highway west of Dalby Moonee Highway - west of Moonee
- Barwon Highway west of Goondiwindi

WEATHER OBSERVATIONS

Warnings

- Flood Warnings are current for the following rivers:
- Condamine and Balonne Rivers: Major flooding extends along the Condamine and Balonne River system between Brigalow Bridge through to the St George and Dirranhandi area. The main flood peak is currently downstream of Surat. Major flood levels continue to rise on the Balonne River at St George. St George is expected to reach 13 metres late Thursday with further rises. A major flood peak possibly higher than 14 metres is expected at St George on Monday or Tuesday of next week.
- Thomson and Barcoo Rivers, and Cooper Creek: Minor to moderate flooding is occurring in the Thomson River between Mutlaburra and Jundah. Moderate to major flooding is extending downstream along the Barcoo River to the Retreat area. Major flooding is rising at Windorah on the
- Fitzroy River Basin: Major flooding continues along the Dawson, Comet, Mackenzie and Fitzroy Fitzroy River Basin: Major flooding continues along the Dawson, Comet, Mackenzie and Fitzroy Rivers. The Fitzroy River at Rockhampton has remained steady at about 9.2 metres during Wednesday. It is expected to remain about its current level throughout Thursday. Flood levels will remain above the major flood level of 8.5 metres for 1 week after the peak. Major flooding continues in the Fitzroy River at Riverslea, where at 5pm Wednesday the river level was rising very slowly. Levels at Riverslea are expected to commence to fall again very slowly during this week, and then more quickly over the weekend. Major flooding is easing between Theodore through to Knebworth including the towns of Moure and Barelaba. Flood levels are expected to continue falling
- falling.

 Moonte River: Moderate to major flooding is occurring in the Moonte River between Flinton and Nindigully, with the flood now downstream of Mt Driven. At Nindigully, flood levels are expected to peak around 3.9 metres during Thursday which is similar to the 1988 flood. River level rises to major flood levels are expected downstream of Nindigully to Thallon and Fenton late this week and over the weekend. Flood levels are expected to be similar to the 1988 flood.

 Well and McIntyre Rivers: Major flooding remains near a peak in the fower Weir River at Surrey. Milnor flooding continues to rise downstream between Talwood and Jericho. Recent rainfalls have resulted in proposed floor forced for the Medickey River River and some levelized milor flooding to the Medickey River.
- resulted in renewed river rises and some localised minor flooding in the Macintyre Brook. Rises and some minor flooding are also likely along the lower Macintyre River between New Kildonan and Goondiwindi.

Rainfall

- In the period since 09.00am Wednesday significant rainfall was recorded at several places including:
 Coolangatta
 - Coolangatta 110mm
 Evandale (Gold Coast) 104mm
 Lytton 95mm
 Bulimba 95mm
 Carbrook Alert (Beenleigh) 87mm
 Belibird Creek (Sunshine Coast) 75mm
 Reid Creek (NW of Gayndah) 75mm
 Ducabrook (nr Alpha) 76mm
 76mm

Weather Outlook

- A weak ridge lies along the Queensland coast. An upper trough will move across southern districts today before developing further into a significant upper level low pressure system over eastern Queensland on Thursday.
- Rain areas with moderate to heavy falls about the Southeast, Wide Bay and Capricornia coasts and adjacent inland, also about Cape York Peninsula. Scattered showers and thunderstorms about remaining eastern and northern districts and fine in the southwest. Light to moderate NE to NW winds in the north and east, tending SW to SE inland.

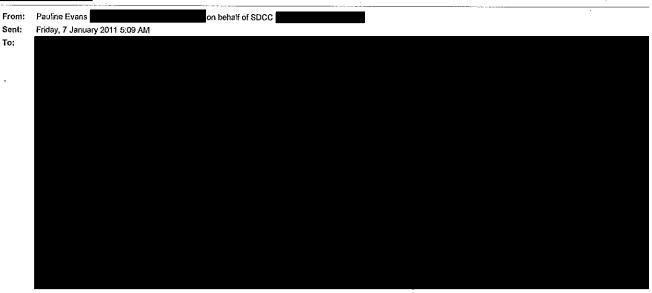
SES 132 500 CALLS

- 335 calls were made to SES 132 500 in the period since 05.00am Wednesday;
 - Brisbane 70 calls
 Rockhampton 65 calls
 Redland 25 calls

MEDIA

- ABC Online reports: Floodwaters levelled in Rockhampton in central Queensland on Wednesday, but weather forecasters say the Fitzroy River has still not reached a predicted 9.4-metre peak. It seems there is little reprieve for the central Queensland city, with the weather bureau issuing a severe weather warning for flood-affected areas in the Fitzroy catchment. http://www.abc.net.au/news/stories/2011/01/05/3107070.htm
- ABC Online reports: Queensland Premier Anna Bligh has announced Major General Mick Slater will lead the state's flood recovery taskforce. Ms Bligh says the disaster
 gripping the state is unprecedented and will require an unparalleled rebuilding effort. Major General Slater says one of his first duties will be to talk to Major General Peter
 Cosgrove, who headed the Innisfail rebuilding project after Cyclone Larry in 2006.
- http://www.abc.net.au/news/stories/2011/01/05/3106898.htm
- The Gladstone Observer reports: The major La Nina event in the Pacific Basin, responsible for bringing near-record rains to eastern Australia during 2010, is likely to persist into autumn, the Bureau of Meteorology says. Australia experienced its third wetlest year on record during 2010 as a 14-year "long dry" was broken by the rapid transition from El Nino to La Nina conditions. The second half of the year (July to December) was the wettest on record for Australia. http://www.gladstoneobserver.com.au/story/2011/01/06/la-nina-to-run-into-autumn-weather-bureau/
- Rockhampton Morning Bulletin reports: Little Cooper Scott Konemann might be one of the smallest packages the SES have had to transfer home to Gracemere, but he's their most precious cargo yet. While the five-day-old bub has been obtivious to it all, his proud parents Sarah and Ben have been on a rellercoaster ride over the past week. But yesterday the family Rose said bon voyage to Rockhampton as they were ferried home to Gracemere in the SES flood rescue boat to be reunited with awaiting family. https://www.themorningbulletin.com.au/story/2011/01/06/ses-new-born-baby-transfer-home/
- News.com.au reports: Storms have heralded more weather chaos in the southeast, with an overnight downpour of 70mm in less than an hour ahead of a further 100mm expected today. The second system is expected to approach this morning, dumping up to 100mm of rain on parts of Brisbane after yesterday evening's storm caused havoc in inner suburbs and knocked out powerlines in the Lockyer Valley. http://www.news.com.au/cars-submerged-as-heavy-rains-turns-brisbane-city-and-fortitude-valley-streets-into-streams/story-e6freon6-1225982647414
- News.com.au reports: The Courier-Mail and The Sunday Mail will team up with the Nine Network this Sunday to raise funds for Queensland's beleaguered flood victims. This follows on from The Sunday Mail's initiative, which saw 50c from the cover price of last Sunday's paper going towards fundraising efforts. Further cementing their commitment to Queensland, The Courier-Mail and The Sunday Mail will partner with the Nine Network for a live telethon to raise more money for the Premier's Flood Relief Appeal, http://www.couriermail.com.au/news/the-courier-mail-sunday-mail-and-nine-network-to-jointly-host-flood-telethon-on-sunday-night/story-e6freon6-1225982605892
- Weatherzone News reports: Brisbane saw drenching rain in the second half of 2010, leading to an annual total of 1659mm and the wetlest year since 1974. The high rainfall totals were a result of the current La Nina pattern, which began to ramp up from October of 2010. During a La Nina pattern the easterly trade winds strengthen over the Pacific, directing high amounts of moisture over eastern Australia. This year, the sea surface temperatures over the Coral Sea were also higher than average, supplying more moisture to the dominant easterly winds that then fed into Queensland. http://www.weatherzone.com.au/news/brisbane-soaks-in-wettest-year-since-1974/15800

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Old



Subject: QEMR as at 05.00 Friday 7 January, 2011

DEPARTMENT OF COMMUNITY SAFETY **Dally Queensland Emergency Management Report** as at 5:00am Friday 07 January 2011

SIGNIFICANT INFORMATION

To:

- The Governor-General will visit Condamine and Chinchilla on today. River levels are rising slowly at St George and Dirranbandi, steady at Rockhampton, falling slowly
 - There were 3717 registered evacuees as of 1500 today 06/01/11.
- The following locations are currently inundated or impacted by flooding:
 - Theodore
 - Rockhampton
 - Emeraid
 - Rolleston
 - Roma St George
- Dirranbandi, Thallon and Hebel are preparing for inundation.
 Theodore, Rolleston, Meandarra, St George and Dirranbandi are currently cut off.
 Across the state, there are 304 houses inundated, 2574 yards inundated, 736 houses have been

- Across the state, there are 304 houses inunciated, 2574 yards inundated; 736 houses have been evacuated with 1913 people evacuated. There are approximalely 269 businesses affected. There are a total of 8 evacuation centres operating across the state; at fast count (15:00 06/01/11) there were 640 people in evacuation centres located at Moura, Rockhampton Emerald (2), Chinchilla, Dalby, St George and Surat.

 A total of 6 disaster situations have been declared.

 Channel 9 is planning a live teletion on Sunday night (6:30-8:30 local time) to screen nationally to ralse money for the flood appeal. Discussions are currently underway with SSQ regarding using the QG phone number 8 call centre.
- 15 SES volunteers from New Zealand will be deployed to Condamine on 08/01/11

HIGHWAY CLOSURES (as at 10pm, 06 January 2011)

- Bruce Highway north of Gladstone Leichardt Highway north of Wandoan Fitzroy Development Rd north of Taroom Dawson Highway Calliope to Springsure Camarvon Highway north of Injune Warrego Highway west of Daby Moonee Highway west of Moonee Barwon Highway west of Goondiwindi

WEATHER OBSERVATIONS

Warnings

- A Severe Weather Warning remains current for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation, for people in the Southeast Coast and eastern parts of the Wide Bay and Burnett districts.

 Flood Warnings are current for the following rivers:
- em parts of the Wide Bay and Burnett districts, od Warnings are current for the folkowing rivers:

 Condamine and Balonne Rivers: Mejor flooding extends along the Condamine and Balonne River system between Brigalow Bridge through to the St George and Dirranhandi area. The main flood peak is currently in the Balonne River downstream of Weribone. Major flood levels continue to rise on the Balonne River at St George. St George was expected to reach 13 metres late Wednesday with further rises. A major flood peak lower than 14 metres is expected at St George during the weekend. Myall Creek at Dalby is expected to reach near the minor flood level of 2 metres during Friday morning.

 Thomson and Barcoo Rivers, and Cooper Creek: Minor to moderate flooding is occurring in the Thomson River between Muttaburna and Jundah. Minor to moderate flooding is continues on the Barcoo River between Isisford and Glenlock increasing to major flooding in the Retreat area. Major flooding continues along the Dawson, Comet, Mackenzie and Fitzroy Rivers. The Fitzroy River at Rockhampton will fall very slowly during Friday with very little change. Rockhampton river levels are expected to remain above 8.5 metres (major) until falte next week. Moderate flooding continues to ease on the Isaac River at Yatton. Major flooding will continue to ease along the Comet River into the weekend. Moderate to major flooding will continue to ease along the Mackenzie River, where the main flood peak is now downstream of Tartrus. Further rises and moderate flood levels are expected on the Dawson River at Taroom during Friday extending to the Glebe area during the weekend. Downstream at Theodore, Moura and Barelaba, levels will continue to fall into the weekend. Downstream at Theodore, Moura and Barelaba, levels will continue to fall into the weekend. These renewed rises will remain well below the recent high level flood peaks.

- Moonie River: Minor to major flooding is occurring in the Moonie River between Flinton and Nindigully. The flood is now approaching Nindigully where a peak was expected of around 3.9 metres late Thursday. Minor flooding is occurring along Teelba Creek. River level rises to major flood levels are expected to continue downstream of Nindigully to Thallon and Fenton for the remainder of this week. Flood levels are expected to be similar to the 1988 flood.

 Weir and McIntyre Rivers: Minor to moderate flooding continues in the lower Weir River between Hartman Bridge and Jericho, with the flood peak currently downstream of Surrey. Rainfall during Thursday resulted in renewed rises and minor to moderate flooding along the Macintyre Brook Catchment. Major flood levels are possible at Inglewood Bridge during Friday. River rises and moderate flooding are expected to develop along the lower Macintyre River between New Kitdonan and Goondivindi going into the weekend.
- Lockyer and Warrill Creeks, Bremer River. Minor to moderate flooding has peaked in Lockyer Creek between Helidon and Showground Weir, with moderate flood levels currently easing at Gatton. Major flood levels continue to rise in Laidley Creek at Laidley. Stream levels have either peaked or are nearing a peak along Warrill Creek and
- Brisbane River above Wivenhoe: Fast creek and river level rises continued during Thursday evening along the upper Brisbane River and tributaries. Minor to moderate flooding continues to rise in the upper Brisbane River at Linville and Devon Hills. Moderate flooding is rising at Gregor Creek.

 Burnett River. Recent rainfall has led to river level rises and minor to moderate flooding in the Burnett River catchment. River levels at Bundaberg are expected to
- remain below minor.
- Mary River: River level rises causing minor flooding are occurring between Gymple and the Home Park area. Further rises causing moderate flooding is likely between Miva and Home Park during Friday. At 7:52pm Thursday, the Mary River level at Gymple was 7.34 metres and rising causing minor flooding

In the period since 09,00am Thursday significant rainfall was recorded at several places including::

•	Geebung	107mm
•	Fisherman's Pocket (Nr Gympie)	101mm
•	Flaggy Creek (nw of Cairns)	98mm
•	Hendra	96mm
•	Bracken Ridge	96mm
•	inata ·	94mm
	Gymple	90mm
•	Mt Kanigan	78mm
•	Clagiraba Road Alert (G Cst Hinterland)	76mm

Weather Outlook

- A weak monsoonal trough occurs over Cape York Peninsula. An upper level low is moving north to the Capricorn region.
- Rain areas generally over the southeast with moderate to heavy falls and local thunder over the eastern Wide Bay region. Scattered showers and thunderstorms over the tropics, isolated showers and thunderstorms about the eastern interior. Isolated afternoon showers further west. Fine over the western interior of the state. Light to moderate NW winds across the tropics and along the NE tropical coast. Moderate to fresh SE/NE winds further south. Light winds over the interior.

860 calls were made to SES 132 500 in the period since 05.00am Thursday.

•	Brisbane	168 call
•	Toowoomba	116 call
٠	Rockhampton	84 calls
•	Bundaberg	46 calls

MEDIA

- The Australian reports: A flood peak will hit Queensland's Western Downs township of Dalby earlier than expected, with authorities rushing to get the message out. Heavy rain fell in the area this morning but metering gauges upstream on the Myall Creek didn't pick up the levels accurately, leaving authorities on the back foot. The creek is expected to rise to the minor level of two metres by 6am (AEST), the weather bureau said, and will inundate backyards, the local caravan park and the supermarket's carpark. http://www.theaustralian.com.au/news/breaking-news/unexpected-flood-peak-to-hit-da/by/story-fn3dxity-1225983249837
- ABC Online reports: The man who led the recovery effort after Cyclone Larry in 2006, retired Army General Peter Cosgrove, says Queensland's flood recovery taskforce must take a unified approach to tackling the reconstruction effort. More than 200,000 people in 40 communities across Queensland have been impacted in some way by the floods, with waters affecting an area approximately the size of New South Wales. http://www.abc.net.au/news/stories/2011/01/06/3107822.htm
- The Courier Mail reports: Flash flooding has affected streets around the wider Brisbane area, with heavy rain occurring in city areas and the south east. At 1pm water at Long Street in Graceville, south of Brisbane was reported to be waist deep. http://www.couriermail.com.au/news/cars-submerged-as-heavy-rains-turns-brisbane-city-and-fortitude-valley-streets-into-streams/story-e6/reon6-1225982647414
- Rockhampton Morning Bulletin reports: The number of flood-inundated houses in Rockhampton has reduced from 400 down to 150 in the last 24 hours, but flood levels will remain at high levels for some days yet. Chief Superintendent Alistair Dawson said the floodwaters in Rockhampton were at 9.15 metres late in the day. "Yesterday the water peaked at 9.2 metres. While it is good news that the water has receded, we are expecting the floodwaters to remain at over eight metres for another week, so we are still urging residents to be patient and exercise caution," Chief Superintendent Dawson said. "We continue to closely monitor the rising water levels in St George Surat, Hebel and Dirranbandi, with sandbags being sent to St George by the Australian Defence Force. "Some residents have been allowed back into the evacuated townships of Condamine and Theodore, with water, sewerage and power services continuing to be worked on today," Chief Superintended Dawson said. The response to the floods will continue for many weeks to come, as a huge body of water continues to pass down the Fitzroy River in Central Queensland and the Balonne; Moonle and Condamine systems in south-wast Queensland. http://www.themprenipobulicin.com.au/stays/Q110/06/flood-levels-stays/bioty-days/ west Queensland. http://www.themorningbulletin.com.au/story/2011/01/06/flood-levels-stay-high-days/
- Warwick Daily News reports: A COW that allegedly swam from the mainland to North Keppel Island in the floods has reportedly died. Police said the beast had been swept or had swum from the nearby beef capital of Rockhampton. "That is a 20-minute boat journey from Rockhampton to North Keppel, so that's an incredible journey by that particular animal," Chief Superintendent Alistair Dawson told reporters in Brisbane, http://www.warwickdailynews.com.au/story/2011/01/06/queensland-recovery-kicks-into-gear/
- Weatherzone News reports, via Facebook: Moist easterly winds, feeding into an upper level low and trough over the east coast of Queensland, have been causing heavy rainfell and storms in the last 24 hours. A severe weather warning was issued with the major concern that heavy rain could lead to localised flash flooding and potentially worsening the existing river flood situation. Areas around the Southeast were especially drenched with heavy rain and a widespread 50 to 100mm fell in only 24 hours. Coolangatta Airport at times saw falls up to 18mm in just 10 minutes. To 9am a total of 110mm was recorded, their heaviest rain for January in four years. http://www.weatherzone.com.au/news/heavy-rain-and-storms-affecting-southeast-queensland/15819
- Herald Sun reports: Another emergency evacuation centre is likely to be closed in Emerald tomorrow as the central Queensland town emerges from the mud, and flood waters continue to fall. Only about 100 people were cared for in two evacuation centres last night, and Mayor Peter Maguire says one will be shut at the end of the week. "The town's new recovery centre was opened this morning, and the council's still handing out cleaning equipment from our depot," Mr Maguire said. http://www.herakdsun.com.au/news/breaking-news/emerald-emerges-from-the-mud-after-floods-ravage-area/story-e6frf7ix-1225983039746

Pauline Evans Watch Desk Officer State Disaster Coordination Centre Emergency Management Queensland Telephon<u>e (07)</u> Mobile

email - sdcc@dcs.ald.gov.au

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or

All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qld

From: Armstrong Steve

Sent: Friday, 7 January 2011 4:19 PM

To: DERM EMG; Watson Doug; Hutchison Peter; Skoien Matthew; Birchley Michael

Subject: Imposts on Councils during the flood crisis

ΑII

This morning at the Flood Management meeting the Acting DG discussed the need to review all fees/charges (including statutory fees) applying to Councils. Governance & Strategy was assigned the task of scanning DERM (by Divisions) to get a handle on where fees/charges apply and whether there is any discretion to defer/waive fees or whether a regulation would be required. This task is in hand.

Fees and charges are only one example of where DERM actions could cause an imposts on Councils during the current flood crisis. In the context of the floods, the Department needs to be very sensitive to all imposts on Councils.

Can each EMG member remain vigilant in relation to communications with Councils, stakeholders and the community at this time.

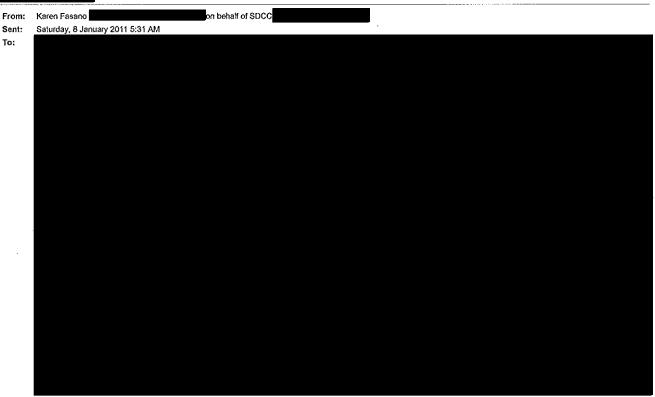
This message should be passed down the line to ensure caution and sensitivity are exercised.

This matter will be further discussed at EMG on Monday. Thanks.

Steve Armstrong
Executive Officer
Office of the Director General
Dept of Environment & Resource Management
Ph:

Mobile:

. . ()



Subject: QEMR as at 05.00 Saturday 08 January 2011

Good Morning

To:

DEPARTMENT OF COMMUNITY SAFETY Daily Queensland Emergency Management Report as at 5:00am Saturday 08 January 2011

SIGNIFICANT INFORMATION

- The Prime Minister will visit St George and Rockhampton today 08/01/11
 The Governor-General visited Condamine and Chinchilla yesterday 07/01/11
 The State Opposition Leader is flying from Brisbane to St George today and has space available for passengers or cargo, wheels up at 0900. Please contact Warren Bridson if you become aware of anything that can be transported on this flight
- River levels are rising slowly at St George, steady at Rockhampton, falling slowly at Surat There are 3720 registered evacuees (total number of persons registered on NRIS) as of 1500
- The following locations are currently inundated or impacted by flooding:
 - Theodore
 - Rockhampton
 - Emecald
 - Rolleston Roma
 - St George

- Surat
 Dirranbandi, Thallon and Hebel are preparing for inundation
 Theodore, Rolleston, Meandarra, Dirranbandi and Hebel are currently cut off
 Across the state, there are 267 houses inundated with water over floorboards, 3932 with water in yards; 835 houses have been evacuated with 1835 people evacuated. There are approximately
 254 businesses affected
 There are a total of 6 evacuation centres operating across the state; at last count (15:00 07/01/11) there were 609 people in evacuation centres located at Moura, Rockhampton Emerald, Chinchilla, Dalby and St George
 A total of 6 diseaster situations have been declared.
- A total of 6 disaster situations have been declared
- A total of 6 disaster situations have been declared Channel 9 is planning a live telethon on Sunday night (6.30-8.30 local time) to screen nationally to raise money for the flood appeal. Discussions are currently underway with SSQ regarding using the QG phone number & call centre. 15 SES volunteers from New Zealand will be deployed to Condamine on 08/01/11 Overnight residents of 2 houses at Kilkivan were evacuated after heavy rainfall caused very rapid
- rises in the Wide Bay Creek (Mary River catchment).

Major Highway Closures (as at 03:40am 08 January 2011)

- Bruce Highway north of Gladstone
- Leichardt Highway north of Wandoan
- Fitzroy Development Rd north of Taroom
- Dawson Highway Calliope to Springsure Canarvon Highway north of Injune
- Warrego Highway west of Dalby
- Moonee Highway west of Moonee Barwon Highway west of Goondwindi
- The BoM advise that it is likely that the Bruce Highway will be cut at Gymple this morning due to flooding in the mary River.

WEATHER OBSERVATIONS

Warnings

A Severe Weather Warning remains current for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation, for people in the Southeast Coast and the Wide Bay and Burnett districts. Heavy rain and isolated thunderstorms are currently occurring about the southern Wide Bay and Burnett district and are forecast to develop about the Sunshine Coast during Saturday morning, and remaining parts of the Southeast Coast district on Saturday afternoon. Heavy rain may lead to

localised flash flooding and/or worsen existing river flooding. Recent events: Rainfall of up to 220mm over the Mary River catchment since 9am Friday has caused rapid river

- Flood Warnings are current for the following rivers:
 - Mary River: Heavy rainfall continues to fall across the lower Mary catchment below the Gympie area, where rainfall totals between 150-180mm have been recorded since 9am Friday. Fast river rises and moderate to major flooding are occurring along the Mary River between Gympie and Tiaro during Saturday morning, with minor

River levels downstream at Maryborough.
River levels downstream at Maryborough are currently at the level of the Lamington Bridge with further rises expected as upstream floodwaters arrive. Rises to above 6 metres are expected during Saturday morning with rises above 7 metres possible later in the weekend.
Further heavy rainfall is forecast to continue during Saturday, which is likely to result in higher levels. The situation will continue to be monitored closely.

- Brisbane River above Wivenhoe: Renewed rises and minor to moderate flooding are occurring in Gregor and Cressbrook Creeks, with major flooding occurring along the Brisbane River between Linville and Devon Hills. Further rainfall is forecast for the calchment during Saturday which may produce further renewed river level rises.
- Burnett River. Moderate to heavy rainfall continued in the Burnett River catchment during Friday evening. Minor to moderate flooding continues in the Burnett River catchment. Major flooding is rising in Barker Creek at Glenmore and in Berambah Creek at Litzows. Further rainfall is forecast for Saturday throughout the catchment with moderate to heavy falls possible.

Minor to moderate flooding extends along the Lower Burnett River from the Gayndah area to Walla with further small rises expected overnight Friday. Flood levels at Bundaberg are expected to remain below the minor flood level of 3.5 metres but further reinfall is forecast and the situation will continue to be monitored.

- Condamine and Balonne Rivers: Moderate to major flooding extends along the Condamine and Balonne River system. The main flood peak is currently in the Balonne River downstream of Waribone in the Barrackdale area. Further rainfall is forecast for the Condamine catchment during Saturday. Major flood levels are expected to continue rising on the Balonne River at St George into the weekend reaching 13.4 metres during Saturday. A major flood peak lower than 14 metres is expected at St George late in the weekend. For comparison, the March 2010 flood peak was 13.4 metres. Flood levels will remain high (above 13 metres) until mid next week. Creek levels at Dalby continue to ease with the situation being closely monitored.
- Fitzroy River Basin: Moderate to major flooding continues along the Dawson, Comet, Mackenzie and Fitzroy Rivers. The Fitzroy River at Rockhampton has remained steady at about 9.15 metres during Friday following a peak of 9.2 metres on Wednesday. Levels will fall very slowly through the weekend with little change expected. Rockhampton river levels are expected to remain above 8.5 metres (major) until late next week.

 Mirror flood levels in the upper Dawson River at Taroom are nearing a peak. Renewed rises have commenced downstream in the Glebe area. Downstream at Theodore, Moura and Baralaba, levels will continue to fall into the weekend before renewed rises and minor flooding during next week. These renewed rises will remain well below the reserved to the levels will continue to fall into the weekend before renewed rises and minor flooding during next week. the recent high level flood peaks.
- Lockyer and Warrill Creeks: Some small renewed rises and minor to moderate flooding is occurring along Lockyer and Warrill Creeks. River rises are also occurring in the Bremer River where minor flooding continues. The rainfall has continued to ease which is expected to result in stream levels to commence to ease.
- Thomson and Barcoo Rivers, and Cooper Creek: Minor flooding continues in the Thomson River between Multaburra and Jundah. Minor to moderate flooding is easing on the Barcoo River between Isisford and Glenkock. Major flooding has now peaked on the Barcoo River at Retreat. Major flooding is rising slowly on the Cooper Creek at Windorah. River levels at Windorah are expected to peak in the next 1 to 2 days.
- Moonle River: Minor to major flooding is occurring in the Moonle River between Southwood and Thallon. The flood is now downstream of Nindiguily. Small, renewed rises are expected between Southwood and Flinton over the weekend with minor flood levels continuing. Major flood levels are expected to continue downstream of Nindiguily to Thallon and Fenton on Saturday and Sunday. Flood levels are expected to be similar to the 1988 flood.

 Well and Michityre Rivers: Minor to moderate flooding continues in the lower Weir River between Hartman Bridge and Jericho, with the flood peak currently downstream of Surrey. Minor flooding is falling in the O'Connor area. Minor to major flooding continues in the Macintyre Brook and Dumaresq catchments. Moderate to major flooding is forecast along the lower Macintyre River between New Kildonan and Goondiwindi during the weekend. At Goondiwindi, major flood levels of above 9 metres are expected with a peak likely early on Sunday.

Rainfall

In the period since 09.00am Friday significant rainfall was recorded at several places including:

•	Mt Kanigan (NE of Gymple)	236mm
•	Marodian (NE of Gymple)	223mm
•	Brooyar (NE of Gymple)	182mm
•	Gympie	98mm
•	Black Swamp (N of Maryborough)	117mm
•	Maryborough	97mm

Weather Outlook

- A weak monsoonal trough is located over Cape York Peninsula. An upper level low near the Capricornia coast is expected to move offshore overnight and remain offshore on Saturday. A surface trough lying off the Fraser Coast will remain slow moving.
- Rain areas over southeastern districts with possible moderate to heavy falls about the eastern Wide Bay and Southeast Coast districts. Isolated showers and afternoon thunderstorms over the southeast interior, easing to showers over the remaining southern and eastern interior. Scattered showers and thunderstorms over the tropics and northwest. Fine over central and southwest parts. Light to moderate W to NW winds across the tropics. Light to moderate SE to NE winds about the remaining east coast, tending fresh to strong about the southeast. Light to moderate E to SE winds inland.

SES 132 500 CALLS

718 calls were made to SES 132 500 in the period since 05.00am Friday. These included:

•	Brisbane	88
•	Rockhampton	48
•	Noosa	41
,	Cooloola	41
,	Bundaberg	34
•	Toowoomba	33
•	Logan	31
	Dodlanda	20

MEDIA

- ABC News Online reports: The Balonne River in the southern Queensland town of St George has become a raging torrent as residents brace for their second record flood in 10 months. The weather bureau expects the river to surpass last year's 13.4-metre record today and continue rising on Sunday, but it is not predicted to surpass 14 metres. Authorities predict the river will inundate around 30 homes. Power has been turned off to more homes in the area and another 10,000 sandbags are being filled. http://www.abc.net.au/news/stones/2011/01/07/3108638.htm
- The Courier Mail reports: THE man charged with leading the rebuilding of flood-ravaged Queensland has conceded it will take years for some regions to fully recover. But Major-General Mick Stater said the group tasked with a massive effort expected to cost more than \$5 billion would not seek "short-term, temporary fixes". And he said the http://www.couriermail.com.au/news/recovery-chief-describes-region-as-tropical-islands-as-seven-olympic-pools-of-water-rush-through-rocky-every-second/story-e6freon6-1225983599240

- The Brisbane Times reports: Dorothy Eather will never see the war-like destruction that a record flood has wreaked on her Condamine home, west of Brisbane. The 67-year-old cannot bear to return to the house she has lived in for 40 years after a torrent of water whipped through it, turning everything below 1.5 metres into a muddled mess. After being allowed to return for the first time in a week, her family began the mammoth task of emptying the entire house yesterday. http://www.brisbanetimes.com.au/environment/weather/a-towns-heartbreak-as-residents-return-20110107-19ip1.html
- The Rockhampton Morning Bulletin reports: ROCKY'S links to the south and west -- the Capricorn and Bruce Highways and the city's airport -- are likely to remain closed until at least January 15 or 16. Prime Minister Julia Gillard will be in Rocky today to see for herself the sheer volume of water coming down the Fitzroy River. Although the flood level has peaked, the river shows no sign of falling and the Local Disaster Management Group is warning that it could be weeks before some evacuees are able to return to their homes.

Mayor Brad Carter said yesterday residents would not be able to get back into their houses to start cleaning up until authorities deemed it safe. http://www.themorningbulletin.com.au/story/2011/01/08/rockhampton-flood-cut-off-one-more-week/

- The Gymple Times reports: GYMPIE Regional Council has issued a list of roads known to be flooded and impassable as at 5pm yesterday. It also warns motorists to be careful on the roads, as weather conditions can alter water heights suddenly between updates. http://www.gympietimes.com.au/story/2011/01/08/flash-flooding-closes-regionsroads-gympie/
- The Calms Post reports: THERE are calls for an overhaul of how emergency weather warnings are issued in the wake of cyclone Tasha sneaking up on the Far Northern coast on Christmas Day. And the result may be a colour-coded warning system to complement the existing cyclone watch and warnings issued by the weather bureau.

 Both the State Government and the weather bureau have committed to reviewing how the public was notified of cyclone Tasha's sudden upgrade at 2am before it crossed the coast a few hours later, packing 100km/h wind gusts and heavy rain. http://www.cairns.com.au/article/2010/12/29/142111 local-news.html

The Toowoomba Chronicle reports: PERSEVERANCE Dam reached full capacity yesterday afternoon, as water flowed over the spillway for the first time in almost 10 years. Significant rainfall yesterday pushed the level from 97 per cent in the morning to overflowing by 2pm.

The last time Perseverance Dam reached spill point was in February, 2001.

http://www.thechronicle.com.au/story/2011/01/08/perseverance-dam-full-capacity-overflow-flood/

Regards

Karen Fasano Watch Desk Officer State Disaster Coordination Centre



This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qid

. . (.

on behalf of SDCC Karen Fasano Sunday, 9 January 2011 5:23 AM

Subject: QEMR as at 05.00 Sunday 09 January 2011 Good Morning,

DEPARTMENT OF COMMUNITY SAFETY Daily Queensland Emergency Management Report as at 5:00am Sunday 09 January 2011

SIGNIFICANT INFORMATION

From:

Sent: To:

- The Prime Minister visited Gladstone, St George and Rockhampton and the Premier visited St George and Condamine on 8 January 2011.
- As at 8 January 2011, river levels were rising slowly at St George and Dirranbandi, steady at
- As at 8 January 2011, fiver levels were rising slowly at St George and Diffanoanol, steady. Rockhampton, falling slowly at Surat. There were 3,774 registered evacuees (total number of persons registered on NRIS) as of 1600hours Saturday 8 January 2011. The following locations are currently inundated or impacted by flooding:
- - Theodore Rockhampton
 - Emerald
 - Rolleston
 - Roma
 - St George Surat

- Surat
 As at 8 January 2011, Dirranbandi, Thallon and Hebel are preparing for inundation. No issues with resupply to Hebel at this stage but may become a concern if access is cut due to road closures. Highway is open South.
 As at 8 January 2011, Rolleston and Dirranbandi are cut off.
 As at 8 January 2011, across the state, there were 154 houses inundated with water over floorboards, 2,542 with water in yards; 831 houses have been evacuated with 1,797 people evacuated. There are a poproximately 263 businesses affected.
 There are a total of 6 evacuation centres operating across the state; at last count (1600 hrs Saturday, 8 January 2011) there were 534 people in evacuation centres located at Moura, Rockhampton, Emerald, Chinchilla, Dalby and St George.
 A total of 6 disaster situations have been declared.
 Channel 9 is planning a live telethon on Sunday night (1830 hours -2030 hours local time) to screen nationally to raise money for the flood appeal. Discussions are underway with SSQ regarding using the QG phone number and call centre.
 Fifteen New Zealand SES workers arrived in Brisbane on 8 January 2011 and are on their way to Condamine to assist.

- Condamine to assist.
- Cortication to despise.

 Flexible field habitat arrived in St. George 8 January 2011. There is no requirement for it to be erected at this time, however it is on standby if required.

Major Highway Closures (as at 04:30am 09 January 2011)

- Barwon Highway west of Goondivindi
- Bruce Highway north of Gladstone
- Bruce Highway south of Gympie
- Canarvon Highway north of Injune Dawson Highway Calliope to Springsure Fitzroy Development Rd north of Tercom
- Leichardt Highway north of Wandoan
- Moonee Highway west of Moonee Warrego Highway west of Dalby

WEATHER OBSERVATIONS

Warnings

A Severe Weather Warning remains current for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation, for people in the Southeast Coast and southem parts of the Wide Bay and Burnett.

Rain areas and thunderstorms are expected to increase further through the Southeast Coast district and southern parts of the Wide Bay and Burnett district today. Some heavy falls are likely which may lead to localised flash flooding and/or worsen existing river flooding.

Flood Warnings are current for the following rivers:

Mary River: Rainfall totals of up to 300mm have been recorded since 9am Friday causing major flooding between Gympie and Tiaro. River levels at Maryborough rose further overnight with a peak expected during Sunday of around 9 metres. Flooding has now eased below minor in Wide Bay Creek. Moderate flooding is easing in Munna Creek, but minor to major flooding continues in Tinana Creek. Further rainfall overnight is not expected to cause significantly higher river levels and river levels are

- Brisbane River above Wivenhoe: Minor to moderate flooding is easing in the Brisbane River catchment between Linville and Gregor Creek.
- Burnett River: Record major flood levels are occurring along Barambah Creek. Very fast rises continue to be associated with this flood. Further rainfall is forecast overnight Saturday and during Sunday. Minor to moderate flooding continues in the remainder of the Burnett River catchment, with river levels at Bundaberg expected to remain the minor flood level of 3.5 metres.
- Condamine and Balonne Rivers: The main flood peak in the Balonne River is currently upstream from St George in the Beardmore Dam area. A peak near the March 2010 flood level of 13.4 metres is expected at St George overnight and Sunday causing major flooding. Flood levels will remain high (above 13 metres) until mid next week. Moderate to major flooding extends along the Condamine and Balonne River system. Recent rains and high creek inflows have caused renewed rises in the upper Condamine around Warvick to Tummaville. Rises will extend downstream to the Chinchilla Weir area during the next few days causing renewed major flooding, but remaining well below the peaks recorded during the Christmas-New Year period. Creek levels at Dalby continue to ease with the situation being closely monitored.

 Fitzroy River Basin: Moderate to major flooding continues along the Dawson, Comet, Mackenzie and Fitzroy Rivers. The Fitzroy River at Rockhampton has remained steady at about 9.15 metres during Saturday following a peak of 9.2 metres on Wednesday. Levels will fall very slowly from Sunday. Rockhampton river levels are expected to remain above 8.5 metres (major) until late next week.
- Lockyer and Warrill Creeks: Minor to moderate flood levels are generally falling along Lockyer and Warrill Creeks and the Bremer River.
- Thomson and Barcoo Rivers, and Cooper Creek: Major flooding is rising along the Cooper Creek at Windorsh. Minor flooding continues to ease in the Thomson River between Camoola Park and Jundah. Minor to major flooding will continue to fall along the Barcoo River between Glenlock and Retreat. Major flooding continues in the Cooper Creek at Windorsh. River levels at Windorsh are expected to fall slowly through Sunday and next week.
- Moonle River: Minor to major flooding is occurring in the Moonle River between Southwood and Fenton. The flood is now downstream of Nindigully. Small, renewed rises are expected between Southwood and Flinton over the weekend with minor flood levels continuing. Major flood levels are expected to continue downstream of Nindigully at Thallon on Saturday with moderate flood levels at Fenton on Sunday. Flood levels are expected to be similar to the 1988 flood.

 Weir and McIntyre Rivers: Minor to moderate flooding continues in the lower Weir River between Surrey and Jericho, with the flood peak currently approaching Talwood. Moderate flood levels are falling at Medpark Bridge. Moderate to major flooding is forecast along the lower Macintyre River between New Kildonan and Goondiwindi during the weekend with a peak expected at Goondiwindi of 9.2 metres on Sunday.

Rainfall

In the period since 09.00am Saturday significant rainfall was recorded at several places including:

•	Century Mine (SW of Burketown)	61mm
•	Landsborough	. 86mm
•	Maleny	63mm
•	Toolara (NE Gymple)	55mm

Weather Outlook

A weak monsoon trough extends over the northern tropics. An upper level low lies offshore of the Capricorn coast and is expected to drift west today. A surface trough lies over the southern Coral Sea and is expected to drift west towards the Fraser and southern Queensland coasts today.

Rain areas and thunderstorms over southeastern districts and the Maranoa with moderate to heavy falls likely about the Southeast Coast district and southern Wide Bay and Burnett district. Showers and isolated thunderstorms over the tropics, central districts and the Warrego, more widespread with rain areas over northwestern Queensland and Capa York Peninsula. Fine elsewhere apart from the chance of isolated late showers and thunderstorms over the southern Channel Country and Central West. Moderate to fresh St to NE winds over southern Queensland, strong at times along the southeast coast and about the higher ground of the southeast interior. Moderate to fresh SW to NW winds in the far north. I loth winds elsewhere winds in the far north. Light winds elsewhere.

SES 132 500 CALLS

736 calls were made to SES 132 500 in the period since 05,00am Saturday. These included:

• 1	Cooloola	162
•	Maryborough	106
•	Hervey Bay	48
•	Rockhampton	37
٠	Brisbane	36

MEDIA

- The Australian reports: MARYBOROUGH will be the next town to fall victim to Queensland's massive floods after St George was inundated today and Rockhampton residents were told they would be awash for another week. Maryborough residents have been confronted by road closures after more than 300mm fell in the region, creating havoc for Queensland's emergency services and disaster management. http://www.theaustralian.com.au/news/st-qeorge-floodwater-peak-revised-down/story-e6/rg6n6-1225984133763
- ABG News Online reports: The weather bureau says southern parts of Queensland are in for another major downpour, which could lead to a worsening of the flood situation. The bureau's senior forecaster Brett Harrison says a severe weather warning is current for people in south-east Queensland, Wide Bay and the Burnett districts. He says an upper-level low off the central coast and a low-level trough off southern Queensland are generating all the rain. http://www.abc.net.au/news/stories/2011/01/09/3109034.htm
- The Courier Mail reports: PRIME Minister Jufia Gillard wants the Bruce Highway, which runs through the major cities along the eastern coast of Queensland, flood-proofed. Ms Gillard told reporters she had commissioned a feasibility study on how the Bruce Highway, a major supply route that has been cut off in a number of places in the massive floods hitting Queensland, can be protected from flooding.

 "The Bruce Highway was cut and that's why we have commissioned a feasibility study on flood-proofing the Bruce Highway," Ms Gillard told reporters in Rockhampton on Saturday. "That feasibility study will be available for the middle of this year and that points to having a road that is flood-proof."

 http://www.couriermail.com.au/news/crews-respond-to-flash-flooding/story-e6/reon6-1225984083284

 The Courier Mail monds: THE Many Place in Manybory with its expected to coach at least sing matries on Sunday, the highest level since 1968, after 300mm of rain fell in the

- The Courier Mail reports: THE Mary River in Maryborough is expected to reach at least nine metres on Sunday the highest level since 1968 after 300mm of rain fell in the area in 24 hours. Huge downpours in Queenslands southeast are repidly heading towards Maryborough and could leave 20 homes and businesses inundated. http://www.couriermail.com.au/news/breaking-news/huge-downpours-in-southeast-are-heading-towards-maryborough-and-could-leave-20-homes-and-businesses-inundated/story-fn/ik8u2-1225984221465

 The Courier Mail reports: MAJOR-General Mick Slater has outlined his battle plan to tackle the flood crisis, assuring residents their shattered regions would be rebuilt. The top soldier recruited to piece the state back together aims to leave it better prepared for future events.

 "We will rebuild Queensland," he told The Sunday Mail from his new Brisbane operations hub, before touring the stricken regions with Premier Anna Bligh yesterday. "We need to make sure the rebuilding prepares us better for the next flood than we were for this one.

to make sure the recultioning prepares us better for the next flood inan we were for this one.

http://www.couriermail.com.au/news/sunday-mail/mai-gen-mick-slater-pledges-to-get-flood-battered-queensland-back-on-its-feet/story-e6frep2f-1225984338031

The Rockhampton Morning Bulletin reports: PRIME Minister Julia Gillard has toured the evacuation centre in flood hit Rockhampton but earlier stopping short of committing funds to flood proofing the city. After touching down at 1.50pm in a Black Hawk helicopter at the Western Street army base and heading to City Hell for an update on the crisis, Ms Gillard met with Mayor Brad Carter and Member for Capricornia Kirsten Livermore for discussions about building a new transport route to flood-proof the city. http://www.themorningbulletin.com.au/story/2011/01/08/carter-and-pm-talk-flood-proofing-rocky/

Regards

Karen Fasano Watch Desk Officer State Disaster Coordination Centre



This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qld

Pauline Evans on behalf of SDCC Sent: Monday, 10 January 2011 5:08 AM

Subject: QEMR as at 05:00am Monday 10 January 2011

DEPARTMENT OF COMMUNITY SAFETY
Daily Queensland Emergency Management Report as at 5:00am Monday 10 January 2011

SIGNIFICANT INFORMATION

To:

- An Emergency Alert message was sent to residents at Dalby at 10,35pm last night after flooding of the Myall Creek. The Evacuation Centre at the Agricultural College was prepared to
- 15 houses at Toogoolawah were evacuated overnight and 40 people relocated to the RSL hall. Water continued to rise in the town overnight.
- 6 houses have evacuated at Jondaryan; 5 or 6 people self-evacuated to community hall white others have self-evacuated to family or friends.
- TMR advised that the Warrego Highway is closed north and west at Jondaryan. Lockyer Valley SES evacuated one person for medical reasons in Grantham, 100kms west of
- Both 132500 calls and the 1800 (Channel 9) flood appeal hot line were routed through SSQ overnight. During the broadcast of the appeal, higher than normal volume of calls were received and this impacted on the calls for assistance getting through to 132500. BOM reported major flood levels in the Mary River catchment, between the Bellibird Creek junction and Moy Pocket and in Yabba Creek at Imbil and of the lower Mary River between
- Miva and Tiaro.
- At 10pm Sunday, BOM reported that the Mary River at Gymple was 14.5 metres and is expected to reach 19 metres by Monday afternoon.
- Mary River peaked at Maryborough midday Sunday at 8.2 metres. Reinfall in the catchment area is not expected to impact for some days.
- Major flood peak for lower Burnett River at Walla, predicted to be 12.5 metres overnight.
- Bruce Highway at King John Creek (north and southbound, north of the Caboolture/Brible turn off) shut (as at 2000hrs 9-1-11) detours are arranged.
- The Moreton Regional Council has established an operations centre at the Caboolture Council
- The Balonne River at St George remained steady at 13.2 metres yesterday. Dirranbandi, Thallon and Hebel continue to prepare for inundation.
- Burnett River at Bundaberg anticipated to peak at 4 metres with noon high tide on Monday. There were 3,887 registered evacuees (total number of persons registered with Red Cross) as
- at 02:00 hours, Monday 10 January 2011.
- Evacuation Centres are being managed in Moura (for evacuated Theodore residents), Emerald, Dalby (including for Condamine residents), St George and Rockhampton.
- A total of 6 disaster situations have been declared

Major Highway Closures (as at 0300hrs on 10-1-11)

- · Warrego Highway closed north and west at Jondaryan, between Toowoomba and Dalby.
- Cunningham Highway is open.
- · Bruce Highway north of Caboolture (with detours)
- · Barwon Highway west of Goondiwindi
- · Bruce Highway north of Gladstone
- Bruce Highway south of Gympie
- · Carnarvon Highway north of Injune
- · Dawson Highway Calliope to Springsure
- · Fitzroy Development Rd north of Taroom
- . Leichardt Highway north of Wandoan
- · Moonee Highway west of Moonee

WEATHER OBSERVATIONS

Warnings

- A Severe Weather Warning remains current for heavy reinfall leading to localised flash flooding and potentially worsening the existing river flood situation, for people in the Southeast Coast and southern parts of the Wide Bay and Burnett, and eastern Darling Downs and Granite Belt District.
 - Flood Wamings are current for the following rivers:

 Mary River: Fast rises and major flooding are rising between the Bellibird Creek junction and Moy Pocket and in Yabba Creek at Imbil. Renewed rises are being recorded at Gymple with major flood levels expected during Monday. In the lower Mary River, major flooding continues between Miva and the Barrage with moderate flood levels easing in the Mary River
 - Brisbane River above Wivenhoe: Major flooding has developed in Cooyar and

Cressbrook Creeks and in the Upper Brisbane River from Linville downstream to Gregor Creek. Further rises and high level major flooding are possible into Monday. Major flood levels are continuing to rise in the Stanley River at Peachester and Woodford. Further rises and high level major flooding are possible during Sunday and into Monday. Further rises and flooding are also possible in Kilcoy Creek during the next 24 hours.

- Burnett River. Moderate to major flooding continues along Barker and Barambah Creeks. A major flood peak was forecast for the lower Burnett River at Walla overnight Sunday. Minor flooding around 4 metres is possible at Bundaberg coinciding with the noon high tide on Monday.
- Condamine and Balonne Rivers: Major flooding has peaked at Clydesdale and levels have remained below minor at Moffatt. Rises continue at Dalby but flood levels are now expected to peak up to the moderate flood level of 3 metres by 8am Monday. Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Warra-Kogan Road Bridge to Dirranbandi. Major flooding continues to fall slowly around Surat and Weribone. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly. At 9pm Sunday, the Balonne River at St George was 13.2 metres and holding at its peak which was reached during Saturday. Major flood levels will remain high (above 13 metres) during the next few days. High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek. The peak flow will be in the Dirranbandi area by midweek and in the Hebel area later this week. Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine and Oakey Creek during Monday into Tuesday.
- Creek during Monday into Tuesday.

 Fitzroy River Basin: Major flooding continues along the lower Dawson and Fitzroy Rivers. The Fitzroy River at Rockhampton fell very slowly during Sunday and at noon was about 9.1 metres. Levels will fall very slowly this week and are expected to remain above 8.5 metres (major) until later this week. On the Dawson River, minor flooding continues between Taroom and Moura. A small minor flood peak is moving down the Dawson River and is currently approaching Theodore. Major flood levels between Baralaba to Knebworth are expected to drop quickly over the next 48 hours.

 Lockyer and Warrill Creeks: Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek upstream of Gatton and in the Bremer River in the Rosewood area. Further heavy reinfell is forecast for the catchments of the Bremer River and Warrill and Lockyer Creeks during Monday.
- Thomson and Barcoo Rivers, and Cooper Creek: Major flooding is easing along the Cooper Creek at Windorah. Minor flooding continues to ease in the Thomson River between Campola Park and Jundah. Minor to moderate flooding will continue to fall along the Barcoo River between Glenlock and Retreat.
- Moonle River: Minor to major flooding is occurring in the Moonle River between Southwood and Fenton. The flood peak is now downstream of Thallon. Renewed rises are expected between Southwood and Flinton today and Monday with minor flood levels continuing.

 Welr and McIntyre Rivers: Minor to moderate flooding continues in the lower Weir River between Surrey and Jericho, with the flood peak currently approaching Jericho.
- Coastal Streams Maryborough NSW Border: Minor flood levels are easing in the Caboolture River at Caboolture. Renewed rises are still possible in the Caboolture and Pine River catchments during Monday. Minor flooding is easing in Woogaroo Creek at Opossum. Heavy rainfall and flash flooding are possible in the Brisbane and Ipswich metropolitan creeks during Monday. Flood warnings are current for the Mary River, Sunshine Coast streams and the Upper Brisbane and Lower Brisbane rivers. A severe weather warning is also current for this region.
- Sunshine Coast Rivers Major flood levels are slowly falling in the North Maroochy River at Eumundi. Major flood levels are steady in the Mooloolah River at Jordon

Rainfall

In the period since 09.00am Sunday significant rainfall was recorded at several places, especially across the Brisbane and the North Coast Region. These included:

	Maleny	281mm
•	Bald Knob	250mm
•	Landsborough	243mm
•	Boat Mountain	204mm
•	Mt Mee	194mm
•	Eumundi	184mm
•	Noosa Heads	173mm
•	Toogoolawah	166mm
•	Mt Glorious	160mm
	Caboolture	131mm

Weather Outlook

- The monsoon trough extends over the northern tropics and is expected to shift south today. An upper level low lies over the southern Capricornia district and is expected to drift
- Sowly west southwest today. A surface trough lies near the southern Queensland coast and is expected to move inland today.

 Rain areas and thunderstorms over southeastern districts and the Maranoa, with heavy falls about the Southeast Coast, far southern Wide Bay and Burnett, eastern Darling Downs and Granite Belt districts Is Sewere Weather Warning is current]. Showers and isolated thunderstorms elsewhere, more widespread with rain areas over the northern tropics. Moderate SE to NE winds in the south, tending fresh and gusty in the southeast. Moderate to fresh W to NW winds in the far north. Light winds elsewhere.

SES 132 500 CALLS

- 3922 calls were made to SES 132 500 in the period since 05.00am Sunday. These included:
 - Maroochy Toowoomba 523 Caboolture Cooloola 234 Brisbane 190

MEDIA

Courier Mail Reports: The support was so massive that more than 12,000 calls within the first minute forced the phone system to crash, initially delaying calls to the two designated Flood Relief Appeal call centres at Zilmere and Mount Gravatt. A Channel 9 spokesman said 182 phone lines were available at the two centres, with a queue of 800 initially figured in. http://www.couriermail.com.au/news/deluqe-of-donations-as-8m-in-pledges-pours-in-at-telethon-event-for-flood-victims/story-e6freon8-1225984674268

ABC News Online reports: South-east Queensland is bearing the brunt of forrential rains as the state's flood crisis continues. The region, including Brisbane, is now on high alert for flooding with more heavy rain expected Monday. Emergency services say people should be prepared for wild weather. Maryborough, the Sunshine Coast and surrounding areas are already flooding, while south of Bundaberg the town of Pine Creek is cut off. Gympie is also isolated by floodwaters. Power is being cut in Gympie's CBD as a safety precaution - with the Mary River expected to reach around 17 metres this morning. https://www.abc.net.au/news/stories/2011/01/09/3109251.htm?site=sunshine

The Gympie Times reports: ACTING Gympie Regional Mayor Tony Perrett and chairperson of the Local Disaster Management Group urged Mary Street business people to be vigilant as the flood threat increased in Gympie today. He warned business people the current flood height prediction of 17.4 metres was calculated on rain that had fallen in Mary catchment as of 1.55pm Sunday. "Any extra rain that falls over night will add to the flood threat," Cr Perrett said. "We could have another 18 hours of rain," he said. He asked people to keep and eye on the Bureau of Meteorology white their own decision about evacuating their shops. http://www.gympietimes.com.au/story/2011/01/09/extra-rain-will-increase-threat-

Rockhampton Bulletin reports: ROCKHAMPTON Regional Mayor Brad Carter says the full extent of damage to the region's economy and infrastructure won't be known until the flooding recedes. At 3pm yesterday the Fitzroy River's height was 9.10m at Rockhampton and holding steady according to the Bureau of Meteorology. Cr Carter told a press conference yesterday morning that the grazing and cotton industries had taken a "significant hit" and the council had no idea of the cost to infrastructure "at this stage". http://www.themorningbulletin.com.au/story/2011/01/10/damage-cannot-yet-be-gauged/

Rockhampton Bulletin reports: EMERALD residents are returning to their homes and counting the cost of the devastating floodwaters that ripped through the town. Central Highlands region Mayor Peter Maguire said tens of millions of dollars worth of damage had been done to the town. Cr Maguire said the town was in the recovery phase and his focus was on trying to help people get their lives back to normal. https://www.themorningbulletin.com.au/story/2011/01/10/emerald-is-in-recovery-phase-but-cost-is-high/

Pauline Evans Watch Desk Officer State Disaster Coordination Centre Emergency Management Queensland Telephone (07) (24 hours) Fax (07) Mobile

email - <u>sdcc@dcs.qld.gov.au</u>

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or

All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qld

Sent:	Zubrinich Robert Monday, 10 January 2011 8:25 AM		
To:	EWU; Immension of the control of the		
Martin; Short Michael; Goulding Gabrielle; Shirreffs Leslie; Lenz Anne; M Birchley Michael; Allen Peter; Himstedt Dale; Tucker Col; Chadburn Lind Graeme; Michaels Paul; Pearce Martin; Harycki Kim; OER Subject: FW: Sit Rep Flood Situation 10 January AM			
Thanks Paul. Gratef	ful if you could forward to me each morning, and I will distribute.		
Folks, FYI - the flo	ood situation at 5.00am today.		
Tel: (07) Facsimile: 07 e.mail: nd Resource Managem 4001 Nominations for recognise Queensland	www.derm.qld.gov.au Department of Environment ment 400 George Street, Brisbane Q 4001 GPO Box 2454, Brisbane Q r the 2011 Premier's ClimateSmart Sustainability Awards, which ders who are ClimateSmart champions achieving excellence in open until Friday 4 March 2011. For more information on how to		
	n.qld.gov.au/premiersawards		
•			
Original Messag From: Michaels Paul Sent: Monday, 10 Jan To: Zubrinich Robert Subject: Fw: Sit Rep	nuary 2011 8:17 AM		
Rob, not sure if you	get this. Good for distribution.		
Paul Michaels Director, Media Serv Department of Enviro	vices onment and Resource Management		
Original Messa From: Hugh O'Brien_<			



Sent: Mon Jan 10 07:45:02 2011

Subject: Sit Rep Flood Situation 10 January AM

DEPARTMENT OF COMMUNITY SAFETY

Daily Queensland Emergency Management Report

as at 5:00am Monday 10 January 2011

SIGNIFICANT INFORMATION

- An Emergency Alert message was sent to residents at Dalby at 10.35pm last night after flooding of the Myall Creek. The Evacuation Centre at the Agricultural College was prepared to receive evacuees.
- 15 houses at Toogoolawah were evacuated overnight and 40 people relocated to the RSL hall. Water continued to rise in the town overnight.
- 6 houses have evacuated at Jondaryan; 5 or 6 people self-evacuated to community hall while others have self-evacuated to family or friends.
- TMR advised that the Warrego Highway is closed north and west at Jondaryan.
- Lockyer Valley SES evacuated one person for medical reasons in Grantham,
 100kms west of Brisbane.
- Both 132500 calls and the 1800 (Channel 9) flood appeal hot line were routed through SSQ overnight. During the broadcast of the appeal, higher than normal volume of calls were received and this impacted on the calls for assistance getting through to 132500.
- BOM reported major flood levels in the Mary River catchment, between the Bellbird Creek junction and Moy Pocket and in Yabba Creek at Imbil and of the lower Mary River between Miva and Tiaro.
- At 10pm Sunday, BOM reported that the Mary River at Gympie was 14.5 metres and is expected to reach 19 metres by Monday afternoon.
- Mary River peaked at Maryborough midday Sunday at 8.2 metres. Rainfall in the catchment area is not expected to impact for some days.

- Major flood peak for lower Burnett River at Walla, predicted to be 12.5 metres overnight.
- Bruce Highway at King John Creek (north and southbound, north of the Caboolture/Bribie turn off) shut (as at 2000hrs 9-1-11) detours are arranged.
- \cdot $\,$ $\,$ The Moreton Regional Council has established an operations centre at the Caboolture Council Depot.
- The Balonne River at St George remained steady at 13.2 metres yesterday.
- Dirranbandi, Thallon and Hebel continue to prepare for inundation.
- · Burnett River at Bundaberg anticipated to peak at 4 metres with noon high tide on Monday.
- There were 3,887 registered evacuees (total number of persons registered with Red Cross) as at 02:00 hours, Monday 10 January 2011.
- Evacuation Centres are being managed in Moura (for evacuated Theodore residents), Emerald, Dalby (including for Condamine residents), St George and Rockhampton.
 - A total of 6 disaster situations have been declared.

Major Highway Closures (as at 0300hrs on 10-1-11)

- · Warrego Highway closed north and west at Jondaryan, between Toowoomba and Dalby.
- · Cunningham Highway is open.
- · Bruce Highway north of Caboolture (with detours)
- · Barwon Highway west of Goondiwindi
- · Bruce Highway north of Gladstone
- · Bruce Highway south of Gympie
- · Carnarvon Highway north of Injune
- · Dawson Highway Calliope to Springsure
 - Fitzroy Development Rd north of Taroom
- · Leichardt Highway north of Wandoan
- · Moonee Highway west of Moonee

WEATHER OBSERVATIONS

Warnings

- A Severe Weather Warning remains current for heavy rainfall leading to localised flash flooding and potentially worsening the existing river flood situation, for people in the Southeast Coast and southern parts of the Wide Bay and Burnett, and eastern Darling Downs and Granite Belt District.
- § Flood Warnings are current for the following rivers:
- Mary River: Fast rises and major flooding are rising between the Bellbird Creek junction and Moy Pocket and in Yabba Creek at Imbil. Renewed rises are being recorded at Gympie with major flood levels expected during Monday. In the lower Mary River, major flooding continues between Miva and the Barrage with moderate flood levels easing in the Mary River at Maryborough.

- Brisbane River above Wivenhoe: Major flooding has developed in Cooyar and Cressbrook Creeks and in the Upper Brisbane River from Linville downstream to Gregor Creek. Further rises and high level major flooding are possible into Monday. Major flood levels are continuing to rise in the Stanley River at Peachester and Woodford. Further rises and high level major flooding are possible during Sunday and into Monday. Further rises and flooding are also possible in Kilcoy Creek during the next 24 hours.
- Burnett River: Moderate to major flooding continues along Barker and Barambah Creeks. A major flood peak was forecast for the lower Burnett River at Walla overnight Sunday. Minor flooding around 4 metres is possible at Bundaberg coinciding with the noon high tide on Monday.
- Condamine and Balonne Rivers: Major flooding has peaked at Clydesdale and levels have remained below minor at Moffatt. Rises continue at Dalby but flood levels are now expected to peak up to the moderate flood level of 3 metres by 8am Monday. Moderate to major flooding extends along the Condamine and Balonne River system with major flooding extending from Warra-Kogan Road Bridge to Dirranbandi. Major flooding continues to fall slowly around Surat and Weribone. River levels in the area between Weribone and Barrackdale will be very slow to recede over the next few days. The river level at Warroo above Beardmore Dam is also falling very slowly. At 9pm Sunday, the Balonne River at St George was 13.2 metres and holding at its peak which was reached during Saturday. Major flood levels will remain high (above 13 metres) during the next few days. High level major flooding is expected to continue in the Balonne River system downstream from St George to the NSW border throughout January. This includes the Bokhara, Culgoa, Balonne Minor and Narran Rivers and Ballandool Creek. The peak flow will be in the Dirranbandi area by mid-week and in the Hebel area later this week. Further heavy rain is forecast for the south east Darling Downs including the catchments of the Upper Condamine and Oakey Creek during Monday into Tuesday.
- Fitzroy River Basin: Major flooding continues along the lower Dawson and Fitzroy Rivers. The Fitzroy River at Rockhampton fell very slowly during Sunday and at noon was about 9.1 metres. Levels will fall very slowly this week and are expected to remain above 8.5 metres (major) until later this week. On the Dawson River, minor flooding continues between Taroom and Moura. A small minor flood peak is moving down the Dawson River and is currently approaching Theodore. Major flood levels between Baralaba to Knebworth are expected to drop quickly over the next 48 hours.
- Lockyer and Warrill Creeks: Stream level rises causing moderate to major flooding are being recorded in Lockyer Creek upstream of Gatton and in the Bremer River in the Rosewood area. Further heavy rainfall is forecast for the catchments of the Bremer River and Warrill and Lockyer Creeks during Monday.
- Thomson and Barcoo Rivers, and Cooper Creek: Major flooding is easing along the Cooper Creek at Windorah. Minor flooding continues to ease in the Thomson River between Camoola Park and Jundah. Minor to moderate flooding will continue to fall along the Barcoo River between Glenlock and Retreat.
- Moonie River: Minor to major flooding is occurring in the Moonie River between Southwood and Fenton. The flood peak is now downstream of Thallon. Renewed rises are expected between Southwood and Flinton today and Monday with minor flood levels continuing.
- Weir and McIntyre Rivers: Minor to moderate flooding continues in the lower Weir River between Surrey and Jericho, with the flood peak currently approaching Jericho.
- Coastal Streams Maryborough NSW Border: Minor flood levels are easing in the Caboolture River at Caboolture. Renewed rises are still possible in the Caboolture and Pine River catchments during Monday. Minor flooding is easing in Woogaroo Creek at Opossum. Heavy rainfall and flash flooding are possible in the Brisbane and Ipswich metropolitan creeks during Monday. Flood warnings are current for the Mary River, Sunshine Coast streams and the Upper Brisbane and Lower Brisbane rivers. A severe weather warning is also current for this region.
- Sunshine Coast Rivers Major flood levels are slowly falling in the North Maroochy River at Eumundi. Major flood levels are steady in the Mooloolah River at Jordon Street.

Rainfall

§ In the period since 09.00am Sunday significant rainfall was recorded at several places, especially across the Brisbane and the North Coast Region. These included:

•	Maleny	281mm
•	Bald Knob	250mm
•	Landsborough	243mm
•	Boat Mountain	204mm
•	Mt Mee	194mm
•	Eumundi	184mm
•	Noosa Heads	173mm
•	Toogoolawah	166mm
•	Mt Glorious	160mm
*	Caboolture	131mm

Weather Outlook

- The monsoon trough extends over the northern tropics and is expected to shift south today. An upper level low lies over the southern Capricornia district and is expected to drift slowly west southwest today. A surface trough lies near the southern Queensland coast and is expected to move inland today.
- Rain areas and thunderstorms over southeastern districts and the Maranoa, with heavy falls about the Southeast Coast, far southern Wide Bay and Burnett, eastern Darling Downs and Granite Belt districts [a Severe Weather Warning is current]. Showers and isolated thunderstorms elsewhere, more widespread with rain areas over the northern tropics. Moderate SE to NE winds in the south, tending fresh and gusty in the southeast. Moderate to fresh W to NW winds in the far north. Light winds elsewhere.

3S 132 500 CALLS

S 3922 calls were made to SES 132 500 in the period since 05.00am Sunday. These included:

•	Maroochy	628
•	Toowoomba	523
•	Caboolture	238
•	Cooloola	234
•	Brisbane	190

MEDIA

Courier Mail Reports: The support was so massive that more than 12,000 calls within the first minute forced the phone system to crash, initially delaying calls to the two designated Flood Relief Appeal call centres at Zillmere and Mount Gravatt. A Channel 9 spokesman said 182 phone lines were available at the two centres, with a queue of 800 initially figured in. http://www.couriermail.com.au/news/deluge-of-donations-as-8m-in-

pledges-pours-in-at-telethon-event-for-flood-victims/story-e6freon6-1225984674268 <BLOCKED::http://www.couriermail.com.au/news/deluge-of-donations-as-8m-in-pledges-pours-in-at-telethon-event-for-flood-victims/story-e6freon6-1225984674268>

ABC News Online reports: South-east Queensland is bearing the brunt of torrential rains as the state's flood crisis continues. The region, including Brisbane, is now on high alert for flooding with more heavy rain expected Monday. Emergency services say people should be prepared for wild weather. Maryborough, the Sunshine Coast and surrounding areas are already flooding, while south of Bundaberg the town of Pine Creek is cut off. Gympie is also isolated by floodwaters. Power is being cut in Gympie's CBD as a safety precaution - with the Mary River expected to reach around 17 metres this morning. http://www.abc.net.au/news/stories/2011/01/09/3109251.htm? site=sunshine <BLOCKED::http://www.abc.net.au/news/stories/2011/01/09/3109251.htm? site=sunshine>

The Gympie Times reports: ACTING Gympie Regional Mayor Tony Perrett and chairperson of the Local Disaster Management Group urged Mary Street business people to be vigilant as the flood threat increased in Gympie today. He warned business people the current flood height prediction of 17.4 metres was calculated on rain that had fallen in Mary catchment as of 1.55pm Sunday. "Any extra rain that falls over night will add to the flood threat," Cr Perrett said. "We could have another 18 hours of rain," he said. He asked people to keep and eye on the Bureau of Meteorology website and make their own decision about evacuating their shops.

http://www.gympietimes.com.au/story/2011/01/09/extra-rain-will-increase-threat/ <BLOCKED::http://www.gympietimes.com.au/story/2011/01/09/extra-rain-will-increase-threat/>

Rockhampton Bulletin reports: ROCKHAMPTON Regional Mayor Brad Carter says the full extent of damage to the region's economy and infrastructure won't be known until the flooding recedes. At 3pm yesterday the Fitzroy River's height was 9.10m at Rockhampton and holding steady according to the Bureau of Meteorology. Cr Carter told a press conference yesterday morning that the grazing and cotton industries had taken a "significant hit" and the council had no idea of the cost to infrastructure "at this stage". http://www.themorningbulletin.com.au/story/2011/01/10/damage-cannot-yet-be-gauged/ <BLOCKED::http://www.themorningbulletin.com.au/story/2011/01/10/damage-cannot-yet-be-gauged/>

Rockhampton Bulletin reports: EMERALD residents are returning to their homes and counting the cost of the devastating floodwaters that ripped through the town. Central Highlands region Mayor Peter Maguire said tens of millions of dollars worth of damage had been done to the town. Cr Maguire said the town was in the recovery phase and his focus was on trying to help people get their lives back to normal.

http://www.themorningbulletin.com.au/story/2011/01/10/emerald-is-in-recovery-phase-but-cost-is-high/

<BLOCKED::http://www.themorningbulletin.com.au/story/2011/01/10/emerald-is-inrecovery-phase-but-cost-is-high/>

Pauline Evans
Watch Desk Officer
State Disaster Coordination Centre
Emergency Management Queensland
Telephone (07) (24 hours)
Fax (07)
Mobile

email - <BLOCKED:

Hugh O'Brien Manager - Publications and AV Communication Services Department of the Premier and Cabinet

Level 2, 100 George St, Brisbane

Check out Sectorwide Online http://www.premiers.qld.gov.au/ http://www.premiers.qld.gov.au/sectorwide

Tomorrow's Queensland: strong, green, smart, healthy and fair -
www.towardQ2.qld.gov.au <file: application%<="" c:="" documents%20and%20settings="" obrienh="" td=""></file:>
20Data/Microsoft/Signatures/www.towardQ2.qld.gov.au>

This email is intended only for the addressee. Its use is limited to that intended by the author at the time and it is not to be distributed without the author's consent.

Unless otherwise stated, the State of Queensland accepts no liability for the contents of this email except where subsequently confirmed in writing. The opinions expressed in this email are those of the author and do not necessarily represent the views of the State of Queensland. This email is confidential and may be subject to a claim of legal privilege.

If you have received this email in error, please notify the author and delete this message immediately.

From:

Dan Spiller

Sent:

Tuesday, 11 January 2011 10:48 PM

To:

Bradley John

Cc:

Dennien Barry

Subject: RE: Wivenhow Dam update

It warrants a discussion. On phone when suits you.

From: Bradley John

Sent: Tuesday, 11 January 2011 10:44 PM

To: Dan Spiller **Cc:** Barry Dennien

Subject: Re: Wivenhow Dam update

Thanks Dan

As an aside, I think we need to try to maintain the protocol on these through these most serious of events - I notice sitreps lately have had no comment from bom/councils or just "has been advised".

Wouldn't bear much scrutiny in an ex post review, noting recipients (Min, DsG, etc)

Happy to take your and barry's advice as to how this can be achieved.

John B

From: Dan Spiller	
Sent: Tuesday, January 11, 2011 10:18 PM	
To:	Lance
McCallum	Tim Watts
	Geoff Stead
	Bradley John; Best Debbie;
Ken Smith	
Cc: Rob Drury	Dennien Barry
Peter Borrows	SEQWGM Emergency
Subject: Wivenhow Dam update	

All,

Attached is the most recent technical situation report.

Note that Wivenhoe Dam levels have stabilised and are now falling slowly. Without further rainfall, release rates will be reduced progressively. The first reduction will be to 7,100 cubic metres per second.

Regards, Daniel Spiller

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure,

modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

Think B4U Print 1 ream of paper = 6% of a tree and 5.4kg CO2 in the atmosphere 3 sheets of A4 paper = 1 litre of water

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from

message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this monity your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

From:	Dan Spiller	.0044.44.40.514		
Sent: To:	Tuesday, 11 January	/ ZUTT TT:43 PM	'Ken Smith	
	Bradley John; 'Lance			; 'Tim Watts
			Geoff Stead	, , ,
Cc:	Dennien Barry			Dob Dramit
		M Emergency; R	eilly Bob; Brown Damier	Rob Drury';
Subject:	Updated Wivenhoe D	Dam releases		
Attachments	s: Technical Situation R			
All,				
Jpdated repo	ort attached.			
\t 2300, Wive	enhoe Dam was at 74.9	2m AHD (190.4%	6) and holding.	
	erations Centre has cor netres per second.	nmenced a closu	ire sequence. At 2330, r	eleases will be reduced to
he centre wi	II continue to monitor r	rainfall and inflo	ws and adjust as necessa	ary.
Vith releases	having peaked, the nex	xt report will be	provided at 0500.	
Regards, Dan				
Fo: Rob Drury Cc: David Rob	rury ny, January 11, 2011 11 y; Dan Spiller; Paul Bird perts; Duty Seq Technical Report		n; Peter Borrows;	
ttached repo	ort W46.			,
lext report w	rill be 5am Wednesday :	12.1.2011.		
lob				
Robert Drury Dam Operation Vater Delivery Dueensland B	ns Manager	ority <i>trading</i> as S	enwater	
	No-Lifeguards-Here_email_s		cqwatei	· . · · · · · · · · · · · · · · · · · ·
-				
			· · · · · · · · · · · · · · · · · · ·	

Wivenhoe Dam, Brisbane Valley Highway, via Fernvale Q4306 Australia PO Box 37, Fernvale QLD 4306 Website | www.seqwater.com.au

Important information: This email and any attached information is intended only for the addressee and may contain confidential and/or privileged information. If you are not the addressee, you are notified that any transmission, distribution, or other use of this information is strictly prohibited. The confidentiality attached to this email is not waived, lost or destroyed by reasons of mistaken delivery to you. If you have received this email in error please contact the sender immediately and delete the material from your email system. QLD Bulk Water Supply Authority ABN75450239876 (Trading as Seqwater).

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

From:

Petula Martinz

Sent:

Tuesday, 11 January 2011 6:44 PM

To:

Dennien Barry Reilly Bob; Brown Damien; Darren Madgwick; Geoff Stead; Ken Smith; Kerry Dunn; Lance McCallum; Lauren Sims; Peter Borrows; Peter Martin; Rob Drury;

SEQWGM Emergency; Stephen Robertson; Wall Terry; Tim Watts; Media |

Bradley John

Subject:

Updated technical support report

Attachments: Technical Situation Report W41.docx

All,

Updated report attached.

Regards, Dan

Petula Martinz

Executive Assistant to Daniel Spiller Director Operations
SEQ Water Grid Manager

Visit: Level 15, 53 Albert Street, Brisbane Post: PO Box 16205, City East Qld 4002

ABN: 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

From: D

Dan Spiller

Sent:

Tuesday, 11 January 2011 11:49 PM

To:

Cc:

Dennien Barry

Bradley John

Subject: Dam release update

Colin,

A quick update on dam operations. I understand that the Flood Operations Centre has been speaking to your staff directly.

At 2300, Wivenhoe Dam was at 74.92m AHD (190.4%) and holding. Somerset is at 105.2m AHD (185.8%).

The Flood Operations Centre has commenced a closure sequence. At 2330, releases will be reduced to 6,100 cubic metres per second.

The centre will continue to monitor rainfall and inflows and adjust as necessary.

Please call on mobile if you have any queries.

Regards,

Dan

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from thi message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

·

From:

Best Debbie

Sent:

Wednesday, 12 January 2011 5:42 AM

To:

Subject:

Bradley John Fw: QEMR as at 05.00am Wednesday 12 January 2011

Attachments:

QEMR 0500 sitrep 120111.pdf



---- Original Message ----From: Steven Dunn





Sent: Wed Jan 12 05:12:07 2011

Subject: QEMR as at 05.00am Wednesday 12 January 2011

DEPARTMENT OF COMMUNITY SAFETY

Daily Queensland Emergency Management Report

as at 5:00am Wednesday 12 January 2011

SIGNIFICANT INFORMATION (updates since 21:00 11.1.11)

Toowoomba/Lockyer Valley:

- \cdot Official death toll is 10 (6 females, 4 males) with 79 people missing or uncontactable
- QPS MIR in Brisbane and Toowoomba remain operational
- Margaret Street, Toowoomba remains closed to vehicle and pedestrian movement
- QPS now have 29 Officers deployed around the region

Brisbane/Ipswich:

- · Major flooding is starting to occur with widespread road closures throughout the region.
- $\dot{}$ $\,$ Five evacuation centres on standby in Brisbane, and RNA Showgrounds activated with capacity of 3000.
- There are now 4 Evacuation Centres in Ipswich (Show Grounds, St Joseph's School, Ripley View (Church) Ipswich Grammar) housing approximately 1,100 as at 0100 hours.
 - SES, QFRS and QPS are undertaking evacuations in the Oxley Creek area.
- · Brisbane River and Moreton Bay were closed to boating traffic at midnight. Any emergencies on Moreton Island will need a helicopter response.
 - Campers on Moreton Island have been relocated to Tangalooma Resort.
- As at 4am, Energex reported 48,437 customers without power across Brisbane, Gold and Sunshine Coasts. The majority of these are attributed to flooding.

Sunshine Coast

4 evacuation centres (Lake Kawana Community Centre (4 people); The J, Noosa;

Nambour Civic Centre; Beerburrum Community Centre)

- · Many roads have been closed and there are several landslips across the district including Nambour Mapleton road and Buderim in the vicinity of Sam White Drive.
- A previous landslip at Durham Crescent, Buderim appears to have worsened over the past 24 hours. After consultation between QPS and SSCRC 5 houses have been evacuated from Sam White Drive, Devon Drive and Dover Drive in Buderim.
- · Concern is held re the number of landslips occurring throughout the region,
- . LDCC monitoring flood levels at Golden Beach but no imminent risk to residents at this time
- Inundation has occurred on both Bradman Avenue, Maroochydore and Hilton Terrace, Tewantin however no house inundation has occurred at this stage. Both roads are closed and not likely to reopening under after midday high tide.
- · Kenilworth Area may need resupply of essential food stuffs should the area remain isolated for an extended period.
- Power cuts to customers in the Kenilworth/Conondale areas,

Major Highway Closures (as at 0300hrs on 11-1-11)

- Barwon Highway west of Goondiwindi
- Brisbane Valley Highway at Split Yard Creek , Fernvale
- Bruce Highway north of Gladstone
- Bruce Highway south of Gympie
- · Bruce Highway- southbound closed Caboolture, King John Creek and Federal
- · Canarvon Highway north of Injune
- Cunningham Highway-between Warwick and Inglewood
 - Dawson Highway Calliope to Springsure
- D'Aguilar Highway- closed at 4 points from Kilcoy Creek
- Fitzroy Development Rd north of Taroom
- Gateway Motorway- Bald Hills
- Gore Highway- Pampas and Brookstead
- Ipswich Motorway- closed at Goodna and Redbank
- Leichardt Highway north of Wandoan
- New England Highway between Toowoomba and Warwick
- · Moonee Highway west of Moonee
- Mount Lindesay Highway is closed at Jimboomba
- · Warrego Highway closed from Marburg Range to Toowoomba range in both directions, and west of Dalby
 - All roads West and North of Brisbane are currently impacted

All roads west of the Darling Downs are also impacted

• There are major impacts on all Central Queensland road networks with continued heavy rain and further disruptions likely

WEATHER OBSERVATIONS

Weather Situation

The monsoon trough extends over the northern tropics and is moving gradually south. A surface trough lies near the southern Queensland coast and a deep inflow of tropical moisture continues over southeastern Queensland. This is expected to weaken overnight and during Wednesday as a ridge of high pressure extends into the area.

Forecast for Wednesday

A new high will move into the southern Tasman Sea, extending a firm ridge north towards the southern and central Queensland coasts. Patchy rain and isolated thunderstorms will therefore ease to showers over southeastern districts as the ridge starts to dominate later in the day. Rain areas and thunderstorms will continue over northern Queensland and extend south over western districts and also through central parts north of Clermont as the monsoon trough continues to shift south over the Northern Territory. Moderate falls are likely,, possibly locally heavy with thunderstorms. Isolated showers and inland thunderstorms elsewhere.

Forecast for Thursday

The monsoon trough will most likely merge with another trough to the south to result in a sharp trough extending from the Northern Territory into South Australia. An active monsoon trough will also persist through the northern Coral Sea. Moist N'ly winds ahead of the trough will continue to produce rain areas, showers and thunderstorms over western districts west of about Longreach with possible locally heavy falls with thunderstorms. Rain areas and thunderstorms also continue through the tropics and central districts north of about Clermont with at least some moderate falls. Mostly fine conditions over the southeastern corner of the state under the influence of the ridge, with only isolated showers and early inland drizzle areas expected.

Forecast for Friday

The trough system will lie near the western Queensland border while an active monsoon trough will extend from a deepening low near New Caledonia to the northeast Queensland tropics. Widespread rain areas and thunderstorms are therefore expected over the northern tropics with some heavy falls. Rain areas and thunderstorms also continue through western districts west of Longreach with possibly locally heavy falls with thunderstorms. Mostly fine conditions elsewhere with only isolated showers and morning drizzle, chiefly near the coast and adjacent inland

Forecast for Saturday

The monsoon trough remains active over northern Queensland with rain and thunderstorms continuing. Some heavy falls are likely. The other trough system will extend over southwestern parts of the state with showers and thunderstorms persisting over western districts west of Longreach. Mostly fine conditions elsewhere with only isolated showers near the coast under the influence of the ridge.

Outlook for Sunday, Monday and Tuesday

The monsoon trough is expected to remain active over the tropics with rain and thunderstorms continuing. The other trough over southwestern Queensland is expected to move slowly east during the outlook period, with showers and isolated thunderstorms extending east with the trough, most likely reaching the southeast Queensland coast on Tuesday.

Rainfall

§ In the period since 09.00am Tuesday significant rainfall was recorded at many locations across the State. These included:

Dayboro Alert 228mm

Noosa Heads Alert 169mm

Poona Dam Alert 167mm

· Rosewood AL-B 167mm

Lake Clarendon Alert

134mm

· Rosewood AL-B 167mm

SES 132 500 CALLS

 \cdot 32483 calls were made to SES 132 500 in the period since 05.00am Tuesday. These included:

Brisbane 3578

· Caboolture 2024

Ipswich 1730

Media

Daily Telegraph Reports: CLINGING on to life, and to one another, the Ives family spent almost seven hours sitting terrified on the roof of their flooded house - fearing they would not be found alive. Cowering on top of the two-storey home in Grantham, on the outskirts of Toowoomba, Zac and Ashti Ives and daughters Tamika, 11 and Kayla, 8, waited seven hours for help. Late yesterday, as the weather continued to hamper rescue efforts, a farmhouse caught fire, believed to have been struck by lightning. "We just can't win," an SES spokesman said. http://www.dailytelegraph.com.au/news/i-thought-wed-die-on-the-roof-of-our-house-ives-family-escape/story-e6freuy9-1225985962821

Courier Mail reports: FLOODS that have tormented Queensland for almost three weeks re about to hit the state's biggest city. As towns across the region continue to reel from record devastation, Brisbane is now in the firing line, with residents having just hours to prepare for a flood worse than 1974. Ten lives - including five children have already been lost in the rapidly deepening crisis. Another 78 people are missing after an ''inland tsunami'' tore through the Lockyer Valley on Monday http://www.couriermail.com.au/news/brisbane-braces-for-the-worst-as-record-floodwaters-loom/story-e6freon6-1225985939905

The BBC reports: Thousands of people have been urged to leave parts of Australia's third largest city, Brisbane, which is facing its worst flooding in decades. Officials say between 6,500 and 9,000 homes and businesses are set to flood Queensland's state capital. Streets are largely empty and families have moved to refuge centres in some areas, with the peak of the flooding expected on Wednesday and Thursday. http://www.bbc.co.uk/news/world-asia-pacific-12158608

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or privilege is waived or lost by any mis transmission. If you receive this correspondence in error please delete it from your system immediately and notify the sender. You must not disclose, copy or relay on any part of this correspondence, if you are not the intended recipient. Any opinions expressed in this message are those of the individual sender except where the sender expressly, and with the authority, states them to be the opinions of the Department of Community Safety, Queensland.

All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qld). Details on how personal information may be used or disclosed by the Department of Community Safety, Queensland are available from www.communitysafety.qld.gov.au/info/privacy.htm

From:

Dan Spiller

Sent:

Wednesday, 12 January 2011 5:37 AM

To:

Cc:

Dennien Barry

Emergency;

Peter Borrows; Rob Drury; I

Brown Damien; Reilly Bob

Subject:

Dam release update

Attachments: Technical Situation Report W47.docx

All,

Attached is the most recent situation report.

There was minimum rainfall in the catchment last night, meaning that dam levels and release rates were reduced.

Wivenhoe Dam is currently at 188%, having peaked at about 191% (74.97m AHD, about 0.6m below the first fuse peak). Somerset Dam is at about 190%, which is its peak level.

Releases are now at 4,300 cubic metres per second (about 370,000 ML/day), having peaked at 7,500 cubic metres per second (about 650,000 ML/day) for a couple of hours.

We will update the report about every three hours. The next report will include more information about the closing sequence, including the broad timeframes for dam levels to be reduced. Note that, while dam levels are reducing, they remain at critical levels.

An update on water treatment will be provided later this morning.

Please call me on

if you require further information.

Regards,

Dan

Daniel Spiller

Director, Operations

SEQ Water Grid Manager

Email:

Visit: Level 15, 53 Albert Street Brisbane Post: PO Box 16205, City East QLD 4002

ABN: 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

Disclaimer

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the

views of the SEQ Water Grid Manager and/or the Queensland Government.

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

From:

Dan Spiller

Sent:

Wednesday, 12 January 2011 9:00 AM

To:

Cc:

Subject:

Dam release update

Attachments: Technical Situation Report W48.docx

All,

Attached is an updated Technical Support Report, including advice about the gate closure process.

Note that releases have been reduced to 2,500 cubic metres per second while peak Lockyer Valley flows pass. Increases will then increase to 3,500 cubic metres per second.

Please call me on

if you require further information.

Regards,

Dan

Daniel Spiller

Director, Operations

SEQ Water Grid Manager

Phone:

Email:

Visit: Level 15, 53 Albert Street Brisbane Post: PO Box 16205, City East QLD 4002

ABN: 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

Discialmen

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

Bradley John; Best Debbie; Dennien Barry

From: Dan Spiller

Sent: Wednesday, 12 January 2011 7:26 AM

To: 'Geoff Stead

Cć:

Subject: Media questions about boiled water notice

All,

Colin Jensen has advised that media is asking the LM questions about there being a boiled water notice across Brisbane.

This is not true. There is a boiled water notice in Atkinson, which applied to 20 people only (two houses plus caravans).

Colin agreed to advise the LM to respond along the lines that:

"Water is safe in Brisbane. People should be sensible in what they use - we want to keep reservoirs high in the event of power failures."

We will start drafting an update on water supply, for issue when appropriate.

Regards,

Dan

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

.

From: Dan Spiller

Sent: Wednesday, 12 January 2011 8:12 AM

To: Dennien Barry Bradley John

Subject: Water conservation

Barry and John,

We are anxious that there be a water conservation message across SEQ. We can maintain levels at current demands, but will have problems at this stage if demand increases significantly.

The key constraints are:

- The pump station at the Mt Crosby East Bank WTP is likely to be flooded, meaning that it will be
 offline. The time that it is offline depends upon whether the electrics are flooded
- Output from the Mt Crosby West Bank WTP and North Pine WTP is currently constrained due to poor water quality. We expect that West Bank will be limited to 125 ML/day for several days.
 This compares to its typical output of about 200 Ml/day.

The capacity constraints may be short-term only, but there has not yet been evidence of any improvements in water quality.

Given these constraints, the current water balance in the central are (Brisbane, Logan and Ipswich) is supply of 320 ML/day and typical demand of 340 to 360 ML/day. We can manage this demand based on storage (Linkwater and QUU reservoirs remain high) but any significant increases in demand would be a concern.

There is also confusion about water quality across the region.

DREs are agitating and will go above the line - QUU is proposing to brief the LM. I would prefer a coordinated whole of Grid approach.

Regards, Dan

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

. . ((. .

From: Stacey Renouf on behalf

on behalf of Corporate Communications

Sent:

Wednesday, 12 January 2011 10:08 AM

To:

Peter McManamon: 'Dennien Barry';

Bradley John; Best Debbie;

Cc:

Water Grid Emergency Manager; Chris Evans;

Andrew Moir;

Jeff Browne;

Subject:

Message from Emergency Manager

Importance: High

This message is being sent on Dan Spiller's behalf:

Αll,

The flood and impacts on water supply has been declared a Level 4 incident under the Emergency Management Plan.

The purpose of this email is to formalise the arrangements that been implemented to manage the proposed management response.

The Emergency Executive Team is:

Emergency Manager: Daniel Spiller

Communications Manager: Michael Lyons

• Coordination Executive: Scott Denner

I require each entity to nominate an executive level manager to sit on the Emergency Management Team. Notification should be to

The Emergency Management Team will have twice daily teleconferences at 0730 and 1600 and at other times as required. At this stage, the EMT will be physically based in the Linkwater offices at Level 6, 200 Creek Street. I request that Linkwater and Seqwater representatives be based in the room for the two teleconferences.

Michael Lyons has formally establish a communications team. This team will also be based at Level 6, in an adjacent room.

Because of the scope and complexity of issues being addressed, I am establishing separate Technical Coordination Teams, as discussed at the teleconference this morning. The teams and Chair organisations are:

- Stand-alone towns (Segwater)
- Chemical supply management (Seqwater)
- Water quality (Linkwater)
- Coordination of staff resources (Chris Evans, Linkwater)
- Water balance (Jeff Brown, Linkwater)
- Demand management (Michael Lyons, WGM).

I require each organisation to nominate appropriate representatives and Chairs by 1030.

The Chairs of these groups report to the EMT at the scheduled teleconferences and at other times as

required.

The Chairs are to immediately convene groups, as discussed at the teleconference this morning.

Given the number of issues that may arise, I am anxious to fully utilise OCA. Each time they meet, we require the notes and outcomes of the meetings to be logged and tasks assigned through OCA (including by emailing

Other agencies will nominate appropriate representatives, including for water quality.

The emergency phone number is

I appreciate your support. Please advise if you have any queries or require any further information.

Regards, Dan

SEQ Water Grid Manager

This e-mail, including any attached files, may contain confidential and privileged information for the sole use of the intended recipient. Any review, use, distribution, or disclosure by others is strictly prohibited. If you are not the intended recipient (or authorized to receive information for the intended recipient), please contact the sender by reply e-mail and delete all copies of this message. Queensland Bulk Water Transport Authority (trading as LinkWater). This email is copyright. LinkWater is not liable if an attachment is altered without its written consent and does not accept liability in connection with the transmission of information using the internet. This notice should not be deleted or altered.

From: Water Grid Emergency Manager

Sent: Wednesday, 12 January 2011 1:45 PM

To: Bradley John

Subject: Update regarding Water Grid Supply Situation

All,

Water supply status across the Water Grid is as follows.

WE, WATERSECURE AND SEQWATER ARE EXPERIENCING EMAIL ISSUES. ALL EMAILS SHOULD BE SENT TO THIS ADDRESS FOR KEY ISSUES, PLEASE ALSO CONFIRM RECEIPT VIA SMS OR MOBILE.

Water quality

All water continues to meet quality requirements.

The exception is supply to about 20 people at Atkinson, where a boiled water notice has been issued.

Stand-alone towns

We are carting water to Kenilworth and Dayboro, though capacity may be limited.

Helicopters have been hired to enable supply of bottled water to other towns, in partnership with QUU. Supply is being prioritised based on remaining storage. Critical towns include Jimna, Linville and Withcott, which are all relatively small.

We are seeking to bring the standby water treatment plant online at Kilcoy/Somerset. This town is significantly larger than the others currently being supplied bottled water.

Central SEQ

In central SEQ, water storage levels remain high.

Reservoirs are likely to be drawn down over coming days, with the extent of drawdown depending upon demand and any asset failures (both bulk and local).

Available supply capacity to the central area is up to about 320 ML/day. Typical demand in this area is about 370 ML/day. The 50 ML/day difference will be supplied by drawing down reservoirs. Conservation is important to minimise drawdown.

Every effort is being made to have more water available by Friday, in order to ensure water is available for clean up.

In term of treatment assets:

- Mt Crosby East Bank WTP is offline. The raw water pump station is very close to being flooded, which
 may result in the plant remaining offline for some time.
- Mt Crosby West Bank WTP has been producing at reduced capacity due to poor water quality (about 135 ML/day). Water quality is being closely monitored
- At North Pine WTP, poor water quality has restricted treatment capacity.
- The Southern Regional Water Pipeline has been transporting about 95 ML/day to central SEQ. It is being supplied from the Molendinar WTP and the desalination facility, which is operating at two-thirds capacity.

A number of major plants are isolated. Another helicopter has been hired to ferry staff.

Chemical supply

Inundation has created logistic problems for the supply of chemicals into and within SEQ.

These issues are currently being managed, with all plants having at least two day supply of all chemicals and access to plants improving.

The most critical issue is the supply of lime to the Landershute WTP, which is the sole supply for about 40,000 people on the Sunshine Coast (pending completion of NPI Stage 2). Supply of 5 tonnes of bagged lime has been arranged, ensuring that supply can continue until at least tomorrow. Further supplies are being arranged.

Coordination

I am the Emergency Manager, I am available on

An Emergency Management Team has been formed. The emergency room can be contacted on

Operational teams have been formed with all Grid participants and relevant agencies. Teams include:

- Stand-alone towns
- Water balance
- Water quality
- Chemical logistics
- Resource logistics.

Please call me on if you require any further information.

Regards,

Water Grid Emergency Manager

Daniel Spiller

Click here to acknowledge this message

From: Elaina Smouha Sent: Wednesday, 12 January 2011 2:15 PM To: Bradley John; Subject: Fwd: Wivenhoe Dam Flood Ops Attachments: SEQ WGM PrelimRep 12012011.docx John, Tim	
Preliminary report as promised by Barry. Final report due COB today.	
Regards	
Elaina Smouha Elaina Smouha Director, Governance and Regulatory Compliance SEQ Water Grid Manager Phone: Mobile: Fax: Fax: Fax: Fax: Fax: Fax: Fax: Fax	
From: Elaina Smouha Date: Wed, Jan 12, 2011 at 11:03 AM Subject: Fwd: Wivenhoe Dam Flood Ops To: Ce:	
Peter, Bob	
Attached is a copy of Brian Cooper's preliminary advice which Barry requested that I forward t you.	0.
Regards	
Elaina	
Elaina Smouha Director, Governance and Regulatory Compliance SEQ Water Grid Manager Phone: Market Ma	
From: Brian Cooper Consulting	

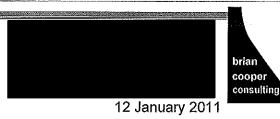
Date: Wed, Jan 12, 2011 at 10:53 AM	ľ
Subject: Wivenhoe Dam Flood Ops	
To	

Dear Elaina,

Report attached as requested.

Regards,

Brian Cooper



Mr. Barry Dennien
CEO, SEQ Water Grid Manager
PO Box 16205
City East QLD 4002

Dear Barry,

This letter report:

- presents my preliminary findings on a review of the operation of Wivenhoe Dam (including controlled releases) for compliance against the Flood Mitigation Manual for the period
 12 December 2010 to date (Flood Event), and;
- provides initial advice on the prudence and appropriateness of the decisions and actions taken during the Flood Event regarding the operation of Wivenhoe Dam in light of the Flood Mitigation Manual's requirements and the circumstances of the Flood Event.

The findings and advice are provided on the basis of information provided by SEQ Water Grid Manager which comprised the Flood Mitigation Manual and Technical Situation Reports. The latter were daily (sometimes twice daily) reports for the subject period. They gave a log of rainfall over the dam catchments and the downstream river (Lockyer Ck. And Bremer R.) catchments; inflows to Somerset and Wivenhoe Dams; storage levels; releases from the dams; details of the operation of gates and other outlets (gate openings/discharges); proposed changes in operating strategies and impacts on the various access crossings downstream of Wivenhoe Dam. In reviewing the Technical Situation Reports, I prepared a spreadsheet summarising the reports so that a timeline of the Flood Event could be seen at a glance. This provided a good overview of the Flood Event as it unfolded.

The main aspects of the Flood Mitigation Manual are the various strategies for operating Wivenhoe Dam and Somerset Dam as well as a number of requirements relating to flood operations personnel, flood preparedness and flood training.

At Wivenhoe Dam there are four main strategies for operating the dam (W1 to W4) and at Dam there are three (S1 to S3). These strategies are hierarchical and are based on a number of flood objectives. These in descending order of importance, are:

- Ensure the structural safety of the dams;
- Ensure the structural safety of the dams;
- · Provide optimum protection of urbanised areas from inundation;
- Minimise disruption to rural life in the valleys of the Brisbane and Stanley Rivers:

- Retain the storage at Full Supply Level (FSL) at the conclusion of the Flood Event, and;
- Minimise impacts to riparian flora and fauna during the drain down phase of the Flood Event.

Normal procedures require a return to FSL within 7 days of the flood event peak passing through the dams so that the potential effects of closely spaced Flood Events can be allowed for.

It is apparent from the Technical Situation Reports that emphasis has been given to communicating changes in flood operations strategies with local authorities and the Bureau of Meteorology (BOM).

Until the last day or so, Wivenhoe Dam has been below EL74.0 and accordingly, would be operating under Strategy W1 i.e. make releases such that bridges downstream of the dam do not have to be closed prematurely. At various times during the Flood Event some of the downstream bridges have been closed. However, it is evident that action has been taken to vary dam releases such that various bridges could be re-opened as soon as possible. This appears to have been done in accordance with the flood operating strategies.

Over the last couple of days, the storage level in Wivenhoe Dam has increased to above EL 74.0 and the storage level in Somerset Dam is at EL 103.3 and is rising. This situation would demand strategy W3 for Wivenhoe Dam (*limit flow in the Brisbane River at Moggill to less than 4,000m³/s*) and strategy S2 for Somerset Dam (*The crest gates are raised to enable uncontrolled discharge. Operations are to target a correlation of water levels in Somerset Dam and Wivenhoe Dam as set out in a graph. The operations target line shown on this graph is to generally be followed as the flood event progresses. The release rate from Somerset Dam is generally not to exceed the peak inflow into the dam). These strategies have been followed, although there appears to have been some discretion used in varying the releases from Somerset Dam (water has been held back in that dam). The last Technical Situation Report (W39 on 11/1/2011) however, indicated that there may need to be a move to Strategy W4 for Wivenhoe Dam (fuse plug triggering likely).*

I conclude then, that the strategies as set out in the Flood Mitigation Manual have been followed, allowing for the discretion given to making variations in order to maximise flood mitigation effects. As a means of reviewing processes followed during a flood, it would be useful to present a timeline of the flood event showing graphs of storage levels, rainfall events, storage inflows, releases made and critical levels and discharges together with strategies adopted and projected strategies. The actions taken and decisions made during the Flood Event appear to have been prudent and appropriate in the context of the available knowledge available to those responsible for flood operations and the way events unfolded. I am informed by the Queensland Dam Safety Regulator (Peter Allen) that the various requirements of the Flood Mitigation Manual relating to requirements for flood operations personnel, flood preparedness and flood training have been adhered to.

Regards,
Brian Cooper

From:

Best Debbie

Sent:

Wednesday, 12 January 2011 2:25 PM

To:

Bradley John

Subject:

Fw: Update regarding Water Grid Supply Situation

John

I am not sure if you receive these but will forward just in case. I will get this info included in the sitrep report.

Debbie

----- Original Message -----

From: Water Grid Emergency Manager

To: Best Debbie

Sent: Wed Jan 12 13:44:49 2011

Subject: Update regarding Water Grid Supply Situation

A11,

Water supply status across the Water Grid is as follows.

YE, WATERSECURE AND SEQWATER ARE EXPERIENCING EMAIL ISSUES. ALL EMAILS SHOULD BE SENT TO THIS ADDRESS

ISSUES, PLEASE ALSO CONFIRM RECEIPT VIA SMS OR MOBILE.

Water quality

All water continues to meet quality requirements.

The exception is supply to about 20 people at Atkinson, where a boiled water notice has been issued.

Stand-alone towns

We are carting water to Kenilworth and Dayboro, though capacity may be limited.

Helicopters have been hired to enable supply of bottled water to other towns, in partnership with QUU. Supply is being prioritised based on remaining storage. Critical towns include Jimna, Linville and Withcott, which are all relatively small.

We are seeking to bring the standby water treatment plant online at Kilcoy/Somerset. This town is significantly larger than the others currently being supplied bottled water.

Central SEQ

In central SEQ, water storage levels remain high.

Reservoirs are likely to be drawn down over coming days, with the extent of drawdown depending upon demand and any asset failures (both bulk and local).

Available supply capacity to the central area is up to about 320 ML/day. Typical demand in this area is about 370 ML/day. The 50 ML/day difference will be supplied by drawing down reservoirs. Conservation is important to minimise drawdown.

Every effort is being made to have more water available by Friday, in order to ensure water is available for clean up.

In term of treatment assets:

- * Mt Crosby East Bank WTP is offline. The raw water pump station is very close to being flooded, which may result in the plant remaining offline for some time.
- * Mt Crosby West Bank WTP has been producing at reduced capacity due to poor water quality (about 135 ML/day). Water quality is being closely monitored
- * At North Pine WTP, poor water quality has restricted treatment capacity.
- * The Southern Regional Water Pipeline has been transporting about 95 ML/day to central SEQ. It is being supplied from the Molendinar WTP and the desalination

facility, which is operating at two-thirds capacity.

A number of major plants are isolated. Another helicopter has been hired to ferry staff.

Chemical supply

Inundation has created logistic problems for the supply of chemicals into and within SEQ.

These issues are currently being managed, with all plants having at least two day supply of all chemicals and access to plants improving.

The most critical issue is the supply of lime to the Landershute WTP, which is the sole supply for about 40,000 people on the Sunshine Coast (pending completion of NPI Stage 2). Supply of 5 tonnes of bagged lime has been arranged, ensuring that supply can continue until at least tomorrow. Further supplies are being arranged.

Coordination

I am the Emergency Manager. I am available on

An Emergency Management Team has been formed. The emergency room can be contacted on

Operational teams have been formed with all Grid participants and relevant agencies. Teams include:

- * Stand-alone towns
- * Water balance
- * Water quality
- * Chemical logistics
- * Resource logistics.

Please call me on if you require any further information.

Regards,

Water Grid Emergency Manager

Daniel Spiller

Click here to acknowledge this message http://ack.ngcomms.net/r94u19fi0gh/3o0hi99tjjwp>http://open.ngcomms.net/r94u19gob0d/3o0hi99tju157

From:

Dan Spiller

Sent:

Wednesday, 12 January 2011 3:52 PM

To:

Cc:

Subject: Dam release update

Attachments: Technical_Situation_Report_W50.docx

ΑII,

Attached is an updated Technical Support Report, including advice about the gate closure process.

The Wivenhoe Dam release rate has been maintained at 2,500 cubic metres per second. Dam levels have reduced slightly.

Please call me on if you require further information.

Regards,

Dan

Daniel Spiller

Director, Operations

SEQ Water Grid Manager

Phone: Email:

Visit: Level 15, 53 Albert Street Brisbane Post: PO Box 16205, City East QLD 4002

ABN: 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

Disclaimer

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

Edmonds Rebecca

From:

Dan Spiller

Sent:

Wednesday, 12 January 2011 8:34 PM

To:

Cc:

Dennien Barry Emergency:

'Peter Borrows': 'Rob Drury'; Brown Damien; Reilly Bob;

SEQWGM

Subject:

RE: Dam release update

Attachments: Technical_Situation_Report_W51.docx

All,

Attached is an updated Technical Support Report.

Please call me on

if you require further information.

Regards,

Dan

Daniel Spiller

Director, Operations

SEQ Water Grid Manager

Visit: Level 15, 53 Albert Street Brisbane Post: PO Box 16205, City East QLD 4002

ABN: 14783 317 630

Please consider the environment before printing this email. It takes 10 litres of water to make one sheet of A4 paper.

Disclaimer

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited. While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure, modification, distribution and/or publication of this email is also prohibited.

While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

·

Subject:

From:

Sent:

To:

QEMR as at 05.00am Thursday 13 January 2011

Attachments: QEMR 0500 strep 130111.pdf
DEPARTMENT OF COMMUNITY SAFETY
Daily Queensland Emergency Management Report
as at 5:00am Thursday 13 January 2011

SIGNIFICANT INFORMATION

- Brisbane and Ipswich are experiencing major flooding.
- The Brisbane River will stead at the Brisbane City Gauge at about 4.45 metres (major) after the high tide at 4am Thursday 13.01.11 Thursday and fall below major flood level during Friday.
- A State-level Disaster Declaration has now been declared
- As of 04:00 hours QPS confirms there have been 12 confirmed deaths in South East Queensland and 62 persons missing or uncounted for, with grave concerns held for 12 persons.
- There will be limited public transport services across Brisbane, no Citycats and Ferrys and no bus services in the western and south western suburbs on Wednesday.
- There are 7,216 registered evacuees (total number of persons registered with Red Cross) as of 2200hours.
- Across the state, there are 2,509 houses inundated with water over floorboards, 5,602 with water in yards; 9,575 people currently evacuated. There are approximately 5,087 businesses affected.
- There are 48 evacuation centres operating across the state.
- An Emergency Alert voice and SMS message to conserve water was sent out to residents of the Somerset Regional Council area at 2030
- To date there have been 6,860 calls to the Recovery Hotline.

Major Highway Closures

The following roads are no-goldanger zones for travellers:

- Barwon Highway west of Goondiwindi
- Brisbane Valley Highway at Split Yard Creek, Fernvale
- Bruce Highway north of Gladstone
- Bruce Highway south of Gymple
- Bruce Highway- closed Federal
- Canaryon Highway north of Injune
- Cunningham Highway between Warwick and Inglewood
- D'Aguilar Highway closed at 4 points from Kilcoy Creek
- Dawson Highway Calliope to Springsure
- Fitzroy Development Rd north of Taroom
- Gore Highway Pampas and Brookstead
- Ipswich Motorway closed at Goodna and Redbank
- Leichardt Highway north of Wandoan
- Moonee Highway west of Moonee
- Mount Lindesay Highway is closed at Jimboomba
- New England Highway between Toowoomba and Warwick
- Warrego Highway closed from Marburg Range to Toowoomba range in both directions, and west of Dalby
- All roads West and North of Brisbane are currently impacted
- All roads west of the Darling Downs are also impacted
- There are major impacts on all Central Queensland road networks with continued heavy rain and

further disruptions likely

WEATHER OBSERVATIONS

Weather Situation

The monsoon trough extends over the northern tropics and is moving gradually south. A ridge of high pressure will build along the east Queensland coast.

Showers, thunderstorms and rain areas in the west and north of the state, with some areas of moderate to locally heavy falls. Isolated showers in the southeast. Moderate to fresh SE to E winds in the east. Light to moderate mostly NE to NW winds elsewhere, fresh at times in the west.

Forecast for Friday

A new surface trough will enter the SW of the state. The monsoonal trough becomes more active over the northern Coral Sea with increased reinfall over the southern tropics inland from Cairns and extending across to Georgetown. Showers and thunderstorms generally over the tropics and extending south through western districts near the trough. Isolated showers about eastern districts and through the central interior. Becoming fine over the southern interior.

Forecast for Saturday

Much the same pattern for Saturday, the western trough will stall but continue to generate showers and thunderstorms. Isolated showers about eastern districts and fine over the central and southern interior. The monsoonal trough seems to weaken over the northern Coral sea.

Forecast for Sunday

The western trough now moves across southern QLD reaching the Darling Downs and the central interior, Showers and thunderstorms over the tropics and the NW of the state, Some rain areas may develop south of the trough over the southern districts. Generally fine over the eastern interior and the SE.

Outlook for Monday, Tuesday and Wednesday

By Monday the southern trough will move through the SE district with a band of showers and thunderstorms, becoming fine across southern QLD and the SW. Showers and thunderstorms remaining over the NW and the tropks. By Tuesday the trough has cleared the SE coast with isolated showers remaining. Showers and thunderstorms across the tropks and extending SE into the Capricom and the Wide Bay coast. By Wednesday rain areas and thunderstorms across the tropics, showers about the east coast, fine over the

Rainfall

- In the period since 09.00am Wednesday significant rainfall was recorded at many locations across the State. These included:
 - Beschs Hills TM
 - Ayr DPI Miriam Vale TM
- 84mm 62mm 61mm

SES 132 500 CALLS

- 6997 calls were made to SES 132 500 in the period since 05.00am Wednesday. These included:
 - Brisbane 2972
 - 628
 - loswich Gold Coast 319

Media

News.com.au reports: IT was once a raitway bridge used daily by freight trains, and now it is a mass underwater grave, bearing little hope for rescuers. Bobbing in the muddy water beneath the Grantham bridge are up to 30 crumpled cars, washed down stream when the flood hit. "You'd have to think with 30-odd cars here, we're about to find some pretty unpleasant things," a police officer said. Within the once 300-strong community, some 43 people are missing. Another three have been confirmed dead. The once vibrant Grantham has become a ghost town, the ground zero of Queensland's crisis. http://www.news.com.au/breaking-news/floodrelief/horror-at-mass-underwater-grave-in-grantham-lockyer-yailay/stoy-fr/16/21e-125888749966 lockyer-vailey/story-fn7ik2te-1225986749966

News.com.au reports: BRISBANE'S Gateway Bridges have been closed for the second time overnight amid fears of flood debris causing major damage. The bridges earlier in the night had been closed temporarily after a 300m section of the Riverwalk at New Farm broke off and hurtled towards the bridge at high speed. However the Riverwalk section broke in two and passed harmlessly under the bridges. Premier Anna Bligh said emergency services had been planning on breaking down the Riverwalk themselves but it had broken away before they could get to it. Witnesses said they heard a loud bang before seeing the large block of concrete floating down the river. Police said the huge section was moving at 21 knots. A witness told ABC Radio she had seen the huge section passing Bretts Wharf at Hamilton, https://www.couriermail.com.au/news/queenstand/mogoil-ferry-island-party-boat-may-be-sunk-if-they-a-considered-a-risk-of-being-a-danger-to-the-public/story-e6frecof-1225986372966

ABC Online reports: Brisbane's flood disaster is about to take a turn for the worse as the south-east Queensland city faces a flood peak to rival the 1974 crisis. After a day of cerily calm weather, which saw waters slip into backyards and businesses across Brisbane, residents are being told to prepare for a "shocking and remarkable challenge". Already thousands of homes in some Brisbane suburbs have waters past the second-storey after Wednesday's peak reached 4.2 metres. The normally sedate Brisbane River, swollen by months of rain, has become a raging torrent, tearing pontoons and boats loose and bursting its banks to swamp low-lying parts of the city. http://www.abc.net.au/news/stories/2011/01/13/3111717.htm

SMH.com.au reports: TENS of thousands of Queenslanders enduring Monday's flash flooding received the government's emergency warning messages hours after their area had been submerged under a detuge of brown, rushing water. The messages, part of the National Emergency Warning System (NEWS), were sent after 8pm, six hours after Toowoomba took between 100 and 150 millimetres of rain in 30 minutes. That might have been because the technology used by the Bureau of Meteorology cannot properly advise towns of impending flash flooding, the chairman of the UN Commission for Agricultural Meteorology, Richard Stone, said. New technology could better predict flash floods and he urged the government to buy it because local weather "is only going to get more extreme". http://www.smh.com.au/environment/weather/message-to-those-in-danger-received-six-hours-late-20110111-19mrs.html?from=smh_sb

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qld From:

Dan Spiller

Sent:

Thursday, 13 January 2011 3:31 AM

To:

Cc:

Subject:

Update on Water Grid supply situation

Attachments: Water balance_130111.docx

Update attached for information.

Please call me on

if you require any further information.

Regards,

Daniel Spiller

This email, together with any attachments, is intended for the named recipient(s) only; and may contain privileged and confidential information. You understand that any privilege or confidentiality attached to this message is not waived, lost or destroyed because you have received this message in error. If received in error, you are asked to inform the sender as quickly as possible and delete this email and any copies of this from your computer system network.

If not an intended recipient of this email, you must not copy, distribute or take any action(s) that relies on it; any form of disclosure,

modification, distribution and/or publication of this email is also prohibited.
While all care has been taken, the SEQ Water Grid Manager disclaims all liability for loss or damage to person or property arising from this message being infected by a computer virus or other contamination. Unless stated otherwise, this email represents only the views of the sender and not the views of the SEQ Water Grid Manager and/or the Queensland Government.

Boyle Michael

Sent:

Thursday, 13 January 2011 6:45 AM

To:

Birchley Michael; Brown Damlen; Bradley John; Wall Terry; Anderson Danielle; Best Debbie; Robson Chris; Levenington Andrea; Ridgway John; Lenz Anne; Williams Christine; Moody Annie; Quincey Richard; Brier Andrew; Cook Clive; Short Michael; Zubrinich Robert; Jacoby Steven; Robinson David; Ashby Deborah; Pearce Martin; Servodio Yvonne; media

Subject:

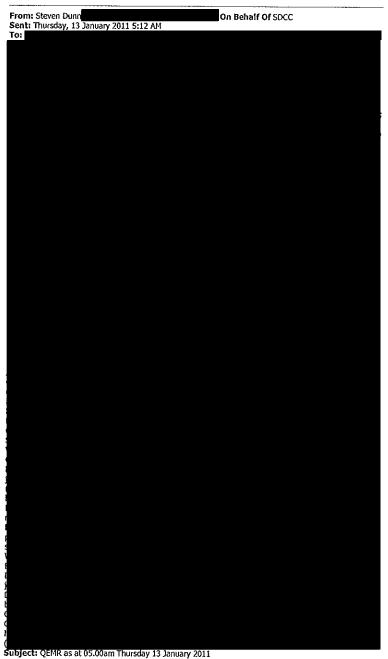
FW: QEMR as at 05.00am Thursday 13 January 2011

Attachments: QEMR 0500 sitrep 130111.pdf; DOC120111-010.pdf

Last night's and this morning's updates. Last night's is the normal statewide report and this morning's is

focused on Brisbane plus a summary.

Mineral House is still without power due to generator faults.



DEPARTMENT OF COMMUNITY SAFETY Daily Queensland Emergency Management Report

as at 5:00am Thursday 13 January 2011

SIGNIFICANT INFORMATION

· Brisbane and Ipswich are experiencing major flooding.

- The Brisbane River will stead at the Brisbane City Gauge at about 4.45 metres (major) after the high tide at 4am Thursday 13.01.11 Thursday and fall below major flood level during Friday.
- A State-level Disaster Declaration has now been declared
- As of 04:00 hours QPS confirms there have been 12 confirmed deaths in South East Queensland and 62 persons missing or uncounted for, with grave concerns held for 12 persons.
- There will be limited public transport services across Brisbane, no Citycats and Ferrys and no bus services in the western and south western suburbs on Wednesday.

- There are 7,216 registered evacuees (total number of persons registered with Red Cross) as of 2200hours.
- Across the state, there are 2,509 houses inundated with water over floorboards, 5,602 with water in yards; 9,575 people currently evacuated. There are approximately 5,087 businesses affected.
- There are 48 evacuation centres operating across the state.
- An Emergency Alert voice and SMS message to conserve water was sent out to residents of the Somerset Regional Council area at 2030
- To date there have been 6,860 calls to the Recovery Hotline.

Major Highway Closures

The following roads are no-goldanger zones for travellers:

- Barwon Highway west of Goondiwindi
- Brisbane Valley Highway at Split Yard Creek, Fernvale
- Bruce Highway north of Gladstone
- Bruce Highway south of Gympie
- Bruce Highway- closed Federal
- Canaryon Highway north of Injune
- Cunningham Highway between Warwick and Inglewood
- D'Aguilar Highway closed at 4 points from Kilcoy Creek
- Dawson Highway Calliope to Springsure
- Fitzrov Development Rd north of Taroom
- Gore Highway Pampas and Brookstead
- Ipswich Motorway closed at Goodna and Redbank
- Leichardt Highway north of Wandoan
- Moonee Highway west of Moonee
- Mount Lindesay Highway is closed at Jimboomba
- New England Highway between Toowoomba and Warwick
- Warreoo Highway closed from Marburg Renge to Toowoomba range in both directions, and west of Dalby
- All roads West and North of Brisbane are currently impacted
- All roads west of the Darling Downs are also impacted
- There are major impacts on all Central Queensland road networks with continued heavy rain and further disruptions likely

WEATHER OBSERVATIONS

Weather Situation

The monsoon trough extends over the northern tropics and is moving gradually south. A ridge of high pressure will build along the east Queensland coast.

Showers, thunderstorms and rain areas in the west and north of the state, with some areas of moderate to locally heavy falls. Isolated showers in the southeast. Moderate to fresh SE to E winds in the east. Light to moderate mostly NE to NW winds elsewhere, fresh at times in the west.

A new surface trough will enter the SW of the state. The monsoonal trough becomes more active over the northern Coral Sea with increased rainfall over the southern tropics inland from Cairns and extending across to Georgetown. Showers and thunderstorms generally over the tropics and extending south through western districts near the trough. Isolated showers about eastern districts and through the central interior. Becoming fine over the southern interior.

Much the same pattern for Saturday, the western trough will stall but continue to generate showers and thunderstorms. Isolated showers about eastern districts and fine over the central and southern interior. The monsoonal trough seems to weaken over the northern Coral sea.

The western trough now moves across southern QLD reaching the Darling Downs and the central interior. Showers and thunderstorms over the tropics and the NW of the state. Some rain areas may develop south of the trough over the southern districts. Generally line over the eastern interior and the SE.

Outlook for Monday, Tuesday and Wednesday

By Monday the southern trough will move through the SE district with a band of showers and thunderstorms, becoming fine across southern QLD and the SW. Showers and thunderstorms remaining over the NW and the tropics. By Tuesday the trough has cleared the SE coast with isolated showers remaining. Showers and thunderstorms across the tropics and extending SE into the Capricorn and the Wide Bay coast. By Wednesday, rein areas and thunderstorms across the tropics, showers about the east coast, fine over the

Rainfall

In the period since 09,00am Wednesday significant rainfall was recorded at many locations across the State. These included:

Beschs Hills TM Avr DPI

84mm 62mm

Miriam Vale TM

61mm

SES 132 500 CALLS

6997 calls were made to SES 132 500 in the period since 05.00am Wednesday. These included:

Brisbane

2972

loswich

628

Media

News com.au reports: IT was once a railway bridge used daily by freight trains, and now it is a mass underwater grave, bearing little hope for rescuers. Bobbing in the muddy water beneath the Grantham bridge are up to 30 crumpled cars, washed down stream when the flood hit. "You'd have to think with 30-odd cars here, we're about to find some pretty unpleasant things," a police officer said. Within the once 300-strong community, some 43 people are missing. Another three have been confirmed dead. The once vibrant Grantham has become a ghost town, the ground zero of Queensland's crisis. http://www.news.com.au/breaking-news/floodrelief/horror-at-mass-underwater-grave-in-granthamlockyer-valley/story-fn7ik2te-1225986749966

News.com.au reports: BRISBANE'S Gateway Bridges have been closed for the second time overnight amid fears of flood debris causing major damage. The bridges earlier in the night had been closed temporarily after a 300m section of the Riverwalk at New Farm broke off and hurtled towards the bridge at high speed. However the Riverwalk section broke in two and passed harmlessly under the bridges. Premier Anna Bligh said emergency services had been planning on breaking down the Riverwalk themselves but it had broken away before they could get to it. Witnesses said they heard a loud bang before seeing the large block of concrete floating down the river. Police said the huge section was moving at 21 knots. A witness told ABC Radio she had seen the huge section passing Bretts Wharf at Hamilton. <a href="https://www.couriermail.com.au/news/queensland/mogqit-ferry-island-party-boat-may-be-sunk-if-they-a-considered-a-risk-of-being-a-danger-to-the-public/story-e6freoof-1225986372966

ABC Online reports: Brisbane's flood disaster is about to take a turn for the worse as the south-east Queensland city faces a flood peak to rival the 1974 crisis. After a day of eerily calm weather, which saw waters stip into backyards and businesses across Brisbane, residents are being told to prepare for a "shocking and remarkable challenge". Already thousands of homes in some Brisbane suburbs have waters past the second-storey after Wednesday's peak reached 4.2 metres. The normally sedate Brisbane River, swollen by months of rain, has become a raging torrent, tearing pontoons and boats loose and bursting its banks to swamp low-lying parts of the city. http://www.abc.net.au/news/stories/2011/01/13/3111717.htm

SMH.com.eu reports: TENS of thousands of Queenslanders enduring Monday's flash flooding received the government's emergency warning messages hours after their area had been submerged under a deluge of brown, rushing water. The messages, part of the National Emergency Warning System (NEWS), were sent after 8pm, six hours after Toowoomba took between 100 and 150 millimetres of rain in 30 minutes. That might have been because the technology used by the Bureau of Meteorology cannot properly advise towns of impending flash flooding, the chairmen of the UN Commission for Agricultural Meteorology, Richard Stone, said. New technology could better predict flash floods and he urged the government to buy it because local weather "is only going to get more extreme". http://www.smh.com.au/environment/weather/message-to-those-in-danger-received-six-hours-late-20110111-19mrs.html?from=smh_sb

This correspondence is for the named persons only. It may contain confidential or privileged information or both. No confidentiality or All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qld

(. .

From:

Elaina Smouha

Sent:

Thursday, 13 January 2011 4:45 PM

To:

Cc:

Bradley John;

Dennien Barry

Subject:

Flood Mitigation Manual review

Attachments: Scan 1.pdf; Brian Cooper - final report.docx; Brian Cooper - final report attachment.xlsx;

Wivenhoe Dam Background_Briefing_Jan_2011[1].docx

Tim,

Attached is the independent review of Somerset and Wivenhoe Dam operations against the Flood Mitigation Manual and a briefing note from Seqwater on the development of the Manual.

Kind regards

Elaina

Elaina Smouha

Director, Governance and Regulatory Compliance

SEQ Water Grid Manager

Phone:

Mobile:

| Fax:

Email:

Visit: Level 15, 53 Albert Street Brisbane Post: PO Box 16205, City East QLD 4002

ABN: 14783 317 630

. ·

Wivenhoe Dam - Development of Flood Operational Rules

1. Introduction

This briefing note has been prepared to detail the development of the flood operational rules for Wivenhoe and Somerset Dam and the extensive reviews undertaken for the studies.

The flood operational procedures were developed during an extensive hydrological study of the Brisbane and Pine Rivers catchments by the DPI, Water Resources between 1990 and 1994 which was reviewed by an external expert panel. Subsequently, the flood operational rules have been reviewed during the Brisbane Valley Flood Damages Minimisation Study in 2006 and the latest revision to the flood manual in 2009. Both reviews have included expert review panels comprising key stakeholders.

2. History

The Brisbane River Basin is the major water supply source for the City of Brisbane and many of the nearby local authorities. The major floods which are derived from the basin have a history of causing significant damage to the local communities.

Somerset Dam was constructed on the Stanley River over the period 1936 to 1954 and was the major regional water supply source up until the late 1970's

During the early 1970's it was identified that both the water supply and flood mitigation of Somerset Dam would need to be augmented. Shortly after the 1974 floods planning for the construction of Wivenhoe Dam began with construction commencing in 1979 and final completion being achieved in 1987.

The main functions of Wivenhoe Dam are to meet the water supply demands of the Moreton Region, provide the lower pool for the 500MW Wivenhoe Pumped Storage Project and provide flood mitigation for the cities of Brisbane and Ipswich.

Changes to the methods used to determine the rainfall for extreme events during the 1980's resulted in significant changes to the design flood for the newly constructed dam.

In 1990, the owners of the Dam, South East Queensland Water Board, undertook a dam safety review of the three dams owned and operated by the Board. A key component of this study was the Brisbane and Pine Rivers Flood Study.

3. Development of the Flood Operations Rules

In August 1990, the South East Queensland Water Board (SEQWB) commissioned the Department of Primary Industries, Water Resources Business Group (DPI,WR) to undertake the Brisbane and Pine Rivers Flood Study. The flood Study was initiated as part of an overall safety review of the Board's dams, Somerset Dam, Wivenhoe Dam and North Pine Dam. The need for the safety review of the dams stemmed from a number of factors including

- the emergence of new techniques for the estimation of probable maximum precipitation and subsequent flooding,
- the development of computer software capable of simulating the hydraulic behaviour of whole river basins and simulating dam failure scenarios,
- advancements in technology associated with real time weather monitoring.

The scope of the flood study was to review the hydrology for each dam and hydraulic aspects associated with the relevant flood studies and to develop real time model programmes for use in flood control operations and forecasting. Key aspects of the study were:

- hydrologic review
- flood operating procedure
- hydraulic analysis, flood studies
- · dam break (failure) analysis
- flood inundation.

This study was undertaken from 1990 until 1994 and represented a thorough review of the flooding in the Brisbane and Pine Rivers and the associated role of the dams within the catchment.

i. Brisbane and Pine Rivers Flood Review

The Brisbane and Pine Rivers Flood Study comprise multiple reports, produced at the completion of each stage of the study. The reports were subject to extensive internal review by the Water Resources Group before being reviewed by an independent review panel comprising Professor Colin Apelt, Head of Department, Department of Civil Engineering, University of Queensland and Mr Eric Lesleighter, Principal Hydraulic Engineer and Chief Engineer Water Resources, Snowy Mountains Engineering Corporation.

ii. Real Time Flood Model

The outcome of the Brisbane River and Pine River Flood Studies were used to develop a real time flood model for the three dams. This real time flood model consists of alert stations within the catchment to provide real time rainfall and stream level data, a calibrated run off model to convert rainfall data into flows, a gate operating model to allow decisions on gate openings to be made and a downstream flood model to provide predictions on flood levels.

iii. Flood Operations Manual

The Flood Operation Manual is the key legislative document prepared by the owner of the dam and approved and gazetted by the Qld Dam Safety Regulator. The manual defines flood procedures, roles and responsibilities, staffing and operational requirements.

The manual in its current form was developed in 1992 using the operational procedures developed during the Brisbane and Pine Rivers Flood Study and a manual written in 1968 covering flood operations at Somerset Dam (Wivenhoe Dam was completed in 1984). Six revisions of the Manual have occurred since 1992 to account for updates to the Flood Alert Network and the Real Time Flood Models, the construction of an Auxiliary Spillway at Wivenhoe Dam in 2005 and to account for institutional and legislative changes.

The primary objectives of the procedures contained in the flood manual are, in order of importance:

- Ensure the structural safety of the dams;
- Provide optimum protection of urbanised areas from inundation;
- Minimise disruption to rural life in the valleys of the Brisbane and Stanley Rivers;
- Retain the storage at Full Supply Level at the conclusion of the Flood Event.
- Minimise impacts to riparian flora and fauna during the drain down phase of the Flood Event.

To meet the objectives, there are four strategies for Wivenhoe Dam defining the gate operations as a flood event unfolds. The first three strategies are focused on delivering the optimal flood mitigation outcomes based on inflows, downstream flooding and forecast rainfall. Once the water level in Wivenhoe Dam exceeds 7m above the normal operating level, the strategies shift from flood mitigation to ensuring that the dam is not overtopped.

4. Subsequent Reviews of the Flood Operational Procedures

iv. Brisbane Valley Flood Damage Minimisation Study

In 2005 and 2006, Brisbane City Council (BCC) undertook the Brisbane Valley Flood Damage Minimisation Study (BVFDMS) in conjunction with Ipswich City Council and Esk Shire Council. The study provided a flood damage assessment for Brisbane River floods. The study aimed to estimate the potential flood damage in the Brisbane Valley and then assess the flood operation rules for the Wivenhoe Dam flood gates to determine whether the current rules could be modified to reduce flood damage in the valley.

This extensive study involved detailed survey assessment of the flood damages within the Brisbane City and Ipswich City areas. A Project Technical Review Group was formed for the project involving:

- SEQWater Corporation
- The Bureau of Meteorology
- SunWater as the operator of the SEQWater Corporation Flood Control Centre
- NRM&W Dam Safety Regulator
- WRM Consultants

Key outcomes from this study for the Flood Operational Rules were:

- Confirmation of the 4,000m3/s flood adopted in the flood manual as the start of damaging flows in the Brisbane urban areas.
- Confirmation of the effectiveness of the existing flood operating rules as the optimal method of providing flood mitigation to Brisbane.

v. 2009 Review of the Flood Manual

In 2009, after the formation of the Queensland Bulk Water Supply Authority, a comprehensive review of the flood manual was undertaken. This review was focused on re-writing the manual and

refining the operational procedures. As part of this review Seqwater assembled an expert review panel comprising the following organisations.

- The Bureau of Meteorology
- SunWater as the operator of the Flood Control Centre
- DERM Dam Safety Regulator
- Brisbane City Council

Minor changes made to the manual were extensively tested to ensure that the flood mitigation outcomes from the operation of the dam were not compromised.

5. Conclusions

The flood operational procedures for Wivenhoe and Somerset Dam were developed by a comprehensive study undertaken by the DPI Water Resources between 1990 and 1994. These operational rules have been reviewed by independent parties to identify any opportunities to improve the flood mitigation outcomes including the Brisbane City Council.

Barton Maher (RPEQ 6833)
Principal Dams & Weirs Planning
Queensland Bulk Water Supply Authority trading as Seqwater





12 January 2011

Mr. Barry Dennien CEO, SEQ Water Grid Manager PO Box 16205 City East QLD 4002

Dear Barry,

This letter report:

- presents my final findings on a review of the operation of Wivenhoe Dam (including controlled releases) for compliance against the Flood Mitigation Manual for the period 12 December 2010 to date (Flood Event), and;
- provides advice on the prudence and appropriateness of the decisions and actions taken during the Flood Event regarding the operation of Wivenhoe Dam in light of the Flood Mitigation Manual's requirements and the circumstances of the Flood Event.

The report follows on from my preliminary report sent to you earlier today. The findings and advice are provided on the basis of information provided by SEQ Water Grid Manager which comprised the Flood Mitigation Manual and Technical Situation Reports. The latter were daily (sometimes twice daily) reports for the subject period. They gave a log of rainfall over the dam catchments and the downstream river (Lockyer Ck. and Bremer R.) catchments; inflows to Somerset and Wivenhoe Dams; storage levels; releases from the dams; details of the operation of gates and other outlets (gate openings/discharges); proposed changes in operating strategies and impacts on the various access crossings downstream of Wivenhoe Dam. In reviewing the Technical Situation Reports, I prepared a spreadsheet (see separate attachment of Excel spreadsheet Tech Reports - Summary, summarising the reports so that a timeline of the Flood Event could be seen at a glance. This provided a good overview of the Flood Event as it unfolded and showed what information may or may not have been included in a particular report. The Queensland Director Dam Safety (Water Supply) informed me that the Flood Operation Logs contain much more detailed information including details of the communications that were carried out and some of the more detailed information that is not necessarily included in the Technical Situation Reports. I have been provided with a draft of the "Protocol for the Communication of Flooding Information for the Brisbane River Catchment – Including Floodwater Releases from Wivenhoe and Somerset Dams" developed in October/November last year and currently being used. The Technical Situation Reports appear to have been an outcome of that Protocol.

The various requirements and required actions detailed in the Flood Mitigation Manual are summarised in the Table given in Attachment A. The Table also gives my comments (where appropriate) on whether there is evidence from the information presented to me, that there is satisfactory compliance with these requirements and actions.

The main aspects of the Flood Mitigation Manual are the various strategies for operating Wivenhoe Dam and Somerset Dam as well as a number of requirements relating to flood operations personnel, flood preparedness and flood training.

At Wivenhoe Dam there are four main strategies for operating the dam (W1 to W4) and at Dam there are three (S1 to S3). These strategies are hierarchical and are based on a number of flood objectives. These in descending order of importance, are:

- Ensure the structural safety of the dams;
- · Provide optimum protection of urbanised areas from inundation;
- Minimise disruption to rural life in the valleys of the Brisbane and Stanley Rivers;
- Retain the storage at Full Supply Level (FSL) at the conclusion of the Flood Event, and;
- · Minimise impacts to riparian flora and fauna during the drain down phase of the Flood Event.

Normal procedures require a return to FSL within 7 days of the flood event peak passing through the dams so that the potential effects of closely spaced Flood Events can be allowed for.

It is apparent from the Technical Situation Reports that emphasis has been given to communicating changes in flood operations strategies with local authorities and the Bureau of Meteorology (BOM).

Until the last day or so, Wivenhoe Dam has been below EL74.0 and accordingly, would be operating under Strategy W1 i.e. make releases such that bridges downstream of the dam do not have to be closed prematurely. For a few days at the end of December and for the last day or so before yesterday's big rise. Strategy W2 would be in place (restrain releases from Wivenhoe Dam such that Brisbane River flows are maintained within the upper limit of non-damaging floods at Lowood (3,500 m3/s)). At various times during the Flood Event some of the downstream bridges have been closed. However, it is evident that action has been taken to vary dam releases such that various bridges could be re-opened as soon as possible. This appears to have been done in accordance with the flood operating strategies. The operations then moved onto Strategy W4 when the storage in Wivenhoe Dam reached about EL 73.5 (before the W4 trigger level of EL 74) when yesterday's heavy rain came on and it was assessed that there was a chance that the first (central) fuse plug could be triggered. It was then a matter of juggling the radial gate openings in an attempt to circumvent any fuse plug triggering. A graph of storage levels for Wivenhoe and Somerset Dams (from information taken from the Technical Situation Reports) showing the limits for the various Wivenhoe Dam flood strategies is given in Attachment A. It is apparent from this graph, that the appropriate flood operation strategies were adopted. The Technical Situation Reports indicate that proposed changes in strategy were appropriately communicated with appropriate authorities in accordance with the new Communication Protocol.

Summary:

The Technical Situation Reports comply with the requirements of the new Communication Protocol. However, I feel that there could be more consistency in the information presented. There seem to be gaps in information presented such as storage levels (see spreadsheet and graph in Attachment A). It would be useful to specify the minimum information required to be presented in the Technical Situation Reports (storage levels, inflows, recent/current rainfall, forecast rainfall, releases from dams, estimated flows from downstream tributaries, current flood operating strategy for each dam and proposed change in strategy, gate and regulator operations, state of downstream road crossings etc). Most of the minimum information is already given, but not in a consistent manner. As a means of reviewing processes followed during a flood, it would be useful to present a timeline of the flood event showing graphs of storage levels and other data that can be easily presented in a graphical manner.

I am informed by the Queensland Director Dam Safety (Water Supply) that the various requirements of the Flood Mitigation Manual relating to requirements for flood operations personnel, flood preparedness and flood training have been adhered to. There are a number of other requirements however, that I am not able to say whether they were satisfied as I had insufficient information. These requirements (see Table in Attachment A) should be subject to a separate audit.

It appears to me that the decision to implement Strategy W4 was a prudent one. While it would cause some damage in the Brisbane River downstream, its implementation, considering forecast rainfalls and projected flows in Lockyer Ck. And the Bremer River, would allow reduction of the storage level in

brian cooper consulting

Wivenhoe Dam. This reduction in storage level would hopefully provide a sufficient buffer that would minimise the chance of a fuse plug triggering in the auxiliary spillway. Triggering of the first (central) fuse plug would cause a sudden increase of flow of some 2,000m³/s from Wivenhoe Dam. This increase in flow would cause significantly more flooding in the lower Brisbane River than that caused by early implementation of Strategy W4.

Conclusions:

The strategies as set out in the Flood Mitigation Manual have been followed, allowing for the discretion given to making variations in order to maximise flood mitigation effects. The actions taken and decisions made during the Flood Event appear to have been prudent and appropriate in the context of the available knowledge available to those responsible for flood operations and the way events unfolded.

There are a number of requirements where there was insufficient time given the urgency of this review, to source the necessary information for me to demonstrate compliance. However, satisfaction or otherwise of these requirements would have had little impact on the operation of the two dams during this particular Flood Event. It is intended that they be audited when time permits, after the Flood Event.

There are aspects of the Technical Situation Reports that could be improved and these have been discussed above.

Regards,

Brian Cooper

ATTACHMENT A

Action Requirements extracted from the Flood Mitigation Manual:	
Action	Comment
The Flood Mitigation Manual contains the operational procedures for Wivenhoe Dam and Somerset Dam for the purposes of flood mitigation and must be used for the operation of the dams during flood events.	Appears to have been done
Sufficient numbers of suitably qualified personnel are available to operate the dams if a Flood Event occurs.	Director of Dam Safety is satisfied
The level of flooding as a result of emptying stored floodwaters after the peak has passed is to be less than the flood peak unless accelerated release is necessary to reduce the risk of overtopping.	See Note 1
A regular process of internal audit and management review must be maintained by Seqwater to achieve improvements in the operation of the RTFM.	See Note 1
Seqwater must maintain a log of the performance of the data collection network. The log must include all revised field calibrations and changes to the number, type and locations of gauges. Senior Flood Operations and Flood Operations Engineers are to be notified of all significant changes to the Log.	See Note 1
Seqwater must maintain a log of the performance of the RTFM. Any faults to the computer hardware or software are to be noted and promptly and appropriately attend to.	See Note 1
Seqwater must ensure that all available data and other documentation is appropriately collected and catalogued for future use.	See Note 1
Seqwater must ensure that information relevant to the calibration of its field stations is shared with appropriate agencies.	See Note 1
Seqwater must liaise and consult with these agencies with a view to ensuring all information relative to the flood event is consistent and used in accordance with agreed responsibilities:	Required also by draft of Communications
Bureau of Meteorology (issue of flood warnings for Brisbane River basin);	Protocol. Technical
Department of Environment and Resource Management (review of flood and discretionary powers);	Situation Reports infer compliance
 Somerset Regional Council (flood level information for upstream of Somerset Dam and upstream and downstream of Wivenhoe Dam); 	
Ipswich City Council (flood level information for Ipswich), and;	
Brisbane City Council (flood level information for Brisbane City).	
Seqwater must report to the Chief Executive by 30 September each year on the training and state of preparedness of operations personnel.	See Note 1
Seqwater must provide a report to the Chief Executive by 30 September each year on the state of the Flood Monitoring and Forecasting System and Communication Networks.	See Note 1

brian cooper consulting

Action	Comment
After each significant flood event, Seqwater must report to the Chief Executive on the effectiveness of the operational procedures contained in this manual.	It is too early for this action to be implemented. Will be implemented when the Flood Event is finished
Prior to the expiry of the approval period, Seqwater must review the Manual pursuant to provisions of the Act.	It is too early for this action to be implemented
Strategies are changed in response to changing rainfall forecasts and stream flow conditions to maximise the flood mitigation benefits of the dams.	Technical Situation Reports indicate that this is done
When determining dam outflows within all strategies, peak outflow should generally not exceed peak inflow.	Information from Seqwater indicates that the requirement was satisfied
Protocol for use of discretionary powers (i.e. who gets told)	Director of Dam Safety is satisfied – I don't know whether Seqwater CEO or Chairperson approved – See Note 1

Note1: For a number of the above actions, given the short time frame for the review on compliance of actual flood operations with the Flood Mitigation Manual, it was not possible to source some of the information required to confirm that requirements had been fulfilled. These actions will be audited separately, when time permits.

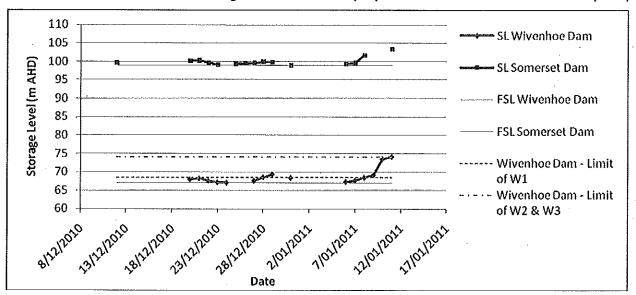
Action	Comment			
Flood Strategies for Wivenhoe Dam:				
The intent of Strategy W1 is to not to submerge the bridges downstream of the dam prematurely (see Appendix I). The limiting condition for Strategy W1 is the submergence of Mt Crosby Weir Bridge that occurs at approximately 1,900 m³/s . For situations where flood rains are occurring on the catchment upstream of Wivenhoe Dam and only minor rainfall is occurring downstream of the dam, releases are to be regulated to limit, as much as appropriate in the circumstances, downstream flooding.	Technical Situation Reports indicate that every attempt was made to keep the specified road crossings open			
The intent of Strategy W2 is limit the flow in the Brisbane River to less than the naturally occurring peaks at Lowood and Moggill, while remaining within the upper limit of non-damaging floods at Lowood (3,500 m³/s). In these instances, the combined peak river flows should not exceed those shown in the following table:	Technical Situation Reports indicate that Wivenhoe Dam			
The intent of Strategy W3 is to limit the flow in the Brisbane River at Moggill to less than 4000 m³/s, noting that 4000 m³/s at Moggill is the upper limit of non-damaging floods downstream. The combined peak river flow targets for Strategy W3 are shown in the following table. In relation to these targets, it should be noted that depending on natural flows from the Lockyer and Bremer catchments, it may not be possible to limit the flow at Moggill to below 4000 m³/s. In these instances, the flow at Moggill is to be kept as low as possible.	releases were made considering concurrent flows in the Bremer River & Lockyer Ck. To delay damaging floods as long as possible			
The intent of Strategy W4 is to ensure the safety of the dam while limiting downstream impacts as much as possible. This strategy normally comes into effect when the water level in Wivenhoe Dam reaches EL74.0 m AHD. However the Senior Flood Operations Engineer may seek to invoke the discretionary powers of Section 2.8 if earlier commencement is able to prevent triggering of a fuse plug. There are no restrictions on gate opening increments or gate operating frequency once the storage level exceeds EL74.0 AHD, as the safety of the dam is of primary concern at these storage levels.	Technical Situation Reports indicate that Wivenhoe Dam releases were such as to delay adopting this strategy as long as possible			
Where possible, total releases during closure should not produce greater flood levels downstream than occurred during the flood event.	Technical Situation Reports indicate that this requirement was satisfied			
The aim should always be to empty stored floodwaters stored above EL 67.0m within seven days after the flood peak has passed through the dams.	Technical Situation Reports indicate that			

brian cooper consulting

	Action		Comment
	·		emphasis was given to satisfying this requirement
Flow in the spillway to be opened first.	e as symmetrical as possible wit	h the centre gates	Technical Situation Reports indicate that this was done
The bottom edge of the r release flow surface.	adial gates must always be at le	east 500mm below the	See Note 1 above

Action	Comment
Flood Strategies for Somerset Dam:	-
The intent of Strategy S1 (Somerset Dam Level expected to exceed EL 99.0 and Wivenhoe Dam not expected to reach EL 67.0 (FSL) during the course of the Flood Event) is to return the dam to full supply level while minimising the impact on rural life upstream of the dam. Consideration is also given to minimising the downstream environmental impacts from the release.	Technical Situation Reports indicate that this was done
The intent of Strategy S2 (Somerset Dam Level expected to exceed EL 99.0 and Wivenhoe Dam level expected to exceed EL 67.0 (FSL) but not exceed EL 75.5 (fuse plug initiation) during the course of the Flood Event). This to maximise the benefits of the flood storage capabilities of the dam while protecting the structural safety of both dams. The Flood Mitigation Manual contains a graph that shows the intended interaction of the Wivenhoe Dam and Somerset Dam storage levels.	Technical Situation Reports indicate that this was done – little information on the operation of the radial gates at Somerset Dam. How the graph was followed not really demonstrated
The intent of Strategy S3 (Somerset Dam Level expected to exceed EL 99.0 and Wivenhoe Dam level expected to exceed EL 75.5 (fuse plug initiation) during the course of the Flood Event) is to maximise the benefits of the flood storage capabilities of the dam while protecting the structural safety of both dams.	Not relevant at this stage
The safety of Somerset Dam is the primary consideration and cannot be compromised and its peak level cannot exceed EL 109.7.	Maximum level only EL103.3

Wivenhoe & Somerset Dams - Storage Level Behaviour (as presented in Technical Situation Reports)





13 January 2011

The Honourable Stephen Robertson MP Minister for Natural Resources, Mines and Energy and Minister for Trade PO Box 15216 Brisbane QLD 4002

Dear Minister

Independent review of Somerset and Wivenhoe Dam operations against the Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam

Attached is a final report from Mr Brian Cooper, Brian Cooper Consulting, on an Independent review of the operation of Somerset and Wivenhoe Dams for compliance against Seqwater's Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam (Flood Mitigation Manual) during the current flood event.

Mr Cooper concludes that:

"The strategies as set out in the Flood Mitigation Manual have been followed, allowing for the discretion given to making variations in order to maximise flood mitigation effects. The actions taken and decisions made during the Flood Event appear to have been prudent and appropriate in the context of the available knowledge available to those responsible for flood operations and the way events unfolded."

Given the circumstances, we endeavoured to provide him with as much information as possible to enable a sufficient compliance review against the Flood Mitigation Manual. Mr Cooper identifies some Flood Mitigation Manual requirements where further information of compliance is required. In relation to these matters, Mr Cooper states:

"There are a number of requirements where there was insufficient time given the urgency of this review, to source the necessary information for me to demonstrate compliance. However, satisfaction or otherwise of these requirements would have had little impact on the operation of the two dams during this particular Flood Event. It is intended that they be audited when time permits, after the Flood Event."

Also, attached is a summary from Mr Barton Maher, Seqwater, on the development history of the Flood Mitigation Manual, and in particular, the extensive peer review to which both the Flood Mitigation Manual and studies that fed the development of it were subject. For example:

- the Brisbane and Pine Rivers Flood Study underwent an internal review by the Water Resources
 Group and then went to an independent review panel comprising of Professor Colin Apelt,
 Head of Department, Department of Civil Engineering, University of Queensland; and Mr Eric
 Lesleighter, Principal Hydraulic Engineer and Chief Engineer Water Resources, Snowy Mountains
 Engineering Corporation
- the 2005/2006 Brisbane Valley Flood Damage Minimisation Study involved a Project Technical Review Group involving SEQWater Corporation, the Bureau of Meteorology, SunWater,
 Department of Natural Resources, Mining and Water Dam Safety Regulator and WRM Consultants
- the most recent 2009 review of the Flood Mitigation Manual was subject to an expert review panel comprising of The Bureau of Meteorology; SunWater (as operator of the Flood Control Centre); the Department of Environment and Resource Management Dam Safety Regulator and Brisbane City Council. The minor changes to the Flood Mitigation Manual were extensively tested to ensure that the flood mitigation outcomes were not compromised.

I hope this proves to be of assistance.

If you have any questions, please contact me on

or via email at

Yours sincerely

A (Barry Dennien (/

Chief Executive Officer

Cc: Mr Joh

Mr John Bradley Director-General

Department of Environment and Resource Management

							d																			 				-				
Rainfall	(mm)						Large storms yesterday pm and night; 20- 50 forecast tonight	20-50 forecast o/n		40-50 since 16/12/2010	20-30 upper Brisbane R.		-					•			none since 300 on 20/12/2010					neavy rain expected to start on 67.23.29/12/2010			little or no rainfall				10-20 over last 24 hrs	
Storage Level	ŀ					-			0.5		3.5	m			68 expected this afternoon		peak 68.24 (0400); · currently 68.22	(112% cap.) falling	slowty	currently @ 67.61	(107% cap.) falling slowly	to finish just>FSL	When gates closed,	75L) & 50mm <gate< th=""><th>opening trigger level</th><th>3.5 67.23</th><th>67.07 expected</th><th>when all gates</th><th>closed</th><th></th><th></th><th></th><th></th><th></th></gate<>	opening trigger level	3.5 67.23	67.07 expected	when all gates	closed					
Opening	(m)								0														-									s zero		•
Gate No.	Total			300					63		350 3	300						peak 1,280	(0200)							er.	1				,	'n		
(elease (m³/s)	Gates			290		0		Opening Op. Initiated	20		350	300				•		ed.	Ö,			, edneuce		All gates expected to be	1500	350		Ali gates expected to be	1300		e ops ceased @			
Wivenhoe Dam Release (m ³ /s)	Hydro			10				Opening	13									•				Closing sequence		All gates	closed by 1.500			Ali gates	closed by 1300		4,200Mi/day from reg. & Radial gate ops ceased @			
•	Regulators							Closed	٠	•				-																•	4,200MI/day fr	סואלים		
Time TSR		٠	1400 W1	1300 WZ	1800 W3	1600 W4	1200 W5	1800 W6	1830	7W 00C0	0700 W8	1800 W9		0700 W10	0900 W11	0900 W12		•	. 0730 W13		0830 W14	1600 W15			0800 W16	1430 W17		0000	DESU WLS		1330 0470	7	0930 W20	
Date			12/12/2010	13/12/2010	15/12/2010	16/12/2010	17/12/2010	17/12/2010		18/12/2010	19/12/2010	19/12/2010	v	20/12/2010	20/12/2010	20/12/2010		•	21/12/2010		22/12/2010	22/12/2010			23/12/2010	23/12/2010		0100/01/20	74/17/2010		24/12/2010	ATA7 /27 /27	25/12/2010	
											-			•	•			,											٠					

.

7 (2)
7000
~
over la
2SI 7
4

26/12/2010

0800 W21

9/01/2011	8/01/2011	7/01/2011	7/01/2011	6/01/2011	31/12/2010	30/12/2010	29/12/2010	28/12/2010	27/12/2010
0700 W32 W33	0700 W31	1500 W30	0700 W29	1200 W28	0700 W26 W27	0700 W25	0700 W24	0700 WZ3	0800 W22
1,343	~890	 Release started 1500 to be incr. slowly to ~1,200m³/s by 1400 tomorrow 		Commence opening RG @ 1800 & ramp up to 300m³/s by 2200	Wivenhoe+Lockyer = 1,600m³/s	Wivenhoe+Lockyer = 1,600m³/s		347 (initially) then back to 46	
	All (5) RG's open								
Currently 68.58 (falling slowly)	68.45 @ 0600 risin steadily	·	 57.54 @ 0600	67.31 @ 0700	68.4 @ 0500	yesterday @ 1200 (2.3m > FSL) 69.07 this am	69.26 (@ 0600) - aim is to return to FSL by 2/1/2011 69.33 peak		
For last 12 hrs. av. of 40 for Somerset CA & <10 for Wivenhoe CA	Widespread rain 20–40 over dam CA's 68.45 @ 0600 rising since 0900 yesterday; further high steadily rainfall predicted for next 4 days		30-50 with isolated falls up to 75; signif. Rain on Lock. Ck.	20-30 widespread with up to 50 on dam CA's	No/very little in last 24 hrs.	No/very little in last 24 hrs.	No/very little in last 24 hrs.	20-40 over dam CA's ;ast 24 hrs	40-50 over dam CA last 24 hrs.
·.									

9/01/2011

2100 W34

1,400

Very heavy rainfall -totals for 24 hrs 100 - 300; Severe weather warning for heavy Currently @ 69.1; rainfall

0700 W32 W33

W35 W36 W37

11/01/2011

0630 W38

11/01/2011

1200 W39

2,750 since 1930 on 10/1/2011

All (5) gates

73.51 rising @ 25mm/hr.

20-60 last 12 hrs in Lockyer CA; 30 in Bremer R.; Isol. Falls of 125 in upper Brisbane R. & widespread falls of 40 - 70 in Somerset CA

74.1 (179.5% cap.) rising @ 25mm/hr.

3,970

Crossing Closures

45,000Ml from Somerset; WL|Somerset to peak at 99.7 on 13/12/2010; 150m³/s expected through Brisbane; 30,000Ml expected into

13/12/2010 ramping up to 300m²/s; Reg. will be closed & Gate 3 opened to 3m to get WL back to 67.25; Incr. release will impact on 3

Wivenhoe from upper Brisbane R.; peak WL in Wivenhoe expected to be 67.6; Releases expected from Wivenhoe on afternoon of

138m^{*}/s from Somerset,

Releases from Wivenhoe will cease on 16/12/2010; Hydro will continue during fish recovery ops.

Gate closed 1000

as possible; 60,000Ml needs to be released from Wivenhoe, & Somerset to maintain FSI Decision to commence a release tonight was made this am by Duty Flood Engineers to provide as much notice to impacted Councils

Need to release >60,000Ml from Wivenhoe & Somerset to achieve FSL

Releases could increase to 300m /s;

100,000Ml to be drained in next 4 days; Q| Brisbane R. to be maintained at 300-350m³/s;Transfer from Somerset via 2 reg.; Wivenhoe

Q incr. to 150m³/s o/n; Will incr. further to 300m³/s as Q Lock.Ck. Subside over next 24 hrs.; Q Lock.Ck. Currently 130m³/s 12,000MI/day from Somerset; Release expected until 22/12/2010;

Somerset rel. steady (Q[reg.=140m³/s); Q}Wivenhoe to be maintained at 300m³/s (Lock.Ck. Permitting) to allow Burtons Bridge to remain open; WL| Wivenhoe expected to incr. to 67.4 over next 2 days;

Q[Somerset peak tomorrow at 1800m*/s this pm; Q[Wivenhoe expected to be >1,200m*/s - discuss with impacted Cncls.- strategy decision by 10000; Wivenhoe inflows excl. Somerset risen to 100.2 - sluice gate releases to be made until am of 22/12/2010 when FSL expected; WL|Wivenhoe at 68 expected

Inflow to Somerset to peak today at 700m³/s; Somerset & Wivenhoe currently storing 140,000MI above FSL; further inflows

occurring; releases to be incr. o/n to ~1,200m³/s; various Cncls. Given heads up; BOM advised

Inflow to Somerset, 67,500MI discharged into Wivenhoe; Wivenhoe inflow (excl. Somerset releases) = 157,900MI, 103,000MI released; Kholo Bridge is also expected to be inundated by mid-morning; In accordance with the adopted operational strategy 410m³/s from Somerset sluice gates; Somerset peaked @100.43 (1300 on 20/12/2010), currently @ 100.23 (114% of cap.); 110,700M Total Inflow to both dams "310,000M); Continued gate operations may be necessary if forecast rainfall results in subsequent river

Wivenhoe; Gate Ops. @ Wivenhoe; High tides expected to coincide with peak levels in Brisbane R. 410m³/s from Somerset sluice gates; Somerset currently @ 99.68 (108% cap.); 121,500Ml inflow to Somerset, 103,000Ml released to BOM aware of all releases

1 sluice open @ Somerset to be closed @ 0900 - WL will be 0.1m> FSL; Est. Inflow to Somerset 135,000ML, majority discharged into been released; Contd. gate ops may be necessary if forecast rain results in river rises; Gate closure ops sequence to be reviewed Wivenhoe; Gate closure ops @ Wivenhoe in progress; Wivenhoe inflow (excl. Somerset inflow) = 204,000Ml; A total of 324,000Ml has Colleges Crossing - 08:00 Friday 23 December 2010

necessary if forecast rainfall gives incr. river levels Somerset gate ops ceased @ 0900, WL @ 99.1; Gate closure sequence extended to pm of 24/12/2010; Contd. Gate ops may be

6 hrs to ensure Brisbane R. Q not incr. due to incr. Lock. Ck. Outflows & maintain Burtons Bridge open;

Gate release will impact on 3 crossings

Would impact Twin Bridges, Savages Crossing, Colleges Crossing

Twin Bridges, Savages Crossing, Colleges Crossing currently closed Twin Bridges & Savages Crossing currently closed; Colleges Crossing to be impacted in afternoon

Twin Bridges, Savages Crossing and Colleges Crossing are closed; closing of Burtons Bridge and Kholo Bridge will be considered if more rain or inflows

Both Burtons and Kholo bridges likely to be inundated

Wivenhoe releases reduced slightly to keep Burtons Bridge open - then incr. releases after Somerset RegnlCncl inform residents affected by Burtons Bridge

these bridges should be back in service by late Thursday and all bridges (with the possible exception of Twin Bridges) should be trafficable for Christmas providing no further rainfall occurs.

Burtons Bridge & Kholo Bridge expected to be back in service by 23-24/12/2010; All bridges expected to be trafficable by Xmas provided no further rain Gate closing sequence to allow bridges to be accessible

Savages Crossing – 19:00 Thursday 23 December 2010 Projected crossing openings: Burtons Bridge — 18:00 Thursday 23 December 2010.

Kholo Bridge – 21:00 Thursday 23 December 2010

Gate ops @ Somerset ceased yesterday, reg. to be opened to bring lake to FSL; Gate ops continuing @ Wivenhoe -1 gate incr. every 5 - time due in part to current outflows into the Brisbane River from Lockyer Creek that will peak in excess of 200 Twin Bridges, Savages Crossing and Colleges Crossing are currently closed and should remain so for some cumecs late today. Thursday 23 December 2010; Other bridges expected to remain closed until Xmas Day Projected crossing openings: Burtons Bridge – 18:00 Thursday 23 December 2010, Kholo Bridge - 21:00

Flood Centre to monitor o/n & consider options tomorrow am based on inflows & rainfall; further gate ops may be necessary in

in Bremer & Warrill systems; WL in Wivenhoe incr. to 67.28 @ 600 through hydro & reg.; 15,00Ml expected just from upper Brisbane R. in next few days; WL cont. to fall in Lock. Ck; Small rises expected runoff. Burtons and Kholo Bridges would be currently unaffected. Kholo will no doubt still be closed by Council

Somerset WL incr. from 99.18 yesterday @ 0600 to 99.33 @ 0730 today; 99.5 tomorrow if no gate ops.; Wivenhoe currently 4,200MI Twin Bridges, Savages and Colleges Crossing remain impacted by Wivenhoe releases and Lockyer and local regarding repairs. Twin Bridges, Savages Crossing and Colleges Crossing may still be affected by flows from the Lockyer.

Wivenhoe WL incr. to 67.37 (0.37m > FSL); RG to be opened later today following discussions with local authorities; further gate ops BOM issued severe weather warning © 0 445; Somerset WL Incr. to 99.46 (0.46m> FSL) - 2 rėgs. To be opened today (140m³/s); may be necessary if rainfall incr. river levels

FSL);Q|Wivenhoe reduced o/n because of incr. Q|Lockyer to ensure Burtons Bridge remains open; RG @ Wivenhoe wound back as BOM continues with severe weather warning & widespread rainfall over dam CA's; 2 regs. @ Somerset giving 139m³/s release, lake $Q[Lockyer\ incr. > 250m^3/s;\ Q[Lockyer\ expected\ to\ peak>500m^3/s\ later\ today/tomorrow\ -\ will\ innundate\ Burtons\ Bridge; When this peak in the second se$ contd. To rise to 99.6 (0.6m> FSL); RG ops @ Wivenhoe commenced yesterday @ 0900, WL contd. To rise to 67.57 (0.57m > happens, Q|Wivenhoe will be incr. to get WL back to FSL; further gate ops may be necessary in coming days

inflows decreasing; RG opening dependent on Q|Lockyer; Wivenhoe WL currently @ 68.55 (1.55m > FSL); Inflows to Wivenhoe decr. Sever weather warning no longer current; Somerset release through regs' $^{\sim}$ 208 $^{\mathrm{m}^3}$ /s;WL |Somerset incr. to 99.96 (0.96 $^{\mathrm{m}}$ >FSL) $^{-}$

Further 2 sluices opened @ Somerset, WL @ Somerset 99.83 & falling slowly, 2 sluices to be closed @ 1200; Intended to Incr. Wivenhoe releases so Q|Wivenhoe+Q|Lockyer maintained @ 1,600m³/s (similar Q to mid Oct &mid Dec 2010) 2 sluices @ Somerset remain open (405m³/s) - FSL expected by 6/1/2011; RG closing sequence expected to start mid tomorrow- RG expected to be closed on 2/1/2013

WL @ Somerset 99.01 (falling from peak of 100.0 - 1200 28/12/2010) - currently 2 regs;

Somerset @ 99.34 (0.34m > FSL) & rising slowly; Wivenhoe 67.31 (0.31m > FSL) & rising slowly; Gates will be opened in next 24 hrs; Lockyer Ck peak of about 100m3/s Friday afternoon

impact of Lockyer flows on Burtons Bridge has been ascertained and flood levels in the lower Lockyer subside Q|Wivenhoe may be as gauges; A peak of about 470 cumecs is expected from Lockyer Creek by mid-afternoon; Wivenhoe gate releases will occur after the Wivenhoe WL @ 67.64 (0.64m > FSL & > gate trigger level) rising slowly; u/s of dam river levels peaked @ Linville and Gregors Ck 100-200mm rain forecast for SE Qld next 5 days; Somerset WL @ 99.58 (0.59m > FSL) rising slowly - currently releasing 35m³/s; high as $1,200m^3/s$

Somerset releasing 35m³/s; 50,000Mi into Somerset; Gate release @ Wivenhoe - strategy to be reviewed tomorrow (dependent on

(depend. On confidence in estimates of Wivenhoe inflows); intended to ramp Wivenhoe up to 1,200m³/s by 1200 - likely to be incr. next week; since 2/1/2011, ~200,000Ml has flowed into Wivenhoe (incl. Somerset releases), further 180,000Ml expected based on. Somerset WI. @100.42 & rising (0500) - 1 open sluice gate; Water temp. held in Wivenhoe - strategy may need to be reviewed recorded rainfall; ~ 50,000Ml released via reg. & hydro (@50m³/s) maintain combined Q of 1,600m³/s in mid-Brisbane R.

levels u/s Wivenhoe rising fast; Q | Brisbane R. @ Gregors Ck @ 6,700m³/s; Wivenhoe expected to reach 73.0 by 11/1/2011 - need to incr. Q]Wivenhoe am of 10/1/2011 - crank up to $2,600 \text{m}^3/\text{s}$ by am 11/1/2011; Attempt to keep combined Q $< 3,500 \text{m}^3/\text{s} - < \text{limit of}$ Somerset @ 101.68 rising quickly; 5 sluice gates open releasing ~1,100m³/s; WL expected to reach 103.5 by am 11/1/2011; River urban damages in the City

Twin Bridges, Savages and Colleges Crossings will be inundated but the plan is to release around 300-350m³/s releases from Wivenhoe). Lockyer Creek outflows into the Brisbane River are currently in the order of 60m3/s. Crossings downstream of the dam are currently impacted primarily by non-controlled river flows only (no RG depending on flows downstream so as to not impact Burtons Bridge.

Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed; No current expectation that either Mt Crosby Weir Bridge or Fernvale Bridge will be impacted by the current event, Lockyer Creek outflows ğ Twin Bridges, Savages Crossing and Colleges Crossing currently closed; Burtons Bridge is currently open, being closely monitored and may come close to impacting upon the Mt Crosby Weir Bridge; England Creek RG discharge dropped back to 46m3/s to ensure Burtons Bridge can remain open; Twin Bridges, Savages expectation that either Mt Crosby Weir Bridge or Fernvale Bridge will be impacted by the current event; An will be closed later today/tomorrow, Kholo Bridge remains unserviceable due to flood damage, No current updated estimate of the time of closure of Burtons Bridge this afternoon will be provided to Council access is not impacted yet

Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed; no current expectation that Mt Crosby Weir Bridge or Fernvale Bridge will be impacted by current event. At this stage, estimated that the flow at Burtons Bridge will fall below the bridge deck on Sunday morning

Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed due Twin Bridges, Savages Crossing, Colleges Crossing, Burtons Bridge and Kholo Bridge are currently closed to inundation Not included

strategy is to keep Burton Bridge free, Gate release would limit mid-Brisbane Q to 400m3/s ((Burtons capacity Savages Crossing. Colleges Crossing could be taken out by a combined Lockyer and local runoff. Current Lockyer ok peak or about 1 uumars Friday atternoon. Inis wiit take out I win brigges and nearly inundate 450m³/s).

Colleges Crossing for several days, may also later impact upon Burtons Bridge & Kholo Bridge; not expected to QiLoòkyer may be of sufficient magnitude to inundate Burtons Bridge; Somerset Regional Council, Ipswich City be any adverse impacts upon Fernvale Bridge or Mt Crosby Weir Bridge; Councils have been advised of this Council and Brisbane City Council have been advised of the potential for gate operations during the next 24 hours; The relatively high Lockyer flows will adversely impact upon Twin Bridges, Savages Crossing, and strategy and are contacting residents All of the crossings downstream of Wivenhoe with the exception of Fernvale and Mt Crosby Weir Bridge will be The projected Wivenhoe release of 1,200m3/s combined with Lockyer flows and local runoff will mean that all Colleges Crossing) will be adversely impacted for several days. At this stage Fernvale and Mt Crosby Weir crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and Bridge are not expected to be affected but they could potentially be affected if the predicted rainfall totals adversely impacted; Councils have been advised of this strategy and are contacting residents eventuate.

Colleges Crossing) will be adversely impacted until at least Wednesday 12 January. At this stage Ferrivale and Mt Crosby Weir Bridge are not expected to be affected, but this may be revised if the predicted rainfall totals Somerset currently @ 100.27 - 60mm rain in last 2 hrs will cause significant inflow later today; 405m³/s being released into Wivenhoe; eventuate and higher releases from Wivenhoe Dam are considered necessary. Cncis advised of Wivenhoe op. The current Wivenhoe Dam release combined with Lockyer flows and local runoff will mean that all low level crossings downstream of Wivenhoe (Twin Bridges, Savages Crossing, Burtons Bridge, Kholo Bridge and

The projected Wivenhoe Dam releases combined with Lockyer flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvale, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Water levels in the lower Brisbane R will be impacted by the combined flows of Lockyer Ck, Bremer River, local Weir and Colleges Crossing) will be adversely impacted until at least Saturday 15 January in varying degrees; runoff and releases from Wivenhoe Dam

Not included
Not included

Somerset WL @ 103.27 & falling slowly; currently 1,400m³/s released to Wivenhoe- to be reduced to 500m³/s later in the day - to ensure flood mitigation of Somerset & Wivenhoe are maximized; BOM provided advice on flash flooding in Lockyer Ck.; WL in Wivenhoe will reach 74 by evening; May need to increase Q further - may result inQ llower Brisbane R. >5,000m³/s

Somerset @ 103.3 & rising; Outflows into the Brisbane River from both Lockyer Creek and the Bremer River are also increasing; If no further rain, can hold @ 74.8 - aim is to prevent fuse plug triggering, situation assessed every 3 hrs.; Heavy rainfall continues throughout South East Queensland and the situation could deteriorate over the next 24 hours. The flood operation centre will continue to monitor the situation and provide situation reports every six hours until the situation stabilizes.

The projected Wivenhoe Dam releases combined with Lockyer Creek flows and local runoff will mean that all crossings downstream of Wivenhoe (Twin Bridges, Fernvalle, Savages Crossing, Burtons Bridge, Kholo Bridge, Mt Crosby Weir and Colleges Crossing) will be adversely impacted; Water levels in the lower Brisbane River will be impacted by the combined flows of Lockyer Creek, Bremer River, local runoff and releases from Wivenhoe Dam.